

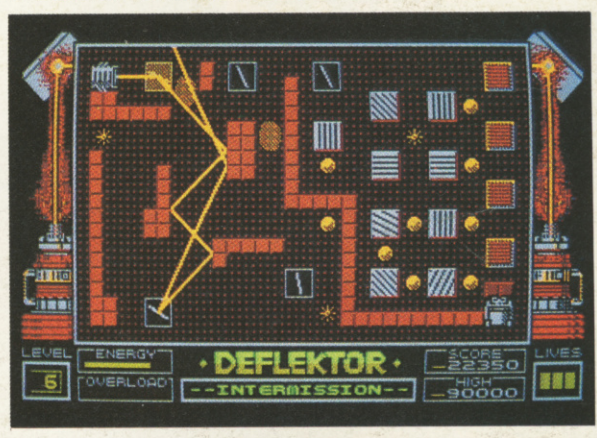
NOT an official Amstrad publication!!

AMSTRAD ACTION

THE MOULD-BREAKING MAGAZINE FROM FUTURE PUBLISHING

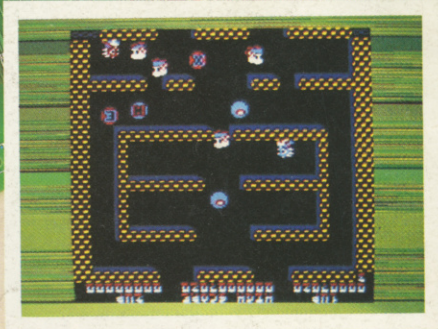
DISCOVERING DATABASES

Create order from chaos with our pick of the organisers



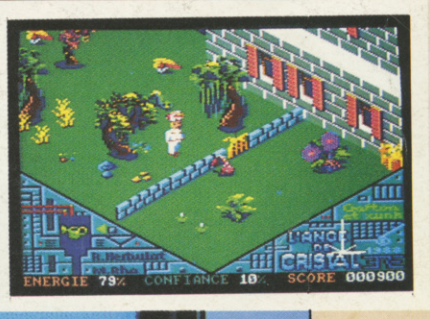
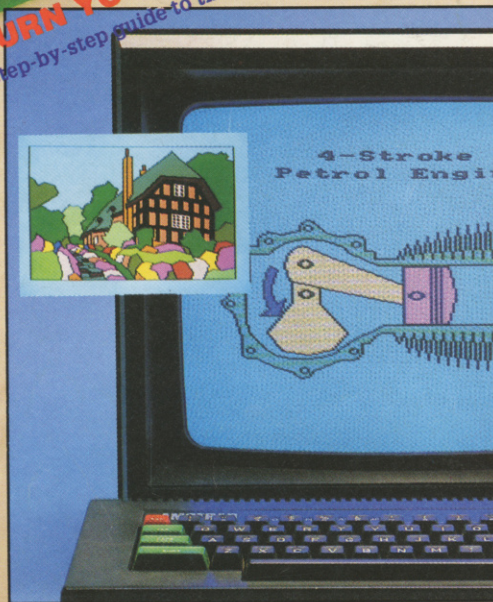
DEFLEKTOR - MASTERGAME

Lasers, puzzles and brain twisting action



BUBBLE BOBBLE

Cutesy arcade action with bubbles



GET DEXTER 2

The sequel to the smash arcade adventure

ART TAKES TO THE WING

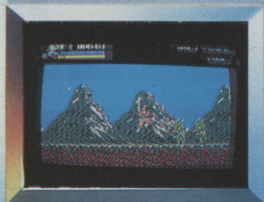
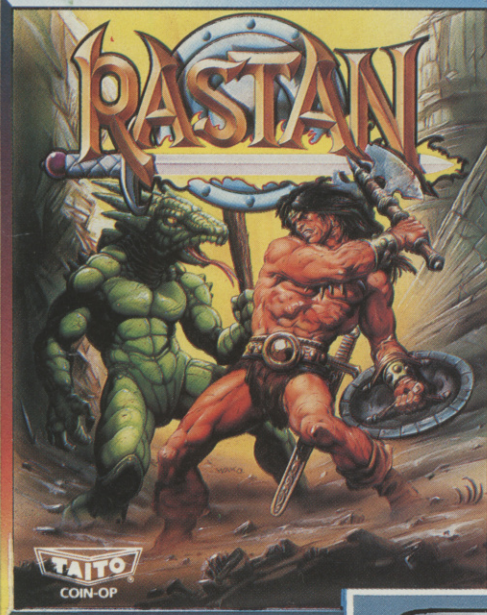
Parrotty Plus demonstrates some lovely plumage



TURN YOUR 464 INTO A 6128
Step-by-step guide to this simple transformation

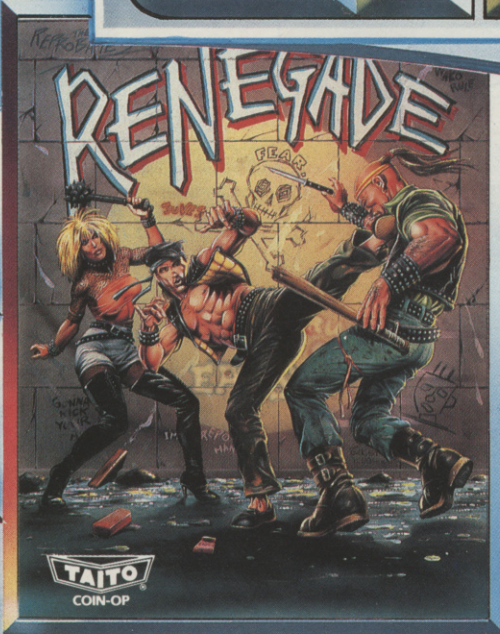
ALL GAMES AVAILABLE FOR:
 SPECTRUM COMMODORE AMSTRAD
 7.95 ea. 8.95 ea. 8.95 ea.
 CASSETTE

ARCADE



...the Warrior King.
 The latest hit coin-op from Taito.
 Lands that produce men of legend, dragon slayers, lie in his shadow – guardians of evil fear his fire spewing sword, the axe he wields as swift as lightning. State of the art programming makes a true simulation of the Arcade hit for your home micro. Enjoy superb graphics and realistic action as RASTAN takes on a world of dangers – magical wizards, fire breathing lions, bats, snakes, skeletons and finally the living dead. Is it more than you can handle?

CHAM

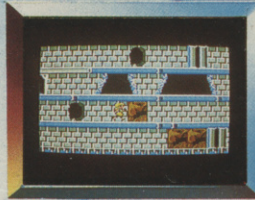


In the knife-edge world of the vigilante there is no place to rest, no time to think – but look sharp – there is always time to die! From the city subways to the gangland ghettos you will always encounter the disciples of evil whose mission it is to exterminate the only man on earth who dares to throw down the gauntlet in their path – the Renegade. A breathtaking conversion of the arcade hit by Taito now for your home computer. With all the original play features.
PLAY RENEGADE . . . PLAY MEAN!

ALL GAMES AVAILABLE FOR:
 COMMODORE 12.95 ea. SPECTRUM & AMSTRAD 14.95 ea.
 DISK

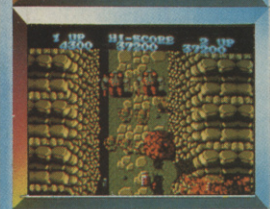
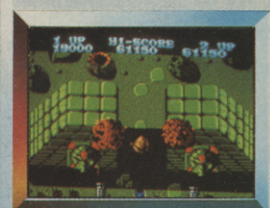
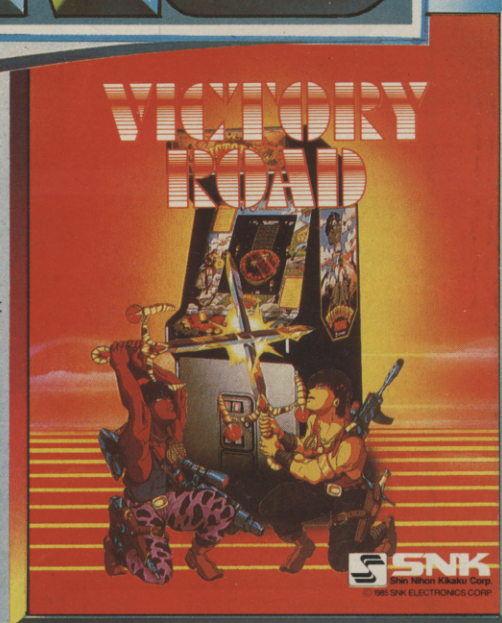
ARCADE

More arcade magic from the SNK label. Psycho soldier is tipped for the top as her thirst for action and adventure takes her to even more strange worlds.



PIONING

Having survived the bloodsucking monsters of the first phase, you progress on to the actual Road itself. This is where the fun really begins. You will meet vampires, two and three headed monsters – the head will fly at you on its own, just when you think you are gaining the upper hand. Collect icons to build up the firepower necessary to fight off your aggressors. Action and excitement all the way with this macabre and unusual game; which has that elusive extra something to keep you coming back for more.



...the name
 ...the game

® Imagine is a registered trademark.

THE LINE-UP

AMSTRAD ACTION MARCH 1988

FRONT END

NEWS • LETTERS

- 07 REACTION**
Everybody shout – “I’m mad as hell and I’m not going to take this anymore.” Then write to us and we’ll soothe your furrowed brow.
- 10 HELPLINE**
Don’t despair, help is at hand. The helpiners can solve just about any problem. Go ahead – make their day.
- 12 AMSCENE**
News of the latest printers from Amstrad and Epson, all the forthcoming games and lots more besides.

SERIOUS SIDE

SOFTWARE • HARDWARE • PROGRAMMING

- 18 PAROTRY PLUS**
Treasure Island Software’s revamped art package displays its plumage, and certainly isn’t an ex-parrot.



- 20 WORDS WORK**
The section where we try to help you get the most from your word-processor and printer.
- 22 ABSOLUTE BEGINNERS**
Our tutorial on how to go from complete computer ignorance to complete mastery of Basic.
- 22 FIRST BYTES**
A beginners guide to the delights of machine code. There’s even something for more advanced hackers.
- 24 PROBLEM ATTIC**
If disaster strikes and you need a helping hand, our trusty expert is never at loss for words.

- 26 TURN A 464 INTO A 6128**
A simple, step-by-step guide to turning a 464 into a 6128 by just adding one chip, 64K of memory and a disk drive.

30 DATABASES

Getting large numbers of records and information organised can be a tricky business. With a database life is made much easier.



35 CAGE COMMS ROM

The Cage Comms Rom is the latest revelation on the comms market. Will it put you in touch?

36 SERIOUS REVIEWS

Stockmarket from Meridian – can it put your portfolio in the black? Plus the latest *Speedtrans* from Goldmark

38 BASIC WORD-PROCESSING - 4

Bill Simister continues his series on how to create and use a word-processor entirely in Basic.

ACTION & ADVENTURE

GAMES • MAPS • PILGRIM

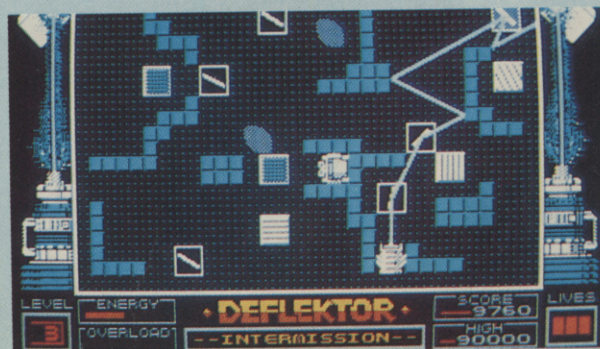
41 ACTION TEST STARTS HERE

41 INTERNATIONAL KARATE +

Bruising combat action as three martial arts masters go at it hell for leather – and all at the same time.

42 DEFLEKTOR — MASTERSGAME

Vortex achieve their third Mastersgame title with a brain tingling game of laser technology and fast thinking.



44 GET DEXTER II

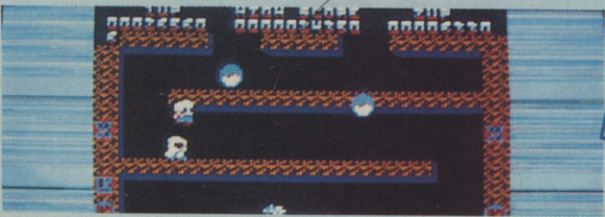
The return of Dexter and his cute podocephalus sidekick in another colourful escapade from across the channel.

46 MAH-JONG

The classic Chinese game played with tiles, winds and a great deal of oriental cunning.

56 BUBBLE BOBBLE

The arcade conversion that's got bubbles, bouncing, bad guys and is big on addiction.



56 TETRIS

From deep behind the iron curtain in the USSR, comes a game of speed, dexterity and mental challenge.

60 THE PILGRIM

They seek him here, they seek him there, they seek the Pilgrim everywhere. Is he lost, is he found, has the Pilgy gone to ground?

INTERACTION

CREATED BY YOU AND FOR YOU

24 HOT TIPS

Discovered handy hints for your programs? Here's the place to send them so everyone else can use them.

64 CHEAT MODE

Take your games to the outer limits with our pokes and playing tips. Some pokes may even take you into the twilight zone.

71 TYPE-INS

The finest listings you can find are right here every month. They're short, useful, fascinating and even exercise your fingers.

WRAPPING UP

THINGS TO BUY • BYE

76 CLASSIFIED ADS

You can use this direct link to tens of thousands of CPC owners, and all for just £5.

78 SPECIAL OFFERS

Outstanding offers on new software you've just got to get. Don't miss out on our, as ever, excellent subscription offer.

82 REAR VIEW

A slanted look at the computer world and the customary spectacular appearance of everyone's hero - Sugarman.

Let's Get Serious

It's long been the case that the CPC's have been recognised as excellent games machines, producing superb graphics and sound. It also has an excellent reputation for being an all-round machine capable of anything from appliance control to digitising. The "serious" emphasis has been on the increase ever since the 6128 came out over two years ago.

CPC's are now being put to more serious use than ever before, a trend that looks set to continue. As a word-processor it can deliver as much as the PCWs' once teamed up with one of the excellent word-processors available and a printer. Databases and spreadsheets are also widely available, as you'll have seen from recent issues.

More specialised packages are also starting to appear like the *Small Traders Pack* from SD Microsystems and *Stockmarket* from Meridian. The hardware side is also thriving with printer buffers, extra memory, teletext adaptors, rom boards, digitizers, sound add-ons and lots more in the works like hard disk drives.

If you still aren't impressed then let me remind you of a few other things the CPC's are good at: desktop publishing packages, programming languages, educational software, art packages, midi, light pens, sign makers, accounting packages, comms.

The CPC's are just as much value for money today as they've ever been. A hobbyist market is being established, similar to that which exists for the BBC. The difference is that the CPC's are even more versatile and can support a thriving games market as well as a burgeoning serious one. Personally, I don't think there's been a better time to own a CPC because of the massive amount of software support, particularly when you can find it all here in *Amstrad Action*.

Bob

Amstrad Action
Future Publishing Limited
4 Queen Street
Bath BA1 1EJ

Fax 0225 446 019
Telephone 0225 446 034

Editor: Bob Wade

Technical Editor: Richard Monteiro

Staff Writer: Gary Barrett

Art Editor: Ollie Alderton

Contributors: Pat McDonald, Steve Cooke, Bill Simister, Steve Williams

Studio Manager: Gordon Druce

Art Assistant: Sally Meddings

Publisher: Chris Anderson

Production: Diane Tavener, Jenny Evans, Claire Woodland

Subscriptions: Carrie-Anne Porter

Mail Order: Clare Bates

The Old Barn, Brunel Precinct, Somerton, Somerset TA11 7PY

Telephone 0458 74011

Advertisements: Margaret Clarke

Byrom House, 58 Brinksway, Stockport, Cheshire

Telephone 061 474 7333

Cover photographs: Stuart Baynes Photography, Bath. Tel: 0225 66343

Colour origination: Wessex Reproductions, 325 Wells Road, Bristol BS4 0QL

Printing: Redwood Web Offset, Yeomans Way, Trowbridge, Wilts

Distribution: Seymour Press, 334 Brixton Road, London SW9 7AG

Netherlands distribution and subscriptions: Info-Data Computers, Postbus 97, 3800AB Amersfoort.

©FUTURE PUBLISHING LTD 1987

Amstrad Action is an independent publication. The company producing it - Future Publishing Ltd - has no connection with Amstrad plc. We welcome contributions from readers but unfortunately cannot guarantee to return material submitted to us, nor can we enter into personal correspondence. We take great care to ensure that what we publish is accurate, but cannot be liable for any mistakes or misprints. No part of this publication may be reproduced in any form without our permission.

A
M
S
T
R
A
D
A
C
T
I
O
N



© 1987 IPC/DAN DARE LTD
Part of the Dan Dare Nostalgia Collection
licensed Worldwide by Dan Dare Ltd.

3^d

DAN DARE MEKON'S II REVENGE

WINTER ISSUE 1955

The story so far . . .

The Mekon has returned, cunning as ever, to take revenge on the Planet Earth. In this bid to become ruler of earth the Mekon has developed a new genetically engineered race . . . the **SUPERTREES!**

To save the earth someone must destroy the Mekon space ship before the Supertrees can be launched. There is only one way to defeat the Mekon – face to face. There is only one man for this mission . . . **DAN DARE!**



Commodore 64/128 cassette £8.95 disc £12.95
Spectrum 48/128/+2 cassette £7.95/+3 disc £14.95
Amstrad CPC cassette £7.95 disc £14.95

Play Dan Dare – or the Mekon in this follow up to Dan Dare – “The Pilot of the Future,” the game that was voted the ZZap 64 Arcade Adventure of 1986, and was declared a Crash Smash, C + VG Hit! A Sinclair User Classic, and your Sinclair Mega Game. **Dan Dare – Mekons Revenge is not to be missed!**

Available from all good retailers or direct from Virgin Games, 2/4 Vernon Yard, Portobello Road, London W11 2DX



Commodore Screen



Spectrum Screen



Amstrad Screen



REACTION

Desperate database

I decided to buy another piece of highly acclaimed software, *Database Manager*. Once again I ventured to my trusty supplier who, after spending a small fortune on telephone calls tracked down the elusive software house to an address miles from the one printed in your magazine. He was informed that the required piece of software was now "unavailable" (yet you still printed it in your "Christmas Gift Guide"). All was not lost, I could get the new updated version if I was prepared to do the following:

- 1) wait till some time early 1988 for it to possibly appear on the market.
- 2) Pay an extra £10!!

James Hampson
Grange over Sands

If you flip to pages 30-32 you'll find *AtLast Plus* (the enhanced version of *AtLast Database Manager*) and three other popular databases. If the revamped, re-priced *AtLast* doesn't appeal, maybe one of the others will suit your needs and pocket better.

Project plea

Now there's a subject guaranteed to draw out an opinion from any computer user as to which is the best system/set up to possess. Personally I use a rather slow clumsy *Amsword* that I used to run on my 464 but have altered slightly so that it would run on the 6128. I have often thought about upgrading it to *Protext* or *Brunword*, preferably on ROM, but I have not yet managed to convince myself that that isn't going over the top somewhat for my needs.

I wonder if you've ever thought about doing a series of articles expanding on those areas that were barely scratched by issue 19. Things like how to disassemble,

The section where you get your say about AA. Libel suits, love letters, letter bombs and all other reactions are dealt with by Bob Wade - so treat him gently. The address to send your letters to is: Reaction, Amstrad Action, 4 Queen Street, Bath BA1 1EJ. Remember we can't reply personally to letters, otherwise we wouldn't have time to produce a magazine each month. All mail-order and subscription enquiries or problems should be aimed at our Somerton address listed on Line-up - we just have to pass them on if they come here.

page the memory maps, write to spare memory etc. I'm sure that many readers have EP(ROM) devices in their homes that they would love to change/enhance (ie central heaters / televisions / VCR's / washing machines) to remove some of those annoying features or to add other useful routines. Obviously you cannot encourage readers to tamper with machinery that may become dangerous if programs are changed, but you could point them in the right direction to find out hardware information for themselves. After all it's not that difficult to program your own burglar/car alarm and although AA is not an electronics mag it could go a long way to helping readers with that sort of inclination.

I S McCulloch
Sunderland

The idea of doing electronic/hardware projects is one we've been toying with. If it's the sort of thing you would like to see in AA then write and let us know the sort of projects you would like.

Who, what, when, where, how?

I am writing as I have a few ques-

tions to ask.

1. If I buy *Stop Press* with the new MK III mouse, can I use the new mouse with *AMX Art* and will I get a new interface for the mouse?
2. Can I use a DMP1 printer to print out pictures from *AMX Art*?
3. Is the AA Cheat Mode book available in the shops? If the Cheat Mode book is not available in the shops, then I would be glad if someone out there had a spare copy to sell.
4. What is the adventure game that got the best overall percentage in the Pilg?
5. Why doesn't AA have a top twenty computer game chart?

David O'Neill
Ardee, Co.Louth

I suggest you contact AMS on 0925 413501 for answers to questions one and two. The Cheat Mode booklet isn't in the shops and we don't have any copies left, so you'll have to rely on some kind soul writing in with one to spare. The Pilg's highest rated game was *Lurking Horror*, weighing in with 94% and the highest ever atmosphere rating as well at 96%.

We don't have a sales chart because it doesn't reflect the quality of the games - just sales. A readers chart would be a better idea but falling response to one we ran in the past lead to its dis-

continuation. If enough people want it back we may give it another go.

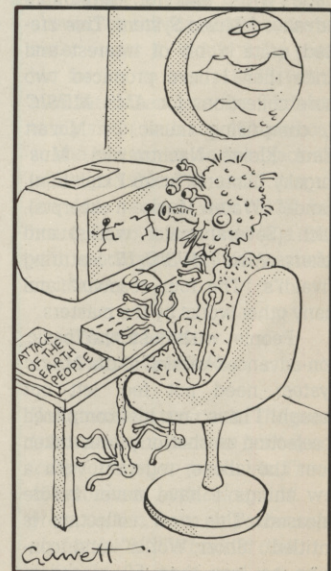
Pieces of praise

These days there is much criticism of software companies, so for a change could we offer praise for one.

Whereas no other company wanted to help, Treasure Island software have given us an immense amount of assistance in getting our COMX printer/plotter to work with our CPC 6128 and we are now achieving satisfactory results.

Furthermore, we have found their *Parotry Plus* package more use than all of our so-called Graphics Packages put together - we must have at least six, which proves to us that the big names don't always produce the best software or provide a meaningful after-sales-service. The reproduction/copy facility has to be used to be believed.

J S Gilks, Lidamar Ltd
Sutton Coldfield



● Down to Basics

I am as usual using Wm. Simister's Basic Word-Processing program (taken from his book) to write this letter, and am reading his new series with interest, to see what new tips he will come up with; the useful "TRON-TROFF" facility, for instance. I am waiting eagerly to see the line 40 referred to in the text (but not shown on the print out!) for SAVEing text - although, frankly, the program itself is so short that I usually just SAVE the whole thing each time, and indeed have several different versions of it on a disk, LOADing the appropriate one according to whether I want to use proportional, italic or whatever, with or without the letter-head, etc.

If Wm Simister doesn't mention it in a later article, I would like to make one suggestion for 6128 owners: in line 60, he DEFINes numeric pad keys which are all right on his 464, but rather accident-prone on the 6128 keyboard, being too close to our cursor keys, so I have DEFined f7 and f9 instead of f0 and f. (full stop). Apart from that, he is quite correct in saying that his program runs equally well on the 6128.

P Russack
Northampton

● Music to your ears

Last year you very kindly published a letter from me (Reaction 20) in which I offered my arrangement of Bach's Brandenburg Concertos made with, and for, Rainbird's *Advanced Music System*. This created quite a bit of interest and since then I have produced two more collections for AMS. *MUSIC II*, comprising music by Mozart (Eine Kleine Nachtmusic), Musorgsky (Pictures at an Exhibition), Handel (Water Music - excerpts), Bach (Several major works) and others. Also, *MUSIC III* featuring Vivaldi's "The four seasons" and many other works by the masters.

People with just the basic, non-advanced version of the *Music System* need not feel left out though! I have now just completed a selection of shorter pieces taken from the above, together with a few things I have never before released. This new collection is entitled "Short Works" and contains no less than 50 pieces of

● Points for Diskussion

There has been much discussion in recent months about whether the 464 and the 6128 are going to be phased out. I think the 6128 will survive, but I don't give the 464 a long life expectancy.

If you use your 464 for serious computing, what software is available? Not much, I'd say. All the best word-processors, databases, art programs and spreadsheets are only available on disk - not to mention *Stop Press* as well. The only database or spreadsheet I could find on tape was on *Mini Office II*

The reason this has happened is that 64K is simply too limiting for the "super-utilities" we have now. A programmer has three choices:

- 1) Make the program fit into 64K. This is very limiting
- 2) Produce two versions - one for the 464 and one for the 6128. This would be the ideal solution, but it takes a lot of time and money.
- 3) Make the program incompatible with the 464.

In a great deal of cases, the third option is being carried out, to the disadvantage of us 464 owners. A similar thing is happening with games, especially adventures. Ask anybody what the best adventure games are, and he would say Infocom's and the *Pawn*, which are both disk only. There are hardly any good tape-based adventures around. This is beginning to happen to arcade games too - think of *Prohibition*, *Koronis Rift* and *Tau Ceti Special Edition*.

My guess is, within two years nobody will be producing any software on tape at all. So start buying your disk drives now, 464 owners!

David Wood
Nth Ferriby

This matter of "life expectancy" is misleading, both CPC's will be around for years yet. I agree with you about tape being phased out, but again I don't think it will happen very quickly because it is still the cheapest and most commonly available form of data storage for the CPC's, Spectrum and 64.



Rob Baxter
50 Milton Grove
Whalley Range
Manchester M16 0BP

● What risk disks?

Could you please tell me how error free are disks when you load them, because I am fed up with waiting for about 5 minutes for a cassette to load only to find that it crashes. Does anyone have trouble loading disks? How long do they take to load, for example *Driller?* What are the main problems with disks apart from the price? Hope you can help as I am thinking of getting a disk-drive.

Paul Page
Solihull

Disks are still prone to corruption and crashing like any other storage medium, but you'll find they are infinitely more reliable than tapes. Where possible, a back-up is a good idea in case anything does go wrong. Compared to tape the CPC disks load in the twinkling of an eye - ie under 20 seconds usually.

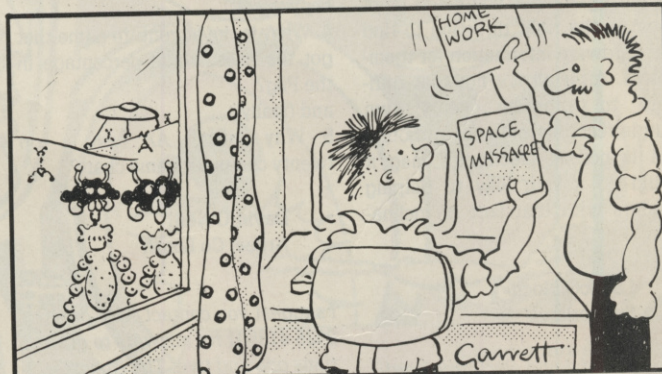
There are no other main problems apart from the price. Disk drives are expensive and so are disks - particularly when you consider games software in comparison with the tape versions.

● Beginning Basic

I have been the very proud owner of a 6128 for a year. My main interest in computers is not games, it's programming. Before I start learning other languages I want to fully grasp Basic. I've worked about half way through the manual and I find that as I advance through it the actual teaching stops at really quite a low level. Then it is all just raw information and data. I was wondering if you could point me in the direction of a good manual which will take me upwards from around this point without starting at the beginning.

David Harris
London

At the moment we are running a feature on Basic programming, Absolute Beginners. Although it is still at a very basic stage, we shall eventually cover advanced



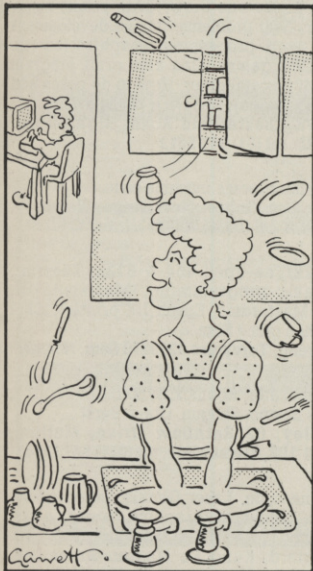
"BUT DAD, YOU NEVER KNOW WHEN ZAPPING ALIENS MIGHT COME IN HANDY..."

music, as .MUS files, for you to listen to. Also, unlike my previous AMS disks, you can examine my arrangements and use my envelopes in your own compositions. Like my other collections, it is sadly only available on disk. Also, you must have TMS/AMS for the files to work.

I feel that all my collections

are good demonstrations of what TMS/AMS is really capable of, and are (I hope) entertaining in their own right. If anybody would like to obtain copies of the above just send me a blank 3 inch disk (one for each collection) together with a copying charge of just £2.00 per disk. Or I can supply the disk(s) myself for just £5.00 each inclusive.

programming techniques. I am sure, however, that you don't want to wait six months before the relevant topic appears; in the meantime, a good book to get your teeth into is *Advanced Amstrad Basic* by Joe Pritchard. Published by Melbourne House, this paperback book sells for £12.95. ISBN 0 86161 202 7. If you are interested, there is a review of the book in issue 15.



"I WISH YOU'D GIVE THAT POLTERGEIST GAME A REST"

Anyone seen a 6128?

I have been saving for a 6128, so while I was in the local computer centre, looking at the games, I asked the sales assistant why 6128's were not for sale in Dixons, Comet, W H Smiths etc: this was because he was selling 6128's. He said that the reason for 6128's not being on display was because were all sold out and new stocks will not arrive until the summer due to PC's being made in Korea instead of the 6128's (Amstrad had to make a choice). Is all this true and if so where do I buy a 6128? He asked me if I would like to buy one of his 6128's because he only had one left in stock. I offered him £200 deposit, but that was not good enough.

David Tunbridge
Wembley

Sounds like a load of hogwash to me. The only people likely to know what Amstrad's production lines in Korea are or aren't up to, are the

top brass at Amstrad. You should be able to get a 6128 through any of the places you mention. If they don't have one in stock now they should be able to order one for you.

Christmas cracker problem

I am having loading problems with your Christmas cracker tape on my 464. The utilities will load ok but the game *The Duct* gives all the impressions of loading, but goes to the end of the tape without doing anything.

Can you give any hints or tips on loading difficult tapes in your great mag.

J Borrett
Newtown

No problem. Here's a summary of what we said way back in issue 8...

The tape deck in the 464 isn't as reliable as one might wish. The playback head can move out of line so it doesn't line up with the recorded track on the tape. This may result in Read Errors.

If you do get problems there are two things you can do. Firstly you can clean the tape-head and the pinch rollers that feed the tape onto it. Use a clean cloth with a dab of methylated spirits. Secondly you can adjust the position of the tape-head using a "Philips" screwdriver.

In front of the Rewind button is a small hole. When Play is pressed an adjustable screw moves into line with the hole. By turning this up to a half turn in either direction you may well succeed in bringing the tape-head more perfectly into line.

Try a series of small adjustments in one direction, and if that doesn't work try the other direction. If you do this will a program is loading, and have the volume turned up full, you can also listen to the speaker at the back of the tapedeck and judge when it is loudest and crispest.

This process is known as adjusting the "azimuth" and does not invalidate your guarantee. However, you should take care lest you move the head out of position. Make sure you know how to get it back to its original position. Also be careful not to press Stop while the screwdriver is still in position - remove it first.

Helpline Saga continues

A few months ago after you printed my name in Helpline I received a letter from an English bloke asking me if I would like to buy cheap software. Enclosed was a complete list of games with prices which made me think that the games were probably copies (eg Knight-Tyme - 50p). I have forgotten the guys name as I tore up the list. This kind of thing not only damages the software industry, but it also gets Helpline a bad reputation and could ruin a great service. If anyone else receives mail from this character they should send his name to AA, that would scare him off.

Roger Murphy
Glengogary, Co Dublin

As a member of Helpline, I have, or hoped to have, helped fellow Amstrad users in many ways. I am writing this letter to defend the Helpline members, okay some are mis-using the service, but to be fair most are helping others. My personal view is if I get a letter asking to swap software it's filed under "B" for bin, so don't write to me as it is a waste of a stamp, any that contain S.A.E are used for people who forgot to include one. On average I get two letters a week asking to swap software. I enclose 2 of them to show how bad things are getting.

Letter no.1, from somebody in Singapore says "No much software over here" (every body say "ah") "I've only got over 370 disk based, never mind the tapes" I worked out that's about £5,180 NEVER MIND the tapes. Letter no.2, from Co. Down. 192 disk based 63 tape based cost about £3,255. Grand total £8,435, and that's only 2 letters.

So the moral is - if you are thinking of swapping software, don't. It will only hurt you in the long run and will mean higher prices for programs. Think, a Mastertronic game is now £1.99, after ten years of this it could be £16 or £17 pounds. So don't just blame the Helpline members. Thanks for listening.

Edward Reid
Drumchapple

It's nice to see Helpliners taking such a responsible attitude. Far from blaming them for anything I think they do a wonderful job for

fellow users. The threat is from outsiders wanting to misuse the service. If caught I think the punishment should fit the crime - let's chop their interfaces off!

PS No I won't print "Will Chris Bowan of Wales, from Camp Beaumont '86 please make contact". While we're on the subject, it's also strictly against editorial policy to print "Happy birthday, Thomas Higgins". Ever get the feeling you've been conned?



"TAKES ALL THE FUN OUT OF IT SOMEHOW..."

Mixing modulators

I have a CPC 464 with speech (ssa1) and Trojan light pen. I would like to get a 6128. But I am not allowed to sell my 464 because my sister wants it. Would it be possible for me to buy a 6128 with a modulator then give the modulator to my sister with the 464 keyboard so she can use it on her black and white portable TV, and I can use the 464 monitor with 6128 keyboard. If so how much is a 6128 with modulator or 6128 keyboard on its own.

Wayne Lewis
Sutton Coldfield

Unfortunately you can't. The modulators and monitors are built specifically for the two machines. The 464 monitors, both colour and green screen, have no power supply for the 6128's built-in disk drive.

Helpline

Where eager Amstrad experts volunteer aid to fellow readers having problems

If you too feel helpful, just send us your name, address, phone number (say so if you don't want it to be printed) and subject on which you want to help. Please write on a postcard or the back of a stuck-down envelope to simplify administration here in the office. Send to: **Helpline, Amstrad Action, 4 Queen Street, Bath, BA1 1EJ.** If you are asking for help, make direct contact with the appropriate Helpliner - don't pester your usually-patient (but pressed) editor. By post, you must include a self-addressed,

stamped envelope for the reply - otherwise you won't get one. And if you telephone, stick to socially acceptable hours!

Reminders: Anyone involved in piracy is not welcome on this page and if problems arise they will be removed. Keep it legal, it's in everyone's interest. A plea to helpliners - if you do receive SAE's from people, please return them with some acknowledgement. Lastly a reminder that if you want to come off the Helpline you should write and say so.

Elite, Yie Ar Kung Fu, Commando, E.Freddy, Space Harrier, Football Manager.
M.Levy, "Brecon", Woodside Lane, Finchley, London, N12 8RG. tel (01) 445 0220 (weekends (01) 209 1006)

I am able to give full help with RSX's (bar commands). Send £1 and a large SAE for the photocopied sheets. Also able to give some help on Basic.
Shabaz Yousaf, 137 The Crescent, Slough Berkshire, SL1 2LF

I am offering tips on: Pinball Wizard, Killer Gorilla, Defend or Die, Chronos, Spindizzy, 5-a-Side Soccer, 180, Dr Destructo, Gauntlet, Head over Heels, World Series Baseball, Paperboy, Renegade, Green Beret, Yie-ar-kung-fu, Leaderboard, Mission Genocide, Football Manager.
Simon Baker, 23 Biddenden Way, Istead Rise, Gravesend, Kent, DA13 9DE ☎ 0474 833246

Gauntlet, Aliens, Hacker 1, Green Beret, Short Circuit, Lightforce, Knight-tyme, Zub, Xcel, Bomb Jack 1, Apprentice, Thrust, Saboteur, 3D Boxing (Amsoft), Kane, Oh Mummy. Good at programs that give lists of things, eg telephone numbers, games, stocks. - 464

Abdul ("Billy") Oureshi, 16 Truggers, Handcross, Haywards Heath, W Sussex, RH17 6DQ ☎ (0444) 40 0548

Soul of a Robot, Zub, Rebelstar, Kobayashi Naru, Spellbound, Knight Tyme, Get Dexter, The Last V8, Thing on a Spring, Batman, Starquake, Cauldron, Cauldron 2, Dummy Run, Bounder, Gunfright, Chronos, Antiraid, Curse of Sherwood, Amaurote, Feud, Robin Hood, Dizzy, Sorcery, Head over Heals, Thrust and Spindizzy.
Graeme and David MacDonald, 13 Shillinghill, Alness, Ross-shire, Scotland, IV17 OSY

Amaurote, Kane, Hyperbowl, Turbo Esprit, Speed King, Starstrike II, Yie-ar Kung Fu, Thrust 1, Tomahawk, Druid, Batman, Knight Tyme, Thanatos, Harvey Headbanger, Paperboy, Gauntlet, Arkanooid, Lightforce, Trailblazer, F1 simulator, Way of the Exploding Fist
Jason Burns, 212 Victoria Rd, Higher St Budeaux, Plymouth, PL5 2DH

Basic, machine-code, hardware, programming roms. Peripherals available for use: printers, video digitizers, rom blowers, Multifaces
Mark Spencer, SIG Enterprises, room 2, 101 Oxspring Bank, Sheffield, S5 6NR ☎ (0742) 31 4053

Protect, Prospell, Utopia, roms, Basic, DMP 2000 printer: can supply screendumps of games or programs
Andrew Perry, 5 Uplowman Road, Tiverton, Devon, EX16 4LU ☎ (0884) 25 3414

Mini Office 2, Melbourne Draw, Music System, tape-to-tape, DMP 2000, Grand Prix Simulator, Chronos, Starglider, Yie-ar Kung Fu, Colony, Destructo, Radzone, Kane, Dynamite Dan, Rocky Horror Show - and many other games, software companies' addresses and general help on the 464
Helen Saunders, 14 Elm Ave, Beeston, Nottingham, NG90 1BU

any problems or tips (founded German Computer Service two years ago) including CPM, transferring programs from other computers, hacking, making programs compatible over all CPCs, pokes, Basic errors and problems, Hacker 1, Cauldron 1 and 2, Theatre Europe, Bruce Lee, Thanatos

Kai Herthneck, Ostracherstr. 4, 7000 Stuttgart 80, W Germany ☎ (+711) 72 3357

Message from Andromeda, Terra Cognita, Thrust, Mr Freeze, Spellbound
Darren Jackson, 85 Fitzherbert St, Warrington, Cheshire, WA2 7PN

Feud, Jack the Nipper, Knight Tyme, Message from Andromeda, Revolution, Street Hawk, Saboteur, Starstrike II, Thrust II, 180
Paul Selvidge, 15 Whitcombe Close, Lordswood, Chatham, Kent, ME5 8RL ☎ (0634) 62978 except Sundays

Batman, Druid (use map locations from AA maps), Head over Heels, Batman, Druid, Ralli II, Green Beret, DT's Decathlon, Lightforce, Yie-ar Kung Fu, Who Dares Wins II, Bruce Lee, Ghosts'n'Goblins, Chuckie Egg, Chronos, Moon Cresta, Mindshadow
Darren Roofe, Cathryn Wheel House, 43 High Street, Manea, Cambs, PE15 0JD

Get Dexter, Robin Hood, Trailblazer, Fighting Warrior, Druid, Knight Lore, Thrust, Avenger, Bruce Lee, Match Point, Starglider, Green Beret, Sorcery, Revolution, Thing on a Spring, Starstrike II, Xeno, Pingpong, The Apprentice, Finders Keepers, Pipeline II, Shockway Rider, Locomotion, Zub, Knight Tyme, Radzone, Everyone's a Wally
John Lawless jnr, 75 Leix Rd, Cabra, Dublin 7

Amaurote, Feud, Sorcery, Knight Tyme, Spellbound, Gauntlet, Space Harrier, Ikari Warriors, Bombjack 1, all Elite games, Batman, Frankie, Gillan's Gold, most Ocean games, Gunfright, Alien 8, Thrust 1, Flyspy, Molecule Man, Caves of Doom, Spindizzy. Adventures: Hobbit, Jewels of Babylon, Worm in Paradise. Has typed in all the type-ins.
Frankie, 103 Strathaven Road, Lesmahagow, Lanarkshire, ML11 0DN

Soccer Boss, Starquake, Thrust, Rebelstar, Ikari Warrior, Hyperbowl, Football Manager, Feud, Harrier Attack, Kane, Radzone, Ghouls, Bruce Lee, Manic Miner, Star Commando, Bump Set Spike, World Series Baseball, Raid, Don't Panic, Grand Prix Simulator, Hunter Killer, Fighter Pilot
Craig Thomson ☎ Motherwell, Scotland (0698) 51177

Machine code programmin, Basic programming, parallaxing udg's (text), multi-coloured text (mode 1 and 0), send SAE and disk for demo progs and programming help, almost all games.
Mathew Middlecott, 168 Fernhill, Harlow, Essex, CM18 7LF. tel (0279) 33269

Solving bugs in Basic and most machine code programs. Enclose listing + description of program + description of problem) If possible enclose cassette with program on 464 only. If machine code enclose assembler listing.
Paul Jones, 78 Fitzwilliam Street, Swinton, Rotherham, S.Yorkshire, S64 8RW

Converting programs for the Vortex disk drive. Simple machine code. Hacking. CP/M programs & utilities. A whole bunch of public domain programs.
Mark de Bont, de Foes 15, 5581 AP, Waalre, Holland, tel (04904) 13963

Radzone, Ghosts and Goblins, Knight Tyme, Dragons Lair, Green Beret, Gauntlet, Feud, Starquake (codes), Bounder, Boggit.
David Brooke, 8 Birkby Grove, Bilton Grange, Hull, HU9 4PZ

Knight Tyme, Spellbound, machine code, Basic, Word Perfect, Melbourne Draw, GAC, pokes, maps, hacking, DMP 2000 problems, games development using GAC, word-processing, graphics (screen dumps), all CPC games. Can also print program listings for a 40p postal order. How to do pokes and problems using modems. (I have a Voyager 7)
Guy Sicka, 78 Chesterfield Road, High Barnet, Herts, EN5 2RF. tel (01) 441 5612

Basic programming, some machine code.
Paul Bower, Elm Gable, Hermitage, Newbury, Berks. RG16 9SA. tel (0635) 20089

Tasword 6128/Tas-spell 464 & 6128, Tasprint, Tascopy, Basic programming, Masterfile III, Locksmith+, Masterdisc, Epson LX printers, CPM and help on then game Elite.
Oystein Kjaereng, Torvymrv.42, 3170 Sem, Norway

Feud, BMX Simulator, Equinox, Who Dares Winds 2, Frank Brune's Boxing, Shogun, Green Beret
Inigo Dunkley, 62 Rainbow Drive, Mellington, Liverpool, L31 1EZ, Merseyside. tel (051) 547 2714

Basic, machine code, Laser Genius, tape loading, disk loading, firmware, graphics, sound, hints, pokes, mapping, Word Perfect, Sorcery+, Transmat, Oddjob, Warlord, Kung Fu Master, Bruce Lee, Bounder, Gunfright, Pip, will print listings for 20p
Steven Lawson, Plot 77, Meir Park, Staffordshire, ST1 6HQ.

Basic programming, machine code programming, firmware calls, Amsdos calls + accessing them, adding second drives (3in + 5.25in), tape loading problems, multiface two, printer problems.
Kevin Bryant, Jessamine Cottage, Chapel Lane, Ashford Hill, Newbury, Berks, RG15 8BE. tel Tadley 71792

GAC adventure writing and problems. Also conversions to other formats undertaken for published GAC authors by fellow established author.
C.Sharp, 4 Osprey Gdns, Sheffield, S2 5GE, S.Yorks

Bombjack, Green Beret, Doomdarks Revenge, Lords of Midnight, Thrust, Barbarian, Kung Fu Master, Elite, Hunchback, Feud, Everyone's a Wally, Who Dares Wins 2, Grand Prix Simulator, Kane, Hyperbowl, Ikari Warriors, Fist, Yie Ar Kung Fu, Bruce Lee, Jack the Nipper, Fourth Protocol (part one only), Knight Tyme, Ghsot n' Goblins.
Paul Crich, 33 Hills Road, Strathaven, Lanarkshire, ML10 6LQ. tel (0357) 29606

Gauntlet, Knight Tyme, Green Beret, Spell Bound, Bombjack, Stormbringer, Bombjack II, Kane, Amaurote, Zub, Grand Prix Simulator, Starquake, Harrier Attack, Bruce Lee, Pipeline 2, Harvey Headbanger, Back to Reality, Equinox, Knight Lore, Bounder, Ping Pong, Space Harrier, Exolon, Mag Max, Ball Crazy, Desert Fox, Boulder Dash.
David Howlett, 53 St Marys Avenue, Alverstone, Gosport, Hants, PO12 2HU

An extremely large number of games which is too long to list here so telephone him to find out.
Craig Thomson. tel (0698) 51177

Raid, 180, Star Raiders II, Beach Head II, Death Wake, Sir Lancelot, Footballer of the Year, Nonteraqueous
Michael Dickinson, 281 Tyldesley Road, Atherton, M29 9AL



COMSOFT

APPOINTED AMSTRAD BUSINESS COMPUTER DEALER

COMPUTERS

TITLE OF GOODS	RRP	OUR
CPC 464 colour monitor	299.95	284.95
CPC 464 mono monitor	199.95	189.95
CPC 6128 colour monitor	399.95	379.95
CPC 6128 mono monitor	299.95	284.95
PC 1512 DD colour monitor	746.35	705.03
PC 1512 DD mono monitor	573.85	545.16
PC 1512 SD colour monitor	631.35	599.78
PC 1512 SD mono monitor	458.85	435.91
PC 1640 DD colour display monitor	861.35	818.28
PC 1640 DD enhanced colour display	1033.85	982.16
PC 1640 DD mono display monitor	688.85	654.41
PC 1640 HD colour display monitor	1206.35	1146.03
PC 1640 HD enhanced colour display	1378.85	1309.91
PC 1640 HD mono display monitor	1033.85	982.16
PC 1640 SD colour monitor	746.35	705.03
PC 1640 SD enhanced colour monitor	918.85	872.91
PC 1640 SD mono monitor	573.85	545.16
PCW 8256	348.85	326.66
PCW 8512	458.85	435.91
PCW 9512 C/W daisywheel printer	573.85	545.16
Spectrum 128+2	139.95	132.95
Spectrum 128+3	199.95	189.95

PRINTERS

TITLE OF GOODS	RRP	OUR
DMP 2160 printer	159.00	151.05
DMP 3160 printer	228.85	217.41
DMP 4000 15" printer	401.35	381.28
LQ3500 printer	401.35	381.28

PRINTER RIBBONS

TITLE OF GOODS	RRP	OUR
DMP 2000/2160 3000/3160 printer ribbons	5.09	4.79
DMP 4000 ribbon	8.05	6.44
DMP 1" printer ribbon	6.50	5.20
LQ3500 printer fabric ribbon	6.50	5.20
PCW 8256/8512 carbon ribbon	6.99	5.94
PCW 8256/8512 fabric ribbon	6.50	5.20
PCW 9512 carbon ribbons	4.89	3.91

BLANK MEDIA

3" Blank disc	3.00
5 1/4" blank discs	13.50
10 3/4" blank discs	24.86
10 31/2" double density microdiscs	29.95
10 31/2" single density microdiscs	22.95
10 51/4" discs	9.95
10 C15 cassettes	4.95

DISC STORAGE BOXES

10 spare 3" disc boxes	3.50
AMS 20L holds 20 x 3" discs	12.95
AMS 20L holds 40 x 31/2" discs	12.95
DD 100L holds 100 x 51/4" discs	12.95

CONTINUOUS PAPER & LABELS

100 3 1/2" floppy disc labels 69x70	3.00
50 5 1/4" floppy disc labels 127 x 36	2.50
100 address labels 1 across	1.50
100 cassette labels 89 x 41 with cut outs	3.00
100 standard disc labels 55 x 35	1.86
1000 sheets 11 x 9 1/2 80g continuous paper	12.95
1000 sheets A4 70g continuous paper	12.95
1000 sheets A4 90g continuous paper	14.95
2000 sheets 11 x 9 1/2 80g continuous paper	14.95
2000 sheets 11 x 9 1/2 80g continuous paper	17.95
2000 sheets A4 70g continuous paper	21.95
500 address labels 1 across	2.95

DUST COVERS

2000/2160 300/3160 printer dust cover	4.50
4000 printer dust cover	4.50
CPC dust cover colour monitor	8.50
CPC dust cover mono monitor	7.50
PC1512 dust cover colour monitor	12.95
PC1512 dust cover mono monitor	11.95
PCW dust cover	11.95

JOYSTICKS

125 Plus joystick Cheetah	8.95
Competition Pro 5000 clear joystick	15.95
Competition Pro 5000 joystick	14.95
Cruiser Microswitch/multidirection	9.99
Economy joystick	5.99
Fantastick joystick	6.99
JY2 joystick with 2nd port	14.95
Mach 1 Plus joystick	14.95
Magnum joystick microswitch	12.50
Phazor One joystick	12.95
Quickshot 2 joystick	9.95
Quickshot 2 Plus joystick	12.95
Silk stick joystick	6.99
Speeding joystick	12.99

GENERAL UTILITIES

3" Head cleaning kit disc kit	9.95
51/2" Head cleaning kit disc	6.99
5 1/4" head cleaning kit disc	5.99
Monitor station (stand)	15.99
Mouse Mat	4.99

CPC GAMES

CASS	OUR	DISC	OUR
4 Smash Hits for Lawsons	8.95	8.06	14.95
500CC Grand Prix	9.99	8.99	14.95
6 Pak Vol 2	9.95	8.96	14.95
720"	9.99	8.99	14.95
Academy	9.95	8.96	14.95
Air Combat Emulator	9.99	8.99	14.95
Ant of Ace	9.95	8.96	14.95
Activator	8.99	8.09	12.95
Advance Art Studio	—	0.00	24.95
Aliens (Electric)	—	0.00	24.95
Aliens (US version)	9.99	8.99	14.95
Battles of Rome	12.95	11.66	17.95
Arkanoid	8.95	8.06	14.95
Armageddon Man	12.95	11.66	—
Army Moves	8.95	8.06	14.95
Asphalt	9.95	8.96	14.95
Auf Wiedersehen Monty	9.99	8.99	14.95
Ballyhoo	—	0.00	24.99
Barbarian	9.99	8.99	12.95
Baseball Gamestar	9.99	8.99	14.95
Battle for Midway	—	0.00	9.95
Battle of Britain	—	0.00	9.95
Battle of Germany	—	0.00	9.95
Big 4 Compilation	9.95	8.96	11.66
Big 4 Vol 2	9.95	8.96	11.66
Black Magic	—	0.00	14.99
Blue War	9.99	8.99	14.95
Blue Sleigh	9.99	8.99	14.95
Bombjack 2	8.95	8.06	14.95
Book of the Dead	8.95	8.06	14.95
Brian Clough Football	14.95	13.46	17.95
Bride of Frankenstein	8.99	8.09	14.95
Bulls Eye	7.95	7.16	—
C50	9.95	8.96	—
California Games	9.99	8.99	14.95
Captain America	9.99	8.99	14.95
Catch 23	8.95	8.06	13.46
Centurions	9.99	8.99	14.95
Championship Football	9.99	8.99	14.95
Champs Water Ski	9.95	8.96	14.95
Cholo	14.95	13.46	19.95
Cluedo	9.95	8.96	14.95
Coin Op Classics	9.99	8.99	—
Colossus Bridge	11.95	10.76	14.95
Colossus Chess 4	9.95	8.96	13.46
Computer Hits 10	9.95	8.96	—
Computer Hits 2	9.95	8.96	14.95
Computer Hits 3	9.95	8.96	14.95
Computer Hits 4	9.95	8.96	14.95
Computer Hits 5	6.26	6.26	11.95
Computer Hits 6	—	0.00	14.95
Convoy Raider	9.99	8.99	14.95
Countdown	7.95	7.16	—
Deluxe Scrabble	—	0.00	15.95
Death or Glory	8.95	8.06	14.95
Death Wish 3	9.99	8.99	14.95
Deeper Dungeons	—	0.00	6.99
Despotic Design	9.99	8.99	14.95
Disc 50	8.95	8.06	14.95
Donkey Kong	8.95	8.06	14.95
Dragons Lair 2	8.95	8.06	14.95
Dragons Lair	8.95	8.06	14.95
Druid	7.95	7.16	—
Edge Classix 1	6.99	6.29	14.99
Enduro Racer	9.99	8.99	14.95
Enterprise	8.95	8.06	14.95
Epyx on Amstrad	9.99	8.99	14.95
Evening Star	8.95	8.06	14.95
Exolon	8.95	8.06	14.95
Express Raider	9.99	8.99	14.95
Eye	9.95	8.96	14.95
FA Cup Football 87	7.95	7.16	—
F15 Strike Eagle	9.95	8.96	14.95
Final Matrix	9.99	8.99	14.95
Five Star Games	9.95	8.96	14.95
Five Star Games 2	9.95	8.96	14.95
Five Star Games 3	9.95	8.96	14.95
Flunky	9.95	8.96	14.95
Football Director	8.95	8.06	—
Footballer of the Year	9.95	8.96	14.95
Freddy Hardest	8.95	8.06	14.95
Frankenstein	8.95	8.06	14.95
GSL Championship Football	8.99	8.09	14.95
Gooch Test Cricket	8.95	8.06	14.95
Game Set and Match	12.95	11.66	17.95
Gameover	8.95	8.06	14.95
Gamestar	9.99	8.99	14.95
Ghost and Goblins	8.95	8.06	—
Go-Bots	9.99	8.99	14.95
Great Escape	8.95	8.06	14.95
Guada Canal	9.99	8.99	14.95
Guid of Thieves	—	0.00	19.95
Harvey Head/Willow	6.99	6.29	—
Head Over Heels	8.95	8.06	14.95
Hi Frontier	9.99	8.99	14.95
Hit Pak	9.95	8.96	14.95
Hitchhikers Guide	—	0.00	24.99
Hollywood H	—	0.00	24.99
How to be a Bastard	8.95	8.06	—
Hybrid	9.99	8.99	14.95
Ikari Warriors	8.95	8.06	14.95
Indiana Jones	9.95	8.96	14.95
Indoor Sports	9.95	8.96	14.95
Infield	—	0.00	24.99
Infiltrator	9.95	8.96	14.95
International Karate	—	0.00	6.99
Into the Eagles Nest	8.95	8.06	12.95
Jack the Nipper 2	8.95	8.06	14.95
Jackal	8.95	8.06	14.95
Jailbreak	14.95	13.46	19.95
Jewels of Darkness	9.99	8.99	—
Kings Play	9.99	8.99	14.95
Killed Until Dead	9.99	8.99	14.95
Konami Coin Ops	9.95	8.96	14.95
Krakuot	—	0.00	14.99
Leaderboard	9.95	8.96	14.95
Leaderboard Add on T	4.99	4.49	9.99
Leather Goddess	—	0.00	24.99
Leviathan	8.95	8.06	—
Lightforce	8.95	8.06	—
Little Comp People	—	0.00	14.99
Living Daylights	9.95	8.96	14.95
Livingstone	8.95	8.06	14.95
Lurking Horror	—	0.00	24.99

Mag Max	8.95	8.06	14.95
Mario Brothers	8.95	8.06	14.95
Matchday 2	8.99	8.09	14.99
Mask	9.99	8.99	14.99
Mercenary	9.95	8.96	—
Mercenary Comp	—	0.00	19.95
Microcross	9.99	8.99	14.99
Miss Gen/Bomscap	—	0.00	6.99
Monopoly	9.95	8.96	14.95
Moon Cresta	—	0.00	7.95
Moonmist	—	0.00	24.99
Mr Weems/She Vampire	8.95	8.06	13.95
Murder on Atlantic	14.95	13.46	19.95
Mutants	8.95	8.06	14.95
Mystery of Arkham	8.95	8.06	14.95
Mystery of the Nile	7.95	7.16	12.95
Nemesis the Warlock	8.95	8.06	12.95
Nemesis	8.95	8.06	14.95
Nepesampster	8.95	8.06	14.95
Now Games 4	9.95	8.96	—
Paperboy	8.95	8.06	14.95
Passenger on the Wind	12.95	11.66	14.95
Passengers on the Wind 2	9.95	8.96	14.95
Pawn	—	0.00	19.95
Pegasus Bridge	12.95	11.66	17.95
Phantom Club	8.95	8.06	14.95
Planetfall	—	0.00	24.99
Power Plays	9.99	8.99	—
President	—	0.00	7.99
Prohibition	9.95	8.96	14.95
PSI 5 Trading	—	0.00	14.99
Quartet	9.99	8.99	14.99
Questor	8.99	8.09	12.95
Ramparts	9.99	8.99	14.99
Red Spaced Out	—	0.00	6.99
Red LED	9.99	8.99	14.99
Renegade	8.95	8.06	13.95
Road Runner	9.99	8.99	14.95
Saboteur 2	7.95	7.16	11.95
Sailing	9.99	8.99	14.95
Sam Fox Strip Poker	8.06	8.06	—
Scalextric	9.95	8.96	14.95
Scrabble	9.95	8.96	14.95
SeaTalker	—	0.00	24.99
Sentinel	9.95	8.96	14.95
Shadow of Mordor	8.95	8.06	—
Side Walk	9.95	8.96	14.95
Sidney Affair	9.95	8.96	14.95
Silent Service	9.95	8.96	14.95
Silicon Dreams	14.95	13.46	19.95
Slim	9.99	8.99	14.99
Slag Fight	9.99	8.99	14.99
Sold Gold	9.99	8.99	14.99
Solomons Key	9.99	8.99	14.99
Sorcerer	—	0.00	24.99
Sorcerer Lord	12.95	11.66	17.95
Space Harrier	8.95	8.06	14.95
Spell Breaker	9.99	8.99	14.99
Spiritfire 40	9.95	8.96	13.95
Spy v Spy 3	9.95	8.96	14.95
Star Games 2	9.99	8.99	—
Starcross	—	0.00	24.99
Starfox	8.99	8.09	14.99
Starglider	14.95	13.46	19.95
Steve Davies Snooker	7.95	7.16	12.95
Strick Fever Harrier	9.95	8.96	14.95
Summer Gold Compendium	9.99	8.99	14.99
Super Cycle	9.99	8.99	14.99
Super Hang On	9.99	8.99	14.99
Super Sprint	9.99	8.99	14.99
Suspect	—	0.00	24.99
Survivor	9.99	8.99	14.99
Suspended	—	0.00	24.99
Sword and Sorcery	9.95	8.96	14.95
Tai Pan	8.95	8.06	14.95
Theatre Europe	—	0.00	14.95
They Sold a Million	9.95	8.96	14.95
They Sold a Million 2	9.95	8.96	14.95
They Sold a Million 3	9.95	8.96	14.95
They Stole a Million	9.99	8.99	14.99
Thing Bounces Back	9.99	8.99	14.99
Throne of Fire	8.95	8.06	—
Thrust 2/Parabola	—	0.00	6.99
Thrust/Ninja Master	9.95	8.96	14.9

AMSCENE

Monthly update on what's new on the CPC scene

Micro movies

Software giants Mirrorsoft, with titles like *Strike Force Harrier* and *Spitfire 40* under their wing, have landed themselves the distribution rights to the next six titles in the Cinemaware interactive software range.

