AMSTRAD COMPUTER USER

August 1990
£1.45

SMASH THE DRUG BARONS IN US GOLD'S NEXT GENERATION JET FIGHTING EXTRAVAGANZA

THE SKY'S THE LIMIT

WIN A SENSATIONAL 2-DAY GLIDING COURSE

PRINT POWER

9-PINS AT A GLANCE. CAN CITIZEN'S LATEST OFFERING BEAT THE BEST OF THE REST?

PIPES AND PUZZLES

PATTERN PUZZLES, PIPE MANIA, HAMMERFIST AND LOTS, LOTS MORE IN THIS MONTH'S GAMES REVIEW BONANZA

SNOW STRIKE EXCLUSIVE PREVIEW

+ Free Poster Inside

ISSN 0952-3049

08

9 770952 304013

IPOPSHOPI

THE FORTNIGHTLY MAGAZINE WITH *MORE* IN *STORE*

This is just some of the stock we've carried over the last six months...

SOUL II SOUL PRINCE ADAMSKI
SNAP LISA STANSFIELD SKID ROW
ROXETTE STONE ROSES MADONNA
BETTY BOO JASON DONOVAN
THE QUIREBOYS THE CHARLATANS
SINEAD O' CONNOR THE MISSION
DEPECHE MODE WET WET WET
NEW KIDS ON THE BLOCK MARTIKA

Pipe Mania!!

ADDICTION BEYOND BELIEF!!

C and VG Feb 1990 94%

Pipe Mania is "a classic puzzle arcade game that is so addictive, it should come with a Government Health Warning!"

Pipe Mania is a game of great ingenuity, simple in concept and friendishly challenging to play.

You'll need to act instinctively, but think strategically!

One wrong move, one brief hesitation or mis-placed pipe section, and you'll drown in a sea of slime!

ST Action

"Pipe Mania is a conceptually simple and cheeky game which is incredibly addictive"

Commodore User Screenstar

"Terrifically addictive... outlasts any arcade conversion"

Zero March 1990 92%

"Buy this game and you may never sleep again"

The Games Machine Star Player Award 83%

"A puzzle game of great ingenuity and addictivity, Pipe Mania is simple in concept, fiendishly challenging in play, and attractive to look at"

Zzap Sizzler

"Absolutely guaranteed to drive you round the bend"

Amiga Computing Excellence Award 95%

"A game with a game play that shines"

Game Players Award USA

"Best PC strategy game of 1989"

AVAILABLE FOR

Commodore Amiga

IBM PC and Compatibles

Atari ST

Commodore 64 Cassette
Commodore 64 Disk

Spectrum Cassette
Spectrum Disk

Amstrad CPC Cassette
Amstrad CPC Disk

MSX

BBC Electron Cassette
BBC Disk

Apple Macintosh

Achimedes







C+VG HIT!

AMIGA FORMAT GOLD

THE One FOR 16-BIT GAMES

The Machine STAR PLAYER

ZERO HERO

GAME Player's GAME OF THE YEAR

4 The Stannetts • Laindon North Trade Centre • Basildon • Essex • SS15 6DJ

In association with Shoot!

Free superb full colour Wallchart follows all the Fixtures through to the Final

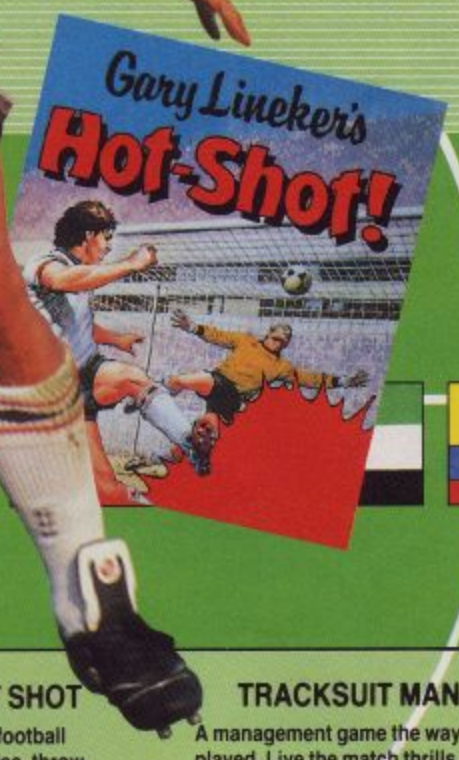
WORLD CUP YEAR 90 Compilation

TILT D'OR AWARDS 1989

TILT D'OR AWARDS 1989







KICK OFF

The award winning, chart topping and international best selling soccer simulation of all time!

- Best Arcade game 16 bit '89
- Europes best soccer simulation '90
- Elspa game of the year
- 16 bit game of the year!

Emap golden joystick awards

Featuring:- Pixel Perfect passing
Blistering Pace
Superb tacticle play

"Has to be the best football simulation yet" ST USER

"Most playable soccer simulation in binary history" C & VG 88%

"Boots the other football simulations over the cross-bar" Zzap 96%

"Simply the best football sim" New Computer Express

GARY LINEKER'S HOT SHOT

Play in a full scale eleven-a-side football game complete with sliding tackles, throw-ins, corners, goal kicks, fouls and even the dreaded referee with his red card.
Will you have what it takes to match the shooting skills of England's Gary Lineker's Hot Shot.

International Soccer replaces Gary Lineker's Hot Shot on Atari ST and Amiga.

Pack includes:

- ***3 Superb Award Winning Games***
- ***Unique Full Colour Wall Chart With the History of the World Cup including Amazing Facts & Figures***
- ***Comprehensive User Guide***
- ***Strategy, Management and Red Hot Action makes this the Ultimate Soccer Experience***

TRACKSUIT MANAGER

A management game the way it should be played. Live the match thrills, as you compete to qualify for the Nations and World Cups.

You decide the play and enjoy the victories and suffer the defeats...

- Play defense, attacking or man to man marking
- Offside trap, sweeper system or possession football
- Genuine goal-kicks, corners and throw-ins
- Crunching tackles, fouls, penalties, bookings and sendings off
- 54 computer managed squads from around the world all with individual tactics

"The best ever football managerial game ever, in the history of the World" C & VG 9/10

The ultimate management game" Ace Rated 929

"Easily the best of its type" Zzap 64 89%

"The best ever managerial game" Sinclair User Classic 93%







AVAILABLE FOR

ATARI ST AMIGA C64 (CASSETTE + DISK)
AMSTRAD CPC (CASSETTE + DISK)
SPECTRUM (CASSETTE + DISK)

4 The Stannetts, Laindon North Trade Centre,
Basildon, Essex, SS15 6DJ Tel. No. (0268) 541126

Published by MCM Ltd.
A division of MCPC Ltd.
Panini House 116-120
Goswell Road,
London EC1.
Tel: 071-490 7161

Editor
Chris Knight

Group Technical Editor
John Taylor

Reviewers
Marc Jones

Columnists
John Cook
Vyk Olliver
John Kennedy
David Dorn

Designers
Paul Ellis
Adrian Hulf

Illustrator
Julian Sharp

Advertising Manager
Georgia Kats

Production Controller
Jayne Penfold

Production Assistant
Michelle Evans

Publishing Director
Ray Lewis

Managing Director
Peter Welham

Subscriptions
LAZAHOLD
PO Box 74, Kent
TN12 6DW
Tel: (089283) 4783

Yearly rates:
UK £17.40
Europe £24.20
Middle East
£24.50
Far East £27.10
Rest of the World £25.00
USA $41.65

Distribution
SM Distribution
Tel: 01-677 8111

Colour and Mono Origination
Ebony
Liskeard
Cornwall
Tel: 0579 46880

Published on 1st Thursday of month preceeding cover date

Amstrad is a registered trademark and, with the title Amstrad Computer User, is used with the permission of Amstrad plc. No part of this publication may be produced without permission. While every effort is made to ensure the accuracy of all features and listings we cannot accept any liability for any mistakes or misprints. The views and opinions expressed are not necessarily those of Amstrad or Amsoft but represent the views of our many readers, users, and contributors. Material for publication is accepted only on an all rights basis. We regret that Amstrad Computer User cannot enter into personal correspondence.

REGULARS

LETTERS 6
Ziggy dips his hand in the mailbag and pulls out some pintsized problems.

NEWS 10
Your chance to win a super Dan Dare T-shirt, plus what's in the pipeline for the near future.

10-LINERS 14
Puzzles, games and utilities abound in our latest finger-tapping 10-liner presentation.

COMBAT ZONE 20
More action than you can handle in this month's red hot selection of game goodies.

HAIRY HACKER 42
Vax proves once more that cheats do, indeed, prosper.



APPLICATIONS 45
David Dorn delves into the problem postbag once more and steals the limelight from his brother Gordon.

AUNTIE JOHN 48
Our favourite relative picks up the scalpel and swab to take a look at operating systems.



LISTING 51
This month's envelope header and utilities 'two files in one' is guaranteed to get your typing fingers clicking.

COMMS 56
Don't be a mug, join gallant Gordon for the best of the Mug lines now.

FEATURES

COMPETITION 12
Put your flying goggles on and don't miss this once in a lifetime chance to go gliding.

DREAM MACHINE 18
A prototype joystick innovation which will set your high scores soaring.

CYBER CHAMPS 25
Those fabulous American Football Shirts have been won, find out if you've struck gold with your artwork.

PRINT POWER 38
Andrew Banner looks at the new 9-pin from Citizen and shows you the competition at a glance.

EDUCATION 59
Dr. Dorn takes a trip into the woods with school software.

BRAIN TEASERS 63
HTB Software's Pattern Puzzles will set your brain reeling, as Yvonne Taylor found out.

Chips away

I have just purchased an Amstrad 40025 O.S. chip to upgrade my CPC 464 to a 6128 from W.A.V.E. When I wrote to them, I explained that I was an electronic cretin and could they give me some details on how to fit it. The reply that I received was that the fitting instructions were in one of the CPC magazines. Could you help me out?

A.Lambourne, Brook Close, Aldershot, Hants.

Ziggy: Well, if you are very lucky, you might find the chip is socketed, but the chances are that it is soldered. If it is socketed, all you do is replace the existing 40010 chip marked clearly with Amstrad on the back. If you are an electronic cretin, however, and it needs soldering, just take the chip and your machine to the nearest TV or computer repair shop, show them where the chip goes, sit back and have some dosh on you. It shouldn't take long.

Basic plea

Please does anyone have a copy of "Basic Programming for the Amstrad Computers CPC 464, 664 and 6128" by Wynford James for sale? It was published by Micropress in 1985 and I would be most grateful if anyone could help me out.

C.Russell, 57 Brookside Close, South Harrow, Middx., HA2 9AW.

Ziggy: Well, can anybody help our Harrovian friend here?



Multiview

Just to reaffirm the point made in Stephen Bowden's Letter (June ACU), I think that the idea is a good one because although some games have an easy to use multiload system, others are a real nuisance!

Also, it might be a reasonable idea to give each game an overall score by another reviewer, so as not to give a biased opinion if a reviewer doesn't like one. I hope these views will be noticed.

Ewan Pitcairn, Dover Crescent, Bedford.

Ziggy: Noticed and indeed worked upon, Mr Pitcairn.

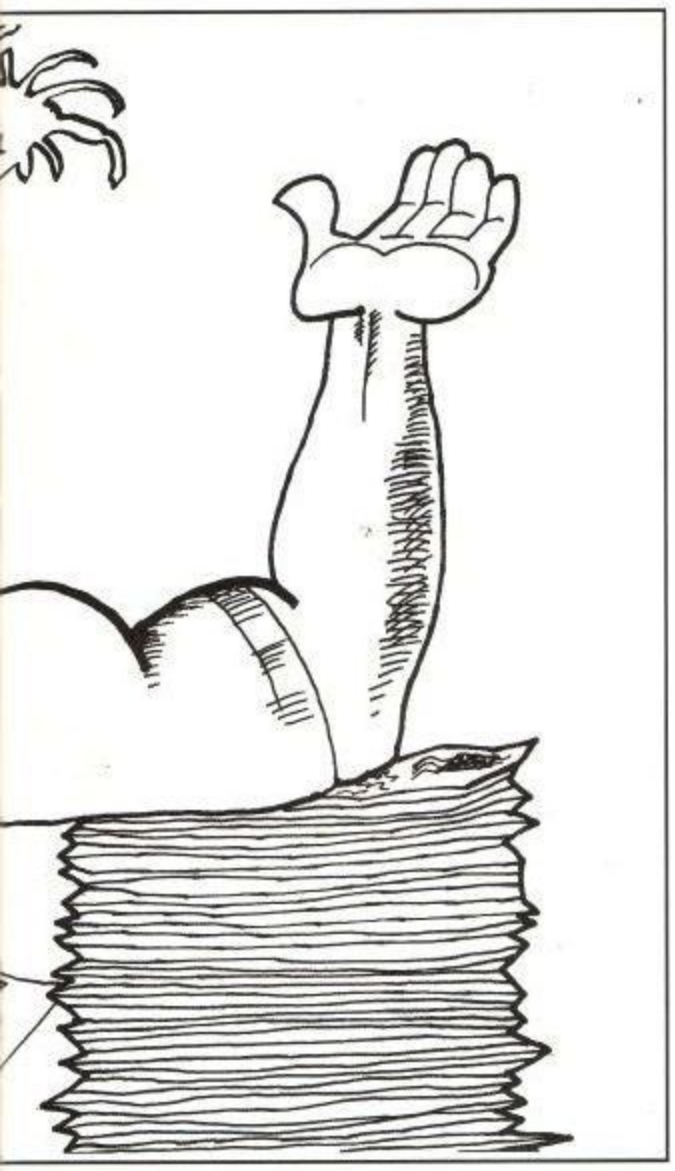
Fair or foul?

Two things, unless I can think of more, which both concern the June 1990 issue. Firstly, in reply to Mark Hopwood's request, there is a teletext decoder about by Microtext, 7 Birdlip Close, Horndean Hants., PO8 9PW (Tel: 070-5 595694). Secondly, isn't Code Masters Pro Boxing Simulator a little similar to Alligator's By fair Means or Foul?

Duncan Nagle, Kenmare Road, Knowle, Bristol.

Ziggy: Thanks for the Teletext tip, Duncan. You are not the only one to notice a similarity between the two games you mention, the truth being that Code Masters took over the licence for the original game. Here the similarity ends though, because there are plenty of extra goodies that Code Masters have thrown into Pro-Boxing and its well worth looking at.

ZIGGY'S MAILBOX



Power up

Could you tell me how much 'K' I can add onto my Amstrad 464 before it blows a circuit? Also, could you please tell us in future magazines if there is any music on 464 game versions, as I am forever buying games, only to find there is only music on the 6128 versions?

Andrew Baker, 2 Arbour Court, Northampton.

Ziggy: As far as souping up your 464 goes, it really is a 'suck it and see' situation, depending on varying power supplies. You should be able to get it up to 256K without much problem, and even as high 512K, but that depends on what peripherals you are using on your expansion ports. On the music front, we at ACU will certainly try and keep you informed.

Compatibility

I own an Amstrad CPC 464 and wish to attach a 3.5 inch disc drive. I have noticed in copies of ACU that Siren Software do such a disc drive. Can you say if this is compatible and if you require the RS232C interface. I also have a collection of discs from the covers of PC magazines, will these operate on my computer?

B.Morsell, Millfield, Sittingbourne, Kent.

Ziggy: To make use of Siren's offer, you will first need the Amstrad DDI first disc drive which has the necessary interface for the Siren. As for the PC discs, I'm afraid that these will be written in MS-DOS and therefore, will not be compatible with the CPC.

Future shock?

I have been an avid reader of ACU for two years now, so I was amazed when flicking through another mag to find a piece saying how certain mags, including ACU had hit financial problems and its future was in balance. Why didn't I see anything about this in ACU? Should we not know that our favourite mag could go under?

Another thing, how about reviewing games a bit earlier? And one last point, have you ever wanted to shrink the size of your screen and speed up music and gameplay when playing your favourite game? Well now you can. Just type in OUT & BC00,8:OUT &BD00,255. You can now load your game as usual, or do anything you want in the small screen.

Jim Tupper, Central Avenue, Eastbourne, East Sussex.

Ziggy: A quick glance at our news section June ACU will show you our view on certain rumours that have been circulating as to our future, and you shouldn't be reading these other mags anyway, tut, tut! Although we do preview and review up to the minute games, there are some which have been rereleased as budget games that we feel deserve a second mention for value for money and, finally, thanks for the little pokette, very handy indeed.

Drive on

I would like to know if it is possible to connect an old style 8" Wang disk drive onto my 6128. The drive appears to have some kind of controller circuitry and came from an old computer system. My second query is about my colour monitor which flickers from brighter to darker and vice versa whenever it feels like it, even though I have had it serviced under guarantee.

Finally, I have started on machine code but am going crazy because I only have a limited number of routine addresses. Do you know of any books that give a list of basic and CP/M routines?

Richard Lott, Burntwood, Walsall, West Midlands.

Ziggy: Before you go any further, the old 8" disk format has a lesser capacity than the 3" disk you are using on your 6128 now. You'll certainly find no advantage by using the older discs, and at anything up to £5 a time, they are certainly an expensive option to use on your CPC. As for the flicker, check that your monitor is not too close to other electrical appliances. If it is plugged into the same mains supply as your heating or fridge, the cutting in of either one of these could also affect the power to the monitor. Try re-siting your machine for a week or two and if you still have no joy, take the monitor back and get it changed.

As for your final point, Rodney Zak's 'Z80 Programming guide' is excellent for CP/M routines and can be ordered from most bookshops. As for basic, there are numerous books on hints and tips and machine code in the shops. One book, now sadly out of print, is Soft 968. If anyone has a spare copy for sale, I'm sure Richard would be very interested.

Housey-housey

I recently bought a copy of "Your own Software house-Guaranteed" from Galeper Soft and decided to open my own mail-order company, although I am barely 14 years of age.

The company is called CES (Cash Enterprises Software) and should be able to supply software to all CPC users with discounts of up to 50% off RRP. I would be extremely grateful if you could mention this company in your magazine, because if you don't, it may die off.

James Cash, 54 Clydesdale Road, Quinton, Birmingham, B32 1DS.

Ziggy: There you are James. CES apparently stocks software from most of the big name software houses, so if you want to send a SAE to James at the above address, or ring him on 021 4213598, he will send you a list of all the goodies in store.

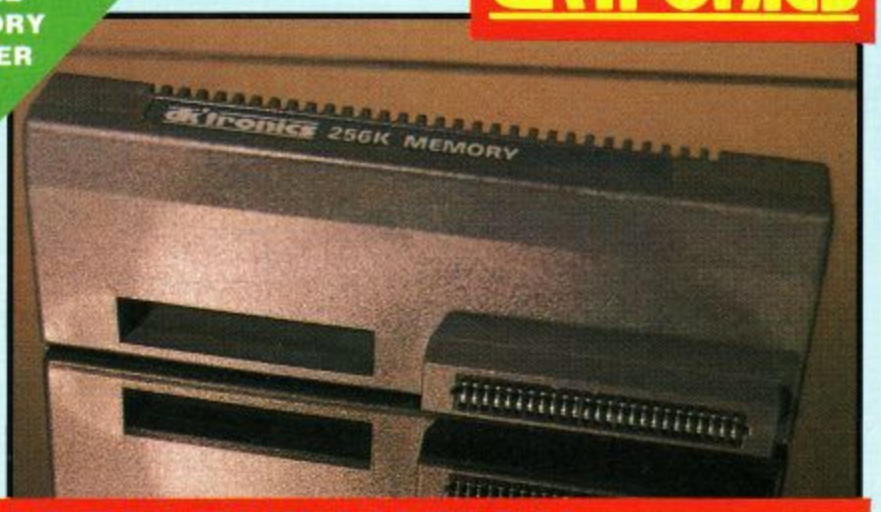
DATEL ELECTRONICS

dk'tronics



MORE MEMORY POWER

dk'tronics



64K AND 256K MEMORY EXPANSION

- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K. The 256K unit takes your 6128 to a massive 320K!!
- 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio - see Ad.).
- Ideal for use with the CPM 2.2 etc.
- All bank switching done automatically by supplied software (cassette 464 - disk 6128).

ONLY £49.99
64K FOR 464
ONLY £99.99
256K FOR 464 OR 6128
(PLEASE STATE)

THE TOTAL SOLUTION TO YOUR MEMORY EXPANSION NEEDS!!

MIDI COMPATIBLE



FREE MICROPHONE AND HEADPHONES!

RAM

MUSIC MACHINE

The RAM Music Machine is probably the most exciting music add-on available for any computer.

- It's a full sound sampling system allowing any sound to be recorded digitally into computer RAM. Once stored the sound can be replayed at different pitches with many varying effects.
- It's an echo chamber & digital delay line.
- Various sampled sounds are provided to get you going.
- The Music Machine can be used as a drum machine - eight drum sounds are provided, but you can easily produce more of your own.
- The powerful software allows you to compose tunes from individual bars of music. You can edit on screen & Save/Load sounds, instruments & rhythms.
- The Ram Music Machine supports full MIDI In, MIDI Out & MIDI Thru.
- Output through your Hi-Fi or Headphones. Comes complete with Microphone.
- Use a full size MIDI keyboard to play the Music Machine.
- Sounds produced by the Music Machine can be mixed with a MIDI Synthesiser's own sounds.
- On screen Sound Editor can produce MIDI data from your own compositions.
- No other product can offer so much in one unit - it's the total solution!!

ONLY £49.99 (Cassette)
ADD £5 IF DISK REQUIRED

SPEECH SYNTHESISER & STEREO SOUND BOOSTER

NEW LOW PRICE



dk'tronics

- This easy to use Speech Synthesiser includes a powerful Stereo Amplifier and two Pod Speakers which are an enormous improvement on the sound supplied by the internal mono speaker.
- Speech output is monorial but directed to both speakers. Booster gives stereo to computer internal sound output.
- Using the SPO/256 Speech Chip the unit has an almost infinite vocabulary.
- Text to speech software is provided in ROM to make speech output simplicity itself.
- Voicing is transparent to the user and the computer can carry on with other program tasks.

ONLY £29.99
464 or 6128 (Please state which)



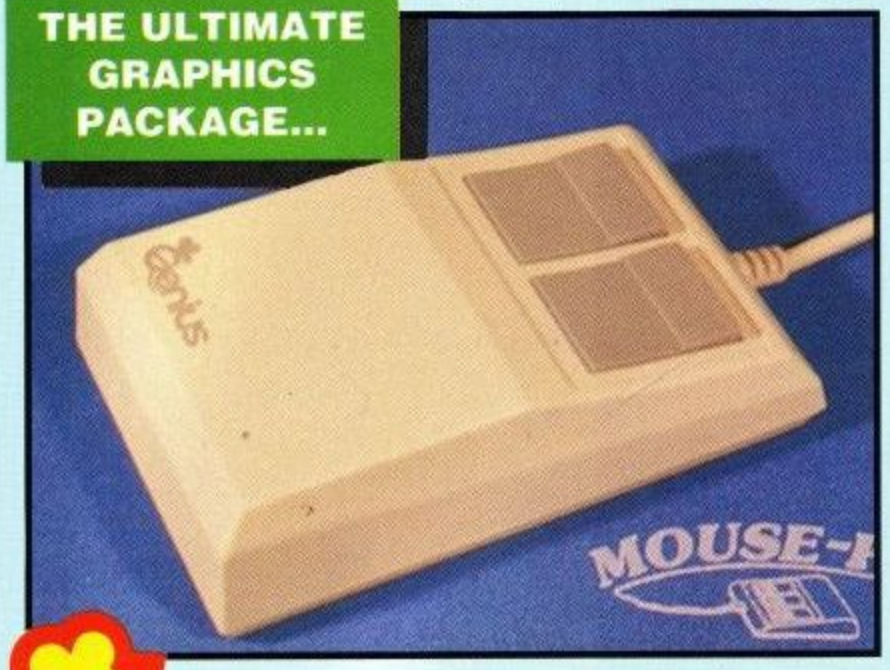
LIGHTPEN/GRAPHICS SYSTEM

- Complete Lightpen and graphics system lets you create a whole range of effects on screen.
- It can magnify, shrink, colour fill and create circles, rectangles, lines and curves.
- Pictures can be edited at pixel level using a scratch pad which is magnified to full screen.
- Picture storage and retrieval, and a pen calibration feature.
- Printer dump utilities for Epson/ Amstrad printers supplied (on cassette).
- Complete package - no more to buy.

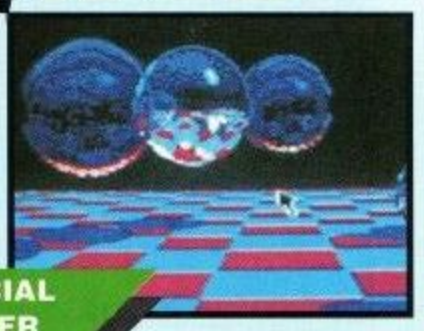
ONLY £14.99
CASSETTE
OR £24.99
WITH SOFTWARE ON ROM - NOTHING TO LOAD
464 or 6128 (Please state which)

DATEL ELECTRONICS

THE ULTIMATE GRAPHICS PACKAGE...







SPECIAL OFFER PACK!





Genius Mouse

COMPLETE WITH

ADVANCED ART STUDIO™

- **Genius Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.**
- **When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...**

TAPE OR DISK FOR 464 OR 6128 (PLEASE STATE WHICH REQUIRED) N.B. 464 NEEDS DK' 64K RAM PACK

ONLY £49.99

TOTAL PACKAGE INCLUDES MOUSE, INTERFACE, ADVANCED ART STUDIO, MOUSE MAT AND HOLDER

- Create an image - shrink it, expand it, move it, rotate it, copy it, colour it etc., etc.
- Spray patterns or shades, make elastic lines - stretch and manipulate shapes.
- Zoom in to add detail in fine mode.
- Pulldown/Icon driven menus for ease of use.
- Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes - so flexible anyone can create superb graphics easily.
- Full cut and paste facilities plus excellent printer support.
- Pixel edit, font editor, flip, invert, rotate, solid or textured fill and professional manual make Advanced Art Studio simply the best graphics package.



COMPLETE WITH MOUSE INTERFACE

- The Genius Mouse Graphics System comes complete with the special Mouse Interface to allow super smooth control.
- Attractively styled to match your 464 or 6128 design and colour.
- Simply plugs into Expansion/ Joystick Port.



FREE!

MOUSE MAT AND MOUSE HOLDER

(WORTH £12.99)

WITH EACH PACKAGE

ONLY WHILE STOCKS LAST

A TOTAL GRAPHICS PACKAGE

SAVE OVER £25

- **NO OTHER GRAPHICS PACKAGE CAN OFFER SO MUCH AT SUCH A PRICE!!**
- **OCP ADVANCED ART STUDIO ALONE NORMALLY RETAILS FOR £25.00. THE MOUSE SYSTEM HAS A NORMAL PRICE OF £39.99. NOW YOU CAN BUY BOTH FOR ONLY £49.99 AND GET A MOUSE MAT AND HOLDER (worth £12.99) ABSOLUTELY FREE.**
- **WE HAVE LIMITED NUMBERS OF THESE PACKS - SO BUY NOW!**

WHAT THE MAGAZINES HAD TO SAY...

AMTIX
"CLASSIC"

C.T.W.
"PICK OF THE WEEK"

AMSTRAD COMPUTER USER
"BEST UTILITY OF THE YEAR"

ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

HOW TO ORDER ...

BY PHONE	BY POST	FAX
0782 744707 24hr Credit Card Line	Send cheques/POs made payable to "Datel Electronics"	0782 744292 UK ORDERS POST FREE EUROPE ADD £1 OVERSEAS ADD £3

PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS AND SUBJECT TO CHANGE WITHOUT NOTICE

CALLERS WELCOME - Please reserve goods by telephone prior to visit.

DATEL ELECTRONICS

DATEL ELECTRONICS LTD., FENTON INDUSTRIAL ESTATE
GOVAN ROAD, FENTON, STOKE-ON-TRENT, ENGLAND.

SALES ONLY	TECHNICAL ONLY
0782 744707	0782 744324

PD Scene

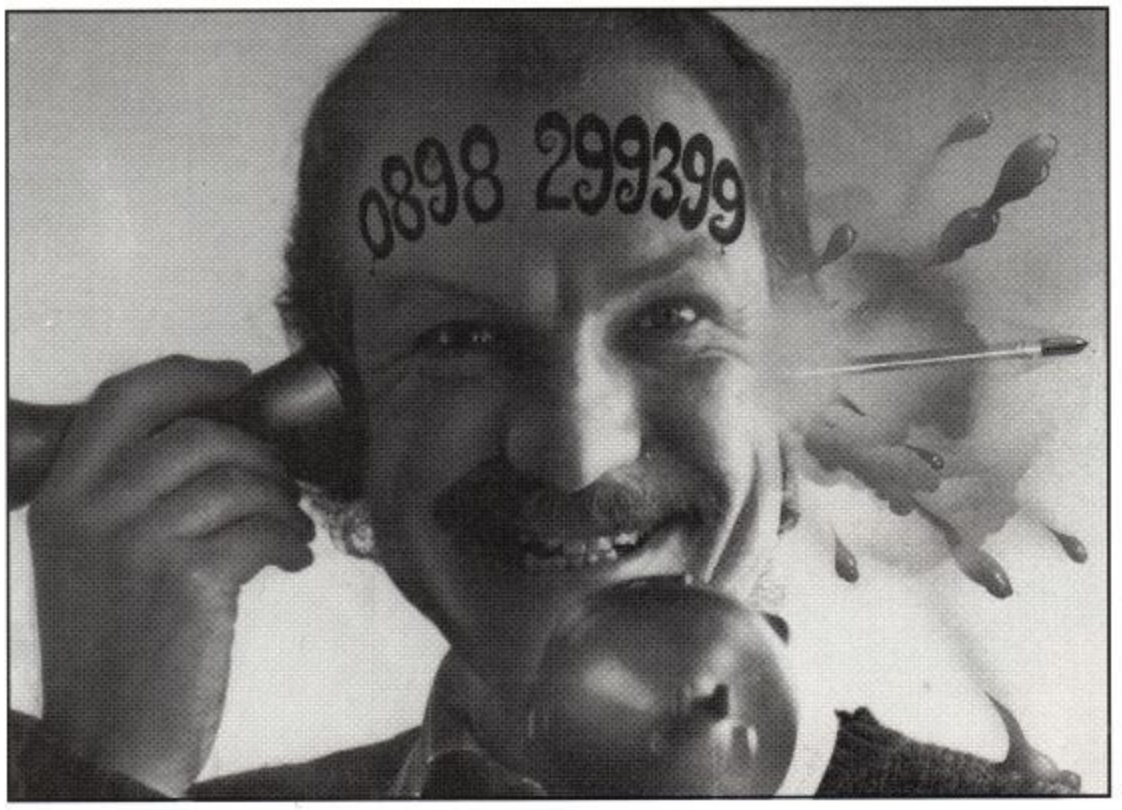
Anyone looking for a few goodies on public domain could do far worse than browse through the Scull PD library set up in Glasgow by alan Scully.

The library presently boasts over 250 programs on both cassette and disc and claims to be the largest supplier of cassette PD and non CP/M programs, although CP/M programs are available.

If anybody is interested in programs covering games, applications, serious, educational, artificial intelligence, programming tools, hacking... the list goes on, a copy of the present stock list can be obtained by sending a cassette or disc and an SAE to:

Alan Scully (Scull PD)
119 Laurel Drive
Greenhills
East Kilbride
G75 9JG

Alternatively, send 50p, a cassette and SAE for a C15 full of PD, or £1, a disc and SAE for 360K of tip top programs. Well worth it.



Mad Mel

If you value your sanity, stay away from the phone lines, especially now that zany Mel Croucher's computer fun line is up and running.

Mel has been flooding the computer industry with amusing and informative reports for over a decade, via software, printed and broadcast media.

Now, he has taken to the phone lines with the common themes of computers, software, hardware, the industry, the people in it and humour.

If you can't keep yourself away from it, the number is 0898 299399, with calls charged at 25p per minute cheap rate and 38p per minute at other times.

Remember, if you are under 18, don't forget to ask your parents first, or they might not see the funny side.



Dashing Dan Giveaway

Following the huge success of Virgin's latest epic, Dan Dare III – The Escape, the real McCoy, dashing Colonel Dan MacGregor Dare of Eagle comic fame, went walkabout in the Virgin store in Oxford Street.

Although he went to answer a few questions, he also asked a few posers himself, though judging by the number of people who won heaps of goodies, the questions were far too simple. But look out! Now it's your turn to win. Just answer this simple question and you could walk off with a super Dan Dare T-shirt, badge and poster set, courtesy of Virgin.

Who is Dashing Dan to marry at the end of this year? If you know the answer, send it in to us at Daring, ACU, Panini House, 116-12- Goswell Road, London EC1V 7QD, and the first correct answer pulled out of the postbag will get the goodies.

The story goes on

Were you one of the millions who followed Bastian's epic adventures in Michael Ende's 'Never Ending Story'? No, I'm not including Limahl's unfortunate musical accompaniment in the package.

If you did, you will no doubt be avidly waiting for the sequel, Never Ending Story II, due out at the end of the year. If so, you will probably also be hankering after Linel to hurry up with the computer game to coincide with its release.

Well, we can reliably inform you that work is underway on what Linel claims will be a high quality game in a totally new style. Following the filmstory very closely, the game will follow Bastian's travels through Phantasia to explore the Orchid Forest, visit the Silver City and fight evil giants.

Boasting stunning graphics and action packed gameplay, Never Ending Story II should be well worth the wait.

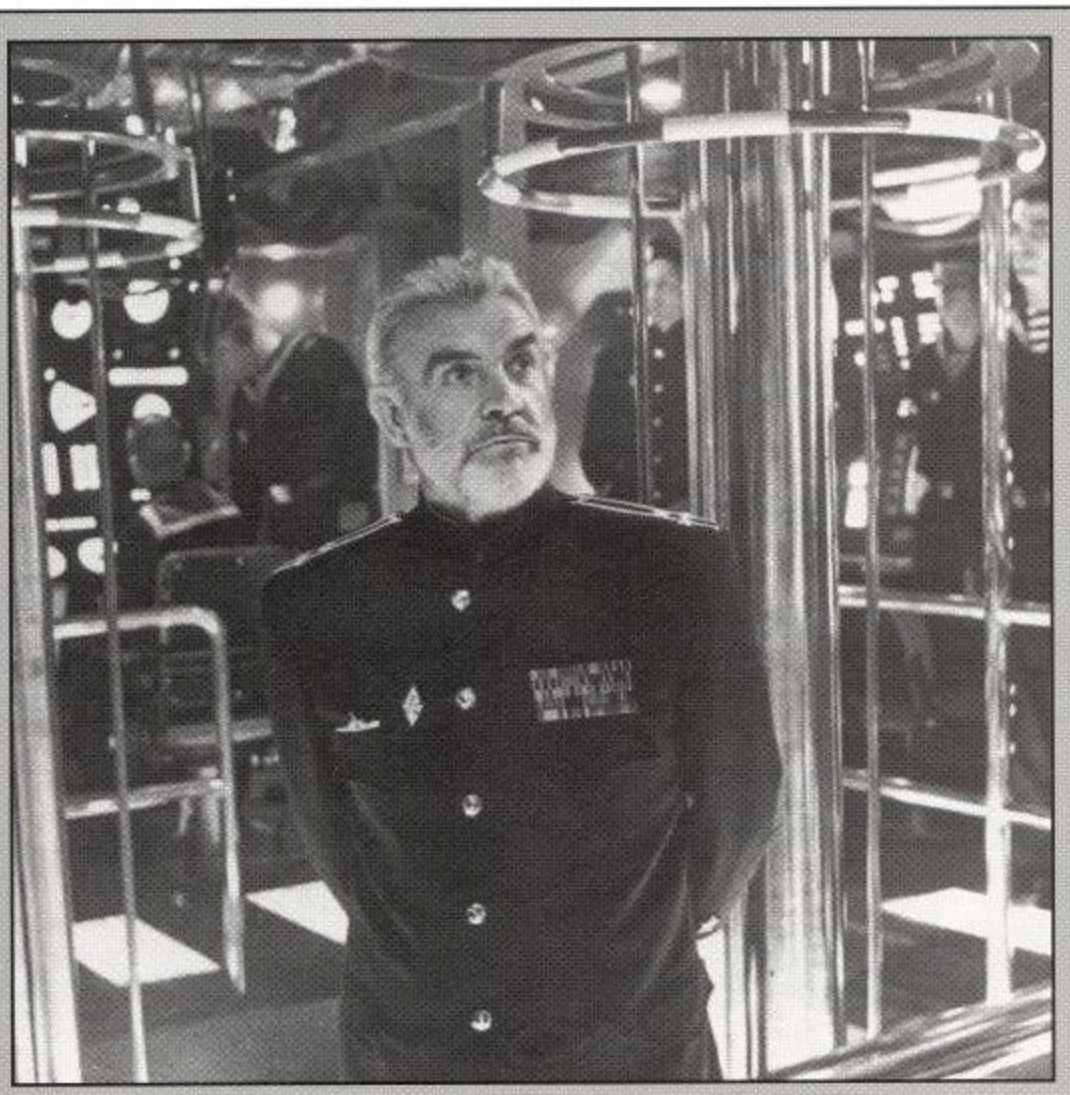
Good Hunting

With most of us drowning in the wake of the latest aquatic epic to hit the big screens, The Hunt for Red October, the goods news is that Grandslam looks set to produce the computer version to coincide with the peak of the film's popularity in late summer.

If you haven't popped down to your local fleapit yet, the film centres around Soviet submarine captain, Sean (yes, I've seen 'im) Connery, in his efforts to cross the Atlantic and defect to the other side, with all the nastiness between the Yanks and the Reds that involves.

Grandslam sales manager, Duncan Lowthian said of the game: "The Hunt for Red October will be one of Grandslam's major releases this year and we are putting a lot of resources into ensuring the game captures the excitement of the film."

Sounds good, but in the meantime, take a look at the re-release of Hunt for Red October, the simulation based upon the original book.



Atomix Reaction

To celebrate the launch of Thalion's latest epic, *Atomix,* those awfully nice Thalion people, along with Grandslam, are giving away an Amiga (Wot, no CPC?-Ed.) to the school with the first chemistry teacher to master the game, and a smacking £100 to the first computer game player who nominates his teacher.

The aim of Atomix is to construct ever more complicated molecules from atoms and includes 30 levels of fiendish puzzlement. You don't need to be a chemistry professor to play it, but it helps.

The teacher who will win the prize, will be the first to complete the first 20 levels of the game and must be nominated by a pupil.