Mirrorsoft have already been exclusive UK distributors for Cinemaware's first four products - *Defender of the Crown*, *SDI*, *King of Chicago* and *Sinbad and the Throne of the Falcon*. None of these titles have yet appeared on the Amstrad, however, *Defender of the Crown* (which has clocked up huge sales on other formats) is currently being developed for the CPC by Ubisoft in France.

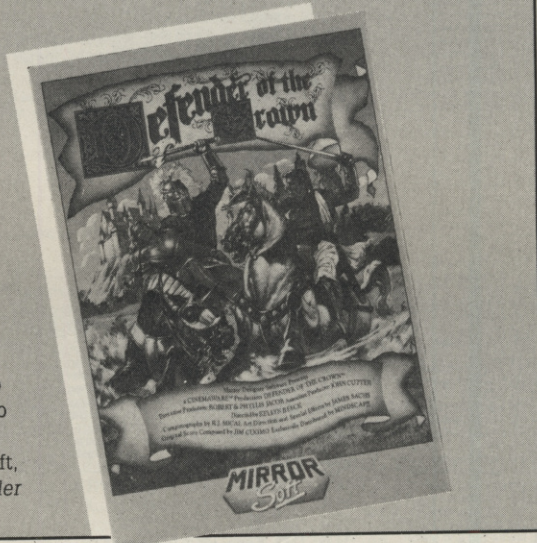
Defender of the Crown is a medieval strategy game in which the personality of any of four characters may be controlled. The objective is to reunite England by capturing all the territories of the other characters. The game has been received with such enthusiasm on other computers because of the staggering number of beautifully designed locations.

Ubisoft in France told us they were hopeful that the product would be ready for scrutiny by Mirrorsoft in early March. So far Ubisoft haven't encountered any programming hitches, but due to the programs huge size it is likely to appear on two disks.

Pat Bitton, marketing director at Mirrorsoft, was unable to give a firm release date for *Defender*

of the Crown on the Amstrad. However, Pat stated that a price of around £15 will be set. And, due to the massive playing area and number of screens, a cassette version is unlikely.

"We shall wait and see how *Defender of the Crown* is received before deciding whether to release other Cinemaware products on the Amstrad", enthused Pat. The same applies to the first two (of the promised six) new Cinemaware offerings: *Three Stooges* and *Rocket Ranger*. More from Mirrorsoft on 01 3774644.



Advance into the Future

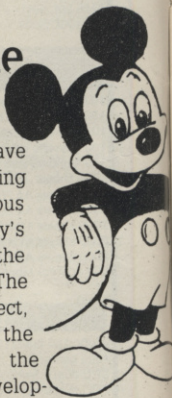
Digital Integration have turned their attention to flights of future fancy with their latest simulation called *ATF* (Advanced Tactical Fighter). DI have an exceptionally good record for producing accurate simulations that are fascinating to play, like *Bobsleigh*, *Tomahawk* and *Fighter Pilot*. As far as we know the aircraft the game is based on doesn't actually exist (the Pentagon may know different) so DI are really getting ahead of the crowd. The craft is packed with high-tech weaponry and devices and flies over a 3D relief landscape. Should be one to watch for when it comes out at £8.95 on cassette and £13.95 on disk.

Taking the Mickey

Gremlin Graphics have signed a deal to bring the world's most famous mouse, Walt Disney's Mickey Mouse, to the computer screen. The Mickey Mouse Project, as it's called at the moment, is still at the early stages of development, so details of the game are still sketchy.

At present the story line is that Disney Castle has been invaded by four evil witches who serve the Ogre King. They've stolen Merlin's wand and cast a spell so that the Ogre King can reign supreme. The wand was then broken into four pieces and each witch was given the task of guarding the piece in a tower around Disney Castle. Mickey has been chosen to recover the wand and defeat the Ogre King.

That sort of scenario sounds like it will produce an arcade adventure with some zapping elements thrown in, but we'll have to wait a while for more details.



Budget Gargoyles

The much acclaimed arcade adventures by Gargoyle Games are to be re-released as budget titles. Gargoyle gained their exceptional reputation for games from a handful of titles like *Dun Darach*, *Marsport*, *Tir Na Nog* and *Heavy on the Magick*. All these games, along with *Sweevo's World* will be appearing on the Rack-It label at £2.99. There's also the possibility of a disk compilation of three of the titles but at the moment Hewson, publishers of Rack-It, are undecided on that.

Cuchulainn is the star of both *Tir Na Nog* and *Dun Darach*. He's a

large beautifully animated figure wandering around a Celtic landscape using the objects that he finds so that he can complete his quest. *Marsport* was the first game in the *Siege of Earth* Trilogy, unfortunately the other two games never materialised. The setting was futuristic this time, but the style of play was very similar to that found in Cuchulainn's adventures.

Sweevo's World was a game similar in style to *Knight Lore* only there was more humour in it. *Heavy on the Magick* was an animated graphical adventure. You control Axil the Able in his attempts to escape from the dungeons beneath Collodon's Pile. This is the first time that *Tir Na Nog* has been available in the high street shops, before it was only available

from AA via the mail order department. All of the games will be re-released during February and March at £2.99.



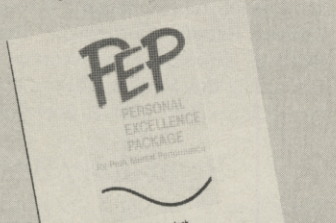
Self-assurance for '88

London based Iansyst – renown for their Iankey typing tutor – have announced *PEP* – Personal Excellence Package. *PEP* is badged as a self-assessment and improvement package. Basically, it will tell you everything you wanted to know about yourself. Like what is your intelligence quotient? What is the best time of the day for you? What do other people think of you?

PEP provides 16 challenges to test and stimulate your brain. Although it is meant primarily as a self-assessment package, Ian-

syst say that the program is of a high enough standard that it can be used for personnel selection.

Only 6128 owners can reveal the truth about themselves as *PEP* runs under the CPM plus operating system. *PEP* is available on disk at £24.95. Direct from Iansyst it costs £24.95 plus £2.30 postage and packing. More from Iansyst at Omnibus Building, 41 North Road, London, N7 9DP. telephone 01 607 5844.



CPM plus from CPC

Owners of upgraded 464s and 664s can obtain a copy of the CPM plus operating system from CPC Ltd of Preston, Lancashire. For a long while it has been the subject of confusion as to where users might legally obtain a copy of the operating system. As CPC Ltd are the only company in the United Kingdom licenced to sell and distribute Amstrad computer spare parts, there is no problem in this department.

This is excellent news for anyone upgrading their 464 to a 6128 as described in this issue. Now you can obtain CPM plus to go along with it without resorting to underhand methods. CPM plus retails for £20.04 on disk. CPC Ltd can be contacted on 0772 555034.

New mouse

Manchester based Siren Software have released a mouse and interface with bundled software. The mouse and interface are available with *Cherry Paint* (a Mode 2 art package) for £49.99 or with *Micro Design* – a desktop publishing program reviewed in issue 28 – for £64.99. Siren are on 061 2281831.

Four not six

The *Cricket Program* designed for compiling cricket statistics, mentioned in the December issue, has been knocked down to £12.95. 14 Heol-Waun-y-Nant, Whitchurch, Cardiff, CF4 1JZ is the place to get the product; Russell Barton is the man to speak to.

Book keeping

To complement their *Small Traders Pack*, SD Microsystems have released the *General Ledger* package. The *Small Trader's Pack* was aimed at providing accounting, stock control and mailing list facilities for a small business. The *Ledger* is designed to handle income and expense accounts. Both cash and bank transactions are catered for. Reports can be produced to include profit and loss statements.

Steve Denson at SD told us, "The system has been specially tailored for the non-accountant and non-computer expert". Features include automatic double-entry, auto-date sort, up to 40 headings and a maximum of 250 transactions.

The *General Ledger* is available now at £19.95 on disk only. It is compatible with all disk-based CPC computers. SD microsystems are on 0462 675106.

Trader's latest

The *Small Trader's Pack* (reviewed issue 26) has been updated to include part payment and stock discounts. The package also boasts better use of memory and an improved menu system. SD say that files from the old version are compatible with the new.

Upgrades can be obtained by sending the earlier version along with £5 to SD Microsystems, PO Box 24, Hitchin, Herts. If buying the Trader's pack for the first time, the price is £24.95.

NEW RELEASES

Activision

The US owned software giants have no less than six new games on the way: *Championship Sprint*, *Predator*, *Gee Bee Air Rally* and *Karnov*.

The rather inappropriately named *September* is a board game that was thought up on a Greyhound bus as it zig-zagged its way around the US of A. The concept is that of Danny Kishon, who found himself with a lot of free time (in between jobs don't-ya-know) and used it to develop the game. The object is to construct a line connecting one side of a playing area to the other. If Danny gets stuck in some traffic jams there's no telling what he'll come up with next.

Predator is based on the Arnold Schwarzenegger movie of the same name. In both the movie and the game he's up against not just human opponents but the lethal alien predator. It's a horizontally scrolling shoot-em-up in the mould of games like *Green Beret*, with a 3D element thrown in and loads of screens to battle your way through.

Championship Sprint is the follow up to *Super Sprint*. There's a difference this time, because you can design your own tracks and then race around your own creations. That addition could well extend the life of an otherwise quite simple arcade game.

The *Corporation* is a strategy/action game set in the year 3026AD. You play the part of the commander of a deep-space robotic mining team, out to get a rare Minorthian Crystal from an asteroid. You have a competitor who also wants the Crystal. Time is short because the asteroid is on a path that will lead to destruction.

Gee Bee Air Rally is a racing game in which take the controls of a Gee Bee, a 1930's plane that was very fast, dangerous and guaranteed to thrill. There are 16 courses of varying difficulty for you race around.

Finally there's *Karnov* on the Electric Dreams label. It's a coin-op conversion and you play a fire breathing Russian who's searching for the lost treasure of Babylon

(entry number 1,973 in the plausible plots file). There are nine levels filled with strange monsters for you to avoid.

All of the games cost £9.99 on tape and £14.99 on disk. *Championship Sprint* and *Predator* are out now, the others will be available soon.

Gremlin

Blood Valley is a new Gremlin game based on the fantasy books of the same name by Mark Smith and Jamie Thompson. The books are in the Duel Master series where

two players take part in a role playing adventure.

They're the book equivalent of our own computer adventures, but the game is going to be more concerned with the arcade side. The computer game is nearing completion so blood should be flowing down your valley shortly.

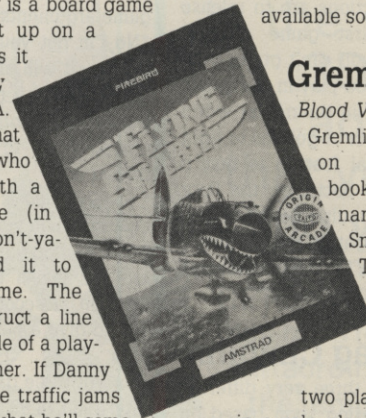
Gremlin are also bringing out a third *Mask* game. It's called *Venom Strikes Back*. This time Matt Tracker's son has been kidnapped by the forces of *Venom* and is being held to ransom. It costs £9.99 on tape and £14.99 on disk.

Druid Strikes Back

Firebird are about to hit the market with the sequel to *Druid* and the conversion of the *Flying Shark* coin-op. The *Druid* sequel is called *Enlightenment*, in which you again control Hasrinaxx the druid. You're attempting to rid the land of Belorn of Acamantor. You're accompanied by an old friend, the Golem, and also some new chums – Wisp, Phoenix and Kraken, representing the other three elements of air, fire and water. It's out now and costs £8.95 on cassette and £14.95 on disk.

The arcade conversion of *Flying Shark*, licensed from Taito, is flapping its fins about in the shops now. It puts you at the controls of a small fighter aircraft in a vertically scrolling shoot-em-up. Costs £8.95 on tape and £14.95 on disk.

Firebird budget also has a couple of new titles out: *Warhawk* and *War Cars*. *Warhawk* is a shoot-



em-up set in an asteroid belt with hordes of aliens waiting to be slaughtered. *War Cars* is a racing game in which you have to find flags around a large network of roads. Also included is a course designer that lets you design your own tracks. Both are available now, *Warhawk* costs £1.99 and *War Cars* is £2.99.

Outlaw Trolls

Outlaw Productions are to release *Troll*, their first game on the Amstrad. Bet you can't guess from the title who you play in the game. You're trapped in the nether world of Narc with lots of goblins to fight off. An unusual feature is that if things get too hectic on the floor you can somersault onto the ceiling and carry on fighting upside down. We look for to taking a sideways look at it when it's finished.

Lazers tag Chaplin

US Gold have three very different licences appearing soon based on Charlie Chaplin, *Lazer Tag* toy guns and the coin-op *Shackled*. In

the role of Charlie Chaplin the silent movie star you get to make your own silent movie. Can you capture the humour, slapstick, emotion and heartache of a Chaplin classic? Can US Gold?

The computer game of the popular toy, *Lazer Tag*, is also nearing completion. The toy allows you to play cowboys and indians (that's what it was when I was a kid anyway) with body targets that completely destroy those delightful game arguments - "You're dead!", "No I'm not you, missed me by a mile" - it will all end in tears you know. You're a rookie cadet at the *Lazer Tag* Training School and your objective is to reach the rank duelist.

Shackled is a coin-op conversion in which you search through a prison to find your comrades. There are 112 levels to fight your way through, a second player can join you to give a better chance of success.

All three games cost £9.99 on tape and £14.99 on disk.

Spreadsheet mix-up

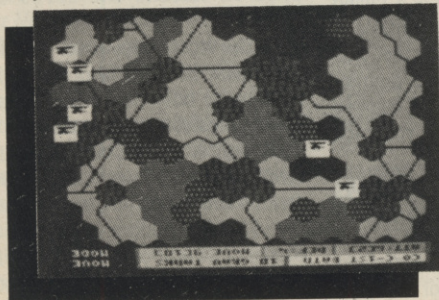
In issue 29 we published an article on spreadsheets, Spread a Little Happiness. Unfortunately things turned out disastrously wrong: all the GOOD NEWS/BAD NEWS boxes are in the wrong place and the address for Audiogenic Software (publishers of *Matrix*) is incorrect. The first GOOD NEWS box (at the top of page 30) belongs to the *Cracker* review; the second GOOD NEWS box belongs to *First Calc*; the third box to MasterCalc 128 and so on. Each box has been shifted one review up.

Audiogenic's new address is Winchester House, Canning Road, Wealdstone, Harrow, Middlesex, HA3 7SJ. Telephone 01 8611166. We stated that *Matrix* was a disk-only product. This is not so. *Matrix* is now available on cassette at £29.95. Those responsible for the mess-ups have been forced to play Roland on the Run till they begged for mercy.

D.I.Y. Wargames

PSS have released *Firezone*, a 21st century wargame, in their Wargamers Series. It plays and looks very similar to *Battlefield Germany* and *Sorcerer Lord*, probably because they're by the same

author! Not only do you get the game, but there's a bonus for all you budding wargame designers - a design program that lets you create your own scenarios. It costs £12.99 on tape and £17.99 on disk.



Battle commences in *Firezone*

US Gold Comp winners

The answers to our Christmas competition for *Gauntlet II* and *720°* are:

- 1) a Ghost
- 2) Merlin
- 3) a Grunt

The winner who will be receiving a US Gold sweatshirt and a copy of both games is **Frances Stockdill** from Darnick. The 24 runners-up will be receiving both games and they are: **Peter Drew**, Worthing; **Unreadable**, Tongham; **Dylan Reuter**, Belgium; **Simon Smith**, Newton; **Gregory Nicholas**, Hardwicke; **Sigurjon Ingolfsson**, Iceland; **Stephen Fairweather**, Sunderland; **Ian Baker**, Bradford; **Edward Turner**, Grappenhall; **Daniel Johnson**, Camberley; **Philip Scanlon**, Chorley; **David MacDonald**, Alness; **Richard Harrad**, Stockport; **R. Larden**, Bromley; **Andrew Harvey**, Cheltenham; **Mark Whitehead**, Retford; **Malcolm McCaig**, Kirkcudbright; **Andrew Kerr**, Droitwich; **Stuart Wood**, Wadesmill; **Guy Verbist**, Malvern Wells; **S. Lucas**, Huyton; **Kevin Wallbank**, Charnock Richard; **A. Stevenson**, Lickey End.

Beau Jolly Bonanza Winner

The winner of the Christmas competition for the Beau Jolly compilations is **Martin Hinsley** from South Littleton. He'll be receiving every-one of Beau Jolly's compilations to date. The three screenshots are correctly identified as *Spindizzy*, *Antirad* and *Tau Ceti*.

Twenty five runners-up will be receiving *Five Star Games 3*. They are: **Mark Chappell**, Bristol; **A. Watson**, Inverness; **Paul Bentley**, Tettenhall; **M. Pemberton**, Sutton; **David Lim**, London; **Mark Watson**, Dewsbury; **Jonathon Blench**, Normanby; **V. Bashforth**, Dronfield; **Andrew Smith**, Mildenhall; **Stewart Lewis**, Newcastle; **M.K. Hessin**, London; **Kevin Leatherbarrow**, Manchester; **Andrew Godliman**, Norwich; **B. Morgan**, Harley; **Steve Harvey**, Bocking; **L.B. Huggins**, Reading; **Gareth Howlett**, Peterborough; **Martin Chapman**, Penryn; **Alexis Tudor-Hart**, London; **Alex Johnson**, Chertsey; **Russell Howell**, Bracknell; **Darren Lee**, Stafford; **John Pitt**, Shirley; **Stephen Flinter**, Attey; **Ranjit Singn**, Huddersfield.

The twenty five runners-up that will be receiving *Computer Hits 10:4* are: **Mark Oldham**, Banbury; **Adam Seamen**, Lower Weare; **Michael Bird**, West Bromich; **Kevin Patton**, Highfield; **Winston Reynolds**, Birmingham; **Unreadable**, East Keswick; **Ivor Betty**, Cardiff; **J. Graham**, Rushton; **S. Longly**, Tonbridge; **S. Danks**, Walsall; **Martin Watkins**, Hardwicke; **Joe Lyrell**, Hackney; **Lee James**, Lymm; **Joe Kernis**, Loughrea; **A.J. Carson**, Glasgow; **Y. Smeets**, Holland; **Unreadable**, Brixham; **Mark Baldock**, Tonbridge; **Geoff Balding**, Bury St Edmunds; **Ken Mitsumizo**, Camberley; **Andrew Nation**, Bridgwater; **David Chapman**, Kiltarlity; **D.G. Philips**, Fulham; **Iain Anderson**, Clifton; **Martin Gillibrand**, Weymouth.

All the prize winners have been passed on to the software houses who should be getting the prizes to you, even as you read this.



AVAILABLE FOR ATARI ST, AMSTRAD,
(AMSTRAD VERSION INCLUDES 'GET DEXTER 1')

He's back..... **GET DEXTER 2**



GET DEXTER II is the winning 3D arcade adventure that you can't do without.

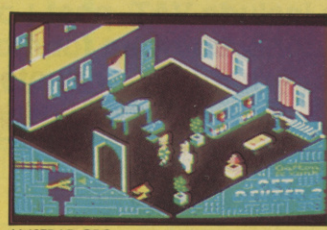
A new and stupendous GET DEXTER adventure. You have to uncover the extraordinary secret of the temple of Antines by negotiation, battles and seduction. An unbelievably wondrous world of excitement awaits you: 3D graphics, animated humanoids, robots, live animals and lots of traps, gags and puzzles.



AMSTRAD CPC



AMSTRAD CPC



AMSTRAD CPC

DISTRIBUTED BY INFOGRADES UK

MITRE HOUSE, ABBEY ROAD, ENFIELD, MIDDSX. EN1 2RQ TEL: 01-364 0123 FAX: 01-360 9119



Lots of nice programs from ARNOR

Amstrad CPC Games

		cas	disc
500cc Grand Prix	Activision	7.89	11.84
6 Pack	Elite	7.86	11.81
6 Pack Vol. 2	Elite	7.86	11.81
Academy	C R L	7.86	11.81
Ace of Aces	U S Gold	7.89	11.84
Acrojet	Microprose	7.86	11.81
Advanced Art Studio	Rainbird		19.71
Aliens (Electric)	Electric Dreams	7.89	11.84
Aliens (U S Versn)	Activision	7.89	11.84
Annals of Rome	P S S	10.23	14.18
Arkanoid	Imagine	7.07	11.81
Armageddon Man	Martech	10.23	
Army Moves	Imagine	7.07	11.81
Asphalt	Elite	7.86	11.81
Auf Wiedsen Monty	Gremlin	7.89	11.84
Ballyhoo	Infocom		11.84
Barbarian	P V G	7.89	10.23
Baseball Game Star	Activision	7.89	11.81
Battle For Midway	P S S		7.86
Battle of Britain	P S S		7.86
Battlefield Germany	P S S	10.23	14.18
Big 4 Compilation	Durell	7.86	9.44
Big 4 Vol. 2	Durell	7.86	11.81
Black Magic	U S Gold	7.89	11.84
Blue War	Go!		11.84
Bombjack 2	Elite	7.07	11.81
Brian Clough F/ball	C D S	11.81	14.18
Bride Frankenstein	Ariolasoft	7.10	11.84
Bulls-Eye	Domark	6.28	
C50	Cascade	7.86	
California Games	U S Gold	7.89	11.84
Captain America	Go!	7.89	11.84
Catch 23	Martech	7.07	11.02
Centurions	Ariolasoft	7.89	11.84
Championship F/ball	Activision	7.89	11.84
Champs Water Ski	Infogames	7.86	11.81
Cholo	Firebird	11.81	15.76
Cluedo	Leisure Genius	7.86	11.81
Coin Op Classics	U S Gold	7.89	
Colossus Bridge	C D S	9.44	11.81
Colossus Chess 4	C D S	7.86	11.02
Computer Hits 2	Beau-Jolly	7.86	11.81
Computer Hits 3	Beau-Jolly	7.86	11.81
Computer Hits 4	Beau-Jolly	7.86	11.81
Computer Hits 5	Beau-Jolly	5.49	9.44
Computer Hits 6	Beau-Jolly		11.81
Computer Hits 10	Beau-Jolly	7.86	
Conflicts	P S S	10.23	14.18
Convoy Raider	Gremlin	7.89	11.84
Countdown	Domark	6.28	
De Luxe Scrabble	Leisure Genius		12.60
Deadline	Infocom		19.74
Death Wish 3	Gremlin	7.89	11.84
Deeper Dungeons	U S Gold		5.52
Despotik Design	Infogames	7.89	11.84
Donkey Kong	Ocean	7.07	11.81
Dragon's Lair	Soft Projects	7.07	
Dragon's Lair (1 + 2)	Soft Projects	7.07	
Dragon's Lair 2	Soft Projects	7.07	11.81
Druid	Firebird	6.28	
Edge Classix 1	The Edge	5.52	11.84
Elite	Firebird	7.86	10.23
Enduro Racer	Activision	7.89	11.84
Enterprise	Melbourne	7.07	
Epyx on Amstrad	U S Gold	7.89	15.79
Evening Star	Hewson	7.07	11.81
Exolon	Hewson	7.07	11.81
Express Raider	U S Gold	7.89	11.84
F A Cup Football 87	Virgin	6.28	
F15 Strike Eagle	Microprose	7.86	11.81
Final Matrix	Gremlin	7.89	11.84
Five Games	Beau-Jolly	7.86	11.81
Five Games 2	Beau-Jolly	7.86	11.81
Five Games 3	Beau-Jolly	7.86	11.81
Flunky	Piranha	7.86	11.81
Football Director	D&H Games	7.07	
Footballer of Year	Gremlin	7.86	11.81
Freddy Hardest	Ocean	7.07	11.81
G Gooch T. Cricket	Audiogenic	7.86	11.81
Game Set & Match	Ocean	10.23	14.18
Gameover	Imagine	7.07	11.81
Gauntlett	U S Gold	7.89	11.84
Ghosts & Goblins	Elite	7.07	
Go-Bots	Ariolasoft	7.10	11.84
Great Escape	Ocean	7.07	11.81
Guadacanal	Activision	7.89	11.84
Guild of Thieves	Rainbird		15.76
Harvey Head/Willow	Firebird		5.52
Head over Heels	Ocean	7.07	11.81
Hi-Frontier	Activision	7.89	11.84
Hit Pack	Elite	7.86	11.81

		cas	disc
Hitchhikers Guide	Infocom		19.74
Hollywood Hi	Infocom		19.74
How to be a Bastard	Virgin	7.07	
Hybrid	Starlight	7.89	11.84
Ikari Warriors	Elite	7.07	11.81
Indianna Jones	U S Gold	7.86	11.84
Indoor Sports	Advance	7.86	11.81
Infidel	Infocom		19.74
Infiltrator	U S Gold	7.86	11.81
Intern'l Karate	Prism Leisure		5.52
Into Eagles Nest	Interceptor	7.07	10.23
Jack the Nipper 2	Gremlin	7.89	11.84
Jackal	Nemesis	7.07	11.81
Jailbreak (Konami)	Konami	7.07	11.81
Jewels Darkness	Rainbird	11.81	15.76
Kids Play	Power House	7.89	
Killed Until Dead	U S Gold	7.89	11.84
Konami Coin-Ops	Imagine	7.86	11.81
Krak Out	Gremlin		11.84
Leaderboard	U S Gold	7.86	11.81
Leaderboard add on	U S Gold	3.94	7.89
Leather Goddess	Infocom		19.74
Leviathan	English	7.07	
Lightforce	Gargoyles	7.07	
Little Comp People	Activision		11.84
Living Daylights	Domark	7.86	11.81
Livingstone	Allgata	7.07	11.81
Lurking Horror	Infocom		19.74
Mag Max	Imagine	7.07	11.81
Marlo Bros	Ocean	7.07	11.81
Mask	Gremlin	7.89	11.84
Mercenary	Novagen	7.86	
Mercenary Comp	Novagen		15.76
Metrocross	U S Gold	7.89	11.84
Miss Gen/Bomb scare	Firebird		5.52
Monopoly	Leisure Genius	7.86	11.81
Moon Cresta	Incentive		6.28
Moonmist	Infocom		19.74
Mr Weems/She Vamp.	Piranha	7.07	11.02
Murder on Atlantic	Infogrames	11.81	15.76
Mutants	Ocean	7.07	11.81
Mystery of Arkham	Melbourne	7.07	
Mystery of the Nile	Firebird	6.28	10.23
Nemesis the Warlock	Martech	7.07	10.23
Nemesis	Konami	7.07	11.81
Now Games 4	Virgin	7.86	
Paperboy	Elite	7.07	11.81
Passengers on Wind	Infogrames	10.23	11.81
Passengers Wind 2	Infograme	7.86	11.81
Pawn	Rainbird		15.76
Pegasus Bridge	P S S	10.23	14.18
Planetfall	Infocom		19.74
Power Plays	Power House	7.89	
President	Prism Leisure		6.31
Prohibition	Infogrames	7.86	11.81
PSI 5 Trading	U S Gold		11.84
Quartet	Activision	7.89	11.84
Ramparts	Go!	7.89	11.84
Realm/Spaced Out	Firebird		5.52
Red L.E.D.	Straight	7.89	11.84
Renegade	Imagine	7.07	11.81
Road Runner	U S Gold	7.89	11.84
Saboteur 2	Durell	6.28	9.44
Sailing	Activision	7.89	11.84
Sam Fox Strip Poker	Martech	7.07	
Scalextric	Leisure Genius	7.86	11.81
Scrabble	Leisure Genius	7.86	11.81
Seastalker	Infocom		19.74
Sentinel	Firebird	7.86	11.81
Shadows of Mordor	Melbourne	7.07	
Sidewalk	Infogrames	7.86	11.81
Sidney Affair	Infogrames	7.86	11.81
Silent Service	Microprose	7.86	11.81
Silicon Dreams	Rainbird	11.81	15.76
Slaine	Martech	7.89	11.84
Slap Flight	Imagine	7.07	11.81
Solid Gold	U S Gold	7.89	15.79
Solomom's Key	U S Gold	7.89	11.84
Sorcerer	Infocom		19.74
Sorcerer Lord	P S S	10.23	14.18
Space Harrier	Elite	7.07	11.81
Spellbreaker	Infocom		19.74
Spitfire 40	Mirrorsoft	7.86	11.02
Spy V Spy 3	Database	7.86	11.81
Star Games 1	Gremlin	7.89	11.84
Star Games 2	Gremlin	7.89	
Starcross	Infocom		19.74
Starfox	Ariolasoft	7.10	11.84
Starglider	Rainbird	11.81	15.76
Steve Davis Snooker	C D S	6.28	10.23
Strike Fce Harrier	Mirrorsoft	7.86	11.81
Summer Gold Compn.	U S Gold	7.89	
Super Cycle	U S Gold	7.89	11.84
Super Sprint	Electric Dreams	7.89	11.84
Survivors	U S Gold	7.89	11.84

		cas	disc
Suspect	Infocom		19.74
Suspended	Infocom		19.74
Sword & Scorcery	P S S	7.86	11.81
Tai-Pan	Ocean	7.07	11.81
Theatre Europe	P S S	7.86	
They Sold a Millin	Ocean	7.86	11.81
They Sold a Millin 2	Ocean	7.86	11.81
They Sold a Millin 3	Ocean	7.86	11.81
They Stole a Millin	Ariolasoft		11.84
Thing Bounces Back	Gremlin	7.89	11.84
Throne of Fire	Melbourne	7.07	
Thrust 2/Parabola	Firebird		5.52
Thrust 2/Ninja Mstr	Firebird		5.52
Thundercats	Elite	7.86	11.81
Tobruk	P S S	7.86	11.81
Tomahawk	Digital Int	7.86	11.81
Top Gun	Ocean	7.07	11.81
Trantor	Go!	7.89	11.84
Triaxos	Ariolasoft	7.10	11.84
Trio Hit Pack	Elite	7.86	11.81
Trivial Baby Boomer	Domark	11.81	15.76
Trivial Genus Edit	Domark	11.81	15.76
Trivial Young Edit	Domark	11.81	15.76
Two on Two Bsktball	Activision	7.89	11.84
Ultima Rat/Gunstar	Firebird		5.52
Vulcan	C C S	7.86	
Warlock	The Edge	7.07	11.81
Winter Games	U S Gold	7.86	11.81
Wish Bringer	Infocom		19.74
Wizball	Imagine	7.07	11.81
Wonderboy	Activision	7.89	11.84
World Class L/board	U S Gold	7.89	11.84
World Genus	U S Gold	7.89	11.84
Xor	Logotron	7.86	11.81
Yie Ar Kung Fu 2	Imagine	7.07	
Zork 2	Infocom		19.74
Zynaps	Hewson	7.07	11.81

CPC6128 utility software

		cas	disc	rom
Advanced Music System (+ 464)	Rainbird			23.66
AMX Stop Press	A.M.S			39.49
Dbase II	1st Software			78.96
Mastercalc 128	Campbell			26.07
Masterfile 3	Campbell			31.56
OCP Art Studio	Rainbird			15.76

Arnor CPC Software

		cas	disc	rom
Protex		19.95	26.95	39.95
Prospell			24.95	34.95
Promerge			24.95	
Promerge Plus				34.95
Utopia				29.95
Maxam		19.95	26.95	39.95
BCPL			39.95	39.95
Model Universe		15.95	19.95	
ROMBO Rom box				34.95

Arnor PCW/CPC 6128

		cas	disc	rom
Protex (v2.2)			59.95	
Prowot (German Protex)			59.95	
Prospell (v4.1)			29.95	
Pocket Protex			39.95	
German dictionary for Protex			19.95	
Maxam II			49.95	
C			49.95	
Maxam II & C together			69.95	
BCPL			39.95	

Arnor PC software

		cas	disc	rom
Protex			59.95	
Protex demo disc			5.00	
Protex utilities			19.95	
German dictionary for Protex			19.95	

NEW Release ... Cage ROM

Amster's Cage ROM - Viewdata software £34.95

Quite simply the best Viewdata software available for Amstrad CPC computers, the Cage ROM is ideal for Prestel. Features include mailbox uploading, telesoftware downloading, full configuration facilities, autodialling, printer screen dump, frame stores, tagging, carousel viewing. Menu operation makes the Cage ROM very easy to use. Can be used to upgrade your existing comms software ROM.

All prices include VAT, post + packing. Please phone to enquire about products not listed. We can supply software for most computers at very low prices. Please make cheques payable to Arnor Ltd. or quote Access/Visa number. 24 hour sales line on 0733 239011. Arnor Ltd (AA3), Protex House, Wainman Road, Peterborough, PE2 0BU.

Please send me the following:		Name	Address	
Qty	Product			
_____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
Total £ _____		I enclose cheque/postal order for £ _____, or please debit my Access/Visa card,		
Arnor (AA3), Protex House, Wainman Rd, Peterborough PE2 0BU		number _____ exp _____/_____		



Who's a pretty boy then?

Will Treasure Island's updated art package get Richrd Monteiro in a flap?

Parrotty Plus

Treasure Island, £19.95, disk only



Back in March '87, issue 18, we reviewed *Parrotty* – a graphics package with a difference. Since then *Parrotty* has joined the ranks that have sprouted a *Plus*.

Parrotty Plus is unlike any other art package; it is unique in the manner in which graphics are designed and displayed.



● Three of the many stages in a picture's make-up

Parrotty remembers every brush stroke and, later, can re-draw your picture – parrot fashion. The advantage of this system is two-fold: the screen is not static (as with standard graphic screens) and amount of disk space used is considerably less.

Any picture produced with *Parrotty* may be re-drawn from within your own Basic listings which is a nice touch. Of course, if you do prefer static pictures, the design may be saved as an ordinary screen.

Any graphical operation performed within *Parrotty* is remembered or stored. Co-ordinates of lines, colours they are drawn in, filled areas and such are all kept in two Basic arrays. This method of storing picture information means that the computer can perform operations quickly and easily on the data – like increasing by a factor, or copying or running through different speeds.



Pieces of eight

A single line, dotted with letters, at the bottom of the screen represents *Parrotty's* main menu. Not very friendly, but then the manual is there if needed. From the drawing mode you can move a cursor anywhere on screen. Once positioned, circles, lines or points may be plotted, text printed, areas filled and colours changed. If you make a mistake there is a handy undo command. Unlike usual delete operations though, you can keep on undoing all the way to the first line you drew or area you filled.

If you wish to position text or shapes accurately then the grid comes in handy. This simply draws vertical and horizontal guide lines on the screen. The grid squares can be set to any size.

At any time during the design of a picture it is possible to re-draw everything you've done up to that point. The speed at which the picture re-draws is definable – it is even possible to single step through the display, that is, after each command the program waits for you to press a key. During playback it is possible to erase any section that doesn't look

ABC

Treasure Island, £12.95, disk only

Currently this package comes free when you purchase both *Library* and *Parrotty Plus* disks. However, this is likely to change towards the beginning of March. *ABC* is an educational-cum-demonstration program following in the wake of *Parrotty*. It is aimed at young infants and helps them associate letters with pictures.

The program is very simple in execution: an animated picture (created with *Parrotty*) is drawn corresponding to the letter hit on the keyboard. It is a shame that the name of the object is not displayed as not all the pictures will be familiar to the toddler.

Although the pictures are very nice to see once or twice, the thrill tends to thin with time; it wouldn't have been hard to add other sets of pictures. Free is fine. £12.95 is questionable.



● The house that Polly built

Parrotty Plus Library

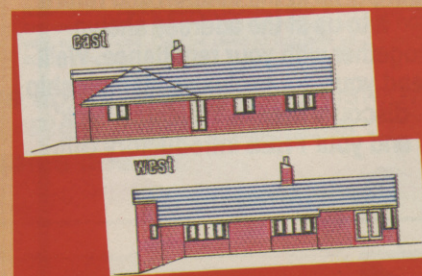
Treasure Island, £9.95, disk only

The disk contains a character set and a handful of maps. These can be merged with other *Parrotty Plus* files. The intention is to save you hours of repetitive design.

Although plotters are not particularly common with home computer users – possibly because there is a lack of software support – Treasure Island have supplied a plotter dump routine with the *Library* disk. Why it is on the *Library* disk and not on the *Parrotty* disk is

perplexing to say the least. The program should drive most commonly available plotters. But if you find a plotter which doesn't work correctly with the software contact Treasure Island, they say they will write a dump routine for any model.

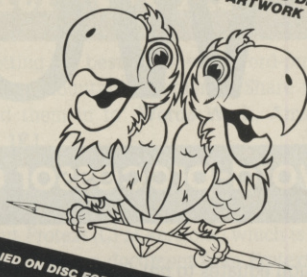
The advantages of plotter dumps are well defined pictures, colour (if your plotter has several pens) and easily-selected dump sizes. Complicated areas filled with colour are impossible (or very difficult) to produce with plotters and, depending on the make, it may not prove feasible to print text at infinitely variable sizes.



● Plotter dump using the £150 Mannesman Tally Pixy 3

Parrotty Plus

THE VERSATILE DRAWING AND DESIGN PROGRAM THAT BRINGS ARTWORK TO LIFE



SUPPLIED ON DISC FOR THE AMSTRAD CPC 664 & 6128
Treasure Island Software ©

up to scratch.

Included is a loop function which enables any part of your drawing to be repeated, any number of times, anywhere on the screen. While you draw you will notice a sequence number alongside the cursor co-ordinates. This simply shows the number of commands that have been entered. To perform a loop you will need to know the first and last numbers of the sequence. You can find this out by re-drawing at slow speed. In addition to sequence numbers, the loop function needs to know how many times to repeat a sequence, new left or right cursor position and new up or down cursor position. You can't have nested loops (loops within loops), but this isn't too much of a restriction.

Land ahoy

There are a group of instructions collectively known as the data handling commands. These include:

- Move** - shifts a selected area of the screen in any direction.
- Reverse** - mirrors a selected part of the display.
- Invert** - turns a selected area on its head (top to bottom).
- Rotate** - moves an area by 90° in the chosen direction.
- Change size** - sections of the display may be enlarged or reduced.
- Slant** - slants areas of the screen (left or right) by up to 48°.
- Merge** - designs can be loaded from disk and merged with the screen contents.

Short change

Pay an extra £6.95 on top of the *Parrotty Plus* price and you get an additional two disks. One contains a library of designs and fonts, the other holds an educational program, *ABC*. This special price of £26.90 for all three disks lasts until the end of February. After that you can purchase *ABC* on its own for £12.95, the *Library* disk on its own for £9.95 or *Parrotty Plus* and the *Library* disk together for £27.95.

The arrays themselves may be edited if necessary. All the information required to re-draw your design is stored in two arrays: X and Y. You can inspect, change, delete or add to this data by using the editing facilities. Each sequence or command starts with a control code (or command). These are usually numbers above 9000. Anything after a control code can be a horizontal or vertical cursor position, pen colour, or text. Absolutely anything in the array can be altered or removed. It is even possible to create pictures simply by editing the array - but this isn't advisable if you wish to stay sane.

Treasure me hearties

The screens you create with *Parrotty* may be saved as either standard screens - binary files that can be loaded into other art packages - or array data. Whatever form you decided to save your designs, they may be loaded back (or re-drawn) from within your own Basic listings.

It is very odd, even ludicrous, that you can't dump a screen to either printer or plotter from *Parrotty*. Instead you must buy the *Library* disk, but even that only contains a plotter dump routine. If you wish to send a picture to the printer then you must hunt elsewhere for a routine.

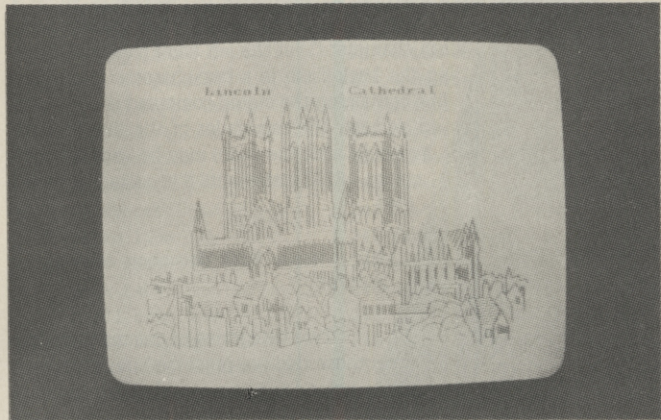
Parrotty Plus cannot compete with the *Art Studio* or *Melbourne Draw* in terms of quality and options. Indeed, it doesn't try: *Parrotty* is aimed at those wanting a live screen, animated graphics and colour switching, rather than the still pictures produced by other graphics programs.

What's new

The original *Parrotty* sold for £12.95. The *Plus* version is £7 more. What exactly do you get for the extra pennies?

- Mode 2 drawing is now acceptable.
- Circle routine improved.
- The whole screen can be used (previously the bottom line was gobbled by the menu).
- A new section - data handling - has been added. This has been explained elsewhere in the review, but put simply it allows you to modify parts of the design. For example, invert, rotate and delete areas.

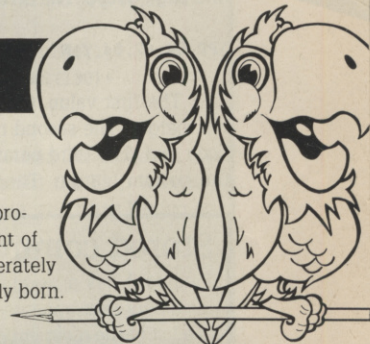
If you decide to pay an additional £6.95 the package as a whole becomes much more worthwhile: you get two extra disks. The *Library* disk has a handy plotter dump routine, not to mention a character set and other useful designs. *ABC* on its own makes it worth paying the extra.



● Detailed drawings are also possible with *Parrotty*

Adventure games would gain by using graphics made from *Parrotty* as the picture data takes up far less memory than conventional screen data. Shop advertising and presentation displays could easily be made with *Parrotty's* output. The potential is there for many great things. A genuinely useful package.

Treasure Island Software ☎ 0492 530229
140 Llanwrst Road, Colwyn Bay, Clwyd, LL28 5YL



What came first, the software company or the program? In this case *Parrotty* was first to see light of day. A fitting name for the company was desperately needed. Treasure Island Software was eventually born.

GOOD NEWS

- Different from usual graphic packages.
- Pictures may be redrawn from within your own Basic programs.
- File size of screens are far less than standard.

BAD NEWS

- *Parrotty Plus* - on its own - offers little more than the original.
- No screen dump routine provided with the program.

WORDS WORK

How to get the most from your word-processor and printer

Printing from Pyraword

Last issue we dealt with most of *Pyraword's* printing options. Setting up the printer configuration file and modifying control codes was mentioned. This month we look at the word-processor's stored commands.

When printing a document from *Pyraword* it may be necessary to control the page breaks, form depths and so on to achieve a specific print appearance. These things are done by using stored commands. Generally, stored commands are word-processor instructions placed in the document. They appear on screen, but are not sent to the printer at print time.

Stored commands are identified by the backslash character (\) at the left-hand margin. Following the back-slash is a two-character code. The line containing the stored command is not counted as text; the remainder of the line (that is, anything after the code) may be used for comments – REM statements if you like. For example:

```
\SS   Words Work document created
25/1/88
```

Two categories of commands exist: those that are processed immediately – before printing – and those that are processed during printing (like page breaks). Before-printing options include form depths, headers, footers and so on.

The command \PP must be placed at the top of your document (if used). It is probably the best example of a before-printing

command. \PP allows you to specify a number of values: top-margin, lines-per-page, bottom-margin, line-feeds and page-pause. The first three added together give the form-depth.

```
\PP 04, 62, 04, Y, N
```

The first value, 04, refers to the number of lines that make up the top margin. The second number refers to the amount of lines left for the body text. The third parameter tells you the number of lines reserved for the bottom margin. The Y stands for yes to line-feeds (N surprisingly

Stored commands

Pyraword has a number of stored commands, that is text within a document that appears on screen but is not sent to the printer. Here is a list of the most important:

- \PP – specifies print parameters. Top margin, line-feeds and so on.
- \HD – marks the beginning and end of a header.
- \FT – marks the beginning and end of a footer.
- \PN – numbers a page automatically.
- \NP – starts a new page.
- \DS – puts two spaces between each line.
- \SS – single spacing.
- \EP – end printing at a particular line or paragraph.

enough equates to no). The last character (N) specifies no to page-pause. Note that the first three values, when added together, give the page length in lines. In the case above, 4 + 62 + 4 comes to 70 – standard A4.

Multiple-file printing

Pyraword has a memory limit of about 32k for each document. However, at print time documents can be joined or chained together. In this

Headers and footers

A header is one or more lines of text which is to be printed at the top of each page before the top margin. They are often used when printing manuals, technical documents and books. *Pyraword* uses \HD at the beginning and end of the lines of text you wish to use as a header. For instance:

```
\HD
Lord of the Rings           The breaking of the fellowship
```

Footers are similar to headers, but instead of being printed at the top of the page they are printed at the bottom. Often they are used to contain a page number. *Pyraword* uses \FT to define a footer:

```
\FT
Page \PN
```

The command \PN will be replaced at print time by a page number. It will be incremented for each successive page.

Both headers and footers can be defined at any time in a document, however, it is worth remembering that the definition must always precede the page on which it is to be used

way it is possible to link several files on a disk and print them out one after another to produce one large document. This is particularly handy if you are writing a book, manual or thesis and can only fit one chapter per file. The command to use is an extended version of \EP, stop-printing.

At the end of each file you must have a line \EP filename, where filename refers to the next document you wish printed.

The chain operation varies according to how much memory your Amstrad has. On 64k systems printing takes over the whole machine. In plain English this means that you won't be able to edit or create another document until the current file has finished printing. With 6128s and expanded 464 machines printing takes place as a background task.

Page breaks

When you print a document normally, page breaks or form feeds will occur depending on the form depth value (specified by \PP command). This could cause paragraphs or spaces for diagrams to be split. To prevent this you can force a page break by using the new-page option, \NP.

The problem is knowing where to put the page-break command. Decide how many print lines per page are available. For standard A4 (70 lines) if you use a top and bottom margin or 4, you are left with 62 lines. Program a key to scroll down 62 lines. By simply pressing this key you can determine where a page-break will occur. If after pressing this particular key the cursor is on a blank line, insert \NP. If the cursor is buried in text, move it up to the first available blank line and insert the \NP command.

Ways with Words

Do you have favourite tricks for getting the best out of your word-processor? Or do you have seemingly insurmountable problems? Share them with other Amstrad addicts. Send them in to: **Words Work, Amstrad Action, 4 Queen Street, Bath, BA1 1EJ.**

Power to the printer

I've just discovered something about *Protext* (CPM versions) which is really gong to change my life. If you're printing a document from *Protext* and you don't want to start at the first page, then this is the simplest way.

After typing the command **PRINT**, you get the message **Page 1**. Press **SPACE** to print. Instead of pressing the space bar, press any other key. This will skip page 1 and give you the message **Page 2**. Press **SPACE** to print. Continue in this way until you reach the page you want.

This feature isn't in the manual. I discovered it by accident, and it took me months to realise that it was actually useful. I used to use **SET-PRINT** to alter the print options, but the aforementioned method is quicker and more convenient.

Perry Williams, Cambridge

Ascii converter

When saving files from the *Mini Office II* word-processor, it gives you two options: Ascii and Mini office II format. The only problem with the Ascii option is that although it saves a lot of disk space (*Mini Office II* files use as much as 16k, Ascii around 10k for the same file), when loaded into the processor writing appears over the left and right margins - very messy indeed, and there has been no remedy until now. The program below will convert any Ascii file (including programs saved with the A option) into a *Mini Office II* file.

```

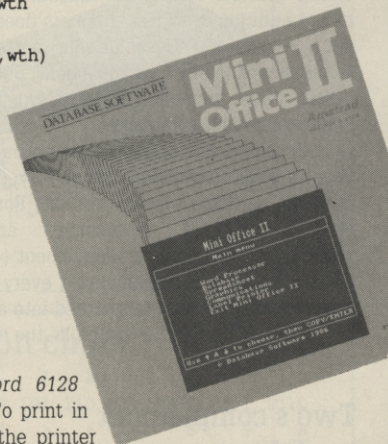
10 ' Ascii to Mini Office II converter
30 MODE 2:CAT
40 margin=5 'this sets the left margin to 5 characters
50 INPUT "Enter source file: ",a$
60 INPUT "Enter destination file: ",b$
70 INPUT "Mode (20/40/80) ";mde
80 wth=mde-margin
90 PRINT:PRINT"Please wait..."
100 OPENIN a$:OPENOUT b$
110 WHILE NOT EOF:LINE INPUT#9,a$
120 b$="":For g=1 TO LEN (a$)
130 IF MID$(a$,g,1)=CHR$(13) THEN b$=b$+CHR$(250):GOTO 160
140 IF MID$(a$,g,1)=CHR$(32) THEN b$=b$+CHR$(251):GOTO 160
150 b$=b$+MID$(a$,g,1)
160 NEXT
170 FOR g=1 TO LEN (b$) STEP wth
180 c$=SPACE$(mde)
190 MID$(c$,margin)=MID$(b$,g,wth)
200 ' 464 users will need to
alter line 180 and 190
210 PRINT#9,c$;
220 NEXT:WEND
230 CLOSEOUT:CLOSEIN
240 PRINT:PRINT "Conversion
finished."
```

Cormac McGaughey, Co Antrim

Near-letter control

Here's a tip for using *Brunword 6128* which you reviewed in AA 24. To print in near-letter quality (NLQ), go to the printer menu by pressing **ESC** followed by **P**. Then press **shift** and **f9** together. Enter the printer control codes 27, 120 and 1 respectively. Press **control** and **f9** together and enter 27, 120 and 0. When entering text, to turn NLQ on press **shift** and **f9** together. To turn it off press **control** and **f9**.

Paul Blendis, London



Keyboard macros

The *Readme* text file which is supplied on the *Tasword 6128* disk gives some information on the creation of keyboard macros (series of key strokes called by pressing a user definable function key while holding down control). It does not give a full description of the possibilities however, and lists only six out of the large number of command codes available in *Tasword*. I have worked out the full syntax and the codes so that I could create a number of more useful macros.

- | | |
|------------------------------|-----------------------------|
| 1 set left margin | 182 help window on |
| 4 set right margin | 183 help window off |
| 2 mark block beginning | 184 goto main menu |
| 22 mark block end | 185 printer characters mode |
| 3 delete marked block | 186 second character set |
| 5 move text right | 187 DEL |
| 17 move text left | 188 CLR |
| 6 toggle right justification | 189 delete line |
| 7 toggle word-wrap | 190 paging toggle |
| 8 insert toggle | 191 put header |
| 9 insert line or character | 192 put footer |
| 10 or 21 rejustify paragraph | 198 enter or exit notepad |
| 11 justify line left | 199 display notepads |
| 12 justify line | 226 write notepad to cursor |
| 13 enter or return | 227 write text to notepad |
| 14 copy block to cursor | 228 undelete line |
| 18 find and replace | 240 cursor up |
| 19 reset margins | 241 cursor down |
| 20 get header | 242 cursor left |
| 25 get footer | 243 cursor right |
| 23 centre line | 244 fast scroll up |
| 24 reset tabs | 245 fast scroll down |
| 26 clear tabs | 246 word left |
| 27 scroll help down | 247 word right |
| 29 scroll help up | 248 go to top of file |
| 32 to 126 Ascii characters | 249 go to bottom of file |
| 127 pound sign | 250 start of line |
| 181 set a tab stop | 251 end of line |
| | 252 full help screen |

Tasword's Readme file shows how single code numbers can be entered using the **CHR\$** command, but codes which are repeated can be entered using **STRING\$**. For example, **STRING\$(7,243)** will move the cursor seven steps to the right. This will not overwrite any text present, (unlike **SPACE\$**, which is suggested in *Readme*). Four of my nine macros provide alternative margin and other settings, and will allow the alteration of previous settings without affecting text. The following example clears any previous margins before setting them to 8 and 75, turns paging on, right justification off, and removes the help window.

```

20 KEY 1,CHR$(19)+CHR$(250)+STRING$(7,243)+CHR$(1)+
STRING$(67,243)+CHR$(4)+STRING$(250)+CHR$(190)+
CHR$(6)+CHR$(183)
```

The next example sets the margins to 8 and 70, retrieves my address from notepad 1, resets and then removes the Help window, places the cursor in position for entering the date, and turns Paging on - it saves more than 25 key presses.

```

20 KEY 0,CHR$(19)+CHR$(250)+STRING$(7,243)+CHR$(1)+
STRING$(62,243)+CHR$(4)+STRING$(5,29)+CHR$(198)+
CHR$(226)+CHR$(198)+STRING$(5,27)+CHR$(183)+
STRING$(5,13)+STRING$(45,243)+CHR$(190)
```

The next macro goes direct to the save mode from the text file. It helps regular backing up during the creation and editing of long documents.

```

80 KEY 6,CHR$(184)+"S"+CHR$(13)
```

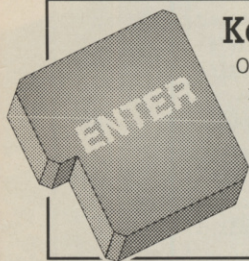
J Crabtree, Darlington

Absolute Beginners

The third in a series of articles taking you from complete ignorance to COMPLETE mastery of Basic

The story so far

Last issue we saw how you can give your CPC instructions to clear the screen, print up pieces of text and change the screen mode. We also saw the way that simple instructions like **CLS**, **PRINT** and **MODE** can be joined together with colons. This month we shall be looking at simple graphics instructions. Also we'll be moving on from instructions to programs.



Keys of choice

On computers in general, the key you press to mark the end of an instruction is called the **RETURN** key. It is actually labelled **RETURN** on the 6128, but on the 464 and 664 it is the larger of the two keys marked **ENTER**. Remember that you have to press this key after each typed instruction.

Before you start

Sometimes, especially when you're working with graphics, you can get your Amstrad in such a state that you just can't give instructions properly. Maybe you can't see what you're typing because of the way you've altered the screen colours – this often happens. If you do get in this kind of fix, and you just can't get out of it, you can simply switch the machine on and off again. This will certainly get you out of the fix, but it's a bit drastic.

A better answer, in most cases, is to reset the computer. Press the control (CTRL) and shift keys together and, still holding these down, press the escape (ESC) key. This will give you the same start-up message as if you had just switched on. If you follow these reset instructions properly and fail to get the start-up message, you have got a crash or lock-up on your hands. In this case, you will need to switch your computer off and on again.

Pen and paper

The graphics effects which your Amstrad can produce depend very much on which of three **MODES** (0, 1 or 2) you're in. When you first switch on, the CPC is in **MODE 1**. As we saw last time, this gives you 40 characters to each screen row. It also gives you up to 4 different colours on the screen at once. You can only see two of them at first – blue and bright yellow. It's easy enough to get at the other two available colours, though. Type:

PEN 2

If the machine understood this, you'll now be writing everything in bright cyan – a sky blue colour. If it didn't understand it, you probably forgot the space between **PEN** and **2**. On a green screen monitor you should be able to see the change, but it's hardly spectacular. Try:

PEN 3

First Bytes

So, hexadecimal horrifies you? We have the solution in this section devoted to the novice machine code programmer.

Last issue you were left with three binary-addition problems: $0100101_2 + 11011_2$, $1111_2 + 0001_2$ and $010110_2 + 101011_2$. The answers are as follows:

0100101	1111	010110
+ 11011	+ 0001	+ 101011
= 1000000	= 10000	= 1000001

Signed binary

You should know that with eight individual bits (or digits) the largest binary number you can represent is 11111111_2 (or 255 in decimal). This holds true for unsigned binary. In signed binary representations, the

Binary-coded decimal

Including decimal, binary and hexadecimal, one other system is commonly used in computing – binary-coded decimal (BCD). As its name suggests, it is a hybrid of binary and decimal. It is commonly used where an output is needed in digital format. A digital clock, say.

The principle in representing numbers in BCD is to encode each decimal digit separately, and to use as many bits as necessary to represent the complete number exactly. In order to encode each of the digits from 0 to 9, four bits are necessary. Since only four bits are needed to encode a BCD digit, two BCD digits may be encoded in every byte – remember, a byte contains eight bits or digits. For example, the number 21 is translated into BCD in the following manner: 2 (0010_2) and 1 (0001_2) give 00100001_2 (21).

left-most bit is used to indicate the sign of the number (that is, positive or negative). Traditionally a 0 is used to denote a positive number and a 1 is used to signify a negative number. With this knowledge under your belt, it should become clear that 11111111_2 – in signed binary – represents -127 (decimal) and 01111111_2 is +127. It is now possible to show positive and negative binary numbers. The trade-off, however, is the maximum magnitude of these numbers: 127.

Say you wished to perform the addition, using signed binary, of -5 and +7. You might try:

```
(+7) 00000111
(-5) 10000101
= 10001100
```

Convert 10001100_2 to decimal and you'll get the value -12 – not the correct result. As you know, when you add +7 and -5 together the answer is +2. Obviously something has gone wrong with our calculation. Indeed, the binary addition of signed numbers does not work correctly. The solution is to use something called two's complement. But before two's complement, you must understand one's complement.

In one's complement representation, all positive numbers are displayed in their correct binary format. For instance, +3 is represented as 00000011_2 . However, its complement (-3) is obtained by complementing every bit in the original representation. This means that every 0 is turned into a 1 and vice versa. Now -3 will be 11111100 . Using another example, the complement of 00001101_2 (+13) is 11110010_2 .

In two's complement representation, all positive numbers are still represented as usual. The difference lies in the representation of negative numbers. A negative number is obtained in two's complement by first representing the value in one's complement and then adding 1. For example, the number +3 (00000011_2):

Signed-binary table

Binary	Decimal
01100001	+97
11100001	-97
10010000	-16
10000001	-1
00000010	+2

Two's complement

With two's complement, positive numbers are still represented as usual. The difference lies in the representation of negative numbers. A negative number is obtained in two's complement by first representing the value in one's complement and then adding 1. For example, the number +3 (00000011_2):

This turns the letters bright red in colour, (very dark on a green-screen). Now we've got a total of four colours on screen – the maximum available in **MODE 1**.

So as you can see, to change the colour of text, you simply use the **PEN** command followed by a single number. The number (which, as we saw last time, is called operand) simply selects one of the available colours. In this case, because we are in **MODE 1**, the number should be in the range 0 to 3 – 0 gives blue text, 1 bright yellow and we've just seen 2 and 3 in action.

If you were to switch on and immediately type **PEN 0**, you'd have blue text on a blue background. That means you wouldn't read anything the computer displayed – and that would make life very difficult. Of course you could read blue text if it was on some different coloured background. Type:

Next issue

Next month, armed with an understanding of colours and inks, we'll be venturing into the world of **DRAWING** and **PLOting**. On the program side of things, we'll be dealing with lines: line numbers and editing.

In the meantime experiment with **INKS, PENS, COLOURS**:

0 Black	9 Green	18 Bright green
1 Blue	10 Cyan	19 Sea green
2 Bright blue	11 Sky blue	20 Bright cyan
3 Red	12 Yellow	21 Lime green
4 Magenta	13 White	22 Pastel green
5 Mauve	14 Pastel blue	23 Pastel cyan
6 Bright red	15 Orange	24 Bright yellow
7 Purple	16 Pink	25 Pastel yellow
8 Bright magenta	17 Pastel magenta	26 Bright white

PAPER 3: PEN 0

You should now have blue text against a red background. Notice that **PAPER** doesn't change the background of the whole screen – just the little square of background behind each character. If you want to change the whole background type **CLS**.

Apart from that, **PAPER** works the same way as **PEN**. The number following it selects that colour as the new background. try experimenting with these commands. You might even find a combination of pen and paper colours that is easier to read.

The ink command

So far we've been talking about **MODE 1** which gives you 40 characters to the row, and up to 4 colours on the screen at any one time. **MODE 0** offers 20 characters per line in up to 16 colours at any one time. You may think this doesn't match up with the Amstrad adverts which said you can get 27 colours. Don't worry – you haven't been conned. The computer can display 27 different colours, but not all at the same time. You can only use 16 colours at once in **MODE 0**, but you can choose which you want out of the palette of 27.

Likewise, you can choose 4 out of 27 for **MODE 1**, or 2 out of 27 for **MODE 2**. Try doing this. Reset the computer, and type:

INK 0,9

This should leave you with the screen background coloured green instead of blue. On a green screen it's just a paler green than before, but the change is still perfectly visible. Unlike **PAPER**, it affects the whole screen immediately.

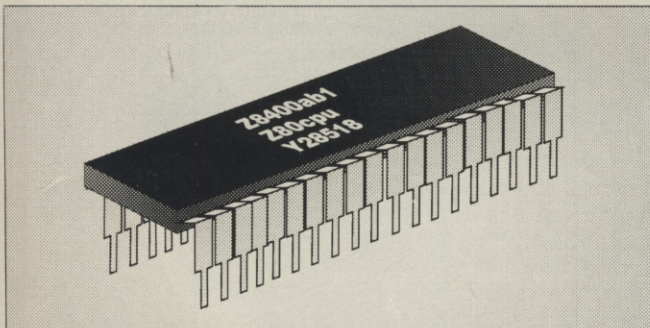
0000011 – +3 in standard signed-binary format
 1111100 – -3 in one's complement format
 1111101 – two's complement format

Let us try a subtraction:

```
(+3) 0000011
(-5) 1111011
= 1111110
```

To identify the result you must compute the result using two's complement. The one's complement of 1111110 is 0000001. Add 1 and the result becomes 0000010 – which is +2 in decimal. The earlier result of 1111110 represents -2. We have found the correct result.

Try the following signed-binary additions and subtractions using two's complement: 00100001₂ + 01001011₂ and 00110010₂ - 00010001₂. Answers next month.



Numeric conversion chart

Decimal	1	2	3	4	5	6	7	8	9	10
Binary	1	10	11	100	101	110	111	1000	1001	1010
Hexadecimal	1	2	3	4	5	6	7	8	9	A
Decimal	11	12	13	14	15	16	17			
Binary	1011	1100	1101	1110	1111	10000	10001			
Hexadecimal	B	C	D	E	F	10	11			

Hackers Only

The box that caters for the more advanced programmer.

In previous issues we have published routines for printing numbers to the screen in decimal and hexadecimal. This month there's another useful print routine. It takes the contents of the accumulator and prints (at the current cursor position) the result as an eight-digit binary number.

Entry conditions: A register holds number to print. Exit conditions: F and BC corrupt. Length: 21 bytes. Code type: relocatable.

```

start
06 08          LD B,8

loop
07             RLCA          ;rotate A left
F5             PUSH AF       ;save number
38 07          JR C,not_zero ;jump if carry not 0
3E 30          LD A,&30      ;load A with Ascii 0
CD 5A BB       CALL &BB5A   ;print 0
18 05          JR onwards

not_zero
3E 31          LD A,&31      ;load A with Ascii 1
CD 5A BB       CALL &BB5A   ;print 1

onwards
F1             POP AF        ;restore number
10 ED          DJNZ loop    ;jump loop if B not 0
C9             RET
    
```

HOT TIPS

Have you special tricks and tactics with serious software and hardware? Share them with other Amstrad addicts. Send them to "Hot Tips", Amstrad Action, 4 Queen Street, Bath, BA1 1EJ. Remember the best tip each month gets £20.

● 464 version

Last month in Problem Attic there was a listing that sent all on-screen text to a printer. The routine only worked on 664 and 6128 machines. I have written a version that will work with the 464 – and for that matter, any of the CPC computers.

The variable `md` in line 10 holds the screen mode. It is set up for

mode 2. Change the value to a 1 for mode 1 or a zero for mode 0. The routine will fit neatly into your own program.

```
10 md=2:at=2^(md+1)*10:MEMORY &9C49
20 FOR ad=&9C50 TO &9C5F
30 READ n$:POKE ad,VAL("&"n$):NEXT
40 DATA cd,60,bb,fe,00,28,04,cd
50 DATA 2b,bd,c9,3e,20,18,f8,00
60 FOR y=1 TO 25:FOR x=1 TO at
70 LOCATE x,y:CALL &9C50:NEXT x,y
```

William Lawrie, North Muirton

● Number entry mugtrap

Here's a routine for verifying that a number has been entered following an INPUT prompt. It avoids the awful ? Redo from start system prompt and allows the programmer to substitute his own message:

```
10 ' Mugtrap FOR number entry
20 MODE 2:LINE INPUT "Enter a number: ",a$
30 CLS:b$a$:IF LEFT$(b$,1)="" THEN MID$(b$,1,1)="1"
40 IF RIGHT$(b$,1)="" THEN MID$(b$,LEN(b$),1)="1"
50 IF LEFT$(b$,1)="-" AND MID$(b$,2,1)="" THEN
MID$(b$,2,1)="1"
60 IF STR$(VAL(b$))=" "+b$ OR STR$(VAL(b$))=b$ THEN
PRINT "The number you have entered is ";a$ ELSE PRINT
"You have entered ";a$;" which is not a number."
70 FOR delay=1 TO 5000:NEXT:RUN
```

Line 60 does the work. It converts the entry, held in `b$`, to a numeric variable and back to a string again. The result is compared with the original

PROBLEM ATTIC

RpM goes on his latest problem solving escapade. If your CPC's in danger, if you need help, then perhaps you can contact the AA team.

Silent sound chip

My first problem concerns several of my games; when I play them on my 6128 with green screen, they play very slowly. However, when I run the same games on my cousin's colour 6128, everything works much faster. Can you account for the speed difference?

My second problem is my sound chip. Every so often, when I turn my computer on, it emits a strange crackly hiss from the speaker. All the sound in games is then quieter than usual – sometimes non-existent. I loaded *Antirad* from cassette and the title tune began to play. I plugged in a joystick and all sound ceased. The only cure I can find for this problem is to turn off the machine and leave it off for over an hour. What is wrong?

Stephen Trimmer, Broadstairs

Your problems are connected: the AY-3-8192, better known as the sound chip, has two uses in the CPC machine: keyboard interrogation (including joystick) and sound generation. You say, Stephen, that the machine doesn't emit any sound (or very little) when you switch on. Do you have the joystick plugged in? I suspect you do. Joysticks are notori-



ous on the Amstrad and – although it hasn't been proved – some can damage the CPC's sound chip. The reason seems to be that the joystick supplies +5v on a pin that should have no voltage.

If your sound chip hasn't been damaged already, I suggest removing the joystick and not using it again. It will cost you about £20 to replace the AY-3-8192 – not cheap.

Not enough disk space

I have a disk which I use for short type-in utilities – each about 1k or 2k long. I have now come to the point where I have about 50k of room on the disk (which is system formatted), and I have 64 filenames on it. It is now impossible to store any more listings on the disk as the directory is full. Is there any method for getting round this?

Ian Williams, Waltham Abbey

It is possible to alter the number of directory entries per disk, however, you must decide how many entries you want before saving anything to the disk.

Before you save enter:

```
A=PEEK (&BE42) :B=PEEK (&BE43) :C=B*256+A
CAT:POKE C+24,&FF:POKE C+7,63
```

Note that the last value – 63 – refers to the number of directory entries on the disk. Anything between 63 and 127 is safe. To load, save or catalogue the disk with extra directory entries, you must first enter the two lines of Basic above. If you don't you may lose certain files.

Computer showdown

My brother is thinking of buying an Amstrad PCW 8256. He wants to use it for word-processing and for projects in his college course. He would need to have Cobal and Pascal compilers – preferably Z80 based.

string. A space is inserted at the front of the string to allow for the fact that Basic automatically adds a leading space to numbers to leave room for a minus sign. To cover negative numbers a comparison without the added space is also validated.

Line 30 and 40 respectively ensure that numbers with leading zeros and decimal numbers with trailing zeros are accepted. Line 50 similarly ensures that trailing zeros are accepted. The variable a\$ is first copied into b\$ to avoid corrupting the original entry.

Colin Cotterill, Nunthorpe

● Veritable variables

While glancing through the Amstrad 6128 User Instructions I noticed that the description of variables was very shoddy. Following is my explanation.

A variable name is the name given to a group of letters which represent a value that is defined by the user. There are three types of variable:

Real: these can be used to store numbers or decimal fractions. For instance, 123.987 and 23.

Integer: can only store whole numbers. 123 or 23, say.

String: a group or string of characters can be stored in this type of variable. The characters forming the variable must be enclosed in quotes.

Each of the variable types is distinguished by the last character of the variable name. A real variable has just a name: a=25.9, lives=3 and so on. Integer variables have a percent symbol as their distinguishing mark: d%=123, form%=9. String variables have the dollar symbol preceding the variable name: s\$="A", name\$="Electro Freddy" for instance.

Should you need long variable name - to make the listing more readable - then use full stops between word: first.letter\$="A" is easier to read than firstletter\$="A".

● The bug stops here

In the Christmas edition of Amstrad Action there appeared a review of *Stop Press*. One of the comments that caught my eye was the reference to the bug in the cutout section of the program. Basically the screen goes wild if you try to load several cutouts from the disk (this only happens on the CPC 464). I have found a way of loading as many cutouts as I want without causing the machine to crash or the page to scroll uncontrollably:

1. Before you try loading any cutouts click the Goodies icon.
2. From the menu click on the | Command icon.
3. When the screen clears and the | appears type DIR.

You will get a directory listing of the disk currently in the drive - it can be any disk. Press ESC to quit from the | Command mode and then go about loading your cutout in the normal way.

It works all the time. And I know that it works on the latest version of *Stop Press* as I have a friend who is using the latest release.

Rupert Cahill, Ferns

Great tip, Rupert. I'm sure it will be a godsend to many other *Stop Press* users. £20 is on the way.



Could you please tell me if the above computer would be suitable.
S Clarke, Guildford

What's wrong with the CPC 6128? There are several good word-processors available including: Protex on disk for £26.95 (available from Arnor on 0733 239011), Tasword 6128 for £24.95 (available from Tasman on 0532 438301). As for languages, the CPC machines have a very healthy selection. Hisoft are the major force in programming utilities. Indeed, Cobal and Pascal 80 are available from them at £39.95 a piece. Hisoft can be contacted on 0525 718181.

Assembler errors

In several past issues of Problem Attic you used the RST 3 instruction to access the extra disk commands. In your example programs the mnemonics used ran something like RST 3,store. The variable store pointing to the rom address. When I try and use this notation in either of my assemblers (Pyradev and Raw) an error message is returned. The assemblers accept RST 3, but not RST 3, store. Why? What is going on?

G Mudford, New Zealand

Compared to other Z80 machines, the CPC computer interprets RST operands in a non-standard way. Maxam and a few other assemblers handle these instruction CPC-style. However, the assemblers you mention cope with RST instructions in the more usual manner. RST 3, address translates to the following on Pyradev and similar assemblers:

```
RST #18
DW address
```

Colours from CPM

From CPM plus I want to be able to alter the screen colours. I know I can do this by physically typing in PALETTE 63,0, but I want this to happen automatically when I boot up. Help.

Michael Tomlinson, Horsforth

Type in the short basic listing below. Make sure your CPM plus boot

disk is in the drive. Run the program.

```
10 OPENOUT"PROFILE.SUB"
20 PRINT #9,"PALETTE 63,0"
30 PRINT #9:CLOSEOUT
```

Whenever you boot CPM the colours will change automatically.

Fitting 8" drives

I have recently acquired what I think is a Wang 8-inch disk drive. I would be grateful if you could tell me whether it can be used with an Amstrad 464. If yes, how?

A Scott, Leytonstone

Unfortunately it's impossible to fit an 8 inch drive to a CPC computer. The simple reason is that the Shugart standard for 5.25-inch drives (also used for 3 inchers) is different to that of 8-inch drives. The larger drive normally uses a clock frequency of 8 MHz (the Amstrad's uses 4 MHz). To get an 8-incher to work would be a very tough, mind-boggling affair. Don't even think about it.

Funny formats

Is there some way of altering the format identifier which is usually &C1 (data), &41 (CPM) or &01 (IBM). I know there is an entry in the directory which holds the user number. I assume, therefore, that there must be a similar entry in ram for the format identifier. Where is it?

M Lyons, Burnage

To find the location of the format identifier use the following algorithm:

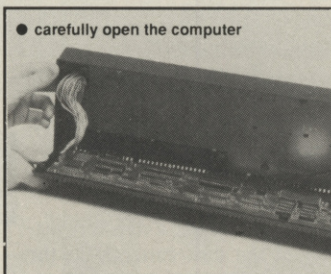
```
A=PEEK(&BE42):B=PEEK(&BE43):C=B*256+A:D=C+15
```

D holds the location of the format identifier. If you wish to change this parameter, you must also POKE C+24,&FF. This will stop the system

464 + 40025 = 6128

Richard Monteiro's step-by-step guide to converting a 464 or 664 into a 6128

Converting your 464 or 664 computer to a CPC 6128 is not as daunting as it may sound, but it does depend very much on the model of your computer. Essentially the transformation involves removing the screws that hold the two halves of your computer together and replacing one of the chips from the main circuit board.

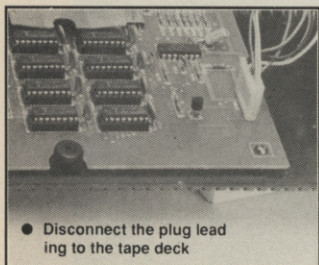


● carefully open the computer

The obvious difference between a 464 and 6128 is the 464's lack of a disk drive. Less obvious is the 6128's extra 64k of memory. Perhaps least noticeable is the 6128's extended Basic command set. If you want to run 6128 software, use 6128 hardware and generally do things that only a 6128 can do, then all three items are essential.

Changing the Amstrad's operating system – the Basic, if you like – is the hardest part of the exercise. The alteration entails removing the old operating system (which is held on rom) and replacing it with a new rom. The very early 464 computers have a plug-in rom; later 464s and 664s have the chip soldered in.

First switch off at the mains, unplug the keyboard from the monitor and remove any peripherals you may have sticking out of the back of the computer. Turn the computer upside down with the tape deck (disk drive on the 664) face down on the right; you will notice six holes (seven on the 664). Remove the screws located at the bottom of the holes with a Philips screwdriver.



● Disconnect the plug leading to the tape deck

Gently lever the two parts of the computer apart. You won't be able to open the machine completely as there are several wires holding the halves together. If you peer inside, towards the left, you will see a plug from which several wires are flowing. These wires lead to the keyboard matrix. Disconnect the plug from the main circuit board. It may be stiff; don't be frightened of using a little force – if necessary use a screwdriver to help. 664 owners will notice

two smaller plugs (one carries power to the speaker, the other to the red LED) near the large plug. Undo these. The 664 will now lie in two pieces.

If you have a 464 then on the right, towards the tape deck, you will

Ingredients

You will need a disk drive, extra memory and a rom containing the latest Amstrad operating system if you wish to convert your 464 to a 6128. It isn't essential to add a disk drive and memory, but then you won't reap the benefits of all the wonderful 6128-only software. What you will have, though, is a machine that will be able to run any Basic listing found in any Amstrad-devoted magazine. The list:

Part	Cost	Supplier	Telephone No
40025 Basic rom	£21.75	CPC Ltd	0772 555034
Dk'tronics 64k ram	£40.95	Ram Electronics	0252 850085
DDI-1 disk drive	£159.95	Amstrad	0277 228888

see another plug (the wires of which lead to the tape deck). Disconnect this. The 464 will now come apart in two bits.

For the moment discard the part that contains the keyboard. Turn the piece containing the circuit board towards you – the writing on the chips should be the correct way up. If you look to the left of the circuit board you will see a chip labelled SOUND AY-3-8912 (this slice of silicon sees to sound production and keyboard control). Below the sound chip is

the AMSTRAD 40009 rom (AMSTRAD 40022 on the 664). This is the beast that needs replacing; it contains the Amstrad operating system. Depending on the age of your CPC computer, this chip will either be soldered

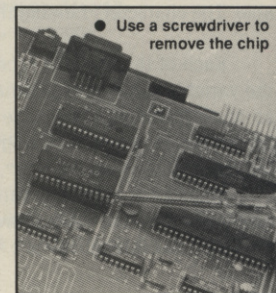
Proviso

Your Amstrad's guarantee will be invalidated if you decide to undertake these modifications. Do take care when poking around your CPC's insides; after all, we can't help you if your screwdriver slips. If you are at all unsure of what you're doing seek expert advice, or take your computer, the bits and pieces that need fitting and this article to a reputable computer-repair shop; the technician should be able to do the job in no time at all. What they charge you for it is another matter.

into place or fitted into an IC socket.

Earth yourself before you touch any of the chips. This can be done by touching water or heating pipes. To the left of the 40009 rom you will see a capacitor (round, brown thing on two legs). Carefully push this flat against the circuit board.

If your computer has the rom fitted in an IC socket, place a flat-head screwdriver between the socket and the rom (right-hand side); twist the screwdriver slowly. The rom will rise a little. Remove the screwdriver repeat the process from the left end. By repeating these actions several times the chip will eventually come out.



● Use a screwdriver to remove the chip

Insert the new chip (AMSTRAD 40025) when the old one has been pried out. Take care that the notch on the 40025 is pointing to the left. Bend the legs inward – on both sides of the rom – if you have problems fitting it. If your computer has the 40009 (or 40022 on the 664) soldered to the circuit board, and your confident of your ability to use a soldering iron, then replace the chip very carefully. Don't attempt this if you have little or no experience with such

things – seek technical help.

With the new 40025 rom in place put the computer back together. If you have the Dk'tronics expansion ram, plug it in (and if you own a 464 disk drive, plug it in). Connect the leads from your monitor to the keyboard. Switch on. You should be greeted with Amstrad 128k Microcomputer (v3) ...

Compatibility

Your upgraded machine will act as a 6128. The software you run on the computer will think it's using a 6128. To use things like the Art Studio, CPM plus and Meltdown you will need Dk'tronic's 64k expansion ram (and a disk drive if you have a 464) – all the software uses 128k of memory. We have successfully tested the following: CPM plus operating system, the Art Studio, Tas-Sign, Meltdown, Multiface II, The Pawn, Brunword 6128

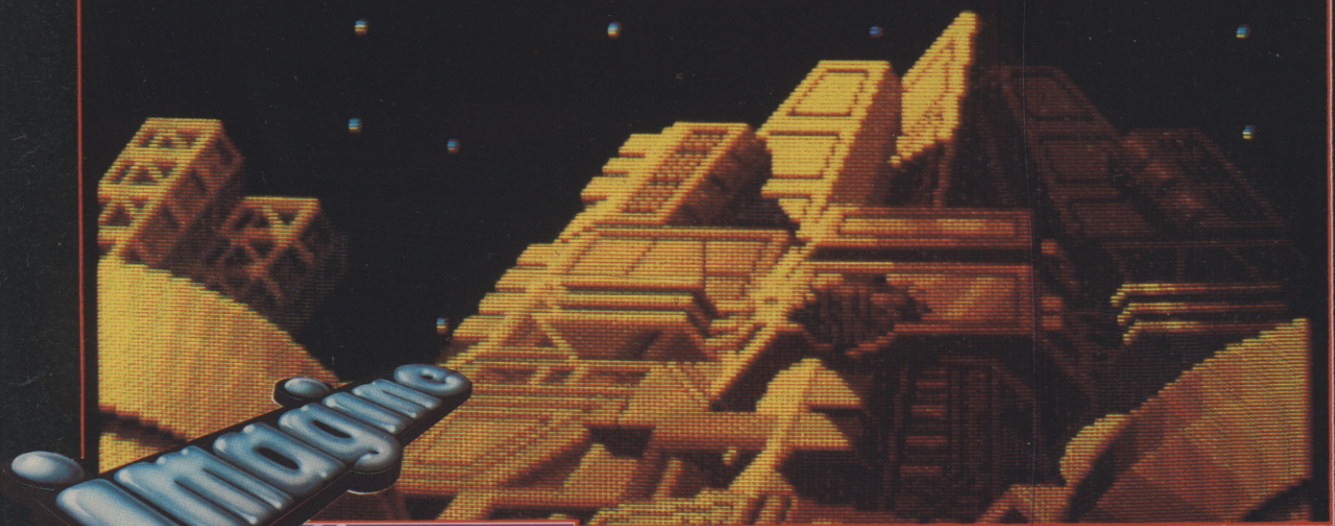
Amstrad ☎ 0277 228888
Brentwood House, 169 Kings Road,
Brentwood, Essex
CPC Ltd ☎ 0772 555034
194-200 North Road, Preston, Lancashire, PR1 1YP
Ram Electronics ☎ 0252 850085
Unit 16, Redfields Industrial Park,
Redfield Lane, Church Crookham,
Aldershot, Hants, GU13 0RE

So far our upgraded computer has worked perfectly. If you find any products that don't work with this new setup do let us know. Write to Reaction. Also let us know if you have any other problems, or have advice for people wanting to make the change.

ARKANOID

TAITO
COIN-OP

REVENGE OF DOH



*..the name
of the game*

Licensed from © Taito Corp., 1986

£7.95
SPECTRUM

Eons have passed... yet despite apparent annihilation in the original ARKANOID game; Dimension-controlling Force "DOH" has come back to life, and occupying the huge space-craft ZARG, has entered our Universe.

ARKANOID type space-fighter MIXTEC runs through long forgotten computer data until it finds the answer to this threat... "VAUS 2" is launched and speeds towards the threatening alien presence, before it can extract its revenge... "The Revenge of Doh"

COMMODORE
£8.95
AMSTRAD

Adding to the fun and excitement of Arkanoid... All new Features include exit choices to vastly increase the screen options, many extra "VAUS" effects, multiple shots and a secret additional alien to contend with. This adds up to the most thrilling reaction game since ARKANOID but with so many improvements you just won't be able to stop playing...

GAMIE SET &

STEVE DAVIS SNOOKER

'As far as features go, probably the best snooker game about. It's very playable with speed and spin easily controlled' - *Crash*



COLOSSUS CHESS

'If you want a chess program then look no further' - *ZZAP!* 64



FREE PAPERBACK
BEGIN BRIDGE
BY G.C.H. FOX



COLOSSUS MAH JONG

This computer version of the ancient oriental game, includes 3D graphics, nine levels of intelligence and a tutor, and is a worthy member of the Colossus series.



COLOSSUS BRIDGE

'Its greatest strength is the sheer range of practice and cheat options these make Colossus the best bridge practice program yet' - *Popular Computing Weekly*.

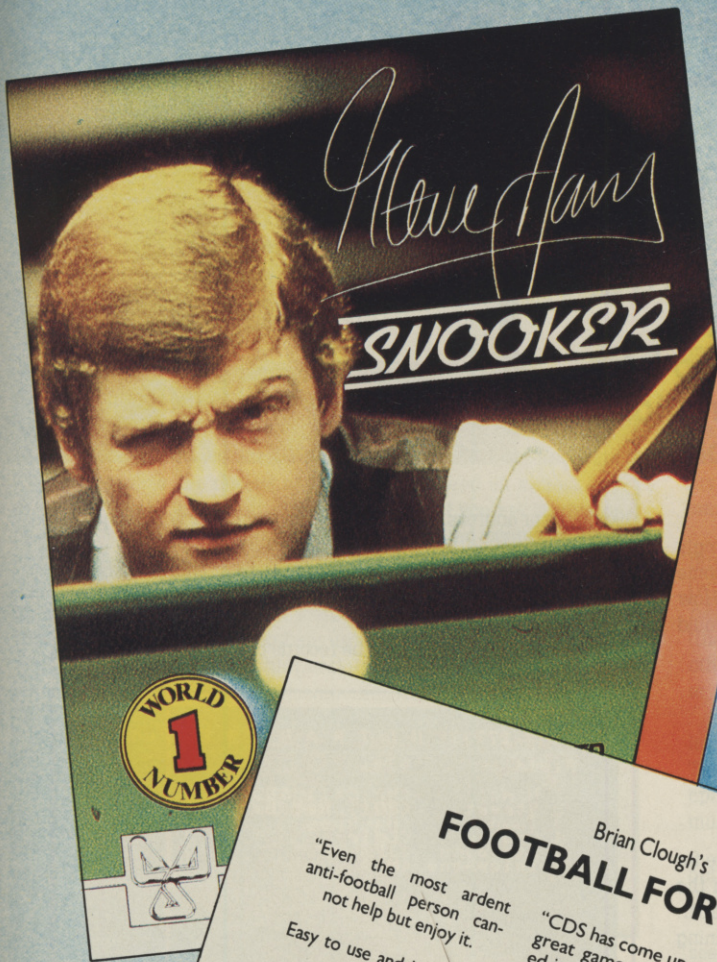


CDS Software LTD

CDS HOUSE, BECKETT ROAD,

MATCH....

ER
best
with
Cash.



BRIAN CLOUGH'S FOOTBALL FORTUNES
 'The balance achieved is just right, making for a great family game' - Computing with the Amstrad.

Brian Clough's FOOTBALL FORTUNES

"Even the most ardent anti-football person cannot help but enjoy it. Easy to use and beautifully designed."

JULIAN RIGNALL ZZAP64 93%

"CDS has come up with a great game and presented it really well. It couldn't work as well purely as a board game, and it would lose something for being a micro-only game."

BBC MICRO USER 9/10

MEGAGAME

"You have to be good at wheeling, dealing, bargaining and backstabbing."

YOUR SINCLAIR 9/10

Buy any of the games below and get

☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆
STEVE DAVIS SNOOKER
 ☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆☆
 on the same format

☆☆☆☆
 ☆ **FREE** ☆
 ☆☆☆☆

TITLE	Cassette	Disk
Colossus Mahjong	9.99	14.99
Colossus Chess 4.0	9.95	13.95
Colossus Bridge 4.0	11.95	14.95
Brian Clough's Football Fortunes	11.95	14.95



Please make all cheques/P.O. Payable to CDS Software Ltd and send to the address below. All prices include VAT and Postage and Packing. Please allow 14 days for delivery.



Discovering Databases

A database can bring order from chaos and eliminate the need for filing cabinets packed with paper. Richard Monteiro introduces you to the art of clutter elimination and looks at the databases available.



Why do I need a database?

You have a vast collection of interplanetary dust particles, each lovingly filed in its own little plastic bag, and wish to catalogue them; bring some order into their chaotic existence. But how do you go about it? How should each piece of dust be categorised? Using pen and paper you could scrawl:

Particle name: Terra
 Composition: Powdery earth
 Location found: 4 Queen Street, Bath
 Colour: Pale brown
 Weight: 0.003 mg

But that just covers one particle. You would need to do the same for every bit of dust in your possession. And to make things easier in the long run, each particle should be written up on a separate slip of paper. You could use a card box or card index; a system where cards containing data are arranged systematically.

Once all the data has been collected you could sort the bits of paper alphabetically, in particle-name order, or even in ascending weight order. Of course, you may not want all that information – perhaps just the name would suffice – or you may wish to keep track of other facts: number of sides or resistance to heat say. That is up to you. It is imperative, however, that you decide upon the format of the particle information sheet before you start entering data. For it would look very messy if you decided to cross out one piece of information, colour perhaps, and replace it with another or even remove it all together.

Enter the **database**. All your dust particle data can be stored, edited, sorted and printed from such a program. The job could be done painlessly and a lot faster. Retrieving your data would almost be instantaneous. Of course, databases (like card boxes) aren't restricted to collections: mailing lists, books and authors, properties and numerous other objects that require some form of cataloguing or have a common denominator – such as, name, location, date.

Off the record

Anything you might write on a card from a card index may also be entered in a record of a database file. Each individual item in the record,

What is a database?

In its simplest form a database is an electronic (or computerised) card box. Anything that might be kept in a card box – such as an address list, book catalogue or details of component parts – can easily be stored in a database. With a card box it is possible to sort all the entries alphabetically or by date order – in fact, in any way you wish. The same is true for a database, only it takes seconds to sort rather than minutes or even hours. The advantages of a database, and there are many, include speed, large storage capacity and powerful printing options.

like name or address, may be placed in a separate field. Thus:

Field – individual piece of information (name or address, say).

Record – several bits of data, that are the equivalent of one card in a card index.

File – a collective term for all the records of a particular subject.



● Part of a database file

Before you can enter any data into a database you must plan – on paper – the layout. The reason is that once the format (number and types of field per record etc) has been chosen, and subsequently entered into a database, it is usually impossible to alter it.

Defining a layout involves deciding upon the number of fields per record (perhaps five as in the dust particle example: particle name, composition, location found, colour, weight), the length of each field (going by our example; 15 for the name, 25 for the location found and so on) and the type of field (that is, character or numeric). Most packages distinguish between character and numeric data. More advanced databases can perform arithmetic calculations on numeric values – much like a spreadsheet. This can be particularly useful as you can have the balance updated automatically by the computer every time a record is amended. Of course, more complex calculations involving credit and interest payments are also possible.

When setting up a database there will come a point when the program asks you for a key field. This is simply the field by which the record will be known or identified – name is one of the wisest choices.

Report to sender

Once you have successfully entered all the relevant information into the database you can start displaying and printing the data in all sorts of wonderful ways. Producing a report is the term often used.

To do this you must tell the computer how you wish the various fields to be arranged on paper. With most databases you may have a

number of report-formats. The idea is that you might have one format for displaying all the information, another for printing just names and address, yet another for printing names and amount owed... the possibilities are endless, but again advance planning is necessary.

Of course, the usefulness of a database does not end there: you could view or print every record in alphabetical order, you may edit and delete records, and with really powerful packages you can relate information from one file with that of another. A database is only as good as the work you put into it. Setting up may be a little tough, but the benefits over box index systems are enormous.

Choosing the right database can also prove a headache. There is a healthy selection for the CPCs; the prices starting around the £20 mark and climaxing at £100. To help you make up your mind there follows a brief look at four databases currently available.

Legal requirements

You've probably heard a lot about the Data Protection Act recently. Since it came into operation on November 11th 1987 you have had the right to know the details about yourself stored on almost any computer. That is looking at it from one angle. If you are storing or intending to store data regarding other people on computer then you may need to register.

Straight payroll and account details of your employees would not make you liable to register; neither would standard name-and-address lists of your club members used purely for mailshots. However, if you store any other information or start mailmerging - that is, using *Tasword* or *Promerge* commands like "if address contains Leeds then print this paragraph" - you would have to register no matter how trivial or boring the information may be.

Further information can be obtained from your local library under *Data Protection Act: Guidelines* or in *Data Protection: Putting the Record Straight*. The latter is by Roger Cornwell and Marie Staunton and is available from the National Council for Civil Liberties at 21 Tabard St, London, SE1 4LA. Price £3.95 + 40p postage.

Random Access Database

Minerva Systems, £29.95 disk only

There are two types of filing system available for databases. The first is sequential. It is usually associated with cassette systems, but surprisingly Amsdos (the CPC disk operating system) also works this way. Sequential filing means that records or packets of data can only be read or written to in sequence - one after another. Naturally this method is slow. The other filing system is known as random access. Most disk operating systems use this (including CPM). Essentially random access means you have the ability to move rapidly anywhere on the disk and pick up data in any order.

Minerva's database, with its give away title, uses random access filing. By clever programming Minerva have managed this from Amsdos.

With a 464 or 664 *Random Access* has room for 3,000 records (this is doubled with an expanded machine or a 6128). Each record can have a maximum of 40 fields, and each field can consist of up to 1500 characters - plenty of room for your beetle collection.

Card layouts or formats are totally user-definable and there is no limit to the number you may wish to create. Both 40 and 80 column text may be mixed on the screen at the same time which can look appealing - this also translates to the printer. The screen can be scrolled which means larger-than-screen cards are possible.

Particularly good are the database's string handling and mathematical options. String functions include *LEFT\$, RIGHT\$* and *INSTR*. While mathematical operations include standard expressions (+ - * /) and more colourful expressions like *SIN, COS, LOG* and so on.

Sorting and searching are very rapid. A unique record can be found almost instantly from a file containing a thousand or more entries. The result of a search can be kept as a sub-set of the complete file and dealt with independently. Minerva's offering is a very versatile product at a reasonable price. True random access from Amsdos, powerful format facilities and above-average maths operations coupled with a simple menu system make *Random Access* a worthwhile investment.

GOOD NEWS

- Good range of mathematical operations.
- Dual 40 and 80 column display.
- Comprehensive formatting options.

BAD NEWS

- Can be slow to respond to key commands.
- Version tested was not 100% error checked.

Ultrabase

Beebugsoft, £14.95 tape, £17.95 disk

Rather than using virtual memory - disk space - for storing record data, *Ultrabase* keeps everything in the computer's memory. This proves limiting in the amount of information that can be handled. However, this system does have the advantage of fast sorts and searches.

Ultrabase can store around 300 records (15 fields per record, with a maximum of 25 characters per field) at most - that's even on 6128s and expanded 464s; a pity Beebug haven't taken advantage of the extra memory. Still, 300 records are enough for a collection or a mailing list for a small business.

Beebug's database is easy to get to grips with: it constantly prompts you, if you select an incorrect option it will tell you why and (where possible) what to select instead. Before you can start using *Ultrabase* you must supply it with information regarding the size of the file (that is, number of records and number of fields). The more roms and other memory-grabbing peripherals that you have stuck to your computer, the less room you'll have for data storage.

An *Ultrabase* field consist of four parameters: field (number), type, length and title. These options must be supplied to each individual field. That's fine, but it becomes very tiresome if you decide to edit a single option in the field (like type or title) - you can't. Instead every option must be re-entered.

In its favour the database has extremely fast sort and search options. This is due to the information being memory resident; there's no time wasted hunting about a disk for a file or record.

Ultrabase contains a special feature - which Beebug call a fuzzy search - that allows greater power and flexibility when searching. In normal search mode an exact match is found. The fuzzy search permits rough matches to be made. For instance, you could search for Road or Rd.

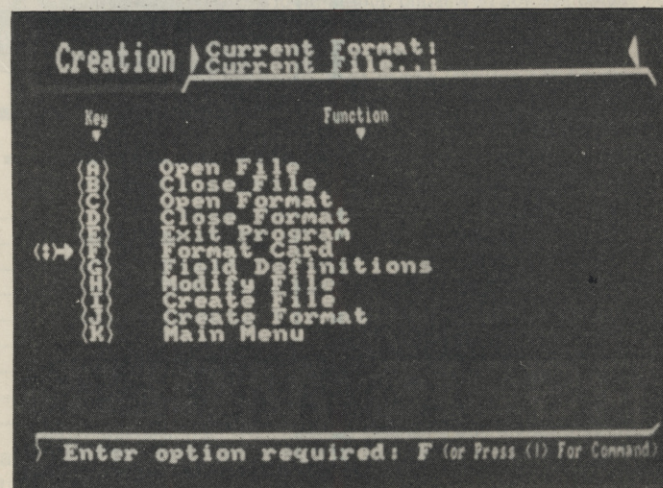
Admittedly *Ultrabase* lacks many of the features found on other databases, but for the price it's good value.

GOOD NEWS

- Fast sort and search.
- Cheap and easy to use.

BAD NEWS

- Limited data space as everything is memory resident.
- Fixed record format.



● Mixed 40 and 80 column text on Ultrabase's main menu.

AtLast Plus

Rational Solutions, £39.95 disk only, CPM plus (6128) only
Eighteen months after it's conception *AtLast* (reviewed issue 18) has been revamped, re-priced and re-badged. The improvements range from a better manual, to larger and more efficient data storage. The price has increased by £10; and the title now includes a *Plus*.

AtLast Plus is the last of the decent CPM-needing databases left on the Amstrad. Its features beat those on packages costing twice as much.

The database uses all the available space on your disk to store information. This means relatively large files can be handled: the manual states a maximum of 32,000 records. However, this target is unlikely to be reached as disk space runs out fast. 1,500 records is about the most you can hope for. Each record can have 20 fields. This is not as restricting as it sounds because each field is further divided into 99 elements. At most, fields and records hold 79 characters.

With standard databases each line of an address must be placed on a new field; alternatively the whole address must be placed on a single line. Neither is satisfactory. *AtLast* overcomes this as each field may be split into elements. This means only one field will be used for the address. And each line of the address is placed in a separate element.

All screen layouts and report formats are user-definable. This is achieved using a built-in word-processor. Data items and explanatory text may be positioned anywhere on the screen.

Masterfile III

Campbell Systems, £39.95 disk only, 6128 or expanded 464/664
Campbell's database is relational. This doesn't mean it has close ties with other databases, but means you can call up details of a record on one file by referring to a related record on another.

The use of relational files may not seem obvious at first. Take an example, though. If you were keeping an index of books on a *Masterfile* database, you might have five by JRR Tolkien. Each book record would need to have the full author's name against the title. This would mean having the letters "JRR Tolkien" in your file five times. Multiply this by all the other authors whose books number more than one, and you should see you're wasting quite a bit of space.

Masterfile allows you to set up a parent file with all the authors' names on it. Two-character references are used to link the names to child records, on a different file, which have details of all the book titles.

The program can sort a file and search through it using a system of selecting and deselecting records. You can therefore create any sub-set you like by choosing only the records you want to keep on file.

You can keep totals of fields in a file, but you can't perform any other calculations on numeric data. Screen layouts and report formats are put together by selecting options from menus - not as easy as designing a record on screen, but just as effective. A very competent database.

GOOD NEWS

- Supports parent and child files.
- Vast range of screen layouts possible.
- Fast.

BAD NEWS

- Limited arithmetic functions.
- Creating report formats is tricky.

The differences

Over the last eighteen months *AtLast* has matured into *AtLast Plus*. The modifications and enhancements are numerous. Here's a brief rundown:

- ◆ Enhanced single drive operation.
- ◆ Improved use of disk space.
- ◆ Better instruction manual.
- ◆ More powerful browse and edit section.
- ◆ Easier installation.

If you own *AtLast* and wish to upgrade to *AtLast Plus* simply send the front cover of the manual and the product's serial number to Rational Solutions (address below). Plus £19.95.

GOOD NEWS

- Data capacity restricted to disk memory.
- Fields can be split into elements.
- Powerful report generator.

BAD NEWS

- Calculated fields still aren't possible.

AtLast Plus is much better than before. It can store and manipulate large amounts of data with ease. Results can be presented equally impressively. The whole package performs well; its only shortcoming is that calculations can't be performed on fields.

Mini Office II

Database, £14.95 tape, £19.95 disk

If you like the idea of a database, but don't like the thought of laying out so much cash, then *Mini Office II* is a decent buy. It is basically a collection of business applications including word-processor, spreadsheet and database. Although the database is not up to the standards of the others reviewed on these pages, it is good value for money.

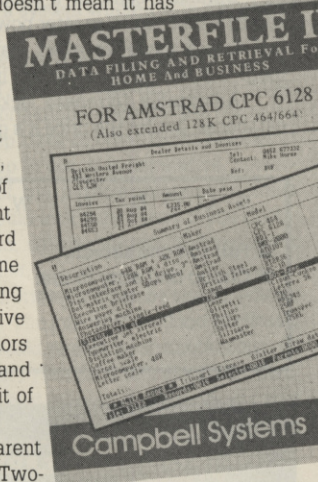
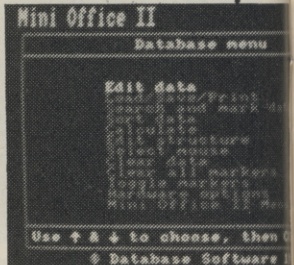


Table of features

	Random Access	AtLast Plus	Masterfile III	Ultrabase
	£29.95	£39.95	£39.95	£16.95/£17.95
Max no. records	6,000	32,000*	1,000	300
Max no. of fields	40	20	50	15
Max field length	1,500	79	240	25
Definable format	yes	yes	yes	yes
Search	yes	yes	yes	yes
Sort	yes	yes	yes	yes
Print facilities	unlimited formats	unlimited formats	card dump & sel. list	card dump & sel. lists
Maths operations	same as Basic	none	totals	totals
Special features	mixed 40/80 text	99 elements	relational files	fuzzy search

* Refers to maximum possible; in practice disk space limits this to 1,000

Beebugsoft ☎ 0727 40303

Dolphin place, Holywell Hill, St Albans, Herts, AL1 1EX

Campbell Systems ☎ 0378 77762

7 Station Road, Epping, Essex, CM16 4HA

Database Software ☎ 0625 879940

Europa House, Adlington, Macclesfield, Cheshire, SK10 5NP

Minerva Systems ☎ 0392 37756

69 Sidwell Street, Exeter, Devon, EX4 6PH

Rational Solutions ☎ 056681 511

Carn House, Canworthy Water, Nr Launceston, Cornwall, PL15 8UB

TELETEXT

A world of information at your fingertips

A Microtext Adaptor turns your 464 or 6128 into a sophisticated Teletext Receiver. Giving you access to any of the hundreds of free pages from Ceefax or Oracle. As well as up-to-the-minute news or football results, there's the local weather or even bargain holidays. And Teletext caters for special interests, like computing, motoring, or gardening, you'll find things to do and places to go in your area plus much much more.

But unlike a Teletext TV, a Microtext Adaptor allows you to do a lot more with the information, you can save a page to disc or cassette, perhaps to keep a watch on share prices, or print pages like what's on TV. There's free software too! Amstrad software is broadcast in a special format on Channel 4 for Microtext users to download. Plus you can access and use Teletext data from your own programs, providing endless possibilities.

The Microtext Adaptor fits neatly on the expansion port, it comes with software and is very easy to use. Just connect it with the lead supplied to the VIDEO OUT or AV socket of a video recorder and change channels with the controls on the video or, there's our own Tuner which has been specially designed to provide the signal that the Adaptor needs, plug in an aerial, it tunes itself in (!) and channels are selected from your keyboard. Tune into Teletext, a world of information at your fingertips.

'A well thought out product that performs admirably.'
Amstrad Action Dec. 87

A Microtext Adaptor for use with a video is only **£74.95**, Adaptor and Tuner just **£114.80**. Prices include p/p & VAT.

Instructions are provided to transfer software to disc. Disc's are available for **£5.00** extra.

Please send cheques/PO's to:-

MICROTEXT

Dept A 7 Birdlip Close, Horndean, Hants PO8 9PW
Telephone: (0705) 595694

COMMUNICATE

Better

With the Cage Comms ROM

Produced by Enthusiasts for discerning Viewdata Users

The Cage Comms ROM replaces existing software in Amstrad RS232 Port, Pace/Honeyview, Amstrad/Pace Serial I/Fs (Type Ams) or KDS/Sven I/F (Type KDS)

Now YOU can use the software chosen by Micronet for their NEW ProPak package

Features:-

- | | |
|---------------------------------|----------------------------------|
| Very easy to use | Automatic downloading and decom- |
| Offline message preparation and | paction of Telesoftware |
| automated sending | Comprehensive 60+ page manual |
| 94 Frame stores (6128) to store | Autodials any autodial modem |
| captured frames, or messages | Automated Log-on procedure |
| Full & part frame copying | Superb printing facilities |
| Professional editing facilities | Prestel frame 'tagging' |

Very good indeed. An excellent viewdata Package ...
amazing. MICRONET

When ordering, please state type required, AMS or KDS

Cheques should be made
payable to:-
I M Hoare

Amster's Cage (FP)
46 Connaught Road
London NW10 9AG

Tel: 01-965 8957

£34.50



Castle Computers

Castle House,
11 Newcastle Street,
Burslem,
Stoke-on-Trent,
ST6 3QB
Tel: 0782 575043

AMSTRAD CASSETTE	AMSTRAD CASSETTE	AMSTRAD CASSETTE	AMSTRAD CASSETTE	AMSTRAD COMPILATIONS	AMSTRAD DISCS
500cc Grand Prix £2.99	Escape Singe's Castle £2.99	Matchday II £6.50	Spy v Spy Island Caper £2.99	HEWSON FOUR SMASH	3D Voice Chess £7.95
10th Frame £2.99	Elevator Action £2.99	Melbourne Draw £4.95	Spy v Spy Arctic Antics £2.99	HITS -	3D Stunt Rider £4.95
Airwolf £1.99	Future Knight £1.99	Mystery Arkham Manor £3.95	Sam Fox Strip Poker £2.99	Ranarama, Exelon, Zynaps,	Airwolf £4.95
Agent Orange £2.99	Fairlight £2.99	Miami Vice £1.99	Theatre Europe £3.95	Uridium+ £6.95	Sea Stalker £7.95
Bride of Frankenstein £2.99	Fighting Warrior99	Murder off Miami £2.99	Tarzan £1.50	FIVE STAR GAMES Vol 2 -	Bridge £7.95
The Big Sneeze £2.99	Football Manager £1.99	*****	Thantos £2.99	Dandy, Frostbyte, Cauldron II, Alien	Station Fall £7.95
Battle of Planets99	Frankie Goes Hollywood £1.99	* Mask II £2.99 *	3D Quazars50	Highway, Doomsday Blues £4.95	Warlock £5.95
Bridge £3.95	Glen Hoddles Soccer £2.99	* Masters of Universe *	3 Weeks in Paradise99	DURREL BIG 4 -	Shockway Rider £4.95
Breakthru £2.99	Get Dexter £2.99	* (The Movie) £2.99 *	Popeye £1.50	Combat Lynx, Saboteur, Turbo	Ninja Hampster £10.50
Ball Breaker £2.99	Gyroscope99	*****	Trap £1.50	Esprit, Critical Mass £3.95	Matchday 2 £10.50
Bobby Bearing £2.99	Game, Set & Match £9.50	Nomad £1.99	TT Racer £2.99	COIN OP CONNEXION -	Cholo £5.95
Battle of Britain £3.95	Greyfell £2.99	Nexor £1.99	Tecnician Ted99	Breakthru, Crystal Castles, Metro	Melbourne Draw £7.95
Barbarian £6.95	Glider Rider £2.99	Nodes of Yesod £2.99	They Sold a Million £2.99	Cross, Express Raider £3.95	Challenge of Gobots £5.95
Contamination £1.99	Grange Hill £2.99	Nemesis Final Chall. £2.99	Top Gun £2.99	AMSTRAD ACADEMY -	Cosmic Shock Absorber £4.95
Cosmic Shock Absorber £1.99	Hydrofool £2.99	Nemesis Warlock £2.50	Tapper £1.99	Zorro, Bruce Lee, Bounty Bob,	Waterloo £7.95
City Slicker £1.50	Hobbit £3.95	Ninja99	Tau Ceti £2.99	Dam Busters £2.99	Doomsday Blues £5.95
Core99	Hybrid £1.99	Nether Earth £3.95	Virgin Atlantic Chall.99	AMTICS ACOLADES -	Design Design £4.95
Challenge of Gobots £2.99	Hot Runestone £2.99	Pulsator £1.99	"V" This is an allout attack £1.99	Sweevo's World, Starquake,	Enduro Racer £6.95
Camelot Warriors £2.99	Highlander £2.99	Shockway Rider £1.99	Vulcan £3.95	Bounder, Monty on the Run £2.99	Xor Designer £7.95
Combat School £6.50	High Frontier £3.95	Robin of Sherlock £2.99	The War Game £2.99	5 COMPUTER HITS -	Kung Fu Master £3.95
Cholo £2.99	The Inheritance £2.99	Rocky Horror Show £2.99	Waterloo £2.99	Wizards Lair, 2112AD,	Heartland £5.95
Collosus 4 Chess £3.95	Infiltrator £2.99	Red Scorpion £2.99	Winter Games £3.95	Contrapion, Kettle, Attack of	Infodroid £4.95
Desert Fox £1.99	Into the Eagles Nest £2.99	Ranarama £1.99	The Young Ones £2.99	Killer Tomatoes £2.99	Bride of Frankenstein £5.95
The Animator £7.95	Impossible £1.99	Red Hawk75	Xevious £1.50	ACTION PAK -	Code Name Matt £3.95
The Devils Crown99p	Impossible Mission £1.99	Swords & Sorcery £3.95	Rampage £6.95	Blogger, Defend or Die, Darts,	Sun Star £3.95
Dracula £3.95	International Karate £2.50	Sigma 7 £2.99	Academy £6.95	Electro Freddie £2.99	Johnny Reb II £4.95
Driller £10.50	International Karate + £6.95	Starglider £7.95	Armageddon Man £9.50	LIVE AMMO	Spy v Spy Island Caper £6.95
Dogfight 2187 £2.99	Jail Break £2.99	Saboteur99	Big 4 Vol 2 £6.95	MAGNIFICENT 7 £6.95	Ballyhoo £7.95
Deathsville £1.99	Kat Trap99	Saboteur II £3.95	California Games £6.95	10 GREAT GAMES -	Catch 23 £6.95
Doomsday Blues £2.99	Knight Lore £1.50	Shaolins Road £2.99	Death Wish 3 £2.99	Avenger, Krackout, Future Knight,	Fairlight £5.95
Elite £6.95	Livingstone £2.99	Starfox £2.99	Auf Wiedersehen Monty £2.99	Bounder, Footballer of Year,	Outrun £10.50
Enduro Racer £4.95	Lords of Midnight £2.99	Spindizzy £1.99	Mask I £2.99	Trailblazer, Highway Encounter,	
Electra Glide £2.99	Movie £2.99	Stainless Steel £2.99	Mask II £3.50	West Bank, Jack the Nipper, Monty	
Equinox £1.99	Mission Omega99	Slap Fight £3.95	Masters of Univ. The Movie . £3.50	on the Run	
		Strike Force Cobra £1.50		All these Games for £6.50	



Please note we stock all the latest Amstrad Software on Tape and Disc.
Please Phone!