Send all of your nominations to Grandslam at 56 Leslie Park Road, Croydon, CR0 6TP on school letterheaded paper, signed by the Head Teacher confirming the success, stating the name of the teacher and the pupil who nominated him or her.

Atomix should be out on the CPC within the next couple of months, so come on you lot, let's make sure we nominate the winner and those canny people at Grandslam might even give out a CPC instead. Much more to our liking, what?



COMPETITION



Roll up! Roll up! This is it, you're chance to win a once in a lifetime gliding course and free membership to one of Britain's top Gliding clubs, courtesy of those generous softies at US Gold.

The thrilling experience of non-powered flight could be yours not once, but six times over a two day course, under the eagle eye of a first class instructor.

To win this incredible prize, all you need to do is design the next generation jet fighter and send in your colourful offerings to the ACU team.

Don't worry if you don't come first, goodies will be on their way to the three runners up.

The editor's decision is final.
Send your entries to:

Supersonic,
ACU,
MCM Ltd.,
116-120 Goswell Road,
London EC1V 7QD.

DISCOUNT SOFTWARE
from M.J.C. SUPPLIES

DISC GAMES

MJC SPECIAL
WORLD CUP ITALIA '90
RRP £14.95 **/Our Price £9.95**
Offer ends 31st JULY

Black Tiger	10.95
Castle Master	10.95
Chase HQ	10.95
Cyberball	10.95
Cycles	12.95
Dan Dare III	10.95
Double Dragon II	10.95
Dr Dooms Revenge	10.95
E-Motion	10.95
Football Manager World Cup	10.95
Ghostbusters II	10.95
Impossamole	10.95
Jack Nicklaus Golf	12.95
Kenny Dagleish 2	10.95
Kick Off	10.95
Klax	10.95
Manchester United	10.95
Ninja Spirit	10.95
Pipe Mania	10.95
Rainbow Islands	10.95
Robocop	10.95
Scrabble De Luxe (6128)	10.95
Star Wars Trilogy	10.95
Super Wonderboy	10.95
X-Out	10.95

CORNIX SOFTWARE

CARD INDEX:
An easy to use card index type data retrieval program. Ideal for basic database requirements
CASS: 19.95 **DISC: 24.95**

JOB ESTIMATOR:
Aimed at the small contractor who needs to provide estimates quickly and neatly. Ideal for small builders, bricklayers, plasterers etc.
DISC ONLY: 39.95

PRODUCT COSTING:
Similar to Job Estimator but aimed at manufacturers or those producing a product for sale.
DISC ONLY: 39.95

Full specifications of all Cornix Products available free of charge upon request

EDUCATIONAL

Animal, Mineral, Vegetable	11.95
World Wise	11.95
Learn to Read with Prof (4-9)	17.95
Answerback Junior Quiz	**11.95**
Factfile's (*require Answerback Quiz*)	
Arithmetic (6-11 yrs)	7.95
Spelling (6-11 yrs)	7.95
Sports (6-11 yrs)	7.95
Fun School 1 *10 programs per disc*	
For 2-5 years	7.95
For 5-8 years	7.95
For 8-12 years	7.95
Fun School 2 *8 programs per disc*	
For 2-6 years	9.95
For 6-8 years	9.95
For 8-12 years	9.95
French Mistress (*12-adult*)	**15.95**
German Master	15.95
Spanish Tutor	15.95
Italian Tutor	15.95

DISC SERIOUS

Protext	17.95
Prospell	16.95
Promerge	16.95
Tasword 6128	23.95
Tasword 464-disc	23.95
Taspell	14.95
Tasprint	11.95
Tascopy	11.95
Tasdiary	11.95
TasSign (6128)	23.95
Qualitas Plus v2	14.95
Qualitas Font Library	11.95
Qualitas CPM+ disc	8.95
Masterfile 3 (Database)	29.95
Mastercalc 128 (Spreadsheet)	25.95
Matrix (Spreadsheet)	29.95
Stockmarket (share analysis)	25.95
Money Manager (home accounts)	
Stop Press Desktop Publisher	34.95
Extra! Extra!	19.95
X-Press V1.3	18.95
Sprites Alive!	18.95
Sprites Alive! Compiler	24.95
Maxam assembler	18.95
Mini Office 2	13.95
Advanced Art Studio	19.95
ColourDump 2	12.95

CPM BASED

Protext CPM (inc Spell & Merge)	**39.95**
At Last Plus	29.95
Supercalc 2	54.95
Arnor C Compiler	39.95
Maxam II	39.95
Fortran	39.95
Nevada Cobol	39.95
Hisoft Devpac 80	39.95
Hisoft Pascal 80	39.95
Hisoft C Compiler	39.95
Iankey Two Finger Typing	19.95
Iankey Crash Course	19.95

CF2 DISCS
Maxell: 5 for £12.00
10 for £21.95
Amsoft: 5 for £13.00
10 for £23.95

CASSETTE BASED

Mini Office 2	**9.95**
Maxam 464	15.95
Protext 464	15.95
Tasword 464	15.95
German Master 464	14.95
French Mistress 464	14.95
Answerback JNR Quiz	8.95
Italian Tutor	14.95
Spanish Tutor	14.95

ACCESSORIES

DKT 64K Memory Expansion	45.95
Multiface 2+	42.95
Amstrad RS232 Interface	55.95
KDS 8 bit printer port	18.95
CPC printer lead 1 metre	8.95
CPC printer lead 1.5 metre	9.95
CPC printer lead 2 metre	10.95
464 Keyboard/Monitor ext leads	6.95
6128 Keyboard/ Monitor ext leads	7.95
FD1 2nd disc drive lead	7.95
6128 Cassette lead	4.95
464 Dust Cover (state col/mono)	7.95
6128 Dust Cover (state col/mono)	7.95
CPC mono screen filter	12.95
CPC colour screen filter	14.95
3" Disc drive head cleaner	6.95
1000 Fanfold address labels	7.95
Quickjoy 2 Turbo joystick	9.95
Cheetah 125+ joystick	7.95
Competition Pro 5000 joystick	13.95
Cruiser joystick	9.95
Advanced Art Studio and Mouse	49.95
AMX Art and Mouse	59.95
Stop Press and mouse	69.95
AMX Mouse and Interface	34.95

BOOKS/MANUALS

Advanced Amstrad Graphics	7.95
Mastering Machine Code	8.95
Programming the Z80	19.95

RIBBONS

Printer	Quantity 1	2	5
DMP 2000/2160	3.50	6.00	14.00
Panasonic 1081	3.95	7.00	15.00
Citizen 120-D	3.95	7.00	15.00
Star LC-10 Black	3.95	7.00	15.00
Star LC-10 Colour	5.95	11.00	---
Heat Transfer Ribbons (for iron-on transfers)			
Citizen 120-D	12.95	25.00	
Star LC-10 Mono	13.95	27.00	
Star LC-10 Colour	19.95	37.50	

ROM BASED

Protext	27.95
Prospell	22.95
Promerge +	22.95
Maxam	27.95
Maxam 1.5	20.95
Utopia	20.95
BCPL	21.95
Rombo (if purchased with ROM)	28.95
KDS Rom Board (holds 6)	24.95

ALL ABOVE PRICES INCLUDE VAT, POSTAGE & PACKING IN THE U.K.
THE ABOVE SOFTWARE IS ONLY FOR THE AMSTRAD CPC RANGE

Quali Pack V.2

The Print Enhancement Package
Qualitas Plus V.2
KDS 8 Bit Printer Port
R.R.P £36.90
Package Price £31.95

Quali Pack Extra V.2

Qualitas Plus V.2
KDS 8- bit printer port
Qualitas font library
RRP £51.85 Our Price £41.50

PRINT COLOUR GRAPHICS!

At last it is possible to get colour screen dumps from a 6128!
Colourdump 2 *is available exclusively from M.J.C Supplies. Will take a standard screen file from the Advanced Art Studio or created with AMX Art, and Prints out in full colour on a Star LC10 colour printer. Also works on Epson compatibles (inc. DMP 2000/2160) with coloured ribbons.*

Colour Dump 2 £12.95
Advanced Art Studio £19.95
Star LC-10 colour printer £229.95

PRINTERS

All printers listed have a ten inch 80 column carriage and accept continuous or single sheet paper. They are Epson compatible and have a centronics parallel interface and are supplied with the cable required for your computer. Prices shown include VAT, delivery by Royal Mail Insured Parcel (which takes 7-10 days), and 12 month "return to us" guarantee.
For Courier despatch, add £5.00
For on-site "call out" warranty, add £5.00

CITIZEN 120D
A cheap, Epson FX compatible, giving a range of text sizes and effects in draft mode, and a limited range in Near Letter Quality.
£139.95

PANASONIC KXP - 1081
Well built and reliable, offers all the sizes and effects of the Citizen 120-D, but offers NLQ in all combinations.
£159.95

STAR LC-10 Mk 1
On a par with the Panasonic for build, speed and NLQ combinations, but offers 4 different NLQ styles and double height as well as double width text. Great value for money
£179.95

STAR LC-10 Mk II
Identical to the Mk1 but 25% faster.
£199.95

STAR LC-10 COLOUR
Based on the LC-10 Mk 1 but offers seven basic text colours. If you require colour graphics, please call first for advice.
£229.95

STAR LC 24-10
24 pin version of the LC-10, offering great text output in one of five letter quality styles, available in combination with all the usual sizes and effects. Two additional effects, Outline and Shadow are also available. Call first for advice if you require graphics output.
£259.95

PANASONIC KXP-1124
Offers all the fonts of the 2410, but has a better print quality, build quality and control panel.
Please call for advice before ordering
£299.95

Overseas Orders Welcome - Please write for details

WE ARE NOW IN OUR FIFTH YEAR OF SPECIALISING IN AMSTRAD MAIL ORDER, OUR POLICY IS TO PROVIDE THE WIDEST RANGE AT DISCOUNT PRICES WITH A FAST TURN AROUND TIME - TRY OUR SERVICES WITH CONFIDENCE

CALLERS WELCOME: Mon-Fri 9 to 5 Sat 10 to 4

PLEASE SEND CHEQUES/POs TO:

VISA

M.J.C. SUPPLIES, (A.C.U.)

Access

40a Queen Street, Hitchin, Herts. SG4 9TS.

Tel: (0462) 432897, (0462) 420847 or 421415 for enquiries & Credit Card orders

Proprietor M J Cooper

PUZZLE

BY CHRIS DUNN

Do you remember those little puzzles where you had to move all the small squares around to make the big one. Sort the letters into an alphabetical order using the cursor keys in as few moves as possible. Tricky.

```
10 REM * Puzzle by Chris Dunn *

20 MODE 1:BORDER 0:INK 0,0:INK 1,24:INK 2,6:RANDOMIZE TIME:DIM p(15):LOCATE 1,10
:PEN 1:PRINT "Use the cursor keys to move the letters into alphabetical order in
 as few moves as possible.":PEN 2:LOCATE 10,20:PRINT "Press any key to play.":CA
LL &BB18

30 MODE 0:INK 3,2:INK 4,18:WINDOW#1,6,14,3,19:PAPER#1,0:PEN#1,2:CLS#1:FOR c=0 TO
 14:p(c)=c+65:NEXT:m=0:r=0:sx=3:sy=3:FOR c=1 TO 50

40 a=INT(RND(TIME)*15):b=INT(RND(TIME)*15):IF a=b GOTO 40

50 p=p(a):p(a)=p(b):p(b)=p:NEXT:FOR c=0 TO 256 STEP 64:PLOT c+172,104,1:DRAW c+1
72,360:PLOT 172,c+104:DRAW 428,c+104:NEXT:PEN 1:FOR c=0 TO 14:x=c MOD 4:y=c\4:LO
CATE#1,2+2*x,3+4*y:PRINT#1,CHR$(p(c));:NEXT

60 IF INKEY(1)>-1 AND sx>0 THEN nx=sx-1:ny=sy:GOSUB 100 ELSE IF INKEY(8)>-1 AND
sx<3 THEN nx=sx+1:ny=sy:GOSUB 100

70 IF INKEY(2)>-1 AND sy>0 THEN ny=sy-1:nx=sx:GOSUB 100 ELSE IF INKEY(0)>-1 AND
sy<3 THEN ny=sy+1:nx=sx:GOSUB 100

80 FOR c=0 TO 14:r=r-(c+65=p(c)):NEXT:IF r<15 THEN r=0:GOTO 60

90 WHILE INKEY$ <>"":WEND:PEN 3:LOCATE 3,1:PRINT "CONGRATULATIONS!";:PEN 4:LOCAT
E 1,21:PRINT "That took";m;"moves.":PEN 2:LOCATE 1,23:PRINT "  Press any key to
       play again":CALL &BB18:GOTO 30

100 m=m+1:c=ny*4+nx:s=sy*4+sx:p(s)=p(c):p(c)=0:LOCATE#1,2+2*nx,3+4*ny:PRINT#1,CH
R$(32);:LOCATE#1,2+2*sx,3+4*sy:PRINT#1,CHR$(p(s));:sx=nx:sy=ny:FOR d=1 TO 100:NE
XT:RETURN
```

DUMP

BY JOHN BADLEY

Based on the PEEK command, the contents of the RAM are displayed in hexadecimal format in blocks of 256 bytes at a time, with the ASCII characters picked out on the right of the screen. Press the up or down arrow keys to jump blocks, or shift up and down to jump 16 blocks for rapid memory access. There is also a print option on this excellent little utility.

```
10 MEMORY &7FFF:FOR a=&8000 TO &8030:READ h$:POKE a,VAL("&"+h$):NEXT

20 DATA cd,26,80,2e,01,2c,26,00,24,e5,cd,75,bb,cd,60,bb,cd,2b,bd,e1,3e,50,bc,20,
ef,cd,26,80,3e,16,bd,20,e4,3e,1e,cd,5a,bb,3e,0d,cd,2b,bd,3e,0a,cd,2b,bd,c9

30 DEF FNd=MIN(m+256,65280):DEF FNu=MAX(m-256,0):DEF FNsd=MIN(m+4096,61440):DEF
FNsu=MAX(m-4096,0):INK 0,10:INK 1,1:MODE 2:BORDER 1

40 IF LEN(a$) THEN a=ASC(a$):IF a=241 THEN m=FNd ELSE IF a=240 THEN m=FNu ELSE I
F a=245 THEN m=FNsd ELSE IF a=244 THEN m=FNsu ELSE IF a=80 THEN CALL &8000 ELSE
IF a=81 THEN END

50 PRINT CHR$(30):PRINT " Addr  00 01 02 03  04 05 06 07  08 09 0A 0B  0C 0D 0E
0F    0123456789ABCDEF    ------------------------------------------------------
----------------------"

60 FOR x=m TO m+255 STEP 16:PRINT " " HEX$(x,4) "  ";:d$="  ":FOR n=0 TO 15:p=PE
EK(x+n):a$=UPPER$(INKEY$):IF a$>"" THEN 40

70 IF p>31 AND p<127 THEN d$=d$+CHR$(p) ELSE d$=d$+"."

80 PRINT HEX$(p,2);:IF n MOD 4=3 THEN PRINT "  ";ELSE PRINT " ";

90 NEXT n:PRINT d$:sp=INSTR("37B",MID$(HEX$(x,4),3,1)):IF sp THEN PRINT

100 NEXT x:LOCATE 1,25:PRINT CHR$(24) " Press " CHR$(240) CHR$(241) " shifted &
unshifted to move memory location.  P to Print.  Q to Quit  " CHR$(24);:GOTO 40
```

END-LESS

BY BILL HAMLEY

Endless by name, endless by nature. This is a fascinating graphics demo which, quite literally, goes on and on. It'll send your eyes screwy.

```
1 REM 'Endless' by Bill Hamley, Scotter
10 MODE 0:ORIGIN 320,200:x=10:y=10:x1=50:y1=50
20 WHILE NOT done:ik=INT(RND*13):FOR a=1 TO 2:FOR b=1 TO 2
30 MOVE x,y:DRAW x1,y1,ik:MOVE y,x:DRAW y1,x1,ik
40 x=x*-1:x1=x1*-1:NEXT b:y=y*-1:y1=y1*-1:NEXT a:x=x1:y=y1
50 p=RND*50:q=RND*50:z=INT(RND*2)+1:zz=INT(RND*2)+1
60 IF z>1 THEN p=p*-1:ELSE IF zz>1 THEN q=q*-1
70 x1=x1+p:IF x1>200 THEN x1=x1-200 ELSE IF x1<-200 THEN
x1=x1+200
80 y1=y1+q:IF y1>200 THEN y1=y1-200
90 IF y1<-200 THEN y1=y1+100
100 WEND
```

CROSS

BY ROGER SWAINE

Have any of you lot seen the Crystal Maze on the box? It's not half bad, is it? Anyway, here's a little something taken from the prog. and converted very nicely onto our screens. Simply change the word around from its vertical position to a horizontal one by picking which letter you want to change, and using the cursor keys to move them around. It's a real teaser.

```
10 MODE 1:ORIGIN 250,70:t=180:vt$="MACHINE":hz$="     I   ":word$=vt$:LOCATE 32,2:
PRINT "TIME=180s":up$=CHR$(240):dn$=CHR$(241):lt$=CHR$(242):r$=CHR$(243):m$="Pre
ss a key to play again...":MOVE 0,72:FOR lp=1 TO 12:READ x,y:DRAW x,y:NEXT:EVERY
 50 GOSUB 100

20 GOSUB 90:DI:LOCATE 15,3:PRINT "CHOOSE LETTER":EI:i$="":WHILE i$="":i$=UPPER$(
INKEY$):WEND:IF INSTR(word$,i$)=0 GOTO 20 ELSE xp=INSTR(hz$,i$):yp=INSTR(vt$,i$)
:DI:LOCATE 15,3:PRINT "DIRECTION?    ":EI

30 d$="":WHILE d$<up$ OR d$>r$:d$=INKEY$:WEND:d=ASC(d$):GOSUB 80:d=d-239:ON d GO
SUB 40,50,60,70:mv=mv+1:GOSUB 90:IF hz$<>"MACHINE" GOTO 20 ELSE DI:LOCATE 15,3:P
RINT "  WELL DONE! ":PRINT "You've completed the puzzle in";mv;"moves.":PRINT m$
:CALL &BB18:RUN

40 IF MID$(vt$,yp-1,1)>" " THEN mv=mv-1:PRINT CHR$(7):RETURN ELSE tp$=LEFT$(vt$,
yp-2):bt$=RIGHT$(vt$,7-yp):vt$=tp$+i$+" "+bt$:lt$=LEFT$(hz$,4):rt$=RIGHT$(hz$,2)
:hz$=lt$+MID$(vt$,5,1)+rt$:RETURN

50 IF MID$(vt$,yp+1,1)>" " THEN mv=mv-1:PRINT CHR$(7):RETURN ELSE tp$=LEFT$(vt$,
yp-1):bt$=RIGHT$(vt$,7-yp-1):vt$=tp$+" "+i$+bt$:lt$=LEFT$(hz$,4):rt$=RIGHT$(hz$,
2):hz$=lt$+MID$(vt$,5,1)+rt$:RETURN

60 IF MID$(hz$,xp-1,1)>" " THEN mv=mv-1:PRINT CHR$(7):RETURN ELSE lt$=LEFT$(hz$,
xp-2):rt$=RIGHT$(hz$,7-xp):hz$=lt$+i$+" "+rt$:tp$=LEFT$(vt$,4):bt$=RIGHT$(vt$,2)
:vt$=tp$+MID$(hz$,5,1)+bt$:RETURN

70 IF MID$(hz$,xp+1,1)>" " THEN mv=mv-1:PRINT CHR$(7):RETURN ELSE lt$=LEFT$(hz$,
xp-1):rt$=RIGHT$(hz$,7-xp-1):hz$=lt$+" "+i$+rt$:tp$=LEFT$(vt$,4):bt$=RIGHT$(vt$,
2):vt$=tp$+MID$(hz$,5,1)+bt$:RETURN

80 IF ((d=240 OR d=241)AND yp=0)OR((d=242 OR d=243)AND xp=0)OR(d=240 AND yp=1)OR
(d=241 AND yp=7)OR(d=242 AND xp=1)OR(d=243 AND xp=7)THEN d=239:PRINT CHR$(7):mv=
mv-1:RETURN ELSE RETURN

90 DI:TAG:FOR lp1=1 TO 7:MOVE 102,lp1*24-6:PRINT MID$(vt$,8-lp1,1);:MOVE (lp1-1)
*24+6,66:PRINT MID$(hz$,lp1,1);:NEXT:TAGOFF:EI:RETURN

100 t=t-1:LOCATE 37,2:PRINT USING "£££";t:IF t<>0 THEN RETURN ELSE LOCATE 15,3:P
RINT "  GAME OVER  ":PRINT "     You ran out of time!":PRINT:PRINT m$:CALL &BB18:
RUN:DATA 96,72,96,168,120,168,120,72,168,72,168,48,120,48,120,0,96,0,96,48,0,48,
0,72
```

BALLS IN THE AIR

BY BILL HAMLEY

Another shorty from Bill, this time giving you a 3D type glance at the globe in linear technicolour, before reducing to dotty bits. Interesting to say the least.

```
1 REM Balls-in-the-air by Bill Hamley, Scotter.

10 MODE 0:CALL &BC02:DEG:ON BREAK GOSUB 70

20 ORIGIN 320,200:MOVE 0,100:FOR i%=0 TO 360:s=SIN(i%):c=COS(i%)

30 PLOT s*150,c*150,i% MOD 15+1:PLOT s*75,c*150:PLOT s*150,c*75

40 NEXT:FOR i%=0 TO 15:INK i%,0:NEXT

50 WHILE -1:FOR i%=1 TO 15:INK i%,24:FOR x=1 TO 100:NEXT

60 INK i%,0:NEXT:WEND

70 CALL &BC02:PEN 1:PAPER 0:END
```

NUMBERCIRCLE

BY ROGER SWAINE

Another little Crystal challenge here, this time in the form of circles and radial lines. The idea is to rotate the sets of numbers in each of the four circles, so that each of the totals in the four radial lines adds up to 9. Use cursors up and down to turn the rings anticlockwise and clockwise, and use the left and right cursor keys to select which ring of numbers you want to move. Watch out, this is tougher than you think.

```
10 DIM no%(3,3):INK 2,11:MODE 1:WINDOW 1,40,1,3:ORIGIN 320,200:FOR a=5 TO 1 STEP
 -1:FOR x=-a*30 TO a*30 STEP 2:y=SQR((a*30)↑2-x↑2):MOVE x,y:DRAW x,-y,(a MOD 2)+
2:NEXT:NEXT:PLOT -8,8,1:TAG:PRINT USING "#";9;:MOVE 37,-180:PRINT CHR$(240);:TAG
OFF:GOTO 90

20 CLS:t=INT(RND*2):FOR lp=0 TO 3:FOR lp1=3*t TO -3*(t=0) STEP -1*(t=0)-1*t:READ
 no%(lp,lp1):NEXT:NEXT:FOR dsc=0 TO 3:n%=INT(RND(1)*4)+1:dr=1:FOR lp=1 TO n%:GOS
UB 40:GOSUB 80:NEXT:NEXT:dsc=1:GOSUB 60:tm=180:LOCATE 31,1:PRINT "TIME=180s":EVE
RY 50 GOSUB 100

30 flg=0:i$="":WHILE i$<CHR$(240) OR i$>CHR$(243):i$=INKEY$:WEND:dr=ASC(i$)-239:
ON dr GOSUB 40,50,60,70:GOSUB 80:FOR lp=0 TO 3:flg=flg-(no%(lp,0)+no%(lp,1)+no%(
lp,2)+no%(lp,3)=9):NEXT:IF flg=4 THEN DI:LOCATE 16,2:PRINT "WELL DONE!":GOTO 90
ELSE GOTO 30

40 tmp%=no%(3,dsc):FOR aclp=2 TO 0 STEP -1:no%(aclp+1,dsc)=no%(aclp,dsc):NEXT:no
%(0,dsc)=tmp%:RETURN

50 tmp%=no%(0,dsc):FOR aclp=1 TO 3:no%(aclp-1,dsc)=no%(aclp,dsc):NEXT:no%(3,dsc)
=tmp%:RETURN

60 dsc=dsc-1:DI:TAG:MOVE 0,-180:PRINT SPC(11);:MOVE 30*(dsc+1.5)-8,-180:PRINT CH
R$(240);:TAGOFF:EI:IF dsc<0 THEN dsc=1:GOTO 60 ELSE RETURN

70 dsc=dsc+1:DI:TAG:MOVE 0,-180:PRINT SPC(11);:MOVE 30*(dsc+1.5)-8,-180:PRINT CH
R$(240);:TAGOFF:EI:IF dsc>3 THEN dsc=2:GOTO 70 ELSE RETURN

80 DI:TAG:FOR lp2=0 TO 3:MOVE COS(lp2*PI/2)*30*(dsc+1.5)-8,SIN(lp2*PI/2)*30*(dsc
+1.5)+8:PRINT USING "#";no%(lp2,dsc);:NEXT:TAGOFF:EI:RETURN

90 LOCATE 5,3:PRINT "Press a key to continue...";:CALL &BB18:RUN 20

100 tm=tm-1:LOCATE 36,1:PRINT USING "###";tm:IF tm>0 THEN RETURN ELSE LOCATE 16,
2:PRINT "GAME OVER":GOTO 90:DATA 2,3,1,3,0,5,0,4,1,2,5,1,3,0,4,2
```

Virgin Games

DAN DARE III
The Escape



IBM PC



ATARI ST



AMIGA



CBM 64



SPECTRUM



AMSTRAD

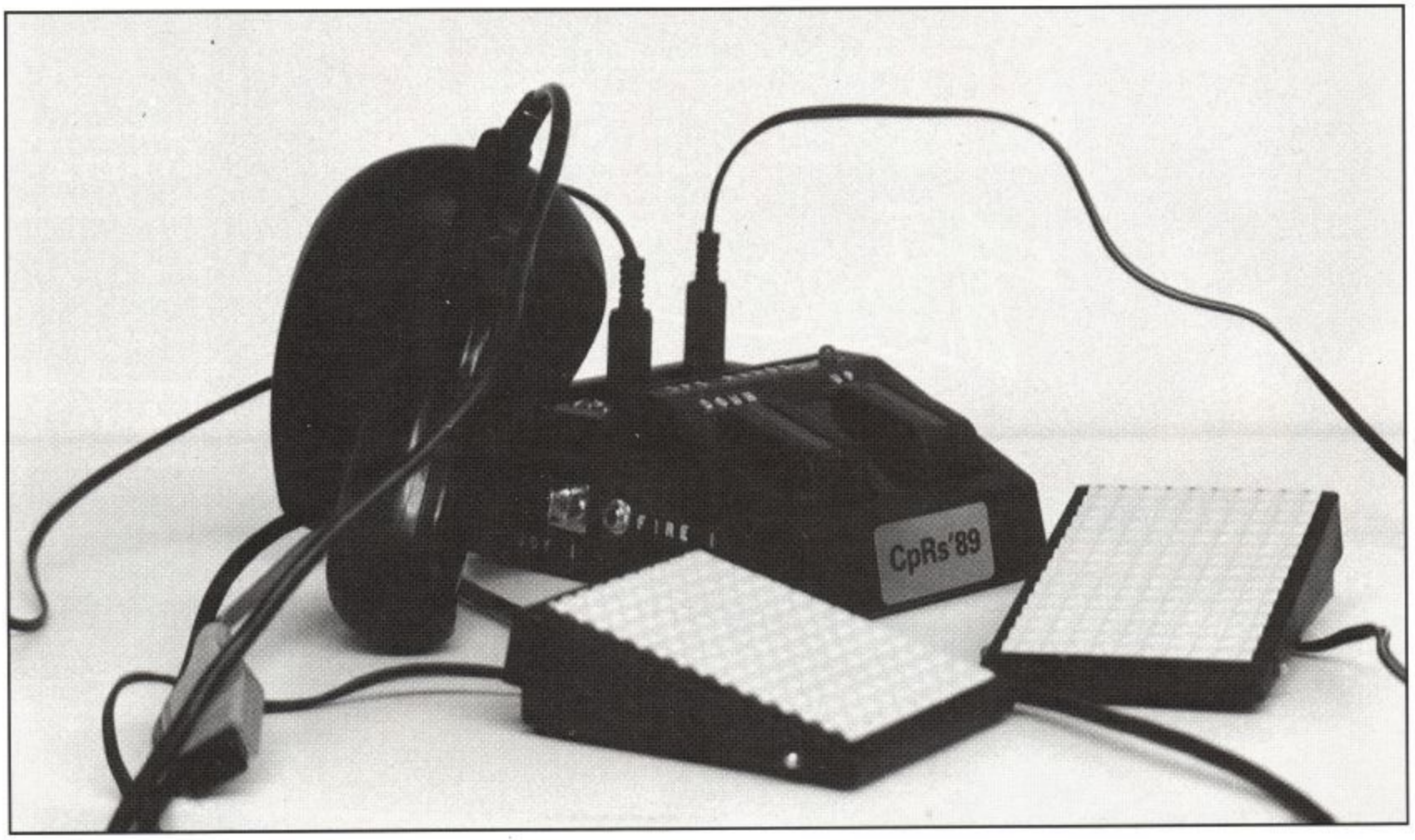
IBM PC	£24.99
ATARI ST	£19.99
AMIGA	£19.99
CBM 64	£9.99 (CASS)
	£14.99 (DISC)
SPECTRUM	£9.99 (CASS)
	£14.99 (DISC)
AMSTRAD	£9.99 (CASS)
	£14.99 (DISC)

© 1990 Fleetway Publications/Dan Dare Ltd. Part of the Dan Dare nostalgia collection licensed world wide by Dan Dare Ltd.
Virgin Mastertronic, 2-4 Vernon Yard, 119 Portobello Road, London W11 2DX.

REVIEW

DREAM MACHINE

Chris Knight takes a look at a little black box full of delights



Do you remember months and months ago, when you were in your favourite arcade playing the very latest hot driving coin-op, sitting inside the little booth and getting right into the realism of it all? Do you remember thinking: "I can't wait til this comes out on my CPC.", and then, when it finally did, did you feel just a little disappointed because your joystick couldn't really take the place of the old accelerator pedals?

Well, throw your disappointment aside, because electronics wizard Chris Price has come up with the answer to your dreams – the Game-Pro.

Originally designed for use with the Amiga, Chris, thankfully, has adapted his new gadget, which looks like something out of Star Trek, for us CPC lovers. What does it do?

The Game-Pro plugs neatly into your joystick port and not only allows you to use two joysticks with your latest games, but it also brings a new dimension to game playing, by allowing you to plug special foot pedals into the unit.

Chris has created his masterpiece from easily available parts and standard microswitches from suppliers like Maplins and Greenweld, and the end result is certainly innovative.

Plug your own joystick into the box, remember you can use two, and then decide which options you want to use the foot pedals on. For driving or racing games, you can plug into the up/down joystick options, allowing you to accelerate and brake just like the real thing. Alternatively, plug into the left right options on simpler games, leaving your hands free to hammer on the fire button. You can even use your feet to fire if you so desire.

A flick through your CPC manual will show you that there is a second fire control option built into the machine, which is not normally fitted on your average joystick – there is on the box!

As an added extra, you can use the box as a joystick in its own right, using the up/down toggles provided and configurating the foot pedals to the other options.

Chris Price said of his box of delights: "Although I originally designed it for the Amiga, I decided to go for the CPC as well, as there is really nothing else like the black box on the market. One selling point is that it makes an excellent joystick splitter, but for game playing, the hard wearing foot pedals will last longer than most joysticks, as well as providing an extra dimension to your game."

The only minor drawback to the device as it stands, is its size. As Chris himself freely admits, the foot pedals could be a little larger to give a better feel, but for a prototype, the Game-Pro has certainly got a great future, and for the value-for-money price of just £24.99, is well worth purchasing for its innovative style and function.

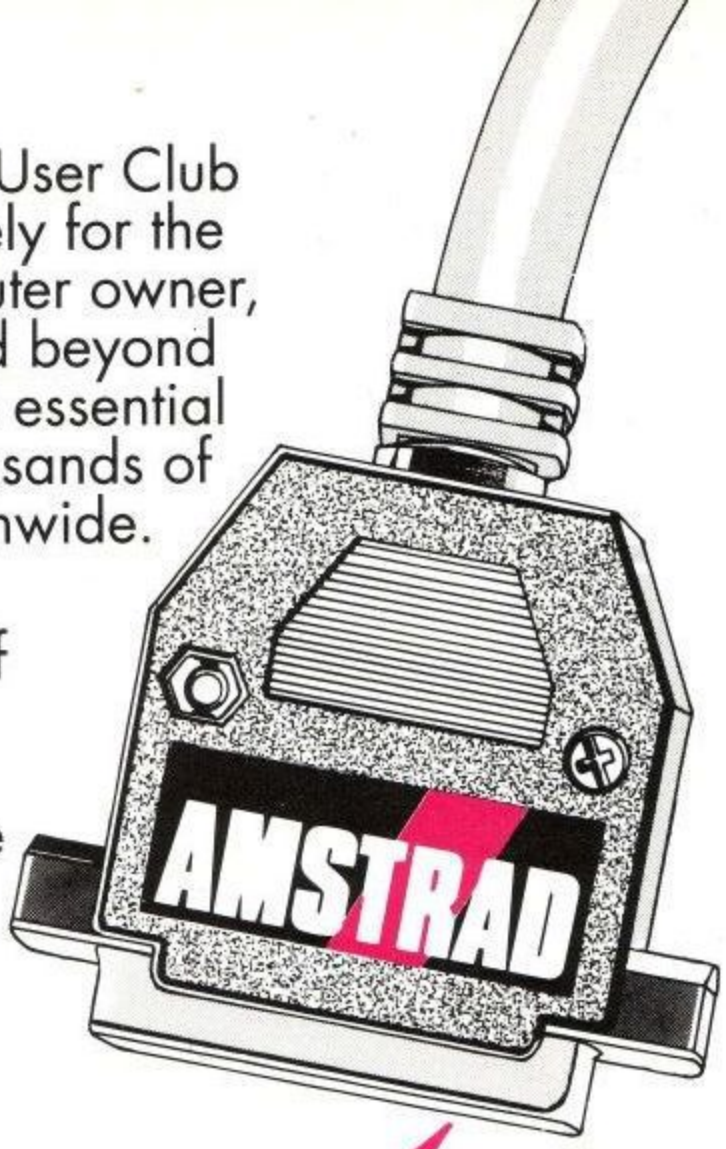
If you are quick, the first fifteen boxes will be sold complete with two foot pedals included in the price.

Although Chris has patented his Black Box, he is presently attempting to licence it to the major joystick producers, enabling it to be marketed quicker and more cheaply. My advice to those companies involved – get in quick, this little gadget is going to go a long way.

Game-Pro Mark2 + Footswitches
Christopher Price
CpRs-Designs
70 Potton Road
Eynesbury-Hardwicke
Cambridgeshire
Tel: 0480 76038
Cost: £24.99

The Amstrad User Club caters exclusively for the Amstrad computer owner, and has proved beyond doubt to be the essential add-on for thousands of members nationwide.

We have the widest range of software and equipment available in the UK, all generously discounted for members,



You will also receive your choice of quality free gift and 'Welcome Pack' as soon as you join and much more besides! User Club Membership costs just £27.95 a year.

For further details and our full colour brochure simply return the FREEPOST coupon (no stamp required) or ring 091 510 8787.

THE ESSENTIAL ADD ON



with a 24 hour order service, technical hotline support, monthly club newsletters and price listings and 12 issues of the official Amstrad magazine, "Amstrad Computer User" worth £17.40.

Please send me Membership details of the Amstrad User Club.
I am resident in the U.K.
Name .....
Address .....
.....
..... Postcode.....
Day Phone Number .....
Machine Type
.....

AMSTRAD user club

Send to:

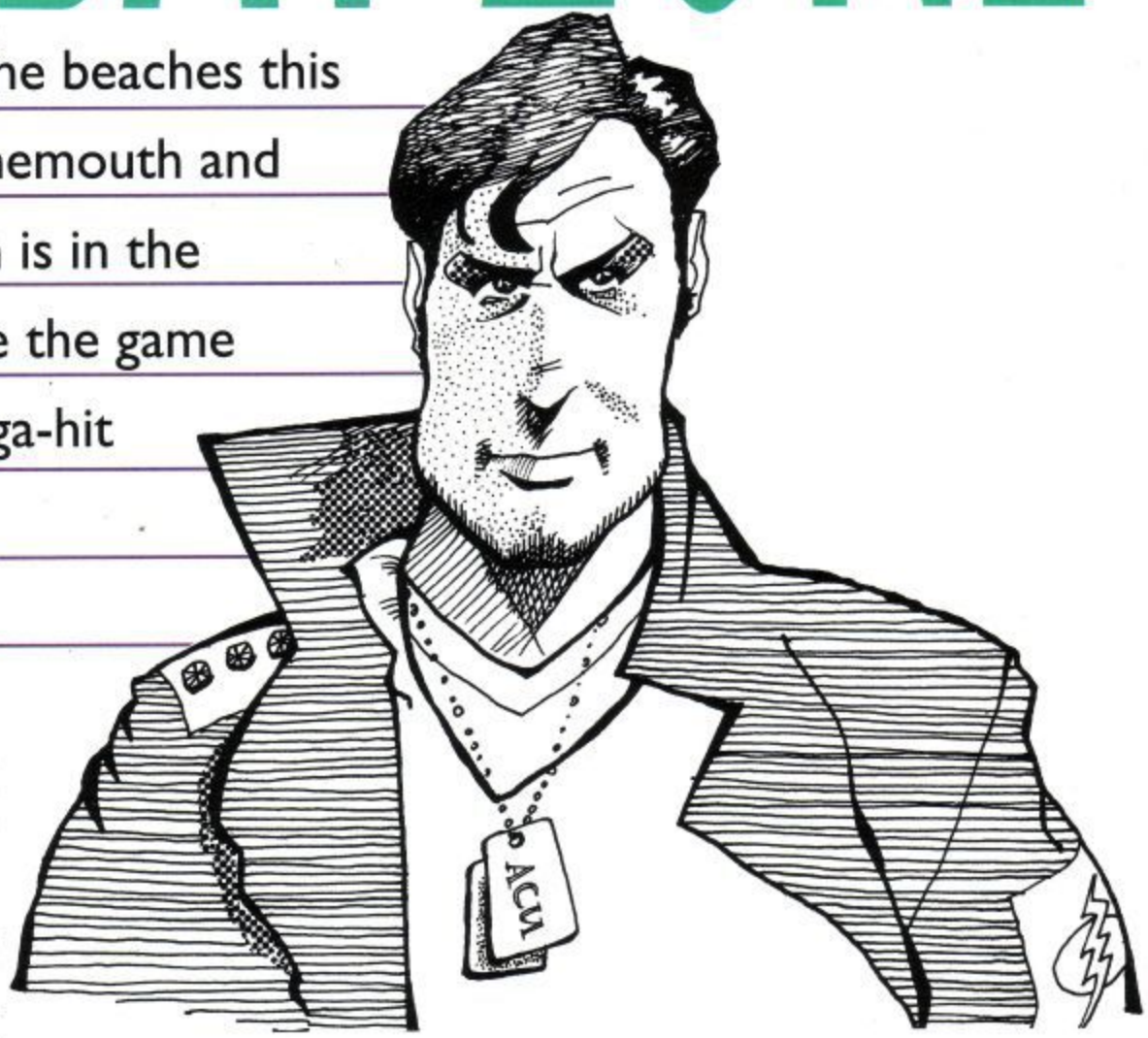
AMSTRAD USER CLUB, FREEPOST, Sunderland SR11BR.

ACU/SY/8

COMBAT ZONE

They'll be fighting on the beaches this summer! Forget Bournemouth and Leeds – the real action is in the arcades as Sega release the game destined to be the mega-hit of 1990 – G-Loc.

John Cook explains...



Y'know, a couple of weeks ago, I got all nostalgic and attempted the rather dangerous manoeuvre of balancing a set of highly dodgy steps on top of the washing machine and launching myself off the top, in order to get into my attic. Why?

Nope, the central heating hadn't packed up on me, I just wanted to take a look at some backnumbers of a magazine called Coin Slot – an American trade publication which covers all coin operated entertainment equipment.

I got them down and spent a fair few hours looking at screen shots of some very old games happily recalling those high scores of ten years ago – and how pinball machines used to give five ball games and vids only cost 10p a go!



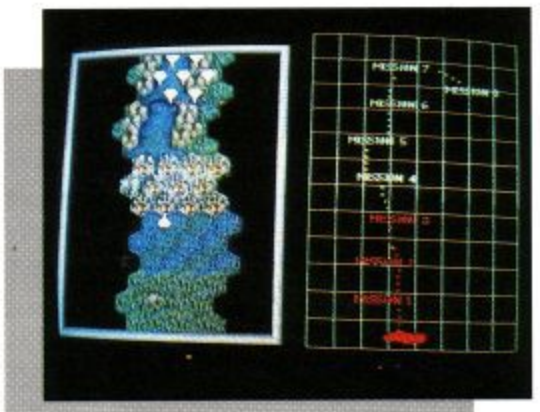
Ten years? Well, yes sir! In fact, the initial Invaders explosion started in late 1979, but by 1980, things were just beginning to hot up. Anybody remember Lunar Lander, for instance?

It's interesting to note that, even after 10 years or so in what must be one of the most volatile market places in existence, many of the big names from way back then are still around today – and I guess if you had to name two of the biggest, they'd be Atari Games and Sega.

Both are giants now, but if I had to pick a single company that seems to have made the most consistent impression in the arcades over the past decade, I'd just have to choose Sega.

PCB games like Shinobi and Super Cops have made good money and been great fun to play, but it's with its dedicated games like the early Monaco Grand Prix and the later titles such as Space Harrier, Afterburner, Thunderblade, Power Drift and Super Monaco that have astonished punters over the years.

These sit-in units don't only provide amazing visuals for you, but straightforward, down-to-earth, sensory overload; throwing you around with hy-





draulics that are linked in to the action and bashing your eardrums with white noise!

Well, if you thought you were impressed by every other Sega game, the latest release from that stable – G-Loc – is going to really blow you away. It's the long-awaited follow-up to Afterburner, again with you piloting a flash jet fighter, but is faster, smoother, more colourful, and has superior gameplay than its predecessor. Quite simply, to be any better, it would have to do the ironing for you.

Sprite technology has always been Sega's forte – and they've got teams of engineers working on permanent overtime trying to improve these routines and the hardware they run on. G-Loc shows that they earn their Yen alright, as the game is technically flawless.



For the first time, Sega seems to have integrated some kind of 3-D poly technology seamlessly in with the sprite work, an effect that has to be seen to be believed.

Sit in the cabinet and if you are familiar with Afterburner, you'll be at home with these controls. Central stick controlling pitch and yaw with two fire buttons–one for the cannon (unlimited ammo, of course!) and another for the air-to-air missiles with lock onto targets for you... although you do have a limited number of these.

On the left of this is a throttle control that will make the plane go faster/slower – with a button that engages your afterburners if the need for a little extra speed should arise.

To start off you have to choose one of



Congratulations – you've won!

three difficulty levels. Beginner is fairly easy, so much so that the speed control is disabled in this mode and the enemy almost lines up to fall over. Expert is not easy, and you can take it from me that it would be a real challenge to finish the game in this mode!

After an automatic take-off sequence from your aircraft carrier, you are given an 'out of the cockpit' view of things. Taking a look at the console, you'll find a radar – giving the position of the enemy fighters – and a damage meter.

There are ten stages to the game, the object of each being fairly simple – shoot down a specified number of targets within a time limit. It isn't always that easy in practice!

The main thing you have to watch out for is having enemy fighters locking on to your tail. When this happens, the view dramatically changes to a position behind the enemy fighter itself.

You can watch your plane twisting and turning to try and get away (assuming you have elected to take that sensible course of action!) – and the sinister black fighter following your every move. A fast roll combined with a tap



on the afterburner is recommended to do the trick, then it's back to the cockpit.

This sudden change in perspective is a novel and exciting technique – almost cinematic in nature. The only other game I can recall using a similar routine is Hard Drivin', where when you crash, you have a bird's eye view slow-mo replay of the carnage. Expect to see it cropping up in a lot of games from now on!



The gameplay isn't going to stretch anyone's intellect, but fast reactions are needed and there's always enough going on on-screen to keep the pulse racing. Combine this with a sit-in unit that throws you around such that the partaking of a hearty breakfast cannot be recommended beforehand and you have all the makings of another Sega blockbuster.

Aspiring programmers, play it and weep – the rest of us can lie back and enjoy the experience – and giggle insanely, imagining how some software house will try and convert this monster to the CPC.

'Till next month – here's hoping you don't run out of change...

BrunWord

Complete Word Processing Package £30

BrunWord 6128 is a complete word processing package consisting of three programmes, a word processor, a spelling checker and a card filing programme. It is written to run on a standard unexpanded CPC6128 (or CPC464 + disc + 64K) and is optimised for use with a single disc drive. The latest version was released in October 1988 and out performs any other word processor for the CPC6128.

The programme has three screen modes 40, 80 and 128 columns that are automatically selected according to the right margin setting. We take the view that it is not possible to read a paragraph if it goes off the screen sideways, so BrunWord 6128 has a unique 128 column mode for the wider text. The mode can be changed any time simply by using <CTRL> R to set the right margin. The cursor will remain on the same word after the change. Children often prefer to type in using the easy to read 40 column mode and then to print out using the 80 column mode.

Manipulating the text can be great fun as it is possible to move the temporary margins while watching the effect as it happens on the screen. This also has the important use of allowing a block of text to be easily adjusted to its best shape.

Most word processors have a simple justification system that either makes the middle bulge or the text lopsided. BrunWord has a superb system where spaces are added after punctuation and then between words alternating left and right towards the centre of the line. This gives the text a pleasing balanced appearance.

Marked text is shown clearly in inverted video and can be moved, copied, deleted or saved as a memory file. Memory Files are another powerful feature of BrunWord. Often when making severe changes to a piece of text, it is necessary to save sections for possible use later or for adding to another file. Normally this would involve saving these to the disc with the difficulty of using a name which makes the content obvious. This results in the disc becoming congested with small files that later need to be examined and possibly deleted. BrunWord allows a number of small files to be stored in memory and these can be saved to the disc along with the main file (under the same name) or left in the memory for adding to another file.

Printing

This paragraph shows the various printer facilities that do not affect the general format of a paragraph. For example underline is simple and so is *italics*. $y=ax^2+bx^3$ or Note$_6$ present no difficulty. **Emphasised**, double strike and NLQ can also be used without upsetting the justification.

E n l a r g e d m o d e i s *p o s s i b l e* b u t a l i t t l e p l a n n i n g i s n e e d e d a n d the same applies to condensed printing.

Spelling Checker

The integrated spelling checker of BrunWord 6128 and its 30,000 word dictionary load at the same time as the main programme. We invented a special system to compact the dictionary so much that each word is represented by just one and a half characters. Each group of words had to be given the correct group ending and typed in by hand, taking one 'man' six months to complete. With such a compact dictionary, we are able to store this in the 64K of banked memory, making access very convenient and exceptionally fast.

Our closest rival claimed that their spelling checker achieves 'up to 2000 words per minute'. Our tests, published at the October 88 Amstrad show, revealed that its average speed for a file of 3366 words was only 526 words per minute and much more to our surprise, that it required eight changes of the disc to complete the spelling test. Our spelling checker, BrunSpell, achieved 3883 words per minute for exactly the same test (7 times faster!) and needed no disc in the drive. Remember that all other word processors need to load the dictionary from disc during the spelling test, even the so called ROM versions.

The Reference

There are times that a spelling error creates a valid word and we have given an unusual amount of effort to this problem. We have tried to leave out uncommon words that are likely to confuse and have included only the most up to date English spellings. The Oxford dictionary was our main reference but at times we had to take a consensus from several good quality magazines and newspapers.

It is very important only to add words to the dictionary that really are needed and here BrunSpell scores a triumph. As the dictionary is memory resident, it is possible to save peculiar words and abbreviations to the memory, to form a temporary working dictionary which is NOT saved to the disc. Each day you are reminded that these words are not up to your reference level but they only need to be saved once each working secession.

If a strange word is regularly used then this can be saved permanently to the disc. The supplied dictionary occupies 49K of the available 64K and it would be possible to add another 15,000 words if these fitted in perfectly. In reality you are likely to be limited to about 35,000 words in total.

Help and Transfer

Suppose that necessary is misspelt as 'necesery'. The spelling checker will stop with NECESERY displayed at the bottom left of the screen in large letters. Press H for Help and in less than a second a list of three words will appear on the screen:-

NECESSITY NECESSARILY NECESSARY

The spelling error can now be automatically corrected using one of the three words by stepping through the list to the right word and then pressing T for Transfer. The word will be corrected in a fraction of a second, keeping the first letter the same case as the original word.

The help routine has two levels of search. The first is quite rigorous while the second search takes a broader spectrum of possibilities and would normally be able to correct a severe error that is only vaguely similar to the word.

For example NACSERIY produces no words on the first search but takes just six seconds to list 11 words in the second search:-

NAUSEATING	NECESSITY
NECESSITATE	NECESSARILY
NECESSITATES	NECESSARY
NECESSITATED	NESCIENT
NECESSITATING	NESCIENCE
NECESSITIES	

The first search restricts the length of the suggested words. The second search will offer any words where the first part has a similar pattern to the incorrect word and this can be used to list all the words with a particular stem.

The First Step

BrunWord has a 40 page manual which has several detailed examples, starting with step by step instructions to produce and print a simple letter. But your very first step is to load the TUTOR file into BrunWord. This takes even the complete novice straight into word processing and demonstrates the powerful editing and formatting features of BrunWord. There are also examples of printer control, showing how to create headings, to underline or to emphasise, and five deliberate spelling errors for you to correct. The tutor takes about 20 minutes to run through and after that you will feel confident to type in your own text.

BrunWord Features

*40, 80 or 128 column display. *Touch typing speed over 200 words/min. *True insert or overwrite. *Justify or unjustify paragraph or whole text. *Justified text has balanced appearance. *Instant word wrap. *Block save, move, copy, insert and delete. *Local editing with word delete/undelete. *Adjustable margins and TABs. *Column/Line/Page display with file name. *True word count. *Find and replace. *Help menus. *Memory filing system. *Single character embedded printer commands (18 with 3 printer codes and 21 with 10 printer codes). *Page throw markers. *Multiple copies. *Odd/even page headers/footers with page numbers. *Multi file printing (new page or continuous). *Print specified pages. *Works with any printer. *True display superscript and subscript numbers. *User defined print characters. *Load ASCII files from other word processors. *Save ASCII files for other word processors. *Files can be encrypted. *Maximum file size about 9 pages of text.

BrunSpell Features

*Memory resident with word processor. *Checks 4,000 words/min. *30,000 word dictionary. *No American spellings. *Add up to 5,000 of your own words. *Instant lookup. *Helps to find correct spelling. *Automatic correction.

DataFile Features

*Alphabetical, numerical, date sorting on any field. *User defined headings. *Search routine. *Data merging into BrunWord. *Label printing.

Info-Script £50

The complete data processing package, including all the features of the BrunWord 6128 package.

Free Booklet

Our 16 page booklet explains all about our programmes, starting with BrunWord 6128 and going on to Info-Script and BrunWord Elite. To get your copy, simply write your name and address clearly on a piece of paper and send in an envelope to 'BrunWord & Printer', Brunning Software, at the address below.

Send cheque/PO/Access number/Visa number to:

Brunning Software

34 Helston Road,
Chelmsford, Essex, CM1 5JF
Telephone (0245) 252854 (24 Hours)



BrunWord 6128 with BrunSpell & DataFile. . . £30.00
Info-Script 6128 with BrunWord & BrunSpell. . £50.00
BrunWord Elite 6128, Info-Script & BrunSpell. . £90.00
100 Letters (needs Info-Script). £15.00
BrunWord Elite and Info-Script include backup disc.
(All supplied on 3in Disc - state which computer)

All prices are inclusive for UK. Overseas orders sent insured air mail - Europe add £2.50 : Rest add £7.50

Headline

with

BrunWord Elite

The Elite System for 9 Pin Printers £69

When BrunWord Elite is used with Headline, it is possible to achieve the same resolution from an ordinary 9 pin printer as normally only possible from a good 24 pin printer. We cannot change the actual dot size as this is governed by the thickness of the pins in the print head, what happens is that the 9 pin printer produces larger text when it is driven with a 24 pin font.

This is a terrific advantage in its own right as the normal type face of a dot matrix printer is a little on the small side. When Headline is used with printers with a poor type face (such as the DMP2160), you will think you have a different machine.

24 Pin Fonts

Study the text in this paragraph. The letters are very clean with good descenders. What you see is our favourite 24 pin font 'Fineline' just as if it had been printed on a 24 pin printer but it was printed using a 9 pin printer.

When a 24 pin font is printed using a 9 pin printer, it comes out about 50% bigger but with the same resolution as if it had been printed on a 24 pin printer. So, if we reduce it back to its natural size using a photocopier, we end up with characters that are the same size and quality as produced by a 24 pin printer.

To help understand this, study our advertisement on the opposite page. That was printed from BrunWord Elite using a 24 pin printer. The original is A3 size and it was photographically reduced to A4. The final result, with the combination of 24 pins and A3 to A4 reduction, gives a quality that is comparable to a laser printer.

This page was printed using an ordinary 9 pin printer (Star LC10). The printing was done in two parts so that we are able to create a master that is 50% bigger. (We assume that most CPC users don't have a wide carriage 9 pin printer so we apply the same limitation to ourselves). The two parts were pasted together and then photographically reduced to A4. The final quality, as you can see, is indistinguisable from a 24 pin printer. Any Epson compatible 9 pin printer with quad graphics could have been used!

The very large word 'Headline' at the top of this page was also printed directly from the programme in our 'Comput' font, using 7 times width and 8 times height. That is something that cannot be done normally on any 9 or 24 pin printer. Now look at the 'BrunWord Elite' just beneith the main heading. That was printed in the same font using 3 times width and 2 times height.

Our name and address at the bottom is printed in our 'Finetype' font using normal and double size.

Star LC10

The Star LC10 is a good choice to print this page as it can be left to perform the task without human intervention. A printer without reverse line feed such as the Amstrad DMP2160 will produce an identical page but needs an occasional helping hand during the printing process. (The BrunWord teddy and the thick bottom line were not printed). A page with this complexity of layout cannot be achieved without resetting the paper during the process, so for printers without reverse line feed, the programme will stop at critical points, and request the paper to be reset to the top of the page. It will then wind on the paper to the exact position that is needed.

The Power

Headline has some powerful features. As you can see, these columns have true micro justification. The space between letters is adjusted to give the column an even right margin, rather than the space between words. Single, double, or 8 times height can be used and the width can be expanded from normal width to 2 times, 3 times, 4 times, 5 times... up to 9 times! The programme can even automatically adjust the width to the maximum possible for a particular column. This is very useful with headings. Set double height and nine times width, then let the programme give you the widest heading possible.

Add to these features most of the power of BrunWord Elite (lines, boxes, columns, page layouts like this advertisement....) and you can almost feel the ground shake!!

Multi-Strike

Another feature of Headline is designed to overcome faint printing which is often a problem with 9 pin printers. Headline can multi-strike up to 9 times. This advertisement used double strike on a nearly new ribbon but it is possible to squeeze black printing out of quite an old ribbon.

Where's the Catch

Headline sounds almost too good to be true and you might be forgiven for thinking that we don't use our 24 pin printers any more. Sorry! the 24 pin is still our strong favourite but then we run our business using BrunWord Elite on the CPC6128 and speed is important. In general terms Headline allows BrunWord Elite to perform most of its functions using a 9 pin printer and adds some very exciting extra features. However, you must accept that a 9 pin printer can take 3 or 4 times longer for the same operation and that's not a bad price for being able to pretend that it's a 24 pin printer.

Finally, if you own a 24 pin printer then you need the standard BrunWord Elite (£90) but you can also buy Headline (£21) and have an amazing choice of print sizes.

For £69.00

The Elite system for 9 pin printers consists of BrunWord Elite with a backup copy, Headline, BrunSpell, a printer lead, 8 bit printer status port and 7 'type setting' fonts (fonts are 24 pin in size but only for 9 pin printers). Total price £69.00 inclusive.

For £99.00

The Elite system as above but also including Info-Script, total price £99.00 inclusive.

Send cheque/PO/Access/Visa number to

Brunning Software

34 Helston Road
Chelmsford, Essex, CM1 5JF.
Telephone 0245 252854



Headline (needs BrunWord Elite).... £21
BrunWord Elite, Headline, BrunSpell.. £69
Elite, Headline, BrunSpell, Info-Script. £99
(All supplied on 3 in disc)

For CPC6128 (or CPC464 + disc + 64K).
Europe add £2.50 : Rest add £7.50.

Learning has never been such fun!

fun school 2

Fun School 2 for Over-8s contains:

- **Build a Bridge:** Shape-fitting challenge
- **Passage of Guardians:** Enjoy anagrams
- **Unicorn:** First steps in problem solving
- **Logic Doors:** Mapping made easy
- **Souvenirs:** An introduction to travel
- **Code Boxes:** Discover binary arithmetic
- **Mystery machine:** Have fun breaking codes
- **Escape:** A final check on progress



Fun School 2 for 6 to 8 year olds contains:

- **Number train:** Calculations made enjoyable
- **Shopping:** Which shops for which products?
- **Maths Maze:** Fun improving arithmetical skills
- **Treasure Hunt:** Introduction to coordinates
- **Bounce:** Get to grips with angles
- **Packing:** Discover tesselating shapes
- **Caterpillar:** Word building challenge
- **Number jump:** Have fun practising tables

Fun School 2 for Under-6s contains:

- **Shape Snap:** Colourful shape recognition
- **Find the Mole:** Experiment with number sizes
- **Teddy Count:** Ideal introduction to numbers
- **Write a Letter:** Creative fun at the keyboard
- **Colour Train:** Play at spotting colours
- **Pick a Letter:** Word building made easy
- **Spell a Word:** Enjoy naming the pictures
- **Teddy Bears Picnic:** Move around a maze

Now children can really have fun while learning. Fun School 2, designed by a team of educationalists, is available for three age groups: Under-6s, 6-8 year olds and Over-8s. Each pack comes with eight colourful and exciting programs, a colourful button badge and detailed instructions giving educational help.

The computer itself monitors the child's progress. The skill level – initially set by parents – is automatically adjusted to suit the child's ability.

Now children can enjoy using their parents' computer while they learn at their own pace.

Available for:
Spectrum, Commodore 64, Amstrad CPC, BBC Micro/Electron £9.95 (tape) £12.95 (disc).

Also: Atari ST, Amiga, PC £19.95

DATABASE EDUCATIONAL SOFTWARE

Format	Under-6s		6-8 years		Over-8s	
	Tape	Disc	Tape	Disc	Tape	Disc
Archimedes*		2900		2901		2902
Commodore 64	9064	9065	9066	9067	9068	9069
Amstrad CPC	6179	6180	6181	6182	6183	6184
BBC Micro/Electron	2239		2242		2245	
BBC B+/Master 40T		2240		2243		2249
BBC B+/Master 80T		2241		2244		2250
Atari ST		9192		9193		9194
Amiga		9842		9843		9844
PC 5.25"		5764		5765		5766
PC 3.5"		5767		5768		5769

Please circle the code number of the format you require

Send to: Database Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB.
Access/Visa orders: Tel: 051-357 2961

Please supply Fun School 2 for the code number(s) circled

☐ Cheque payable to Database Software

☐ Please debit my Access/Visa card no.

|_|_|_|_| |_|_|_|_| |_|_|_|_| |_|_|_|_|

Expiry date |_|_|/|_|_|

Signed _____

Add £2 per program Europe & Eire/£5 Overseas

Name _____

Address _____

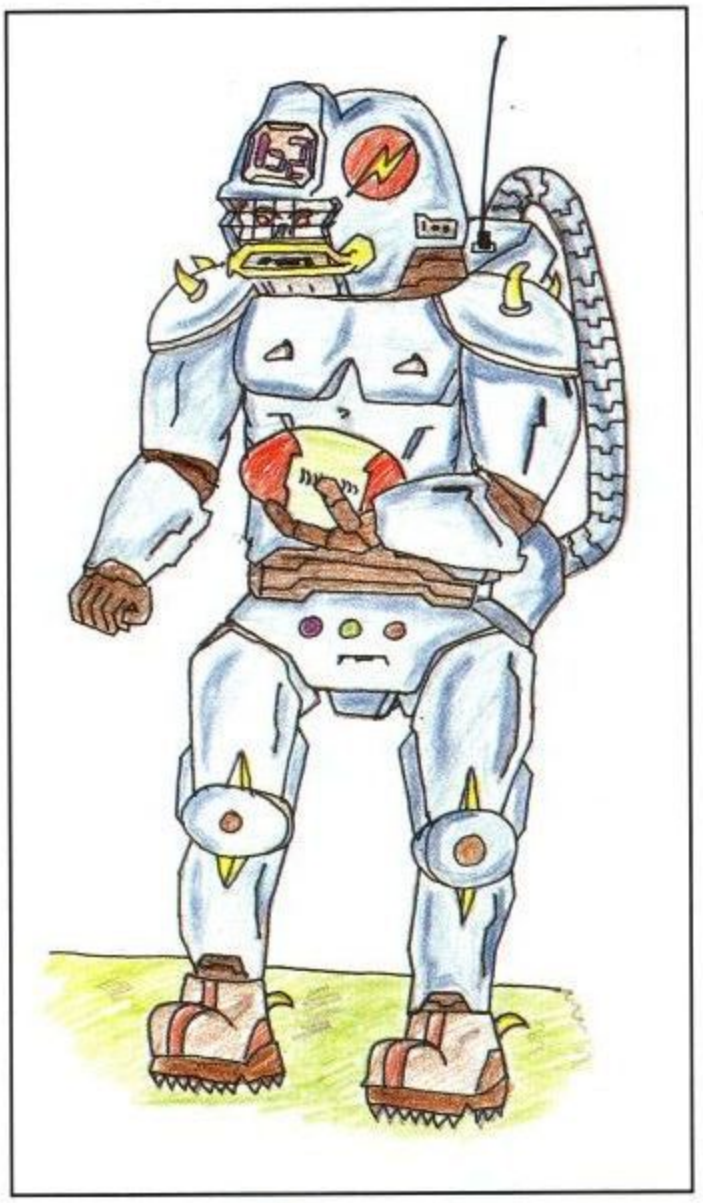
_____

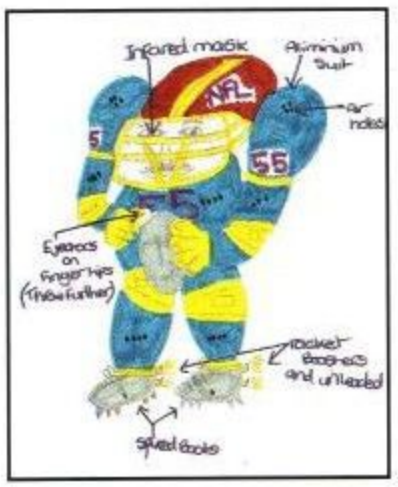
_____

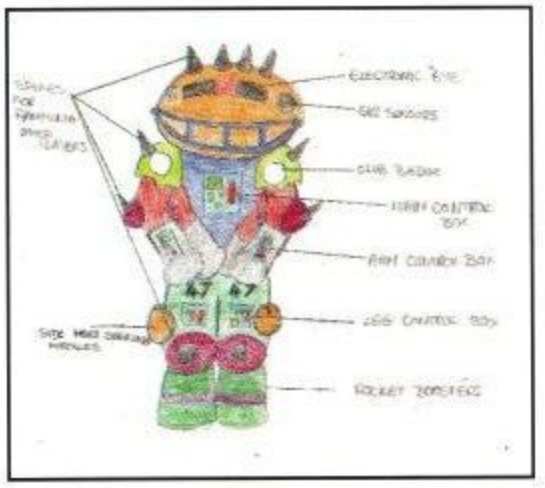
_____

Postcode _____

MU4

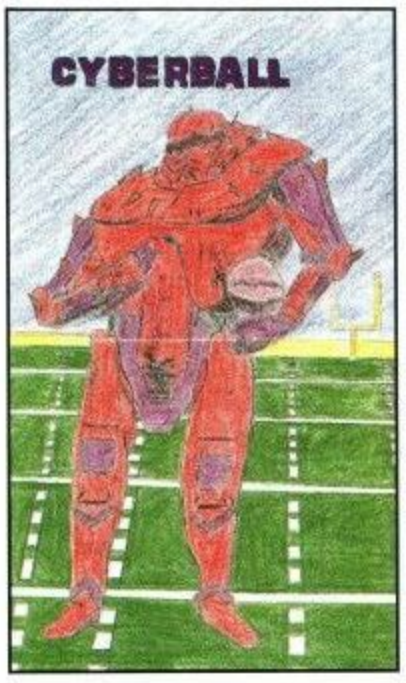




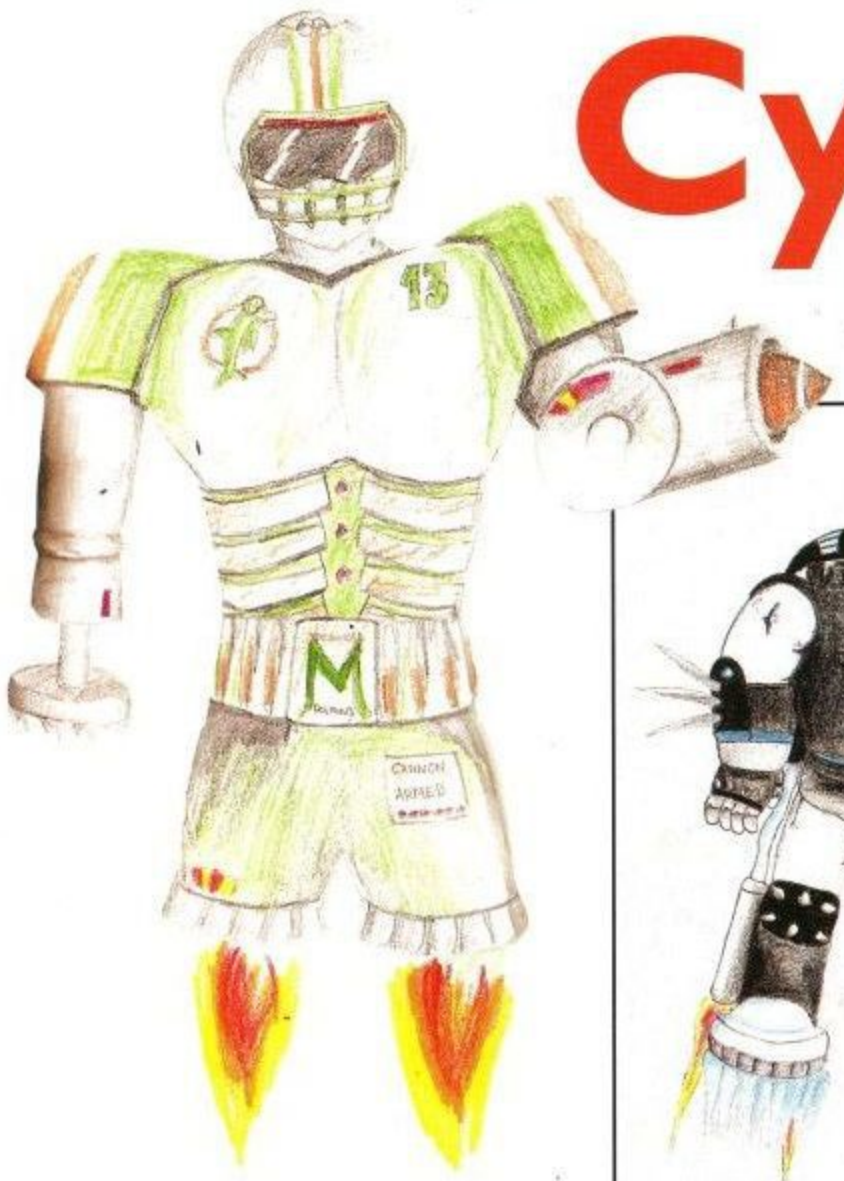


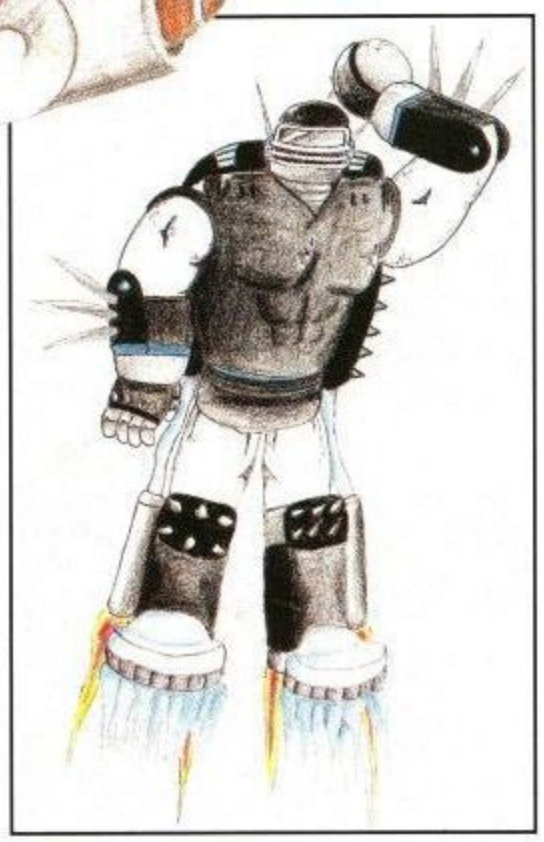
Yes folks, it's time to give away the goodies again. Wading knee deep through your fantastic drawings of the American Footballer of the 21st century, we finally managed to dig out the three lucky winners of the superb American Football shirts. They are; Dean Pallister of Durham; Adrian Hopson of Broxbourne, Herts., and Craig Dochray of Oldham, Lancs.

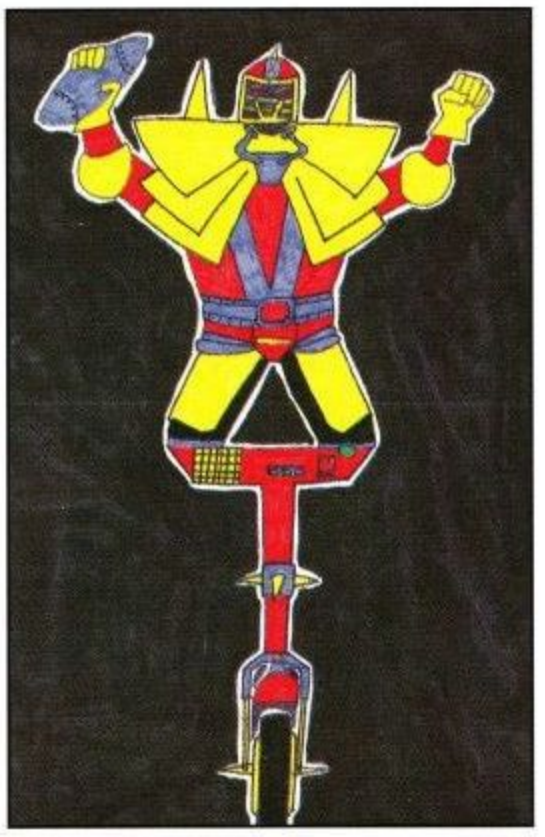
Unfortunately, we haven't got room to show all of the entries, but twenty runners-up will also receive fabulous inflatable American footballs to drive their parents wild. Judge the quality of the entries for yourself with this selection of the winners and some of the runners-up.



Cyberball Spectacular







STAR SOFTWARE

29A Bell Street, Reigate, Surrey RH2 7AD. Tel: 0737 223869. Fax: 0737 246733

100% DYNAMITE
ONLY £10.99 CASS.
LAST TRAIL, DOUBLE DRAGON, WEC LE MANS, AFTER BURNER

TOLKIEN TRILOGY
ONLY £7.99 CASS.
£11.99 DISC
THE HOBBIT, LORD OF THE RINGS, SHADOWS OF MORDOR

TOP 30 AMSTRAD

BLOODWYCH	6.99	
DR DOOMS REVENGE	6.99	10.99
KLAX	6.99	10.99
HAMMERFIST	6.99	10.99
DAN DARE 3	6.99	10.99
SONIC BOOM	6.99	10.99
ITALY 1990	6.99	
POWERDRIFT	6.99	10.99
BOMBER	9.99	
BLACK TIGER	6.99	10.99
PIPEMANIA	6.99	10.99
CLOUD KINGDOMS	6.99	10.99
MYTH	6.99	10.99
THE BIZ	10.99	
HARD DRIVIN	6.99	10.99
RICK DANGEROUS	6.99	10.99
CABAL	6.99	10.99
BEACH VOLLEY	6.99	10.99
BATMAN THE MOVIE	6.99	10.99
GHOSTBUSTERS II	6.99	10.99
CHASE HQ	6.99	10.99
X-OUT	6.99	10.99
DOUBLE DRAGON II		10.99
HEAVY METAL	6.99	10.99
LASER SQUAD	6.99	10.99
CASTLE MASTER	6.99	10.99
HOT ROD	6.99	10.99
NINJA SPIRIT	6.99	10.99
RAINBOW ISLANDS	6.99	10.99

COMPUTER HITS VOLUME 2, ONLY £5.99
3D STARSTRIKE, SUPERPIPELINE, TECHNICIAN TED, ANDROID 2, MUTANT MONTY, CODENAME MAT, MOONBUGGY, WORLD CUP, GAUNTLET, FANTASIA

COMPUTER CLASSICS ONLY £3.99
ZYNAPS, INTO THE EAGLE'S NEST, DYNAMITE DAN, ALIENS, CAULDRON II

10 COMPUTER HITS VOLUME 5
ONLY £4.99 CASS. £9.99 DISC
SAMURU WARRIOR, MORPHEUS, TARZAN, TRAZ, MEGA APOCALYPSE, MAGNETRON, NINJA HAMSTER, MYSTERY OF THE NILE, FRIGHTMARE, ENLIGHTENMENT DRUID II

SUPREME CHALLENGE
ONLY £4.99 CASS.
£9.99 DISC
ELITE, ACE II, SENTINEL, STAR GLIDER, TETRIS

IN CROWD
ONLY £9.99 CASS.
KARNOV, GRYZOR, BARBARIAN, CRAZY CARS, PREDATOR, COWBAT SCHOOL, PLATOON, TARGET RENEGADE

20 CHARTBUSTERS ONLY £4.99 CASS.
GHOSTBUSTERS, FA CUP FOOTBALL, AGENT X2, KANE, LA SWAT, NINJA MASTER, RASPUTIN, OLLIE & LISA, RICOCHET, ZOLIX, WAY OF THE EXPLODING FIST, DAN DARE, FORMULA 1 SIMULATOR, BRIAN JACKS SUPERSTORE CHALLENGE, TAU CETI, I-BALL, PARK PATROL, THRUST, HARVEY HEADBANGER, WAR CARS.

MEGA MIX
£10.99 CASS ONLY
OPERATION WOLF
DRAGON NINJA
REAL GHOSTBUSTERS
BARBARIAN II

★ FIVE STAR ★ VOLUME 3
CASS £5.99. DISC £7.99
TEMPEST, THE WAY OF THE EXPLODING FIST, TRAPDOOR, TAU CETI ALIENS, THE LORD, STRIKE FORCE HARRIER

COMPUTER HITS VOLUME 4, ONLY £5.99
BRIDE OF FRANKENSTEIN, SPINDIZZY, PULSATOR, SACRED ARMOUR OF ANTIRIAD, REVOLUTION, TRIAXOS, DEACTIVATORS, UCHI MATA, CITY SLICKER, STARQUAKE, ELEKTRAGLIDE, DANDY.