The Comm-plete Rom

Steve Williams investigates a new rom for the modern modem.

Cage Comms Rom

Amster's Cage, £34.50 rom only

Amstrad CPC owners have never been over-spoilt when it comes to the quality of viewdata communications software available. Now, at last, someone has come to our rescue. Dave Gorski and Ian Hoare have produced the *Cage Comms Rom*, designed to put Amstrad owners back into the limelight.

The manual – a 60 page offering – is written in an informal, friendly yet comprehensive style.

The rom can be fitted as a direct replacement to the two Honeysoft roms that are in the Amstrad/PACE RS232 interface (or KDS modem), or it can be fitted into a rom expansion box. Once the rom is running you are presented with the main menu which consists of six options.

- 1) Log-on
- 2) Carousel
- 3) Messaging
- 4) Filing and Templates
- 5) Printer
- 6) Configuration

Everything you need can be accessed from this "front page". The menu technique, is used throughout the program; its structure is very logical and very easy to follow.

Instead of setting up all the various parameters and preferences, you will require, each time you switch in the rom, these can all be saved to disk. Using a program from the manual these parameters can be loaded and the rom invoked all in one go.

The Concept

The *Cage Comms Rom* is based around a big frame carousel (26 pages on a 464 or 664 and 94 on a 6128) that permits a large number of operations to be carried out on frames, on-line or off-line.

Wherever possible intelligent defaults are automatically used. This means that you don't have to keep remembering technical matters. Just press a designated key and the rom will do all the house-keeping for you.

Carousel menu

The carousel menu is the heart of the program. Once grabbed or created, frames are stored in banks. If you have a 464 then a total of 26 frames may be stored. 6128 machines have enough memory for 94. Having this storage facility means pages can be manipulated as you wish.

If you're "on line" and you see a frame you want, simply press the COPY key and it's (the frame) in the bag, or rather the carousel. The frame is automatically stacked on the next available carousel location. After you have logged-off you can elect to view the carousel frames you have grabbed. Pages are turned forwards or backwards via the right and left cursor keys.

Off-line editing is very well catered for. Single key-presses are used for the creation of coloured graphics, backgrounds and inks. The editing package includes a pixel editor. When switched on the six pixels under the cursor can be toggled on or off. It sounds fiddley, but saves endless reference to a viewdata character set.

Having composed your masterpiece(s) offline, chances are you might want someone else to see them? Unlike other viewdata packages, the Cage can help you with this problem. Sending a full frame back up-line to the host takes a little under two minutes. A great saving when you think how much it would have cost you to do it all on-line

Telesoftware

The *Cage Rom* has the ability to download both CET and compacted types of telesoftware fully automatically.

The log-on menu allows you to set up phone directories, establish log-on and log-off procedures (if you have an intelligent modem), etc etc. The *Cage* can store directories onto disk in an encrypted form. This means that a password will be needed before the directory is unlocked. This keeps all your valuable account numbers safe from prying eyes.

When you are looking through pages of frames and get the urge to view something else, simply press the TAB key and any letter. The current frame is now marked, just like a bookmark marks a page. After you have finished whatever it was that distracted you, press TAB and the frame-tag letter and the *Cage* automatically returns you to the frame you were looking at previously. In addition, before logging-on you can set up the frame-tags as keywords to take you to your favourite pages. Tag strings can be alphanumeric. This means, for example, by pressing a certain key combination you will be taken to the Amsters Cage on Prestel.

The tagging feature saves a lot of typing and is very easy to get used to. So much that it makes me very lazy. I really miss this feature when using other comms set-ups now.

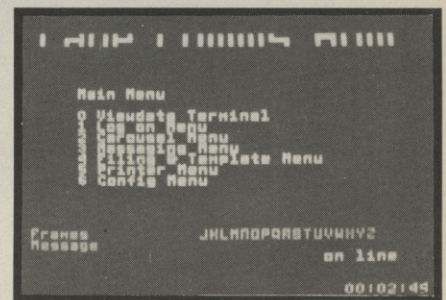
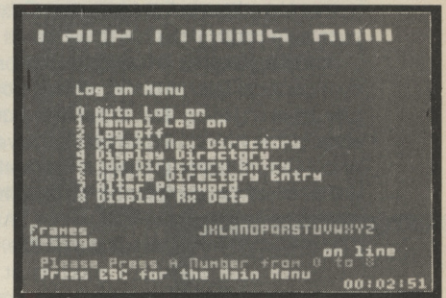
The deeper dungeons

This is the comms package that others will be measured by. There are rumblings that Amstrad are having a long hard look at it and they could adopt it for the Amstrad RS232 interface by Pace.

I am still delving around the *Cage Comms Rom's* darker corners and finding out even more things that it is capable of doing. I haven't yet found the tea-making facility, but I suspect that it has one. I suspect that I shall be finding new delights for quite some time to come.

Over the last few years I have seen and used a lot of different combinations of machines and comms software (business and home computers alike). On the basis of what I have seen available, I have no hesitation in recommending the *Cage* for any CPC comms user.

Amster's Cage ☎ 01 9658957
46 Connaught Road, London, NW10 9AG



GOOD NEWS	BAD NEWS
<ul style="list-style-type: none"> ■ The best comms software for the CPC. ■ Handy tagging feature saves lots of key presses. ■ Off-line editing of frames possible. 	<ul style="list-style-type: none"> ■ Pricey, considering it doesn't include the rom board.

Taking Stock

Clutching his Filofax, bona fide yuppie Pat McDonald tries his hand at stocks and shares

Stockmarket

Meridian Software, £29.95 disk only

There are four main types of business software. These are the word processor, the spreadsheet, the database and the accounts package. Now for something different: *Stockmarket* from Meridian Software, which is a cunning mixture of the last three breeds of software, plus a little extra.

Stockmarket is a sophisticated program designed to record your own personal folio of stocks, shares, government bonds, unit trusts, and just about anything else. It can also plot the rise and fall of up to twelve share prices (titles) at once over a five year period. Admittedly in the light of the current financial chaos it may well be of purely academic use... it's not for me to comment further on this, though.

Anyway, *Stockmarket* is split down the middle. Once you have loaded in a data file – which must be on a separate disk, except to start with – you can select either the accounts program or the price recorder.

A word about the style of the program. It's menu driven, but roughly 95 percent of your entry can be selected using the cursor keys alone. This makes for quick, error free input. Three levels of menu are provided; these are main, option and question. Generally, to go through a particular process takes more steps, but the steps are still simple. There's also a panic button – hit the close square bracket to return to a former menu.

From the main menu you can access the following:

- **Update:** this allows access to share prices,

present yields on shares and also P/E ratios, which can be left to be recalculated by the computer.

- **List Account:** depending on whether you want to see the results on your screen or printer, this lists either your current folio, your historic folio – where every transaction is taken into account, on shares that were sold long ago – your present dividend payments, and any cash accounts you may have set up. The program can also record your method of payment; Access or cheque, that is.

- **Buy and Sell:** apart from the obvious, this enables you to edit sales and purchases, merge two share blocks together (if you increased your stake in a company) and delete a share block, which isn't a smart inclusion by any stretch of the imagination.

- **Dividends:** these can be entered and edited if incorrect.

- **Cash Transactions:** from here, you can manipulate your various cash accounts, Access card, bank account, post office etc.

- **Housekeeping:** this lets you change the VAT and stamp duty, as well as indicating a printer on-line or changing the screen colours. You can also turn off the default values of the various menus.

- **Deal Costs:** yes, stockbrokers make money on deals too. The program needs to know how much they charge for handling a particular share.

City slicker

Right, now for some raw info. Accounts can handle up to 50 share

blocks per folio, and can take scrips, rights and part paid shares into account. It is one smart cookie.

The prices program is designed to be able to make a study of various companies' share prices. Up to twelve different titles can be compared, and up to 260 dates can be stored, giving you five years storage at one week intervals.

From its main menu you can get to:

- **Enter/Edit Prices:** this is the main entry point for share prices. You can type in the date and price, and amending them is very easy.

- **Enter/Edit Titles:** enter and amend the actual share titles, for instance, "AMSTRAD 5P". The price ceiling – which can be 64, 640, 6400 or 64000 – may also be edited.

- **List Prices:** gives a copy of all the prices and dates entered so far, and which title they belong to.

- **Prices:** you can select which title you want a list of prices and dates for.

- **Plot Prices:** the big one! Once you have entered your list of prices and dates for a particular title, the computer will print a pretty graph. You can select either logarithmic or linear scales – its best to go for log, since any big gains at high prices are in proportion. You can also have an average drawn on the graph, and a hard copy produced.

- **Adjustments:** by use of this option, you can input scrip (which is a free issue of shares to existing shareholders to stop share prices becoming excessively high), rights (issue of new shares to existing shareholders to raise capital) and part paid issues. You can also add a multiplier to prices.

- **Housekeeping:** very similar to the accounts program housekeeping.

- **Save and Exit:** saves your particular database to disk.

- **Cont/Restart/Stop:** you can continue with the pricing program, go to the accounts program or bomb out to Amsdos.

All the on-screen presentation is in 80 column mode and has a straightforward, no-nonsense look about it. The program has a professional feel about it. Unfortunately it is let down by a few fairly minor problems. The program appears to me to be written totally in Basic. The fact is almost invisible, except that if you try to print without having a printer, the program locks up – the sort of thing a jumpblock call could have gotten round. Also, the program has no in-built copy routine, you will have to resort either to *Tas-copy* or *Utopia*.

The manual takes you through the steps of the program quite gently, but doesn't explain a lot. You can spend a long time before you understand everything in it. Personally, I put this down to complexity of the program subject rather than the manual being badly written. On the other hand, a complete novice at computing might have a lot of trouble getting *Stockmarket* to behave.

I think that *Stockmarket's* real market is the small scale, long term investor; also the person who wants to learn more about investments. And finally, as an educational tool for letting people indulge in stocks and shares without the danger of losing or the success of gaining. I believe that's where *Stockmarket's* real potential lies – with the aid of a suitable textbook, of course.

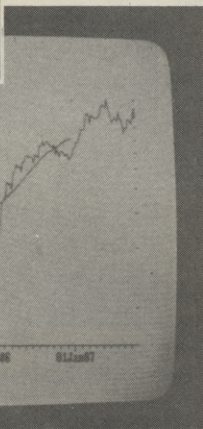
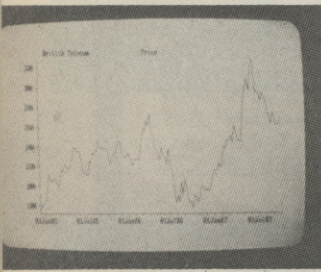
Meridian Software ☎ 01 8507057
38 Balcaskie Road, London, SE9 1HQ

GOOD NEWS

- Very easy to input data and amend it.
- Of genuine use, as a home, business and education tool.
- Well produced – has a good feel to it.

BAD NEWS

- Subject is not the easiest to grasp.
- Another program needed to make a copy of the graphs.



● Amstrad before the recent stockmarket crash.

Disk Transfer

Pat McDonald tests a new tape-to-disk program and raises the important issue of piracy

Speedtrans Plus

Goldmark Systems, £12.99 disk only, 128k machines only

Goldmark systems have long been renowned for their tape to disk backup service. *Speedtrans* handles a fair proportion of the "DJL Speedlock" system of protection. Can its successor do any better?

Thorny issue

Tape-to-disk transfer routines have long been a bone of contention on the CPC's. Users cry out for them, mostly for the legitimate purpose of backing up tape software. For this reason we continue to cover these devices, both hardware and software. However, we'd be interested to hear from all readers as to whether you think we ought to continue this policy, when there is the potential for them to be misused for illegal purposes. **BW**

Yes! Oh, you want more... Well, using the thing is simplicity itself. Just run the program, insert a blank disk into the drive. When you have a tape to be transferred in the cassette recorder, press any key on the keyboard. From now on, *Speedtrans Plus* works automatically. It loads the Speedlock'ed loading picture and program, then saves them to disk. It tells you what filename the game is being saved under, and saves an autorun file as well. Run it, and your game comes off the disk at the speed of a - well, something pretty quick. All the files are compacted down to their minimum size. *Speedtrans Plus* will only work on 6128s or

expanded 464/664 machines. Goldmark confidently predict it will handle about 83 different games.

To a more important aspect of this product - its potential use. Many people claim that these sort of programs have a clearly defined task - to make disk backup copies of someone's tape program. Which is what a proportion of people will use it for. But, stated simply, these programs bypass protection systems. After that, the programs are susceptible to misuse by pirates - software thieves. I don't believe that most commercial pirates use this method, but the possibility exists.

Pirates have too easy a life as it is, and the present state of the industry is so apathetic that they will continue to get away with their theft. I would like to see more hardware protection. Amstrad could easily incorporate an electronic serial number into every computer manufactured. Games would have to be configured and registered with that serial number, like a lot of business software at present.

The whole point of this hypothetical exercise is that, if a game was found on the wrong machine, or a piece of software was written to get round the protection, whoever had the game or wrote the software could be identified, and then prosecuted. Now, under the above system, *Multiface II* - blackbox copiers - would replace programs such as *Speedtrans Plus*. They are cheaper in the long run, and can't easily be used to pirate games.

Goldmark Systems ☎ 07072 71529

51 Comet Road, Hatfield, Herts, AL10 0SY

GOOD NEWS

- Program does everything it says it can.
- It's hard to make a mistake when using it.

BAD NEWS

- Can be used for small scale piracy.
- It's not cheap considering the alternatives.

Camel on the Menu

Richard Monteiro gets his ladder and chamois out and peers into a window operating system

Wops

Camel Micros, £14.95 disc only

Back in issue 24 we reviewed a product from Advanced Memory Systems, *Max*, which is based on WIMP systems. Camel Micros, who have been quiet on the CPC front for the past 18 months, have released a similar package.

The acronym WIMP stands for windows, icons, mouse and pointer. The mouse is an input device and is used in preference to the keyboard or joystick (*Wops* doesn't work with a mouse at present, however, this option is promised for later). A pointer is an object on the computer screen whose movements correspond to those of the mouse. It is used to point at objects and select options. Icons are the objects or small pictures from which menus spring. Windows hold menus or options.

Wops (windows operating system) replaces *Amsdos*. It is basically a disk management utility in the same vein as *Discology* and *Oddjob*. *Wops* presents itself as a large window and a cluster of icons. Sadly neither the window nor the icons can be moved to different locations on the screen. Even worse is the fact that the window cannot be increased or decreased in size.

By using the arrow keys or a joystick you can move a flickery, intelligent pointer across the *Wops* screen. Once the pointer is resting on an icon of your choice, a stab at the fire button or return key will select that particular option.

The disk drive is constantly checked to see what is present. For instance, if you remove a disk and insert another, *Wops* will immediately show the directory of the new disk. *Wops* shows files as icons with the name of the file underneath. These files may be run simply by clicking on the file-icon.

From the panel of eight icons you can elect to alter screen colours, print the contents of files, copy files, copy disks, format disks, edit sectors, rename files, erase files and unerase files. The list doesn't end there. Files may be saved to either disk or cassette, external or bar commands may be accessed, drive number is selectable and extra memory may be used (assuming you have it).

The idea of a WIMP environment is to make it simple for the user to choose options and get from one menu to another with the minimum of fuss. *Wops* fails to do this. Achieving certain tasks can be very confusing - the manual is less than helpful. *Wops* has good features: the functions work correctly and there are some novel touches (like the constant scanning of the drive and being able to run a file simply by clicking on an icon). However, if *Wops* is your first encounter of a WIMP-like system, you'll be disappointed.

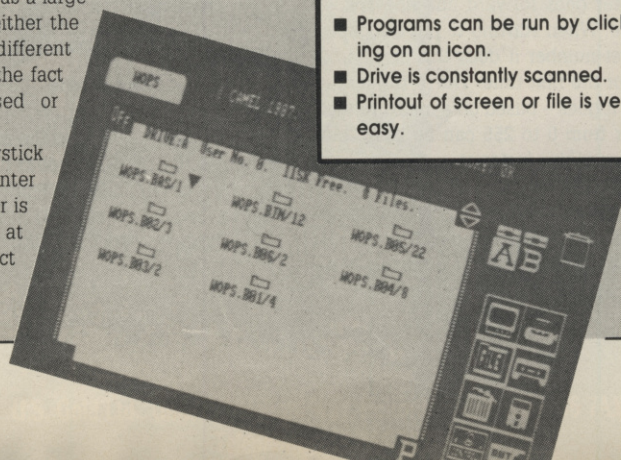
GOOD NEWS

- Programs can be run by clicking on an icon.
- Drive is constantly scanned.
- Printout of screen or file is very easy.

BAD NEWS

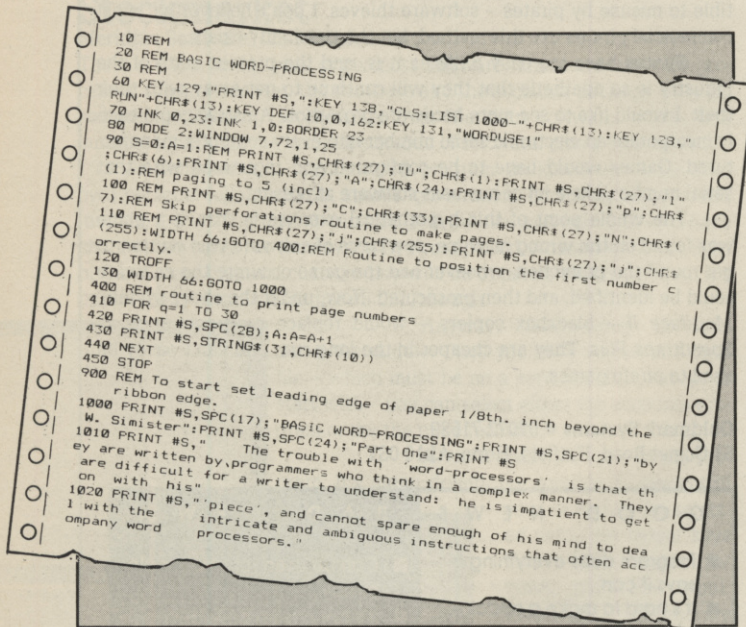
- Confusing layout.
- Too much keyboard input required.
- Poor, unhelpful manual.

Camel Micros ☎ 0392 211892
Wellpark, Willeys Ave, Exeter, EX2 8BE



Basic Word-Processing:4

The fourth in a six part series by Bill Simister on how to create and use a word-processor entirely in Basic.



In part four we continue explaining the printer commands of the Basic Word Control program. We start in line 100 with a facility of the DMP 2000 that enables it to skip the perforations in the paper, with an accurate positioning of the text anywhere.

Perforation skipping

`PRINT #S,CHR$(27);"C";CHR$(33)` is the first part of the command after the REM in line 100. The "C" triggers it, and `CHR$(33)` stipulates the number of lines – provided we are using 24 in the "A" command of line 90, explained in part 3. If that "A" command was 12, then this "C" command must be 66. These two commands are related.

To explain further: double spacing ("A" and 24) gives 33 lines to the page, hence "C" and 33; single spacing ("A" and 12) gives 66 lines to the page, therefore, "C" and 66.

With just this "C" command, the text would reach the bottom of the page, so another command is used to correct this.

`PRINT #S,CHR$(27);"N";CHR$(7)` takes 7 lines from the bottom of each page. "N" triggers that command, and `CHR$(7)` tells it how many lines to deduct. 7 from 33 gives 26 lines to each page. Some people prefer 25 lines; in that case they should use 8 instead of 7 in that "N" command.

Paper positioning

In line 110, after the REM, are two repetitions of the same command: `PRINT #S,CHR$(27);"j";CHR$(255)`. They are used to make the paper rewind a little before printing. They are once only commands, so using each twice means that the printer goes forward one line space, then back about two line spaces – twice. When starting to put the paper in its proper position to receive the first number it does this surprising dance, which is startling when heard for the first time. The "j" triggers it off, and the 255 gives the distance back it goes – based on a measure that says 216 equals one inch. Any number from 0 to 255 can be used, but none higher, which is why it is used twice in this instance.

It should be explained here that each of the many `PRINT #S,` commands in the various orders cause the printer to advance one line space. In this line 110 is a command that moves it back about two line spaces before printing the number. I repeat, it is a once only order, so it only happens for the first page, thereafter the program attends to the spacing, as described when dealing with lines 400 to 440.

Width way now

At the end of line 110 are two orders similar to the ones in line 130. `WIDTH 66` – which is an order to the printer ensuring that the width remains constant, and `GOTO 400`. The one at line 130 is `WIDTH 66: GOTO 1000`, and it could well be placed at the end of line 100 before the final REM, instead of in a separate line – except that when lines 90, 100, and 110 have their REMS in place it would not be available to direct the computer to the screen printing the text. Lines 100 and 110 are never used at the same time, but each together with line 90. That is another reason why all three lines have REM before them when text is being printed on the screen. The REMs at the ends of lines 100 and 110 are there for your own information only.

When you want to use the printer, line 90 has its `S=0` changed to `S=8`, and the REM after `A=1` is removed. That brings the line 90 printer commands into use. At the same time the first REM in line 100 is removed, so that it can separate the pages.

When the pages are printed they are cut off and re-threaded, and the REM is placed back at the beginning of line 100. Then the line 110 has its first REM removed, so that the numbering can be done.

The main event

All the lines, 10 to 1000, constitute the program itself, and from now on I shall be dealing with your use of that. It is advisable to keep a copy of the program on a separate disk or cassette. I have done that although I invariably use the last chapter I worked on to start the next one, deleting lines 1010 on, then altering the title and lines 20, 60 and 1000 as well as the variable A in line 90 to give the first page number in the new chapter.

The first matter to deal with is the method of EDITing. I use the Copy Cursor method described on page F2.8 of the Manual. If you have got used to a different method, then stick to it, it never pays to change habits too much. With the Copy Cursor method it is easy to slice into a program line to start a new para, and it has other merits too.

For your practice it will be best for you to use the copy I give here. The title is: `TROUBLE WITH VIKING` so the lines in the REM heading must be changed. Pull down line 20 by the copy cursor method, which is fully described on page F2.8 in the 464 manual.

Following the method there outlined change the BASIC WORD-PROCESSING to `TROUBLE WITH VIKING`.

That gives the REM heading a tidy start. Now bring down line 60, and alter the final command so that it reads: `KEY 131, "VIKING1"`

The next line to alter is 1000. There are three sections to this: the title, the name of the writer, and the chapter number. These are each enclosed in " ". Alter each one as you come to it using the Copy Cursor method. That will make the line into: `PRINT #S,SPC(19);"TROUBLE WITH VIKING";PRINT#S,SPC(21); "by BILL BLOGGS";PRINT #S ,SPC(24); "Chapter one":PRINT #S`

Note that the final '`PRINT #S`' has had its comma deleted. As it is, it will print a blank line between chapter number and the first line of text. When RUN this line will give:

TROUBLE WITH VIKING

BY BILL BLOGGS

Chapter one

It will be seen that the second line (name) needs a space after 'by', whereas Chapter One needs a space taken from in front of it. Do this by bringing down line 1000 again, inserting the space after 'by', and changing the `SPC(24)` to `SPC(23)`. It should then look like this:

TROUBLE WITH VIKING

BY BILL BLOGGS

Chapter One

Limited Edition

GAUNTLET™

and

GAUNTLET™ II

MORE THAN 1,000 ... DIFFERENT SCREENS



“A first rate conversion of a first rate arcade game.”
ZZAP 64 - ZZAP SIZZLER
“Great graphics, good sound, perfect playability, what more could you ask for?” C & V G HIT



“Gauntlet is definitely the most exciting coin-op conversion ever for the 64. For sheer fun and hours of entertainment value this is game the best yet.”
COMMODORE USER - SCREEN STAR



“A super sequel to the much loved dungeon based shoot 'em up. As much of a blast as the first, and about twice as addictive.”
YOUR SINCLAIR



“A corker, fast action and superb gameplay.”
SINCLAIR USER - SINCLAIR USER CLASSIC
“The game's brilliant!”
AMSTRAD ACTION - MASTERGAME

SCREEN SHOTS FROM VARIOUS SYSTEMS

GAUNTLET II

MERLIN
THOR
THYRA

U.S. GOLD
All American Software

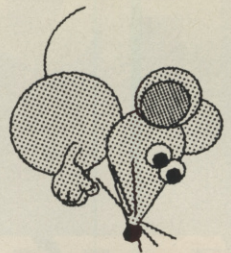
U.S. Gold Ltd., Units 2/3 Holford Way, Holford, Birmingham B6 7AX.
Telephone: 021 356 3388

Only a limited number of special collector's game packs will be manufactured.
CBM 64/128 AMSTRAD £9.99 CASSETTE
SPECTRUM 48/128K

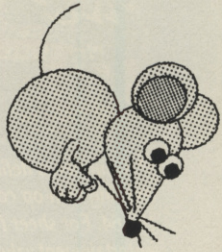
NEW

MASTER MOUSE

Available at last for your Amstrad 464/664/6128, a high quality low cost mouse! This 3 button mouse (as used by our competitors) uses the latest in optical mouse technology combined with a low friction ball to make it a pleasure to use. The simply to connect interface ensures full compatibility with all AMX compatible software. The package is completed with our drawing package "Cherry Paint" on disc.



NEW



Master Mouse available now only **£49.99** fully inc.
 SAVE **£9.99** !! Master Mouse & Micro Design together for only **£64.99**

STILL AVAILABLE:

- DISCOLOGY**, The ultimate in disc utility packages. 3 modules include a disc editor, a full disc/file copier and disc explorer. **£14.99** on disc
- DISCOVERY PLUS**, The tape to disc transfer program. Will transfer the majority of games etc from tape to disc. (Including Speedlock etc). **£14.99** on disc.
- PRINT MASTER**, Print out Tasword/Protext files in a variety of fonts/styles. Print Master comes complete with 20 fonts and a font editor. **£14.99** on disc.
- SOUNDBLASTER**, The Stereo amplifier for an added dimension to all games on your computer. Adjustable volume/balance controls. Comes complete with top quality 3 way speaker and headphones. **Only £29.99 + £2.00 p&p.**

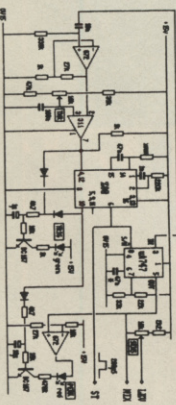
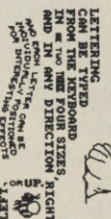
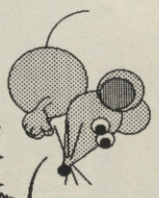
SIREN SOFTWARE · 2-4 Oxford Road · Manchester · M1 5QA
 Tel: 061 228 1831



Micro Design is a powerful new design and artwork package for the amateur CPC microcomputers, allowing the user to design and print up to an entire A4 page. The unique keyboard layout and full on-screen menus offer unparalleled ease and speed of operation, and with the high priority given to the quality of the output, the printing software gives unsurpassed results from any Epson- or IBM-compatible dot-matrix printer. From technical diagrams to greetings cards, **Micro Design** offers the novice and professional alike a unique combination of power, versatility and ease-of-use at an unbelievable £24.99.

Micro Design OPERATES AS FIVE 'PAGES' ...

- LAYOUT PAGE: AN OVERVIEW OF THE ENTIRE DRAWING AREA
- UPRIGHT 64 SIDEMARKS 64/HI-RES STRIP FORMATS MAY BE USED.
- FULL CUT & PASTE FACILITIES ALLOW MANIPULATION OF THE WHOLE PAGE LAYOUT WITH UNDO/REDO.
- DESIGN PAGE: DESIGN OPERATIONS INCLUDE:
 - FULL CUT & PASTE WITH AREA TRAILER, MIRROR & INVERSE
 - FOUR TEXT STYLES: QUAD, RECTANGLE, TRIANGLE & DIAMOND
 - LINE WITH FULL CONTROL OF OUTLINE AND FILL STYLES
 - PATTERNED FILL USING USER-DEFINABLE SHADERS/TXNUMS
 - ICON MENU (REMOVED) HOLD SELECTED/NOTIFIED/RECALL
 - 8-SPEED CURSOR MOVEMENT AND REAL-TIME SCROLLING ACROSS THE DRAWING
 - THREE SIZES OF POINT-PLOTTING/PRINTING
 - UNDO/REDO DETAILED PIXEL EDITING
 - 25600 DESIGNED PAGE: FULL DESIGN/EDITING FACILITIES FOR ICON DESIGNING 4x4x64 PIXEL ICONS.
 - FILING PAGE: DISC OPERATIONS INCLUDE:
 - STORAGE/LOADING OF ALL OR ANY PART OF THE DRAWING AREA.
 - STORAGE/RETRIEVAL OF ALL OR ANY PART OF THE ICON SET.
 - CATALOG/DELETE/RENAME OPERATIONS.
 - PRINTING PAGE: PRINTS ALL PAPER FORMATS:
 - FULL/HALF/QUARTER SCALE, DARK/LIGHT SHADERS.
 - ONE-PIN OPTION FOR HIGHEST-QUALITY OUTPUT.
 - MULTIPLE COPIES etc.



LETTERING CAN BE TYPED IN ANY OF THE FOUR SIZES AND FROM ANY DIRECTION RIGHT, LEFT, UP, DOWN, AND FROM ANY OF THE FOUR DIRECTIONS



Micro Design ONLY **£24.99**
 *for: CPC 6128
 CPC 664 + 64K RAM
 CPC 464 + 64K RAM + DISC DRIVE

This page produced entirely using **Micro Design**, and a £200 printer

ACTION TEST

Original concepts come to the fore again this month, proving there's always someone ready to go against the tide of licences.

Deflektor is the first game to come out of the tie-up between Vortex and Gremlin. It features mind warping puzzles involving lasers and all sorts of optical devices.

Get Dexter II looks set to capitalise

on its predecessors success. Packed with new features and missions for Dexter and his faithful podocephalus sidekick.

The arcade conversions have a mixed month: a nice job has been made of *Bubble Bobble*, but *Out Run* gets a decidedly cool reception.

All this plus *Tetris*, *Mah-Jong* and much, much more!

Mastergame	Page	Compendium	
Deflektor	42	Galactic Games	49
Raves		Guadalcanal	53
Bubble Bobble	56	High Frontier	48
Get Dexter II	44	IK+	41
Mah-Jong	46	Masters Universe	59
Games Reviewed		Northstar	51
Andy Capp	54	Out Run	46
Bedlam	49	Rolling Thunder	51
Blockbusters	48	Strait 6	54
California Games	59	Tetris	56

INTERNATIONAL KARATE +

System 3/Activision, £9.99 cass, £14.99 disk, joystick or keys

According to the adverts for this game I'm going to end up flat on my back. The reason is simple I'm going to call it a sequel to *International Karate*. *IK* was reviewed back in issue 13 when everyone was beginning to get a little tired with combat games. If anything combat games are getting more and more boring, but companies keep on churning them out.

The scenario is non-existent, all you need to know is which way to move the joystick in order to deliver the appropriate blow to your opponent. The differences between this and *IK* are three fighters on screen at a time, some new moves and much improved graphics. It is in fact a completely new game by different programmers.

SECOND OPINION

This is, without doubt, the best martial arts game around - and I'm bored with it. Two years ago it would have been state-of-the-art, but today it's just run-of-the-mill. Three fighters at once and slick animation give it a boost but it still won't hold you for long.

BW

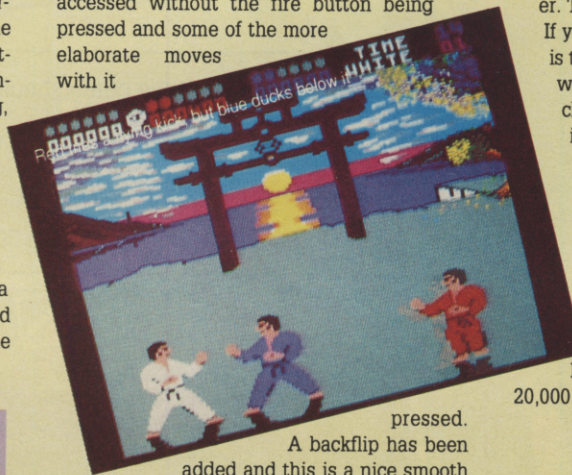
GREEN SCREEN VIEW

The red and blue fighters do look similar, but you can still tell them apart.

There are two stages to the game: combat rounds and ball dodging rounds. During the combat round there are three fighters on the screen rather than two. The extra opponent makes the game more difficult because you have to watch two fighters at a time. The fighter that finishes the 30 second combat rounds in third place is out of the game. Computer opponents always stay in the game, but they are encouraged to improve by the judge when he appears. In the two player game though the two humans could gang up on the computer opponent so that they stay in the game longer.

As with nearly all combat games you select the move that you want to do by a com-

ination of the fire button and eight joystick directions. The more common moves are accessed without the fire button being pressed and some of the more elaborate moves with it



pressed. A backflip has been added and this is a nice smooth manoeuvre that takes you away from the action.

The ball dodging part of the game is a bonus stage that appears after every two combat rounds. In this you stand in the centre of the screen with a small shield in your hand. Balls bounce on the screen at different heights and you must deflect them with the shield. The speed of the balls increases with each one that you deflect, until you are hit by a ball. You then you leave the bonus stage and carry on with the fighting. Flashing balls appear sometimes and they have an unpredictable bounce which changes each time the ball touches the ground. The number of flashing balls increases as you progress through the game.

There are a variety of options that you can use regarding the sound in the game. You can have a continuous tune playing, just sound effects, both, or neither. Since the tune is not exactly the best piece of music that's ever been programmed, you'll probably play the game with just sound effects. The spot effects don't vary much, but since you're only beating your opponent to death with fists and feet, there are few effects that can be used. The backdrops are nice and oriental in design with good use of colour. The animation in this

is probably the best for any combat game yet - nice flowing moves from one position to another. The backflip in particular looks good.

If you want another combat game then this is the best. The graphics look good and the wide variety of moves make the game challenging. Unfortunately the ball dodging stage isn't very exciting and after a few goes you'll be spending most of the time on this stage rather than the more interesting combat stage. You could just exit this stage by not deflecting the ball, but a lot of points can be scored and points are needed to progress through the dans. **GBH**

FIRST DAY TARGET SCORE

20,000 points

The Verdict

GRAPHICS84%

- Smooth movement between positions.
- Colourful backdrops add to the games look.

SONICS58%

- Spot effects are good.
- Not the best tune I've heard.

GRAB FACTOR71%

- Three fighters at a time make it fun at first.
- Action offers little new to games that have gone before.

STAYING POWER59%

- The computer opponents get tougher as you get further.
- Ball dodging gets tedious after a while.

AA RATING68%

- One of the best combat games.
- Clapped out game concept.

DEFLEKTOR

Vortex/Gremlin, £9.99 cass, £14.99 disk, joystick or keys

Vortex are famous for games like *Highway Encounter* and *Alien Highway*, both programmed by Costa Panayi. So his latest venture, into the world of laser optics, was loaded with much interest. Particularly since this is the first Vortex title since they linked up with Gremlin.

The object of the game couldn't be simpler, all you have to do is destroy all the cells dotted around the screen with a laser, and then line the beam up with a receiver. The screens are made up of a mass of mirrors and obstacles that you have to guide the laser around, using a cursor to alter the position of mirrors that deflect the beam.

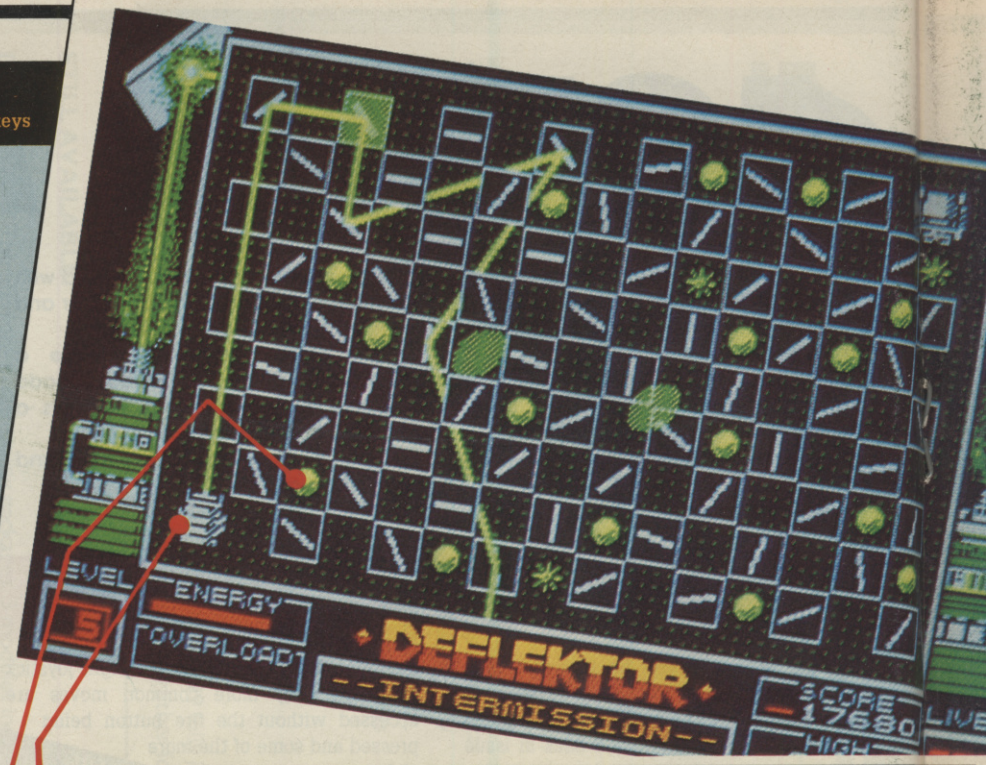
Completing the objective is made more difficult because of the various objects and their positioning on the screen. Cells are sometimes in what look to be inaccessible places and there are the gremlins that wander around getting on your nerves by moving your carefully positioned mirrors.

On the screen there is the playing area and a status panel. The playing area shows the position of your cursor, the laser beam and all of the objects that make up the level. The status panel shows the level, number of lives, laser energy, overload and score. You have three lives to complete each screen with and so you'll always get three chances at each level, even if you completed the previous one on your last life.

The laser energy is used up as time passes and if this runs out you lose a life. If the beam is too long, hits a mine or is reflected back along the path into the laser source then an overload situation occurs. When the overload meter is filled you lose a life. If you move the beam in time the overload will fall gradually back to zero.

There are several types of object that affect the beam in different ways: reflectors, refractors, mirrors, absorbers, polarisers and fibre optics. There are two types of mirrors: rotating and stationary. The stationary mirrors can have their angle turned through 360° and the rotating mirror sends the beam out in lighthouse fashion. The rotating mirror can be stopped or rotated faster if necessary. Reflectors make up "walls" on screen and have similar properties to mirrors, but they can't be moved.

The beam is sent in random directions when it hits a refractor and often this is the only way to get some of the cells. If the beam strikes an absorber it stops there, naturally enough. There are two types of polarisers: reflectors and absorbers, both rotate continuously and allow the beam to pass through when the polariser is lined up correctly. The

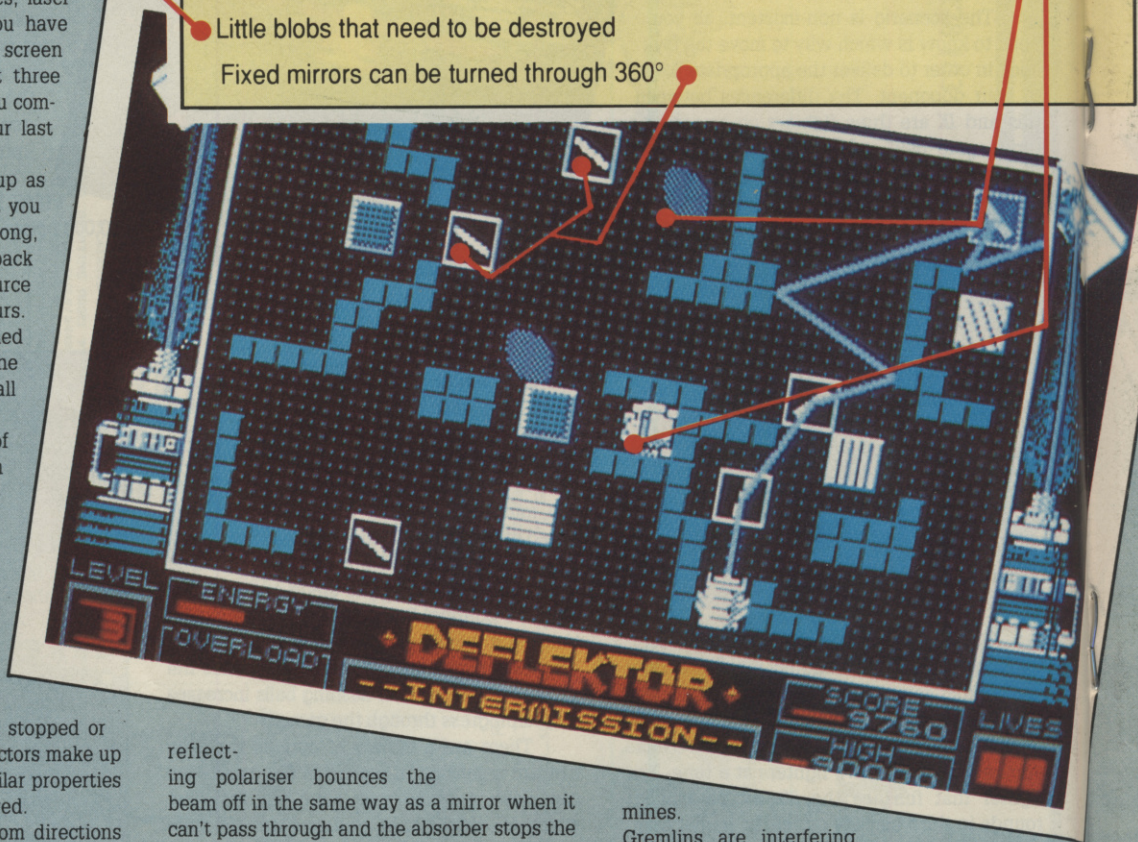


The Receiver to which the beam should ultimately come ●

● The Source of the laser beam Gremlins keep turning the mirrors ●

● Little blobs that need to be destroyed

Fixed mirrors can be turned through 360° ●



reflecting polariser bounces the beam off in the same way as a mirror when it can't pass through and the absorber stops the beam like the absorbing blocks. Pairs of fibre optics appear on some screens and when the beam enters one it leaves through the other travelling in the same direction as it entered the first.

Two other things appear on screen and neither is any good for you: gremlins and

mines. Gremlins are interfering little busy bodies who wander around the screen turning mirrors around and generally being a nuisance. Just when you've got a long complicated route set up a gremlin will come along and move a mirror, possibly causing a fatal catastrophe. You can temporarily destroy them by moving the cursor over them and fir-

MASTER GAME

ing. Mines on the other hand don't move, but are more deadly because if the laser hits them it overloads very quickly.

Initially the game seems easy, but the time limit soon becomes a serious problem with cells still on screen and the laser power diminishing rapidly. Higher levels have more complex arrangements of objects and Gremlins appear in larger numbers. There's a demo mode that shows you all 60 levels and some of them are very mean indeed. A practice mode lets you try three levels with no chance of overload and a much longer time to complete the level.

Sound is simple and limited, but it's good enough and a great tune plays on the title screen or during the intermission. The graphics are easily recognisable and colourful, the sort that you'd expect from Costa. Colour is not used much with only a few colours on screen at any one time, the overall impression is a little dull since the backgrounds are generally black.

Frustrating and addictive are two words that come to mind with this game. It's frustrating when you run out of time with the beam just one turn away from the receiver and addictive because you'll be sure that you can do it next game. It may not appeal to everyone, but it's definitely worth a look at, it's even vaguely educational with it teaching you the principles of optics.

GBH

FIRST DAY TARGET SCORE

Complete 10 levels.

SECOND OPINION

It's great to see that Vortex and Costa Panayi have lost none of their flair and originality since teaming up with Gremlin. The game is a superb test of fast, logical thought. It has the same sort of mental difficulties attached as planning a series of moves in a chess game. However, unlike chess the results are immediate and spectacular. The levels do get a bit samey but the addiction doesn't stop. You'll end up like the features in the game - totally absorbed, with your vision polarized on the screen.

BW

GREEN SCREEN VIEW

It's duller, but just as playable.

The Verdict

GRAPHICS 76%

- Clear and easily recognisable graphics.
- Not that much colour.

SONICS 64%

- Great title tune.

GRAB FACTOR 93%

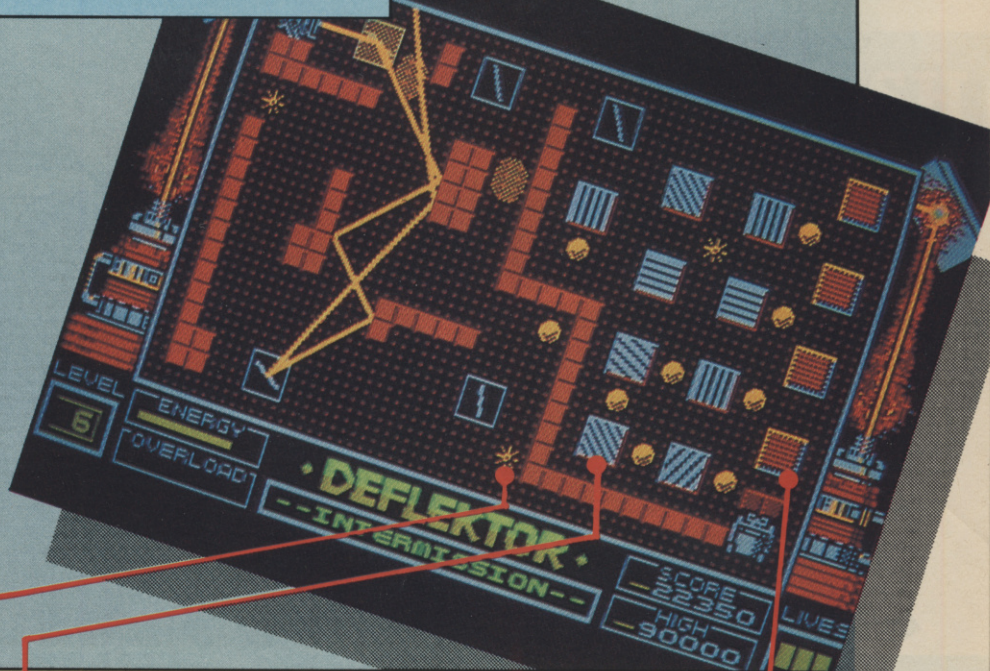
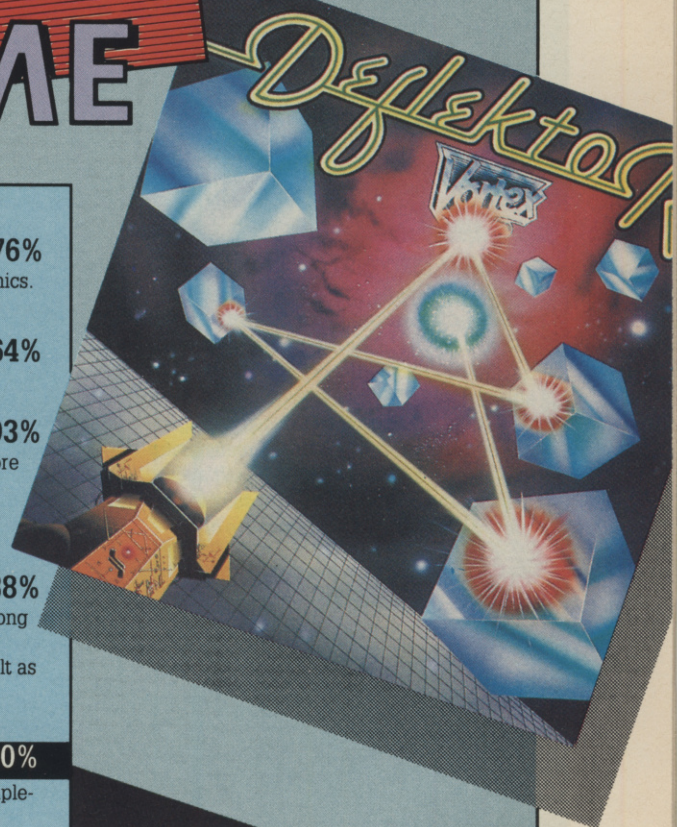
- You'll just **have** to complete one more level.
- Masterfully absorbing need for fast, strategic thought.

STAYING POWER 88%

- 60 levels will keep you going for a long time.
- Problems get more and more difficult as you progress.

AA RATING 90%

- An original concept, wonderfully implemented.



● A reflecting polariser either lets light through or reflects it back

● Refractors send the beam off in random directions

● Mines make the laser overload

GET DEXTER II

Infogrames/Ere, £9.95 cass, £14.95 disk, joystick or keys



Get Dexter was the *Mastergame* game back in issue eight and the sequel has made it across the channel. Dexter the android has a new mission on the planet of Kef and his podocephalus friend Scooter has again joined him.

Kef is inhabited by two races, the Stiffiens and the Swapis who had until recently been on good terms. Amongst the Stiffiens a new religious sect has developed and things have begun to deteriorate, with the Swapis being

Antines is through a secret passage that is known only to the Swapis. Since you're a stranger on their world they have little confidence in your abilities to solve the mystery and so they have decided to test you before they'll let you into Antines.

Three tasks have been set for you, one in each of three buildings. A plaque on the wall of the building tells you what the task is and then all you have to do is complete it. The three tasks can be done in any order, so you can work out how to do each of them before going for the whole game.

In *Get Dexter* you wandered around a 3D isometric complex solving problems and using the various objects littered about. The same style of game has been used, but there are some differences. The one that stands out the most is the way that everyone on Kef can move from location to location. Most of the games of this type restrict characters to one room and this is the first one that I know of where that restriction does not apply.

Many objects that you find can be picked up, dropped or thrown. Some of the heavier objects like book cases and tables can't be carried, but they can be moved around. This often lets you reach a doorway or something else

that you may need. Don't jump on everything that you see because swivel chairs send you spinning to the floor and your batteries take a power loss. Run out of energy and you're doomed. Fortunately you can recharge your batteries by plugging your self into the mains supply.

SECOND OPINION

The original game was a big step for 3D arcade adventures. The sequel isn't as innovative but it's still full of the sort of special touches that made the original so enjoyable. The graphics are exceptional again - why can't more software houses manage this sort of quality? This one is really going to keep you busy for a long while. It's a tough game to crack but it's so easy to get started, explore and perform some of the more basic tasks. Super stuff. **BW**

GREEN SCREEN VIEW

It doesn't look half as good in green, but it's playable.



Bright and colourful vegetation covers the planet

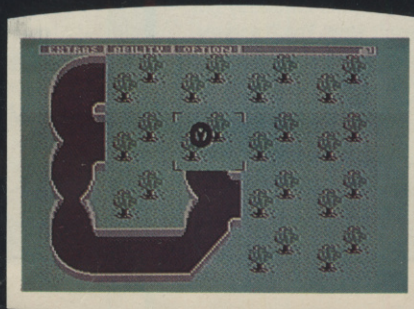
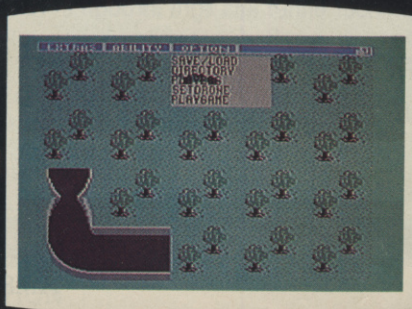
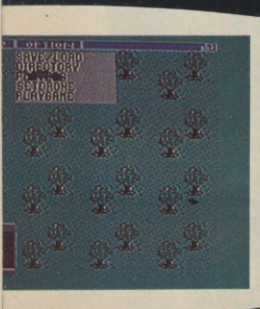
In *Get Dexter*, Scooter was little more than a pest, only being useful occasionally, in the sequel however he is more helpful. If you whistle him then he will make his way towards you and you can tell him what object to go and fetch. Ever willing to please he hops off and

the first victims. The sect is centered around a mysterious building called Antines and your task is to discover it's secret. Entry into

CHAMPIONSHIP

SFARI

SUPER BURNER'S CIRCUIT



will eventually turn up with the object balanced delicately on his head, and then drop it at your feet.

There are basically three sorts of being on the planet: animals, Swapis, and Stiffiens. The animals and Stiffiens drain your energy when you come into contact with them, the Swapis on the other hand are more friendly. They



The eagle eyed will notice that the screen shots are taken from the French version of the game, where it's called *L'Ange de Cristal*

enjoy conversing with you and if you have an object with you they will trade the item that they're carrying for the one that you have. One object that you'll find useful is the mousetrap that kills off the animal life when it steps on the trap. Dynamite can also be thrown to blow

up all robots and animals in the vicinity. A laser gun can be used to kill too, if you have it with you.

Once all three tasks are completed you will be lead into Antines where the final stage of your mission lies. Discover the secret of the building and you can return home a hero with the knowledge of a job well done.

No tune plays during the game, but there is a great tune before you begin your mission. The sound effects are good and the whistle for Scooter is nicely done. The graphics are very similar to those found in the original with the improvements being that you can see a short way into the adjacent locations. Colour is used very well with a lot of detail used in the graphics. The graphics get a little confused sometimes when you pass behind the scenery.

Cassette and disk versions of the game are slightly different with the disk game being a little larger. The extra space on disk has been used to add a few more rooms and sprites, but the cassette version plays just as well.

The gameplay has been improved with Scooter being much more use. Comparison with the original is inevitable and you can do that for yourself because you get *Get Dexter* supplied free with the game. You'll spend many long hours puzzling away at this one,

The Verdict

GRAPHICS93%

- Nicely animated and very colourful sprites.
- Detailed, colourful backgrounds.

SONICS71%

- Jolly title tune.
- The spot effects are good too.

GRAB FACTOR86%

- Puzzle solvers will find a lot to like.
- The feeling of getting nowhere fast may put some people off.

STAYING POWER89%

- Three missions to solve and then onto Antines.
- Lots of variety and surprises to keep you interested.

AA RATING88%

- Excellent value because you get the original as well.

and it will all be time well spent. **GBH**

FIRST DAY TARGET SCORE
Complete one of the three tasks.

ARCADE SMASH

CHAMPIONSHIP SPRINT

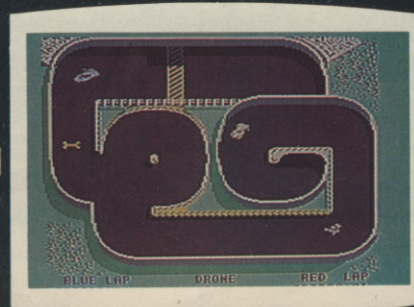
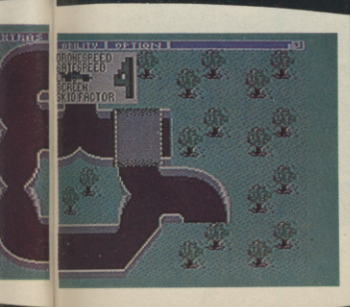
Licenced from Atari Games

your driving skills are put to the ultimate test. Ramps to jump, random obstacles to avoid,— driving blind through oil streaked underpasses!! There's no limit to excitement — because you can make up the circuits!!!