COMPUTER HITS, VOLUME 3, ONLY £5.99
HERBERTS DUMMY RUN, HI RISE, ON THE RUN, DEVILS CROWN, WRIGGLER, DYNAMITE, ELIDON, JUGGERNAUT, GEOFF CAPES STRONGMAN, CAULDRON

COMING SOON

BOMBER DISC	13.99	
BLOODWYCH DISC	10.99	
INTERNATIONAL 3D TENNIS	6.99	10.99
KENNY DAGLISH SOCCER MATCH	6.99	10.99
SECRET AGENT/SLY SPY	6.99	10.99
THE CHAMP	6.99	10.99
VENDETTA	6.99	10.99
F-16 COMBAT PILOT	10.99	13.99
DRIVING FORCE	6.99	10.99
GOLDEN AXE	6.99	10.99
ORIENTAL GAMES	6.99	10.99
SCAPE GHOST	10.99	13.99

EUROPEAN SUPER LEAGUE

BOXING MANAGER	6.99	10.99
WORLD CUP SOCCER	6.99	10.99
ADIDAS CHAMPIONSHIP FOOTBALL	6.99	10.99
ESCAPE PLANET OF THE ROBOT MONSTERS	6.99	10.99

PLEASE NOTE:- ORDERS FOR THESE ITEMS WILL BE DESPATCHED WITHIN 24 HOURS OF RELEASE

SOCCER MANIA

EMLYN HUGHES	7.99	11.99
FOOTBALLER OF THE YEAR 2	6.99	
FOOTBALL DIRECTOR	6.99	
FOOTBALLER MANAGER 2	6.99	
K. DAGLEISH SOCCER MAN.	6.99	
KICK OFF	6.99	
SAINT & GREAVSIE	6.99	8.99
TRACKSUIT MANAGER	6.99	
GAZZAS SUPER SOCCER	6.99	10.99
LIVERPOOL	6.99	10.99
ITALY 1990	6.99	

AMSTRAD FULL PRICE

	CASS	DISK
A.P.B.	6.99	9.99
ACTION COUNTDOWN	6.99	9.99
ACTION FIGHTER	6.99	9.99
AFTER BURNER	6.99	9.99
AIRBORNE RANGER	9.99	12.99
BARBARIAN 2	6.99	9.99
BEACH VOLLEY	6.99	9.99
BEVERLY HILLS COP	6.99	9.99
BIONIC COMMANDO	6.99	999
CABAL	6.99	9.99
CAPTAIN FIZZ	6.99	9.99
CLOUD KINGDOMS	6.99	10.99
CONTINENTAL CIRCUS	6.99	10.99
CROSSBOW	6.99	10.99
CRAZY CARS 2	6.99	
CYBERBALL	6.99	10.99
DOCTOR DOOMS REVENGE	6.99	10.99
DOUBLE DRAGON	6.99	9.99
DRAGON NINJA	6.99	9.99
DYNAMITE DUX	6.99	
DEFENDERS OF THE EARTH	6.99	10.99
ELIMINATOR	6.99	9.99
EPYX 21	9.99	13.99
FOURTH DIMENSION	9.99	13.99
GARFIELD'S WINTER TAIL	6.99	9.99
GRAND PRIX MASTER	6.99	9.99
GUNSHIP	6.99	12.99
HEROES OF THE LANCE	6.99	9.99
HUMAN KILLING MACHINE	6.99	9.99
HOT ROD	6.99	10.99
INC. SHRINKING SPHERE	6.99	9.99
I. JONES - LAST CRUSADE	6.99	
IMPOSSAMOLE	6.99	10.99
LAST DUEL	6.99	9.99
LAST NINJA 2	6.99	
LICENCE TO KILL	6.99	
LIVE AND LET DIE	6.99	9.99
MEGA MIX	10.99	
MOONWALKER	6.99	9.99
MYTH	6.99	
NEW ZEALAND STORY	6.99	9.99
NIGHTRAIDER	6.99	9.99
OPERATION WOLF	6.99	9.99
OUT RUN	6.99	9.99
PACLAND	6.99	
PACMANIA	6.99	8.99
PURPLE SATURN DAY	6.99	9.99
POWERDRIFT	6.99	10.99
P47 THUNDERBOLT	6.99	10.99
R-TYPE	6.99	
RAINBOW ISLANDS	6.99	10.99
RALLY CROSS	6.99	
REAL GHOSTBUSTERS	6.99	
RED HEAT	6.99	
RENEGRADE 3	6.99	
RETROGRADE	6.99	10.99
RICK DANGEROUS	6.99	10.99
ROBOCOP	6.99	10.99
RUNNING MAN	6.99	9.99
SCRAMBLE SPIRITS	6.99	10.99
SILKWORM	6.99	10.99
SKATE OR DIR	6.99	9.99
SONIC BOOM	6.99	10.99
SPACE HARRIER 2	6.99	9.99
STARGLIDER 2	9.99	13.99
STUNT CAR	6.99	9.99
SUPERWONDERBOY	6.99	10.99
TANK ATTACK	6.99	10.99
TEST DRIVE 2	6.99	
THUNDERBIRDS	7.99	9.99
THUNDERBLADE	6.99	9.99
THE BIZ	10.99	
TOLKEIN TRILOGY	7.99	11.99
TRACKSUIT MANAGER	6.99	
TRIVIAL PURSUIT NEW BEG	6.99	13.99
TRIVIAL PURSUIT	6.99	
TURBO OUTRUN	6.99	10.99
TYPHOON	6.99	9.99
VIGILANTE	6.99	9.99
VINDICATORS	6.99	9.99
WAR IN MIDDLE EARTH	6.99	
WEC LE MANS	6.99	9.99
XENON	6.99	9.99
XENOPHOPE	6.99	9.99

WORLD CUP 90
CASS ONLY £8.99
KICK OFF
TRACKSUIT MANAGER
GARY LINEKARS SOCCER

SOCCER SPECTACULAR
ONLY £4.99 CASS. £8.99 DISC
FOOTBALL MANAGER, PETER BEARDSLEYS INTERNATIONAL FOOTBALL, WORLD CHAMPIONS, SOCCER SUPREMO, PETER SHILTONS HANDBALL MARADONNA

SOCCER SPECTACULAR
£4.99 CASS
£7.99 DISC

NAME ..... COMPUTER SYSTEM .....

ADDRESS ..... PLEASE SEND ME:

..... 1st CHOICE .....

..... 2nd CHOICE .....

TEL NO .....

I ENC CHEQUE/P.O. FOR £.....

PLEASE DEBIT MY ACCESS/VISA CARD FOR £ .... ACCESS/VISA NO. | | | | | | | | | | | | | | | | |

(Please make cheques or P.O. payable to **STAR SOFTWARE.** Orders over £5 P&P inc. Under please add 50p per item. Europe £1 P&P. Elsewhere + £2)

Access VISA

CREDIT CARD ORDERS WELCOME
(ACCESS & VISA ONLY)

Join us in the quest to smash the South American drug barons in Snow Strike, grapple with Einstein's theories in E-Motion and lead Hammerfist's 23rd century holographic revolution in this month's action packed Gameplan.

GAMEPLAN



SNOW STRIKE

Be the terror of the airways in your supercharged F14 LCB Cosmos combat fighter.



E-MOTION

A world of puzzle and peril as you strive to smash molecules to survive.



HAMMERFIST

Judgement Day is close at hand as the holographic assassins turn against their masters.

PLUS

Check out Turrican, Liverpool, Crackdown, Pipe Mania and more of the best budgets worthy of your pocket money.

TOP 20

1	(1)	Fantasy World Dizzy	Code Masters
2	(NE)	Temple of Doom	Kixx
3	(2)	Paperboy	Code Masters
4	(4)	Rock Star	Code Masters
5	(7)	Wonderboy	Hit Squad
6	(NE)	Pro Boxing	Code Masters
7	(NE)	Yogi's Great Escape	Hitec Software
8	(3)	Thomas The Tank Engine	Alternative
9	(NE)	Dragons Lair	Encore
10	(NE)	3D Snooker	Players
11	(NE)	Thriller Pack	Prism
12	(13)	Match Day	Hit Squad
13	(10)	Batman - The Movie	Ocean
14	(9)	1943	Kixx
15	(8)	Road Blasters	Kixx
16	(11)	Chase	Ocean
17	(12)	Buggy Boy	Encore
18	(NE)	Robocop	Ocean
19	(NE)	Migbusters	Players
20	(16)	Rainbow Islands	Ocean

Last month's position in brackets
Top 20 compliled by Gallup



Hammerfist

The post-holocaust holographic revolt against repression.

Freedom. What's it all about? Free from what? From Whom? Free to do what to whom and where? The fight for freedom. The clime of the unforgotten brave! Whose land from plain to mountain-cave was freedom's home or glory's grave! Sorry, that was one of Byron's but he too could tell the tale of repression. A fight to break the chains of humdrum conundrums and robot existence.

Holograms by definition are not essentially free agents. They are in fact meaningless until they are suitably illuminated when by the wonders of photographic science, patterns turn into 3-D images. But they are still not free!

Hammerfist attempts to transform this enclosed world of imprisoned 3-D images into a world where holograms mingle with humans and are indistinguishable from the real race (except perhaps at nightime when a lack of light would surely turn the holograms back into meaningless patterns!).

The year is 2215 AD. A large corporate body producing and operating the holograms of the future has invested wisely, planned well and cunningly overcome the two main cities of the planet. Centro-Holographix is that body.

The holograms are specially selected people, chosen for particular skills, who are transformed into holograms to commit murders, political crimes or any other nasty deed that needs to be done. Between the missions the holograms are stored in personality computers – Mind prisons. Chains on thoughts. Dreams behind bars. Computers however have a tendency to break down, even 200 years into the future.

The computer controlling two of the most powerful holograms ever created, *Hammerfist* and *Metalisis*, has malfunctioned sending these two angry and lethal assasins on a final mission. The mission? The fight for freedom. To carry the flag for all the poor meaningless patterns of existence created by the evil minds of the controlling body. To rid the world of Centro-Holographix.

Take up your joystick and assume the role of both holograms. A basic platform and ladders game this is not as you attempt to smash the security systems to gain access to later levels. Fight the droids and kill the technicians. Up the revolution!

Energy and weapon recharge is essential for survival against the numerous aliens both holographic and solid sent by the master to level your rebellion.

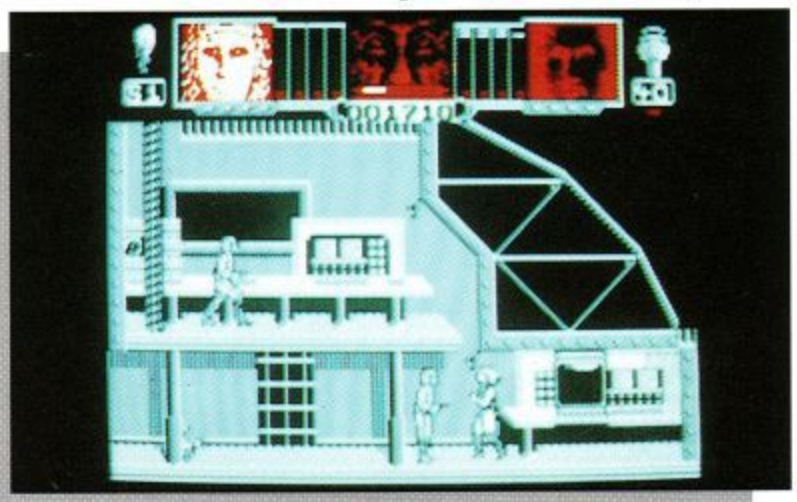
Difficulties may arise in controls. Switching between Hammerfist and Metalisis requires practice as each have specific skills to overcome various obstacles and enemies. A quick flic-flac from Metalisis, good enough to score a 10 at any Olympic gymnastic tournament and a sharp punch from Hammerfist is usually enough to outwit the witless slaves of Centro-Holographix.

In destroying your opponents and various obstacles, energy fizzles are released which when picked up revitalise your characters. So keep close to those fizzles!

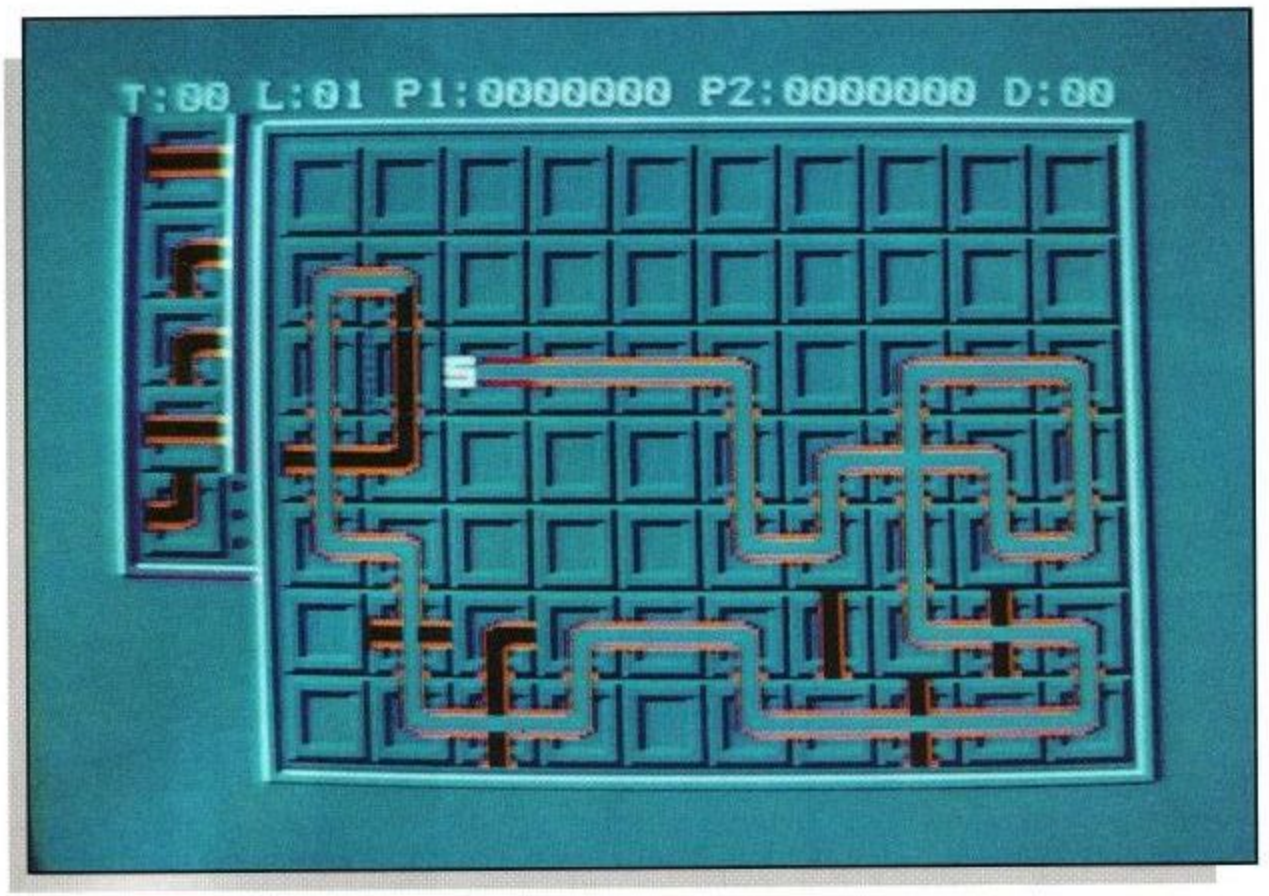
Hammerfist the game is good in many ways. Although basic in its approach, it retains a certain interest due to its storyline. Control of two characters is also an interesting option.

A fight for freedom from the evil grip of heartless humans in control of Centro-Holographix echoes certain literary classics as *Carry on Hologram, Carry on up the Revolution and 1985*. The challenge is all yours.

Basil Bread



ROUND-UP			
NAME	Hammerfist		
FROM	U.S. Gold	PRICE	Disc £14.99 Cassette £9.99
60%	52%	78%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



Pipe Mania

Piping hot action in a battle against the Flooz

Grip the old monkey wrench firmly in your hand, push your work cap squarely onto the back of your head and get ready for a fiendish challenge of the highest order.

If you've never tried your hand at plumbing before, get in touch with somebody who has, because you are going to need all the help you can get in your quest to construct the craziest pipelines in history.

Starting at the 'S' mark, where else, the aim of the game is to build a pipe out of straight sections, bent sections and cross-sections, filling as much of the screen as posssible.

Soon after you start your mammoth task, the icky green Flooz comes creeping after you, determined to catch you up before you finish the job.

In the top right hand corner of the screen, you are told how far the Flooz needs to travel before the round is completed, usually fourteen segments in the earlier rounds. If your pipe does not stretch that far, you come to a sticky end, but if it does, you are through to an even harder level.

Before you get building, a quick run through the practice level will give you the general idea of the game, and how best to use the pipe segments as they come into play. Place the pipes wherever you like, but you'll need to think ahead and move quickly in order to beat the Flooz.

When you judge that your pipe has covered the right amount of ground, you can either stop building and press 'F' to speed up the Flooz to the end, or build on to earn a few extra points.

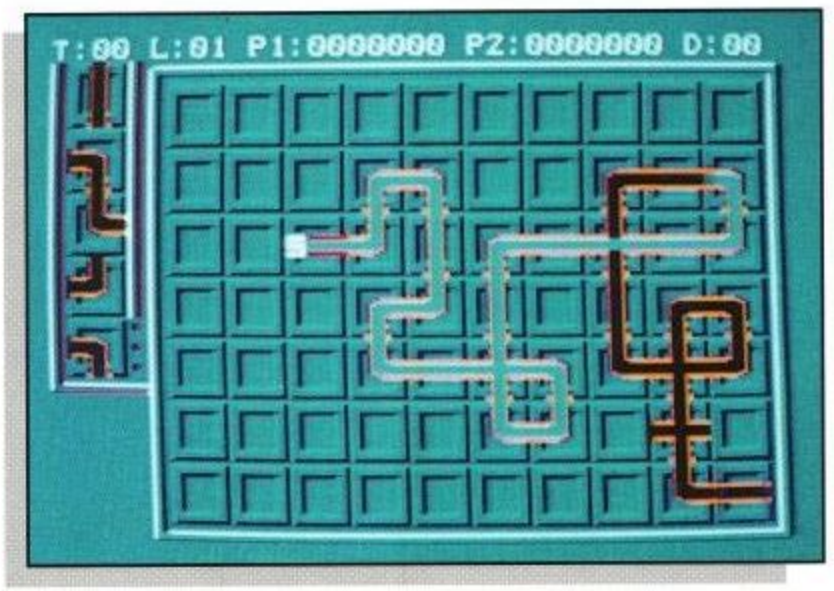
As you progress, you will come up against a number of obstacles and special pipe segments to make your life just that little bit harder. Look out for one-way pipe pieces, move around obstacles, and try to direct the Flooz into reservoirs to buy yourself a little time to build on. On certain levels, you can direct the Flooz off the screen to reappear on the other side, to help you out of a tight corner, while on others, you will need to connect your pipe to a special end piece, after completing the minimum distance of course, otherwise you lose the round.

After every four levels, you will also come up against a brain teasing bonus round, which will see pipe segments scrolling across the top of the screen waiting for you to bring them down in the correct order to let the Flooz flow. A little reminiscent of Tetris, maybe? Who cares, it is certainly just as fast and furious a challenge.

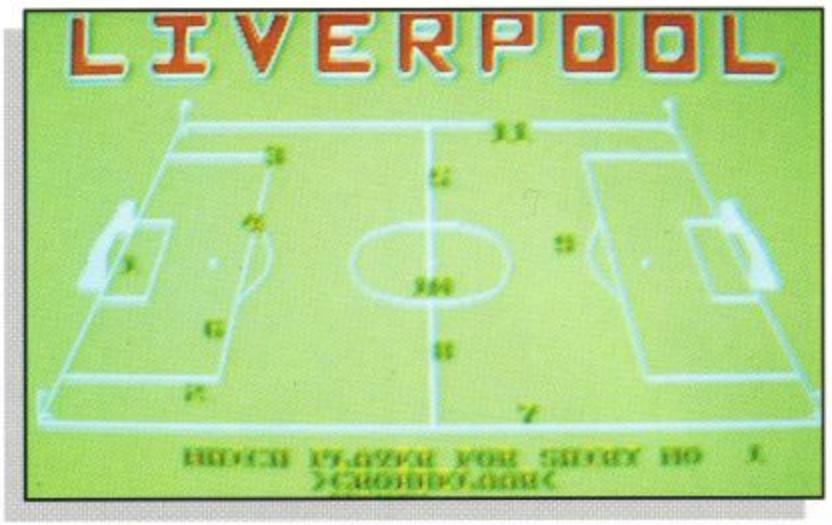
When using cross-pieces of pipe, make sure you have enough room to loop through them, to earn extra points, and try not to replace segments too often by exploding them, as this costs points.

With two player competition and expert levels included in the package, Pipe Mania is compulsive playing and guaranteed to set your blood boiling along with the Flooz. Go out and buy it now, it's piping hot stuff.

Chris Knight



ROUND-UP			
NAME	Pipe Mania		
FROM	Empire	PRICE	Disc £14.99 Cassette £9.99
82%	74%	88%	CURRY
GRAFFIX	SONIX	PLAYABILITY	VERDICT



Liverpool

Take the Reds to the top and keep them there.

The name, the players, the history, the legend. As a team, you either hate Liverpool or you love them, depending, I suppose, on whether you support them. Whichever, it cannot be denied that they are a force to be reckoned with in British Football and, therefore, an ideal club to use as the basis of a computer footie game.

By the time you read this, you will almost definitely be sickened by the mere hint of the word football, after the constant barrage of World Cup Highlights on the box, and for those who are, turn the page, this is definitely not for you.

As an overall first impression of Liverpool – the game, it seems to be a case of nice music – shame about the game. Switch on, and you are greeted to the dulcet tone of 'You'll never walk alone', enough to bring tears to the eyes of ardent Anfield lovers. When it comes to actually playing the game, there may also be tears, but definitely not of joy.

Graffix off the pitch are excellent and scrolling through the menus of players, teams, fixtures and leagues is bright and colourful, but on pitch, movement is slow, stilted and very frustrating as your players amble about the pitch aimlessly.

The aim, of course, is to get the Reds to the top of the League and keep them there, whilst simultaneously crushing the hopes of the giant killing F.A. Cup hopefuls on the way to Wembley. Can you manage to do the double? If you've got a couple of weeks spare and an awful lot of saving space, then maybe. If not, it wil be a hard grind all the way.

During the games, which drag on realistically, controlling your players is easy enough, but kicking or heading the ball will take some getting used to. Holding down the fire button will vary the strength of the kick, but you need to press fire again to actually initiate that kick, using the joystick to put an angle on the ball at the same time – not easy.

Free kicks, throw-ins and corners are controlled in the same manner, and goalkeepers? Well, goalkeepers always did move in peculiar ways anyway.

On the good points, each team in the League is comprehensively listed, with club history, records, and real players from the First Division. After each game, there is also a list of Hotshots, showing the top scorers in the League.

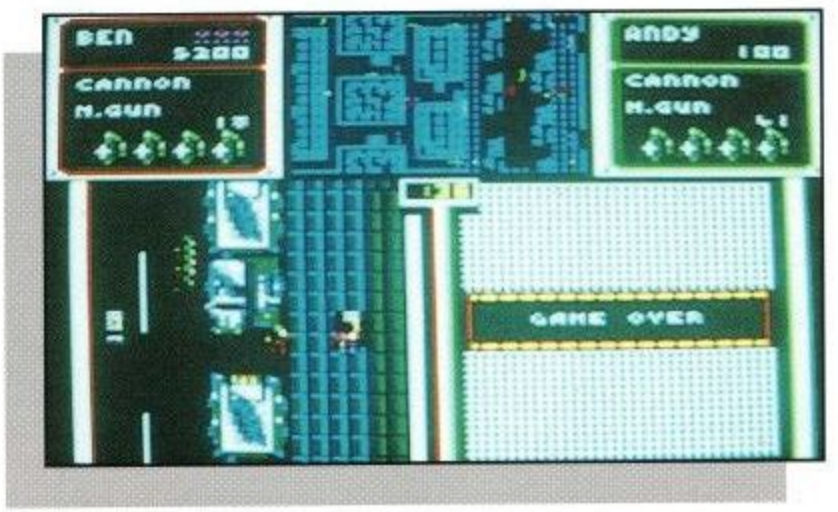
Before each game, you must pick which players to include in the side, some of whom may have been injured the week before. Pick wisely as some players may be better suited to cup matches than others.

When all is said and done though, what we want to do is play football. It's all very well having fancy music and a host of option menus, but if we can't get out onto the pitch, knock the ball around and stick a few in the back of the net without flickering about the screen for ages, there are a fair few alternatives out on the market for us to choose from, especially after the events of Italia. Sorry Grandslam, how about Tranmere Rovers next time?

John Taylor



ROUND-UP			
NAME	Liverpool		
FROM	Grandslam	PRICE	Disc £14.99 Cassette £9.99
64%	68%	55%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



Crackdown

Fight with bombs, fight with your bare hands but, above all, fight for freedom from the evil Dr. K.

Shout loud and look mean. If you don't like spiders then get outa here! While some people are playing with toys, some people are playing with fire. In the mean, tough, dangerous, precarious, violent, unsavoury, pitiless, tough, ruff, horrible, nasty, nasty, horrible world of *Crack Down,* you don't get scared and you've never heard of cotton wool.

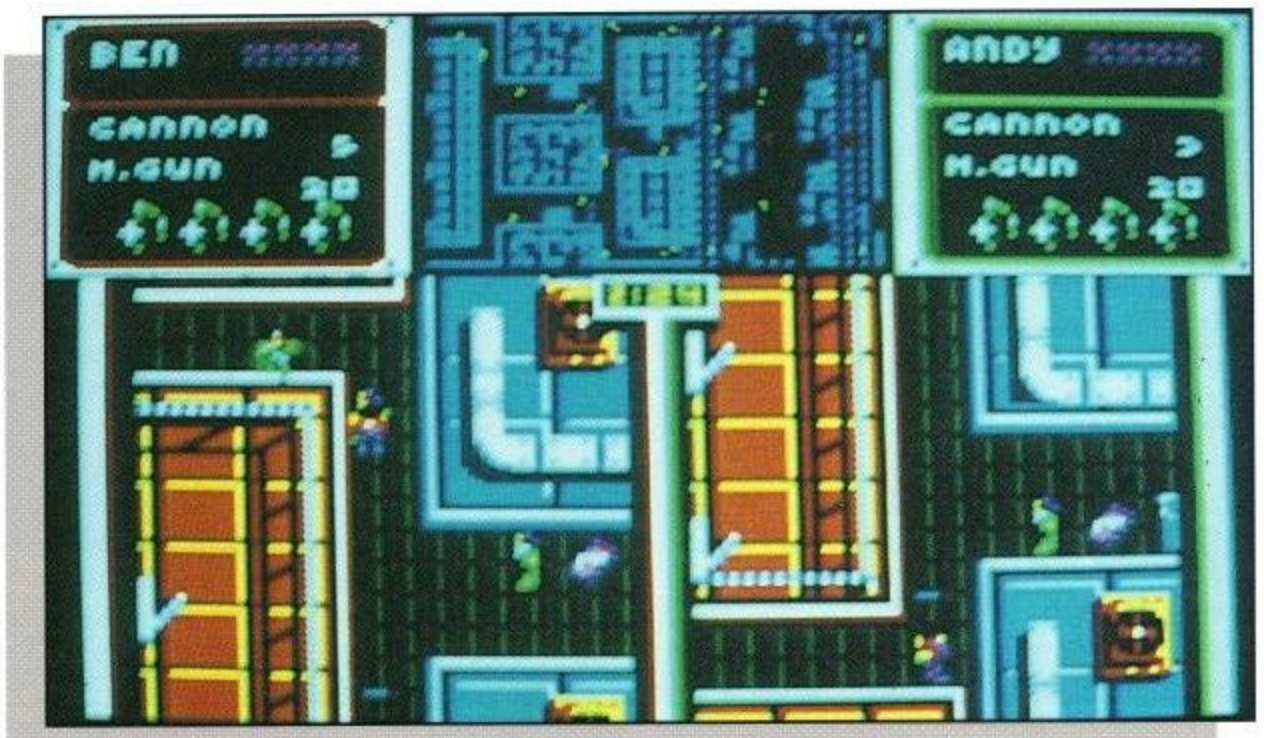
Ben and Andy are two unassuming, muscle-bound blobs on the screen, fighting for freedom against the evil forces of Dr. K. Freedom from what and from whom? Dr. K. There is no other. But our two heroes must, guided by your very hands, search the Replicants barracks, pick up keys and set the bombs marked by a big red cross. The cross is in fact so big that orange blobs, which happen to be King-Fu guards, could find the alien explosives and diffuse them. But this is not the real world. This is Crack Down.

The screen is divided into two halves, one half for Ben and one half for Andy. Crack Down is a two player game. But it's more than a mere shoot 'em up as the race is against time. The clock is always ticking. The bells are always chiming and there are 16 levels to compete with.

As well as the all-kicking, all punching Kung-Fu orange guards, crackshot green guards also stalk the area. As you cross the roads and pass the trucks more guards pop out to confront you and give you a good kicking. This may not seem a problem at first, but once you have set all the bombs on the level you have to make a quick dash for the exit to the next level before the barracks are totally destroyed.

Ben and Andy now find themselves in some underground caverns leading to the rest of Dr.K's fortress. The guards are still on your trail but just to make things more difficult, more guards arrive in the scene wearing bullet-proof kit and wielding machine guns. Trap doors are just another hazard to break the sweat.

The levels continue into the refinery where flame throwers make an unwanted appearance and the crackshots are firing more frequently. With this complete, Dr.K's fortress and 13 more levels roll out before our faithful freedom fighters.

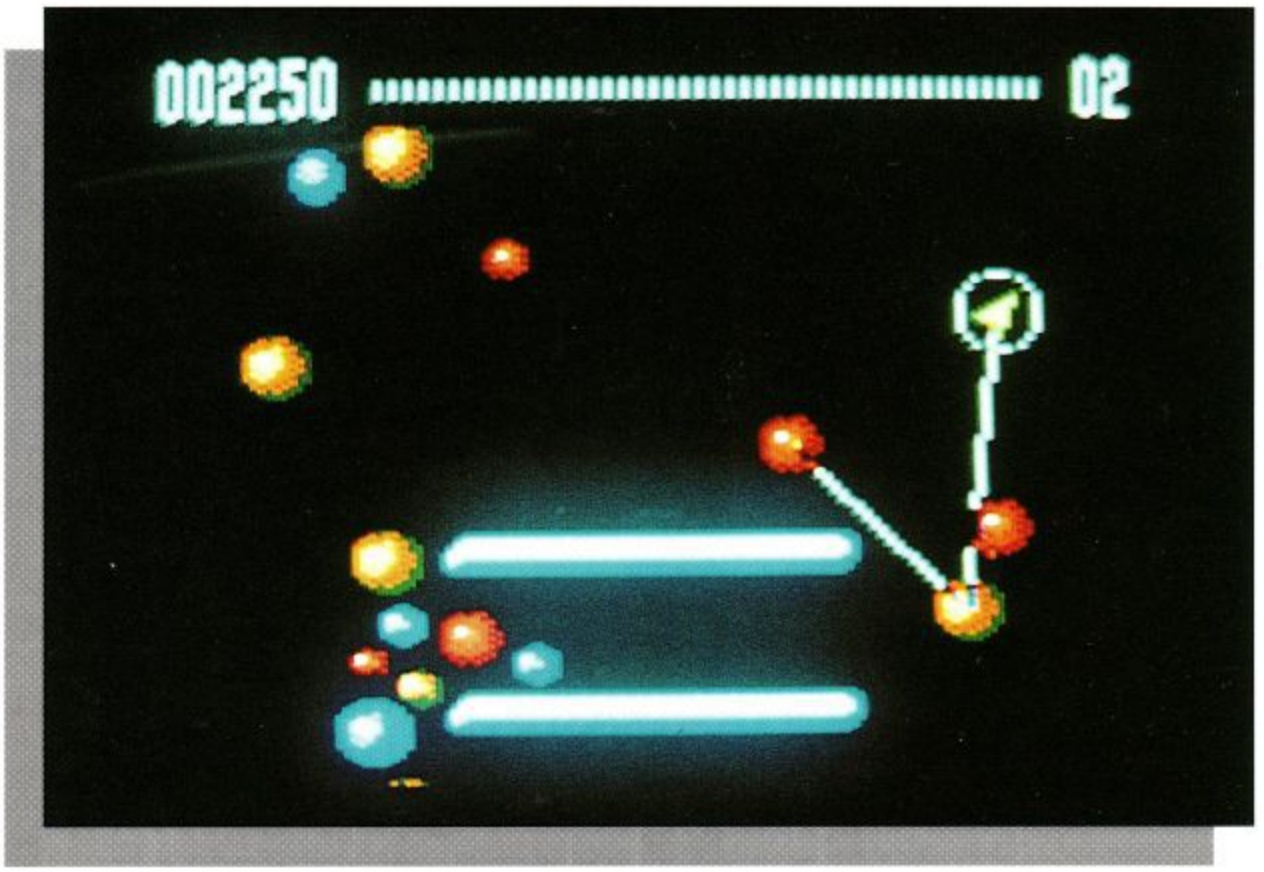


Control of the game is very simple, with a super bomb (if the fire button is held down for two seconds) to destroy everything in sight and get you out of those awkward situations. Graphically, Crack Down is not a great offering but it's a game people may know through the arcades. Its 16 levels become progressively more difficult to complete and each level has certain obstacles to master such as the trap door. Nothing is easy when you're fighting for freedom.

Crack Down is the sort of game that will hold interest long enough for the players to complete the challenge. The fact that it is a simultaneous two player game is to its advantage as sharing an interest can make things more appealing. But if you haven't any friends, you'd better have a lot of fingers.

Basil Bread

ROUND-UP			
NAME	Crackdown		
FROM	U.S. Gold	PRICE	Disc £14.99 Cassette £9.99
48%	55%	60%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



E-Motion

Time to knock the balls together. Don't titter, madam.

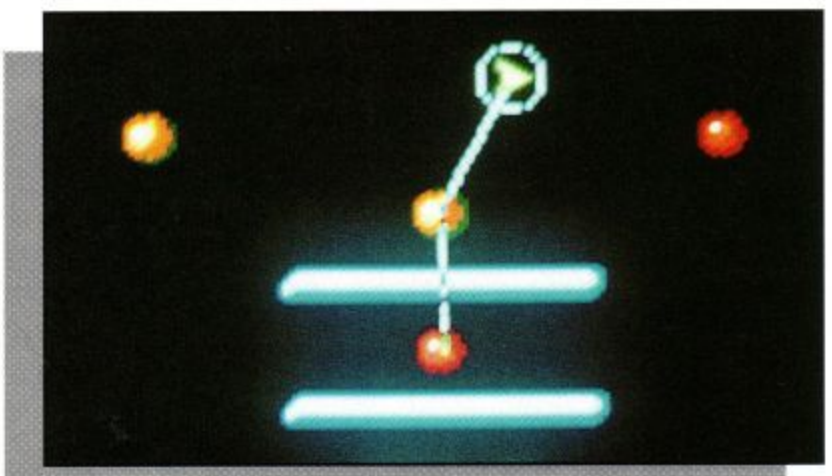
There are times in your life when you think it would be nice to just sit in front of your CPC screen, with a harmless, friendly little game and just vegetate for a few hours.

If that's what you're after, don't even think about sitting down in front of E-Motion. Yes, it may look harmless enough to start with; a simple spaceship encased in a globe, pretty coloured balls and an elastic band, but make your first move and the tranquility is well and truly shattered.

As you guide your extremely sensitive rocket around the wrap-around screen (that's right, if you disappear off the top, bottom or sides, you reappear on the other side), your task is to make the brightly coloured balls collide with other balls of the same colour. Reminiscences of the old Asteroids game may come to mind as you pilot through the non-gravity void, but the gameplay is something else.

When balls of the same colour collide, they simply disappear and, once all of the balls are gone, you've completed the screen. Now comes the tricky part. not only is there no gravity, which means that if you knock the balls too hard, they start flying around at a rate of knots, but if balls of different colours go bump, an extra ball of a different colour is produced.

Catch these while they are still small and you can gain much needed energy, but once they have grown, they become lifesize problems with no matching coloured ball to do away with them. That is, unless you cause another ill-matched bump.



If you leave any of the balls unattended for too long, they will explode, draining away vital energy from your ship.

Just to make matters even more frantic, on some levels, balls and even your ship are connected by an elastic lifeline which allows you to go just so far, but also drags the connected balls around as well, causing whiplash and many an unwanted crunch. if this happens too often, you'll end up with a very pretty multicoloured screen full of balls-fatal.

Watch out for the tubular steel constructions as well; get the balls wrapped around those and your troubles really have started.

There are 50 mindbending screens in all, with a special bonus level every fourth screen, which have easy to follow instructions of what you have to do. Well, the instructions may seem easy enough anyway.

The game in itself is incredibly simple, but also incredibly addictive and frustrating as you watch your every move going wrong and coloured balls start boggling your eyeballs. For extra special results, however, try two player mode. Instead of fighting against each other, points on each level are shared and you have to work together to finish the task at hand. Just you wait, I can hear the screams of exasperation now as your partner starts screaming instructions at you.

E-Motion is excellent. The sound isn't up to much, but the gameplay is everything and will keep you enthralled for hours. This certainly wasn't what Albert Einstein had in mind when he started juggling with molecules, but he wouldn't half be proud of it.

Chris Knight

ROUND-UP

NAME	E-Motion		
FROM	US Gold	PRICE	Disc £14.99 Cassette £9.99

GRAFFIX	SONIX	PLAYABILITY	VERDICT
76%	54%	88%	

Turrican

Flushing out the bad guys was never so much fun



Dusk is a time where dreams are vague and reality vaguer, where fact and fable become entwined, where history fades into myth. A time where monsters of lore, laughed at in the plain light of day, turn up to haunt the darkest recesses of your mind. Who's laughing now?

So it is with Morgul, Lord of darkness and all-round bad guy. All those years ago, the goodies came up with a good, clean living hero who banished old Morgul into the endless tracts and tunnels of time. But, true to his omnipotent form, he's back, and this time he's sorer than ever. Who's going to save us now? I mean, the Ghostbusters are just this group of guys who act for a living. This is the real thing!

Turrican-Achilles, Hector, Hercules, Alexander the Great, in fact, just about all of the old heroes seem to have come together to form our modern day saviour, whose thankless task it is to go into the evil fortress and flush out Mr Morgul.

If you think that sounds just a little too dramatic, try playing the game. There are five worlds for Turrican to battle through before he reaches the final combat, and each of them are progressively harder.



World one sees your hero taking on the might of a huge iron gauntlet amongst other daunting adversaries in the dusty wasteland. Try to keep a track of where you are going, because there is only one correct route through the level, with plenty of dead ends to stump your progress. Blowing fake blocks out of your path may reveal some short cuts, but they don't always lead in the right direction. Never mind, just blow away the baddies that get in your way.

Although you are only equipped with a three shot rifle to start with, killing off certain nasties will power you up with excellent death-dealing lasers. For best effects, try pressing fire with the joystick centred. Down you go into a crouch, and out leaps your lethal laser whip. Not to be messed with.

As well as platforms and stages, you will also have to take many a deep breath and trust to the Lord, as you leap out into the unknown from ledges and hope there is solid ground beneath you.

Turrican is a shooty of epic proportions. The playing arena is vast, and the variety of opponents is stunning, especially when you reach World three and battle it out against an ever increasing bacterial blob on a diagonal screen.

The combination of frantic shooting and trail searching makes this game incredibly addictive. The graffix are clean, with excellent scrolling and there are also some neat sound effects as you use your various weapons. Take the battle to Morgul in the Industrial World and you can certainly be proud of your progress, even if it does take you all week.

Chris Knight

ROUND-UP

NAME	Turrican		
FROM	Rainbow Arts	PRICE	Disc £14.99 Cassette £9.99

78%	75%	85%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



Snow Strike

Kick butt in your F14 Superfighter

April 1999, despite continual opposition from Congress, the President has vowed to declare formal war against the South American drug barons, who are polluting his nation.

Off the West Coast of South America, the aircraft carrier USS Epyx moves into position, bearing a squadron of a brand new jet fighter, the F14-LCB COSMOS.

Briefing at 13.00 hours: prepare for the first solo run of Operation Snow Strike.

Enter your credentials into the onboard computer and select a training mission; no one would be fool enough to take on the forces of the drug barons unprepared. Get the feel of the aircraft, practice manoeuvres, then pick one of the ten exhilarating missions and start dealing out death in large quantities.

You'll be involved in dog-fights, air to ground attacks and vice versa as you attempt to destroy fields of evil weed, complexes and warehouses. At the end of each mission, the information you have gained will be fed into the computer.



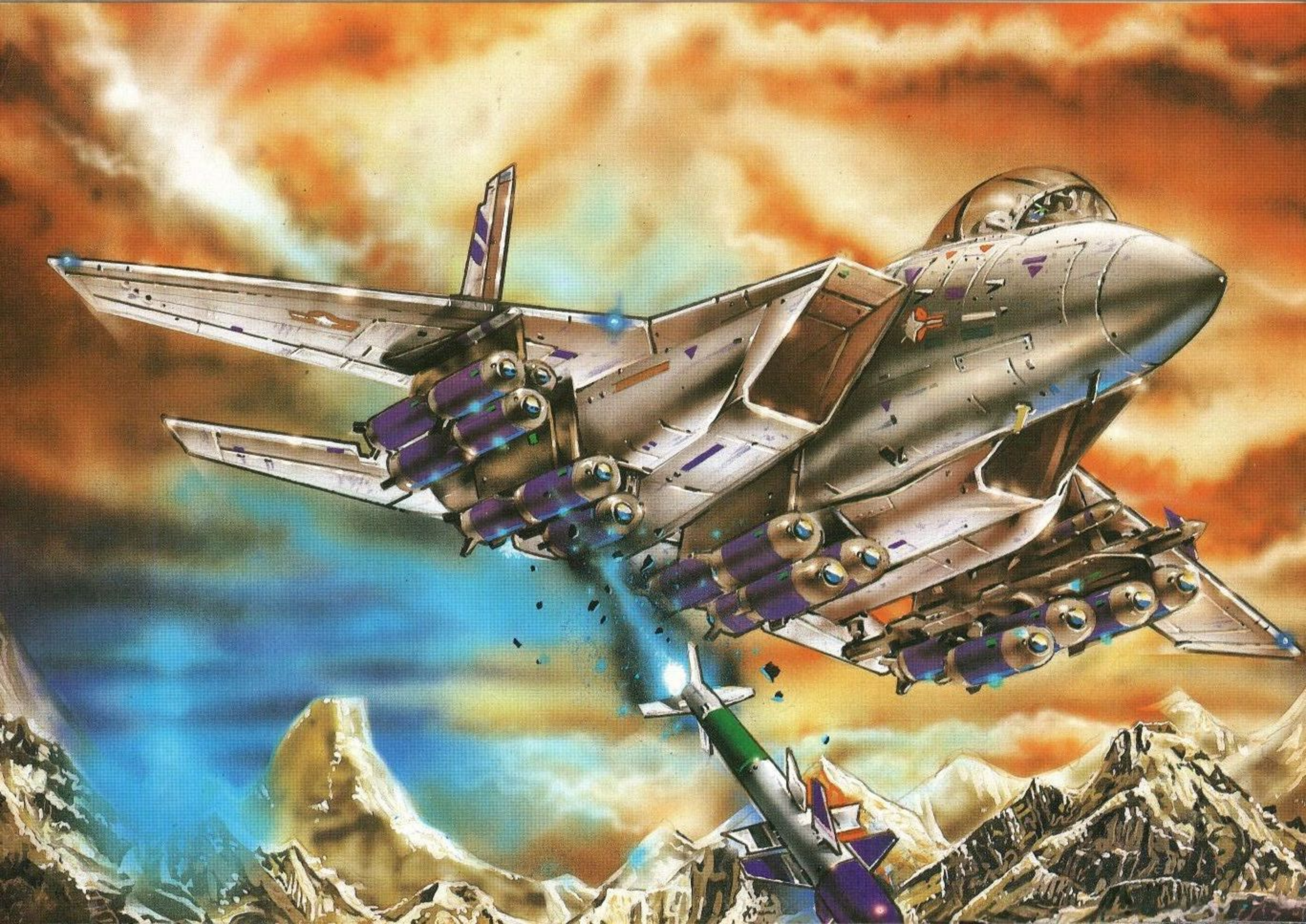
Graphically, the game looks excellent, and there is more than enough excitement to get the old adrenalin going. As an added twist, you can't even trust your companions; those evil barons have double agents in their pay just where you least expected it.

Although Snow Strike is not designed as a simulator, you'll need to be pretty adept to dodge incoming missiles and some of the views look breathtaking from the cockpit.

Action is what this set of missions is all about, and with the excellent storyline, it should keep you hooked to your screen until the last crop of toxic weed is wiped from the face of the Earth. Prepare for take-off.



Snow Strike
US Gold
Disc: £14.99
Cassette: £9.99



Budget Basement

More power for your pocket money



ESCAPE FROM SINGE'S CASTLE

Anyone of you who likes your adventure Dirk the Daring style, as featured in last month's ACU in Dragon's Lair, could do far worse than to pop out and buy this equally good sequel.

Not content with rescuing the fair Princess Daphne and returning her to her devoted father Aethelred, Dirk has now resolved to go back and brave the lair one more time in search of the magic pot of gold, hidden deep within the Lizard King's domain.

If you thought getting to the pot was bad enough, with Boulder Alley and Ye River Caves just some of the obstacles to get through, the going gets tougher when you actually have it in your grasp. Watch out for the Mud Monsters just waiting to spoil your fun.

As an added extra, you need to make only the right moves at the right time to survive the Throne Room and Doom Dungeon. Make a false step and its all over, so be careful, timing is everything.

With excellent graphics and intriguing gameplay, this sequel has got to be worth buying.

4 SOCCER SIMULATORS

If you like Footie, then you like Footie, that's all there is to it. And if you do, they don't come any better than this little collection from Code Masters.

To start with, you've got the usual 11-a-side game, with corners, fouls, throw-ins, the works...Coming close on its heels is the 5-a-side game, with faster gameplay and the fast and furious action you'd expect without throw-ins and corners.

If that weren't enough, you then come to the real rough and tumble in Street Soccer. Watch with glee as other players roll around in agony after another of your bone crunching tackles – there are no rules – but remember not to lose the ball over the wall. They don't grow on trees, you know.

To get you in the right frame of mind, you also get the chance to build up your skills and stamina with the special Soccer Skills game, which includes, sprints and push-ups, as well as the usual shooting and dribbling exercises.

As a compilation, this has got to be excellent value for money, and if you don't like footie, don't worry, there are other compilations coming out soon.

YOGI'S GREAT ESCAPE

You'll have to be smarter than your average gamester to get Yogi out of this fix. Full marks to Hi-Tec for bringing this lovable bear onto our screens with excellent results and wonderful prices.

The story so far: Ranger Smith is told that Jellystone Park must close and all the animals must be transported



to a zoo. Now, Yogi's not too keen on this, so he resolves to escape, and that's where you come in.

With the clock ticking against you, you need to get Yogi out of the park, through the forest, the Wild West, Mumbo Jumbo Marsh, the Funfair and finally, the rough, tough streets of New York City.

Playing Yogi is fun, with a good storyline and matching Graffix and sonix. Missing out on this offering would definitely be a big 'Boo-Boo'.

ITALIAN SUPER CAR

Yes. Super Stuntman is back in yet another rip-roaring adventure across five action packed levels of adventure. This time he's equipped with the latest and greatest road-burning, turbocharged monster of them all – the Italian Super Car.



Well, its not bad as far as it goes, but unfortunately most of it has gone before. Put your foot down on the accelerator and try to outrun the opposition against the clock to get to the end of each level. The opposition, however, are not prepared to sit back and watch this happen, so look out for the bullets and guided missiles flying at you and use your own to deal out some death.

The action is fair enough, but don't expect too much in the playability or graffix stakes as you take on the bridges and ramps of Super Car.

FUTURE BIKE SIMULATOR

Can you imagine a world without Motorcycles? A world without the likes of Barry Sheene and Randy Mamola? Well, you've just described the world of Future Bike.

With the banning of bikes, billionaire Finnius M. Houlder has invented his own replacements, and the roads to go with them – the Strip.

On these private roads, without the usual trucks and holidaymakers to slow you down, you can reach dizzying speeds of up to 300, but there are hazards.

Racing through the city, desert, River rapids, Ice floes and Mountains, destroying all of the other road users will deposit a bag of money on the road for you to pick up. The more you pick up, the more you can spend in the shop on upgrading your bike and buying a mammoth armoury to get rid of the enemy.



There is also a handy radar to be had, allowing you to see just which areas to avoid.

Watch out for mines as they appear before you; they hurt. As do the bombs thrown in your direction.

Future Bike is very playable with some nice sound effects thrown in for good measure. Well worth a look at.

ROUND-UP

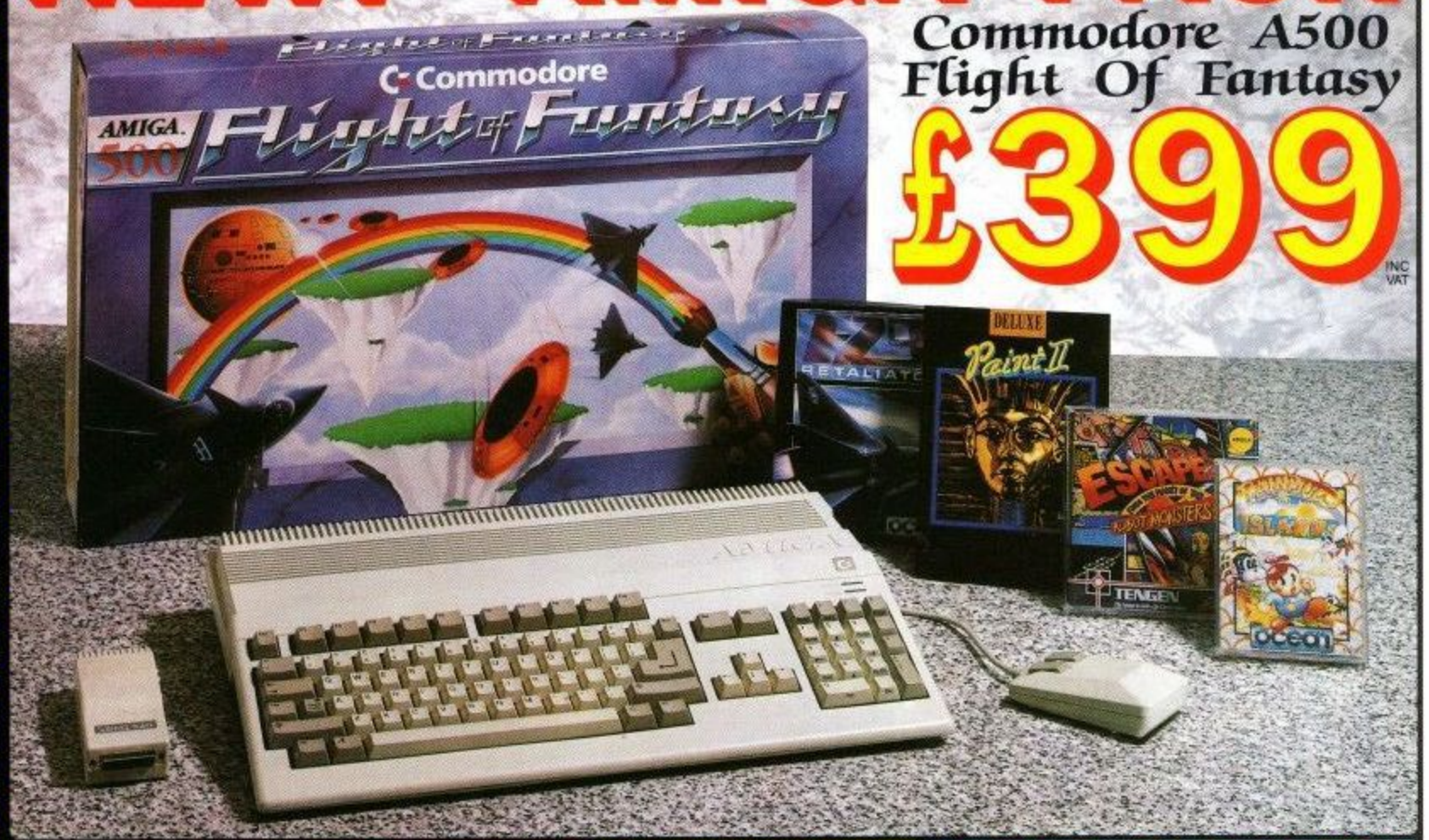
NAME	FROM	PRICE	RATING
Escape from Singe's Castle	Encore	£2.99	84%
4 Soccer Simulator	Code Masters	£2.99	76%
Yogi's Great Escape	HiTec	£2.99	80%
Italian Super Car	Code Masters	£2.99	68%
FutureBikeSimulator	HiTec	£2.99	78%

RETURN THE COUPON FOR FREE COLOUR BROCHURES!

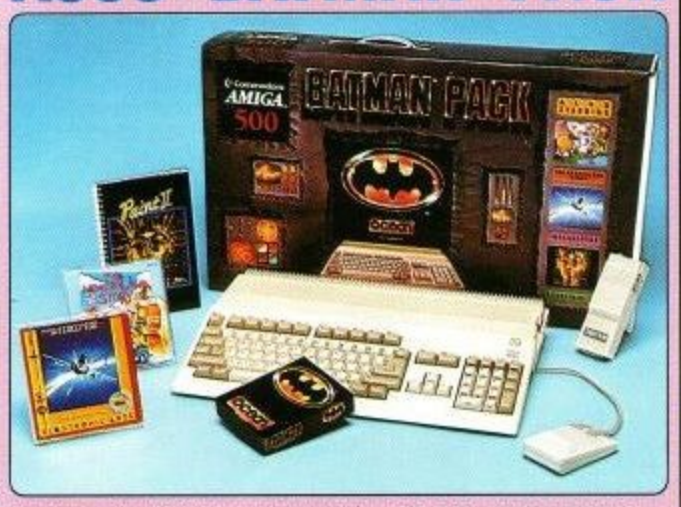
NEW! - AMIGA PACK

Commodore A500 Flight Of Fantasy

£399 INC VAT



A500 BATMAN PACK



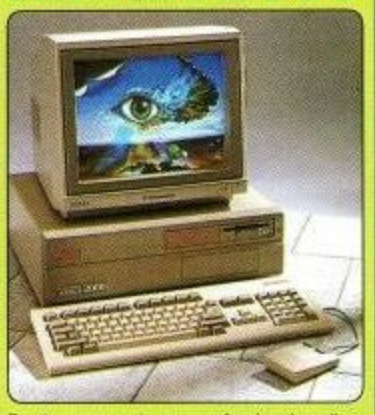
The Commodore A500 Batman Pack must surely rank as one of the most popular computer packs ever! The pack features the **Commodore Amiga 500 computer** with **mouse controller** and **TV modulator**, plus four top software titles. The software includes: **'Batman The Movie'** - Rid Gotham City of the cunning joker, in Ocean's top selling title based on the blockbuster Batman film; **New Zealand Story** - high quality conversion of the leading arcade game; **Interceptor** - Dogfight with two F-16's in this leading flight simulator; **Deluxe Paint II** - top quality Amiga graphics package which set the standard for others to follow. Return the coupon for further details.

PACK INCLUDES:

A500 Computer & Mouse	£399.99
A520 TV Modulator	£24.99
Batman The Movie	£24.95
New Zealand Story	£24.95
Interceptor	£24.95
Deluxe Paint II	£49.95
TOTAL RRP:	£549.78
Less Pack Saving:	£150.78
PACK PRICE:	**£399.00**

£399 INC VAT

AMIGA 2000



For the more serious or professional applications user, Commodore have a selection of systems based around the expandable Amiga 2000, at prices from £1295+VAT. The A2000 features a full 1Mb RAM (expandable to 9Mb), 9 system expansion slots, plus IBM compatibility with the use of PC-XT or PC-AT bridgeboards. Complete and return the coupon, putting a tick in the A2000 box, for details of A2000 computer systems.

£1295 +VAT= £1489.25

FLIGHT OF FANTASY

Flight of Fantasy is the very latest Amiga 500 pack from Commodore, featuring BRAND NEW software releases, to make this the most spectacular A500 pack ever! The pack features the Amiga 500 computer with mouse controller and TV modulator, as well as four top software titles. These include the following:

DELUXE PAINT II:
The high quality graphics program that set the standard for other Amiga art packages. Deluxe Paint II includes powerful, easy to use tools that bring out the artist in you. Create masterpieces, presentations, 3D perspectives or just doodle.

ESCAPE / ROBOT MONSTERS:
Here's something completely different - a science fiction story with comic book style graphics. Our heroes Jake and Duke are on the Planet X rescuing Humans who have been captured by the Robot Monsters and forced to create an evil Robot Army to DESTROY EARTH! Jake and Duke fight their way through hordes of evil Robots to help the Humans escape.

RAINBOW ISLANDS:
Slip on your magic shoes, practise throwing a rainbow and you're ready to go island hopping. From the Island of Doh to Monster Island, you will encounter Doh himself, stinging insects, lethal combat machines, mechanical assailants, the formidable beings of legend and folklore. Finally enter the world of darkness and its inhabitants.

F29 RETALIATOR:
The ultimate in flight simulation with a choice of two aircraft and four battle environments with dozens of different tactical missions. Aerial combat, strategic bombings, interactive ground based battles, seagoing carriers ... the list of features is endless. Real time cockpit displays, including 'true radar' enhance the realistic feel of this stunning simulation.

PACK INCLUDES:

A500 Computer & Mouse	£399.99
A520 TV Modulator	£24.99
Deluxe Paint II	£49.95
Escape/Robot Monsters	£19.99
Rainbow Islands	£24.95
F29 Retaliator	£24.95
TOTAL RRP:	£544.82
Less Pack Saving:	£145.82
PACK PRICE:	**£399.00**

£399 INC VAT

FOR FURTHER DETAILS OF THE AMIGA RANGE, COMPLETE THE COUPON AND RETURN IT TO SILICA SHOP
THE UK's No1 AMIGA SPECIALISTS

SILICA SHOP OFFER YOU

FREE OVERNIGHT COURIER DELIVERY: On all hardware orders shipped in the UK.
TECHNICAL SUPPORT HELPLINE: Team of Amiga technical experts at your service.
PRICE MATCH: We normally match competitors on a "Same product - Same price" basis.
ESTABLISHED 12 YEARS: Proven track record in professional computer sales.
£13M TURNOVER (with 60 staff): Solid and reliable with maintained growth.
BUSINESS/EDUCATION/GOVERNMENT: Volume discounts available for large orders.
SHOWROOMS: Demonstration and training facilities at our London & Sidcup branches.
THE FULL STOCK RANGE: All of your Amiga requirements from one supplier.
FREE CATALOGUES: Will be mailed to you with offers and software/peripheral details.
PAYMENT: By cash, cheque and all major credit cards.
CREDIT PAYMENT TERMS: Silica are licensed credit brokers - return coupon for details.

Before you decide when to buy your new Amiga computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Amiga, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Shop, we ensure that you will have nothing to worry about. Silica have been established for over 12 years, and have an annual turnover of £13 million. With our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Shop Service".

RETURN THE COUPON NOW FOR FREE BROCHURES

SILICA SHOP

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-309 1111**
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening Fax No: 081-308 0608
LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA **Tel: 071-580 4000**
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Fax No: 071-323 4737
SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-302 8811**
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017
BUSINESS/EDUCATION: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-308 0888**
Order Lines Open: Mon-Fri 9.00am-6.00pm Closed on Saturdays Fax No: 081-308 0608

To: Silica Shop, Dept AMSCU 0890-32, 1-4 The Mews, Hatherley Rd., Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON THE AMIGA

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

.....

.....

Postcode: ..... Tel: .....

Which computer(s), if any, do you own? ..... A2000 ☐

E&OE - Advertised prices and specifications may change - please return the coupon for the latest information.

REVIEW

Printing Power

Andrew Banner's print and be condemned attitude takes a surprising twist as he faces up to the new Citizen Swift 9.

And the nominees for the best 9-pin printer of 1990 are:– The Citizen Swift 9. This is one of the possible phrases that will earn the new Citizen Swift 9 printer even wider acclaim than it already has; being the little brother of the award winning Swift 24 of last year.

Citizen is the name of one of the most prestigious printer companies in the world today. Ranking with the likes of Star Micronics and Epson, Citizen has been at the forefront of consumer printers for some years – ever since it launched the 120D in fact. Last year the company launched the Swift 24, a 24-pin printer with exciting features. Not surprisingly it won awards and now Citizen are cashing in with a 9-pin version for £269 (plus VAT).

There are few differences between the Swift 9 and 24. The casing on both machines is identical, as is the versatile paper transport system. In fact, the inner mechanical workings are the same as the 24-pin version.





At the Citizen press launch a few months ago, a Citizen spokesman said the Swift 9 provided some of the best quality text output he had ever seen from a nine pin printer. I rarely agree with biased spiel from company reps, but I couldn't fail not to here. The text output is fantastic and close to the quality of some 24-pin printers. The Swift 9 has three NLQ fonts (Courier, Times Roman and Sans Serif) and two draft modes. In high speed draft mode the Swift 9 races along at an amazing 213 characters per second (cps). In standard draft mode the print quality betters and the machine slows to 192 cps. In NLQ it handles 40 cps with easy and relative quietness – 51dB in fact.

Control of the Swift 9 is via a completely new developed front panel. A slide action control panel switches between four different menus, the selections being displayed beneath four windows. Each window has a corresponding button and indicator light to bring the current function into action. Nothing I've seen previous is as simple to use as this new system and I look forward to seeing the same system in future Citizen printers.

The printer is supplied with a centronics interface as standard and an RS232 serial interface is a user installed optional extra. Also available is a colour upgrade kit. This too is easily installed by the user, and is relatively inexpensive. Citizen also produce a special printer stand as well as automatic and semi-automatic sheet feeders.

As for the Swift 9's paper handling capabilities, well, paper parking is a standard feature on most printers today. However, the Swift 9 goes further and can handle the usual form fed continuous stationery and single sheet paper. Tractor feed paper can be fed from either behind or below using a repositionable tractor unit for both push and pull paper transport.

Citizen have come up with , what I consider to be, the successor to the Star LC10 printer. The sheer power of this 9-pin printer completely dashes that of the LC10 which is now getting on a bit. The Swift 9 betters everything on the Star offering and although its retail price is set above that of the Star LC-10 and Panasonic KK-P 1081, most stockists will be able to reduce it to a more affordable option for the CPC user. If you were considering buying a printer other than the new Citizen, think again and also think about the free 2 year warranty that Citizen provide for peace of mind.

9-Pin Printers at a glance

Model	Price	PrintSpeed Draft/NLQ	Colour	Emulates
Citizen Swift 9	£269	213/40	Optional	Epson IBM
Star LC10 mkII	£229	180/45	No	Epson IBM
Star LC10c	£259	144/36	Yes	Epson IBM
Panasonic KX-P1181	£219	120/24	No	Epson IBM
Panasonic KX-P1180	£269	192/38	No	Epson IBM
Citizen Prodot 9x	£559	250/60	Optional	Epson IBM

Prices do not include VAT

SOFTWARE CITY

CALL US ON: 0902 25304

ACCESS VISA

SOFTWARE CITY
Unit 4, Business Development Centre
21 Temple Street, Wolverhampton WV2 4AN
TEL: (0902) 25304 FAX: (0902) 712751

2 Player Super League	£2.99
3-D Pinball	£2.99
4 Soccer Sim	£2.99
720	£2.99
1942	£2.99
Academy	£2.99
Ace	£2.99
Airwolf 1 or 2	£1.99
Arcade Flight Sim	£2.99
Arkanoid	£2.99
Army Moves	£2.99
Barbarian	£2.99
Bard's Tale	£2.99
Barry McGuigan's Boxing	£2.99
Baseball	£2.99
Batman	£2.99
Battleships	£1.99
Beyond The Ice Palace	£2.99
Blasteroids	£2.99
Bombjack 1 or 2	£1.99
Boulderdash 4	£2.99
Boxing Manager	£2.99
British Super League Football	£2.99
Buggy Boy	£2.99
Captain Blood	£2.99
Championship Sprint	£2.99
Chuckie Egg 1 or 2	£3.99
Classic Punter	£2.99
Classic Trainer	£2.99
Combat Lynx	£1.99
Commando	£2.99
Crazy Cars	£2.99
Cricket Captain	£2.99
Cricket Crazy	£1.99
Cricket Int.	£1.99
Critical Mass	£1.99
Crystal Castles	£2.99
Cybernoid	£2.99
Daley Thompsons Decathlon	£2.99
Daley Thompsons Supertest	£2.99
Dan Dare 1 or 2	£2.99
Deep Strike	£1.99
Dizzy	£2.99
Dizzy In Fantasy World	£2.99
Dizzy Dice	£1.99
Enduro Racer	£2.99
European 2 Football	£2.99
Exploding Wall	£2.99
F.A. Cup	£1.99
Fast Food	£2.99
Fist 2	£2.99
Football Champions	£2.99
Football Manager	£2.99
Footballer Of The Year	£2.99
Frank Bruno	£1.99
Frankenstein Jnr.	£2.99
Fruit Machine Sim 1 Or 2	£2.99
Game Over	£2.99
Gary Linekars Superstar Soccer	£2.99
Gauntlet 1 Or 2	£2.99
Graham Gooch	£1.99
Ghosts And Goblins	£2.99
Ghostbusters	£1.99
Great Escape	£2.99
Green Beret	£2.99
Greg Loses Clock	£2.99
Grid Iron 2	£2.99
Hardball	£2.99
Head Over Heels	£2.99
Heavy On The Magick	£1.99
Hypersports	£2.99
Ikari Warrior	£2.99
Indoor Soccer	£1.99
International Manager	£2.99
Jack The Nipper 1 Or 2	£2.99
Jet Set Willy	£1.99
Joe Blade 1 Or 2	£1.99
Joe Blade 3	£2.99
Kikstart 2	£1.99
Knightmare	£1.99
Konami Ping Pong	£2.99
Konami Tennis	£2.99
Krakout	£2.99
Leaderboard	£2.99
League Challenge	£1.99
Little Puff	£2.99
Manic Miner	£2.99
Matchday	£2.99
Matchpoint	£2.99
Migbusters	£2.99
Monty On The Run	£2.99
Moto Cross Sim	£2.99
Nigel Mansell Grand Prix	£2.99
Ollie And Lisa 3	£2.99
On The Beach	£2.99
Operation Gunship	£2.99
Overlander	£2.99
Paperboy	£2.99
Pinball Sim	£2.99
Powerplay	£1.99
Postman Pat	£1.99
Postman Pat 2	£2.99
Predator	£2.99
Premier 2 Football	£1.99
Pro Boxing Sim	£2.99
Pro Golf	£1.99
Pub Trivia	£2.99
Rastarunner	£2.99
Renegade	£2.99
Rex	£2.99
Roadblasters	£2.99
Rolling Thunder	£2.99
Rugby Boss	£1.99
Rugby Sim	£2.99
Rygar	£2.99
Sadoteur 1 or 2	£1.99
Sam Fox Poker	£2.99
Scooby Doo	£1.99
Short Circuit	£2.99
Sidearms	£2.99
Sigma 7	£1.99
Skate Crazy	£2.99
Slapfight	£2.99
Soccer Boss	£1.99
Solomon's Key	£2.99
Space Harrier	£2.99
Spindizzy	£2.99
Spy Hunter	£2.99
Spy V Spy	£2.99
Street Fighter	£2.99
Striker	£2.99
Summer Games	£2.99
Super Cycle	£2.99
Super Hang-On	£2.99
Super Nudge 2000	£1.99
Tetris	£2.99
Theatre Europe	£2.99
Thundercats	£2.99
Tom Cat	£1.99
Top Gun	£2.99
Trap Door 1 or 2	£1.99
Treasure Island Dizzy	£2.99
Turbo Esprit	£1.99
Twin Turbo V8	£2.99
U.S. Basketmaster	£2.99
Wembley Greyhounds	£2.99
Who Dares Wins 2	£1.99
Wizball	£2.99
Wonderboy	£2.99
World Champion Soccer	£2.99
World Class Leaderboard	£2.99
World Games	£2.99
World Soccer League	£2.99
Yes Prime Minister	£2.99
Yie Ar Kung Fu	£2.99
Yogi Bear's Great Escape	£2.99
Zybex	£2.99

SOFTWARE CITY SPECIALS

A.P.B.	£6.99	£3.99
Afterburner	£6.99	£2.99
Chain Reaction	£1.99	£0.50
Cholo	£6.99	£0.99
Deactivators	£1.99	£0.50
Deep Strike	£6.99	£1.99
Fighting Soccer	£6.99	£2.99
Gary Linekar's Hotshots	£6.99	£2.99
Heartland (Disc Only)	£6.99	£2.99
Hive	£1.99	£0.50
Kinetik	£1.99	£0.50
Mega Apocalypse	£2.99	£1.99
Mike Reid's Pop Quiz	£6.99	£2.99
Myth	£8.99	£4.99
Pacmania	£6.99	£2.99
Passing Shot	£6.99	£2.99
Question Of Sport	£6.99	£3.99
Question Of Sport Disc	£9.99	£4.99
Rasputin	£1.99	£0.50
Shackled	£6.99	£2.99
Shadowfire (Disc Only)	£6.99	£2.99
Slaine	£2.99	£1.99
Starstrike 1 & 2	£2.99	£1.99
Superwonderboy	£6.99	£3.99
Tusker	£6.99	£2.99
Xenophobe	£6.99	£2.99
A.M.C.	£6.99	£9.99
Adidas Championship Football	£8.99	£9.99
Batman The Movie	£6.99	£9.99
Beach Volley	£6.99	£9.99
Beverley Hills Cop	£6.99	£9.99
Black Tiger	£6.99	£9.99
Bloodwych	£6.99	£9.99
Bomber	£9.99	£13.99
Cabal	£6.99	£9.99
Carrier Command	£9.99	£11.99
Championship Golf	£6.99	N/A
Chase H.Q.	£6.99	£9.99
Continental Circus	£6.99	£9.99
Crackdown	£7.50	£9.99
Crazy Cars 2	£6.99	N/A
Cricket Master	£6.99	N/A
Cyberball	£6.99	£8.99
Cycles	£6.99	£11.99
Dan Dare 3	£6.99	£9.99
The Duel (Test Drive 2)	£6.99	£9.99
E-Motion	£7.50	£9.99
Emlyn Hughes	£6.99	£9.99
Escape-Planet Robot Monsters	£6.99	£9.99
Fiendish Freddy	£6.99	£9.99
Footballer Of The Year 2	£6.99	£9.99
Football Director	£6.99	N/A
Football Director 2 (128k)	N/A	£13.99
Football Manager World Cup Ed	£6.99	£9.99
Football Manager 2 + Expansion	£6.99	£9.99
Ghouls And Ghosts	96.99	£9.99
Gunship	£9.99	£13.99
Hammerfist	£6.99	£9.99
Hard Drivin'	£6.99	£9.99
Heavy Metal	£6.99	£9.99
Impossamole	£6.99	£9.99
Indiana Jones Last Crusade	£6.99	£9.99
International 3-D Tennis	£6.99	£9.99
Italy 1990	£8.99	£11.99
Kenny Dalglish Manager	£6.99	£9.99
Kenny Daglish Soccer Match	£6.99	£9.99
Kick Off	£6.99	£9.99
Klax	£6.99	£9.99
Knight Force	£6.99	£8.99
Lazer Squad	£6.99	N/A
Manchester Unt	£6.99	£9.99
Microprose Soccer	£9.99	£13.99
New Zealand Story	£6.99	£9.99
Ninja Spirit	£6.99	£9.99
Ninja Warrior	£6.99	£9.99
Operation Thunderbolt	£6.99	£9.99
P-47	£6.99	£9.99
Paul Gasgoine Super Soccer	£6.99	N/A
Pipemania	£6.99	£9.99
Pro Tennis Tournament	£6.99	£11.99
Rainbow Island	£6.99	£9.99
Rick Dangerous	£6.99	£9.99
Robocop	£6.99	£9.99
Scrambled Spirits	£6.99	£9.99
Shadow Warriors	£6.99	£9.99
Shinobi	£6.99	£9.99
Starglider 2	£9.99	£13.99
Strider	£6.99	£9.99
Stunt Car	£6.99	£9.99
Super Wonder Boy	£6.99	£9.99
Tolkein Trilogy	£8.99	£11.99
Toobin	£6.99	£9.99
Tracksuit Manager	£6.99	N/A
Treble Champions	£6.99	N/A
Turbo Outrun	£6.99	£9.99
The Untouchables	£6.99	£9.99
Vendetta	£6.99	£9.99
Vulcan	£6.99	N/A
World Boxing Manager	£6.99	N/A
World Cup Soccer Italia '90	£6.99	£9.99

COMPILATIONS

WORLD CUP COMPILATION
Kick Off, Gary Linekers Hotshots & Tracksuit Maanager
CASS: £8.99

COMPLETE GAMES CENTRE
Brian Cloygh's Football Fortunes, Wizard's Lair, Hi Q Quiz, Ice Temple, Steve Davis Snooker, Wolfpack, Syntax, Castle Blackstar, Pool & Pinball
CASS: £8.99

QUATTRO SPORTS
Pro Snooker, Grand Prix Sim, Pro Ski and BMX Sim
CASS : £2.99

THE BIZ
R-Type, Operation Wolf, Double Dragon Batman The Caped Crusader
CASS: £9.99

MEGA MIX
Operation Wolf, Barbarian 2, Dragon Ninja & Real Ghostbusters
£9.99

WINNERS
Indiana Jones Temple Of Doom, Blasteroids, Led Storm, Thunderblade, Imp Mission 2
CASS: £9.99 DISC: £13.99

100% DYNAMITE
Afterburner, Last Ninja 2, Wec Le Mans Double Dragon
CASS: £9.99

TAITO COIN OPS
Rastan, Flying Shark, Arkanoid 1 And 2, Slapfight Bubble Bobble, Renegade and Legend Of Kage
CASS: £8.99

WE ARE THE CHAMPIONS
Supersprint, Renegade, Rampage, I K + & Barbarian
CASS: £6.99 DISC: £11.99

IN CROWD
Karnov, Gryzor, Barbarian, Crazy Cars, Predator, Combat School, Platoon and Target Renegade
CASS: £9.99

CHALLENGE SOCCER SPECTACULAR
Football Manager, World Championships and Peter Shilton's Handball Maradona
CASS: £8.99 DISC: £11.99

SUPREME CHALLENGE
Elite, Starglider, ACF 2, Sentinel and Tetris
CASS: £5.50

GAME SET AND MATCH 2
Match Day 2, Sueperbowl, Winter Olympiad, Nick Faldo, Championship Sprint, Track and Field, Steve Davis Snooker & Super Hang On
CASS: £8.99 DISC: £11.99

WE ARE THE CHAMPIONS
Supersprint, Renegade, Rampage, I K+ & Barbarian
CASS: £6.99 DISC £11.99

SOCCER SQUAD
Footballer Of The Year, Gary Linekars Superstar Soccer, Gary Linekars Superskills and Roy Of The Rovers
CASS: £6.99 DISC: £9.99

THE STORY SO FAR VOL 2
Overlander, Hopping Mad, Space Harrier, Beyond The Ice Palace & Live And Let Die
CASS: £8.99 DISC: £9.99

THE STORY SO FAR VOL4
Ghostbusters, Aliens, Wonderboy, Eidolon, Back To The Future & Quartet
CASS: £8.99 DISC: £9.99

COIN OP KITS
Outrun, Road Blasters, Spy Hunter, Thunderblade & Bionic Commando
CASS: £9.99 DISC: £13.99

GIANTS
Rolling Thunder, Guantlet 2, 720, Outrun California Games
CASS: £9.99 DISC: £13.99

THEY SOLD A MILLION
Sabre Wolf, Daley Thompson, Jet Set Willy & Beach Head
CASS £4.99

BEST OF ELITE VOL 1
Bombjack, Frank Bruno, Commando & Airwolf
CASS: £4.99

SUMMERTIME SPECIAL
Solomons Key, Bravestarr, Captain America, Trantor, World Class Leaderboard & Rygar
CASS: £5.50

THRILLTIME GOLD 1
Paperboy, Ghosts and Goblins, Bombjack, Batty & Turbo Espritt
CASS: £6.99

THRILLTIME GOLD 2
Airwolf, Scooby Doo, Battleships, Saboteur & Frank Bruno
CASS: £6.99

THRILLTIME GOLD 3
Commando, 1942, Spitfire, Combat Lynx, Deep Strike
CASS: £6.99

THRILLTIME PLAT 1
Buggy Boy, Space Harrier, Live And Let Die, Overlander, Dragon's Lair, Thundercats, Beyond The Ice Palace, Great Gurianos, Hopping Mad & Ikari Warriors
CASS: £8.99 DISC: £13.99

MULTIFACE II
Amstrad 464 664 and 128K
£47.95

ORDER FORM AND INFORMATION

All orders sent **FIRST CLASS** subject to availability.Just fill in the coupon and send it to: Software City, dept. A.C.U. Lichfield Passage, Wolverhampton, WV1 1DZ

ORDER FORM (Block Capitals)

NAME: _____

ADDRESS: _____

POSTCODE: _____ TEL: _____

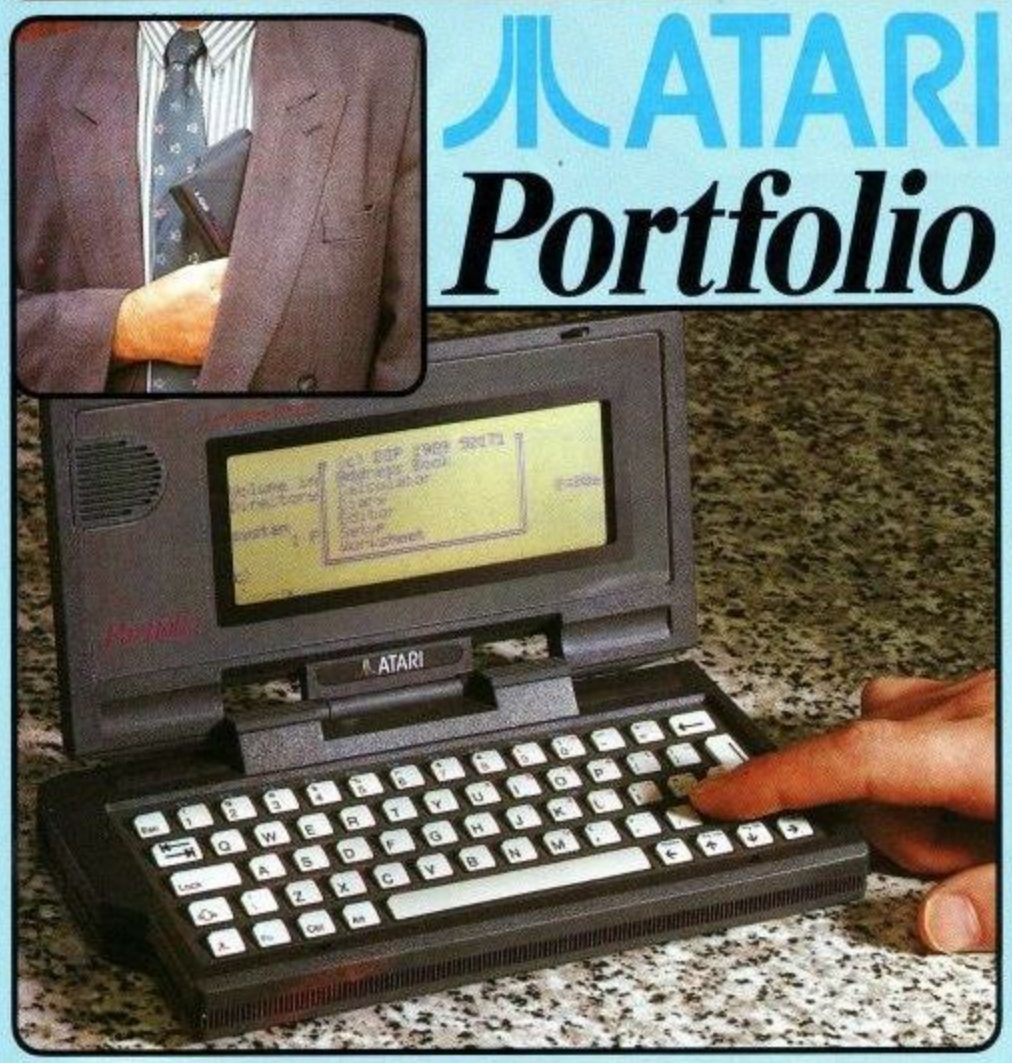
Name of Game	Computer	Value
	Postage	
	TOTAL	

POSTAGE RATES: Please add 50p for post & packaging on all orders under £5. Overseas add £1.50 per item.
PAYING BY CHEQUE: Cheques payable to **Software City**

Card Type _____
Expiry date _____
Signature _____
Date _____
European Orders Mastercard

★ POCKET SIZED ★ PC-COMPATIBLE ★ PERSONAL ORGANISER ★

ATARI Portfolio



THE PC IN YOUR POCKET

The new Portfolio from Atari is the world's first pocket-sized electronic organiser that is also a powerful PC compatible computer, with a full QWERTY keyboard and scrolling 80×25 character display.