Championship Sprint TM
TM & © 1986 Atari Games Corporation. All rights reserved.
Electric Dreams Software. Authorised User.
Mail Order: Activision (UK) Ltd
Units 3 & 4 Lloyds Close
Finedon Road Industrial Estate
Northampton NN8 4SR
Tel: 0933 76768

Commodore 64/128 Cassette (£9.99)
and Disk (£14.99) ZX Spectrum 48k/128k/+
(£9.99) Amstrad CPC Cassette (£9.99)
and Disk (£14.99)



Commodore Screens



COLOSSUS MAH-JONG

CDS, £9.99 cass, £14.99 disk, joystick or keys

CDS are well known for games like *Colossus Bridge 4* and *Colossus Chess 4* which had challenging computer opponents. Now they have turned their hand to the oriental tile game. Included with the game are a tutor program and a detailed manual to help you learn the basics of the game.

The game is played with 144 tiles which come in several types: bamboos, characters, circles, winds, dragons, flowers and seasons. Bamboos, characters and circles are like the suits in cards and are numbered from one to nine. The wind tiles represent the north, south, east and west winds, and the three dragons are red, green and white. There are four of each of these tiles. There are also four flowers and four seasons but each is different, the seasons being the four seasons of the year and the flowers corresponding to each season.

Each player is known as one of the four winds, much as in bridge. At the start of play a wall is built using the tiles and each wind is dealt thirteen tiles from it with the exception of the east wind who is dealt an extra tile. The aim of the game is to get rid of all the tiles in your hand by forming sets or runs with the tiles. This is known as "going Mah-jong".

East starts the game by discarding a tile from his hand. Any other player can claim the discard providing it enables him to form either a pung, kong or chow. A pung is a set of three identical tiles, a kong a set of four and a chow is a run of three tiles in the same suit. If the tile is not claimed then it is placed on the discard pile in the centre of the screen. Play cycles in an anti-clockwise direction until

COLOSSUS

West
North 555 Ba South

Cr
Or
Pl
6666
777

East

Season tiles and flower tiles score bonus points

A run of three tiles is a chow, only one of which is allowed in each hand

The four winds can be collected to boost your score

A kong is a set of four identical tiles

OUT RUN

US Gold, £9.99 cass, £14.99 disk, joystick or keys

If you walk into an arcade now you'll probably see arcade machines with bits of car sticking out of them. Although it may look like someone is very bad at parking, it is in fact supposed to be like that, so you can feel all the movement of the car as you hurtle around bends and speed over hills. Fortunately you don't get splattered all over the game screen when you crash. The question is, did the game convert well to the home micro?

You are sitting in the driving seat of a Ferrari Testarossa with five stages of race to complete. There's a time limit to each stage and failing to reach to checkpoint before time runs out ends the game. At the top of the screen is a status display which shows your score, lap time, speed and time remaining. The rest of the display is taken up with a rear view of your car and a 3D scrolling representation of the stage through which you are travelling.

Before the race begins you can change the amount of traffic that will be on the roads from easy to very hard. Put your foot on the accelerator and you're off, nothing can catch you now, with the exception of a small tortoise out for a stroll. The impression of speed in this



The graphics are slightly better than the gameplay

The Verdict

GRAPHICS54%

- The tiles are colourful and well defined.
- Not much else as far as graphics go.

SONICS06%

- Just a single beep.

GRAB FACTOR78%

- Challenging and fun once you understand what's going on...
- but a little confusing at first.

STAYING POWER87%

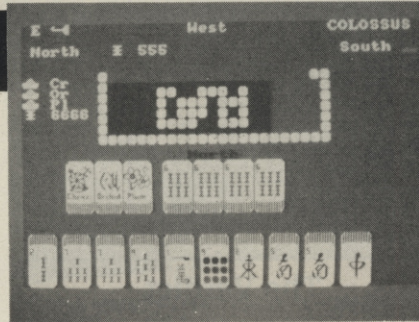
- Nine skill levels will keep you occupied for a long time.
- A save game option is a serious omission.

AA RATING82%

- A good conversion of a game that should keep many people happy for years.

all the tiles have been removed from the wall (a washout) or someone declares Mah-jong. If a player only needs one tile to go Mah-jong then he is said to be fishing. To go Mah-jong you must have four sets and declare Mah-jong with a pair. Only one chow is allowed in your hand.

Points are scored after each hand, unless there's a washout when nobody scores, and they are added to your cumulative score. If the east wind wins then he remains as the east wind for the next hand, but if any other wind



East to play, but which tile to discard ?

is victorious then the winds cycle one place anti-clockwise. Play continues until each player has been the east wind four times. A complete game of Mah-jong can take a long time to play and so a shortened version can be played.

Other than the selection of which tile to play, the program has several options that you can use in your turn. Dead tiles allows you to have the discard pile visible or hidden, the latter makes for a harder game because you have to remember what's been discarded. The expert mode removes flower and season tiles from the game which eliminates much of the luck element from the scoring. A hint indicates which tile the computer thinks you ought to play, level changes the computer skill level, peep shows you what tiles your opponents are holding and wait adjusts how long you have to decide whether or not you want to claim the discarded tiles.

A new hand option starts a new hand without changing the wind of the round. A hand can also be re-played completely or you can just re-play the last discard. You can quit the game, but it would be better if you were asked to confirm that you want to quit rather than just doing it. Some of these options allow

you to cheat so you'll have to resist the urge to use them if you want a fair game.

Sound is very limited with the only effect being a standard beep. The tiles look very pretty and that's all you get as far as graphics go, the rest of the display is just text.

Not having played Mah-jong before didn't seem to matter really. At first it seems confusing, but after a few hands you begin to understand what is going on and get into the swing of things. One feature that is lacking is a save game option. Some games don't convert very well to the micro, but this one does. Mah-jong players should find the higher skill levels challenging and newcomers to the game will learn as they go along.

GBH

SECOND OPINION

I've played Mah-jong before so it was easier for me to get to grips with the computer version. It's excellent for both the beginner and more advanced player, automatically performing all the hard parts of the game like the scoring and tile handling. You can only have one human player but that's understandable because of the complexities of hiding players hands from each other. It's nicely presented, using the tiles to their best effect, although the constant redrawing gets rather wearing. You'll be playing this one for many years to come.

BW

GREEN SCREEN VIEW

No problems in green.

game is so great that at first you think you're travelling at about 30 kmh, a quick glance at the speedometer will confirm that you are in fact travelling at 180 kmh.

There are other cars on the road and if you hit them you come to a dead stop and slide across the road. I have no idea why you slide across the road, you just do. Hitting any other obstacle has the same effect. As the end of each stage approaches you are given a choice of which route to take, the right or the left. This decision determines which data is loaded next out of the fifteen files on the cassette or disk.

Graphically it's very disappointing with slow scrolling and poor animation. The screen is colourful, but the objects are badly drawn. The sound is unbelievable. Your engine must be one of the quietest in existence because it doesn't make a noise at all. The only sound is the beep of your tyres as you go round tight corners. The sound for the game is supplied in the form of an audio tape of the arcade soundtrack supplied in the box.

As far as arcade conversions go this is probably one of the worst ever. Every good point that it had the arcades has been

SECOND OPINION

This really is dreadful. There are better racing games that are two years old. There's no feeling of speed at all and no chance of getting the adrenalin rush that the arcade provides. The sound is awful - the tape soundtrack is good but it's a poor excuse for shoddy programming. The multi-load is annoying because it interrupts the flow of the action. My only hope is that the profits from this one get ploughed back into producing some decent software.

BW

GREEN SCREEN VIEW

There's no problems seeing the game in green.

destroyed by bad programming. Eight bit computers just can't handle this type of game in the same way that the arcade machines can and anyone expecting the excitement of the arcades will be sorely disappointed.

GBH

FIRST DAY TARGET SCORE

Complete 3 stages.

The Verdict

GRAPHICS58%

- The car looks good.
- Lousy scrolling, badly drawn obstacles.

SONICS05%

- Absolutely terrible (tape soundtracks don't count).

GRAB FACTOR36%

- No sensation of speed at all.
- Not even a decent crash.

STAYING POWER42%

- There are many combinations of routes.
- There isn't enough variety to keep you going.

AA RATING37%

- A very disappointing conversion indeed.

HIGH FRONTIER

Activision, £9.99 cass, £14.99 disk, joystick or keys

A lot has been heard of the American "Star Wars" project, known as the Strategic Defence Initiative (SDI). It's the plan to put space lasers and anti-missile systems in orbit around the Earth to stop the majority of nuclear warheads heading for the USA. You are in charge of the construction of the system.

SECOND OPINION

I disagree about the games popular appeal. I think it's got quite a bit going for it. The strategy element isn't very deep - just management of R&D resources, spying and weapon deployment. Nonetheless it's enjoyable, challenging and well presented. I don't think the politics will cause too many sleepless nights but the game might. **BW**

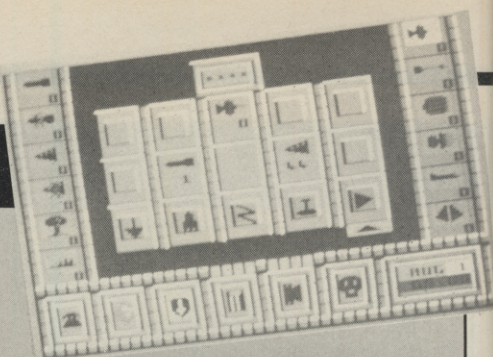
GREEN SCREEN VIEW

No problems.

The US and Soviet leaders can be one of three types: dove, realist and hawk. Dove leaders tend to spend less on defence and there is less chance of war beginning. The combination that's not allowed is two dove leaders. Two hawk's and war won't be long in

coming. The orbit screen lets you practice fighting in orbit.

There are several icons across the bottom of the screen, each accesses a sub menu



● The SDI command screen

where you either receive information or execute commands. The telephone icon gives you presidential messages, the shield icon is used to control your SDI system, the calculator allows you to build up your SDI system, the camera tells your spies who to spy on and the skull icon gives you access to the threat screen. All of the icons are explained in great detail in the instruction manual and so are the systems that you can employ.

Presentation of the game is good with a useful instruction booklet. The icons are easy to identify and graphics adequate for the type of game. Sound is a little limited, but in general strategy games are judged on their challenge and not on their appearance.

In a tactical game like this you normally try to gauge how accurate a simulation it is. Since this is set in the near future there's no way of telling how realistic it is, and let's hope we never find out. It provides a challenge with options to make it last a little longer, but I'm dubious about the nuclear setting. **GBH**

The Verdict

GRAPHICS46%

- Clearly defined icons.
- A little more colour would have been nice.

SONICS15%

- Standard type effects for a strategy game, not very good.

GRAB FACTOR58%

- For strategists it's a fair challenge.
- Unnecessarily complicated instructions.

STAYING POWER66%

- Lots of combinations to keep you challenged.
- Basic action gets repetitive.

AA RATING64%

- A good strategy game with an interesting setting.

BLOCKBUSTERS

Domark, £7.95 cass, joystick or keys

This is not the first time that the ITV quiz show has turned up on computer. It originally came out a long time ago from Macsen. The game has been redone with improved graphics and both the normal game and gold runs rolled into one package.

The game is designed for two players or

teams, but it can be played solo. The quiz show is hosted by Bob Holness and the computer game has a small picture of him at the bottom right of the screen. If you don't want him looking at you while you play then you can turn him off.

There are two stages to the game: a two player stage (or one player against the computer) in which you have to form a chain horizontally or vertically across a grid of 20 hexagons, and the gold run. To win a hexagon you need to answer a question correctly. Answers are typed in from the keyboard and the program will sometimes give you the benefit of the doubt with spelling.

In the one player game you have a time

limit in which to answer the question. If you run out of time or get the answer wrong then the computer gets the hexagon. The first player to link from edge to edge will win the game. When one player has won two games, he goes on to a gold run.

In the gold run you have 45 seconds in which to cross the grid. The questions are more difficult and the time limit is a major problem. Typing in all the answers within the time limit is very difficult and if you make more than one typing error then you're unlikely to make it. 60 seconds would have been a more sensible time limit.

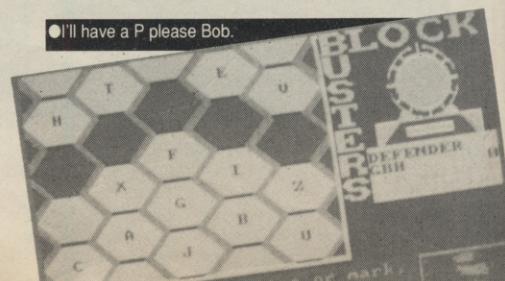
You may recognise the tune that's played in the game, since it's from the TV show. It's played well, but the rest of the effects are poor. Graphically it's very boring and the choice of colours is bad.

As a two player game it's quite good, but the one player game is a little boring. The time limit on the gold run is too short and this tends to irritate. **GBH**

FIRST DAY TARGET SCORE

Complete a gold run.

● I'll have a P please Bob.



The Verdict

GRAPHICS37%

- Nice little picture of Bob.
- Pity about the rest of the graphics.

SONICS48%

- The tune is pleasant.
- Other sound effects could've been better.

GRAB FACTOR51%

- As a two player game it's fun.
- One player game has less going for it.

STAYING POWER42%

- You work through the questions very quickly.
- Gold run time limit is too short.

AA RATING47%

- Little better than the original.

SECOND OPINION

I don't know what possessed them to re-hash this old thing. It's not much different from the original and adding a digitised piccy of Bob "I'll have a P please" Holness doesn't make it any better. As quiz games go it isn't too bad, but that isn't saying much. **BW**

GREEN SCREEN VIEW

It doesn't look any worse in green than it does in colour.

BEDLAM

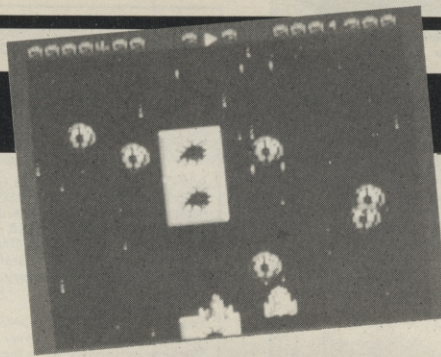
US Gold, £9.99 cass, £14.99 disk, joystick or keys

You're sitting at the controls of the X12 fighter about to undertake your final test in the Stellar Imperium's pilot academy. This test will either pass or fail you.

Initially this looks to be standard vertically scrolling shoot-em-up with hordes of aliens for you to destroy. An unusual feature is the number of players option because there are three settings, one player, two player and dual play. The first two are fairly standard, but it's the dual play that makes this game a little different, because there can be simultaneous two player action. Fortunately you can't harm each other, but if you bump into the other player he bounces away a little. Normally this is ok, but sometimes he ends up ploughing uncontrollably into some oncoming aliens.

The game is split into 16 sections with a special bonus stage at 17. There is also a bonus stage every fourth stage – a mother ship appears that has to be destroyed before you can continue. Mother ships take several hits to be killed. The various sections have basically the same features and aliens, but their formations vary.

As well as the aliens and the gun batteries there are some objects that you can collect. They are shields and hearts to give you invulnerability for a limited time and an extra life respectively. Either cooperation or greed will determine who gets what in dual play mode. A



●Dual play makes alien annihilation easier

shield is also given if a formation is completely destroyed. The player that killed the last alien gets the shield.

There's no title tune and the sound effects are pretty diabolical. The vertical scrolling is well done and the graphics are nicely drawn and colourful.

SECOND OPINION

Simultaneous two player action hasn't been exploited much in shoot-em-ups but I'm sure a better job can be made of it than this. Just throwing in a dual player option doesn't make an ordinary game anything other than that. We've seen it all before and unfortunately we'll probably see it all again.

BW

GREEN SCREEN VIEW

No problems zapping in green.

The one thing that it has going for it is the dual play option, because it gives you something to compete against other than just a high score.

GBH

FIRST DAY TARGET SCORE

45,000 points

The Verdict

GRAPHICS67%

- Smooth vertical scrolling.
- Sprites are large, colourful and well animated.

SONICS32%

- No tunes and mediocre sound effects.

GRAB FACTOR61%

- Dual play option is a fun feature.
- Not very original.

STAYING POWER48%

- 17 levels of increasing difficulty.
- Little variation from level to level.

AA RATING53%

- Apart from dual play it's just another mediocre shoot-em-up.

GALACTIC GAMES

Activision, £9.99 cass, £14.99 disk, joystick or keys

There have been sporting games simulations, western game simulations, military training simulations and now there's interplanetary sports. There are five olympic style events to enter in: 100m Slither, Space Hockey, Psychic Judo, Head Throwing and Metamorph marathon. One or two people can take part.

The first event on the list is the 100m Slither. In this you control a racing worm who has a maximum of 70 seconds to complete the course. Control is in the joystick wagging tradition of Decathlon.

Next comes Space Hockey in which you control one of two eyes that move around a large playing area. There's also the puck that frowns whenever he's hit by one of the players.

In Psychic judo you see a representation of you and your opponent. Both of you hurl bolts of mental energy at each other which you have to deflect, failure to deflect means that you lose some of your energy.

Head throwing is basically the javelin with a difference, the difference being that you run up to a line and throw your head instead. While your head's in the air you can waggle the joystick to make your ears flap and your head will then travel further.

Finally there's the Metamorph Marathon in which you have to negotiate an obstacle course within a time limit. You have five forms

that you can take on: rest state, runner, burrower, jumper and flyer.

The graphics are very pretty and colour is used well. The presentation of the game is very good and the little eye that prints out the message looks nice. The sound effects are well

The Verdict

GRAPHICS68%

- Humorous and well drawn graphics on all events.
- Backgrounds are dull

SONICS45%

- Spot effects are good.

GRAB FACTOR62%

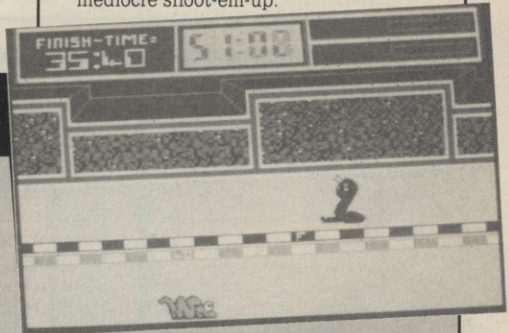
- Five different games for the price of one.
- None of them is particularly riveting.

STAYING POWER54%

- Events can take some mastering.
- Once you've won all of them you'll probably only play with two players.

AA RATING57%

- Too simple to interest you for long.



●Don't lose your head

done but there are no tunes.

This is basically a compilation of five different games with the only connection being the silly futuristic setting. It's well packaged and the games are fun to play, but I was left with the feeling that younger players are more likely to enjoy this than someone looking for a lasting challenge.

GBH

SECOND OPINION

This is the sort of game that sounds great in concept – wacky alien sporting events – but isn't so good in execution. The events lack depth and for the most part are good for about one smirk before you're bored. Not likely to set anyone's pulse racing.

BW

GREEN SCREEN VIEW

It loses at lot of appeal in green, but there's no problem seeing the action.

BEST BYTE SOFTWARE

Amstrad Software	TAPE	DISC	Amstrad Software	TAPE	DISC	Amstrad Software	TAPE	DISC
10 Computer Hits vol 4	7.25	-	Football Manager 2	7.25	10.95	N.M. Grand Prix	7.75	11.50
6 Computer Hits vol 4	-	10.95	G.L. Superstar Soccer	7.25	10.95	North Star	7.25	10.95
Andy Capp	6.50	10.95	Galactic Games	7.25	10.95	Outrun	7.25	10.95
Art Studio 6128	-	14.50	Game Set and Match	9.50	13.15	Pac-Land	6.50	10.95
Barbarian	7.25	9.50	Gauntlet I or II	7.25	10.95	Phantom Club	6.50	10.95
Basil Mouse Detective	7.25	10.95	Get Dexter 2	7.25	10.95	Platoon	7.25	10.95
Basket Master	6.50	10.95	Gryzor	6.50	10.95	Rampage	7.25	10.95
Bedlam	7.25	10.95	Guarda Canal	7.25	10.95	Red L.E.D.	7.25	10.95
Blockbusters	5.80	-	Guild of Thieves 6128	-	14.50	Renegade	6.50	10.95
Bobsleigh	7.25	10.95	Hewson's 4 Smash Hits	7.25	10.95	Roadrunner	7.25	10.95
Bubble Bobble	6.50	10.95	High Frontier	7.25	10.95	Rolling Thunder	7.25	10.95
Buggy Boy	6.50	10.95	Hit Pak Six	7.25	10.95	Salamanda	6.50	10.95
California Games	7.25	10.95	Hit Pak Six vol 2	7.25	10.95	Scrabble Deluxe 6128	-	11.95
Captain America	7.25	10.95	Hunt for Red October	10.95	14.50	Solid Gold	7.75	14.50
Combat School	6.50	10.95	International Karate+	7.25	10.95	Sorcerer	9.50	13.15
Compendium	7.25	10.95	Killed Until Dead	7.25	10.95	Ten Great Games	7.25	-
Dan Dare 2	6.50	10.95	Knightsmare	7.25	10.95	Tetris	6.50	9.50
Defektor	7.25	10.95	Lazer Tag	7.25	10.95	The Pawn 6128	-	14.50
Driller	10.95	13.15	Live Ammo	7.25	10.95	Thundercats	6.50	10.95
Elite Collection	10.95	10.25	Lucasfilm Games	7.25	10.95	Western Games	7.25	10.95
Elite	7.95	14.50	Magnifilm 7	7.25	13.15	World Class Leaderboard	7.25	10.95
F15 Strike Eagle	7.25	10.95	Mah Jong	7.25	10.95	World's	7.50	14.50
Five Star Games 3	7.25	10.95	Masters of Universe	7.25	10.95	Xor	7.25	10.95
Flying Shark	6.50	10.95	Matchday II	6.50	10.95	Atari 520STFM+ demos	299.99	259.00
Football Director	6.50	-	Mini Office II	10.95	14.50	Amiga A500+£170 stw	449.99	419.99

All items include first class postage. Overseas orders add £1.00 per item.

We also sell software for Amiga, Atari ST, Commodore 64 and Spectrum.

Send SAE for full list. For FAST despatch send cheques/PO's payable to-

BEST BYTE SOFTWARE, (Dept AA11) 2 Quarry Gardens, Tonbridge, Kent TN9 2SG

FOOTBALL & CRICKET

SPORTS SIMULATIONS FROM E & J SOFTWARE (Established 3 Years)

4 CLASSIC Strategy Games packed with GENUINE & REALISTIC Features

PREMIER II - CAN YOU HANDLE ALL OF THIS? - Play all teams Home & Away - Unique & Comprehensive Transfer Market Feature - Full Team & Substitute Selection - In-Match Substitutions - Match Injuries - Team Morale - Transfer Demands - 7 Skill Levels - Manager's Salary - Continuing Seasons - Job Offers - Sackings - Save Game - MUCH MORE!

EUROPEAN II - THE MOST COMPLETE EUROPEAN SIMULATION YOU CAN BUY! - Home & Away Legs - Penalty Shoot-Out - 2 Substitutes Allowed - Away Goals Count Double - Full Team & Subs Selection - Extra Time - 7 Skill Levels - Disciplinary Table - Save Game - TEXT MATCH SIMULATION - Match Timer - Named & Recorded Goal Scorers - Corners - Free Kicks - Goal Times - Disallowed Goals - Sending Off - Injury Time - Penalties - Bookings - MUCH MORE!

WORLD CHAMPIONS - A COMPLETE WORLD CUP SIMULATION - Select Friendlies - Squad of 25 Players - Qualifying Rounds - 2 In-Match Substitutes - Disciplinary Table - Select Tour Opponents - Save Game - 7 Skill Levels - Extra Time - Penalty Shoot-Out - TEXT MATCH SIMULATION including Bookings, Goal Times, Named & Recorded Goal Scorers, Injury Time, Corners, Free Kicks, Match Clock, Penalties - MUCH MUCH MORE!

CRICKET MASTER - A SUPERB SIMULATION OF ONE DAY CRICKET - Weather, Wicket & Outfield Conditions - Batting & Bowling Tactics - Team Selection - Fast, Spin & Medium Pace Bowlers - 4 Types of Batsmen - Select Field Layout - 3 Skill Levels - Wides - No Ball - Dropped Catches - Scoreboard - Batting & Bowling Analysis - Run Rate - Run Single Option - 3 Game Speeds - MUCH MORE! Price includes a FREE pack of CRICKET MASTER Score sheets

Software availability	Spectrum		Commodore		Amstrad CPC	
	Any 48/128	Disc 3	Tape	5 1/4" Disc	Tape	3" Disc
PREMIER II	£6.95	£10.95	£7.95	£10.45	£7.95	£11.95
EUROPEAN II	£6.95	£10.95	£7.95	£10.45	n.a.	n.a.
WORLD CHAMPIONS	£6.95	£10.95	£7.95	£10.45	£7.95	£11.95
CRICKET MASTER	£7.95	£11.95	n.a.	n.a.	£8.95	£12.95

GREAT VALUE buy any 2 Games and deduct £2.00 from total - **SUPERB VALUE** buy 3 games and deduct £3.00 from total - **FANTASTIC VALUE** buy 4 games and deduct £5.00 from total All Games available by MAIL ORDER for IMMEDIATE despatch by 1st Class Post. Prices include P & P (add £1.00 outside UK) and include instructions. PLEASE STATE MACHINE AND TAPE or DISC.

Send to: E & J SOFTWARE, Room A1, 37 Westmoor Road, ENFIELD, Middlesex EN3 7LE

From NEMESIS (The Original Meddlers) BONZO SUPER MEDDLER (FOR ANY CPC)

THE dedicated TAPE TO DISC utility

NOW including the devastating

BONZO's HACK PACK

BONZO hits 600!

BONZO SUPER MEDDLER is GUARANTEED TO TRANSFER MORE GAMES THAN ANY OTHER PROGRAM; THE FIRST PERSON TO FIND A MORE SUCCESSFUL PROGRAM WILL RECEIVE TREBLE THEIR MONEY BACK !!

BONZO SUPER MEDDLER is the SUPREME utility, and ALSO includes the answer to the "hitherto impossible" **SPEEDLOCKS** **IBONZO SUPER MEDDLER** does NOT use a massive "host" program to run the transferred games. ALL transfers "stand alone".

BONZO uses LESS memory, transfers MORE, COSTS LESS and gives REAL support to the user.

THE 1988 UPGRADE

Clearly the best in 1987 BONZO start 1988 with up to the minute refinements; now even more versatile! Simple details of over 600 transfers supplied.

We have such confidence in the superiority of BONZO that we invite you to send your present disk utility to be transferred into:

BONZO Super Meddler and Hackpack for just £8.00

Return BSM disc for 1988 upgrade £3.00

BSM & HACKPACK DISC £11.50. ONLY

BONZO'S DOO - DAH

"This is the best I've seen in a long while ... I recommend it"

Amstrad Action, June 1987

Features **BIGBONZO FORMAT**

A REALLY USABLE 203K per SIDE FORMAT, with all the support files to maximise it's use. PLUS - All the disc housekeeping features that you could possibly want, including "Cloning", Directory & Sector edit, Disc search, Formatting, Read sectors, Filecopy, etc. ALL FUNCTIONS are effective on normal, enhanced, and the vast majority of "funny formats".

MANY UNIQUE FEATURES supplied on DISC £11.50

BONZO BLITZ - NEW SPEEDLOCK's to DISC !!

A TOTAL utility for SPEEDLOCKS, straight to DISC from TAPE! NO RE-NAMING, SCREEN INCLUDED, ABSOLUTELY NO "JUGGLING".

NEW

WHAT CAN IT DO ?

There's not many that it can't do ! BLITZ works on a standard 464 as well as the 6128 & expanded machines. All our claims are based on user reports. A small selection for flavour !

GAMEOVER, SLAPFIGHT, MAG MAX, MARIO BROS., ARMAGEDDON MAN, ARMY MOVES, FIS STRIKE, SPACE SHUTTLE, BLACK MAGIC, WARLOCK, METROCRSS, DIZZY, TRANSMUTERS, SHAO LINS RD, ARKANOID, COBRA STALLONE, DALEY'S SUPERTEST, CATCH 23, MIKIE, SCALEXTRIC, SARACEN, SHORT CIRCUIT, EXPRESS RAIDER, XEVIOS, TOURNAMENT LEADERBOARD, SCRABBLE, FREDDY HARDEST, MATCHDAY II, PHANTOM CLUB, SUPER HANG ON, MAD BALL.
DISC Only - just £10.00 inc.

ALL WITH FULL INSTRUCTIONS. We give FULL after sales support and a regular NEWSLETTER.

Overseas please add £1.00 to total.

ORDERS with cheque/postal, sent by return post:

NEMESIS (AA)

10 Carlow Road, Ringstead, Kettering, Northants NN14 4DW

DISCOUNT SOFTWARE

DISC GAMES

Adv. Music System	25.95
Adv. Art Studio	19.95
Big League Soccer	10.95
Colossus Chess 4	11.95
Driller	14.95
Elite	10.95
Elite Collection	16.95
Epyx Epics	16.95
F-15 Strike Eagle	11.95
Hollywood Hi-jinx	20.95
Game Set & Match	14.95
Gauntlet II	11.95
Live Ammo	11.95
Lurking Horror 6128	20.95
Matchday II	11.95
Moonmist 6128	20.95
Monopoly	11.95
Out Run	11.95
Scrabble Deluxe	12.95
Silent Service	11.95
Six Pak II	11.95
Solid Gold	16.95
Starglider	16.95
Starwars	11.95
Super Hang On	11.95
Trantor	11.95
Trivial Pursuits	16.95
Thundercats	11.95
The Pawn 6128	16.95
World Leaderboard	11.95

DISC SERIOUS

Matrix	29.95
Maxam ass/diss	21.95
Protext	21.95
Prospell	20.95
Promerge	20.95
Qualitas Plus	12.95
French Mistress	16.95
German Master	16.95
Masterfile III	32.95
Mastercalc 128	28.95
Tasword 6128	19.50
Taspell	12.95
Tasprint	10.95
Tascopy	10.95
Tasdiary	10.95
Tas Sign 6128	23.95
Mini Office II	15.95

CPM BASED

Supercalc 2	41.95
Maxam II	39.95
Arnor C	39.95
DR Draw	39.95
DR Graph	39.95
Nevada Fortran	35.95
Nevada Cobol	35.95
Devpac 80 V2	35.95
Pascal 80	35.95
Hisoft C	35.95
Two Fingers Typing	21.95
Crash Course Typing	21.95

CASSETTE BASED

German Master	14.95
French Mistress	14.95
Spanish Tutor	14.95
Italian Tutor	14.95
Mini Office II	11.95
Protext	16.95
Tasword 464	15.95
Tasprint 464	8.50
Tascopy 464	8.50
Maxam	16.95

ROM BASED

Maxam	32.95
Protext	32.95
BCPL	32.95
Utopia	24.95
Prospell	29.95
Promerge +	29.95
Rodos	28.95
ROMBO Rom Board	33.95
ROMBO (with any Rom)	29.95

BOOKS & MANUALS

Anatomy of the CPC	14.95
Programming the Z80	19.95
128 Firmware Spec	17.95
DDI Firmware Spec	9.50
Amstrad CPM+ Book	12.95
Amstrad CPM+ Binder	16.95
Mastering m/code	8.95

ACCESSORIES

CLI cassette lead	3.50
Printer lead 1m	8.95
Printer lead 1.5m	9.95
Printer lead 2.0m	10.95
RS232 leads (var)	11.95
DMP 2000 ribbons	3.95
DMP 8k buffer kit	6.95
Mono screen filter	12.95
Colour filter	14.95
Comp Pro 5000	13.95
Quickshot Turbo	12.95
6128 light pen	26.95
464 mon ext. leads	6.95
6128 mon ext lead	7.95
64k memory expansion	35.95
Single CF2 disc	2.95
1000 fanfold labels	5.95
Second drive lead	7.95
Disc box holds 20	11.95

HARDWARE

Amstrad Modem	95.95
Linnet Modem	139.95
New DMP 2160 Printer	
160 cps	159.95
RS 232 Interface	55.95

AMSOFT CF2 DISCS
box of 10, just £24.95

All prices include postage, packing and VAT in the U.K.

Overseas orders welcome - please write for prices

Please send cheques/POs to **MJC SUPPLIES, (AA) 40a Queen Street, Hitchin, Herts. SG4 9TS**

Call (0462) 32897/420847 for enquiries / Access orders - Callers welcome

NORTHSTAR

Gremlin, £9.99 cass, £14.99 disk, joystick or keys

Due to a lack of food a top secret project was undertaken by the four Earth-Lords. The project was a massive space station on which huge quantities of food were produced efficiently and quickly. The last shipment of food failed to arrive and all has gone silent on the space station.

On arrival you find the station in the hands of aliens. In the lower part of the screen there is a status panel showing your oxygen level, score, number of lives and any weapons carried and the upper part shows the space station and its occupants. At the

start of the game you only have your robotic arm to kill the aliens, but as you progress through the game you will find cylinders that

SECOND OPINION

It's an obvious derivative of games like Exolon, Gryzor and Green Beret, but competently put together. The graphics are delightful in all departments, rivalling even Exolon's. The gameplay can get frustrating, because there are times when you just can't help dying, but at least you don't get sent back to the start. **BW**

GREEN SCREEN VIEW

No problems seeing everything.

contain other weapons. The other weapons are accessed by smashing the cylinder with your arm and collecting the contents which will drift up towards the top of the screen.

There are five weapons that you can collect: extra long arm (so you can kill your enemies at a greater distance), a smart bomb, a

The Verdict

GRAPHICS78%

- Smooth horizontal scrolling.
- Good use of colour.

SONICS76%

- Brilliant title tune.
- In game effects are good too.

GRAB FACTOR79%

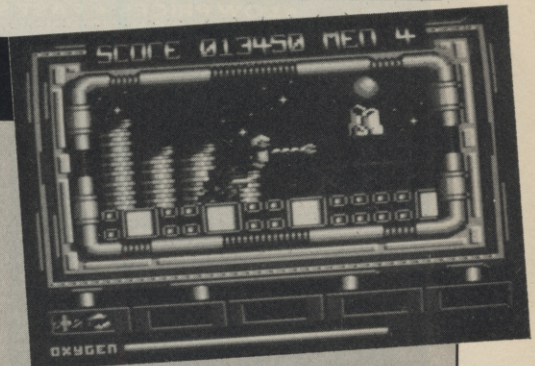
- Instant fun running around smashing things with your arm.
- Not an original idea.

STAYING POWER65%

- Nine levels of fast and furious action.
- Not much variation from level to level.

AA RATING73%

- Good fun, but lacking in long term



● Equipped with an extra long arm you leap across the landscape

weapon that lets you shoot upwards (which is very useful on later levels), a pair of boots that stop you from sliding and finally a limited invulnerability to make life a little easier. Unfortunately whenever you lose a life you also lose one of your weapons.

The music on the title screen is excellent and the effects in the game are splendid too. Colour is used to great affect and the graphics are well drawn. There are nice touches to the graphics like the way you slide to a halt.

If you want a game with lots of aliens to kill and little thought then this is for you. In the long term you may grow tired of it, but in the short term there's plenty of fun to be had exploring the large space station. **GBH**

FIRST DAY TARGET SCORE

40000 points

ROLLING THUNDER

US Gold, £9.99 cass, £14.99 disk, joystick or keys

Geldra is the head of a secret organisation that must be stopped. The location of the HQ has been determined and you have to penetrate all ten levels of it.

The levels scroll horizontally and have balconies, doorways and a variety of obstacles in your path. They are guarded by Geldra's guards who are out to kill you. Fortunately you have a pistol and a machine gun, but in your haste to depart you picked up only a little pistol ammo and no machine gun ammo at all. The doorways are of three types, normal, pistol and machine gun. You can enter any door, but only those labelled with pistols and machine guns are very useful. Inside these doors you can reload your weapons with the appropriate type of ammunition.

The other doorways can be hidden in if

SECOND OPINION

The gameplay is repetitive and frustrating. The graphics are terrible. The sound is disastrous too. To get any enjoyment out of the thing at all you'll have to have the patience of a saint. **BW**

GREEN SCREEN VIEW

It looks no worse in green than it does in colour.

The Verdict

GRAPHICS34%

- Poor horizontal scrolling...
- and even worse animation

SONICS46%

- Horrible continuous tune.

GRABFACTOR42%

- Simple to get into.
- Irritating having to go so far back when you lose a life.

STAYING POWER35%

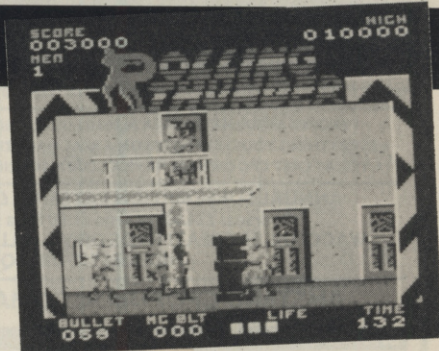
- It'll take a long time to complete.
- You'll get bored very quickly.

AA RATING37%

- One of the worst arcade conversions.

there are too many guards around. The balconies allow you access to the doors on the upper level and also let you pass some of the obstacles that get in the way on the ground like the packing cases.

If you die on a level then you are sent back a long way and have to renegotiate all the hazards you had just bypassed. Later in the



● Horrible graphics add nothing to this game

game you will come across automatic lasers and the fire-men (not the 999 variety) that inhabit the lava pools. If you manage to fight your way to Geldra's command centre and capture it then you'll have to meet Geldra in a final confrontation.

The graphics are terrible, animation is poor and there is very little detail in the graphics. There's a continuous tune, but that's nothing to get excited about. Sound effects are appalling too.

This is another classic example of how an arcade game completely fails to work on the home micro. The arcade game may have had a lot going for it, but all this has is a reputation based on the arcade game. **GBH**

FIRST DAY TARGET SCORE

30,000 points

K & M COMPUTERS

★ LOW PRICES ★ FAST SERVICE ★
★ THE BIG NAME IN MAIL ORDER ★

★ ADVENTURE ★	CASS DISC	★ ARCADE ★	CASS DISC	★ ACCESSORIES ★
Time and Magic	£10.70 £14.45	Platoon	£6.70 £10.70	Amsoft 3" Discs
The Pawn 6128 Only	£14.45	Renegade	£6.30 £10.70	£24.95 for 10
Guild of Thieves (6128)	£14.45	Madballs	£6.30 £10.70	AMX Mouse & Art Pkge
Hollywood Hijinx	£20.95	Super Hang On	£6.70 £10.70	DMP 2160 Printer
Lurking Horror	£20.95	Rastan	£6.30 £10.70	Cover Set 464/6128
Passings on Wind II	£6.70 £10.70	Trantor	£6.70 £10.70	col/green
Silicon Dreams	£14.45	Sidearms	£6.70 £10.70	Covers DMP2000/2160/3160
Jewels of Darkness	£14.45	Predator	£6.70 £10.70	Multiface II
Jinxter (6128)	£14.45	Thundercats	£6.30 £10.70	MP2 Modulator (Plesae ☺)
Knight Orc CPC/PCW	£10.70 £14.45	Elite	£6.70 £ 9.90	Amstrad DMP2000 Ribbon
Hitchhikers Guide	£20.95	Starglider	£10.70 £14.45	Lockable 3"
★ COMPILATIONS ★				
Comp. Hits 6 Vol. II	£10.70	Spy Hunter ☺	£6.70 £10.70	Disc Boxes (hold 20)
Comp. Hits 6 Vol. III	£10.70	720 ☺	£6.70 £10.70	AMX Mouse Mats
Hit Pack Six	£6.70 £10.70	Alternative MG Games	£6.70 £10.70	★ JOYSTICKS ★
5 Star Vol 2	£6.70 £10.70	Combat School	£6.30 £10.70	Amstrad JY2
Comp. Hits 10 Vol. IV	£6.70	Captain America	£6.70 £10.70	Cheetah Mach I
Star Games II	£6.70	Salamander	£6.30 £10.70	Euromax Pro 5000
4 Smash Hits	£6.70 £10.70	Roy of the Rovers ☺	£6.70 £10.70	Datex Joystick
(Inc.Undium+)	£6.70 £10.70	Bubble Bobble ☺	£6.30 £10.70	Slick Stick
Sold a Million III	£6.70 £10.70	Slaine	£6.70 £10.70	Cheetah I25
Magnificent 7	£6.70 £13.10	Last Ninja ☺	£6.70 £10.70	Euromax Arcade
Game, Set and Match	£9.45 £13.10	Gauntlet II	£6.70 £10.70	Phaser One
The Elite Collection	£10.70 £14.45	Masters of the Universe	£6.70 £10.70	Konix Autofire
Ten Great Games	£6.70	Outrun ☺	£6.70 £10.70	Konix Speedking
Solid Gold	£6.70 £13.95	California Games	£6.70 £10.70	Starfighter
Durell Big 4 vol II	£6.70 £10.70	Bravestarr	£6.70 £10.70	★ BUS/UTIL ★
Kidspay (Backpack)	£6.70	Lazer Tag	£6.70 £10.70	Tas Sign 6128/PCW
Epye Epics	£6.70 £15.95	Driller	£10.70 £13.10	StopPress (no mouse)
Hit Pack Six Vol 2	£6.70 £10.70	Road Runner	£6.70 £10.70	Discology (Siren)
★ STRATEGY/SIMULATION ★				
F15 Strike Eagle	£6.70 £10.70	Ramparts	£6.70 £10.70	Tascopy
Match Day II	£6.30 £10.70	Dan Dare	£6.30 £10.70	Tasprint
Silent Service	£6.70 £10.70	Mystery of the Nile	£6.30 £10.50	Professional Adv. Writer
Armageddon Man	£9.45	Death Wish II	£6.70 £10.70	AMX Max
Scruples	£6.70 £10.70	Wizard Warz	£6.70 £10.70	Mini Office II
World Class L.Board	£6.70 £10.70	Galactic Games	£6.70 £10.70	Plan-It
W.C.L. Board	£6.70	Rampage	£6.70 £10.70	Adv. Art Studio
Famous Courses	£4.50 £ 7.99	Jackal	£6.30 £10.70	Adv. Music System
Football Director (464)	£6.30	Not a Penny More.		Protext
Garry Linekars		Not a Penny Less	Phone	Masterfile III
S Star Soccer	£6.70 £10.70	Gryzor ☺	£6.30 £10.70	★ GAMES CONSOLES ★
Football Manger II	£6.70 £10.70	Buggy Boy ☺	£6.30 £10.70	Nintendo Basic Console
		Rygar ☺	£6.70 £10.70	Nintendo Deluxe
				Robotic Buddy
				Sega

★ If you see anyone advertising software at a lower price than us, we will match that price (except special offers) ★
★ We do not have credit card facilities but can offer ★
★ a cash on delivery service to approved customers ★

★ All prices include post and packing ★ In stock items sent by return ★
★ All budget titles stocked £5.50 for 3 (£1.99) ★

★ We also have an extensive range of C.P.C. Software for hire -
Free Membership - Send for details ★

★ Cash with order or send for full lists ★ Overseas orders welcome ★
★ Please add £1 per item for overseas postage ★

★ British postal orders or sterling cheques ★ Return of post service ★
★ All new releases on day of release ★

K & M COMPUTERS, 40 FAIRSTEAD, BIRCH GREEN, SKELMERSDALE, LANCS. WN8 6RD
24 hrs phone 0695 29046

Yorkshire Computer Users Club

East Royd, Off Station Road, Oakworth,
Yorks BD22 7JN

(YCUC are Hardware Specialists only.
We do not sell software)

AMSTRAD

CPC 6128 (colour)	£375
CPC 6128 (Green)	£280
PCW 8256	£316
PCW 8512	£414
PCW 9512	£505
PC 1512 Single Mono	£404
PC 1512 Single Colour	£509
PC 1640 Single Mono	£506
PC 1640 Single Colour	£649
Printers: Amstrad DMP 3000	£165
DMP 3160	£199

Please make cheques payable to: YCUC
and allow up to 14 days delivery.

All orders are insured against loss
for whatever reason

(a charge of £2 is included in all prices to cover premium)

With YCUC you know your money is safe!

WACCI - THE WORLDWIDE AMSTRAD CPC FANZINE

RICHARD EDDY (Amtix): "A professionally produced and well written magazine".
KEITH HAZELTON (BBC Ceefax): "Right at the top".
SIMON COBB (Siren Software): "A truly professional publication".
RUPERT STEELE (PCW Magazine): "Money well spent".
GARY MAYS (PSS Software): "WACCI is by far and away the best".

- ★ PROPER A4 FORMAT ★ OVER 20,000 ILLUSTRATED WORDS EVERY MONTH ★
- ★ EVERYTHING YOU'D EXPECT FROM A REAL MAGAZINE, PLUS A LITTLE BIT MORE ★
- ★ YES, AT LAST CPC OWNERS HAVE A CLUB MAGAZINE THEY CAN BE PROUD OF ★

ANNUAL SUBSCRIPTION RATES: UK £12.00, Europe £18.00,
Overseas £24.00, or send £1.00 for a sample copy to:
WACCI UK, 75 GREATFIELDS DRIVE, HILLINGDON, UXBRIDGE,
MIDDLESEX, UB8 3QN

AMSTRAD CPC PUBLIC DOMAIN SOFTWARE

CPM DISC 1 - MACHINE CODE TOOLS	Price £6.50
Z80 and 8080 assemblers, Z80 to 8080 to Z80 code translator, Debugging monitor and assembler, Reverse assembler, Binary File comparer, plus NewSweep and more.	
CPM DISC 2 - COMPUTER LANGUAGES	Price £6.50
Small-C, Prolog, Lisp, EBasic, Small-C-Interpreter plus NewSweep	
CPM DISC 3 - FILE AND DISC MANAGEMENT	Price £6.50
Library utilities, Disc quality checker, Unix GREP command, PCW disc reader, Disc sector editor, Text file sorter, Word counter, plus NewSweep and more.	
CPM DISC 4 - AT YOUR LEISURE	Price £6.50
Cave Adventure, Chess, Othello, Golf, Word search, Biorhythms, Maze generator, On-screen calculator, Prolog, Comms utility, plus NewSweep and more.	
CPM DISC 5 - THE BUSINESS	Price £6.50
Scrivener spreadsheet, Inventory database, Powerful text editor, Spelling checker with dictionary, Sorter, Word counter, Comms utility, plus NewSweep and more.	
CPM DISC 6 and 7 - PASCAL PLUS (Two Discs)	Price £10.00
Pascal, SC1, Cobol, EBasic, Powerful text editor, plus NewSweep.	

★ ALL PROGRAMS COMPLETE WITH ORIGINAL DOCUMENTATION AND SUPPORT FILES ★
★ SAVE MONEY ★ CPM DISCS 1 TO 5 FOR £29.95 - ALL 7 DISCS FOR £39.95 ★ SAVE MONEY

WACCI PD, 75 GREATFIELDS DRIVE, HILLINGDON, UXBRIDGE,
MIDDLESEX UB8 3QN

ESTABLISHED 1986 - Phone (0895) 52430

BBD
DUST
COVERS

GET SMART

BBD
DUST
COVERS

Protect Your Computing Equipment With
BBD PROFESSIONAL DUST COVERS

- In today's economic climate where equipment failure costs time and money protecting your hardware from wear and tear is the smart thing to do and the smart way to do it is with dust covers from the BBD Professional Range.
 - Manufactured from top quality washable nylon and attractively finished with contrasting piping BBD covers are simply the smartest protective covers available.
 - BBD covers can be washed and ironed without fear of fading or shrinking and will never crack or lose their shape.
 - With all these superlative features you might expect BBD covers to be a little expensive. Nothing could be further from the truth.
- Covers for the AMSTRAD CPC 464 : £7.50**
Covers for the AMSTRAD CPC 6128 : £7.50
Please state Colour or Monochrome Monitor
- BBD also offer a wide range of matching covers for the printers from only £5.00.
 - These include Amstrad DMP 2000,3000 and 3160, Amstrad DMP 4000 and LQ3500, and a selection from Brother, Canon, Citizen, Epson, Star etc. etc. Generally covers for 80 column printers are £5.00 and for 132 column £6.00

GET SMART! GET BBD!
BBD DUST COVERS

The Standish Centre,
Cross Street, Standish, Wigan WN6 0HQ
Telephone: 0257 422968 Ext.321 Fax: 0257 423909



DEALER ENQUIRIES WELCOME



GUADALCANAL

Activision, £9.99 cass, £14.99 disk, joystick or keys

Guadalcanal is a Pacific island that was fought over by the Japanese and Americans during 1942. A history of the battle is supplied in the detailed instruction manual that's supplied with the game.

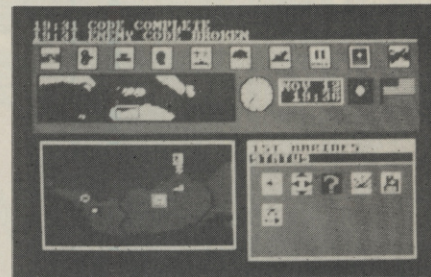
There are three scenarios that you can play: a three day battle to get you used to the game, the full Guadalcanal campaign in which

you control the USA, and the final one is the same campaign but you command the Japanese. The objective is to win the battle by destroying the enemy forces using your land, sea and air forces. This involves careful use of your fleets, planes and men or you will leave yourself open to counter attack.

Along the top of the screen is a row of ten icons. The map icon switches you between the map and icons. Other icons appear when you've selected a unit and they let you find out what condition your forces are in and allow you to order yours troops to attack, withdraw, go home etc. Next to the map icon is the clock winder which rapidly forwards the time if things are going a little too slow for you. Scouts can be sent out on missions to find out what the enemy are doing. Intelligence information is important in any battle and the ear icon is used for this purpose.

Weather plays an important role in war and a weather icon tells you what it's like outside. The status of your fleet and the number of losses can also be shown via icons. The last three icons allow you to pause the game, save it or quit it.

It's a little confusing at first as to what's going on, but you soon begin to get to grips with the game. The use of espionage and scouts adds to the action because to win you need to know what your enemy is doing. The feeling of dread when you suddenly discover a



● Battle for the island has just begun

massive fleet approaching you gives the game atmosphere.

Sound is simple beeps, buzzes and pings. The icons are all large and easy to identify. The graphics are small and simple on the map, a bit more detail would have been nice.

The manual is long and a good read through is recommended before you begin play. World War Two has had many of it's battles put onto computer and this one is a good representation of the battle. **GBH**

FIRST DAY TARGET SCORE

Win in scenario one.

GREEN SCREEN VIEW

Some of the units are a little difficult to identify in green.

The Verdict

GRAPHICS57%

- Good use of icons.
- Map graphics are small.

SONICS16%

- Sound could have been used more.

GRAB FACTOR64%

- A hefty manual gets you into the feel of the battle.
- A little tricky to understand at first.

STAYING POWER72%

- Three scenarios to complete.
- Each of them is a challenge in itself.

AA RATING69%

- One of the better wargames in recent months.

COMPENDIUM

Gremlin, £9.99 cass, £14.99 disk, joystick or keys

Compendiums have been around for a long time. Few Christmas' went by without one turning up amongst the presents. They usually looked cheap and were played with a few times and then put in a cupboard and forgotten about. Now you can play some of those old games in a slightly modified form on your computer.

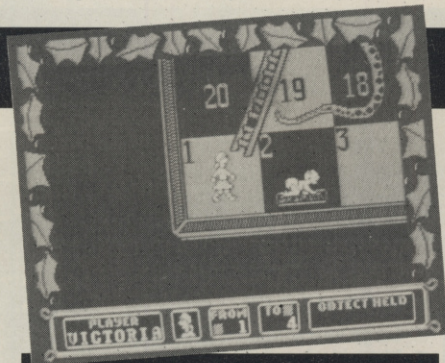
SECOND OPINION

Not exactly my idea of nostalgia or of long lasting entertainment. A few giggles may be had, particularly in multi-player games but hardly the sort of thing you'll play for long. I'm getting bored of saying it but where's the lasting challenge to keep you at the keyboard for weeks, months and years, never mind minutes? **BW**

GREEN SCREEN VIEW

Everything's easy enough to see.

Up to four people can take part in the game with each player being represented by a member of the Wink family. There are four games in the box: Ludo, Snakes and Hazards, Shove-a-Sledge and Tiddly Drinks. Ludo and Snakes and Hazards are the standard games with only minor differences. In both games the pieces used are Ralph, Victoria, Tiny Tim and Sniffer. The differences being that if you bump



● Snakes and hazards

into one of other any other character on the board your turn will end and the next players begins. In Snakes and Hazards there are also some objects that stop your movement because your piece likes it, Sniffer the dog likes lamp-posts and bones for example.

In Shove-a-Sledge you push Tiny Tim on a sledge and try to make him stop in each of ten different zones in the snow. The first player to stop him in all ten zones wins the game. In Tiddly Drinks the family is in the local pub. Dad is out on a drinking spree and you have to catch the glasses that he throws into the air - after draining them of the contents. The winner is the one that caught most glasses by closing time.

Every game has at least one tune. They're all very good and it makes a change for a game to have such variety in the music. The graphics are a little simple, but they do their job well

The Verdict

GRAPHICS54%

- Background graphics look good.
- Not much detail on the characters.

SONICS87%

- Lots of tunes and they all sound good.

GRAB FACTOR56%

- Initially it's a jolly piece of nostalgic fun.
- Rapidly loses its challenge.

STAYING POWER43%

- Does anyone still play games like Snakes and Ladders?
- Even four different games doesn't hold you for long.

AA RATING49%

- It's more fun sitting around the board playing a game rather than doing the same on a computer.

enough in showing what's going on.

This is definitely a game that only young players will find enjoyable. There's so little skill needed and such a lot of luck that it provides virtually no challenge. **GBH**

STRAIGHT SIX

Loricels, £9.99 cass, £14.99 disk, joystick or keys

This is a compilation of six games from the French software house. Two of the games have been released in the UK before, *Soccer* and *MGT*, the other four are *3D Fight*, *Billy*, *Flash* and *Zox 2099*.

3D Fight is a *Buck Rogers* style game in which you fly over the surface of a checkerboard planet, shooting the rapidly approaching aliens and ground based forces that try to kill you. Meteors drop in from the top of the screen in some stages and they also have to be dodged.

Billy is an exploration game where you have to find the four video games that are hidden in the city. To do this you move around, picking up objects on the way to give to people who will then disappear, allowing you access to other parts of the city. If you don't have the object that they want then they'll beat you up.

In *Flash* you're trying out a new military weapon which enables you to change from a man into a jeep, tank or helicopter. You have to put the equipment through its paces by wiping out enemy forces and their bases.

All of the inhabitants of the planet Hullm are being held hostage by Zox on an asteroid. *Zox 2099* is split into two parts: a fight in space and then an exploration stage on an asteroid. The space fight is a 3D shoot-em-up with aliens coming in one at a time shooting bolts of energy at you. Once on the asteroid you have

to penetrate Zox's guarded labyrinth and free the people of Hullm.

MGT (reviewed issue 19) is a 3D exploration game. You drive around rooms in a tank shooting at invading alien bacteria and solving puzzles to get you further into the complex.

Soccer (reviewed issue 12) is a football game where you control one of four European teams. Either a second player or the computer can control one of the other teams. You can alter the difficulty level to make play easier or harder.

The graphics in all the games are colourful, although they are chunky and don't look brilliant. Tunes play in most of the games and they're good. The sound effects are generally disappointing.

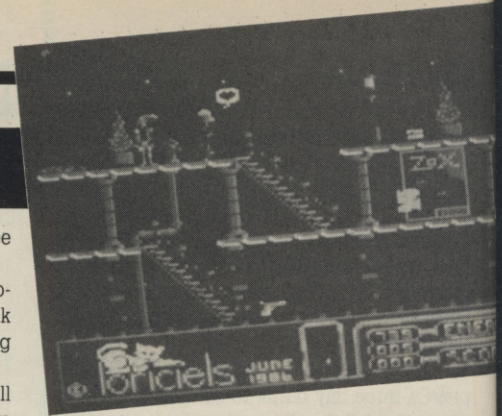
SECOND OPINION

Not the best compilation of games I've seen but it's got plenty of variety and enjoyment to offer. MGT is probably the best of the bunch but the others will also keep you occupied for a time. The shoot-em-ups look dated but the arcade adventure elements are still quite interesting.

BW

GREEN SCREEN VIEW

No problems on any of the games.



● Billy offers his heart to his girlfriend

None of the games are particularly outstanding, but as a pack of six they are good value for money. Take a look before you make a decision.