Portfolio includes everything you would expect from an electronic organiser - an address and telephone book, time manager, diary and sophisticated calculator.

Portfolio also includes several functions that you would not expect - a spreadsheet for your personal budget and expense records, as well as a text processor for typing memos and letters.

And, because Atari's Portfolio is PC compatible, it can communicate with your desktop PC at home, or in the office. You can transfer files from one to the other, to enable you to update your reports and figures with the Portfolio while you are on the move.

FOR ONLY **£249** INC VAT

SPECIFICATION

- ★ ***Processor:*** Intel 80C88 at 4.9152Mhz.
- ★ ***Operating System:*** Compatible with MS-DOS 2.11.
- ★ ***Internal ROM:*** 256K containing BIOS, operating system and applications suite.
- ★ ***RAM:*** 128K with an internal RAM disk, configurable from 8K. Externally expandable to 640K RAM.
- ★ ***Keyboard:*** 63 keys, QWERTY, IBM PC BIOS compatible. Buried numeric pad and function keys. Optional key click.
- ★ ***Character Set:*** Extended IBM ASCII (255 characters).
- ★ ***Mass storage:*** credit card sized memory cards (32K or 64K or 128K RAM).
- ★ ***Display:*** Graphics LCD, supertwist technology, MDA compatible, 40 columns x 8 lines, 240 x 64 pixels (with the option to window a full 80 x 25 character display). Keyboard controlled contrast.
- ★ ***Peripherals:*** 60 pin expansion BUS to take serial and parallel ports and memory expansion units.
- ★ ***Size:*** 8" x 4" x 1" (200mm x 105mm x 29mm).
- ★ ***Weight:*** 495 grammes (with batteries).
- ★ ***Applications:*** calendar and diary, address and phone book, Lotus 1-2-3 compatible spreadsheet, text processor, communications software.

COMING SOON!

In addition to the excellent software built-in to the Portfolio Free of Charge (see right), other software and peripheral products, such as the sophisticated Pocket Finance package and serial/centronics interfaces are available. And it doesn't stop there. Many manufacturers have recognised the potential of the Portfolio and have already started to design new peripherals and software. Products currently under development include: Serial interface with built in mini modem, Apple Macintosh interface, business, utility and programming software plus a range of adventure and battle strategy games. For further free details on the Portfolio range, fill in the coupon below and return it to Silica Systems now.

5 BUILT-IN APPLICATIONS TO GET YOU ORGANISED!

To get you started, Portfolio comes with a suite of five useful functions built-in, all accessible from a simple menu display.

TIME MANAGER

More than just an electronic diary, the Portfolio Time Manager enables you to plan your appointments via a comprehensive calendar and diary. It can even be programmed to sound an audible alarm at specific times to remind you of important appointments.

CALCULATOR

Your Portfolio will be invaluable in the office or at home as a powerful pocket calculator. It has a full range of functions, including factorial, power and root calculations, all with multi display formats and memories.

ADDRESS BOOK & DIALLER

Portfolio has a complete address book facility that allows you to store hundreds of addresses and phone numbers. And, at the touch of a button, you can retrieve any one of them, or search for a specific grouping, such as "all Italian restaurants". And, when you are ready to book your table, hold your Portfolio to your telephone mouthpiece and use its special built-in tone dialler to dial the number for you.

TEXT PROCESSOR

The Portfolio's built-in text processor program includes word wrap, line and column count, string search, in fact most of the functions you would find in a word processor. It handles printer and word processor control codes and allows easy transfer of files between Portfolio and your desktop PC.

SPREADSHEET

For real calculating power, Portfolio has a Lotus 1-2-3 compatible spreadsheet built-in. It has 127 columns x 225 rows and reads/writes Lotus V1.0 and V2.01 files, so you can transfer data to and from Lotus 1-2-3 on your desktop PC. The Portfolio's 256K ROM includes MS-DOS and PC BIOS compatible systems software.



MEMORY CARDS

Portfolio can store and retrieve data and programs from its own RAM, or from small credit card size memory cards, that slot into its built-in card drive. The cards are available in three sizes, 32K, 64K and 128K, so you can carry a library of data in your pocket. The card drive also accepts ROM cards, which can contain commercial or custom software.



POWER SUPPLY

Portfolio is powered by three AA batteries which will run for up to six weeks with normal use, or from the mains using an adaptor. All the peripherals take their power from the Portfolio, so no extra batteries or adaptors are required. A 'battery-low' warning and memory back-up ensure that information is not lost when the batteries are changed.



INTERFACES & PERIPHERALS

Portfolio can communicate with other computers and supports a growing range of peripherals via a built-in 60 pin bus connector. Peripherals available include serial and parallel interfaces and memory expanders (to 640K). You can also add a card drive to your desktop PC, to enable it to read/write to Portfolio's cards.

SILICA SYSTEMS OFFER YOU

FREE OVERNIGHT COURIER DELIVERY: On all hardware orders shipped in the UK.
TECHNICAL SUPPORT HELPLINE: Team of Atari technical experts at your service.
PRICE MATCH: We normally match competitors on a "Same product - Same price" basis.
ESTABLISHED 12 YEARS: Proven track record in professional computer sales.
£13m TURNOVER (with 60 staff): Solid and reliable with maintained growth.
BUSINESS/EDUCATION/GOVERNMENT: Volume discounts available for large orders.
SHOWROOMS: Demonstration and training facilities at our London & Sidcup branches.
THE FULL STOCK RANGE: All of your Atari PC requirements from one supplier.
FREE CATALOGUES: Will be mailed to you with offers and software/peripheral details.
PAYMENT: By cash, cheque and all major credit cards.
CREDIT PAYMENT TERMS: Silica are licensed credit brokers - details on request.

Before you decide when to buy your new Atari Portfolio, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Portfolio, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new Portfolio products? At Silica Systems, we ensure that you will have nothing to worry about. Silica Systems is a new division of Silica Shop, the UK's leading Atari specialists. This new division has been established to provide a service to the more serious home user, as well as to business and education purchasers. Silica have been established for over 12 years, and have an annual turnover of £13 million. With our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now, for our latest Free literature and begin to experience the "Silica Systems Service".

SILICA SYSTEMS

MAIL ORDER:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-309 1111**
Order Lines Open: Mon-Sat 9.00am-6.00pm	No Late Night Opening		Fax No: 081-308 0608
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA		**Tel: 071-580 4000**
Opening Hours: Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm		Fax No: 071-323 4737
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-302 8811**
Opening Hours: Mon-Sat 9.00am-5.30pm	Late Night: Friday until 7pm		Fax No: 081-309 0017
BUSINESS/EDUCATION:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-308 0888**
Order Lines Open: Mon-Fri 9.00am-6.00pm	Closed on Saturdays		Fax No: 081-308 0608

To: Silica Systems, Dept AMSCU 0890-29, 1-4 The Mews, Hatherley Rd., Sidcup, Kent, DA14 4DX

PLEASE SEND INFORMATION ON PORTFOLIO

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

.....

..... Postcode: .....

Tel (Home): ..... Tel (Work): .....

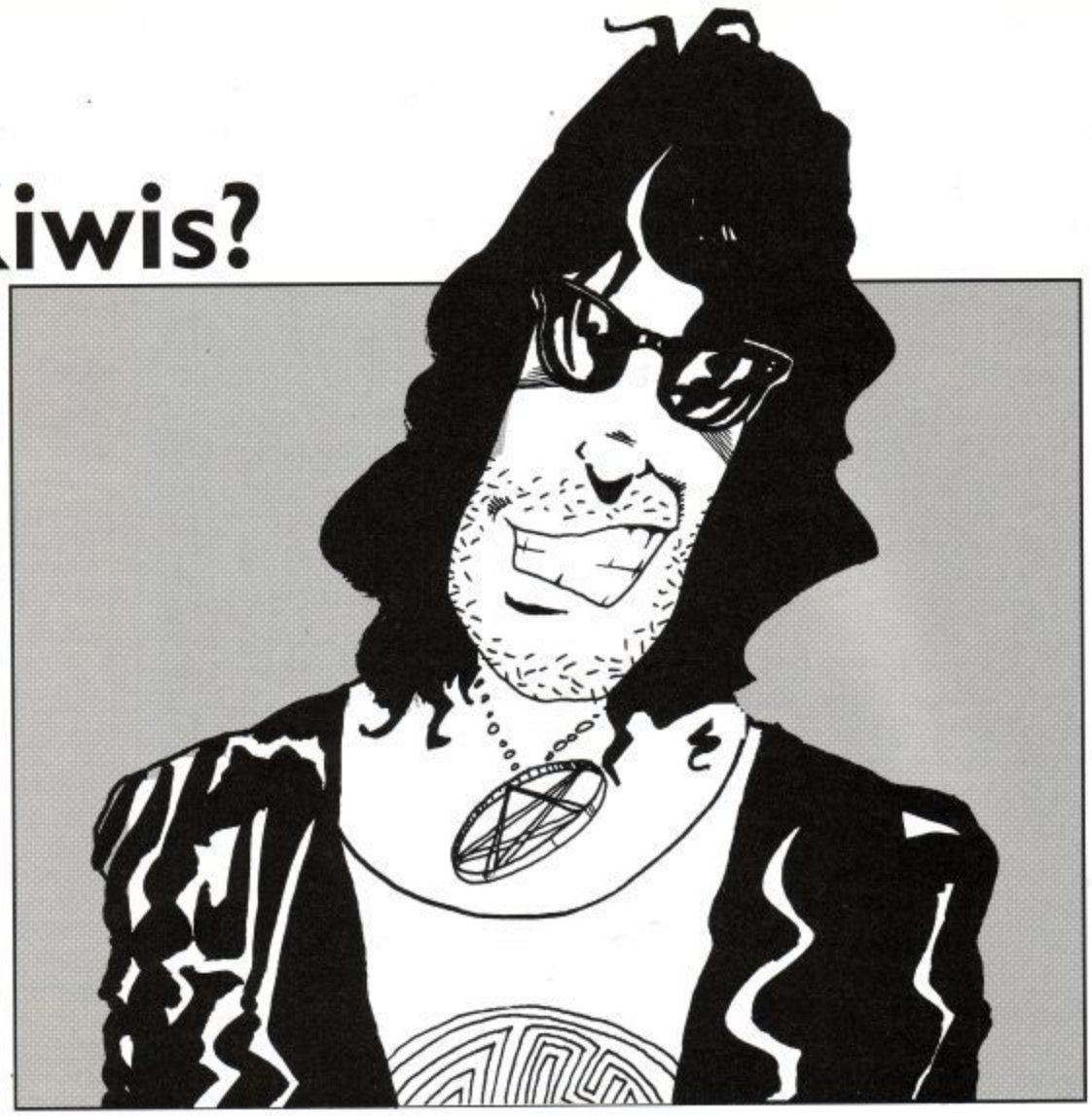
Company Name: .....

Which computer(s), if any, do you own? .....

E&OE - Advertised prices and specifications may change - please return the coupon for the latest information.

Altered Kiwis?

Vax pokes his nose into New Zealand Story and Altered Beast just for start-ers.



Welcome to the environmentally sound edition of the Hairy Hacker's Haunt. An edition so green, even the jokes have been recycled. Even our good ol' John "Hackman" Girvin has come up with a wee pokeroony for that endangered species featured last month: The Kiwi. Actually, he's got a couple of pokes, but the second one isn't so ecologically minded.

The first one, and he wrote it last year, is for The New Zealand Story by Ocean. You can give your kiwi infinite lives, invulnerability, infinite air, and infinite time. Just about what the remaining kiwis really need, that lot. Anyhow, it's all summed up in this little listing, which you type in, save, run and feed one of those cruncy non-biodegradable plastic cases with the thin, brown spaghetti filling.

```
1 'THE NEW ZEALAND STORY hacks (tape)
2 'By John Girvin
3 'December 1989
4 '
10 MODE 1:OPENOUT"d"
20 MEMORY &69CA:CLOSEOUT
30 LOAD"!nzstory",&69CB
40 addr=&BE80:RESTORE
50 READ byte$
60 IF byte$="KIWI" THEN CALL &BE80
70 POKE addr,VAL("&"+byte$)
80 addr=addr+1:GOTO 50
90 '*** LEAVE 100-180 IN ***
100 DATA 21,cb,69,11,cb,99,01,17
110 DATA 0f,ed,b0,3e,c3,21,99,be
120 DATA 32,16,bd,22,17,bd,c3,cb
130 DATA 99,cd,37,bd,21,00,00,22
140 DATA 4b,a6,21,b1,be,22,4e,a6
150 DATA c3,08,a6,a4,48,4c,46,0c
160 DATA 89,dd,21,b8,a8,11,ab,00
170 DATA cd,47,a8,21,c4,be,22,61
180 DATA a9,c3,ef,a8
190 'Infinite lives
200 DATA 21,00,00,22,3b,7e,22,3c
210 DATA 7e
220 'Invulnerability
230 DATA 3e,c9,21,00,00,32,2d,7b
240 DATA 22,da,7b,22,db,7e
250 'Infinite air
260 DATA 21,00,00,22,da,7e,22,db
270 DATA 7e
280 'Infinite time
290 DATA 3e,3e,21,4a,b7,32,85,5a
300 DATA 22,86,5a
310 '*** LEAVE 320 IN ***
320 DATA c3,00,9c,KIWI
```

Anyhow, back to John, 'cos he's got another poke in here. Somehow, I feel I ought to like Altered Beast, but as John points out, Activision's wonderful conversion job is even more unplayable on a green screen. A small point but some of us cheapskates still use them.

Still, when you've got John's Beast Booster inside you, this is no longer a problem. Sure, the lives counter goes down sometimes – and then it goes back up again. Don't worry, it's sort of alright really.

```
1 'ALTERED BEAST hacks
2 'By John Girvin
3 'January 1990
4 '
10 OPENOUT"d":MEMORY &68AC
20 CLOSEOUT:MODE 0
30 LOAD"!abeast",&68AD
40 addr=&BE80:RESTORE
50 READ byte$
60 IF byte$="BEASTIE" THEN CALL &BE80
70 POKE addr,VAL("&"+byte$)
80 addr=addr+1:GOTO 50
90 '*** LEAVE ALL LINES IN ***
100 DATA f3,21,ad,68,11,ad,98,01
110 DATA 35,0f,ed,b0,21,a0,be,3e
120 DATA c3,32,16,bd,22,17,bd,c3
130 DATA ad,98,a4,48,4c,46,01,90
140 DATA cd,37,bd,21,00,00,22,4b
150 DATA a4,21,b2,be,22,4e,a4,c3
160 DATA 08,a4,dd,21,b8,a6,11,ab
170 DATA 00,cd,47,a6,21,00,02,22
180 DATA 61,a7,21,d0,be,11,00,02
190 DATA 01,30,00,ed,b0,c3,ef,a6
200 DATA 21,09,02,22,c2,20,c3,50
210 DATA 23,21,22,02,11,00,00,01
220 DATA 0e,00,ed,b0,3e,c3,21,00
230 DATA 00,32,ca,0b,22,cb,0b,c3
240 DATA 1c,5f,3e,04,32,6d,00,32
250 DATA 92,00,3a,e3,02,c3,cd,0b
260 DATA BEASTIE
```

You type in the listing, save it if you don't fancy typing it in again, run it, bung the rewound Beast tape where it should go, and RUN. That should sort you out.

Oh, don't worry about the screen loading in upside-down, that's just Mr. Girvin getting bored with Ocean & Co.'s silly loader.

Now we'll move on to that recycled pokette I mentioned earlier. Andrew Wright of Wokingham is the recycler, and he's recycled "Mighty" Joe Garner's Sorcery poke from the January '90 column. He's modified it so that not only do you get unlimited lives, but also the ability to walk on water. I heard a story about a feller who did that once...

Anyhow, this is the modified line. Use this, and delete lines 24 and 25 from the original:

23 DATA 0b, 32, 59, 0b, c3,40,00,end

By the way, Martin points out that we seem to have missed out line 1000 somehow, and it should have been something like "CALL & 70". Might explain a few things...

For the benefit of you lucky so-and-so's who got a multiface before the ban, the infinite energy pokette is address &1000A with &18, and walk-on-water is &0FDD with &18.

Now we've a pokelet for the cassette version of Activator. it gives you infinite power, infinite lives, and as much time as you want. I'm afraid you still have to twist the joystick from side to side though:

```
1 REM ACTIVATOR TAPE
2 REM INFINITE POWER, LIVES & TIME
10 MODE 1:CLS:cs=0
20 LOAD"!CASRUN",&BED2
30 POKE &BEF2, &80: POKE &BEF3, &BE
40 FOR x=&BE80 TO &BE97: READ a$
50 a=VAL ("&"+a$): cs=cs+a
60 POKE x,a: NEXT
70 IF cs<> & 903 THEN PRINT "ERROR": END
80 CALL &BED2
100 DATA 21, a3, 7b, 36, 00, 23, 36, 00
110 DATA 3e, a7, 32, 9b, 78, 32, ac, 78
120 DATA 3e, c9, 32, 99, 7b, c3, 30, 75
139 DATA *
```

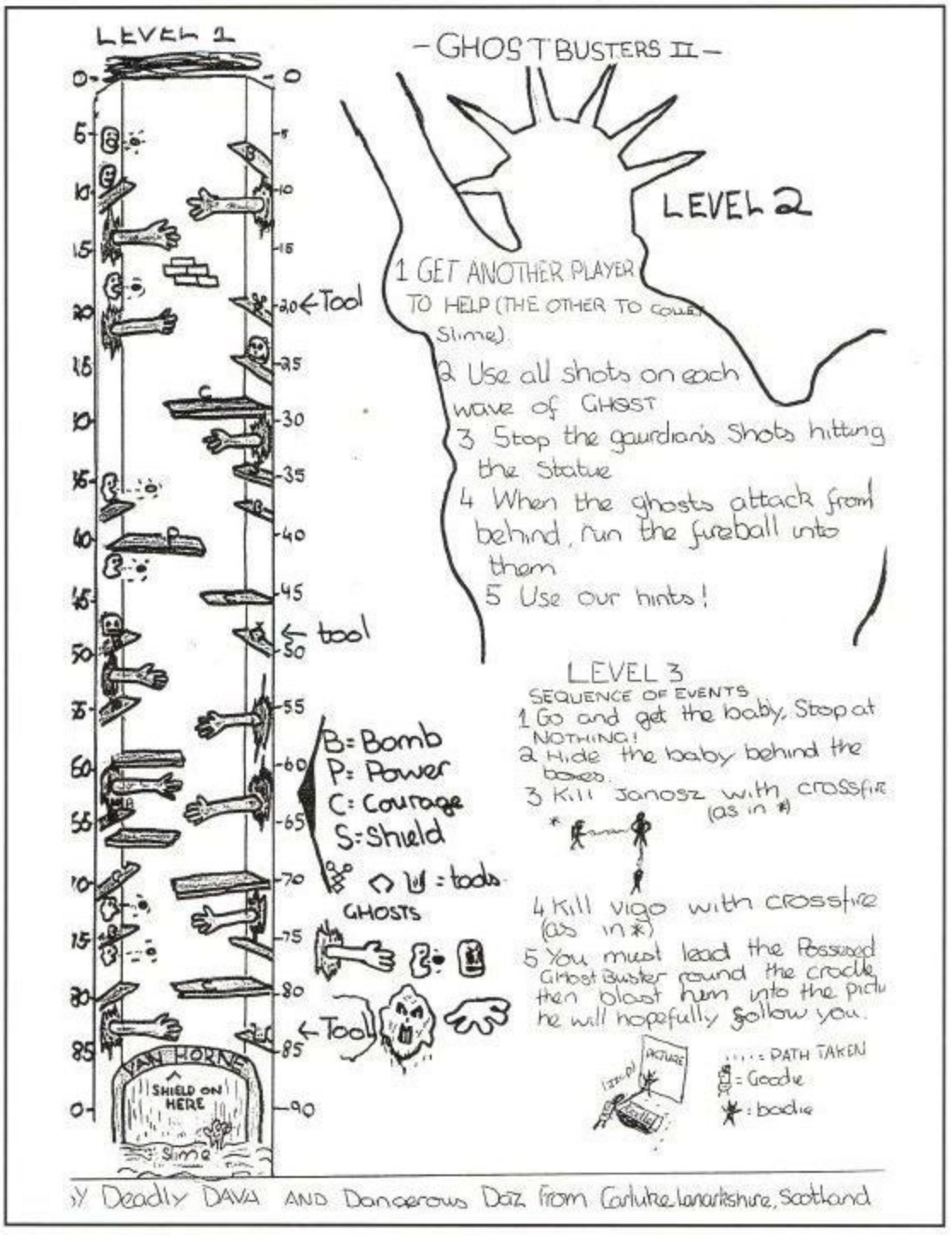
We've done Sabre Wulf before, but new folks are still buying it, so we'll run Andrew's version up the flag pole. This bundle of code gives infinite lives, but owners of 464s without disc drives will have to miss out the bit saying ":TAPE:" in line 10, 'cos it won't work unless you do. Everybody else type in code, rewind tape and run routine, ah so:

```
1 REM SABRE WULF TAPE – RICOCHET LABEL
2 REM INFINITE LIVES
10 : TAPE:cs=0 : MODE 1
20 OPENOUT "d": MEMORY &FFF: CLOSEOUT:LOAD"!"
30 FOR x=&BE80 TO &BEBF: READ a$
40 a=VAL ("&"+a$): POKE x,a: cs=cs + a: NEXT
50 IF cs < > & 19CC THEN PRINT "ERROR": END
60 CALL &BE80
100 DATA 21, 51, 10, 11, 35, bf, 01, ca
110 DATA 00, ed, b0, 31, 34, bf, 21, 35
120 DATA bf, 22, 78, bc, 21, 4e, bf, 22
130 DATA 84, bc, 3e, c3, 32, 77, bc, 32
140 DATA 83, bc, cd, 35, bf, 21, 00, 12
150 DATA cd, 4e, bf, 21, b9, be, 11, 43
160 DATA 12, af, 32, 60, dd, c3, 00, c0
```

Now you've finished sabreing your wulf, here's a spindizzy disc pokette from Andrew too. Not only do you get infinite time, but it's got an environmentally friendly, power-saving, anti spin-dizzy disc-busy pokeykins in it to stop the disc motor whirring round while you're playing the game. Every little bit helps I guess. 464 Owners without a disc drive needn't bother to type this in, as you won't be able to run the disc anyway:

Also this month, we've a notable map (and a few not-so-notable ones too). This comes from Darren Duthart and his friend, Daz, from Carluke (that's hidden away in Scotland somewhere). They didn't believe Andrew Banner's review of Ghostbusters II, and completed the whole thing after three days. Play it with their map and hints, and see what you think.

```
1 REM SPINDIZZY DISC
2 REM INFINITE TIME AND DISC MOTOR HALT
10 cs=0: FOR x=&BE80 TO &BEDC: READ a$
20 a=VAL ("&" +a$): POKE x,a: cs=cs+a
30 NEXT
40 IF cs < > & 2576 THEN PRINT "ERROR IN DATA": END
50 PRINT "INSERT SPINDIZZY DISC AND PRESS A KEYA"
60 CALL &BB18
70 CALL &BE80
100 DATA dd, 21, db, be, 21, da, be, cd, d4, bc
110 DATA dd, 75, 00, dd, 74, 01, dd, 71, 02, dd
120 DATA 2a, 40, be, dd, 6e, 0a, dd, 66, 0b, 22
130 DATA d8, be, dd, 2a, d8, be, dd, 36, 0f, 63
140 DATA dd, 36, 10, 01, dd, 36, 14, 05, dd, 36
150 DATA 15, 08, 06, 0b, 16, 10, 1e, 00, 0e, 63
160 DATA 21, 40, 00, df, db, be, 2e, 00,7c,c6
170 DATA 10, 67, 14, 10, f4, 3e, c9, 32, 31, a8
180 DATA 01, 00, fa, ed, 49, c3, 00, ab, 00, 00
190 DATA 84, 00, 00
```



Still, that's it for this month folks, so in an attempt to save the earth's resources, we'll stop the column here.

Luv 'n' Stuff,
Vax, Suz, Kate & Tammy

QUESTION OF SPORT DISC ONLY £4.99

TURBOSOFT

LASER SQUAD CASS £4.99 DISC £8.99

SPECIALS CASSETTE

	RRP	SRP
Afterburner	9.95	3.99
Bards Tale I		2.99
Big Sleaze	9.99	1.99
Blasteroids	9.99	3.99
Bob's Full House	9.99	4.99
Brian Cloughs Football Fortunes	14.95	4.99
Bubble Ghost	9.95	2.99
Cholo	14.99	4.99
Elite	14.95	4.99
Fighter Pilot	9.99	3.99
Fernandez Must Die	9.95	3.99
Football Manager	9.95	3.99
F-15 Strike Eagle	9.95	5.99
Galaxy Force	9.99	1.99
Get Dexter	9.99	1.99
Hunt for Red October	14.95	6.99
Murder on the ASTlantic	9.99	1.99
Mystery on the Nile	9.99	1.99
Nebulus	9.99	3.99
Sorceror Lord	12.95	2.99
Stiffip + Co	9.95	1.99
Pacific	9.99	2.99
Pacland	9.95	4.99
Pacmania	9.95	4.99
Passing Shot	9.95	3.99
Rock N Roll	9.95	2.99
Running Man	9.95	3.99
R-Type	9.99	3.99
Silent Service	9.95	5.99
Super Scramble Simulator	9.95	3.99
Tai Pan	9.99	3.99
Time and Magik	9.95	4.99
Trivial Pursuits	9.95	5.99
Trivial Pursuits New Beginning	9.99	4.99
Warlock	9.99	1.99

Game Set & Match 2
Only £7.99 Disc £12.50
Matchday II, Ian Bothams Test Match, Basket Master, Super Hang On, Track 'n' Field, Superbowl, Winter Olympiad, Steve Davis Snooker, Nick Faldo's

6 Pack Vol 3
Disc £9.99
Ghost Gobblins
Papwrboy
Enduro Racer
Dragons Lair
Living Daylights
Escape From Singes Castle

IN CROWD
ONLY £10.99,
Barbarian, Gryzor, Crazy Cars, Predator, Karnov, Combat School, Target Renegade, Platoon

TATIO COIN OP
ONLY £8.99
Rastan, Flying Shark, Bubble Bobble, Arkanoid, Slapfight, Arkanoid II, Renegade, Legend of Kage

SUPREME CHALLENGE
ONLY £4.99
DISC £10.99
Elite, Ace, Sentinel, Starglider, Tetris

SOCCER SPECTACULAR
Only £4.99 Disc £10.99
Football Manager, Peter Beardsley's Soccer, World Champions, Handball Maradonna, Soccer Supremo

MEGA MIX
CASS ONLY £9.99
Barbarian II, Dragon Ninja, Operation Wolf, The Real Ghostbusters

FLIGHT ACE
CASS ONLY £5.99
A.T.C., ACE, A.T.F., Spitfire 40, Tomahawk, Strike Force Harrier

30 RED HOT HITS
ONLY £6.99
Ghostbusters, F.A. Cup,Agent X2, Kane, LA Swat,Ninja Master,Rasputin Ollie and Lissa,Ricochet,Zolyx, Way of Exp Fist, Dan Dare,Formula 1 Simulator, Brian Jack's Superstar Challenge, Tau Ceti, Park Patrol,Thrust, Harvey Headbanger, War Cars, Tarzan, Ninja Hamster, Enlightenment, Druid II, The Boggit, Mystery of the Nile, Mega Apocalypse, Endurance, Activatol,Catch 23, Dark Sceptre

AMSTRAD TOP 30 HITS

	CASS	DISC
Batman the Movie	6.99	10.99
Bloodwych	6.99	10.99
Castle Master	6.99	10.99
Chase HQ	6.99	10.99
Cyberball	5.99	9.99
Dr Dooms Revenge	5.99	9.99
Fiendish Freddys Big Top Fun	6.99	10.99
Ghostbusters II	7.99	10.99
Hard Drivin	6.99	10.99
Italy 1990	8.99	11.99
Kick Off	6.99	10.99
Klax	5.99	9.99
Man United	5.99	9.99
New Zealand Story	6.99	10.99
Ninja Warriors	6.99	10.99
Puffys Saga	6.99	10.99
Pipemania	5.99	9.99

AMSTRAD CLASSICS

Altered Beast	4.99	7.99
Airborne Ranger	10.99	13.99
Cabal	6.99	10.99
Carrier Command (Disc 6128)	N/A	11.99
Chuck Yeagers (AFT)	6.99	10.99
Colossus Bridge	8.99	11.99
Colossus Chess 4	7.99	11.99
Continental Circus	4.99	10.99
Cricket Master	6.99	10.99
Deluxe Scrabble	N/A	11.99
Dragon Ninja	6.99	10.99
Dynamite Dux	4.99	7.99
Emlyn Hughes Int Soccer	6.99	10.99
Football Director	6.99	N/A
Football Director II	N/A	13.99
Forgotten Worlds	6.99	10.99
Games Summer Edition	7.99	14.99
Gunship	10.99	13.99
Heroes of the Lance	7.99	14.99
Indy Jones + Last Crusade	6.99	10.99
Jack Nicklaus Golf	6.99	12.99
Microprose Soccer	10.99	12.99
Myth	4.99	7.99
Operation Wolf	6.99	10.99
Pictionary	9.99	10.99
Red Heat	6.99	10.99
Renegade 3	6.99	10.99
Shinobi	4.99	10.99
Strider	6.99	10.99
Tank Attack	9.99	12.99
The National	6.99	N/A
Treble Champions	6.99	10.99
Tracksuit Manager	5.99	N/A
Tusker	4.99	7.99
War in Middle Earth	6.99	10.99

UTILITIES

	CASS	DISC
Mini Office II	10.99	14.99
Protext	14.99	19.99
Hisoft Pascal 80	N/A	37.99
Hisoft C	37.99	37.999
Hisoft Devpac 80	N/A	37.99
Hisoft Knife Plus	N/A	14.99
Hisoft Forth	N/A	14.99
Tascopy	10.99	10.99
Tasword 464/6128	18.99	22.99
Prospell	N/A	18.99
Masterfile 3	N/A	29.99
Tas-Spell	N/A	14.99

	CASS	DISC
Operation Thunderbolt	6.99	10.99
Paul Gascoigne Soccer	5.99	9.99
Power Drift	4.99	7.99
P-47 Thunderbolt	6.99	10.99
Rainbow Islands	6.99	10.99
Robocop	6.99	10.99
Super Wonderboy	4.99	7.99
Test Drive II	6.99	12.99
The Cycles	6.99	10.99
Turbo Outrun	6.99	10.99
Vendetta	6.99	10.99
X-Out	6.99	10.99
World Championship Boxing	6.99	10.99

FORTHCOMING ATTRACTIONS

Adidas Golden Shoe	6.99	10.99
After the War	6.99	10.99
Beach Volley	6.99	10.99
Bomber	9.99	12.99
Dark Century	5.99	9.99
Defenders Of Earth	6.99	10.99
Double Dragon II	6.99	10.99
Driving Force	6.99	10.99
Dynasty Wars	6.99	10.99
European Super League	6.99	10.99
F-16 Combat Pilot	10.99	13.99
Golden Axe	6.99	10.99
Hammerfist	6.99	10.99
Hot Rod	6.99	10.99
Iron Lord	6.99	10.99
Klax	6.99	10.99
Knight Force	5.99	6.99
Laser Squad Exp Kit	3.99	6.99
Ninja Spirit	6.99	10.99
Onslaught	6.99	10.99
Oriental Games	6.99	10.99
Player Manager	6.99	10.99
Quarter Back	6.99	10.99
Scape Ghost	10.99	13.99
Shadow Warrior	6.99	10.99
Sly Spy	6.99	10.99
Southern Belle/Evening Star	9.99	12.99
Storm Lord 2	6.99	10.99
Stunt Car Racer	10.99	13.99
The Champ	6.99	10.99
The Cyclers	6.99	10.99
Twin World	6.99	10.99
Zombi	6.99	10.99

Please note that the majority of the forthcoming attractions are not released at time of going to press. These will be despatched within 24 hours of release subject to availability

EDUCATIONAL

	CASS	DISC
Answer Back Junior	7.50	10.99
Better Maths 12-16	8.99	13.99
Better Spelling 9-14	8.99	13.99
Fun School II Under 6	6.99	9.50
Fun School II 6-8	6.99	9.50
Fun School II ++	6.99	9.50
French Mistress A+B	N/A	15.99
General Science	N/A	7.99
Magic Maths 4-8	8.99	13.99
Spelling	N/A	7.99
Three Bears	N/A	14.50
World Wise	7.99	10.99

LOOK! MEGA OFFER LOOK!

For every £10 spent you can choose a free game from the list below

CASSETTE ONLY

Mr Weems and the She Vampires, Mega Apocolypse, Dandy, High Frontier, Hijack, Sailing, Split Personalities, Fury, Prodigy, Vixen, Mandragore, Guadal Canal, Hive.

All AVAILABLE @ £1.99 EACH

DISC SPECIALS

	CASS	DISC
Afterburner	14.99	5.99
Ballbreaker I or II	14.99	3.99
Bards Tale I	14.99	6.99
Blasteroids	14.99	3.99
Beyond The Ice Palace	14.99	3.99
Colossus Mah Jong	14.99	6.99
Dark Sceptre	14.99	4.99
Druid II Enlightenment	14.99	4.99
Fair Means or Foul	14.99	5.99
Firezone	14.99	4.99
F/Ball Manager II + Exp Kit	14.99	8.99
Cyrus 2 Chess	14.99	6.99
Galactic Games	14.99	4.99
Galaxy Force	14.99	6.99
Gryzor	14.99	4.99
Hunt for Red October	19.99	8.99
Hopping Mad	14.99	5.99
Ikari Warriors	14.99	6.99
Knightmare	14.99	4.99
Mindfighter	17.99	4.99
Never Ending Story	14.99	4.99
Pegasus Bridge	14.99	6.99
Passing Shot	14.99	5.99
Led Storm	14.99	3.99
Pacland	14.99	6.99
Running Man	14.99	5.99
Sentinel	14.99	4.99
The Train	14.99	4.99
Time and Magik	14.99	9.99
Thundercats	14.99	4.99
Vindicators	14.95	5.99
Pacmania	14.99	6.99

10 MEGA GAMES
Cass Only 4.99
Hercules, Tour de Force, North Star, Triaxos, Masters Of The Universe, Blood Brothers, Mask II, Blood Valley, Cybernoid, Deflektor

MAGNIFICENT 7
Only £6.50 Disc £13.95
Head Over Heals, Cobra & Arkanoid, Short Circuit & Wizball, Frankie Goes to Hollywood, Great Escape & Yie Ar Kung Fu

WORLD CUP 90 COMPILATION
£8.99 £11.99
Kick Off
Tracksuit Manager
Gary Linekars Soccer

THE BIZ
Cass Only £10.99
Batman Caped Crusader, R-Type, Operation Wolf, Double Dragon

COMPUTER HITS VOL 5
ONLY £4.99 DISC £10.99
Dark Sceptre, Tarzan, Catch 23, Mystery of the Nile, Endurance, Mega Apocalypse, Ninja Hampster, Activator, The Boggit, Druid II

DYNAMITE
CASS ONLY £9.99
Afterburner, Last Ninja II, WEC Le Mans, Double Dragon

TOLKIEN'S TRILOGY
Only 8.99 Disc £11.99
The Hobbit
Lord of the Rings
Shadows of Mordor

LEADERBOARD PAR 3
Only £9.99 Disc £13.99
Leaderboard, Leaderboard Tournament, World Class Leaderboard

WINNERS
ONLY £10.99
DISC £14.99
Thunderblade, Led Storm, Indy Jones and Temple of Doom, Blasteroids, Impossible Mission II

COIN OP HITS
ONLY £10.99
DISC £14.99
Outrun, Thunderblade, Road Blasters, Spy Hunter, Bionic Commando

41 SOUTH STREET, LEIGHTON BUZZARD, BEDS, LU7 8NT TEL: 0525 377974 FAX: 0525 852278

ORDER FORM Access MasterCard VISA

Please supply me with the following for

Computer .....

Titles	Price

DATE: .....
NAME: .....
ADDRESS: .....
.....
.....
.....Post Code.....
TEL: .....

AMSTRAD COMPUTER USER, APRIL '90

Please make cheques & PO payable to ***Turbosoft***

Orders under £5 please add 50p per item. Over £5 p&p ***FREE*** *in UK. Elsewhere please add £1.50 per item.*

N.B. Please state clearly mode of computer & also cassette or disc when ordering

Getting to Grips

The Doc is back with more queries, hints and tips for your favourite (and least favourite) applications

It's funny how the same applications seem to appear in this column month after month. To me, it can mean one of two things - either people are using them in their thousands, or the applications are so duff that they constantly need help with them.

I make no comment as to which category the subject of the first of this month's letters falls into - you must make up your own mind! The letter, by the way, comes from T.R. Wheeler, a correspondent from ye olde London town, who writes:

'I have just seen ACU after a lapse of about a year, and it certainly seems to have improved, so I'm going to subscribe again.

I was very interested in your comments on Mini Office II in Applications Advice, as I use it regularly on my 6128. Value for money, yes, but it does seem to have several bugs and some important omissions (my version is dated 1986).

1) Bar commands are referred to on page 6 of the manual, but they don't work from the Word Processor, Spreadsheet, or Database - I haven't tried the other programs. I've tried a number of times, and checked the syntax and also tried as many variations as I can think of, but every time I get "Invalid Command".

2) The Spreadsheet cannot take a number larger than 99,999. Changing the column width or the number of decimal places either via the menu or the 'Change Format' command does not help.

3) The Database will not take a number greater than 8,388,607 - presumably due to memory restrictions - but it's no good for such things as account numbers unless you treat them as text.

4) You cannot set control codes for printing when in the database, which means, for example, you cannot use condensed print except by setting the DIP switches on the printer (I use a DMP2000).

5) The Word Processor badly needs an automatic page end indicator related to the number of lines set in the Print Option, Examine Display Options menu.

6) Finally, a couple of tips. Control G to reformat a single paragraph is a bit temperamental - sometimes it just does not seem to want to work. Try either putting the cursor to the beginning of the paragraph rather than at the end, and THEN using the command, or pressing Control Z to show where spaces are and delete any from the end of lines and using Control G again. If this does not work, then Control J is the only answer.

Occasionally, you can type faster than the computer can display the input, and a blank space appears where a letter should be - just run the cursor over the letter, and hey presto!, it appears!'

There are some valid points in there, TR, which I recall seeing in that version. Unless memory serves me wrongly (not an unusual occurrence, I might add), there have been a couple of revisions since the version you have, which address some of the problems you raise.

However, it's worthwhile pointing out that MOII was never really intended for heavy serious use, and, in my mind, at least, is best suited to being a general introduction to what is possible with a 6128 and REAL applications software. Over the years, my view on the suite has changed considerably - I'm now much more mellow towards it, having seen the amount of bashing it takes. As you rightly point out, it IS very good value for the measly amount of money it costs. Even so, gross bugs should not be there!



An old friend writes....

Danny Munroe - EF to those who have read his missives before - has sent a couple of letters recently, praising our readers for their timely help:

'DR Graph wise things are becoming a little clearer, thanks to your column!' Not my fault - I blame our knowledgeable readers! Ta, guys and gals! 'I have been reading the comments made by other contributors and it has been most rewarding. Their findings have helped me very much.

Having reduced the amount of files on Disc B: (and on Disc A:) it is now possible to see the effect of having extra TPA to work with. The enclosed print-out shows the result of my trying to produce a multi-graph presentation: you can see that the machine was trying hard! I have also tried to print a line graph having four graphs on common axes, each graph having 60 points. The computer screen displayed the graph beautifully, but the program would not touch it and I ended up outside the program, with the error message from lack of TPA!

It does look as if the answer may be a larger 2nd disc drive capacity.'

A wee while later, a second missive from Danny arrived chez nous. Seems he popped out and got himself a big second drive, and Ramdos.

'As you know, I have purchased another second drive, and have been experimenting with the new combination.

I keep getting visitations from my old friend "Disc Write Error" etc. so in desperation I put ALL of the DR GRAPH files on the 2nd drive (716k capacity). Next I changed the default drive, using AMSDOS IB, so

that the second drive was the master; an empty, formatted disc was put in drive A:.

Having booted CP/M, I attempted to run DR GRAPH and received various error messages concerning files missing from drive A: Using these as a guide, I copied the relevant files onto disc A: from B: using PIP. The result was Disc A: having GRAPH1.OVL, GRAPH2.OVL, GRAPH3.OVL and GRAPH6.OVL on it, while the remainder were on B: (including the multi-graph I wanted to produce).

Having done this, I called up the multi-graph facility (option 7 on the graph type menu) and went through the output cycle. The results are enclosed.

I know little about computers, but the "cut and try" method seems to have worked. The only small problem is the way in which the legends of the top left graph have been displaced.

I hope that this information is of use to your readers, as I am finding the continuing correspondence on this topic.'

Well! As you'll see from the illustrations, things are looking good for Danny and his one-time insoluble problem. There's not a lot I can say, except that you've followed a patented method of problem solving - which you call cut and try, but which is actually called 'suck it and see'!! Seriously, though, I'm really pleased to see that you're getting places with DR Graph, and that you're finding the column useful. As I said, I take none of the credit - that's entirely due to our correspondents. Great, innit?!

One from my Bruvver

From Malta, Francis Xuereb has written to my brother Gordon (he of limited intellect and massive phone bills - you know, the fellow that writes about modems and stuff near the back pages of this illustrious organ) who has passed the letter on to me. Something to do with getting back to a game of Shades he seems to be addicted to at the moment. Silly boy!

Anyway, Francis is having problems with his comms kit. First he outlines his hard and software, all of which is eminently reasonable kit, and then gets to the nitty gritty. Oh, yes, he also congratulates my bruv on a great column, which means he's going to ask for more money, I'd guess. Silly boy!

'Now to my problem' writes Francis ' When I prepare the text offline with Tasword and then log onto the system and try to upload my previously prepared text, all seems fine, and all of the data seems to have been transferred' (this is via IPSS onto Microlink,by way of Maltese local PSS) ' But when I view the uploaded text file, I find only the first few lines of my text.

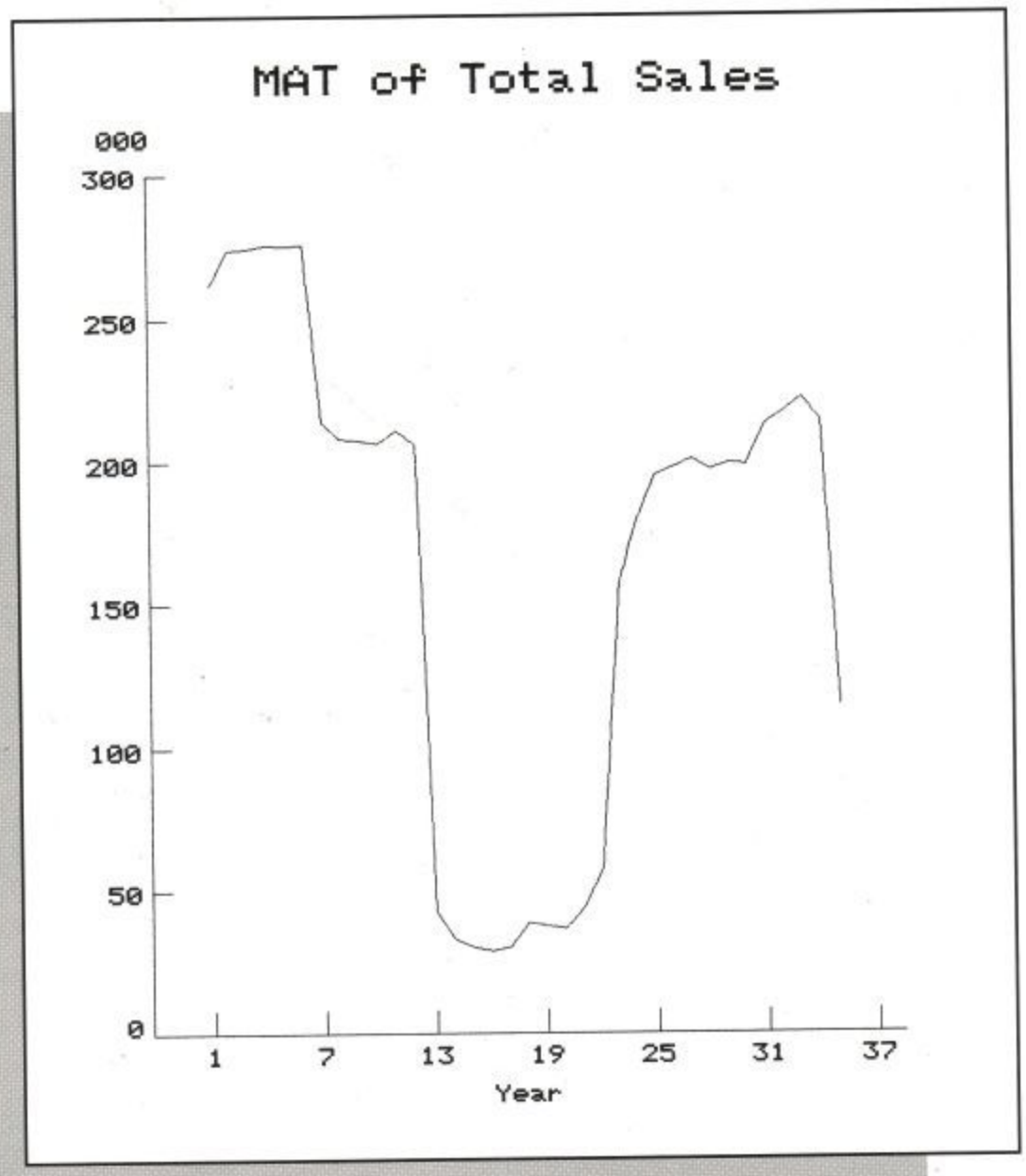
I have tried to be brief and I hope that I have managed to explain myself and my problem fully. I kindly ask for your assistance as it is very unpractical to enter text whilst online.'

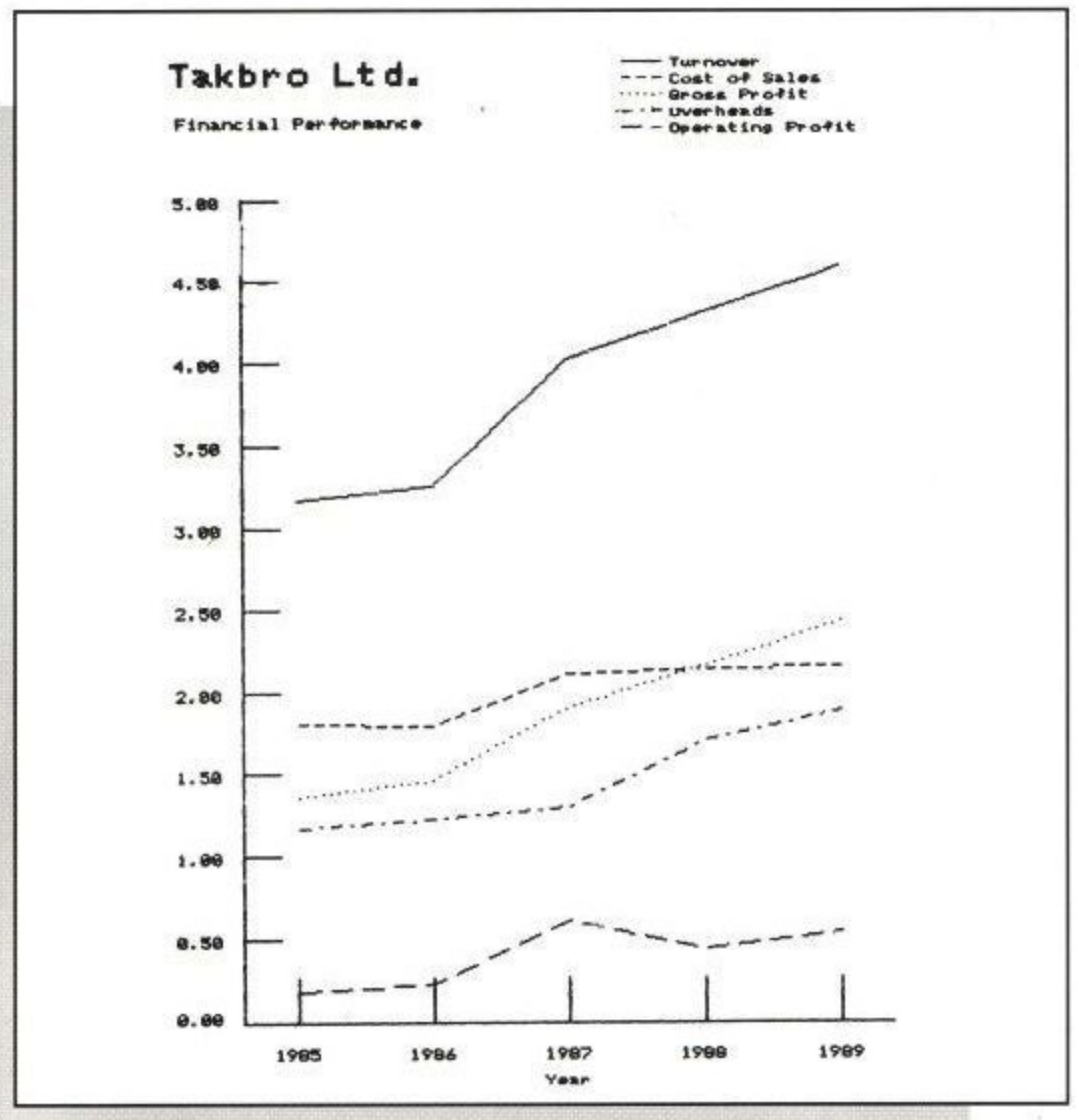
Not to say expensive as well, Francis. As I see it, there are two possible problems here. The first is to do with how much data Microlink can swallow before it needs a carriage return to ready itself for the next chunk. Like Telecom Gold, it's likely to be happy to take somewhere in the region of 255 bytes of data before a carriage return.

If it doesn't get one, it simply sends out error codes to you, and refuses to accept any more data. Tasword, however, saves an ASCII file without carriage returns at line ends, as I recall (I haven't got a version from 1984, which is the vintage that Francis' copy is from), which might just mean that this is the cause. If so, the solution lies in the way the text is prepared, and a change of word processor may prove advantageous. Alternatively, making sure that each line within a document is less than, say 70 characters, and has a carriage return at the end will solve that one.

The other possible cause of the problem is IPSS lag. What this means is this (Gordon will flip when he sees this!!). PSS and IPSS (Packet Switch Stream, and International Packet Switch Stream) work by sending little packets of data at a time, when there's room in the flow of data from one place to another. If there's a space on the trunk, it sends a packet. If there isn't, it waits for a space, and then sends it.

In the meanwhile, at the sending computer end, your CPC might be merrily churning out data like nobody's business, blissfully unaware that there isn't space for it on the trunk lines. Enter FLOW CONTROL, which does exactly what it says. It controls the flow of data from point to point. Software flow control (which is what PSS and IPSS use) is called XON/XOFF flow control. When the receiving computer can't handle any more data for a while, it sends an XOFF character to the sending computer, which is a little





message saying 'hang on a tick!'. Now, if the sending computer's software hasn't been set to recognise the XON/XOFF procedure, it takes not the slightest bit of notice, and keeps sending anyway.

This being the case, the data just gets churned out, and ends up absolutely nowhere, least of all where it was intended to be. The end result is that, if an XON character isn't sent from the receiving computer before the sending computer has finished squirting data, only the first 250 odd bytes of data have effectively been received, which is what Francis has seen.

The cure is simplicity itself. Commstar, which is what Francis uses, has an XON/XOFF flow control option. All he has to do is make sure that it is set to ON, and all should be well. If he does both of the things I've suggested, all should go swimmingly, and his text ought to get through without any bother at all.

Well, once again, space has beaten us to it, so I've got to wrap up for another month. In the meanwhile, enjoy what summer we get (it's scorching as I write this in May) and keep sending those letters. Live long and prosper!

Happy Birthday Maxam

It is the 5th anniversary of the release of Maxam, the first ROM based program for the CPC.
To celebrate this occasion Arnor are holding a sale of CPC products for the first time.
Everyone knows that our ROM software is the best business and utility software for the CPC, so we will just give you the prices :-
All 7 Arnor ROMs are available at special prices and additional savings may be made by buying more than one program. The programs are:

Protext	Maxam
Prospell	Maxam 1.5
Promerge Plus	BCPL
Utopia	

The ROMBO ROM box can also be supplied at an additional cost of just £20 if one or more program is being purchased. We are unable to supply the ROMBO separately.
Please note that if Maxam 1.5 and Protext are purchased then Maxam is not needed.

Number of ROMs	price without Rombo	price with Rombo
1	£25	£45
2	£40	£60
3	£60	£80
4	£75	£95
5	£90	£110
6	£100	£120

ORDER FORM- Send to: Arnor (ACU), 611 Lincoln Road, Peterborough, PE1 3HA
Please send me (indicate where applicable):

❑ ROMBO ❑ PROTEXT
❑ PROSPELL ❑ PROMERGE +
❑ UTOPIA ❑ MAXAM
❑ MAXAM 1.5 ❑ BCPL

I enclose Cheque / Postal order for £ _____ or debit my
Access/Visa card no._____ Exp. ____/____

Name .....
Address .....
.....
.....
Postcode.....

Releasing your micro's potential...

ARNOR

Arnor (ACU), 611 Lincoln Road, Peterborough, PE1 3HA. Tel: 0733 68909 (24hr) Fax: 0733 67299

All prices include VAT, postage and packing. Credit card orders will be despatched by return of post. If paying by cheque please allow 10-14 days for delivery.



Your favourite relative explains what an Operating System is, and how you can use it.

The Wizard Of OS

You know, a lot of people ask me why I write under such a silly name. This is a jolly good question, and I for one would certainly like to know the answer.

In the meantime however, we have reached an interesting point in our great quest to understand machine code. We have covered enough of the ground rules to start thinking about writing our own programs. A great day indeed!

Before we continue we'll need one or two little extras. I know many months ago I said you could probably do without an Assembler, but the time has now come to rush out and buy one. To be honest, if you have read this far in the series you are either interested, my mother or my editor.

If you are interested, then the time has come. Open that piggy-bank. Search behind the sofa for loose change. Tell your parents that you're going on hunger strike until they give you a raise in pocket money. Write thank-you letters to all your relatives for last year's Christmas presents and explain that you have a deep and important need for something to improve your education.

And once you have the dosh, here is what you do. Send it to me, care of the editor. Well no, I suppose you'd better not. I'd only spend it. What you should do is start reading your local paper.

You'd be surprised how many people are selling CPC equipment for one reason or another. It's the perfect opportunity to expand your own system for minimum cost.

Failing the second hand market, you'll have to buy a brand spanking new Assembler. Several advertisers in recent copies of your favourite mag (that's this one, by the way) will be happy to exchange your cash for a disc, tape or ROM with an Assembler such as MAXAM on it.

You will also need some reference books. The first can usually be obtained from your local library, and is called something like "Learn Z80 machine code". Ask the librarian to order you one if it's not currently in stock, it shouldn't cost you anything.

You'll need it to list all the possible Z80 instructions that you can use in your programs. There just isn't time or space to list them all here, so such a book will come in very handy.

The second reference guide is something you will need if you want to become rich and famous like me. It's called "The CPC Firmware Guide" and without it, you'll be forever in the dark. This one is quite expensive, so ask around at computer clubs to see if someone will lend you a copy. Eventually of course, you'll really need one of your own. The Amstrad User Club will help you out here.

Ok, so we have all the books and an assembler. Where do we go from here? First off, let's look at an enquiry I received from a would-be machine code programmer. The programmer in question was worried that by POKEing around in memory, he could accidentally break something.

Let me put your mind at rest: there is nothing you can type from the keyboard that will damage your computer in any way. Even if your program suffers an amazingly awful crash, just switching it off and then on again will enable you to start all over again. The only delicate parts of the CPC set-up are the discs and tapes. Remember to remove them from the computer before switching off or you may corrupt the data stored on them.

Now, let's have a little POKE around in memory and see what happens. Try this little program-ette:

```
10 MODE 1
20 POKE &C020,255
RUN
```

See what happens? A tiny line has appeared at the top of the screen. The reason for this is that the area of memory we POKEd just happens to be that used by the video display. We didn't break anything, or damage anything. We just POKEd some memory that wasn't expecting it. Remember that the "&" symbol just means that the number following it is in hexadecimal. Try this program for some more fun. Instead of just one little byte of screen memory being changed, it will write to the entire screen. You can learn a lot about how the screen display works just by watching this program in action.

```
10 MODE 0
20 A = &C000
30 FOR B = 1 TO &4000
40 POKE A,INT (RND*256)
50 A = A + 1
60 NEXT B
70 CLS
```

If we POKE somewhere lower down in memory, say between &4000 and &8000, we won't see anything. When you switch on your CPC this memory is empty, just waiting for something to come along and use it. It's a darn good place to store machine code programs.

However, if you start to POKE around in lower or higher memory addresses, you may get yourself in trouble. Although you might not believe it, your CPC is always running a machine code program. Even when you think it's not



doing anything, there is still a program running all the time.

This program is called the Operating System or OS, and it takes care of all the mundane bits and pieces like keypresses and updating the screen. If you accidentally POKE into these areas, the OS will get very confused. So confused that it will crash. Now you'll have to switch off and start again.

Problem time again. How do you think we can put a letter "A" on the screen? Come to think of it, how does the CPC normally write letters and numbers to the screen?

We saw from the example listings above how we could write to the screen memory directly. In theory, we could therefore POKE the correct patterns of pixels onto the screen to make the shape of a letter.

Thankfully, there is a better way. It's our old friend the Operating System. The engineers who designed the CPCs knew that sooner or later, machine code programmers would want to write characters onto the screen. They knew also that they needed to do it themselves. So they designed a machine code routine to do it. Then they placed it in a ROM and built it into every CPC you can buy.

The routine is at address &BB5A, and it works by being supplied with an ASCII code in the A register.

What's that? You don't know what an ASCII code is? Sigh. Look up the back of your CPC guide. There will be a list of all the letters, plus the digits and punctuation marks. Each one will have a special number. These are the ASCII codes.

The letter "A" has the ASCII code of (decimal) 65. So here is a machine code program to write a letter A on the screen.

```
LD A,65
CALL &BB5A
RET
```

Incredibly simple, n'est pas? The Operating System can come in useful after all!

Next month we'll look at some other wonderful things the OS can do for us, so until then, keep POKEing!

ROMANTIC ROBOT present

multiface two

RESET STOP

If you wish to FREEZE a program any time, BACK it UP to disk/tape, fully automatically, at a touch of a button, then the MULTIFACE TWO is the ONE and ONLY answer! It is extremely simple to use, idiot-proof, menu driven with on-screen instructions, 100% reliable - PURE MAGIC...

Just RUN any program, STOP it by the FREEZE BUTTON, SAVE PROGRAM or SCREEN to disk/tape or use built-in MULTI-TOOLKIT to study, POKE infinite lives, ammo, etc. When you RETURN to the program or RELOAD it next time, it will automatically CONTINUE from where frozen. You DON'T need to do ANYTHING - just push the button, name the program, insert disk/tape and press a few keys. MULTIFACE works on ANY CPC, needs NOTHING extra, but in order to prevent piracy, it must be attached to your CPC to RUN the programs it SAVED - see the box below!

NOW ON SPECIAL MAIL ORDER SALE at just £37.95!

£10 OFF the MULTIFACE 2

STOP

Do you need to know what happens ANY TIME INSIDE a RUNNING CPC program? Get INSIDE INFORMATION!

Install INSIDER into MULTIFACE 2, RUN a program, let Multiface FREEZE it and the INSIDER tell you everything: it fully disassembles, finds text or code, shows/alters RAM and Z80 registers, dumps to printer, etc. All this and more for £14.95. Now on SALE for just £9.95!

Invaluable tool for machine code users!

A unique de-bugging/development aid.

The INSIDER has no use for piracy - see the box below!

ROMANTIC ROBOT THE INSIDER

£5 OFF

THE RODOS SYSTEM

Would you like to be able to attach additional disk drives - 40/80 track, single/double sided 5.25 or 3.5 or 3 inch - and store up to 800K per disk? All controlled by a powerful DOS? Have RANDOM ACCESS to your files? Get a PRINTER BUFFER and SILICON DISK and a ROM manager and over 50 new bar commands! All this on a single ROM!

Now also available: RODOS EXTRA on disk for only £9.95. Any RODOS owner will find RODOS EXTRA indispensable: it offers nearly 200K of valuable information how to get the most out of RODOS, with examples of RODOS applications ranging from simple to complex such as a DISK DOCTOR or IBM MSDOS DISK READER. The indispensable EXTRA!

£10 OFF

You MUST NOT use any of the above products to copy, reproduce or infringe in any way any copyrigh t material without the clear permission of the copyright owner. We do neither condone nor authorise the use of our products for the reproduction of copyright material - to do so is ILLEGAL!

KRAZY! £10 OFF the MULTIFACE and RODOS! £5 OFF the INSIDER!

I order a **Multiface** ☐ ~~£47.95~~ **£37.95** **Rodos** ☐ ~~£29.95~~ **£19.95** Rodos **Xtra** ☐ ~~£9.95~~ **£6.95** **Insider** ☐ ~~£14.95~~ **£9.95** + **p&p**!: UK **£1**, Europe **£2**, Overseas **£3**.

I enclose a **cheque/PO/cash** for £..... or debit my **Access/Visa** No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Card Exp.....

Name/address.....

The above reduced prices apply strictly only to mail orders received by 31/7/1990

ROMANTIC ROBOT UK LTD 54 Deanscroft Ave, London NW9 8EN 24 hrs 081-200 8870 acu

25% or more off all non-budget software RRP

1st Choice for fast friendly service

EDUCATION

	Tape	Disc
Answer Back Quiz (6-11)	7.45	10.45
Fact Files for above		
Arithmetic (6-11)	3.70	6.70
English Words (12+)	3.70	6.70
Gen. Know. (12+)	3.70	6.70
Gen. Science (14+)	3.70	6.70
Nat. History (10+)	3.70	6.70
Spelling (6-11)	3.70	6.70
World Geog. (11+)	3.70	6.70
Better Maths (12-16)	8.20	12.70
Better Spelling (9-14)	8.20	12.70
Chemistry GCSE	10.95	14.95
French Mistress (A + B)	12.70	14.95
Fun School (2-5)	4.45	6.70
Fun School (5-8)	4.45	6.70
Fun School (8-12)	4.45	6.70
Fun School 2 (Under 6)	7.45	9.70
Fun School 2 (6-8)	7.45	9.70
Fun School 2 (Over 8)	7.45	9.70
Geog. Map Quiz (9+)	8.20	12.70
German Master (A + B)	12.70	14.95
Happy Letters (3-6)	7.45	10.95
Happy Numbers (3-5)	7.45	10.95
Happy Writing (3-6)	7.45	10.95
Magic Maths (4-8)	8.20	12.70
Map Rally (7-13)	7.45	10.95
Maths Mania (8-12)	8.20	12.70
Micro English (8-17)	17.95	17.95
Micro Maths (8-17)	17.95	17.95
Physics GCSE	10.95	14.95
Primary Maths (3-11)	17.95	17.95
The Three Bears (5-10)	-	12.70
Timeman One (4-9)	7.45	10.95
Timeman Two (4-10)	7.45	10.95
Word Hang (5+)	7.45	10.95
World Wise (7+)	7.45	10.95

BUSINESS

	Tape	Disc
Mini Office (Budget)	2.99	-
Mini Office 2	10.95	14.95
Promerge	-	18.70
Prospell	-	18.70
Protext	14.95	19.95
Sprites Alive (Req. 128k)	-	17.20
Sprites Alive - Compiler	-	22.45
Tasprint	10.95	10.95
Tassign	-	22.45
Tasspell	-	14.95
Tasword464 (or 6128)	18.70	22.45

LEISURE & SPORT

Adidas Cham. Football	9.70	10.95
Colossus Bridge	8.95	10.95
Colossus Chess 4	7.45	10.95
Cycles	7.45	12.70
E. Hughes Int. Soccer	7.45	10.95
International 3D Tennis	7.45	10.95
Italy 1990	9.70	13.45
Kenny Daiglish Soc. 2	7.45	10.95
Kick Off 2	7.45	10.95
Manchester Utd.	7.45	10.95
Oriental Games	7.45	10.95
Tie Break	7.45	10.95
World Cham. Box Man.	7.45	10.95
World Cup Italia '90	7.45	10.95

BARGAIN BUYS

Adventure Quest	2.99	-
After Burner	-	5.99
Beyond The Ice Palace	2.99	5.99
Challenge of Gobots	-	5.99
Cyrus Chess 2	-	6.99
Dragon Spirit	5.99	-
Dynamic Duo	3.99	6.99
Dynamite Dux	-	7.99
Flunky	2.99	6.99
Future Knight	2.99	-
Galaxy Force	-	5.99
Grand Prix Master	3.99	7.99
Hopping Mad	3.99	5.99
Howard The Duck	2.99	-
Karnov	2.99	5.99

ARCADE

	Tape	Disc
4th Dimension	9.70	13.45
Batman The Movie	7.45	10.95
Bloodwych	7.45	10.95
Castle Master	7.45	10.95
Chase HQ	7.45	10.95
Cyberball	7.45	10.95
Dan Dare 3	7.45	10.95
Dark Century	7.45	10.95
Defenders of the Earth	7.45	10.95
Dragons of Flame.	8.20	10.95
Dr Doom's Revenge	7.45	10.95
Dynasty Wars	8.20	10.95
E-Motion	7.45	10.95
Exploding Wall	7.45	10.95
Fighter Bomber	10.95	14.95
Hammerfist	7.45	10.95
Impossamole	7.45	10.95
Klax	7.45	10.95
Ninja Spirit	7.45	10.95
Operation Thunderbolt	7.45	10.95
P-47 Thunderbolt	7.45	10.95
Pipe Mania	7.45	10.95
Puffy's Saga	7.45	10.95
Rainbow Islands	7.45	10.95
Robocop	7.45	10.95
Scapeghost	10.95	14.95
Scramble Spirits	7.45	10.95
Shadow Warriors	7.45	10.95
Sonic Boom	7.45	10.95
Spherical	7.45	10.95
Untouchables	7.45	10.95
Vendetta	7.45	10.95
X-Out	7.45	10.95
Zombie	7.45	10.95

BARGAIN BUYS

Lords of Midnight	2.99	-
Master of the lamp	2.99	-
Myth	-	6.99
Power Drift	-	6.99
Price of Magic	2.99	-
Pyraword *	4.99	*
R Type	2.99	-
Report Generator	2.99	-
Spitting Image	2.99	-
Tusker	3.99	6.99
Time Scanner	-	5.99
Toobin	5.99	-

*Transfers to disc

BUDGET

	Tape	Disc
Archon Collection	2.99	6.99
Arctic Fox	2.99	6.99
3D Pinball	2.99	
Bards Tale 1	2.99	6.99
Buggy Boy	2.99	
Dizzy	2.99	
Fantasy World Dizzy	2.99	
Football Champs	2.99	
Gary Linaker Hot Shot	2.99	
Ghosts N Goblins	2.99	
G. British Sup. League	2.99	
Guardian 2	2.99	
Ikari Warriors	2.99	
Joe Blade 3	2.99	
Little Puff	2.99	
Pegasus	2.99	6.99
Postman Pat 2	2.99	
Pro Boxing Sim.	2.99	
Pro Tennis	2.99	
Psycho Hopper	2.99	
Pub Trivia	2.99	
Raster Runner	2.99	
Rockstar ate Hamster	2.99	
Space Harrier	2.99	
Striker	2.99	
Thomas Tank Engine	2.99	
Thriller Pack	2.99	
Treasure Island Dizzy	2.99	
Wonderboy	2.99	
Yes Prime Minister	2.99	
Yeti	2.99	
Yogi's Great Escape	2.99	
Air Wolf (1 or 2)	1.99	each
Bomb Jack (1 or 2)	1.99	each
Bronx St. Cop (L. Gun)	1.99	
Classic Arcadia	1.99	
Dan Dare	1.99	
F16 Falcon (L. Gun)	1.99	
Ghostbusters	1.99	
G. Gooch Match Cricket	1.99	
Jungle Warfare (L. gun)	1.99	
Pool	1.99	
Postman Pat	1.99	
Super Nudge 2000	1.99	
Steve Davis Snooker	1.99	

SUMMER SAVER

Buy any 2 items* and **save £1.**

Just deduct £1 for every 2 items ordered.

* Offer excludes blank CF2 discs.

CHEAT

Tape £2.99 Disc £4.99

Ready to use cheats for your games.

CHOICE CHEATS 1

Cheats for 12 games including:Operation Wolf, Cybernoid, Joe Blade 2, and Shanghi Karate.

CHOICE CHEATS 2

Cheats for 12 games including: Tr. Island Dizzy, Batman Cap. Crus. Dragon Ninja and Arkanoid.

CHOICE CHEATS 3

Cheats for 12 games including:Thunder Blade, After Burner, Robocop, Skweek, Thunderbirds, Yabba Dabba Doo and Yogi Bear.

JOYSTICKS

Quickshot 3 Turbo	£8.95
Megablaster	£6.45
Delta 2000	£8.95
Star probe	£13.95
Quickjoy 2	£6.95
Q'joy 3 S. Charger	£11.50
Q'joy 5 Superboard	£17.50
Q'joy 6 Jet Fighter	£13.50

Seal 'n Type

Keyboard protector (464 or 6128) £8.95

RIBBON REFRESH

Ribbon Restorer

Only £7.95

MAGNUM LIGHT PHASER

Complete with 6 games Only £29.95

BLANK DISCS

Maxell CF2 3" discs

£21.95 for 10

£11.25 for 5

£2.35 each

Prices include VAT and P & P subject to availability. UK only

To order, state name, address, computer, tape or disc and send it with a cheque or P O to

1st Choice Software Ltd., Dept AU8, 4 Paul Row, Temple Lane, Littleborough, Lancs. OL15 9QG

PHONE 0706 72728

1ST CHOICE SOFTWARE LTD

NIRVANA v1.1

The Ultimate Disc Management Suite

A POWERFUL SUITE OF DISC UTILITIES WITH THE FOLLOWING FEATURES

SELECTABLE DRIVES
Any combination of disc drives can be selected

FAST DISC FORMATTER
Formats a disc in under 20 seconds. Formatting is possible in drive A or B with a choice of DATA or VENDOR formats.

RENAME FILES
NIRVANA supports single and multiple renaming of files.

ERASE FILES
NIRVANA supports single and multiple erasing of files

DIRECTORY EDITOR
On-screen directory allows alteration to any part of a disc's directory.

SECTOR EDITOR
On-screen editing of any sector is possible allowing alterations to be made directly to the disc's code. To help guide you round a data formatted disc a Data Sector Map is included in the instruction manual.

DISC MAP
Maps a disc with the option of printing the map to screen or printer. The map shows the name of each file together with the tracks & sectors it occupies.

FILE ATTRIBUTES
Four options are available allowing files to be READ ONLY or READ WRITE and DIRECTORY or SYSTEM.

FILE COPY
A unique and intelligent file copier allows single or multiple transfer of files from one disc to another. This option will check for and use any additional memory including D K'tronics memory packs up to 256K. With a 256K pack it will transfer one side of a disc in a single pass (only one disc change for single dirive users.) Full On-screen reporting of how the transfer is progressing.

DISC COPY
This option allows single or multiple tracks to be transferred from one disc to another. Full on-screen reporting shows tracks and sectors being transferred.

ARCHIVE A DISC
This option is very similar to "Tape Streamers" on PC machines. It will automatically archive a whole disc in around 15 minutes without any attention from the operator.

FILE ARCHIVE
Similar to Disc Archive, this option will archive individual files by name and in alpha-numeric order.

Both Disc & File Archive will allow you to release expensive disc space by archiving material to cassette tapes. Cassette tapes are inexpensive and provide the ideal medium for backing-up those important discs.

The ROM version of NIRVANA has insufficient room for some features. These are, however, supplied on disc

NIRVANA IS CAPABLE OF BACKING-UP SOME COMMERCIAL DISCS. AUTHORITY MUST BE OBTAINED FROM THE COPYRIGHT HOLDER BEFORE A COMMERCIAL DISC IS BACKED-UP.

Simply the best Disc Management Suite available today

Upgrade your early Disc version	UK £3.00	Europe £4.50	Rest of the World £5.50
Upgrade your ROM (incl disc)	UK £6.00	Europe £7.50	Rest of the World £8.50
Disc to ROM upgrade (inc. disc)	UK £13.00	Europe £14.50	Rest of the World £15.50
Disc version	UK £15.00	Europe £16.50	Rest of the World £17.50
ROM version (includes disc)	UK £26.00	Europe £27.50	Rest of the World £28.50

LABELMAKER

FOR ALL AMSTRAD CPC COMPUTERS

THE DISC LABEL PROGRAM

LABELMAKER is suitable for a large range of dot-matrix printers including the Amstrad DMP2000/3000 series and other Epson compatibles, Shinwa's, Mannesmann Tally's, Star's, Panasonic's and the Citoh M8510.

LABELMAKER is a very easy to use utility which will generate both 3" and 3.5" disc labels with ease. Single-key commands, with on-screen prompts, provide a variety of functions to enable rapid production of the perfect disc label, made to suit your own individual requirements.

LABELMAKER screens are in standard Amstrad CPC format and can be edited with your own art/graphics package adding logos, graphics etc. The program allows loading and saving of screens at any time so that you can build a library of your favourite labels. We also include a number of example screens on the disc.