GBH

The Verdict

- Good use of colour on all games.
- Graphics are very chunky.
- *Flash* has the worst graphics, they're small and indistinct.
- Animation in *Billy* is poor.
- Great music on all the games.
- Sound effects are in general of a lower standard.
- The best game is *MGT*.
- *Flash* is the worst of the games.
- Good value for money.

AA RATING 60%

ANDY CAPP

Mirrorsoft, £9.95 cass, £14.95 disk, joystick or keys

This is the first time that a newspaper cartoon character has appeared on the Amstrad and he's probably the last as well. He's a beer swilling, cigarette smoking, layabout and he's had his dole cheque stolen.

You start the game on Monday morning with a pittance in your pocket and your ever loving wife, Flo, is demanding your dole cheque. The screen is split into two parts, the upper play area and the icon area at the bottom. There are four icons: wallet, speak, fight and action. The wallet icon is used to get or giveaway money and to buy things when necessary. If you want to talk to any of the other characters in the game then you use the

speak icon.

Violence is sometimes necessary to get you out of bad situations and this is done through the fight icon. The final icon is the

The Verdict

GRAPHICS 53%

- Large well animated characters.
- It's in black and white.

SONICS 36%

- Nice title tune.
- Poor in-game effects.

GRAB FACTOR 58%

- A bit more detail in the instructions would have helped.
- Very confusing at first, because you've no idea what's going on.

STAYING POWER 62%

- Solving the mystery should take you a while.
- Boring just walking around town trying to find someone.

■ Andy Capp doesn't seem to be the ideal

AA RATING 60%

candidate for a computer game.

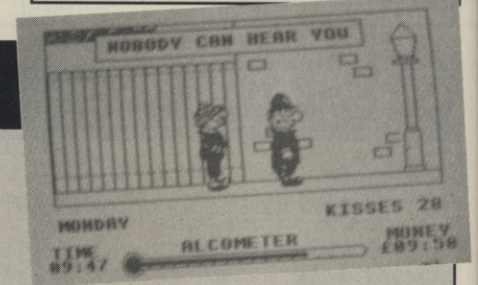
SECOND OPINION

The comparison to Marsport and Dun Darach seems to me to be purely in the movement area. The actual game tasks aren't anywhere near as absorbing, atmospheric or tricky. A strip cartoon licence strikes me as strange, particularly if you present it exactly as the cartoon in the paper.

BW

GREEN SCREEN VIEW

You can see what's going on alright, the games in monochrome anyway.



● Andy Tries to talk to the policeman

action icon which deals with the manipulation of objects. There's also an alcometer that must never be allowed to read empty, if it does your game ends. No prizes for guessing where you top up on alcohol.

The rest of the screen display shows Andy and the rest of the characters that you'll have to interact with in the game. If you want to make a getaway from someone you can shock them into standing still by blowing a kiss at them.

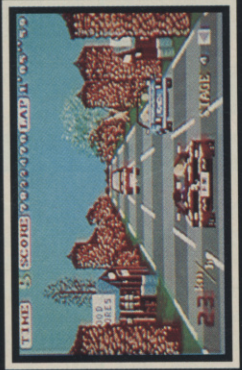
The graphics are very similar to those found in the newspaper - black and white. Andy and friends are large and well animated, pity that they wander around town so slowly. Sound effects are minimal to say the least, but there's a good tune that plays before you start the game. If it sounds familiar think about small brown loaves of bread.

If I was to compare this to anything it would be games like *Marsport* and *Dun Darach*. You have to spend a great deal of time wandering around doing nothing and solving puzzles periodically.

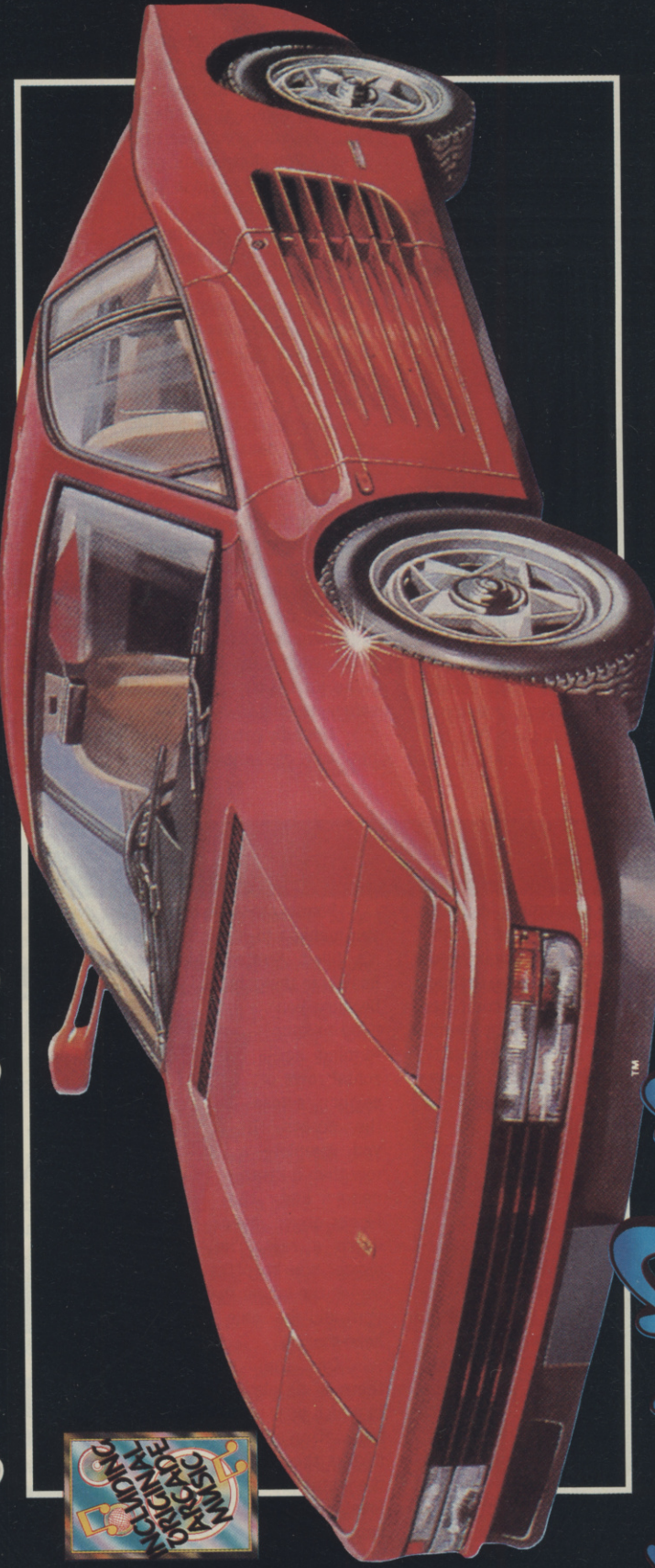
GBH

NOW AVAILABLE FOR ATARI ST

Screen shots from Atari ST version.



High performance racing, High performance game, High performance action!



Out Run

As many millions have before you, experience the exhilaration and excitement of driving a high performance sports car in this teasing time trial where your co-ordination and nerves are tested to unbelievable limits.

Atari ST £19.99d
CBM 64/128 £9.99t, £11.99d
Amstrad £9.99t, £14.99d
Spectrum £8.99t



U. S. Gold Ltd.,
Units 2/3 Holford Way,
Holford, Birmingham B6 7AX
Tel: 021 356 3388



OVER 250,000, ALREADY SOLD!



BUBBLE BOBBLE

Firebird, £8.95 cass, £14.95 disk, joystick or keys

Dinosaurs are making a comeback. The two pre-historic heroes of this game of bubble blowing mayhem are Bub and Bob the brontosauri. No wonder dinosaurs became extinct if they spent all their time blowing bubbles instead of eating and drinking like all those intelligent little mammals were doing.

SECOND OPINION

It's a cracker. Definitely a game I shall keep coming back to. It's not the graphics or the sound that make the game so enthralling. No, it's sheer addictability. The thrill of blowing bubbles, bashing monsters and feasting on the fruits of your labour. Just one complaint, why is the abort key so close to the player-restart key.

RpM

GREEN SCREEN VIEW

No problems playing in green.

This is one of many recent games featuring a simultaneous two-player option – double trouble dinosaurs. The game is made up of 100 levels, each of which is a single screen. To progress to the next level you must destroy all of the hostile inhabitants (the bullies) on the screen, who don't particularly

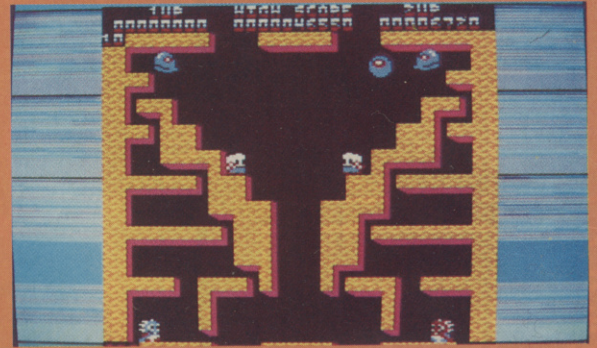
want to be extinct. There are two stages to destroying the bullies, blowing a bubble to trap them and then bursting it.

The levels are made up of a series of platforms which you use to move around the screen. Travel between platforms is accomplished by jumping up or walking off the edge of a platform. You can fall any distance without worrying about dying when you hit a solid surface. Sometimes there are holes at the bottom of the screen and falling through these takes you to the corresponding hole at the top of the screen.

The seven types of bully are called Benzo, Bonnie-bo, Boa-boa, Blubba, Boris, Bonner and Baron von Blubba. Each of the seven little B's move around the screen looking for a nice, filling Brontosaurus to eat. Two of your opponents are more deadly and they are Baron Von Blubba and Boris. Boris spits rocks at you that must be dodged and the Baron turns up if you spend too much time on a screen, the Baron can't be bubbled.

Not only can bubbles contain the bullies, but they can also contain fire, thunder or

water. Bursting an empty bubble merely adds 10 to your score. If you burst a water bubble then a stream of fast moving water emerges and heads off the screen destroying everything in its path, taking you with it if you're



● Bub and Bob go bully bashing

not careful. The thunder bubbles release a bolt of lightning when burst and these travel across the screen killing anything that's foolish enough to move in the way, including the other player. A fire bubble drops out little flames which kill anything on contact.

TETRIS

Mirrorsoft, £8.99 cass, £12.99 disk, joystick or keys

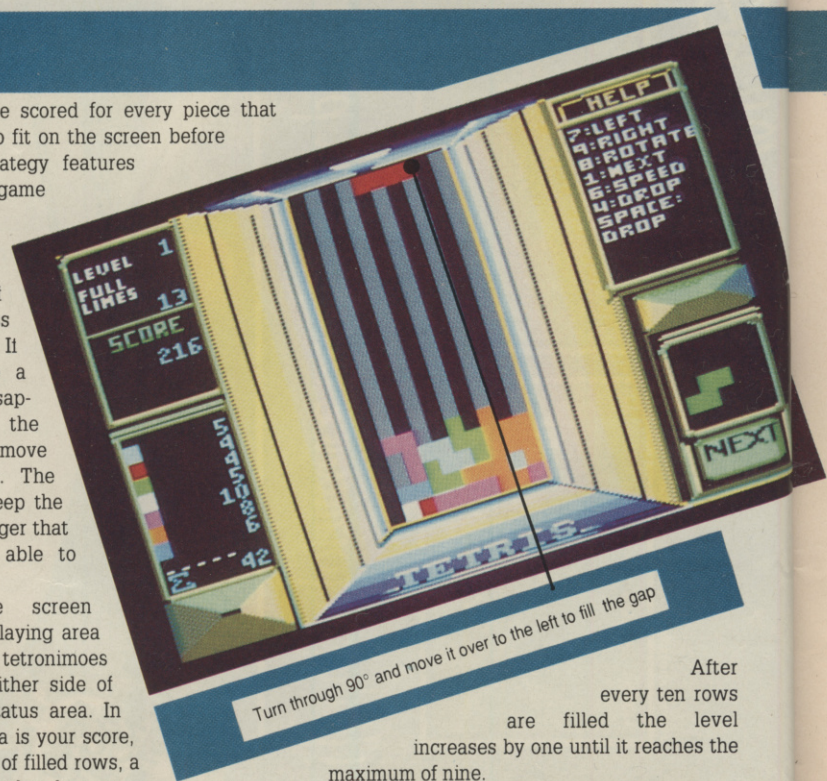
Watch out, the Russians are coming. A Soviet invasion is about to be unleashed on the unsuspecting British public. Before you go out and barricade the streets and prepare to repel the invaders, fear not, it's only a computer game. The game was programmed by Vagim Gerasimov, a student at Moscow University and has been brought to Britain via Hungary. It's the first time that a game originating in the Soviet Union has reached our shores.

Tetrimoes are shapes made up of four squares linked along their edges. They include straight pieces, squares, "L" shapes, "T" shapes and many others. The principle of the game is very simple, a random tetrimo appears at the top of the screen and falls towards the bottom. While it's falling you can rotate the shape through 360° in 90° steps and move it left or right. When it reaches the bottom of the screen or

lands on top of another shape it stops moving and another shape appears. If the pile of shapes reaches the top of the screen then the game ends and you have to begin all over again.

Points are scored for every piece that you manage to fit on the screen before it's filled. Strategy features heavily in the game because you need to keep forming horizontal rows of colour across the screen. If you complete a row then it disappears and the blocks above move down a row. The clearer you keep the screen the longer that you will be able to keep scoring.

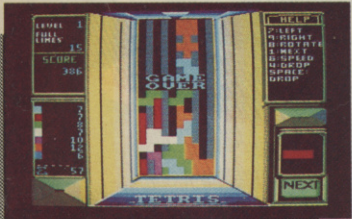
On the screen there is the playing area in which your tetrimoes fall and on either side of that is the status area. In the status area is your score, level, number of filled rows, a summary of the key commands, a record of how many of each piece has fallen and a window in which the next piece can be shown. The level setting determines how fast the shapes fall.

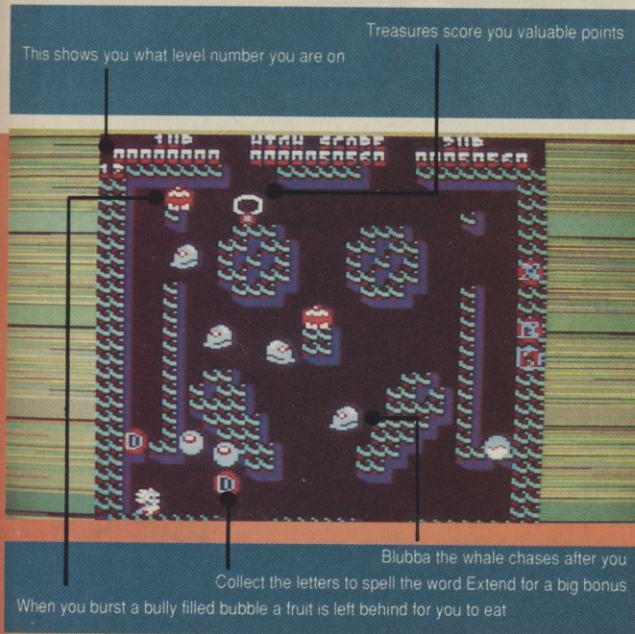


Turn through 90° and move it over to the left to fill the gap

After every ten rows are filled the level increases by one until it reaches the maximum of nine.

To make play a little easier you can switch on the next shape window and the shape that will follow the one currently descending the screen is displayed. This





the third acts like a smart bomb and kills all the creatures on the screen, the fourth lets you throw out bubbles at high speed and everything goes bubbly, the fifth freezes all the bullies and the last one lets you shoot fireballs.

Letters sometimes crop up and if you collect six of them to form the word "extend" then you get a significant score boost, some extra lives and go to the next level. One advantage of the two player game is that you

have eight credits between you. If one player dies then he can re-enter the game by pressing a key, one credit is used each time a player does this and when all eight credits have run out the game ends.

Sound is mainly beeps of just the right frequency to irritate you enough that the sound gets turned off completely. All of the sprites, especially Bub and Bob, are pretty but they do flicker a little.

It's taken a while for this arcade conver-

Bully bashing makes bonus objects appear, the more that you kill at any one time the bigger the value of the bonuses that appear. A lot need to be destroyed in one go to make a diamond appear, but collecting it adds 32,000 to your score. If you complete a level quickly then the next level will have other bonus items on it that range in value from 5,000 to 10,000 points.

There are six magical objects that appear periodically, but they only stay on screen for a short time. One of them lets you move faster, a second fills the screen with random treasures,

The Verdict

GRAPHICS86%

- Colourful graphics with reasonable animation.
- Some flicker does spoil the graphics.

SONICS42%

- Irritating bouncing noise.

GRAB FACTOR85%

- Blowing bubbles and bursting them with a bronto headbutt is fun.
- Not a lot to think about.

STAYING POWER72%

- 100 levels of increasing difficulty.
- Levels and gameplay get distinctly repetitive.

AA RATING81%

- A good conversion that retains the addictiveness of the arcades.

sion to reach the CPC's but it's certainly been worth the wait.

GBH

FIRST DAY TARGET SCORE

Complete 15 levels.

information is very useful, especially on higher levels, because you have very little time to

SECOND OPINION

Here I have to confess that I've played the game on another machine and preferred it there. I don't normally compare machine versions, but in this case the other version had a feature which is noticeable by its absence on the CPC's - a pause mode. This may sound trivial but when the blocks are appearing at full speed there is no way of keeping up with them, or even moving them in time.

A joystick operated pause mode allows you thinking time, although the shape manoeuvring would still have to be done in real time. This omission destroys much of the games long term strategic appeal and turns it into a simple game of reflexes rather than thought. With a pause mode you can plan your moves ahead, enhancing the brain testing element. I still enjoy the game but its lifespan and addictiveness have been badly hit by one small omission.

BW

GREEN SCREEN VIEW

The pieces sometimes merge with the background on the green screen and make play difficult.

make a decision on where the shape is to be positioned. If you leave spaces between the blocks then the screen will fill up more rapidly and the end of the game will draw near. If there are spaces on screen and you complete a row above it then you may eventually get into a situation where that empty space can be filled again.

Graphics are very simple since all they are is squares linked together that fall down the screen. The shapes are colourful, but the rest of the screen has a boring design to it. There are no sound effects, but a good, if a little irritating, tune plays throughout the game. The Russian original of the game was programmed on an IBM PC and the conversion doesn't look brilliant. The presentation of the game is very amateurish to look at and it appears to be a bit of a rush job.

As far as gameplay goes it does have a certain appeal. Careful thought is needed as to where a shape should be put, because the wrong decision can quickly end your game. After a few games you begin to pick up the principles and your scores grow rapidly. The only problem that I think could arise is reaching a maximum score. On level nine the pieces fall so quickly that you often can't move the piece into the desired location and the game becomes impossible. It's a good game for a while, but you probably won't play it much

once you've reached your peak.

GBH

FIRST DAY TARGET SCORE

2,500 points

The Verdict

GRAPHICS48%

- Good use of colour.
- Overall presentation of the game is dull.

SONICS66%

- Pleasant tune plays throughout the game.

GRAB FACTOR84%

- Fitting the pieces in place is engrossing.
- The whole thing looks amateurish.

STAYING POWER66%

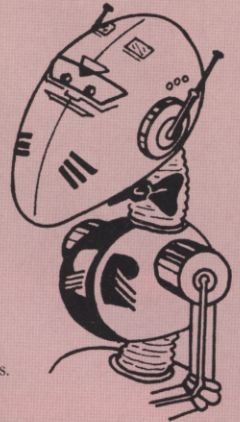
- The level of difficulty increases at the right speed to keep it challenging...
- but it becomes impossible to get further.

AA RATING72%

- An excellent concept that just has a few rough edges.

ROMANTIC ROBOT present

1988 - THE YEAR OF THE ROBOT



Q: WELL, I'VE HEARD OF THE YEARS OF THE CAT, PIG, AND EVEN DRAGON - BUT THE YEAR OF THE ROBOT?

A: Absolutely! And ROMANTIC ROBOT wish to make 1988 a truly memorable year (if not us, who will?). To kick off with, there is an **INTRODUCTORY OFFER OF £29.88 ON RODOS**, plus a truly unique 1988 **NEW YEAR MAIL ORDER PRICE OF MULTIFACE TWO - £39.88!**

Q: I LOVE SALES. BUT WHAT'S SO LIKEABLE ABOUT RODOS and MULTIFACE?

A: RODOS is too powerful and complex to be summed up here - please send a SAE for full info. MULTIFACE is (simply) a **MUST** for ANY CPC owner: it can copy and change programs as you wish.

Q: OH, DO I NEED TO DO ANY PROGRAMMING TO MAKE BACK-UPS?

A: NO! - NOT with the MULTIFACE TWO - it is in fact the **ONLY** product on the market which works **FULLY AUTOMATICALLY**. You **LOAD** any program as usual, **RUN** it for as long as you like and when you wish to make a copy you just press the MULTIFACE's red button and follow the menu and on-screen instructions.

Q: HOW DOES IT WORK THEN? IS IT EASY? USER-FRIENDLY? ERROR-TRAPPED? IDIOT PROOF? GUARANTEED?

A: YES! It works a treat and it could not be easier. The menu gives four basic options - to **SAVE** a program, to **RETURN** to continue it, to **JUMP** (say to your own routines - invaluable for hackers) and **TOOL** to access the MULTI-TOOLKIT set of built-in utilities. For example pressing **S** to **SAVE** will first allow you to **NAME** the back-up and then let you save a **PROGRAM** or just a **SCREEN** to **TAPE** or **DISK**. Before the saving itself, MULTIFACE compresses the program so that it takes the least amount of space on tape/disk and will re-load as quickly as possible. Once a program is saved, you can **RETURN** or **JUMP**, use the **TOOLKIT** to change it, **SAVE** it again, etc.

Q: DON'T YOU CORRUPT THE SCREEN WITH YOUR MENU, INSTRUCTIONS, PULL DOWN WINDOWS, ETC.?

A: NO. MULTIFACE TWO has its own memory (8K ROM & 8K RAM) and a lot more hardware - thus when it finishes its job or when you re-load your back-ups, everything is **FULLY** and **AUTOMATICALLY** restored: screen modes, colours, windows, etc. This is essential and **NO OTHER DEVICE CAN DO IT!**

Q: OK, SO MULTIFACE CAN COPY FROM TAPE TO DISC, BUT CAN IT DO TAPE TO TAPE OR DISC TO DISC OR DISC TO TAPE?

A: Of course it can. MULTIFACE saves either to tape or disc and it saves whatever happens to be in the computer at that time - no matter how you loaded it in.

Q: SO FAR SO GOOD. BUT CAN'T I DO ALL THIS WITHOUT THE MULTIFACE?

A: ABSOLUTELY NOT! First, you need a hardware device, a "magic box", to be able to stop and copy programs **AT ANY STAGE** - be it upon loading, half-way through the game, etc. Tape/disc copiers can only try to copy programs **BEFORE** they load: if there are unorthodox loaders, speedlocks, protections against copying, etc., you'll end up with a problem - but not with a back-up. Also, with MULTIFACE you can poke infinite lives, ammunition, etc. - and then **SAVE**.

Q: MULTIFACE IS NOT THE ONLY 'MAGIC BOX' ON THE MARKET - WHY SHOULD I BUY IT MORE THAN ANYTHING ELSE?

A: There are four devices on the market. Action Reply by Datal Electronics, Disc Wizard by Evesham Micros, Mirage Imager and MULTIFACE TWO. Each manufacturer would naturally argue his product is the best buy - fortunately (for you and us), MICRONET recently compared all four units and MULTIFACE TWO came out the best in literally all respects: the most successful one - 100%, the **ONLY AUTOMATIC ONE**, the **FASTEST ONE** both in **LOADING AND SAVING** time, the one taking the **LEAST ROOM** when saving - and you still get a couple of **EXTRAS**: a **RESET** button and an extensive and unique **MULTI-TOOLKIT**.

Q: MULTIFACE IS IT! THE RIGHT THING IN THE RIGHT TIME! IF ONLY IT PAID FOR ITSELF..

A: But it does! By the time you buy 8 programs on tape instead of disc, you will have saved £40 - the cost of the MULTIFACE. The money you save on further programs is all yours ... **MULTIFACE - worth every penny, saves you pounds!**

Romantic **RO**bot **D**isc **O**perating **S**ystem

Just one ROM will turn your CPC into a professional set-up: With RODOS you can attach additional disc drives - 40/80 track, single/double sided and store more than 800k per disc.

RODOS **NEW**

But RODOS is in fact much more than a fast and perfect DOS. RODOS also gives you **RANDOM ACCESS, PRINTER BUFFER, full ROM manager, SILICON DISC**, altogether 54 new bar commands, enormous power - all this and much more for £29.88 only!

multiface two

NEW YEAR MAIL ORDER SALE PRICE £ 39.88

RODOS INTRODUCTORY OFFER-ON ROM £ 29.88

The special price of £39.88 applies strictly to mail orders received with coupon below before the 31st March 1988

Tape-to-disk at the touch of a button. Ridiculous, you may say, but it works every time. *Multiface* can stop any program in its tracks and save the program from memory to either tape or disk. It's completely fool-proof. Similar products have had problems with screen size, colour and even sound: *Multiface* can handle all these without a second thought.

That alone would have satisfied many people, but Romantic Robot has gone one step further, incorporating a memory editor. No program is safe with this: everything is out in the open, including the Z80 registers, CRTC data and any part of memory.

Don't be fooled into thinking this will result in mass piracy, however. The *Multiface* unit itself must be plugged into your Amstrad to allow reloading of a program it saved.

Multiface II must be the cleverest hardware device at present - a necessity for disk owners who thought they were stuck with loading from tape every time.

AMSTRAD ACTION JANUARY 1987

THE YEAR OF THE ROBOT - BE PART OF IT

I order MULTIFACE 2 (£39.88) / RODOS (£29.88) plus p&p UK £1, Europe £2, Overseas £3

I enclose a cheque PO for £..... or debit my No Card exp.....

Name & address

CALIFORNIA GAMES

US Gold, £9.99 cass, £14.99 disk, joystick or keys

California has a reputation of being full of beach bums, starlets and all the worlds wacky people, getting sun tans and generally enjoying themselves. This sounds like a nice way to live, it beats working for a living.

The six events that you can take part in are skateboarding, footbag, surfing, roller skating, BMX bike racing and flying disk throwing. You can practice an event, do one event, do all six or select which events you want to do. One to four people can play.

Skateboarding is the first event and you have a side view of a half pipe with you in the centre on a skateboard. You score points by doing various acrobatics while moving up the slopes of the pipe.

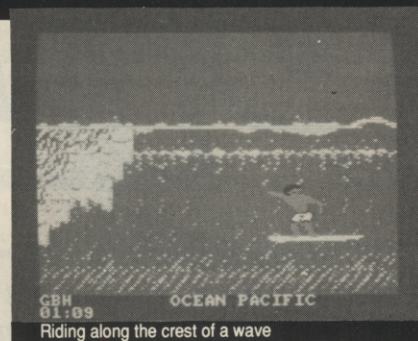
The footbag is small bag which you have to juggle with your feet. The more elaborate the move the better the score that you get. You have 75 seconds to score as high as possible.

Surfing is the next sport and here you have to manoeuvre inside a wave to make as long a run as possible. The further you get, the higher the score.

Roller skating over an obstacle course is no mean feat. It'll take some practice before you can do the course with no problems. You begin the next event sitting in the saddle of a BMX bike at the start of a course filled with obstacles. You have to cover the course in the

fastest possible time and do as many stunts as possible for points.

Finally there's the flying disk, or frisbee, throwing contest. You are standing at one end of a field with the disk in your hand. You select the angle and strength with which the disk is



thrown and then control the catcher at the other end of the field who has to catch the incoming disk to score.

There's no music in the game and the sound effects are average. The graphics are colourful, but do have a chunky appearance.

Six events that are fun to some extent, but they may lose there appeal after a short while. Initially they're too difficult, but practice takes you to the other extreme of far too easy.

GBH

FIRST DAY TARGET SCORE

20,000 points total from all six events.

GREEN SCREEN VIEW

No problems.

The Verdict

GRAPHICS54%

- Colourful graphics.
- They are chunky.

SONICS43%

- Not very stimulating.

GRAB FACTOR63%

- Up to four people can play.
- None of the events grabs your attention.

STAYING POWER56%

- Mastering all six events provides variety.
- Once mastered there's little fun to be had.

AA RATING59%

- Hasn't survived the conversion process well.

MASTERS OF THE UNIVERSE

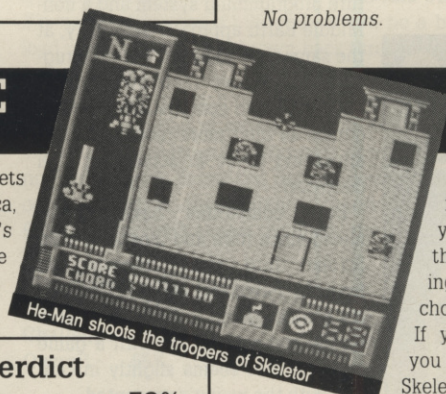
Gremlin, £9.99 cass, £14.99 disk, joystick or keys

First there was the cartoon series on TV, then there was the movie and now there's the computer game. You are the muscle bound hero as the battle between good and evil comes to Earth.

The Key to time travel has inadvertently made its way to Earth and Skeletor has followed so that he can use the Key to become Master of the Universe. He-Man would much rather be the Master of the Universe and so he to has journeyed to Earth. Skeletor has brought Evil Lyn, his powerful ally, and a horde of troopers with him to ensure that he gains the Key. He-Man on the other hand has only brought his two friends Teela and Gwildor with him. Together they must stop Skeletor.

There are in fact five games rolled into

one with this: the streets of modern day America, the scrapyard, Charlie's shop, the disk battle and the final confronta-



tion. The streets are filled with troopers who you must dispatch with the aid of a gun while looking around for the eight chords that make up the key.

If you enter the scrapyard you have to fight two of Skeletor's best men in a simple combat game. When you've killed both you receive a chord.

In Charlie's shop you play a *Prohibition* type game where you have to shoot 70 of Skeletor's men. You're then given another chord. The third game is a shoot-em-up where you fly around on a disk shooting Skeletor's men until you're greeted with a message that tells you Teela and Gwildor have been captured by Skeletor. Finally you must confront Skeletor himself in a battle that will seal the fate of the universe.

Sound is poor with only tinny effects and no tunes. The graphics in the streets are small and chunky, the scrapyard graphics are badly animated and incredibly slow.

Playing this game does get tedious, you just wander around trying to find pieces of chord and killing Skeletor's troops. Having to think occasionally would have been nice rather than just the mindless slaughter. **GBH**

FIRST DAY TARGET SCORE

10,000 points

The Verdict

GRAPHICS53%

- Smooth four way scrolling of the street scenes.
- Small and poorly animated graphics.

SONICS24%

- Appalling sound effects - don't pause the game when a sound's being produced.

GRAB FACTOR47%

- Not much to do around town.
- Confusing how north is not always straight up. It disorients you.

STAYING POWER39%

- Different sub-games provide some variety.
- Not much to keep your mind occupied.

AA RATING42%

- Disappointing game that lacks the necessary fun element or difficulty level.

SECOND OPINION

*I played this one quite diligently through all the sequences, finding them too simple to activate brain cells or adrenalin. Having finished the disk sequence I had a very dull exchange of words with Skeletor, followed by a choice: 1 Come quietly, 2 Stand and fight. What would you do? I expect the same as me, which is to stand and fight - result, Game Over. It's enough to make you buy Out Run - well maybe not. **BW***

GREEN SCREEN VIEW

Skeletor's men are difficult to spot in green.

THE PILGRIM

Welcome! The Pilg Pages don't just get a new look, they also get a detailed preview of Magnetic Scrolls' *Jinxter*, a review of Sandra Sharkey's *Shymer*, news of Level 9's new image, and the latest hot gossip. If you're on the straight and narrow path, now's the time to take a rest with the Cowled Crusader, and catch up on what's going on...

Jinxter

Magnetic Scrolls/Rainbird, £19.95 disk only

Magnetic Scrolls are the blue-eyed boys and girls of the adventure scene in Britain these days. They came on to the market with a strong adventure programming system and a non-Middle Earth approach to fantasy, at the same time as Level 9 were struggling to improve their own system and, with two compilations of older games as their more recent product, appearing to be in something of a dead-end.

Both companies have moved ahead since then and *Jinxter* is Magnetic Scrolls' third game, following on from the *Pawn* and *Guild of Thieves*. It's a tricky game to evaluate - technically competent, but with a game scenario that seems slightly in conflict with the way it's presented.

Guild of Thieves was successful largely because of its simple plot - get as much treasure as you can - whereas the *Pawn* lost support with some players (and gained it with others) because of its rather enigmatic storyline and quirky sense of humour. *Jinxter* appears to be a mixture of the two - the task is very straightforward, but throughout the game there are intrusions of typical Magnetic Scrolls quirkiness. The company obviously think this gives

everyone the best of both worlds, but of course it depends on your taste...

Simplicity

On the bottom level, there's a simple storyline - the Bracelet of Turani has gone missing, together with the five magic charms that were originally attached to it. Because of this, the power of the Green Witches of Aquitania, previously held in check by the bracelet, has been allowed to grow to the detriment of life, the universe, and everything. Your task is to find the charms, reassemble the Bracelet, and kill the arch-baddie, Jannedor the Witch.

Sounds simple enough, but around this Magnetic Scrolls have built a very complex, quirky scenario. First, the Green Witches are draining the luck from Aquitania, so everyone is suffering from severe and repeated doses of ill-fortune. Second, there are a bunch of Guardians - members of ARSE, the Association of Registered Stochastic Executives - whose job is

The Magnetic Scrolls Parser

Both Level 9 and Magnetic Scrolls have been busy updating their parsers over the past couple of years. Here's what the authors of *Jinxter* offer you:

Complex containers - you can put bottles containing milk in cases, or even the beer in the blue bottle into the green bottle.

GO THROUGH, ENTER, LEAVE, SIT DOWN, SIT ON, GET OFF
Relative positions - in, on, under, behind...

Ultra-complex commands - GO SOUTHEAST AND GET THE HARMONICA AND THE BOTTLE THEN GET THE KNIFE THAT IS ON THE TABLE AND USE THE KNIFE TO CUT THE SANDWICH

Use of pronouns - IT, THEM etc. You can check what a particular pronoun is currently referring to by typing PN or PRONOUNS.

AGAIN repeats the last command.

Z waits - other abbreviations include L, I, and DR...

SCORE tells you how lucky you are, and what your score is out of 205.

Communication with other characters, as in ASK LEN ABOUT THE SANDWICH.

8 directions plus UP, DOWN, and IN

Effectively this puts Mag Scrolls on a par with Infocom. Level 9 have stronger character handling facilities in their parser but lose out to Mag Scrolls on the relative position front and the use of ultra-complex commands including pronouns. Don't forget, however, that what really determines the success of a game is the design of the story-line, not the power of the parser. Unless you can really weld the strengths of your parser to the ingenuity of your scenario, your going to expend a lot of programming effort for nothing. A good example of this is Level 9's game *Knight Orc*, which has dozens of independent characters, who can do almost anything the player can, but who can often be simply a pain in the neck!

to protect adventurers like yourself from sudden death.

These Guardians form the core of the humour throughout the game. Although Immortals, they eat cheese sandwiches, have pot-bellies, drink Old Moose Bolter beer, and constantly use the words "narmean", "woss-name", and "werl". They are all called Len, and you can read about their moans and groans in the copy of the Independent Guardian that comes with the game.

The real function of the Guardians (as mentioned in the Pilg Preview a couple of issues back) is to extricate the novice player from difficult situations where he/she would otherwise lose a life and have to start again. This is an excellent idea because it enables a player to explore the game thoroughly, effectively by-passing some of the more difficult puzzles. Of



course, to get maximum score you have to solve them properly, but the Guardian is always there to rescue you from a tight spot.

Unfortunately I didn't find myself laughing much at the Guardian style of humour. The fact that ARSE was incorporated during the reign of King Willy the Bit Childish didn't have me reeling with hysterical laughter, nor did the rest of the Independent Guardian newspaper. This shouldn't matter at all, but I felt that the tone of the humour overshadowed the game itself.

In Play

There's no doubt, however, that it's a stunning adventure from the programming point of view. Practically every object has a witty and enlightening description, whether it's needed in the game or not. There are several different ways to solve some of the puzzles (one or two of which are very difficult indeed) and there is a wide range of locations, from a train station, to a fairground, to an under-water stronghold. Moving about the game is a constant pleasure of discovery as you find different uses for the many objects you discover.

What's more, there's an element of magic (for the first time in a Magnetic Scrolls game). Each charm has a corresponding spell which, if you have the charm, you can cast on objects to aid you in your progress. The five spells available enable you to freeze and animate objects; make them come back to you if lost or dropped; summon rain, and make the sun come out. You'll need to use each charm at least once to complete the game.

Magnetic Scrolls' games score, in my opinion, when compared to Level 9 first in the amount of attention they pay to the description of objects and people and secondly in their use of relative positions. This means that you can not only examine the table, but you can also look under it, on it, or even behind it. All this helps to build up atmosphere, making progress enjoyable as well as challenging.

Jinxter is an excellent game, but somewhat overclouded by a forced sense of humour that weakens the overall impact of the package. It's not too difficult to complete if you take the simplest solution each time and rely on the Guardian to get you out of trouble, but for the experienced player there's a lot to do and one or two very tricky puzzles indeed.

Atmosphere	85
Challenge	87
Interaction	90
Overall	88

Shymer

Sandra Sharkey, 78 Merton Road, Wigan, WN3 6AT £1.99

Sandra Sharkey edits the monthly magazine *Adventure Probe*, so she must have seen quite a few games in her time. The Pilg was intrigued, therefore, to see how she herself would put together an adventure. The Case of the Mixed Up Shymer (to give it its full title) gave me just that opportunity.

People keep claiming that do-it-yourself adventure kits like PAW, GAC, and *The Quill* open up the market to everyone who wishes to pro-

duce adventures. It's easy to exaggerate this possibility - after all, everyone nowadays can get access to a pen and paper, but that doesn't necessarily mean that everyone can write a book. You need time, patience, and dedication. And it certainly doesn't mean that everyone can write a GOOD book...The same applies to adventures, but at least now those few (and they are few) geniuses for adventure design need no longer be held back by lack of programming talent.

Shymer is a text-only game programmed using GAC. That in itself is a surprise but is, Sandra tells me, due simply to the memory limitations of GAC. As a personal preference she also believes that "not having graphics does not detract from the game". There's been endless debate over this point in every adventure column the Pilg has had the pleasure to edit over the past four years. My own view is that there is no doubt that there is a role for graphics in adventures, but that role must be created by the game itself - you can't just tack on pictures and assume they will enhance the adventure, something a lot of GAC programmers do simply because the program makes it so easy.

Sandra's game is highly original in some respects, and very traditional in others. The Island of Nersree is populated by numerous characters drawn from the world of nursery rhyme, but the role of each has become distorted and must be corrected by the player. For example, Little Bo Peep has FOUND her sheep, and Humpty Dumpty delights in chucking himself off walls all the time. You must put the world to rights, of course, and restore the illogical sense of the nursery rhyme in every case.

During play there are numerous appearances by the characters, all highly original. Little Bo Peep keeps yelling "Get lost" at her sheep, Old King Cole runs backward and forward stinking of alcohol, Little Tommy Thin dumps your cat, Dok Wat Son (Doctor Watson - geddit?) down a well, and Little Miss Muffet...well, let's face it, this is probably the only adventure in which you're likely to find a tuffet.

The trouble these days is that a huge gap has arisen between state-of-the-art games with stunning graphics, complex parsers, and interactive characters at one end of the scale (the £19.95 end) and games like *Shymer* at the other (£1.99 end). It can be a bit of depressing shock to load up a game and be thrown back three years into a world where most inputs require only two words, responses are frequently dismissive and unhelpful, and location descriptions are limited to one sentence, a list of exits, and mention of visible objects. But where such a game, however simple in its construction, succeeds in introducing an original theme, has no glaring bugs, is not too easy to complete, and manages to raise the occasional smile, then surely it deserves an audience. *Shymer* is only £1.99 - if you don't expect too much, then you won't be disappointed.

Atmosphere	55%
Interaction	53%
Challenge	65%
Overall	65%

Clue Sniffing with the Pilgrim

Here are this month's assortment of timely tips, courtesy of Rod Dunlop, Norm "the Fish" Rodgers, Emma Heggie, David Couldwell, Nicholas Heard, Robert Green, James Tarrant, and of course the Pilg himself.

Gnome Ranger

Accept Cap's offer of a free gift, but don't deliver the letter - go outside and read it.

The eagle will open the kennel for you, without you having to enter the witch's compound.

The dogs can track down the unicorn - make sure the gnymp is with you when you encounter it.

Guild of Thieves

Bet on the grey rat with the note.



The top of the cliff. West is a wall which looks climbable. A farm lies to the north and a road leads east. A path leads down to the beach far below. You notice Humpty Dumpty

You rub your eyes in disbelief as a spoon runs by hotly pursued by a dish.

>say to humpty "hello"

He's sitting on the wall chuckling to himself. "Watch this," he says.

Without further ado he throws himself backwards over the wall.

A smirking Humpty re-appears to sit back on the wall. "I can fall off whenever I like now - and I never get hurt!"

>■

Go to the hot house to kill the snake.
 Reflect the beam at the wax with the mirror and catch the gem.
 Down the rats in the wine cellar by getting the pipe and opening the stopcock.

Runestone

To open any chest, describe the type of chest it is. EG Morval opens the wooden chest.
 The crowbar is in the toolroom, south of the crypt.

Fantasia Diamond

In the cottage, only the robot is capable of opening the manhole.
 In the chest in the Dingy Cellar there is a glass and some wine. Drink wine and rub the glass.

Forest at Worlds End

Put log on chasm to cross.
 Blow horn at precipice.
 Wear ring before entering witch's hovel.
 At the rock wall, touch rock before going east.

Rigel's Revenge

At the first location, FIND GOGGLES.

Haunted House

Kill Frankenstein with the spanner, and the adder with the subtractor fluid.

Venom

To get past the guard, tell him to drop his sword, then grab it.

Leather Goddesses of Phobos

The riddle is the answer to the riddle!
 Use the trellis, the leaves, and the tree-hole to trap the fly-trap.

Chocolate gives you strength.

The Hobbit

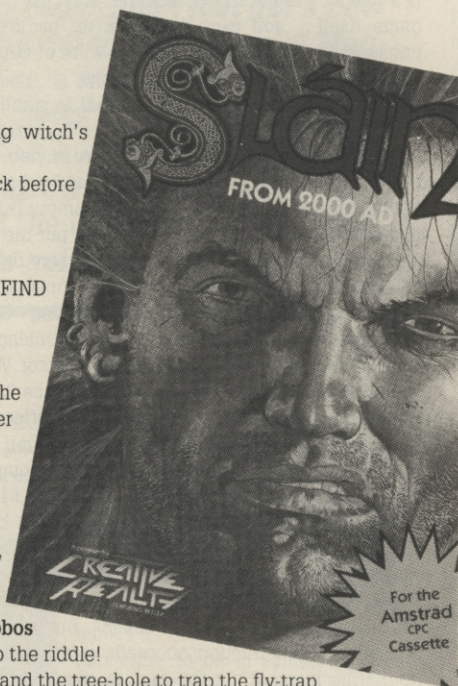
It's been some time since we printed tips for this antique - but correspondence shows that there are still some people stuck out there in the Goblin's Dungeon.
 In the forest, wait twice in each location to avoid being stung.
 Kill the warg with the sword.
 To get out of the goblin's dungeon, first dig sand, then break trap (possibly several times before it gives way), get key, then tell Thorin to open window, carry you, and go west...

Frankenstein

C.Mason has written in and is having trouble with the Bear. I think the solution here is to go up in the world...

Slaine

To get the fire element, remove the eye from the phoenix with the dagger. Put the eye in the furnace, get Ukko to pump the bellow and kill the demon that will appear. Remove the eye from the furnace with the tongs and cool it in the bucket. The eye has now become the fire element.



Lords and Ladies of Adventure

Here once again is the definitive list of those willing and able to give you all the help you need with the games they've completed themselves.

You can reserve a place for yourself in this column you've completed a game (or, even better, games) and are prepared to offer a helping hand to others. You can have a lot fun doing so, and make many friends in the

Rod and Staff Monthly

A Newsletter for Wanderers

Edited by the Pilgrim. Price: Free to all Followers of the Straight and Narrow Path

Activision Still Say No

A special presentation was made at the AA offices the other day. The Pilgrim duly handed a pile of mail to Clare Hirsch of Activision - letters received from readers of this column, begging Activision to resume publication of Infocom titles for the Amstrad CPC range.
 Clare is well aware of the feeling amongst Amstrad owners, but the sad truth is that the sales in this quarter simply do not justify the company continuing to market the titles. Negotiations are continuing, however, so we may be able to make an announcement on this subject in a future issue. Don't give up hope yet!
 There were a number of anonymous pleas, but amongst the rest were letters of protest from:
 Joe Florek, C Wilson, Robert Smith, Ian Houghton, Paul Langton, Antony Preedy, Jaehee Lee, Kath Ager, Carl Moon, Jane Davey, Gavin Manning, J. Fox-Green, J. McPhail, and Daniel Gibson. Many thanks to all of you who wrote in.

Level 9 Go Mandarin

Level 9 have finally severed their link with Rainbird Software and signed up with new software distribution label, Mandarin. The new company has been formed by Europress International, owners of Database Software (publishers of Mini Office).
 There has been some tension between Level 9 and Rainbird in the past over delays to release schedules. *Time and Magic* was due to be released last year, but the administrative overheads inherent in the relationship between the two companies meant that the title has still not been released.
Time and Magic will now be released by Mandarin and will be followed by *Lancelot*, Level 9's latest project based on the Arthurian legend.

Pilg Programming Offer!

Next month sees the resumption of THE series on programming adventures on your CPC. Because we've had to interrupt this series so frequently due to lack of space, we've come up with a special offer for Pilg readers - if you've missed previous instalments, you can get a photocopy of them all, to help provide a continuous guide to programming your own game. Write to the Pilg at AA, enclosing a large self-addressed envelope containing stamps to the value of 50p to cover photocopying costs and postage. Please DON'T stick the stamps to the envelope. The copies will be sent to you post-haste.

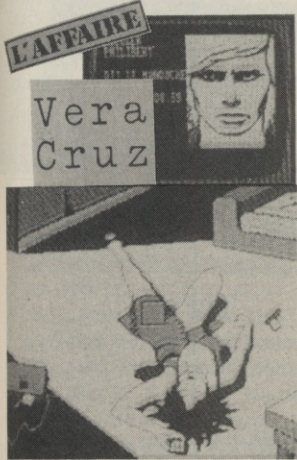
Probe Price Increase

Adventure Probe - the popular little A5 adventuring magazine put together by Sandra Sharkey - has had to raise its price to £1.25, but Sandra has written in to tell me that the support from readers has been "...overwhelming. Not one complaint!"
 Probe is published every month - you can find out more by contacting Sandra at 78 Merton Road, Wigan, WN3 6AT.

process.

"Christmas brought me an inundation of pleas for help," writes Rod Dunlop, "although my last entry as a Lord of Adventure was a while ago. Please can you reiterate the need for a SAE - sometimes people don't even include their address. I received a plea from a Greek lady, which I would have been happy to reply to, but she included no SAE and made no mention of her address..."

So, you get the message -



no SAE, no reply, even if you live in Greece (in which case you can include an International Reply Coupon - as can anyone writing in from abroad). And don't forget, if you're telephoning make sure you do so during sociable hours - not after 10pm or before 9.30am.

One last word...Joan Pancott of Lords and Ladies fame (see her long list of games below) has written in to tell me that many readers are now

writing in with requests for help with a game, without indicating where they are stuck. This in effect amounts to a request either for no help at all, or for a complete solution - which is not what the Lords and Ladies are there for. Please be specific when requesting assistance.

Mindshadow, Never Ending Story, Espionage Island, The Hobbit, Heroes of Karn, Message from Andromeda, Return to Eden, Price of Magic, Gnome Ranger (part 1), Morden's Quest, Bored of the Rings, Boggit, Haunted House, The Mural, Leather Goddesses of Phobos.

Rod Dunlop, Durrisdeer, 43 Sutherland Avenue, Pollokshields, Glasgow, G41 4ET.

Adventure Quest, Apache Gold, Arnold Goes to Somewhere Else, boggit, Bored of the Rings, Brawn Free, Castle Blackstar, Castle of Skull Lord, Classic Adventure, Colossal Adventure, Crystal Theft, Dodgy Geezers, Dracula, Dungeon Adventure, Dungeons Amethysts Alchemists 'n' Everything, emerald Isle, Enchanter, Erik the Viking, Escape from Khosima, Espionage Island, Fantasia Diamond, Forest at Worlds End, Heavy on the Magick, Heroes of Karn, Hitchhikers Guide to the Galaxy, Hobbit, Imagination, Inca Curse, Jewels of Babylon, Kentilla, Lords of Time, Message from Andromeda, Mindshadow, Morden's Quest, Necris Dome, Never Ending Story, Price of Magic, Project Volcano, Qor, Questprobe III, Red Moon, Return to Eden, Seabase Delta, Seas of Blood, Smugglers Cove, Snowball, Souls of Darkon, Spytrek, Subunk, Sydney Affair, Terrormolinos, The Case of the Mixed-Up Shymer, The Trial of Arnold Blackwood, Vera Cruz Affair, Very Big Cave Adventure, Warlord, Wise and Fool of Blackwood, Worm in Paradise, Zork 1

Joan Pancott, 0305 784155 any day Noon to 10pm.

Return to Eden, plus limited help on Snowball.

Chris Street, 43 Ridgedale Road, Bolsover, Chesterfield, Derbyshire, S44

Pilgrim Post

Not fair?

Dear Pilg,

I am very angry about Activision's decision not to release future new Infocom titles for the CPC and PCW.

The reason that Amstrad sales of Infocom games aren't growing so rapidly is because the owners of the 16 bit machines are completely different group compared to 8 bit users. They have no cheap titles from, let's say, Delta 4, Mastertronic, Ocean, Hewson etc. Most adventures for the 16 bit market are from Infocom, Magnetic Scrolls, and Level 9 and the prices are high - at least £18 up to £30. There are some games from smaller companies, but they are rarely much cheaper.

This means that 16 bit owners buy more Infocom games simply because their choices are more limited! We Amstrad owners have the choice of good and cheap titles (like *The Boggit*, *Very Big Cave Adventure*, etc.) as well as expensive and superb adventures from Infocom, Magnetic Scrolls, and Level 9 - we simply have more choice!

The main reason that the Amstrad sales of Infocom games aren't exactly breaking world records is simple: we also buy games from many different companies!

Most 8 bit owners are young people who can't afford to buy an

adventure very week or month with a price tag of over £20, while most 16 bit owners are older, so their wallets are also thicker! Because of these natural sales facts, Activision is about to limit our choice. It isn't fair. Do you and other adventure addicts agree with me?

Jaehee Lee, The Netherlands

Yes, Jaehee, I do agree with you. But unfortunately your letter spells out several very sound commercial reasons for Activision NOT to support the 8-bit Amstrad machines. The sad truth is that life (to coin a cliché) just isn't fair. I would love to run the new Infocom games on my Amstrad, and I would also like to drive a Ferrari. Unfortunately, it doesn't look as if I'll be doing either....

Contact the Pilg!

Why not write to the Pilg? He's a cheery chap, always on the look-out for an envelope with his name on, and he will always answer letters in this column if space permits. You can write on any subject related to adventures, from fantasy role-playing to comics, and be sure of a wide audience if your letter is printed.

So don't be shy - start a debate that the rest of the world can join in! You can write to **The Pilgrim, c/o Amstrad Action, 4 Queen Street, Bath, BA1 1EJ**, or mailbox me via Telecom Gold on 84:TXT152, putting "Pilgrim" on the subject line. I look forward to hearing from YOU, so get scribbling.

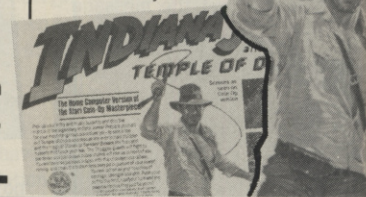


CHEAT MODE

Dick'n'Gary check out your tips, pokes and game-busting ploys. The best ones win an entire issue's *Raves* and the *Mastergame*. Send your latest gem to: Cheat Mode, *Amstrad Action*, 4 Queen Street, Bath BA1 1EJ

Indiana Jones and the Temple of Doom

Peter Clarke of Wootton Bassett has sent in a quick tip for US Gold's game. If you want to go to the next level just press "3" on the main keyboard.



POKE METHODS FOR TAPE

Here is how to input the majority of Cheat Mode tape pokes. The instructions for each poke tell you which of the two different methods to use. If you have a 664 or 6128, first type | tape.

METHOD 1

Rewind the game tape to the beginning. Now type in the poke listing. Then type RUN and press the Enter key. (Don't use the key marked CTRL or Control; that would stop the poke from working.) Press the Play key on the cassette deck, then any key on the main keyboard - spacebar will do nicely. The tape should now start to play through in the normal way.

METHOD 2

For this method you have to skip the first bit of the game program. To do that, start by rewinding the game tape to the beginning. Now type in the listing. Then type CAT and press Enter. Start the tape by pressing Play and then any key. Then watch the screen.

Soon you'll get the message Found *something* Block 1. It doesn't matter what the *something* actually is; this will vary from one game to another. If the Cheat Mode instructions just tell you to skip the first block, you should stop the tape here.

If the instructions tell you to skip several things, stop the tape when the Found message comes up for the last thing you're trying to skip.

Once you've stopped the tape, press Escape, type RUN and press Enter. Now press Play on the tapedeck and any key on the keyboard to start the tape running

Super Hang-on

Regular hacker Phil Howard of Mapperley has sent in this poke for the motorbike racing game. It is entered using Method 1 and gives you more time to complete the stages.

```
1 ' Super Hang-on - tape
2 ' by Phil Howard
3 ' Amstrad Action March 88
10 DATA 00,21,10,32,11,43
20 DATA 02,23,7e,fe,00,28
30 DATA fa,e5,19,22,38,be
40 DATA 2a,0f,bc,22,1d,bd
50 DATA 21,0e,bc,36,c3,23
60 DATA 36,25,23,36,be,e1
70 DATA e9,3e,01,cd,1c,bd
80 DATA 3a,00,be,3c,32,00
90 DATA be,fe,02,c0,21,3b
```

```
100 DATA be,22,5a,34,c9,dd
110 DATA 21,5b,aa,11,00,01
120 DATA cd,ea,a9,21,4e,be
130 DATA 22,28,ab,c3,85,aa
140 DATA 21,00,01,23,7e,fe
150 DATA 3e,20,fa,23,7e,fe
160 DATA 05,20,fa,23,7e,fe
170 DATA 32,20,ee,2b,36,09
180 DATA c3,00,01,82,71,66
190 MODE 1:y=0:MEMORY &30000
200 FOR x=&BE00 TO &BE68
210 READ a$:a=VAL("&"+"a$")
220 POKE x,a:y=y+a:NEXT
230 IF y<&2787 THEN 250
240 LOAD"":CALL
&BE00
250 PRINT"Data
error"
260 END
```

Budget Disks Poke Special

Firebird have put some of their older games on budget disk compilations containing two games each. The cassette pokes won't work on the disks and so we've modified some of the pokes so that you can cheat.

Mission Genocide

Infinite lives and invulnerability are now yours in the disk version of Firebird's budget game.

```
1 ' Miss Genocide - disk
2 ' Amstrad Action March 88
10 DATA 21,A0,BE,11,40,00
20 DATA 06,0C,CD,77,BC,21
30 DATA 40,00,CD,83,BC,CD
40 DATA 7A,BC,AF,32,C7,A0
50 DATA 3E,C9,32,B2,A0,C3
60 DATA 00,80,47,45,4E,4F
70 DATA 43,49,44,45,2E,42
80 DATA 49,4E,82,71,66
90 FOR n=0 TO 43
100 READ a$
110 POKE
&be80+n,VAL("&"+"a$")
120 NEXT
130 CALL &be80
140 END
```

Bomb scare

Running out of power in this arcade adventure? That won't happen anymore with this poke for the disk version.

```
1 ' Bomb scare - disk
2 ' Amstrad Action March 88
10 MEMORY &270F
20 LOAD"bomb.bin",&2710
30 POKE &9969,0
40 CALL &a1b5
50 END
```

Thrust II

Infinite lives on the disk version of Firebird's budget title.

```
1 ' Thrust II - disk
2 ' Amstrad Action March 88
10 MEMORY &153f
20 LOAD"thrustii.bin",&1540
30 POKE &26bb,0
40 CALL 9000
50 END
```

Thrust

No more running out of lives in this on the disk version.

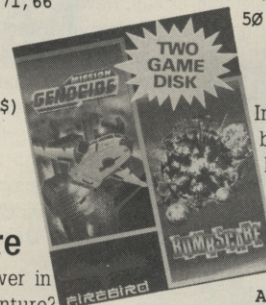
```
1 ' Thrust - disk
2 ' Amstrad Action March 88
10 MEMORY &270F
20 LOAD"thrust.bin",&4000
30 POKE &4347,&c3
40 CALL &7000
50 END
```

Parabola

Infinite lives in Firebird's budget game of bouncing.

```
1 ' Parabola - disk
2 ' Amstrad
Action March 88
```

```
10 MEMORY &3000
20 LOAD"parabola.bin"
30 POKE &8514,0
40 CALL &9979
50 END
```



Driller

Tony Hoyle of St. Annes has sent in this poke for Incentive's Mastergame. Not only can you have infinite lives and shields, but you can position rigs while inside the jet and even begin the game inside the jet. Enter it using method one and answer the questions that appear.

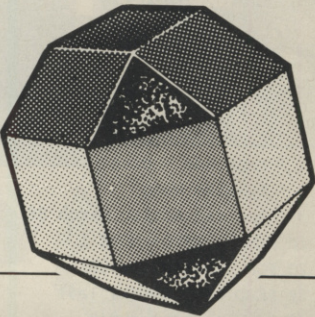
```
1 'Driller - tape
2 'by Tony Hoyle
3 'Amstrad Action March 88
10 DATA DD,7E,00,32,E5,BE
20 DATA 2A,38,BD,22,E3,BE
30 DATA 21,FF,3F,22,38,BD
40 DATA 21,9B,BE,22,01,40
50 DATA C3,05,40,AF,32,E6
60 DATA AC,21,AD,BE,22,4B
70 DATA AC,2A,E3,BE,7C,E6
80 DATA 3F,67,E9,21,E5,BE
90 DATA CB,46,28,0D,AF,32
100 DATA B0,68,32,55,67,32
110 DATA F4,6B,32,87,6D,CB
120 DATA 4E,28,19,3E,18,32
130 DATA B8,6B,32,54,6D,3E
```

```
140 DATA 01,32,B9,6B,32,55
150 DATA 6D,CB,56,C8,3E,18
160 DATA 32,FE,53,3E,01,32
170 DATA FF,53,C9,D4,CD,C8
175 DATA 82,71,66
180 FOR n=&BE80 TO &BEE2
190 READ a$
200 POKE n,VAL("&" + a$)
210 NEXT
220 x=0
230 s$="Infinite shields and energy"
240 GOSUB 340
250 IF a THEN x=x OR 1
260 s$="Place drills while in jet"
270 GOSUB 340
280 IF a THEN x=x OR 2
290 s$="Start game inside jet"
300 GOSUB 340
310 IF a THEN x=x OR 4
320 LOAD"
330 CALL &BE80,x
340 CLS
350 PRINT s$
360 a$=LOWER$(INKEY$)
370 IF a$="y" THEN
```

```
a=1:RETURN
380 IF a$="n" THEN a=0:RETURN
390 GOTO 360
400 END
```

Tony Hoyle's poke has been adapted to run on the disk version. It does exactly the same thing.

```
1 'Driller - disk
2 'Amstrad Action March 88
10 DATA DD,7E,00,32,D4,BE
20 DATA 11,00,00,0E,41,21
30 DATA 00,01,DF,D5,BE,21
40 DATA 9A,BE,22,3D,02,C3
50 DATA 00,01,3A,D4,BE,5F
60 DATA CB,43,28,0D,AF,32
70 DATA B0,68,32,55,67,32
80 DATA F4,6B,32,87,6D,CB
90 DATA 4B,28,10,3E,18,32
100 DATA B8,6B,32,54,6D,3E
110 DATA 01,32,B9,6B,32,55
120 DATA 6D,CB,53,28,0A,3E
130 DATA 18,32,FE,53,3E,01
140 DATA 32,FF,53,C3,9F,48
150 DATA 00,3C,C0,07,82,71
155 DATA 66
160 FOR n=&BE80 TO &BED7
170 READ a$
180 POKE n,VAL("&" + a$)
190 NEXT
200 x=0
210 s$="Infinite shields and energy"
220 GOSUB 330
230 IF a THEN x=x OR 1
240 s$="Place drills while in jet"
250 GOSUB 330
260 IF a THEN x=x OR 2
270 s$="Start game inside
```



Anyone can make a mistake...or six!

A small error crept into last months poke for *Combat School*. Replace line 30 with the one below and the poke will then work correctly.

```
30 DATA 23,36,15,23,36,be
```

Also in last months issue the *Gauntlet* tape poke had two mistakes in it, one in line 70 and one in line 40. They should have been:

```
40 IF a$="xx" THEN GOTO 80
70 x=x+1:GOTO 30
```

The poke for *Lightforce* in issue 28 had a case of disappearing letters in line 250 it should have been.

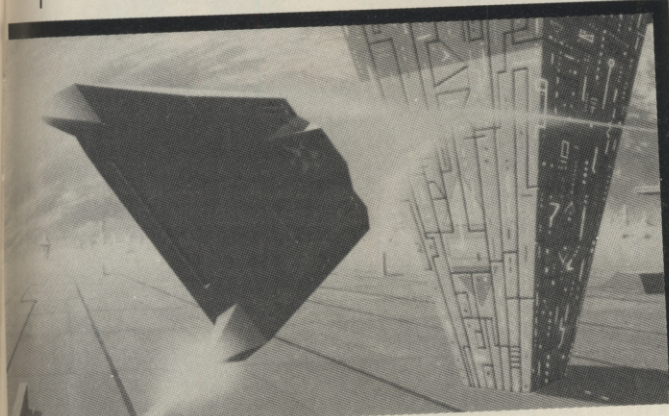
```
250 DATA a9,01,ec,8c,ed
```

In issue 26 there was a poke for *Aliens*. The GOTO's in line 570 and 580 should have been GOTO 550 in both cases instead of GOTO 530.

The *Commando* poke in issue 27 had an error in line 90. It should have been:

```
90 FOR a=&9000 to &9013
```

Finally an apology to **Phil Howard**, who should have been credited with the Dan Dare poke in the last issue, which was part of the Classic Collection.



The Duct

Unfortunately the pokes for the Christmas Cover Cassette and keyboard control wouldn't work together. Now you can have both, on the tape and disk versions of the program. The tape poke is entered using Method 1.

```
1 ' The Duct - tape
2 ' Amstrad Action March 88
10 DATA 21,00,00,11,00,80
20 DATA 06,00,CD,77,BC,21
30 DATA 00,80,CD,83,BC,CD
40 DATA 7A,BC,3E,01,CD,0E
50 DATA BC,3E,2C,21,00,C0
60 DATA 11,00,40,3E,2C,CD
70 DATA A1,BC,3E,2C,11,87
80 DATA 9C,21,00,01,CD,A1
90 DATA BC,3E,01,32,1E,9B
100 DATA 3C,32,18,9B,3E,7F
110 DATA 32,1B,9B,32,21,9B
120 DATA 32,0F,9B,3E,FF,32
130 DATA 0C,9B,3E,9A,32,0D
140 DATA 9B,32,25,9B,3E,FC
```

```
150 DATA 32,24,9B,3E,57,32
160 DATA 27,9B,21,A6,00,ED
170 DATA 63,D7,53,C3,A5,52
180 DATA CD,32,56,3E,FF,32
190 DATA CD,60,C9,9C,82,71
195 DATA 66
200 FOR n=&40 TO &AE
210 READ a$
220 POKE n,VAL("&" + a$)
230 NEXT
240 CALL &40
250 END
```

```
1 ' The Duct - disk
2 ' Amstrad Action March 88
10 FOR n=&BE80 TO &BE91
20 READ a$:a=VAL("&" + a$)
30 POKE n,a
40 NEXT
50 DATA CD,32,56,3E,FF,32
60 DATA CD,60,C9,21,80,BE
70 DATA 22,D7,53,C3,A5,52
80 FOR n=&40 TO &C2
90 READ a$:a=VAL("&" + a$)
100 POKE n,a
110 NEXT
```

```
120 CALL &40
130 DATA 21,46,00,CD,16,BD
140 DATA CD,CB,BC,3E,01,CD
150 DATA 0E,BC,21,AB,00,11
160 DATA 00,C0,06,0C,CD,77
170 DATA BC,21,00,C0,CD,83
180 DATA BC,CD,7A,BC,21,B7
190 DATA 00,11,00,C0,06,0C
200 DATA CD,77,BC,21,00,01
210 DATA CD,83,BC,CD,7A,BC
220 DATA 3E,01,32,1E,9B,3C
230 DATA 32,18,9B,3E,7F,32
240 DATA 1B,9B,32,21,9B,32
250 DATA 0F,9B,3E,FF,32,0C
260 DATA 9B,3E,9A,32,0D,9B
270 DATA 32,25,9B,3E,FC,32
280 DATA 24,9B,3E,57,32,27
290 DATA 9B,21,A6,00,ED,63
300 DATA D7,53,C3,89,BE,44
310 DATA 55,43,54,53,43,52
320 DATA 4E,2E,42,49,4E,44
330 DATA 55,43,54,43,4F,44
340 DATA 45,2E,42,49,4E,00
350 DATA 82,71,66
360 END
```

RENEGADE

Mike Wong of Sale has sent in a poke for the disk version of Imagine's Rave game. It gives you either infinite lives or a choice of 1-255.



```

1 ' Renegade - disk
2 ' by Mike Wong
3 ' Amstrad Action March 88
10 MEMORY &3ED9:MODE 1
20 FOR n=&8E80 TO &8EE1
30 READ a$:p=VAL("&"+a$)
40 POKE n,p:sum=sum+p
50 NEXT:IF sum<>9171 THEN
150
60 INPUT"Infinite lives
(y/n)":a$
70 IF a$="n" THEN POKE
&8ED6,&3D
80 IF a$="y" THEN POKE
&8EDB,3:GOTO 110
90 INPUT"How many lives (1-
255)":a
100 POKE &8EDB,a
110 PRINT"INSERT RENEGADE
DISC"
120 PRINT"THEN PRESS A
KEY..."
130 CALL &BB18:LOAD"DISC"
140 CALL &8E80
150 PRINT"ERROR":STOP
160 DATA 3e,c3,21,8e
170 DATA 8e,32,1d,3f
180 DATA 22,1e,3f,c3
190 DATA da,3e,21,4b
200 DATA 00,36,75,21
210 DATA 4e,00,36,02
220 DATA f3,f1,c9,21
230 DATA 0b,a8,36,a8
240 DATA 21,0e,a8,36
250 DATA 2e,21,2e,a8
260 DATA 11,2e,68,01
270 DATA 26,00,ed,b0
280 DATA 3e,68,32,47
290 DATA 68,32,4b,68
300 DATA 32,53,68,3e
310 DATA c9,32,54,68
320 DATA cd,2e,68,21
330 DATA d5,8e,22,f3
340 DATA a8,21,7a,a8
350 DATA af,77,23,77
360 DATA 23,77,c3,54
370 DATA a8,3e,a7,32
380 DATA 22,0a,3e,ff
390 DATA 32,e1,0f,c3
400 DATA 40,00
410 END
    
```

Boy Racer

Joseph Garner of Holmes Chapel has sent in this poke for Alligata's racing game. It is entered using Method 1. Follow the on screen prompts to run it.

```

1 ' Boy Racer - tape
2 ' by J.P. Garner
3 ' Amstrad Action
March 88
10 MEMORY 12299:LOAD
"!game"
20 INK 1,15:INK
0,3:BORDER 3:MODE 2
30 INPUT "Indestructibility
for player 1 (y/n)":yn$
40 IF yn$="y" THEN POKE
&83CA,&AF
50 INPUT "Indestructibility
for player 2 (y/n)":yn$
60 IF yn$="y" THEN POKE
&83E4,&AF
70 INPUT "Infinite flight
length for player 1
(y/n)":yn$
80 IF yn$="y" THEN POKE
    
```

```

&83FC,&A7
90 INPUT "Infinite flight
length for player 2
(y/n)":yn$
100 IF yn$="y" THEN POKE
&8410,&A7
110 INPUT "Infinite shots for
player 1 (y/n)":yn$
120 IF yn$="y" THEN POKE
&8556,&A7
130 INPUT "Infinite shots for
player 2 (y/n)":yn$
140 IF yn$="y" THEN POKE
&8E7D,&A7
150 INPUT "Infinite flights
for player 1 (y/n)":yn$
160 IF yn$="y" THEN POKE
&84C5,&A7
170 INPUT "Infinite flights
for player 2 (y/n)":yn$
180 IF yn$="y" THEN POKE
&8DEC,&A7
190 INPUT "Infinite fuel for
player 1 (y/n)":yn$
200 IF yn$="y" THEN POKE
&8379,&C3:POKE &837A,&86:POKE
&837B,&83
210 INPUT "Infinite fuel for
    
```

```

player 2 (y/n)":yn$
220 IF yn$="y" THEN POKE
&83A4,&C3:POKE &83A5,&B1:POKE
&83A6,&83
230 FOR a=40534 TO 40642
STEP 24:POKE a,74
240 POKE a+1,79:POKE
a+2,69:NEXT
250 FOR a=40690 TO 40798 STEP
24:POKE a,73
260 POKE a+1,70:POKE
a+2,77:NEXT
270 DATA 48,41,43,4b,45
280 DATA 44,20,20,42,59,end
290 DATA 4d,49,47,48,54
300 DATA 59,20,4a,4f,45,end
310 a=&9F7E
320 READ b$:IF b$="end" THEN
GOTO 350
330 POKE a,VAL("&"+b$):a=a+1
340 GOTO 320
350 a=&9F8C
360 READ b$:IF b$="end" THEN
GOTO 380
370 POKE
a,VAL("&"+b$):a=a+1:GOTO 360
380 CALL 32768
390 END
    
```

BOBSLEIGH

First of all buy an amateur two-man bob. For the first three races make sure that you train your team so that they're superhuman. Train them from then on to keep them at that level.

When choosing your runners use the following guidelines: if both air and ice temperatures are below -3 then use type 4 and if the air temperature is above zero use type 1. In between these levels you should use types 2 or 3. 3 will give you more control, but there isn't much to choose between their effect.

The start and early part of the run are the crucial time. Failure to get a maximum strength push start or clipping the ice wall on one of the early corners will cost a lot of time.

The waggle start is easy enough, but don't get carried away and forget to jump in the bob, because one crash can ruin a whole season. This is particularly true in the first few races when cash is tight and if you don't do well you'll soon be bankrupt.

On the first few corners you pick up speed quickly and must avoid the wall because at this

stage they can literally put seconds on your time.

Try to keep to the bottom of the track on the turns, using the vertical inner wall as a guide. Don't ride high on the bends because you risk a crash coming out of them. More likely is that you will set up a pendulum effect that will make control extremely difficult on the following two or three turns.

The medium length turns are the easiest to deal with. The hardest are the very short kinks and long curves. The kinks can throw you off at a crucial moment either entering or leaving a turn, while it's easy to lose concentration on the long turns and let the bob drift just too far up or down.

You'll need to win consistently to get enough sponsors cash to buy the expensive bobs. There appears to be little difference between the two and four-man varieties, so go for two-man at first because it's cheaper. Once you have an Olympic bob you just need a top three season finish to get into the Olympics at Calgary.



How to win an ENTIRE ISSUE'S rave software!

If you want to win an entire issue's Rave software, including the *Mastergame*, then all you have to do is produce an excellent map, poke or playing tips.

The best solution will win a copy of every Rave and the *Mastergame* from the issue in which the solution is printed. The number of games will vary of course, but it should be at least five, but in a good issue it may meet double figures. We also give runner-up prizes every month of a Rave or the *Mastergame* in that issue.

This month's winner of the *Mastergame* and all the Raves is **Dave Joiner** of Epping for his extensive *Red L.E.D.* tips. The runners-up who'll either get the *Mastergame* or a Rave are **Tony Hoyle** of St Annes for his *Driller* poke, **Phil Howard** of Mapperley for his *Super Hang-on* poke, **Mike Wong** of Sale for his *Renegade* poke and **Joseph Garner** of Holmes Chapel for his *Boy Racer* poke.

MATCH DAY II



'AT LAST'

A WORTHY SUCCESSOR TO THE EVER POPULAR MATCH DAY FOOTBALL SIMULATION - A GAME WHICH HAS REMAINED IN THE READERS CHARTS FOR 3 YEARS!

Written once again by Jon Ritman and Bernie Drummond this NEW Match Day is the result of all the customer feedback and advice on how to create the pinnacle in computer soccer.

Pit yourself against the CPU or with 2 players - full league or cup competition with unique code - save facility.

Jump, head, volley and kick (using the kick meter) to move the ball from player to player with automatic deadball set ups and goalkeeper control.

DIAMOND DEFLECTION SYSTEM™ ensures realistic ball ricochet and the action comes with full music and sound FX.

If you want the very best in football for your micro then there's only one choice... MATCH DAY II with multi-menu system makes the home computer come alive.

ocean

ocean is the registered trademark of Ocean Software Limited



Red L.E.D.

Dave Joiner of Epping has sent in a mammoth guide to one of the routes across Ariolasoft's *Mastergame*. The landscape numbers refer to the numbers in the photo and also is the recommended order that you complete them in. The droids are numbered from left to right on the selection screen.

Landscape 1 Droid 1

Go right and when you reach the end fall off the slope. Go in the up direction until you see the energy and get it. Go right until you see the energy, get it and then go down until you fall off. Shoot the generator and then keep going down until you reach the teleport. Use it once.

Get the droid freeze and then go left until you get the plus time, shoot the generator and then go back to the teleport. Again use it once.

Follow the path round until you see the generator and shoot it. Keep going left until you get the energy. Go back to the two thin paths and travel along one to the exit.

Landscape 2 Droid 3

Go down until you fall off and shoot the generator. Keep going down until the end, go up the slope and get the energy. Go up again until you reach the end and then go right to the energy and get it. Go left to the start of the slopes. Go down until you are level with the last line with a down slope and an up slope. Go left and when you reach the top go up. Teleport once.

Move left until the teleport is out of sight then go up the little slope and get the energy. Go back to the teleport and use it once.

Follow the path around shooting the generator on the way. When you see the minus time below you go down the slope. Don't fall off, because you'll lose time. Keep following the path until you see two thin paths. Go along one, but don't go into the exit hole. Move around the edge of the hole anti-clockwise, get the energy and go through the exit.

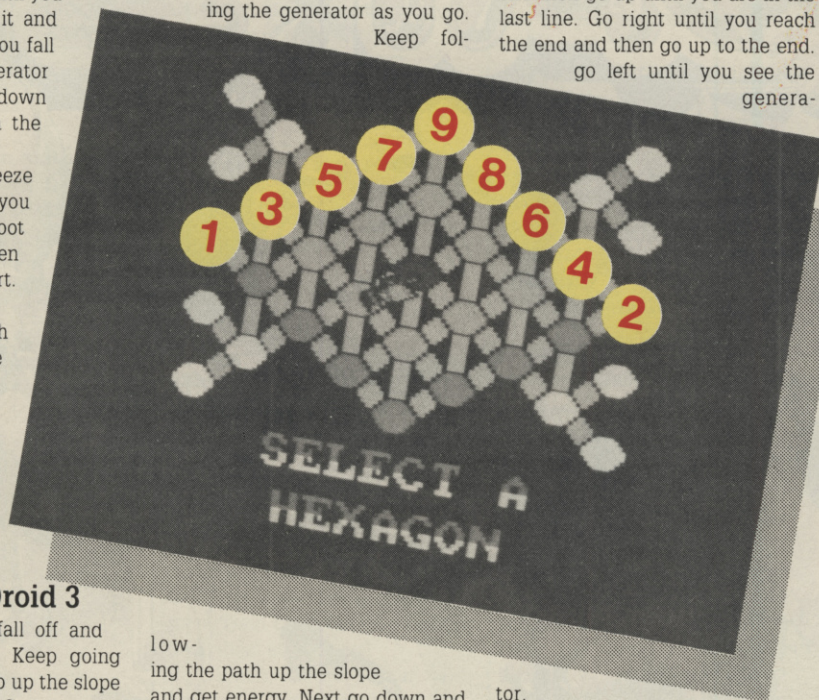
Landscape 3 Droid 1

Go down, but don't go too fast or you'll fall off the end. Teleport

once.

Go right to the end and then down. Get energy and return to the teleport. Use it once.

Follow the path round shooting the generator as you go. Keep fol-



lowing the path up the slope and get energy. Next go down and fall off. Keep going down until you fall off again and you'll reach the teleport. Don't use it, but go left instead. When you reach the top of the slope you should see the energy, get it and go left to the end. Go up and then left as soon as possible, then go through the exit.

Landscape 4 Droid 2

Go up until you are level with the side of the slope going down. Go right until you reach the bottom slope and keep going until the end. Go up until you can see a platform with the energy on it, get it and go back to the big slope. Go down it and you will come to a platform with two slopes going up. First go up the one you're facing and take the energy. Go back and take the second slope. Go up and miss the minus time. Move anti-clockwise around the hole. Get energy and then go back down to the platform. Go down the big slope, keep going and you will hit the acid waterfall.

Don't worry you'll just bounce off it. Get into the last row and go left. When you reach the top of the slope go up and then right until you see the generator. Shoot it and follow the path to the exit.

Landscape 5 Droid 3

Shoot the generator and get the energy. Go right until you reach the end and then go up. A path will lead off to the right, follow it until you see the energy. Get it and then go left. Keep going until you reach the hole. There are two paths, follow one until you get the energy and then go up until you are in the last line. Go right until you reach the end and then go up to the end, go left until you see the genera-

and go through the exit.

Landscape 7 Droid 2

Go right until you are next to the ice switch. Get it, but stay in the same row. Go up until you reach the energy. Go down until you reach another energy. Stay in the square that the energy was in and go right until you get the energy. Go right until you are near the two "L" shaped bits of acid and go down. Keep going (making sure you miss the exit hole) until you get the energy. Go through the exit hole.

Landscape 8 Droid 1

Go down until you fall off, get the energy and go right. Follow the path to the end and then go up to the energy. Get it and go left the teleport. Use it once.

Follow the path round to the energy, go back to the teleport and use it once.

Go left to the end and then up. Go right to the energy and take it. Continue right along the thin path until you fall off. Go up to the end and then right to the end. Go down to a path that leads to the right and follow it to the exit hole.

Landscape 9 Droid 2

Teleport twice to get the energy and then teleport five times.

Go left to the end and then down to a path that goes left. Follow it to the end and then go up. Go left to the end and then down along the thin path to an acid lake. Go left and get the energy. Go down to the end, left and then down again. Follow the path you are on (getting energy on the way) until you see a down slope. Go along the line before the start of the slope to the end and then go up. Get the energy and go right to the end. Go up until a path goes off to the right. Follow this until the acid lake is out of sight, but another lake is in just sight. Go up to the teleport, use it twice and go through the exit. You've then linked left to right and completed the game.

tor, shoot it and go along the path. Keep going to the end and then go left. Shoot the generator and go clockwise around the hole getting the energy on the way. When you've gone all the way round follow the path back until it goes left. Follow this back to the exit.

Landscape 6 Droid 2

Get the ice switch and go right until you see the energy, get it and then go up until you come to the teleport, use it once.

Now go left until end, then go down until the end. Shoot the generator and go along the thin path. Get the energy and follow the path back round until you are level with the slopes. Go up until the end and then go right to the teleport. Use it once.

Go left to the end and then down to a path that goes left. Follow this to the end and go down. Shoot the generator, get the energy



CLASSIC COLLECTION

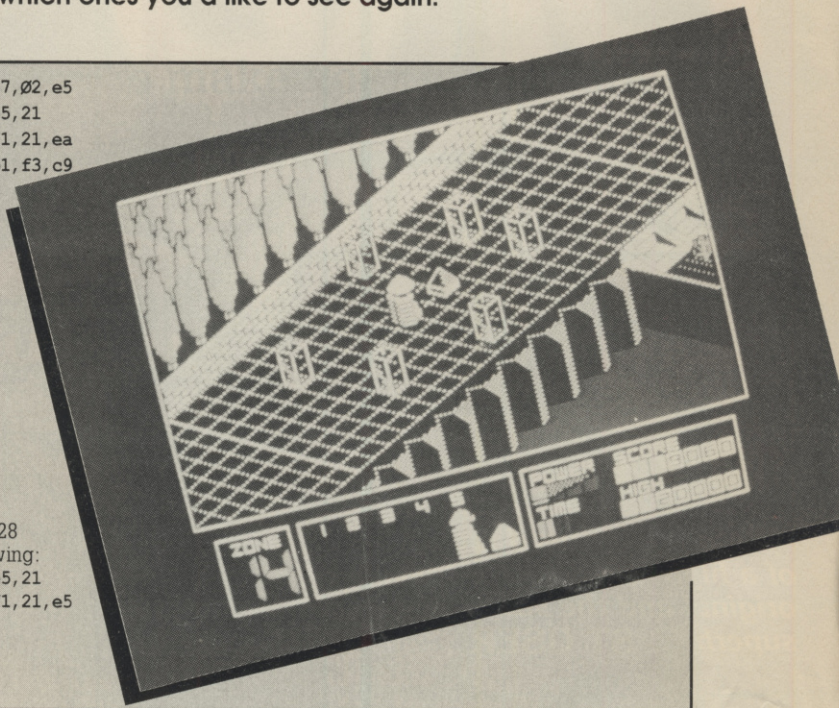
The section where we reprint requested favourite pokes from the past. If you missed out on a poke for a game then write and let us know which ones you'd like to see again.

Highway Encounter

Vortex's *Mastergame* was hacked along time ago and here it is again. It freezes all the aliens except the spiky balls on the first run through. That only leaves the time limit to beat. The first poke is for the 464.

```
1 ' Highway Encounter - tape
2 ' Amstrad Action March 88
10 DATA 21,40,00,11,00
20 DATA 9c,01,40,00,ed,b0
30 DATA 21,80,00,11,40
40 DATA 00,01,00,99,ed,b0
50 DATA 21,77,00,36,03
60 DATA 21,00,9c,11,00,00
70 DATA 01,40,00,ed,b0
80 DATA c3,f2,01,21,74,22
90 DATA 36,0f,23,36,a0
100 DATA 21,5d,22,36,5b,21
110 DATA 40,20,11,40,00
120 DATA 01,37,02,ed,b0,21
130 DATA 40,00,e5,21,00
```

```
140 DATA bb,e5,21,37,02,e5
150 DATA 21,07,b8,e5,21
160 DATA bb,02,e5,f1,21,ea
170 DATA b1,11,d9,b1,f3,c9
180 MEMORY &20000
190 LOAD""
200 MODE 1
210 CALL &3A6A
220 LOAD"!",&2040
230 FOR x=&9B00 TO &9B5D
240 READ a$
250 POKE
x,VAL("&"a$)
260 NEXT
270 CALL &9B29
280 END
If you own a 664 or 6128
then replace the following:
150 DATA 21,1f,b1,e5,21
160 DATA bb,02,e5,f1,21,e5
170 DATA
b7,11,d4,b7,f3,c9
```



Chuckie Egg

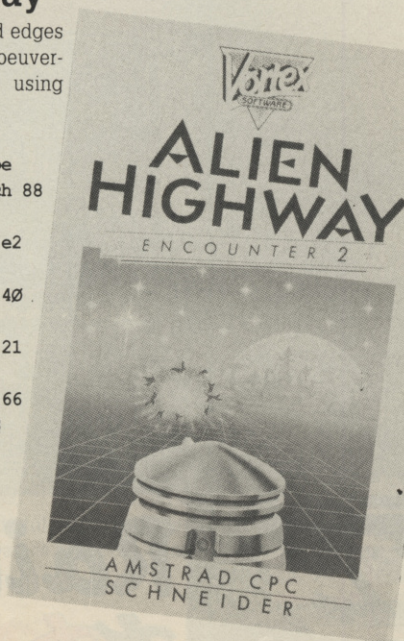
We've had some requests for a reprint of the poke for the old platform classic. Enter it using Method 1 and it'll give you infinite lives.

```
1 ' Chuckie Egg - tape          20 LOAD"", 32768
2 ' Amstrad Action March 88    30 POKE 40175,255
10 MEMORY 32767                40 CALL 39575
```

Alien Highway

Vortex's sequel has the road edges de-electrified to make manoeuvring easier. It is entered using Method 1.

```
1 ' Alien Highway - tape
2 ' Amstrad Action March 88
10 DATA 21,63,11,22,a1
20 DATA 11,c3,40,99,21,e2
30 DATA 39,36,c3,23,36
40 DATA 5f,23,36,be,21,40
50 DATA 00,e5,21,00,bb
60 DATA e5,c3,b7,39,e5,21
70 DATA 75,02,36,85,e1
80 DATA f1,f3,c9,82,71,66
90 FOR x=&BE40 TO &BE68
100 READ a$
110 POKE x,VAL("&"a$)
120 NEXT
130 MEMORY &20000
140 LOAD"alien highway"
150 CALL &BE49
160 END
```



RAMBO™

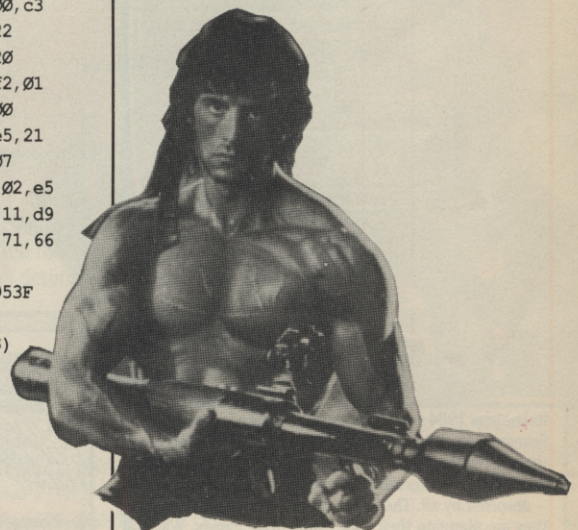
FIRST BLOOD™ PART II

Here's a poke for Ocean's kill-em game. It is entered using Method 1. The first program is for 464 owners.

replace lines 90 to 120 in the program above with the four following lines.

```
1 ' Rambo - tape 464
2 ' Amstrad Action March 88
10 DATA 21,9c,8e,36,00
20 DATA 23,36,00,23,36,00
30 DATA 21,ab,8e,36,00,c3
40 DATA 00,8f,21,2d,22
50 DATA 36,f8,21,40,20
60 DATA 11,40,00,01,f2,01
70 DATA ed,b0,21,40,00
80 DATA e5,21,00,bb,e5,21
90 DATA f2,01,e5,21,07
100 DATA b8,e5,21,bb,02,e5
110 DATA f1,21,ea,b1,11,d9
120 DATA b1,f3,c9,82,71,66
130 MEMORY &20000
140 FOR x=&9500 TO &953F
150 READ a$
160 POKE x,VAL("&"a$)
170 NEXT
180 LOAD""
190 CALL &3A6A
200 LOAD"!",&2040
210 CALL &9513
220 END
```

```
90 DATA f2,01,e5,21,1f
100 DATA b1,e5,21,bb,02,e5
110 DATA f1,21,e5,b7
120 DATA 11,d4,b7,f3,c9
```

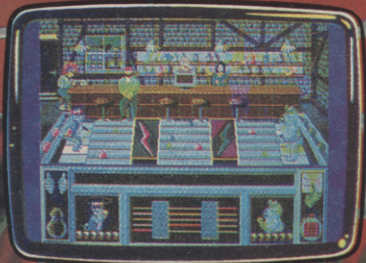
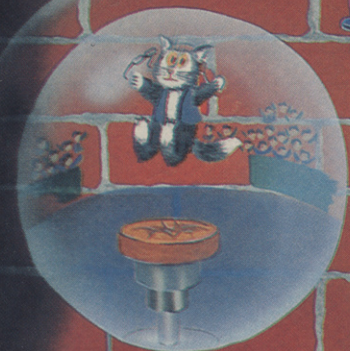


664 and 6128 owners should

BAD CAT



"The graphics used are of a high standard, the events original and the sound is superb." ST USER



Screen shots from Amiga version.

Its the year 1984 and Los Angeles prepares for the Olympic Summer Games. The dignitaries and celebrities prepare their speeches, and await the huge crowds expected to attend. Beware there are still the straying city-dweller cats - despised by all. The infamous cats are well known for they are planning their own competitive games. Will Bad Cat live up to his name?

PC - 24.99d
CBM 64/128 - 9.99t, 11.99d. AMIGA - 24.99d
AMSTRAD - 9.99t, 14.99d. ATARI ST - 19.99d



601 Media Holdings Ltd., Units 2/3, Halford Way, Halford, Birmingham B6 7PX. TEL. 021 356 3386.



More marvellous utility type-ins to make your micro move

Hacker

He's done it again. Yes, **Martin Schroeder** from West Germany has come up with another cracking listing - Hacker. This aptly named program allows you to find infinite lives, infinite energy or infinite time for almost any game you care to mention.

Hacker searches through a program and looks for certain routines - which could be associated with lives, energy or time - and then prints (to either screen or printer) the most likely **POKES**. Martin's program may list a large number of different **POKES**. Some won't do anything. Others will affect different parts of the game (and may even crash it). The correct **POKE** will be lurking among the others listed; it's just a matter of weeding through them all until you find the right one.

You must supply Hacker with the name of the file you wish to search. To list the **POKES** to screen simply enter `a$="filename":CALL &AF00,@a$`. If you wish a printer dump then `a$="filename":CALL &B023,@a$` will do the trick. For instance, if you have a program with a file name, `code2.bin`:

```
a$="code2.bin":CALL &AF00,@a$
```

then press the return key. A list of **POKES** will appear:

```
POKE &0570,0 01
POKE &1337,0 01
POKE &4589,0 02
```

Forget about the last two digits (which will either be 01, 02 or 03), they simply refer to the type of routine Hacker encountered. Make a note of all the **POKES**. Insert one of the **POKES** listed in to the game's loader and run it. Keep doing this until you come up with a useful **POKE**. It works well, we have managed to find cheats for several games using this method.

```
1 ' Hacker
2 ' by Martin Schroeder
3 ' Amstrad Action March 88
10 MODE 2:f$=CHR$(13)+CHR$(10):adr=44800:steps=34
20 FOR loop=1 TO steps:check=0
30 FOR q=1 TO 10:READ a$:a=VAL("&"a$)
40 POKE adr+(loop-1)*10+q-1,a:check=check+a:NEXT
50 READ checks$:checks=VAL("&"checks$)
60 IF checks<>check THEN 170
70 LOCATE 1,2:PRINT"checking line:":180+(loop-1)*10:NEXT
80 MODE 2:PRINT"HACKER V1.0 (c) 1987 M.Schroeder":f$:f$:
90 PRINT"Please insert a disc then press any key"CHR$(7)":
100 CALL &BB18:PRINT:PRINT" saving HACKER.BIN . . ."
110 SAVE"hacker",b,&AF00,&160
120 PRINT:PRINT"For screen type: "
130 PRINT "name$=":CHR$(34);"filename":CHR$(34);":CALL ";
```

```
140 PRINT "&AF00,@name$": PRINT:PRINT"For printer type: "
150 PRINT "name$=":CHR$(34);"filename":CHR$(34);":CALL "
160 PRINT "&B023,@name$":END
170 PRINT"Data Error in line ":(loop-1)*10:CHR$(7):END
180 DATA CD,04,B0,D5,C5,CD,DF,AF,D1,E1,728
190 DATA D5,7E,FE,3A,CC,41,AF,FE,21,CC,632
200 DATA 53,AF,FE,05,CC,66,AF,FE,46,CC,5F6
210 DATA 79,AF,FE,3D,CC,5B,AF,D1,E5,CD,6BC
220 DATA 09,BB,30,03,CD,18,BB,E1,23,1B,3B6
230 DATA B3,7A,FE,00,28,6C,18,D0,E5,DD,569
240 DATA E1,DD,7E,03,C9,CD,3A,AF,FE,3D,5F9
250 DATA 28,01,C9,23,23,23,3E,02,CD,84,2EC
260 DATA AF,00,C9,CD,3A,AF,FE,35,28,EF,578
270 DATA C9,3E,01,18,15,E5,DD,E1,DD,7E,533
280 DATA 01,C9,FE,70,28,08,DD,7E,02,FE,4C3
290 DATA 43,28,01,C9,3E,03,CD,84,AF,23,399
300 DATA C9,CD,5F,AF,FE,05,28,01,C9,23,4BC
310 DATA 18,EE,E5,32,1F,B0,21,AF,AF,06,471
320 DATA 06,CD,B8,AF,E1,E5,CD,C0,AF,21,65D
330 DATA B5,AF,06,03,CD,B8,AF,3A,1F,B0,4AA
340 DATA CD,C9,AF,E1,3E,0D,CD,5A,BB,3E,591
350 DATA 0A,CD,5A,BB,C9,50,4F,4B,45,20,404
360 DATA 26,2C,30,20,7E,CD,5A,BB,23,10,335
370 DATA F9,C9,7C,CD,C9,AF,7D,CD,C9,AF,745
380 DATA C9,F5,1F,1F,1F,1F,CD,D2,AF,F1,579
390 DATA E6,0F,FE,0A,38,02,C6,07,C6,30,3FA
400 DATA C3,5A,BB,21,EC,AF,06,18,CD,B8,537
410 DATA AF,CD,A4,AF,18,B8,54,72,79,20,4FE
420 DATA 74,68,65,20,66,6F,6C,6C,6F,77,3F4
430 DATA 69,6E,67,20,50,4F,4B,45,73,3A,33A
440 DATA DD,66,01,DD,6E,00,46,23,5E,23,379
450 DATA 56,EB,CD,77,BC,C5,D5,EB,CD,83,716
460 DATA BC,CD,7A,BC,D1,C1,C9,03,00,00,51D
470 DATA 00,21,5A,BB,E5,11,20,B0,01,03,30F
480 DATA 00,ED,B0,E1,3E,C3,77,21,48,B0,50F
490 DATA 22,5B,BB,CD,00,AF,21,20,B0,11,3B6
500 DATA 5A,BB,01,03,00,ED,B0,C9,CD,2E,47A
510 DATA BD,38,FB,FE,0D,C8,C3,2B,BD,00,56E
```

Getting technical

Martin's program will watch out for three types of routine:

```
1. LD A, (xxxx)      2. LD HL,xxxx      3. LD B, (HL)
   DEC A              DEC (HL)         DEC B
   LD (xxxx),A       LD (HL),B
```

Every **POKE** that Hacker lists will have a number following it. This corresponds to the routine found. By taking note of the values after the **POKE** you can determine which **POKES** are of no use to you.

Amstrad abstracts

M Jeffery from Mangotsfield in Bristol has written an interesting routine that draws weird and wonderful patterns on the screen. The program will prompt you for a number; values between -4 and 4 are best.

```
1 ' Amstrad abstracts
2 ' by Matthew Jeffery
```

```
3 ' Amstrad Action March 88
10 MODE 2:INPUT z:x=640
20 MOVE 320+200*SIN(y+50),200+200*COS(x)
30 FOR y=1 TO 360:x=x-z
40 DRAW 320+200*SIN(y+50),200+200*COS(x)
50 NEXT y
```

Streamer

Unfortunately several lines of Streamer – which appeared in issue 28 of Amstrad Action – were chopped off. The offending lines are:

```
935 DATA 1E,91,F1,4F,06,00,ED,B0,3E,0B,3DB
940 DATA 21,1C,91,11,32,00,CD,9E,BC,21,359
945 DATA 00,40,11,00,12,3E,16,CD,9E,BC,2DE
950 DATA C9,3E,0B,21,1C,91,11,32,00,CD,2F0
955 DATA A1,BC,21,1E,91,11,00,A1,3A,1C,335
960 DATA 91,4F,06,00,ED,B0,C9,3E,16,21,3C1
965 DATA 00,40,11,00,12,CD,A1,BC,C9,DD,433
970 DATA 46,00,DD,56,04,DD,5E,02,C9,CD,450
975 DATA C7,90,21,00,00,3A,00,A1,4F,DF,421
980 DATA 6D,90,C9,CD,C7,90,DD,21,00,A1,589
985 DATA 21,00,40,E5,D5,C5,DD,7E,00,4F,48A
990 DATA DD,E5,DF,6A,90,DD,E1,DD,23,C1,71A
995 DATA D1,E1,24,24,10,E9,C9,3E,9E,32,4CA
1000 DATA 0F,91,21,00,95,11,14,00,3E,21,1DA
1005 DATA C3,9E,BC,3E,A1,32,0F,91,18,EE,4D4
```

Lean letters

The character set used in Mode 0 is chunky. Michael Smith from Banbury in Oxon has produced an alternative slim-line version. The smaller size of Michael's character set means a maximum of 32 characters can fit across the screen rather than 20.

Characters between 215 and 250 have been redefined. This means that both the normal set and the slim-line set can be used simultaneously on screen.

When run, the listing displays the two character sets side by side. You will notice that the spacing between the two is identical. To change the spacing between letters of the thin set you will need to use the TAG command. For example:

```
10 TAG:x=0:y=294:ORIGIN x,y:PRINT CHR$(215);
20 y=y+23:ORIGIN x,y:PRINT CHR$(216);:TAGOFF
```

TAG tells the computer to print the next character at the graphics cursor (set by ORIGIN). This allows you to position text much more accurately. Have a look at line 170 to 190, TAG is used to print each character of the slim-line font close together.

```
1 ' Lean letters
2 ' by Michael Smith
3 ' Amstrad Action March 88
10 ' <<< SMALL CHARACTER SET >>>
20 '
30 SYMBOL AFTER 215:FOR n=215 TO 250:READ a,b,c,d,e
40 SYMBOL n,0,0,0,a,b,c,d,e:NEXT n:MODE 0
50 '
60 ' << DISPLAY CHARACTER SET >>
70 '
80 PRINT:FOR n=215 TO 250:PRINT CHR$(n);:NEXT
90 '
100 ' << DISPLAY NORMAL SET >>
110 '
120 PRINT:PRINT:FOR n=48 TO 57:PRINT CHR$(n);:NEXT
130 FOR n=65 TO 90:PRINT CHR$(n);:NEXT
140 '
150 ' << EXAMPLE USE OF CHARACTERS >>
160 '
170 x=0:y=294:TAG:FOR t=215 TO 242:ORIGIN x,y:PRINT CHR$(t);
180 x=x+23:NEXT:x=0:y=278:FOR t=243 TO 250:ORIGIN x,y
190 PRINT CHR$(t);:x=x+23:NEXT:LOCATE 1,24:TAGOFF
200 LOCATE 1,24
210 '
220 ' < DATA FOR CHARACTERS 1-0 >
230 '
240 DATA 96,144,144,144,96,192,64,64,64,224,96,144,32,64
250 DATA 240,224,16,224,16,224,32,96,160,240,32,240,128,224
260 DATA 16,224,96,128,224,144,96,240,144,32,64,64,96,144
```

Dropout

You'll need fast reflexes if you want to win at Dropout. Paul Robson from Middlesbrough in Cleveland is the man that programmed the game. The idea is simple: clear a path through the brickwork for a ball to fall through. It may sound easy, but time is against you.

By using a joystick you may move a pointer up, down, left or right. Press 1 or 2 to select the level.

```
1 ' Dropout
2 ' by Paul Robson
3 ' Amstrad Action March 88
10 GOSUB 890
20 GOSUB 800
30 dir=246:a=2:b=4:t=0
40 PEN 12:LOCATE 16,23:PRINT c$(lev)
50 LOCATE 6,1:PEN 4:PRINT USING"###";beat
60 '* HOLES,BALL
70 FOR f=4 TO 17
80 l: lev=1 THEN r%=RND*9+6 ELSE r%=RND*17+2
90 IF f=4 AND r%=2 THEN 80
100 LOCATE r%,f:PRINT " "
110 x(r%,f)=1
120 NEXT
130 bv=3:IF lev=1 THEN bh%=RND*7+7 ELSE bh%=RND*15+3
140 LOCATE bh%,bv:PEN 4:PRINT "@"
150 '* MAIN LOOP
160 WHILE bv<17
170 PEN 1:LOCATE a,b:PRINT b$;CHR$(dir):a$
180 IF INKEY(74)=0 THEN z=-1:dir=247
190 IF INKEY(75)=0 THEN z=1:dir=246
200 IF z=-1 AND a>3 AND x(a-1,b)<>2 OR z=1 AND a<18 AND
x(a+1,b)<>2 THEN GOSUB 660:z=0
210 IF z=-1 AND a=3 OR z=1 AND a=18 THEN i=1:GOSUB 660:
a=a+z:IF x(a,b)=1 THEN x(a,b)=0:x(ABS(a-21),b)=1:LOCATE
ABS(a-21),b:GOSUB 740:z=0 ELSE GOSUB 750:z=0
220 IF z=-1 AND a=2 OR z=1 AND a=19 THEN i=1:GOSUB 660:
a=ABS(a-21):GOSUB 750:GOSUB 690:z=0
230 IF INKEY(72)=0 AND x(a,b-1)=0 AND b>4 THEN y=-1:i=1:
GOSUB 750:b=b+y:GOSUB 770
240 IF INKEY(73)=0 AND x(a,b+1)=0 AND b<17 THEN y=1:i=1:
GOSUB 750:b=b+y:GOSUB 770
250 IF x(bh%,bv+1)=1 THEN GOSUB 600:x(bh%,bv)=2:IF bv<17
AND x(bh%,bv+1)=0 THEN SOUND 4,bv*50,0,1,1,1
260 IF INKEY(67)=0 THEN 520
270 t=t+1:PEN 4:LOCATE 16,1:PRINT USING"###";t:SOUND
1,t,3,7
280 IF t>899 THEN 450
290 WEND
300 '* DROP BALL-DOWN
310 WHILE x(bh%,bv+1)=0
```

```
270 DATA 96,144,96,96,144,112,16,16
280 '
290 ' < DATA FOR CHARACTERS A-Z >
300 '
310 DATA 96,144,240,144,144,224,144,224,144,224
320 DATA 112,128,128,128,112,224,144,144,144,224
330 DATA 240,128,240,128,240,240,128,240,128,128
340 DATA 240,128,176,144,240,144,144,240,144,144
350 DATA 224,64,64,64,224,248,32,32,32,224
360 DATA 144,160,192,160,144,128,128,128,128,240
370 DATA 248,168,168,168,168,136,200,168,152,136
380 DATA 96,144,144,144,96,240,144,240,128,128
390 DATA 96,144,144,96,16,240,144,240,160,144
400 DATA 240,128,240,16,240,248,32,32,32,32
410 DATA 144,144,144,144,96,136,136,80,80,32
420 DATA 168,168,168,168,80,136,80,32,80,136
430 DATA 136,136,80,32,32,240,16,32,64,240
```

```

320 IF bv=25 THEN 430
330 GOSUB 600
340 WEND
350 SOUND 4,bv*50,0,1,1,1
360 '* DROP BALL-DIAG.
370 IF bh%<10 THEN z=1:e=11 ELSE z=-1:e=10
380 WHILE bh%<>e:set=1
390 IF bv=25 THEN 430
400 GOSUB 600
410 WEND
420 '* END+SCORE
430 set=0:SOUND 4,4000,0,1,1,1
440 LOCATE 10,25:PRINT SPC(2)
450 IF t>=beat THEN 520
460 beat=t
470 FOR f=40 TO 1 STEP -1
480 SOUND 4,f*10,6,7
490 LOCATE 16,1:PEN 4:PRINT t
500 LOCATE 16,1:PEN 3:PRINT t
510 NEXT
520 GOSUB 800
530 '* CLEAR X
540 FOR f=2 TO 19:FOR g=4 TO 17
550 x(f,g)=0:NEXT:NEXT
560 '* CLS+NEW SCREEN
570 CALL &A804
580 CALL &A7F8:GOTO 30
590 '* DROP BALL
600 LOCATE bh%,bv:PRINT" "
610 bv=bv+1
620 IF set=1 THEN bh%=bh%+z
630 PEN 4:LOCATE bh%,bv:PRINT"@ "
640 RETURN
650 '* DELETE ARROW
660 PEN b-2:LOCATE a,b:PRINT CHR$(143)
670 IF i=1 THEN i=0:RETURN
680 a=a+z
690 IF x(a,b)=1 THEN GOSUB 720
700 RETURN
710 '* REPRINT HOLE+ARROW
720 x(a,b)=0:x(a+z,b)=1
730 LOCATE a+z,b
740 PRINT" "
750 LOCATE a,b:PEN b-2:PRINT CHR$(143)
760 IF i=1 THEN i=0:RETURN
770 LOCATE a,b:PEN 1:PRINT b$;CHR$(dir):a$
780 RETURN
790 '* START NEW GAME
800 LOCATE 2,23:PEN 12:PRINT"Level":IF st=0 THEN lev=1:
beat=250:LOCATE 16,23:PRINT c$(1)
810 IF INKEY(64)=0 THEN lev=1:beat=250
820 IF INKEY(65)=0 THEN lev=2:beat=500

830 PEN 12:LOCATE 16,23:PRINT c$(lev):"? "
840 PEN 4:LOCATE 2,25:PRINT"PRESS":LOCATE 14,25:
PRINT CHR$(167);"FIRE"
850 IF INKEY(76)=-1 THEN 810
860 IF st=0 THEN st=1:LOCATE 2,25:PRINT SPC(5):LOCATE 14,25:
PRINT SPC(6):GOSUB 1240:LOCATE 19,23:PRINT" "
870 RETURN
880 '* INKS, SCREEN, M/C
890 a$=CHR$(22)+CHR$(0):b$=CHR$(22)+CHR$(1):c$(1)=CHR$(24)
+"1"+CHR$(24)+"2":c$(2)="1/"+CHR$(24)+"2"+CHR$(24)
900 DIM x(20,26)
910 MODE 0:INK 0,0:BORDER 0:INK 1,0:INK 5,15:INK 13,24:
INK 14,26:INK 15,15
920 ENV 1,10,-1,10:ENT 1,50,4,1
930 IF HIMEM<>3FFF THEN SYMBOL AFTER 64:
SYMBOL 64,0,24,60,126,126,126,60,24
940 LOCATE 2,2:PEN 6:PRINT STRING$(19,207)
950 LOCATE 1,2:PRINT CHR$(222):LOCATE 20,2:PRINT CHR$(223)
960 FOR f=3 TO 17
970 LOCATE 1,f:PRINT CHR$(207)
980 LOCATE 20,f:PRINT CHR$(207)
990 NEXT
1000 LOCATE 1,18:PRINT CHR$(221):LOCATE 20,18:PRINT CHR$(220)
1010 LOCATE 2,18:PRINT STRING$(2,207):LOCATE 18,18:
PRINT STRING$(2,207)
1020 lft=3:rgt=18
1030 FOR f=18 TO 24
1040 x(lft,f)=1
1050 LOCATE lft,f:PRINT CHR$(223):LOCATE lft,f+1:
PRINT CHR$(221)
1060 x(rgt,f)=1
1070 LOCATE rgt,f:PRINT CHR$(222):LOCATE rgt,f+1:
PRINT CHR$(220)
1080 lft=lft+1:rgt=rgt-1
1090 NEXT
1100 LOCATE 9,25:PRINT CHR$(207):LOCATE 12,25:PRINT CHR$(207)
1110 p=2:FOR f=4 TO 17
1120 LOCATE 2,f:PEN p
1130 PRINT STRING$(18,143):p=p+1
1140 NEXT
1150 GOSUB 1240
1160 LOCATE 2,1:PEN 13:PRINT"BEAT";SPC(6);"TIME"
1170 MEMORY &3FFF:RESTORE 1200
1180 FOR f=&A7F8 TO &A811
1190 READ d$:POKE f,VAL("&"+d$):NEXT
1200 DATA 21,0,C0,11,0,40,1,0,40,ED,B0,C9,21
1205 data 0,C0,11,1,C0,1,FF,3F,36,0,ED,B0,C9
1210 CALL &A7F8
1220 POKE &A7FA,&40:POKE &A7FD,&C0
1230 RETURN
1240 LOCATE 2,23:PEN 5:PRINT CHR$(24);"Q";CHR$(24);"uit "
1250 RETURN

```

Stipple

This program from **James Cadwallader** in Gosport, Hants, demonstrates how well different colours will mix. This is great if you are designing screens or sprites and need to know what certain colour combinations look like on screen.

You must supply the program with the mode and colours that you intend using.

```

1 ' Stipple
2 ' by James Cadwallader
3 ' Amstrad Action March 88
10 DEFINT a-z:MODE 1
30 ON BREAK GOSUB 260
40 DIM inks(15):PAPER 0:MODE 1
60 INPUT "Mode :",mde:MODE mde:IF mde=0 THEN most=15 ELSE
IF mde=1 THEN most=3 ELSE most=1

```

```

70 IF mde<0 OR mde>2 THEN RUN
80 FOR i=0 TO most:PRINT STRING$(10,32);STRING$(10,8);
90 PRINT "Pen";i:LOCATE 8,i+1:INPUT ":",inks(i)
100 IF inks(i)>26 THEN PRINT CHR$(11);:GOTO 90
110 NEXT:FOR x=0 TO most:INK x,inks(x):NEXT
150 FOR col1=0 TO most:FOR col2=col1 TO most
170 PEN col1:PAPER col2
180 IF col1<>col2 THEN PRINT STRING$(80,207);STRING$(80,8);
MID$(STR$(inks(col1)),2);"&";MID$(STR$(inks(col2)),2);
STRING$(80-LEN(MID$(STR$(inks(col1))),2))-LEN(MID$(STR$(
inks(col2)),2))-1,9);
190 NEXT col2,col1:PRINT CHR$(7);:WHILE INKEY$="" :WEND
220 CALL &BC02:PEN 1
240 run
260 CALL &BC02:MODE 2:PEN 1:PAPER 0:LIST

```

Reset

Alastair Scott from Grangemouth, Stirling, has provided you with a clever routine that resets the inks and mode to their default values at the touch of a key.

When the control and copy keys are held down together the ink values will return to normal. The routine works under interrupt which means you won't know it's there until you activate it by pressing the two keys. Reset even works from certain games and business software.

```

1 ' Reset
2 ' by Alastair Scott
3 ' Amstrad Action March 88
10 FOR a=&B000 TO &B026:READ a$:POKE a,VAL("&"a$)
20 NEXT:CALL &B000
30 DATA 01,FF,81,11,0C,B0,21,27,B0,C3,E0,BC,3E,09,CD
40 DATA 1E,BB,C8,79,FE,80,C0,3E,01,CD,0E,BC,3E,01,CD
50 DATA 90,BB,AF,CD,96,BB,C3,02,BC
    
```

Double-column print

Here's a handy routine sent in by Helen Packer of Greenfield in Middlesex. Text issued to the printer will appear on the page in two columns. This saves an enormous amount of paper and can make a page very appealing.

The program works with the DMP 2000 and should work with most Epson compatible printers. Text appears in a condensed font. The page format is 63 columns by 62 rows. Line-feed characters are ignored. You can use the routine within your own programs and even from Protex or Tasword.

If a page doesn't appear then issue PRINT #8, CHR\$(12) to flush the page buffer. Occasionally you will need to do this twice.

To use the double-column print routine simply run the listing and then set about printing in the usual manner.

```

1 ' Double-column print
2 ' by Helen Packer
3 ' Amstrad Action March 88
10 MEMORY &7FFF:WIDTH 63
20 FOR t=&B000 TO &B13F:READ a$:v=VAL("&"a$)
30 POKE t,v:chk=chk+v:NEXT t
40 IF chk<>29280 THEN PRINT"DATA error":END
50 CALL &B11E
60 DATA C5,D5,E5,CD,0B,80,37,E1,D1,C1,C9,FE,20,30,27,FE
70 DATA 0A,C8,FE,00,28,05,FE,0C,28,00,C9,3A,42,81,FE,01
80 DATA 2A,2C,2A,40,81,18,47,3A,42,81,FE,02,28,7C,3E,45
90 DATA 2A,40,81,77,18,55,2A,3E,81,77,23,22,3E,81,2A,40
100 DATA 81,7E,3C,FE,41,28,27,FE,85,28,02,77,C9,77,2A,40
110 DATA 81,11,85,00,19,22,40,81,3E,45,77,5F,16,00,19,22
120 DATA 3E,81,3A,43,81,FE,3E,28,41,3C,32,43,81,C9,3E,45
130 DATA 77,3A,43,81,FE,3E,28,13,3C,32,43,81,2A,40,81,11
140 DATA 85,00,19,22,40,81,7E,FE,01,20,03,3E,45,77,21,89
150 DATA 21,44,81,22,40,81,7E,FE,01,20,03,3E,45,77,21,89
160 DATA 81,22,3E,81,3E,02,32,42,81,C9,21,44,81,06,3E,C5
170 DATA 0A,C8,FE,00,28,05,FE,0C,28,00,C9,3A,42,81,FE,01
180 DATA 2A,2C,2A,40,81,18,47,3A,42,81,FE,02,28,7C,3E,45
190 DATA 2A,40,81,77,18,55,2A,3E,81,77,23,22,3E,81,2A,40
200 DATA 81,7E,3C,FE,41,28,27,FE,85,28,02,77,C9,77,2A,40
210 DATA 81,11,85,00,19,22,40,81,3E,45,77,5F,16,00,19,22
220 DATA 3E,81,3A,43,81,FE,3E,28,41,3C,32,43,81,C9,3E,45
    
```

```

1 ' Double-column print
2 ' by Helen Packer
3 ' Amstrad Action March 88
10 MEMORY &7FFF:WIDTH 63
20 FOR t=&8000 TO &813F:READ a$:v=VAL("&"a$)
30 POKE t,v:chk=chk+v:NEXT t
40 IF chk<>29280 THEN PRINT"DATA error":END
50 CALL &811E
60 DATA C5,D5,E5,CD,0B,80,37,E1,D1,C1,C9,FE,20,30,27,FE
70 DATA 0A,C8,FE,00,28,05,FE,0C,28,00,C9,3A,42,81,FE,01
80 DATA 20,2C,2A,40,81,18,47,3A,42,81,FE,02,28,7C,3E,45
90 DATA 2A,40,81,77,18,55,2A,3E,81,77,23,22,3E,81,2A,40
100 DATA 81,7E,3C,FE,41,28,27,FE,85,28,02,77,C9,77,2A,40
110 DATA 81,11,85,00,19,22,40,81,3E,45,77,5F,16,00,19,22
    
```

```

120 DATA 3E,81,3A,43,81,FE,3E,28,41,3C,32,43,81,C9,3E,45
130 DATA 77,3A,43,81,FE,3E,28,13,3C,32,43,81,2A,40,81,11
140 DATA 85,00,19,22,40,81,23,22,3E,81,C9,3E,01,32,43,81
150 DATA 21,44,81,22,40,81,7E,FE,01,20,03,3E,45,77,21,89
160 DATA 81,22,3E,81,3E,02,32,42,81,C9,21,44,81,06,3E,C5
170 DATA CD,F0,80,C1,30,0A,10,F7,3E,0C,CD,15,81,C3,C8,80
180 DATA 3E,0C,CD,15,81,C3,C8,80,06,3E,21,44,81,3E,01,77
190 DATA 48,06,84,3E,20,23,77,10,FC,41,23,10,F0,21,44,81
200 DATA 22,40,81,23,22,3E,81,3E,01,32,42,81,32,43,81,C9
210 DATA E5,7E,B7,28,19,23,47,7E,CD,15,81,23,10,F9,E1,11
220 DATA 85,00,19,3E,0D,CD,15,81,3E,0A,CD,15,81,C9,E1,11
230 DATA 85,00,19,B7,C9,CD,1B,81,D8,18,FA,00,00,00,3E,0F
240 DATA CD,2B,BD,21,2B,BD,11,1B,81,01,03,00,ED,B0,21,2B
250 DATA BD,3E,C3,77,23,11,00,80,73,23,72,C3,C8,80,00,00
    
```

MoneyMate

Can't keep control of your money? You need MoneyMate. Karl Stokes from Ossett in West Yorkshire is the man to bring you this lengthy listing. MoneyMate is extremely useful if you want to keep record of your cash accounts and your cashcard numbers.

MoneyMate allows you to keep track of your bank and building society numbers, and the current balance. It also gives you the option of recording the amount of cash you have in your moneybox at home. A total of all monies can be added together and displayed.

If you select either the bank or building society option, you will be prompted for a password. This is to protect information regarding your card numbers from prying eyes. To change this password simply alter the word held in *cash\$* in line 770. The rest of the program is self explanatory.

```

1 ' MoneyMate
2 ' by Karl Stokes
3 ' Amstrad Action March 88
10 num=0:MODE 2:BORDER 0:total=f+a+bf
20 LOCATE 34,2:PRINT"MAIN MENU":LOCATE 33,3
30 PRINT"-----":LOCATE 30,10:PRINT"1...Moneybox"
40 LOCATE 30,12:PRINT"2...Bank":LOCATE 30,14
50 PRINT"3...Building Society"
60 LOCATE 30,16:PRINT"4...Load":LOCATE 30,18:PRINT"5...Save"
70 LOCATE 30,7
80 PRINT"MONEYBOX=£";a:IF num=1 THEN RETURN
90 LOCATE 31,22:PRINT"TOTAL=£";total
100 LOCATE 8,14
110 PRINT"BANK=£";bf:IF num=3 THEN RETURN
120 LOCATE 60,14
130 PRINT"B/S=£";f:IF num=3 THEN RETURN
140 PLOT 213,318:DRAW 390,318:DRAW 390,277:DRAW 213,277:
DRAW 213,318:IF num=5 THEN RETURN
150 PLOT 213,79:DRAW 390,79:DRAW 390,36:DRAW 213,36:
DRAW 213,79:LOCATE 31,22:IF num=1 THEN GOTO 80 ELSE IF
num=4 THEN RETURN
160 IF num=2 THEN GOTO 30
170 IF num=3 AND dif=0 THEN GOTO 130 ELSE IF num=3 AND
dif=1 THEN GOTO 110
180 PLOT 455,206:DRAW 593,206:DRAW 593,165:DRAW 455,165:
DRAW 455,206:IF num=3 THEN RETURN ELSE IF num=5
THEN RETURN
190 PLOT 42,206:DRAW 185,206:DRAW 185,165:DRAW 42,165:
DRAW 42,206:IF num=3 THEN RETURN ELSE IF NUM=5
THEN RETURN
200 a$=INKEY$:IF a$="" THEN 200
210 IF a$="1" THEN GOSUB 260
220 IF a$="2" THEN dif=1:GOSUB 450
230 IF a$="3" THEN dif=0:GOSUB 450
240 IF a$="4" THEN GOSUB 1040
250 IF a$="5" THEN GOSUB 1120 ELSE GOTO 200
260 CLS
270 LOCATE 32,2:PRINT"MONEY MENU":LOCATE 31,3
275 PRINT"-----"
    
```

Fame and fortune

Interested? Yes? Well, if you send us your programming masterpieces and they subsequently get published in these pages you could stand to get £100. And your name would be seen by thousands of Amstrad addicts. What more could you ask for? Every person whose listing appears in the Type-Ins sections is guaranteed anything from £10 to £100. What's the catch? None. We simply want your listings. Send them - together with your name, and a stamped, addressed, jiffy bag (for return) - to "Type-Ins", Amstrad Action, Future Publishing Ltd, 4 Queen Street, Bath, BA1 1EJ.

If you plan to send a listing to be considered for publication, here are a few pointers:

- Make sure it's your own original work and has not been printed in, or submitted to, any other magazine.
- Use lower-case rather than capitals for variable names.
- REM statements make the program easier to understand.
- Do not use letters that look like numbers as variable names (O and 0, l and 1 for example).
- Structure your program - divide it into sensible procedures.
- Avoid long multi-statement lines. Short lines make debugging easier.
- Please make sure your name and address is on every slip of paper, cassette or disk that you send us.

```

280 LOCATE 30,10:PRINT"1...Add Money"
290 LOCATE 30,12:PRINT"2...Deduct Money"
300 LOCATE 30,14:PRINT"3...Return To Main Menu"
310 num=1:GOSUB 150
320 a$=INKEY$:IF a$="" THEN 320
330 IF a$="1" THEN GOTO 360
340 IF a$="2" THEN GOTO 400
350 IF a$="3" THEN GOTO 10 ELSE GOTO 320
360 CLS:GOSUB 150
370 LOCATE 2,2:INPUT"How much do you wish to add";b
380 a=a+b
390 GOTO 260
400 CLS:GOSUB 150
410 LOCATE 2,2:INPUT"How much do you wish to deduct";c
420 a=a-c
430 IF a<0 THEN a=0
440 GOTO 260
450 CLS
460 LOCATE 32,2:IF dif=1 THEN GOTO 480
470 PRINT"BUIL.SOC. MENU":LOCATE 31,3:
PRINT"-----":GOTO 490
480 PRINT"BANK MENU":LOCATE 31,3:PRINT"-----"
490 LOCATE 30,10:PRINT"1...Cash In Money"
500 LOCATE 30,12:PRINT"2...Withdraw Cash"
510 LOCATE 30,14:PRINT"3...Account number"
520 LOCATE 30,16:PRINT"4...Card-Cash"
530 LOCATE 30,18:PRINT"5...Return To Main Menu"
540 num=3:GOSUB 150:GOSUB 190:GOSUB 180
550 LOCATE 8,11:PRINT"Account Number":LOCATE 8,14:
IF dif=1 THEN PRINT bi$ ELSE PRINT si$
560 LOCATE 58,11:PRINT"C.Cash Account No.":LOCATE 60,14:
IF dif=1 THEN PRINT bcad$ ELSE PRINT scad$
570 a$=INKEY$:IF a$="" THEN 570
580 IF a$="1" THEN GOTO 630
590 IF a$="2" THEN GOTO 670
600 IF a$="3" THEN GOTO 720
610 IF a$="4" THEN GOTO 760
620 IF a$="5" THEN GOTO 1030 ELSE 570
630 CLS:GOSUB 150
640 LOCATE 2,2:INPUT"How much do you wish to add";g
650 IF dif=1 THEN bf=bf+g ELSE f=f+g
660 GOTO 450
670 CLS:GOSUB 150
680 LOCATE 2,2:INPUT"How much do you wish to withdraw";h
690 IF dif=1 THEN bf=bf-h ELSE f=f-h
700 IF f<0 THEN f=0:IF sf<0 THEN sf=0
710 GOTO 450
720 CLS:num=4:GOSUB 150:LOCATE 32,19:PRINT"Account Number":
LOCATE 32,22:IF dif=1 THEN PRINT bi$ ELSE PRINT si$
730 LOCATE 2,2:INPUT"Enter new account number";i$
740 IF dif=1 THEN bi$=i$ ELSE si$=i$
750 num=3:GOTO 450
760 CLS:LOCATE 2,2:INPUT"Enter Password";pass$
770 IF pass$="password" THEN 780 ELSE GOTO 450
780 CLS:GOSUB 150:GOSUB 140:LOCATE 30,5:PRINT"C.Cash
Account No.":LOCATE 30,7:IF dif=1 THEN PRINT bcad$
ELSE PRINT scad$
790 GOSUB 180:LOCATE 58,12:PRINT"Emergency Phone No.":
LOCATE 60,14:IF dif=1 THEN PRINT bphone$ ELSE
PRINT sphone$
800 GOSUB 190:LOCATE 10,12:PRINT"P.I.Code":LOCATE 8,14:
IF dif=1 THEN PRINT bcode$ ELSE PRINT scode$
810 LOCATE 32,2:PRINT"CASH CARD MENU":LOCATE 31,3:
PRINT"-----"
820 LOCATE 30,12:PRINT"1...P.I.Code"
830 LOCATE 30,14:PRINT"2...Account Number"
840 LOCATE 30,16:PRINT"3...Emergency Phone No."
850 LOCATE 30,18:PRINT"4...Return To Menu"
860 a$=INKEY$:IF a$="" THEN 860
870 IF a$="1" THEN GOTO 910
880 IF a$="2" THEN GOTO 950
890 IF a$="3" THEN GOTO 990
900 IF a$="4" THEN GOTO 450 ELSE GOTO 860
910 CLS:num=4:GOSUB 150:LOCATE 34,20:PRINT"P.I.Code":
LOCATE 30,22:PRINT code$
920 LOCATE 2,2:INPUT"What is your new Personal
Identification number";code$
930 IF dif=1 THEN bcode$=code$ ELSE scode$=code$
940 num=3:GOTO 780
950 CLS:num=4:GOSUB 150:LOCATE 30,20:PRINT"C.Cash Account
No.":LOCATE 30,22:PRINT cad$
960 LOCATE 2,2:INPUT"What is your new Card Cash account
number";cad$
970 IF dif=1 THEN bcad$=cad$ ELSE scad$=cad$
980 num=3:GOTO 780
990 CLS:num=4:GOSUB 150:LOCATE 30,20:PRINT"Emergency Phone
No.":LOCATE 30,22:PRINT phone$
1000 LOCATE 2,2:INPUT"What is your new Emergency
Telephone number";phone$
1010 IF dif=1 THEN bphone$=phone$ ELSE sphone$=phone$
1020 num=3:GOTO 780
1030 GOTO 10
1040 LOCATE 2,2:PRINT"Sure?(y/n)"
1050 a$=INKEY$:IF a$="" THEN 1050
1060 IF a$="n" THEN GOTO 10
1070 IF a$="y" THEN 1080 ELSE 1050
1080 OPENIN"file"
1090 INPUT #9,a,f,bf,bi$,si$,bcad$,scad$,bphone$,
sphone$,bcode$,scode$
1100 CLOSEIN
1110 GOTO 10
1120 LOCATE 2,2:PRINT"Sure?(y/n)"
1130 a$=INKEY$:IF a$="" THEN 1130
1140 IF a$="n" THEN GOTO 10
1150 IF a$="y" THEN 1160 ELSE 1130
1160 OPENOUT"file"
1170 WRITE #9,a,f,bf,bi$,si$,bcad$,scad$,bphone$,
sphone$,bcode$,scode$
1180 CLOSEOUT
1190 GOTO 10

```

AA small ads

FOR SALE

Colour CPC 464, light pen, music machine, £400+ of software including Out Run, Starwars, Gryzor, etc. Sell for £350 (or nearest offer). Tel: 041 881 1253 (Mon-Fri after 2pm).

Rombo Video Digitizer £40, AMX Mouse III £40, Maxam Rom £15. Utopia Rom £15, DDI Second Drive £50, 256K silicon disc £20, 256K memory £20, Grafpad II £40 for CPC 6128. Tel: Woking 756169.

Convert your MP-1 or -2 to give a composite video output signal for direct connection to your video recorder. Parts and instructions £6.99. AC Talbot, 18 Trelawney Parc, St Coloumb, Major Cornwall.

Amstrad CPC 464 colour monitor, joystick, light pen, £350+ of games, instruction book, GAC. Sell for £250. Phone after 6pm (042121) 2547.

Colour CPC 6128, Multiface-2, Protext, Elite, joystick, 45 mags, 40 original games, Midi interface, 20 discs, manual, leads, Datacorder, mint condition. Cost £1000+, Bargain: £475. 0895 33552. (Mark).

CPC 464, colour monitor, £150+ software, joystick, rom card, Cheat Mode & various other programming books. Price around £300 ono. Ask for Steve on Braintree 22099.

CPC 664 with colour monitor, 6 disks and Dragons Lair 2, books, magazines, 11/2 months old, pristine, £250 ono. Phone Dundee 45552 or A Morrison, 5J Baffin Street, Dundee DD4 6EZ.

CPC Business Software: Accounts, VAT, Stock Control, Mailing List/Label Printer plus utilities all on one disc for only £24.95. "Small Business Booster — Has the lot." (AA26). Fully menu-driven & Epson compatible.

Also Sales Invoicing only £14.95 or £9.95 with above pack. add £2.00 P&P Abroad. Cheques, POs or SAE for details: SD MICROSYSTEMS (AA), PO Box 24, Hitchin, Herts. (0462) 675106.

Money from computers. New guide on working with computers. 10 jobs fully explained. Only £2.95. Send cheque/PO (or sae for details) to: Intermedia (AA), 39 Lynchet Close, Brighton BN1 7FP.

Discount Hardware. Cheaper than anywhere else! from dust covers to Eprom programmers. We sell everything. For more information send SAE to Generation Hardware, 45 Blind Lane, Bourne-End, Bucks. SL8 5TN.

Convert your MP-1 or -2 to give a composite video output signal for direct connection to your video recorder. Parts and instructions £6.99. AC Talbot, 18 Trelawney Parc, St Coloumb, Major Cornwall.

WANTED

CPC 6128 colour wanted, will purchase best deal. Phone 042 483 659 (Hastings area).

SERVICES

Tape-to-disc conversions 464/6128: Send original tape(s) plus a disc & 80 Pence per tape (max. 6 tapes per disc) & we will transfer them to disc. Spend £12 or more & a quality disc will be returned FREE. If you want tapes returned add 30 PENCE per tape to the total cost.

ALSO...

Disc Recovery: If by accident, you have erased your programs send your disc Plus £3.00 & we will recover them. State Whether 464/6128. Dr Hudson, 1 Chynoweth, Stenalees, St Austell, Cornwall. Phone 0726 850458.

Have your Amstrad listings typed! Up to 5 for £1.00, up to 10 for £2 etc. Anylength. Send SAE, listings, blank cassette. Cheques/PO's to V J Elliott, 30 Coppice Avenue, Harrogate, North Yorkshire.

This section of the magazine offers you the chance to speak directly to the huge waiting world of CPC owners — or would-be owners. Users report good results. You can place an ad of up to 30 words for just £5

So you could use it to sell a printer or launch a user group or publicize a piece of software you've written. One thing you can't advertise is the sale or swap of software. Such ads can be misused by pirates.

Fill in the application form and send it to us together with payment. We'll then place the ad in the next available issue (published 2-7 weeks after we receive your order).

Order form Send to: AA Small ads, Future Publishing Ltd, 4 Queen Street, Bath BA1 1EJ

Please place the following advertisement in the next available issue of Amstrad Action

Name _____

Address _____

Telephone _____

Classification: For Sale Wanted Services User groups Other _____

I enclose payment of £5.00 by Cheque/P.O./Access/Visa.

Credit Card number _____

Credit card expiry date _____

Write your advertisement here, one word per box. Include your name and phone no. if you want them printed

ADVERTISERS INDEX

AEL	77	Comsoft	11	Nemesis	50
Activision	44-45	Disk It	77	Ocean	27,67
Amsoft	17	E & J	50	Romantic Robot	58
Amsters Cage	34	Goldmark Systems	77	SDC	33
Arnor	16	Imagine	IFC-3	Siren	40
BBD Dust Covers	52	Infogrames	15	US Gold	IBC,OBC,39,55,70
Best Byte	50	K & M Computers	52	Virgin	6
Budget Soft	77	MJC Supplies	50	Wacci	52
CDS	28-29	Matrix	77	Y.C.U.C.	52
Castle	34	Microtext	34		

budgetsoft

THIS IS NOT A BIRTHDAY
WARRANTY FOR THE
SOFTWARE. FOR THE
OWNER'S BENEFIT & P.

£1.95	£2.95	BOUNDER	NEMESIS THE WARLOCK	ALIEN 8	£5.95
ICEE	HERBERT'S DUMMY RUN	FUTURE KNIGHT	PULSATOR	REPORT GENERATOR	SPY V SPY
THE REAL YOU	STAR COMMANDO	ORANGE HILL	TARZAN	DATABASE	SHOULN
STOCK MARKET	HOME RUNNER	IMPOSSIBL	INHERITANCE	UNDERSTANDING BASIC	SPINWHEEL(DISC)
SHIP OF DOOM	MANIC MANER	TRIXLAB	BRIDGE	QUILL	RED ARROW (DISC)
INCA CURSE	BOULDERDASH	KILLER RING	THE SYDNEY AFFAIR	MICRO VALUE(4 GAMES)	WELTDOWN (DISC)
PLANET OF DEATH	AVENGER	TUJAD	STRYFE	SAM FOX STRIP POKER	TRAILBLAZER(DISC)
ESPIONAGE ISLAND	AMTIX ACCOLADES	TODDRUNNER	DESPOTRIO DESIGN	CHUCKIE EGG	
ON THE OOHE (DARTS)	KEYVUS	WERNER	TENTON	CHUCKIE EGG 2	£6.95
BELLS	RED ARROWS	XARO	REVOLUTION	NEMESIS	LORD OF THE RINGS
LIFE EXPECTANCY 2	INTERNATIONAL KARATE	PRODIGY	WOLFLANDER	FRANK BRUNO BOXING	STARGLIDER
WRECKLESS ROGER	MONTH ON THE RUN	SEPOLCRI	ITS A KNOCKOUT	NOW GAMES 4	BALLBLAZER (DISC)
HOOCHET	THING ON THE SPRING	RAJA RAMA	BIGGES CASTLE		LITTLE COMP. PEOPLE
SWIFMAN	TRAIL BLAZER	THE FOURTH PROTOCOL	BREAKTHRU	£4.95	HOWARD THE D: "K"
DEATH KICK	TRAP	WORLD SERIES BASEBA	FIRETRACK	MICROVALUE VOL.3	TR&M(QUADRO), (DISC)
CODE NAME MATT	KETTLE	TEMPEST	ALIENS	WAY OF THE TIGER	SKYFOX (DISC)
SHADOW FIRE	HUJACK	RESCUE ON FRACTULUS	IKARI WARRIORS	YIE AR KUNG FU	BREETH (DISC)
ARTWORK	THE FIFTH AXIS	EIDOLON	MANDRAGORE	BREETH HAWK	CAMELOT WARRIORS(DIS)
SPELLBOUND	NOXOR 88	EXPLORER	FIFTH QUADRANT	TROUBLE LITTLE CHINA	WERNER(DISC)
ROLAND ON THE RUN	KAT TRAP	FOOTBALL MANAGER	3 WEEKS IN PARADISE	STAR GAMES ONE	GREYFELLDISC
SOLAR COSTER	BOONER	PRESIDENT	BATTLE OF THE PLANET	SHOJUN	DEATHSCAPE(DISC)
PANZERBORNE	LORDS OF MIDNIGHT	THE YOUNG ONES	STARION	DRAGON'S LAIR	CHALLENGE / GOSBODI
HARD HIT ATTACK	GREYFELL	NOW GAMES 3	GENESIS	ZORRO	HYBRID(DISC)
THINK	DEATHSCAPE	JET SET WILLY	ARINEM	WAY OF THE EXP. FIST	TRIALOR(DISC)
ROLAND GOES DIGGING	DEACTIVATORS	ONE	SUPERSEUTH	MARTIANOIDS	TARZAN(DISC)
JEMS OF STRADUS	CHALLENGE OF THE	WEST BANK	SUPERICHESS	SKYFOX	
SPACE HAWKS	HYBRID	SOBOTS BANKRU TRLOY	MORDEUS' QUEST	KNIGHT RIDER	£9.95
CRAZY GOLF	BRIDE OF FRANKENSTEIN	COSMIC SHOCK ABS.	CENTRE COURT	SUPERCHES	ALP WIERDE MONY
ASTRO ATTACK					PRESIDENT (DISC)
TALES OF ARKADIAN					INT. KARATE(DISC)
HEROES OF KARN					AMTIX ACCOLADES (DISC)
JEWELS OF BABYLON					CLASSIC COLLECTION (DIS)
HUNTER KILLER					COMPUTER SPREAD SHEE
ELUDON					TEACH YOURSELF BASIC
MAGIC CLOCK					REEL TIME
PIPELINE 2					TRIVIAL PURSUIT

Post and packing: 1-3 titles 75p, 4 or more £1. Overseas £1.30 per title.
PERIPHERALS: £1 per item. Overseas £1.80
Please send cheques/P.O.'s to: Budgetsoft, Dept AA, 33 Little Breach,
Chichester, W.Sussex, PO19 4TY.

MATRIX HIRE

The cheapest way to play them all.

Top games titles for Amstrad, Commodore and Spectrum.

Disc and Tape for Amstrad and Commodore.

Please state system

Details from:

Matrix Leisure Club, Dept AA,
271 Stansted Road, Bishops Stortford,
Herts CM23 2BT

AMSTRAD COMPUTER REPAIRS

Fixed Price repairs

From £10 inclusive of VAT, P&P, and 3 months "NO QUIBBLE" guarantee
Send your computer to:-

The Computer Factory (Dept. AA01),
Analytic Engineering Limited,
Unit 18a, Grainger Road Industrial Estate,
Southend-on-Sea SS2 5DD

We will then give a no obligation fixed price quotation. If you want to proceed, fine. If not,
we will return the machine by the next post at our expense.

If you prefer to telephone in the first instance for an informal chat:-

TELEPHONE (0702) 618455

Also available, massive software selection

TELEPHONE (0702) 618455 for FREE LIST

Most computers are covered by our comprehensive deal. These include:-

SINCLAIR - COMMODORE - BBC etc.

TELEPHONE (0702) 618455 for details.

***** SPECIAL OFFER *****

Refurbished Amstrad CPC 664 keypad, including fitting, P&P, VAT and
3 MONTH GUARANTEE.

***** £29.95 *****

*** SPEEDTRANS PLUS ***

AMSTRAD CPC6128 (or 464/664 with DK Tronics additional Memory)

THE BEST TRANSFER UTILITY FOR SPEEDLOCK PROTECTED PROGRAMS
FROM THE LEADERS IN TAPE-TO DISC TECHNOLOGY
will transfer more Speedlock protected programs to disc than any of its
competitors and transfers all the programs we say it will

These are some of the features:

- * PLUS * TOTALLY AUTOMATIC TAPE-TO-DISC UTILITY — JUST ONE KEYPRESS
- * PLUS * ONLY ONE PROGRAM TO RUN WHICH FINDS THE SPEEDLOCK TYPE AUTOMATICALLY
- * PLUS * PROGRAM TRANSFERS ORIGINAL AND MANY LATER SPEEDLOCK PROGRAMS
- * PLUS * NO FIDDLING/MEDDLING, WRITTEN WITH THE AMATEUR IN MIND
- * PLUS * AUTOMATIC DISC FILENAMES
- * PLUS * NO WASTED DISC SPACE — SAVES THE CORRECT AMOUNT OF GAME CODE
- * PLUS * SAVES 99% OF OPENING SCREENS AND IN THEIR CORRECT COLOURS
- * PLUS * COMPRESSES SCREEN CODE TO SAVE EVEN MORE DISC SPACE
- * PLUS * FASTER LOADING TIMES FROM DISC BECAUSE OF SHORTER LENGTHS

SOME OF THE PROGRAMS SPEEDTRANS PLUS WILL TRANSFER

* Arcadet * Arkanol * Armageddon Man * Army Moves * Brian Clough's Football Fortunes * BMX Simulator * Barry
McGulgan's Bowling * Beach Head * Bounty Bob Strikes Back * Brain Ache * Bruce Lee * Crystal Castles * Cluedo
Daily Thompson's Decathlon * Daily Thompson's Super test * Dambusters * Desert Fox * Dizzy * Express Raider * F15
Strike Eagle * Fighter Pilot * Frankie Goes To Hollywood * Game Over * Ghostbusters * Goonies * Grand Prix
Simulator * Green Beret * Gunfight * Gyroscop * Hacker * Head Over Heels * Hunchback II * Hypersports * I Spy
Impossible mission * Its A Knockout * Jet Set Willy * Knight Rider * Konami Golf * Kong Strikes Back * Kung Fu
Master * Leaderboard * Leaderboard Tournament * Legend of Kage * Mag Max * Mario Bros * Match Point * Matchday
* Metrocross * Mike * Mindshadow * Mission Jupiter * Monopoly * Nemesis The Warlock * Nomad * Ping Pong * Pro Sid
Simulator * Puleator * Raid * Rambo First Blood II * Rescue on Fracalus * Road Runner (Main Program) * Sabre Wulf
* Samantha's Fox Strip Poker * Saracen * Scrabble * Short Circuit * Silent Service * Space Shuttle * Spy Trek *
Tenth Frame * The Great escape * The Way of the Exploding Flat * Topgun * Transmuter * Vampire * Winter Games *
World Games (Main Program) * World Series Baseball * Xelous * Yie Ar Kung Fu * Zoids (Marsch) * Zorro *

DONT WASTE YOUR MONEY ON OTHER INFERIOR PRODUCTS — BUY
SPEEDTRANS PLUS

WITHOUT DOUBT THE BEST SPEEDLOCK TRANSFER UTILITY ON THE
MARKET PROGRAMMED BY GOLDMARK SYSTEMS THE EXPERTS
AND LEADERS IN TAPE-TO-DISC UTILITIES AND ROUTINES

DISC ONLY £12.99 (UK) EUROPE ADD £1.25. REST OF WORLD ADD £2.00

TO-DISC CONVERSION SERVICE AMAZING OFFER TO ALL 6128 OWNERS

Send us any tape & we will transfer it to a 3 inch disc for just £4.
Each subsequent tape will cost just £1.25. (Max 6 tapes per disc).

Remember —

- * Just send the tape (not the inlay card or box)
- * We supply the disc.
- * All transfers now made to Amsoft CF2 disc.
- * If you want the tapes returned please add 30 pence per tape to the total cost. This will go towards postage and registration.
- * Compilation tapes-£4 for first game + 1.00 for each additional game.
- * If we can't disk-it, no one can!

SPECIAL OFFER ON AMSOFT CF2 DISCS

£12 for 5

£22 for 10

All queries and orders to:

DISK-IT, 32 EGERTON ROAD, STREETLY, SUTTON
COLDFIELD, WEST MIDLANDS, B74 3PG. TEL 021 353 5536

All Prices Inc P&P. Make CHEQUES/P.O. payable to DISK-IT

CHARACTER DESIGNER (Disc)	11.99
Redefines printer download character set (Epson compatibles) for Cyrillic/Arabic fonts and special/scientific characters etc. Redefines Screen fonts and Keyboard keys	
SAMSON TAPE-TO-DISC UTILITY	Disc 11.99
The best Tape-To-Disc utility on the market. It will transfer more programs and	Tape 7.50
does so faster than any other. Numerous features including NEW "SPLIT" option	
SPEEDTRANS v1.43 (Cassette) all CPC's	6.50
Transfers approx. 40 SPEEDLOCK titles automatically to disc including screens (send for list)	
FIRETRANS (Cassette)	5.00
Transfers a number of Firebird games automatically to disc including screens (send for list)	
LORD OF THE RINGS Conversion Cassette	4.50
Side 1 transfer all game parts to disc. Side 2 reduces tape loading time to 3 minutes	
VIEWTEXT (Cassette) Special offer while stocks last	2.00
See the text in binary files — find passwords etc — finish that difficult game)	
TRANSIT (Cassette)	4.50
Disc to Disc file copier. Any drive combination. Easy to use.	
Q-CLONE (Cassette)	4.50
Whole Disc copier (Amstrad formats). Any drive combination. Easy to use.	
MASTERFILE/MASTERCALC ROM UPGRADE	17.25
Masterfile/Mastercalc 464/6128 (NOT Masterfile III). Send original software (approved by John Campbell)	
MICROTEXT ADAPTOR ROM UPGRADE	17.25
Approved by MICROTEXT. Makes program 100% easier to use	
DMP 2000/3000 BUFFER UPGRADE	6.50
Increase the buffer from 2k to 8k with this simple to fit, fully documented kit	
DMP 2000/3000 RIBBON	5.25
ROMBO ROM BOARD	34.00
8-socket ROM board with special disc drive adaptor for 464 owners	
PHASOR ONE JOYSTICK	11.50
Hand-held pistol grip joystick with positive microswitches	
TAPE TO DISC SERVICE	3.50
Send us your tape and a disc together with £3.50. Return of post service	
EPROM SERVICES (Prices includes EPROM)	17.25
We will put your program on ROM (subject to copyright)	
TAPE TO DISC ROUTINES (Listings)	each 1.25
We have 100's of routines to convert tape games/programs to disc. Send for list	
THE GOLDMARK BOOK	6.00
Over 100 tape to disc routines to use with SAMSON/Transmat	
100 CASSETTE LABELS	2.00
100 3" DISC LABELS	1.80
100 ADDRESS LABELS	1.70
DISC FILE HEADER READER (listing)	0.75
DISC LABELS PROGRAM (listing)	0.75
ADDRESS LABELS PROGRAM (Listing)	0.75

The above are UK prices. Europe please add £1.25 per item.
Rest of world add £2.00 per item

Please send your cheque (£ Sterling) Eurocheque OR UK P.O. to

GOLDMARK SYSTEMS, 51 COMET ROAD, HATFIELD, HERTFORDSHIRE, AL10 0SY, ENGLAND

Please write or telephone 07072 71529 for further information.

Q. Which new entertainment software is alluring, addictive, AA raved and available absolutely free of charge on cassette or disk?

A. Any one of these titles when you take out a subscription to Amstrad Action.

Incredible but true. Subscribe to the leading magazine for Amstrad CPC owners and we'll send you your choice of one of the programs on the opposite page for nothing. That means up to £14.99 worth of software free of charge for disk owners. And people who ask for the *cassette* version of the game will *also* get a free copy of the famous 4000-location epic *Lords of Midnight*. (RRP £8.95), making their saving almost £20.

A 12-issue subscription to Amstrad Action costs £16.50, and guarantees a year's supply of your favourite magazine delivered hot off the press direct to your door.

To order, just turn the page and fill in the form, or dial 0458 74011 with your credit card details.

EXTRA SUBSCRIPTION GIFT FOR CASSETTE USERS!

As if one free game wasn't enough, here's another: a free copy on cassette of the huge, multi-character epic *Lords of Midnight*. This title, by top programmer Mike Singleton, was raved over in the very first issue of Amstrad Action. After two years it's still a classic offering hours of very special entertainment. Set in an immense, beautifully depicted landscape you have to take on invading armies of Doomdark by controlling four different characters.

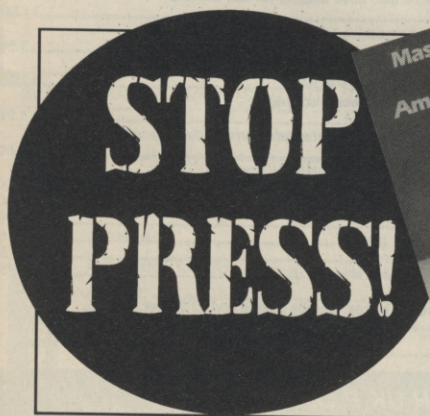
We'll include it as a bonus to every new subscriber who opts for the *cassette* version of one of the other games high-lighted on this page. (Sorry, disk users, but you're getting an expensive enough gift as it is!)

HOW TO ORDER

Just turn the page and use the order form (the order codes are listed next to the form).

Or telephone us with
your credit card details on
0458 74192

(24-hour answerphone).



LIMITED OFFER ONLY!

Master Machine Code on your
Amstrad CPC 464 & 664

By Jeff Naylor and Diane Rodgers
Save £4, now only £2.95

150 pages stuffed with examples, graphics and listings.
Order code A284

ANY ONE OF THESE PROGRAMS **FREE** WHEN YOU SUBSCRIBE!

Or buy them separately for the special price of £6.95 cass, £11.95 disk.

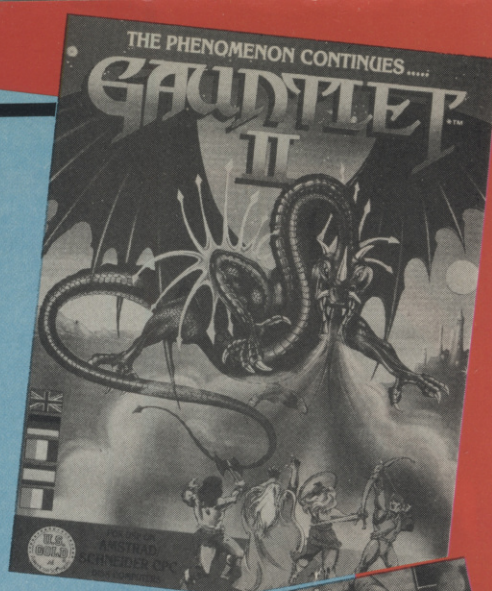
GAUNTLET II

Normal shop price £9.99 cass, £14.99 disk

- The Atari coin-op now on the CPC range!
- US Gold's fantastic follow-up is a totally new game.
- Over 100 levels all plagued

by the Dragon and the Death Curse of "IT".

- Acquire the strength to move even the maze walls!
- AA Rave - "Powers beyond Belief"!

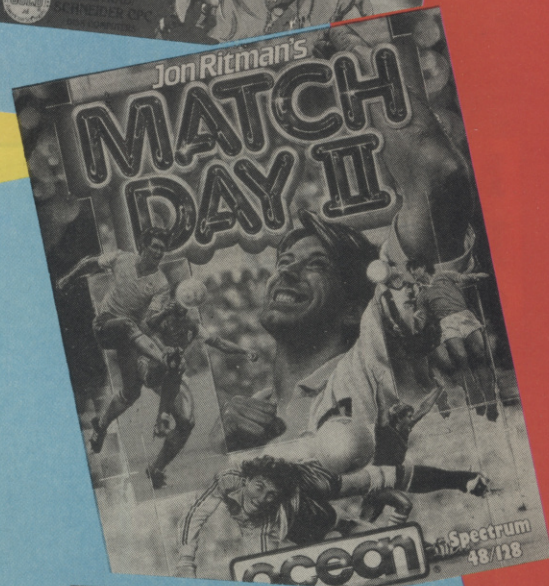


MATCH DAY II

Normal shop price £8.95 cass, £14.995 disk

- AA Rave from Ocean.
- Super new all-action football game.
- Full-sized playing field, individual player control.

- Jump, head, volley or kick to make a move.
- Be a star!



COMBAT SCHOOL

Normal shop price £8.95 cass, £14.95 disk

- Seven events - plus a penalty stage - to test your nerve.
- Take it to the limit on the firing range, assault course,

arm wrestling, chin-ups and more!

- AA Rave from Ocean.
- Lots of thought. Lots of action. But can **you** survive? move even the maze walls!
- AA Rave - "Powers beyond Belief"!



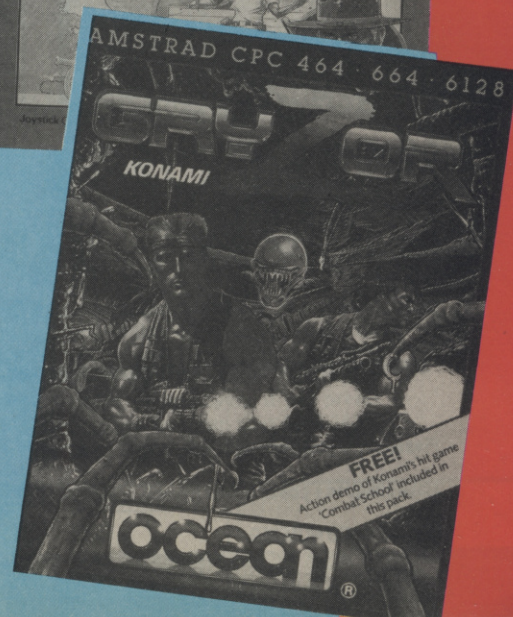
GRYZOR

Normal shop price £8.95 cass, £14.95 disk

- AA Rave from Ocean
- An action-packed coin-op game in three sections.
- Infiltrate the Alien Rebels' headquarters.

• Take on wave after wave of fanatical guerrillas.

- Then destroy the enemy atmosphere processor and mothership.
- PLUS! Free demo of *Combat School*!



HIGHLIGHTER PENS

Three for £1.50

Anyone who uses computers a lot, can make use of highlighter pens. For marking the important lines in a document or printout or program listing. For ensuring a key sentence in a manual isn't forgotten. Or just for highlighting the main points in an Amstrad Action article.

We're offering a set of three different-coloured AA-stamped pens in a clear plastic wallet for just £1.50. They're high-quality and long-lasting. A good way of focussing attention on things that matter.

MAGAZINE BINDERS

Only £4

Amstrad Action is a magazine worth collecting, and our sturdy, custom-built binders provides the best way of keeping your collection tidy and in good condition. Each one is designed to hold 12 copies of AA and preserve them for posterity – and easy future reference.

As well as being functional, the binders look every bit as good as the magazine. They're coloured a smart royal blue with the magazine logo printed in blocked Newvap Gold on the spine and front. Individual magazines are held in place by one of 12 wires.

Buy one and you can have a year of CPC info at your fingertips.



BACK ISSUES

Expand your Amstrad Action collection

If you're one of the thousands of readers who've joined Amstrad Action, you'll have missed out on some of the good things you've missed over the years. We're selling you the back issues listed below, which we're selling at a special price.

Issues 8 and 16 may be of particular interest, as they contain software. Two series also went down very well. And absolute beginners ran from issues 8-17, while a series for experienced users ran from 10-17. All issues contain numerous game articles.

ISSUES 1-6 SOLD OUT!

ISSUE 7 £1.00. Educational software review.

ISSUE 8 £1.50. COVER CASSETTE (an AA Rave) The Covenant.

ISSUE 9. Four-page special on the Amstrad CPC.

ISSUE 10. SOLD OUT!

ISSUE 11. £1.00. Cover: Tau Ceti.

ISSUE 12. £1.00. Pascal.

ISSUE 13. £1.00. 7.

ISSUE 14. £1.00. Art.

ISSUE 15. £1.00. D OUT.

ISSUE 16. £1.00. COVER of Druid, plus numerous other articles.

ISSUE 17. £1.00. Numerous Type-1.

ISSUE 18. SOLD OUT!

ISSUE 19 £1.00. Cover of ing.

ISSUE 20. £1.00. Special of Tas.

ISSUE 21. £1.25. Typewriter He.

ISSUE 22. £1.25. Head of Word.

ISSUE 23. £1.25. Laundry Tas.

ISSUE 24. £1.25. Review of own.

ISSUE 25. £1.25. Create your own.

ISSUE 26 £1.25. Special of Midi music.

ISSUE 27 £1.25. Midi and text. B.

ISSUE 28 £1.50. Special Christmas.

Send this form plus payment to: AA Mail Order, The Old Barn, Somerton, Somerset, TA11 7PY

ORDER FORM

Name..... Telephone no. (if poss).....

Address.....

..... Post code.....

Machine owned: CPC 464 CPC 664 CPC6128

Please send me the following items from the Amstrad Action special offer pages.

ORDER CODE	DESCRIPTION	PRICE

TOTAL PAYABLE

Please circle your method of payment: ACCESS • VISA • CHEQUE • PO

Make cheques + postal orders payable to FUTURE PUBLISHING LTD. If paying by credit card, please enter details:

CREDIT CARD NUMBER

EXP. DATE

USE THESE

Details of these products are given here

ITEM OUR PRICE ORDER CODE

SUBSCRIPTION
 with GUANTLET II cass*.....£16.50 A267
 with GUANTLET II disk.....£16.50 A268
 with MATCH DAY II cass*.....£16.50 A269
 with MATCH DAY II disk.....£16.50 A270
 with COMBAT SCH cass*.....£16.50 A271
 with COMBAT SCH disk.....£16.50 A272
 with GRYZOR cass*.....£16.50 A273
 with GRYZOR disk.....£16.50 A274

*Cass options include Lords of Midnight on cassette as free extra.

GUANTLET II CASS.....£6.95 A275
 GUANTLET II DISK.....£11.95 A276

MATCH DAY II CASS.....£6.95 A277
 MATCH DAY II DISK.....£11.95 A278

COMBAT SCHOOL CASS.....£6.95 A279
 COMBAT SCHOOL DISK.....£11.95 A280

GRYZOR CASS.....£6.95 A281
 GRYZOR DISK.....£11.95 A282

THE THINGI

Only £5.95 – save £2!

What's white, dangles paper next to your computer screen, and costs two pounds less than in the shops? Yes, a Thingi bought through Amstrad Action.

This remarkable computer accessory – an idea so simple it's ingenious – could dramatically ease your hours at the keyboard. It's basically a cleverly-shaped piece of plastic that attaches via Velcro to the top of your micro. But with a Thingi on your CPC you can have documents, letters or program listings clipped right next to the screen in perfect reading position.

Any task involving copying off paper is thereby made much easier and faster. In fact, the coloured clip supplied is sturdy enough to support an issue of Amstrad Action open, say, at the Type-ins section.

The Thingi comes in two versions, one for positioning to the left of the screen, the other to the right – the Velcro attachment allows easy readjustment or temporary removal.

A sensible, cost-effective add-on for your CPC.



DISK BOX!

Only £12.95 – including free blank disk!

This will do for your disks what an AA binder does for your AAs. Keep 'em tidy. The box is made from top-quality perspex and features a tinted, hinged, lockable lid.

It's specially designed to take Amstrad 3" disks and will hold and display 20 including their cases or 40 without cases. A set of 20 dividers included with the box can be used to lay your hand instantly on the disk you need. A classy way to keep your worktop organised.

AA DUST COVERS

2-piece set only £6.95

Let's face it, computers don't like dust. Over a period of time it can make them very ill indeed: disk drives and cassette decks in particular can suffer serious, sometimes fatal damage.

A set of dust covers provides a neat solution. And there's the added bonus of smartening up the hardware's appearance when it's not in use.

The specially-commissioned Amstrad Action covers are made from high-quality, water (and coffee) proof PVC. They're coloured a gentle beige with smart blue trimming and matching AA logo.

You can order a 2-piece set tailor-made for your CPC system – just choose the correct order code from the list next to the order form.

collection!

joined Amstrad Action only recently, you'll want to see how to do it. We have limited numbers available at cover price with post and packing free. As both include free cassettes packed with good Andrew Wilton's programming course in Basic for a series of articles on the CP/M operating system reviews, Type-Ins and Pokes.

viewed Tips on Elite. containing the complete PSS game ant.

ge ple ing guide to Batman. Printer reviews. DUT!

SSUE 11. £1.00 Pokes for Batman, Bounder, The overna at, Tau Ceti.

SUE 12. £1.00 Big disc drives, Starstrike II, Pro Pascal.

E 13. £1.00 7-page music special, Knight Tyme

g guid. £1.00 Art Studio review, maps of Dan Dare,

Magik D OUT!

5. SO £1.50 COVER CASSETTE containing free level us nur erous utilities.

£1.00 Pagemaker review. Red Boxes review.

pe-ins

OLD Q

0 Che Mode special. ROMs and EPROMs.

Surv of ingenious gadgets and add-ons.

Type ins special including Card Trick program.

lead over Heels Poke + 5-page playing guide.

unch of Word-Processing series. Utility Type-ins.

views of Tas Sign, Pocket Protext, Exolon.

te yo own Trivia quiz program. RODOS

al on midi music interface.

nd Tel text. Build an RS232. Red L.E.D.

Christ mas tape!

ORDER CODES

here and on the preceding pages

ITEM	OUR PRICE	ORDER CODE
AA DUST COVERS		
CPC 464 mono	£6.95	A208
CPC 464 colour.....	£6.95	A209
CPC 664 mono	£6.95	A210
CPC 664 colour.....	£6.95	A211
CPC 6128 mono	£6.95	A212
CPC 6128 colour.....	£6.95	A213
THINGI		
left-of-screen	£5.95	A214
right-of-screen.....	£5.95	A215
DISK BOX (with free disk)	£12.95	A216
AA BINDER	£4.00	A217
3 AA HIGHLIGHTER PENS	£1.50	A266
AA BACK ISSUES		
ISSUE 7	£1.00	AA7
ISSUE 8	£1.50	AA8
ISSUE 9	£1.00	AA9

For issues 10-26 use codes AA11-26. The price of each issue is listed in the Back Issues panel on this page.

SPECIAL OFFER

Master Machine Code on your Amstrad CPC 464 & 664Order code A284

24-HOUR HOTLINE

☎ 0458-74192



If you own Access or Visa credit cards you can place your order by telephone at any time of day or night, seven days a week. Just dial 0458-74192 and be ready with your name and address, credit card number and expiry date, and the details of the software you wish to order. Alternatively, if you prefer a human being to an answerphone, you can ring 0458-74011 during office hours and ask for "Credit Card Orders".

REAR VIEW

A sideways look at the world of computing, plus Sugarman!

Horoscope

AA's monthly honest horoscope for CPC users



Pisces (Feb 19 - Mar 20)

You have a vivid imagination and often pretend that *Out Run* is a game. You are bossy and never let your relatives use your computer. You lack confidence, are generally a coward and have never got a high-score in *Barbarian*. Pisces people do terrible things with joysticks.

Government Gamers

I'll bet you didn't know there were games freaks hidden away in the Cabinet? The awful truth was revealed by this publicity still from Konix.

They've just opened a new factory, after 12 months of fantastic success with the Speed King joystick, the ceremony being attended by Peter Walker, the Secretary of State for Wales, and Michael Foot, MP for Blana Gwent and ex-leader of the Labour party.

We're a bit dubious about whether they sent us the correct picture because the two guys on the left are spitting images of: 1 - the up and coming salesman, with vaseline on his teeth, bursting into the shot to try to sell you a joystick; 2 - chief waggle tester of the Speed King.



Rush Job Calendar

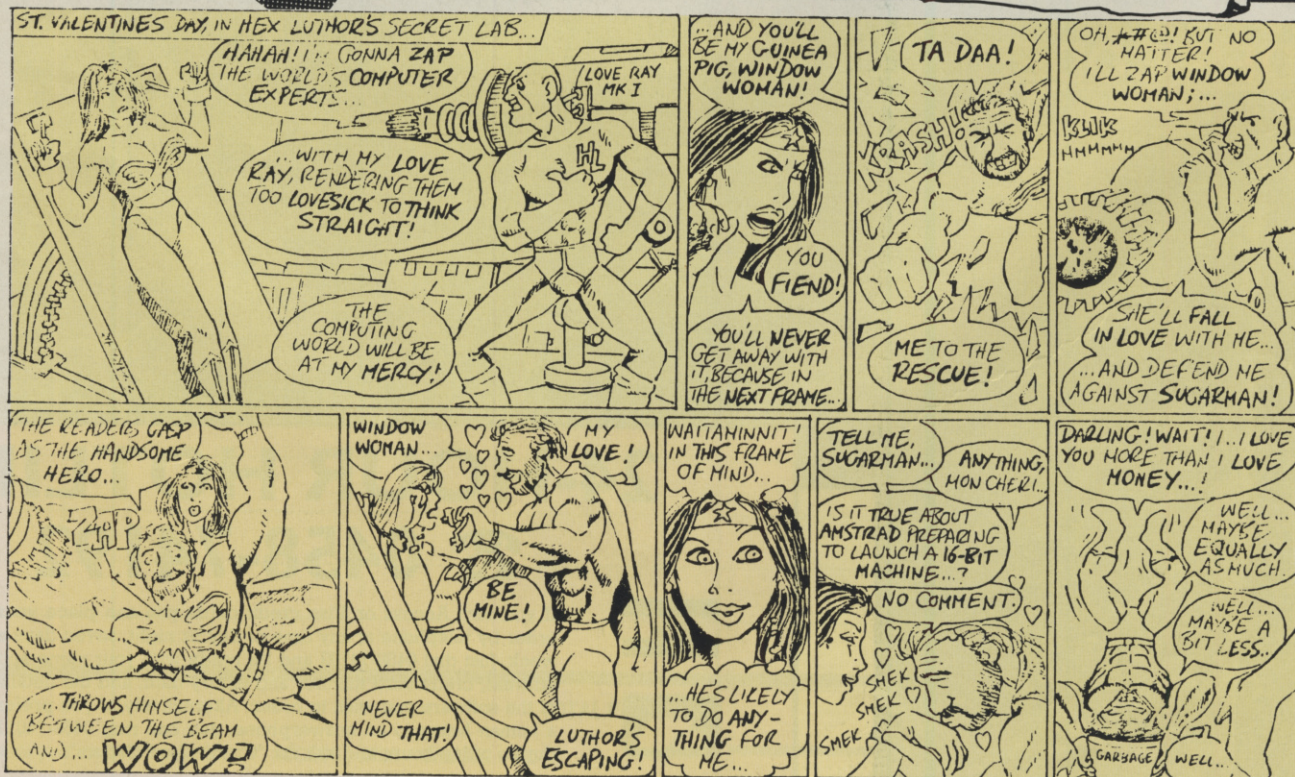
In the computer industry there's never enough time to do things. So to try to help understand magazine deadlines, programmer schedules, game delays and such we've altered the calendar a little. When using it remember to apply these rules:

1. All software takes too long to write. With this calendar the software house can order the program on the 7th and have it delivered on the 3rd.
2. All deadlines are met on Fridays, so there are two Fridays in each week.
3. There are seven extra days at the end of the month for those deadlines that you didn't quite make earlier.
4. There are no "first of the month bills" to be paid because there isn't any 1st. The 10th and 25th have also been omitted just in case you've been asked to pay on one of these days.

5. Saturdays and Sundays have been omitted so that there are no non-productive days and no time-and-a-half to pay.

6. A new day has been introduced each week called Sugarday. It's a day of rest when every-one worships the man himself.

SUG	FRI	FRI	THU	WED	TUE	MON
8	7	6	5	4	3	2
16	15	14	13	12	11	9
23	22	21	20	19	18	17
31	30	29	28	27	26	24
38	37	36	35	34	33	32



INTER GALACTIC HAVOC! A METEORIC MAD HOUSE! IT'S SPACE AGE.....

BEDLAM



CBM 64/128
£9.99 Cassette
£11.99 Disk

SPECTRUM 128
£8.99 Not 48K
Compatible

AMSTRAD
£9.99 Cassette
£14.99 Disk
PC £19.99

Will you endure the X12 Fighter Simulator and emerge an ice cool space fighter at the pinnacle of his powers or like many more will you be reduced to a nervous, gibbering wreck fit for no more than intergalactic tinpot trading ships. Only the premier cadets of the Stellar Imperium's pilot academy will ever find out and its upto merciless instructors to ensure that only the elite survive.

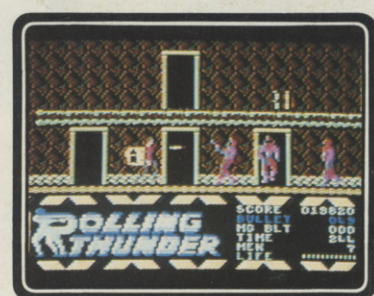
It's space age frenzy... It's interstellar turmoil... It's Bedlam!

GDI
TOMORROW'S SOFTWARE TODAY
GDI Media Holdings Ltd., Units 2/3, Holford Way, Holford, Birmingham B6 7AX, TEL: 021 356 3388

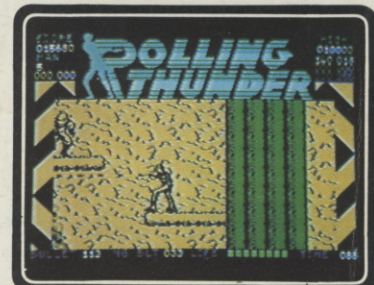


ROLLING THUNDER™

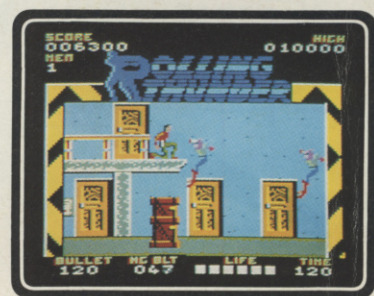
namco



Screen shot from CBM version.



Screen shot from Spectrum version.



Screen shot from Amstrad version.



Have you got
what it takes...
...to be an RT
undercover cop?

- CBM 64/128 £9.99t, £11.99d
- SPECTRUM 48K £8.99t
- AMSTRAD £9.99t, £14.99d
- ATARI ST £19.99d
- AMIGA £24.99d