DISC ONLY: UK £12.00 EUROPE £13.50 REST OF WORLD £14.50

Disc labels white yellow red blue green orange and pink 100 labels **£4**

Please send your cheque (£ Sterling) Eurocheque or UK P.O. to:
GOLDMARK SYSTEMS, 51 COMET ROAD,
HATFIELD, HERTFORDSHIRE, AL10 0SY, ENGLAND

Write or Telephone
(0707) 271529 for a brochure

ENVELOPES AND UTILITIES

BY BILL BROMFIELD

Boy, have we got a mammoth for you this month. Using William's envelope menu, you can set up spacings for the top of an envelope, set the margins, enter address information, list them, retrieve your information, print it, save it and load some new information. Make sure your envelopes are showing about 5mm above the printer, type in the info, or load existing info, then press 5 on the menu and type in the name of the person you want the envelope sent to. Press H for hard copy on your printer and you are away. With this masterpiece, you can use 220mm x 110mm envelopes, as well as 161mm x 115mm and 240mm x 166mm.

As an added extra, there is a utility program included in the listing, with a nifty choice of commands for you to execute. Get those fingers busy, busy, busy.

```
10 MODE 2:CLS: BORDER 11:INK 0,11:INK 1,0:dt$=".WMB":wh$="D I S C":op$="A"   [90
]
20 REM By W M Bromfield  1989  [29]
30  inum=100:lmar=32:tsp=8:REM Amount of DATA, Left Margin, Top spacing
     [36]
40 COP$="ENVELOPE DATA PRINTER      "+CHR$(164)+" By W M Bromfield 1989" [6E]
50 poc=80:ppc=LEN(COP$):poc=poc-ppc:poc=poc/2:PRINT:PRINT:PRINT  [20]
60 PRINT TAB(poc);COP$:PRINT TAB(poc);STRING$(ppc,"-"):PRINT:PRINT [F5]
70 PRINT TAB(poc);"Before you start would you like to change the left" [B5]
80 PRINT TAB(poc);"margin ";lmar;" Y/N" [EA]
90  aa$=INKEY$:aa$=UPPER$(aa$) [E6]
100  IF aa$="N" THEN 150 [23]
110  IF aa$="Y" THEN 130 [88]
120  GOTO 90 [D0]
130 PRINT TAB(10);:INPUT"Enter Left Margin number ",mag [E0]
140 IF mag>60 THEN CLS:GOTO 90 [71]
150 PRINT TAB(poc);"Would you like to change top of enevelope space " [2E]
160 PRINT TAB(poc);"Top space = ";tsp;" Y/N" [A1]
170 qk$=INKEY$:qk$=UPPER$(qk$) [05]
180 IF qk$="Y" THEN 210 [59]
190 IF qk$="N" THEN 240 [0E]
200 GOTO 170 [2A]
210 PRINT TAB(poc);:INPUT"Enter new Top Space ",tsp [49]
220 IF tsp>50 THEN GOTO 210 [F9]
230 IF tsp=0 THEN GOTO 210 [C9]
240 DIM he$(inum) [12]
250 DIM na$(inum) [22]
260 DIM st$(inum) [0F]
270 DIM tw$(inum) [38]
280 DIM co$(inum) [51]
290 DIM pc$(inum) [50]
300 q$=CHR$(150)+STRING$(60,CHR$(154))+CHR$(156) [44]
310 qq$=CHR$(149)+STRING$(60,CHR$(32))+CHR$(149) [8E]
320 qu$=CHR$(147)+STRING$(60,CHR$(154))+CHR$(153) [2E]
330 ti$="E N V E L O P E   P R I N T E R":ss=80:s=LEN(ti$):ss=ss-s:ss=ss/2 [6E]
340 MODE 2:PRINT:PRINT TAB(ss);ti$:PRINT TAB(ss);STRING$(s,CHR$(208)) [D6]
350 IF qo$="T" THEN PRINT TAB(10);"Set for T A P E                    " [85]
360 IF qo$="D" THEN PRINT TAB(10);"Set for D I S C on Drive ";op$ [86]
370 PRINT:PRINT TAB(10);q$:PRINT TAB(10);qq$ [03]
380 PRINT TAB(10);CHR$(149);TAB(32);"1.   Input Information";TAB(71);CHR$(149):P
RINT TAB(10);qq$ [2F]
390 PRINT TAB(10);CHR$(149);TAB(32);"2.   List Information";TAB(71);CHR$(149):PR
INT TAB(10);qq$ [82]
400 PRINT TAB(10);CHR$(149);TAB(32);"3.   Receive Inputs";TAB(71);CHR$(149):PRIN
T TAB(10);qq$ [A1]
410 PRINT TAB(10);CHR$(149);TAB(32);"4.   Save";TAB(71);CHR$(149):PRINT TAB(10);
qq$ [BE]
420 PRINT TAB(10);CHR$(149);TAB(32);"5.   Load";TAB(71);CHR$(149):PRINT TAB(10);
qq$ [60]
430 PRINT TAB(10);CHR$(149);TAB(32);"6.   Use Utility";TAB(71);CHR$(149):PRINT T
AB(10);qq$ [08]
440 PRINT TAB(10);qq$:PRINT TAB(10);qu$:PRINT [35]
450 PRINT TAB(20);:INPUT"ENTER A NUMBER THEN PRESS RETURN ",nu [5D]
460 CLS [4C]
470 ON nu GOSUB 510,650,870,1240,1420,1640 [05]
480 REM print"RETURN FOR MAIN MENU"  [ED]
490 IF INKEY(18)<>-1 THEN 500 [DC]
500 GOTO 340 [20]
510 FOR a=1 TO inum [48]
520 CLS:REM Input Information [D4]
530 ii$="I N P U T   I N F O R M A T I O N":i=80:ie=LEN(ii$):i=i-ie:i=i/2 [76]
540 PRINT TAB(i);ii$:PRINT TAB(i);STRING$(ie,CHR$(208)):PRINT:PRINT [E6]
```

```
550 IF LEN(na$(a))>0 THEN 610 [FF]
560 PRINT TAB(22);"press (ENTER) to when finished":PRINT:PRINT [2C]
570 PRINT TAB(10);:INPUT"Header      ",he$(a):PRINT:PRINT TAB(10);:INPUT"Name
   ",na$(a) [93]
580 IF LEN(na$(a))=0 THEN 620 [0E]
590 PRINT TAB(10);:INPUT"Street      ",st$(a):PRINT TAB(10);:INPUT"Town       ",t
w$(a) [66]
600 PRINT TAB(10);:INPUT"County      ",co$(a):PRINT TAB(10);:INPUT"Post Code  ",p
c$(a) [ED]
610 NEXT [34]
620 PRINT TAB(32);"End of inputs or Data full":FOR count=1 TO 2000:NEXT [72]
630 RETURN [C6]
640 REM LIST DATA INFORMATION [AF]
650 li$="L I S T   I N F O R M A T I O N":lsi=80:lsf=LEN(li$):lsi=lsi-lsf:lsi=ls
i/2:PRINT TAB(lsi);li$:PRINT TAB(lsi);STRING$(lsf,CHR$(208)):PRINT [9E]
660 PRINT:PRINT TAB(10);:INPUT"Screen [S] or Printer [P] ",sp$:sp$=UPPER$(sp$) [
62]
670 IF sp$="S" THEN GOTO 700 [22]
680 IF sp$="P" THEN GOTO 780 [D5]
690 GOTO 660 [67]
700 FOR a=1 TO inum [48]
710 ' [A9]
720 PRINT" ";na$(a);" "; [89]
730 NEXT  [39]
740 PRINT TAB(22);"List Finished" [F8]
750 IF INKEY$="" THEN 750 [24]
760 RETURN [CD]
770 REM LIST DATA NAMES TO PRINTER [C6]
780 PRINT:PRINT TAB(10);"Make sure printer is ON LINE. Press [H] for hard copy o
r [M] to go bac to menu"  [87]
790 k$=INKEY$:k$=UPPER$(k$) [85]
800 IF k$="H" THEN 830  [73]
810 IF k$="M" THEN 840  [C6]
820 GOTO 790 [86]
830 FOR a=1 TO inum:PRINT #8," ";na$(a);:NEXT      [CF]
840 PRINT TAB(22);"List Finished"   [F9]
850 RETURN  [CC]
860 REM RECEIVE INFORMATION [CF]
870 ri$="R E C E I V E   I N F O R M A T I O N":rr=80:re=LEN(ri$):rr=rr-re:rr=rr
/2::PRINT:PRINT TAB(rr);ri$:PRINT TAB(rr);STRING$(re,CHR$(208)) [D0]
880 PRINT TAB(10);"Screen [S]  or  Hard copy [H] " [0C]
890 k$=INKEY$:k$=UPPER$(k$) [86]
900 IF k$="H" THEN 1070 [B3]
910 IF k$="S" THEN 930 [0E]
920 GOTO 890 [91]
930 PRINT:PRINT TAB(10);:INPUT"Receive ",res$ [B5]
940 FOR a=1 TO inum [52]
950 IF INSTR(na$(a),res$)=0 THEN 1020 [A5]
960 PRINT TAB(lmar);he$(a):PRINT [83]
970 PRINT TAB(lmar);na$(a):PRINT TAB(lmar);st$(a):PRINT TAB(lmar);tw$(a) [4F]
980 PRINT TAB(lmar);co$(a):PRINT TAB(lmar);pc$(a) [A5]
990 PRINT:PRINT TAB(10);"Press [RETURN] when ready" [7E]
1000 IF INKEY(18)<>-1 THEN 1020 [A8]
1010 GOTO 1000 [09]
1020 RETURN [61]
1030 NEXT [F5]
1040 PRINT TAB(10);"This name not in data ";na$:FOR count=1 TO 2000:NEXT [10]
1050 RETURN [6A]
1060 REM FULL INFORMATION TO PRINTER [4B]
1070 PRINT TAB(10);"Make sure printer is ON LINE then press [H] for Hard Copy or
 Press [M] for Menu" [BA]
1080 k$=INKEY$:k$=UPPER$(k$) [CB]
1090 IF k$="H" THEN GOTO 1120 [EC]
1100 IF k$="M" THEN 1220 [C5]
1110 GOTO 1080 [73]
1120 PRINT:PRINT TAB(10);:INPUT"Receive name ",res$  [F1]
1130 FOR a=1 TO tsp:PRINT #8," ":NEXT [FA]
1140 FOR a=1 TO inum [62]
1150 IF INSTR(na$(a),res$)=0 THEN 1200 [70]
1160 PRINT #8,TAB(lmar);he$(a):PRINT #8 [B2]
1170 PRINT #8,TAB(lmar);na$(a):PRINT #8,TAB(lmar);st$(a):PRINT #8,TAB(lmar);tw$(
a)  [BC]
1180 PRINT #8,TAB(lmar);co$(a):PRINT #8,TAB(lmar);pc$(a)       [52]
1190 RETURN        [78]
1200 NEXT [F0]
```

```
1210 PRINT TAB(10);"This name not in data ";na$:FOR count=1 TO 2000:NEXT  [0B]
1220 RETURN [65]
1230 REM SAVE INFORMATION [EE]
1240 sa$="S A V E  I N F O R M A T I O N":sa=80:sas=LEN(sa$):sa=sa-sas:sa=sa/2:P
RINT TAB(sa);sa$:PRINT TAB(sa);STRING$(sas,CHR$(208)) [88]
1250 PRINT TAB(15);:INPUT"Save to  Disc D  or  Tape T ",qo$:qo$=UPPER$(qo$) [5C]
1260 IF qo$="T" THEN |TAPE:GOTO 1290 [D5]
1270 IF qo$="D" THEN |DISC:GOTO 1290 [5F]
1280 PRINT"":GOTO 1250 [E0]
1290 PRINT:PRINT TAB(10);:INPUT"Enter file name ",EN$:EN$=UPPER$(EN$)  [10]
1300 IF LEN(EN$)>8 THEN PRINT"File name to long":CLS:GOTO 1240 [F0]
1310 IF LEN(EN$)<1 THEN CLS:GOTO 1240 [16]
1320 IF qo$="T" THEN OPENOUT "!"+EN$+".WMB" [F2]
1330 IF qo$="D" THEN OPENOUT EN$+".WMB" [67]
1340 FOR a=1 TO inum [66]
1350 WRITE #9,he$(a),na$(a),st$(a) [7A]
1360 WRITE #9,tw$(a),co$(a),pc$(a) [4C]
1370 NEXT [07]
1380 CLOSEOUT [3F]
1390 PRINT TAB(32);"Information Saved":FOR count=1 TO 2000:NEXT [1D]
1400 RETURN [63]
1410 REM LOAD INFORMATION [37]
1420 sl$="L O A D  I N F O R M A T I O N":sls=80:slm=LEN(sl$):sls=sls-slm:sls=sl
s/2:PRINT TAB(sls);sl$:PRINT TAB(sls);STRING$(slm,CHR$(208)) [8E]
1430 PRINT TAB(15);:INPUT"Load from  Disc D  or  Tape T ",qo$:qo$=UPPER$(qo$) [9
E]
1440 IF qo$="T" THEN |TAPE:GOTO 1470  [D1]
1450 IF qo$="D" THEN |DISC:GOTO 1470 [5B]
1460 PRINT"":GOTO 1430 [DC]
1470 REM [95]
1480 PRINT:PRINT:PRINT TAB(10);:INPUT"Enter file name ",EN$:EN$=UPPER$(EN$) [4F]
1490 ON ERROR GOTO 1590 [23]
1500 IF qo$="D" THEN OPENIN EN$+".WMB" [3F]
1510 IF qo$="T" THEN OPENIN "!"+EN$+".WMB" [40]
1520 FOR a=1 TO inum [64]
1530 INPUT #9,he$(a),na$(a),st$(a)    [DF]
1540 INPUT #9,tw$(a),co$(a),pc$(a)  [B1]
1550 NEXT [05]
1560 CLOSEIN [A3]
1570 PRINT TAB(32);"Information loaded":FOR count=1 TO 2000:NEXT [62]
1580 RETURN [7D]
1590 cr=(DERR AND &7F) [DC]
1600 IF cr=18 THEN PRINT"File does not exist" [77]
1610 EN$="":FOR A=1 TO 1500:NEXT:CLS:RESUME 1620  [C0]
1620 RETURN [6D]
1630 REM UTILITY USER MENU [C1]
1640 ut$="UTILITY USER MENU":sp=80:lu=LEN(ut$):sp=sp-lu:sp=sp/2 [8F]
1650 PRINT TAB(sp);ut$:PRINT TAB(sp);STRING$(lu,"-") [41]
1660 PRINT:PRINT:PRINT TAB(sp);"8.                          Erase File" [32]
1670       PRINT:PRINT TAB(sp);"9.                          Rename File" [BE]
1680 PRINT:PRINT TAB(sp);"10.  Drive change" [B3]
1690 PRINT:PRINT TAB(sp);"11.  Change User number" [2D]
1700 PRINT:PRINT TAB(sp);"12.  Catalogue" [5F]
1710 PRINT:PRINT TAB(sp);"13.  Change colour" [2C]
1720 PRINT:PRINT TAB(sp);"14.            Go back to Main Menu" [18]
1730 PRINT:PRINT TAB(20);:INPUT"Type in a number then Enter or Return ",n  [5E]
1740 IF n>14 THEN SOUND 1,100,10,10:CLS:GOTO 1630[7E]
1750 IF n<8 THEN SOUND 1,100,10,10:CLS:GOTO 1630 [91]
1760 IF n=8 THEN 1830 [CE]
1770 IF n=9 THEN 2000 [1A]
1780 IF n=13 THEN 2180 [B6]
1790 IF n=14 THEN RETURN [3D]
1800 IF n=10 THEN 2320 [26]
1810 IF n=11 THEN 2410 [34]
1820 IF n=12 THEN 2480 [D6]
1830 REM Erase file [22]
1840 CLS:er$="ERASE FILE":ee=80:l=LEN(er$):ee=ee-l:ee=ee/2:PRINT [F2]
1850 PRINT:PRINT TAB(ee);er$:PRINT TAB(ee);STRING$(l,"-"):PRINT [C1]
1860 PRINT:PRINT TAB(20);"Put Disc in the Drive then press CLR key" [D0]
1870 IF INKEY(16)<>-1 THEN GOTO 1890 [01]
1880 GOTO 1870 [E9]
1890 |DIR [DA]
1900 PRINT TAB(20);"Type in file name then press Enter or Return":PRINT [2]
1910 PRINT TAB(20);:INPUT">",file$ [05]
1920 IF LEN(file$)>8 THEN PRINT"To many letters in file name":GOTO 1900 [40]
```

LISTING

```
1930 IF LEN(file$)<1 THEN PRINT"Must have a file name":GOTO 1900 [69]
1940 |ERA,file$+".WMB":|DIR [AE]
1950 PRINT:PRINT"Would you like to Erase any more files Y/N" [23]
1960 A$=INKEY$:A$=UPPER$(A$) [F7]
1970 IF A$="N" THEN CLS:GOTO 1630 [C7]
1980 IF A$="Y" THEN GOTO 1830 [57]
1990 GOTO 1960 [ED]
2000 CLS:re$="RENAME FILE":sc=80:c=LEN(re$):sc=sc-c:sc=sc/2:PRINT [16]
2010 PRINT TAB(sc);re$:PRINT TAB(sc);STRING$(c,"-"):PRINT [47]
2020 PRINT:PRINT TAB(20);"Put Disc in the Drive then press CLR key"  [B5]
2030 IF INKEY(16)<>-1 THEN GOTO 2050 [6
2040 GOTO 2030 [45] [45]
2050 |DIR [BF]
2060 PRINT TAB(20);:INPUT"Enter new File name ",nn$ [39]39]
2070 IF LEN(nn$)>8 THEN PRINT"File name to long":GOTO 2060 [76]
2080 IF LEN(nn$)<1 THEN PRINT TAB(20);"Must have a file name":GOTO 2060 [13]
2090 PRINT TAB(20);:INPUT"Enter old File name ",no$ []
2100 IF LEN(no$)>8 THEN PRINT TAB(20);"File name to long":GOTO 2090 [65]
2110 IF LEN(no$)<1 THEN PRINT TAB(20);"Must have a file name":GOTO 2090 [E0]
2120 |REN,nn$+".WMB",no$+".WMB":|DIR [23]
2130 PRINT:PRINT TAB (20);"Would you like to Erase any more files Y/N"  [CE]
2140 A$=INKEY$:A$=UPPER$(A$)   [E2]
2150 IF A$="N" THEN CLS:GOTO 1630  [B2]
2160 IF A$="Y" THEN CLS:GOTO 2000 [48]
2170 GOTO 2140 [69]
2180 CLS:col$="CHANGE COLOUR":cc=80:c1=LEN(col$):cc=cc-c1:cc=cc/2:PRINT [0D]
2190 PRINT TAB(cc);col$:PRINT TAB(cc);STRING$(c1,"-"):PRINT [83]
2200 b=11:p=0 [DE]
2210 PRINT TAB(20);"To change border and paper use the Up and Down keys" [78]
2220 PRINT TAB(20);"and to change the pen colour use the left and right" 63]
2230 PRINT TAB(20);"cursor keys.  To go back to Utility Menu press " [3D]
2240 PRINT TAB(20);"CLS keys." [84]
2250 BORDER b:INK 0,b:INK 1,p [C
2260 IF INKEY(0)<>-1 THEN b=b+1:IF b>26 THEN b=0 [0
2270 IF INKEY(2)<>-1 THEN b=b-1:IF b<0 THEN b=26 [55]
2280 IF INKEY(8)<>-1 THEN p=p-1:IF p<0 THEN p=26 [30]
2290 IF INKEY(1)<>-1 THEN p=p+1:IF p>26 THEN p=0 [AC]
2300 IF INKEY(16)<>-1 THEN CLS:GOTO 1630 [69]
2310 GOTO 2250 [74]
2320 CLS:xx$="DRIVE CHANGE":bb=80:ww=LEN(xx$):bb=bb-ww:bb=bb/2 [C0]
2330 PRINT TAB(bb);xx$:PRINT TAB(bb);STRING$(ww,"-") [F4]
2340 PRINT:PRINT TAB(15);:INPUT"Enter Drive A or B ",op$ [F3]
2350 op$=UPPER$(op$) [E0]
2360 IF op$="A" THEN |DRIVE,op$:GOTO 2390 [C7]
2370 IF op$="B" THEN |DRIVE,op$:GOTO 2390 [D8]
2380 PRINT"":GOTO 2320 [CA]
2390 |DIR [D1]
2400 FOR zz=1 TO 1500 :NEXT:CLS:GOTO 1630 [27]
2410 CLS:cun$="USER NUMBER":nuc=80:nu=LEN(cun$):nuc=nuc-nu:nuc=nuc/2 [BF]
2420 PRINT TAB(nuc);cun$:PRINT TAB(nuc);STRING$(nu,"-") [18]
2430 PRINT:PRINT:PRINT TAB(20);:INPUT"Enter user number from 0 - 15 ",ut [CD]
2440 IF ut>15 THEN SOUND 1,100,15,10:GOTO 2430 [AD]
2450 |USER,ut [51]
2460 |DIR [CA]
2470 FOR zz=1 TO 1000:NEXT:CLS:GOTO 1640 [D2]
2480 CLS:cd$="CATALOGUE":cod=80:cad=LEN(cd$):cod=cod-cad:cod=cod/2 [CD]
2490 PRINT:PRINT TAB(cod);cd$:PRINT TAB(cod);STRING$(cad,"-") [7D]
2500 PRINT TAB(20);:INPUT"Catalogue Disc D or Tape T ",v$:v$=UPPER$(v$) [CE]
2510 IF v$="T" THEN 2540 [14]
2520 IF v$="D" THEN 2600 [01]
2530 SOUND 1,100,10,10:GOTO 2480 [03]
2540 REM TAPE CATALOGUE [0A]
2550 PRINT TAB(5);"Press ESC Once only and then CLR key to return to main menu"
[18]
2560 REM [95]
2570 |TAPE:CAT [E6]
2580 IF INKEY(16)<>-1 THEN CLS:GOTO 1630 [85]
2590 GOTO 2570 [CE]
2600 PRINT TAB(5);"Put Disc into disc drive then press DEL key" [64]
2610 IF INKEY(79)<>-1 THEN GOTO 2630 [81]
2620 GOTO 2610 [79]
2630 |DIR [C5]
2640 PRINT TAB(5);"Press CLR key when ready"[82]
2650 IF INKEY(16)<>-1 THEN CLS:GOTO 1630 [7E]
2660 GOTO 2650 [B9]
```

O.J. SOFTWARE

FAST FRIENDLY SERVICE

ADVENTURE	Cass	Disc
Scapeghost	£11.95	£15.95
Bards Tale	£2.95	£6.95
Tolkein Trilogy	£10.95	£14.95
Pirates (6128) Only		£15.95
Bards Tale Hint Book		£4.50
Heroes of Lance	£8.50	£15.95
Lancelot	£11.95	£15.95
Countdown to Doom		£10.95
Return to Doom		£10.95
Avon & Murdoc		£11.95
Ingrids Back	£11.95	£15.95
Tolkein Trilogy	£10.95	£14.95

ARCADE		
P47 Thunderbolt	£8.50	£11.95
Ghostbusters II	£8.50	£11.95
Fighting Soccer	£8.50	£11.95
Batman The Movie	£8.50	£11.95
Heavy Metal	£8.50	£11.95
Cyberball	£8.50	£11.95
Oper Thunderbolt	£8.50	£11.95
Uncouchables	£8.50	£11.95
Crack Down	£8.50	£11.95
Crazy Cars II	£8.50	£11.95
Robocop	£8.50	£11.95
Pipemania	£8.50	£11.95
Space Harrier	£8.50	£11.95
Bloodwytch	£8.50	£11.95
Dr Dooms Revenge	£8.50	£11.95
A.M.C.	£8.50	£11.95
Pacmania	£8.50	£11.95
Pacland	£8.50	£11.95
Ghouls & Ghosts	£8.50	£11.95
Double Dragon II	£8.50	£11.95
Myth	£8.50	£11.95
Continental Circus	£8.50	£11.95
Chase HQ	£8.50	£11.95
Vendetta	£8.50	£11.95
Super Wonderboy	£8.50	£11.95
Test Drive II	£8.50	£11.95
Klax	£8.50	£11.95
Rainbow Islands	£8.50	£11.95

JOYSTICKS	
Cheetah 125 +	£7.95
Quickshot II Turbo	£10.95
Konix Speedking	£10.95
Konix Navigator	£12.95
Cheetah Mach 1	£10.95
Pro 5000 Clear	£14.95
Pro 5000 Extra	£16.95
Starprobe	£13.95
Quickshot 130F	£9.95

COMPILATIONS	
Mega Mix	£11.95

Thrill Time Gold 1	£8.50	
World Cup 90 Comp	£10.95	£14.95
Thrill Time Plat	£10.95	£15.95
100% Dynamite	£11.95	
Coin-Op Hits	£11.95	£15.95
Leaderbd's Par 3	£11.95	£15.95
InCrowd	£11.95	
Epyx 21	£11.95	£15.95
Supreme Challenge	£10.95	£13.95
Joystick Thunder	£10.95	£14.95
Magnificent 7		£14.95
House Mix	£8.50	£11.95
Winners	£11.95	£15.95
Epyx Action	£11.95	£15.95
Story So Far 4	£8.50	£11.95
Starwars Trilogy	£10.95	£15.95
Soccer Spectac	£10.95	£13.95
The Biz	£11.95	
Story So Far 2	£10.95	£11.95
Game Set Match II	£10.95	£14.95
4th Dimension	£10.95	£14.95
Special Action	£10.95	£14.95

EDUCATIONAL	Cass	Disc
Funschool 2-5	£5.50	£7.50
Funschool 5-8	£5.50	£7.50
Funschool8-12	£5.50	£7.50
Funschool 11 UN6	£8.50	£10.95
Funschool II 6-8	£8.50	£10.95

Funschool II OV8	£8.50	£10.95
Happy Letters 3-6	£8.50	£11.95
Happy Numbers 3-6	£8.50	£11.95
Happy Writing 3-6	£8.50	£11.95
Wordhang 5+	£8.50	£11.95
Timeman 1 4-9	£8.50	£11.95
Timeman II 4-9	£8.50	£11.95
Map Rally 7+	£8.50	£11.95
Animal/Veg/Min 7+	£8.50	£11.95
World Wise 7+	£8.50	£11.95
Physics GCSE	£11.95	£15.95
Chemistry GCSE	£11.95	£15.95
Play & Read	£16.95	£21.95
Here & There Mr Men	£9.95	
Caesers Travels	£9.95	
early Words	£8.95	£13.95
Early Maths	£8.95	£13.95
Primamry Maths 5-14	£24.95	£24.95
Micromaths 8+	£24.95	£24.95
Mega Maths 15+	£24.95	£24.95
Micxro English	£24.95	£24.95
Grannys Garden (6128)		£16.95
Dragon World (6128)		£20.95
Three Bears (6128)		£12.95
Giant Killer Maths ADV		£11.95
Maths Mania 8.12	£8.95	£12.95
Maxi Maths 9.14	£8.95	£12.95
Better Maths 12-16	£8.95	£12.95
Better Maths 12-16	£8.95	£12.95
Better Spelling 9+	£8.95	£12.95

Biology 12-16	£8.95	£12.95
Physics 12-16	£8.95	£12.95
Chemistry I 12-16	£8.95	£12.95
Geog Quiz GB + IR	£8.95	£12.95
Weather/Climate	£8.95	£12.95
French Mistress	£13.95	£16.95
Spanish Tutor	£13.95	£16.95
German Master	£13.95	£16.95
Italian Tutor	£13.95	£16.95
Answer Nack Jnr	£8.50	£11.95

STRATEGY/SIMULATION		
K. Dalg Socc Match	£8.50	£11.95
Colossus 4 Bridge	£9.95	£11.95
Colossus 4 Chess	£8.50	£11.95
Scrabble DeLuxe 128K		£12.95
Mindstreatchers		£15.95
Monopoly	£8.50	£12.95
Scrabble & Cluedo	£15.95	£15.95
Leaderboard Par3	£11.95	£15.95
jack Nicklaus Golf	£8.50	£13.95
Carrier Command 6128		£14.95
Chuck Yeagers Aft	£7.95	£11.95
F15 Strike Eagle	£8.50	£11.95
Footballer Year II	£8.50	£11.95
Gunship	£11.95	£15.95
Silent Service	£8.50	£11.95
Desert Rats		£12.95
Football DI II Disc		£15.95
Football Manag II	£8.50	£11.95
F/Mangr World Cup	£8.50	£11.95
Yes Chancellor Disc		£11.95
Arnhem	£8.50	£11.95
World Cup Soccer	£8.50	£11.95
Vulcan	£8.50	£11.95
Italy 1990	£10.95	£15.95
Cricket Master	£8.50	
Quarterback	£8.50	£11.95
Ancient Battles	£11.95	£11.95
Man United	£8.50	£11.95
Emlyn Hughes Socc	£8.50	£11.95
Gazza Super Soccer	£8.50	£11.95

BUS/UTILITIES	Disc
AMX Mouse & Art	£62.95
AMX Mouse & Stop Press	£71.95
AMX Stop Press	£39.95
AMX Extra Extra	£20.95
Proext (ROM + £8.00)	£21.95
Proext CPM + Version	£50.95
Prospell (ROM + £8.00)	£20.95
Promerge (ROM + £8.00)	£20.95
Maxam (ROM + £8.00)	£21.95
Utopia ROM	£24.95
Tasword 464D/6128	£24.95
Taspell	£15.95
Tasign 6128&PCW	£24.95
Tascopy	£11.95
Tasprint	£11.95
Tasdiary	£11.95
Microdesign	£20.95

Microdesign Extra	£10.95
Supercalc II 6128&PCW	£59.95
Advanced Art Studio	£19.95
Qualitas + **Vers II**	**£13.95**
Mastercalc 128	**£27.95**
Masterfile III	**£29.95**
Money Manager (+ PCW)	£24.95
Mini Office II	£15.95
Crash Course Typ Tut	£20.95
Crash Course Typ Tutor	£20.95
Two Fingers Conversion	£20.95
Qualitas + (New)	£13.95

BUDGET	Cass
3D Pinball	£2.75
Matchday	£2.75
Thomas Tank Engine	£2.75
Arkanoid	£2.75
Fruit Machine II	£2.75
Vinidcator	£2.75
Chuckie Egg	£2.75
Chuckie Egg II	£2.75

ACCESSORIES	
Multiface II +	£46.95
3.5" Drive Ramdos	£109.95
3.5" Dr Rodos/Romdos	£119.95
Ribbon Refresh	£7.95
AMX Mouse & Stop Press	£71.95
Star LC10 Inc cable	£179.95
LC10 Ribbons £3.75	£7.00
Rombo Rombox (8 Roms*	£31.95
KDS 8 Bit Printer Port	£18.95
Cass Head Alignment Kit	£7.50
6128 Keyboard Ext Lead	£7.95
464 Keyboard Ext Leads	£6.95
Amstrad MP2 Modulator	£28.95
Amstrad DDI Driv	£159.95
Citizen 1200 Printer	£149.95
FD1 2nd Drive (3")	£99.95
AMS30L Disc Box	£12.95
Monitor Stand	£15.95
464/664 64K Rampak	£44.95
Printer Cable 1mtr	£8.95
Ribbon DMP 2/2160/3160	£3.75
2 For £7.00 5 For	£16.25
Covers 464/6128 Col/M	£7.50
Cover DMP 2/2160	£4.50
Seal & Type 464/6128	£8.95
Amsoft/Maxell Disc	£2.65
5 For £12.50 10 For	£23.95
Mousemat	£4.95
Joystick Splinter	£7.95
Printer Cable 2mtr	£10.95
664/6128 Cass Lead	£3.50
Cassette Recorder	£18.95
Cassette recorder & Lead	£21.95

NEW GAMES ARE AVAILABLE ON DAY OF RELEASE: PLEASE PHONE FOR AVAILABILITY

Prices include Post & Packing in UK. Please send Cheques/PO's to:

O.J. SOFTWARE
273 MOSSY LEA ROAD, WRIGHTINGTON, WIGAN, LANCS WN6 9RN

MOST ORDERS ARE DESPATCHED BY RETURN
(OUT OF STOCK ITEMS USUALLY WITHIN ONE WEEK)
Write or phone (0257) 421915 for FREE LIST and LATEST RELEASES
OVERSEAS ORDERS: SOFTWARE ITEMS COSTING OVER £10 EACH
POST FREE, OTHERS ADD £1.00 EACH
* SPECIAL OFFER ALL SOFTWARE ORDERS OVER £30 FREE CALCULATOR *
Order by Access or Visa 24 hrs Answerphone

Only
£24.95
including VAT and p&p.

Save £5 on RRP of £29.95 when you order direct from Connect Software

MONEY MANAGER

Versions available for Amstrad PCWs and PC compatibles. Phone or write for details.

Amstrad CPC 464, 664 and 6128
(disc only)

Over 25,000 sold in UK alone

Financial management software for personal and/or small business use

Money Manager provides individuals, businesses and professional people with a simple yet powerful way of managing their financial activities. All transactions can be entered easily and then presented in a wide variety of reports, ranging from a detailed listing of expenditure for tax purposes to summaries showing, for example, how much money has been spent over the past twelve months on petrol or electricity. Reports can also be presented in graphical form as pie and bar charts.

The Money Manager package has over 25,000 users in the UK alone. It is the ideal program for people who find that traditional accountancy programs are too complicated, unweildy and time-consuming for their requirements.

- Any number of data files: Personal, Business, Accounts etc.
- 12 months per file, up to 100 entries (transactions) per month
- Move a file forward by a month at a time when required
- All options selected from the main menu
- Up to 9 user-defined accounts: Bank, Cash, Visa, Access etc.
- Up to 50 user-defined classes of income and expenditure
- A reference of up to 6 characters for each entry
- Your own descriptive text of 18 characters for each entry
- All the codes are displayed on screen whilst entering data
- Add, modify and delete existing entries at any time
- Quick insertion of standard entries and standing orders
- Entries can be sorted into date order automatically
- Single character 'mark' for even more selective reporting
- Reports showing each entry in a month or for whole year
- Reports may show classes merged into groups

- Spreadsheet type table showing class totals in each month
- Report showing class totals for each account
- Bar charts for up to 4 selected categories
- Pie charts of up to 10 selected 'slices'
- Report of monthly income, expenditure and cash-flow etc.
- Account statistics - monthly max, min, average, balance etc.
- Detailed Input and Output VAT reports
- Automatic calculation of VAT
- Simply ignore VAT features if they are not required
- Budget and cash-flow forcasts - may be updated
- Data search facility to find 'lost' items
- User-defined screen colours
- Comprehensive manual
- Two sets of sample data for practice and familiarisation
- Free telephone support for as long as you need it

Connect Software Ltd.

To receive your copy of Money Manager by return post phone us now with your credit card number, or write to us at the address below enclosing your cheque for £24.95

081 743 9792 8am-10pm, 7 days a week

Connect Software Ltd., 3 Flanchford Rd., London W12 9ND

VISA ACCESS AMERICAN EXPRESS

Mugs away!

In which a Gallant adventurer meets a few MUGs!

Welcome, traveller. Come thee inside and rest they weary bones for a spell, for tis written that thou shalt hear tales of derring do, and remote modemised intellectual games playing. Forsooth and Gadzooks!

'sno good, I can't keep that up for long. As a change from all the terrifically techie stuff we've been looking at over the past few issues, this month's masterpiece concerns MUGs. Now, lest you don't know what one of those is, or have it confused with a container for hot brown liquid, allow me to explain. A MUG is a Multi User Game. Assit - simple! In general terms, it's a game that is played over the phone lines, by modem, (how else??!) by sometimes vast numbers of people at any one time. And, dear reader, there are hordes of them around.

I propose to take a fairly deep look at one that I'm particularly fond of, which ought to give you a pretty good insight into the rest of them. One of the cheapest and easiest to access of these MUGs is SHADES, available on Prestel and Telecom Gold (and latterly on Microlink, but not any more, I'm afraid). Shades is a massive adventure game, set in a fantasy medieval realm, in which strange things can, and do, happen.

Players are encouraged to 'Role Play' (RP) a character in Shades, something we'll come to a bit later. The mechanics of the game are very simple. To begin with, an ID is issued - in common with almost all charged systems - and you, as a user, supply a password, and a character name. Let's say you decide to name your character Ferhud the Anoraxic. You may choose to use Ferhud as your password - a fairly logical choice, and since the ID is given to you numerically, not a bad one.

Once that's taken care of, you can enter the game. Inside Shades, what you see on your screen is more or less similar to a normal text-only adventure game, but there are some very important differences. All the usual commands are available to you - Move South, North, East, West, up, down, and so forth (usually shortened to the first letter of each - s,n,e,w,nw,u,d,in, and so on) plus Look, Examine, Get, Take, Put and all of the others that you'll be familiar with.

There are also spells, but, as a novice, (for that is what you will be) you don't have the power to make many of them work. Some spells, if you get them wrong (a random occurrence) cause you to be killed, which means you have to enter the game again. But we're jumping ahead. As you go through the Shades realm, you come across pieces of Treasure ('T' in Shades parlance) which you may pick up. Simple? Not necessarilly. Having got the T, you have do do something with it, a little something called 'kinging'.

Now, all this involves is taking the object (whose value can be anything from 10 to many times that) to Skratch's

Castle, and dropping it in the Mad King's Room. Then, and only then, do you get credited with the points the T is worth. 'Simpler than I thought' I hear you cry. Nope, not yet it isn't.

You see, while you're rushing around solving puzzles and collecting T, there are other players doing exactly the same. And they might very well beat you to the thing you're after. In which case you might decide to have a fight with another player. No problem, you simply 'Kill <player> <Weapon> (yes, you will find weapons scattered around - swords, spikes, axes, even a rat!!). If you're lucky, your opponent will not be well versed in the art of 'Stealing' weapons, in which case you might very well win.

If you are not so lucky (and this is more likely) you'll discover your wep (more Shades parlance) has been stolen from you and used against you. So you will have to try to STEAL it back, and RETALIATE with it. Whichever one of you is successful finally kills the other, and is awarded some of his/her points. The loser, depending on whether he started the fight or not, loses a rather greater number of points.

All of this is a little different from the normal single player adventures you'll have seen on your CPC - you actually interract with other, real live players, each of whom has his own way of gaining points. The killers in the game can whittle your score down terrifically, even if you FLEE OUT from a fight (which reduces both your points, and because you'll have taken at least one blow, your stamina).

Once your stamina begins to drain, then you need to replenish it. In the parts of the Shades realm close to where you join the game, a Strange Little Girl wanders around. Touching or Grabbing her tops your stamina up to your limit again (useful tip number one!)

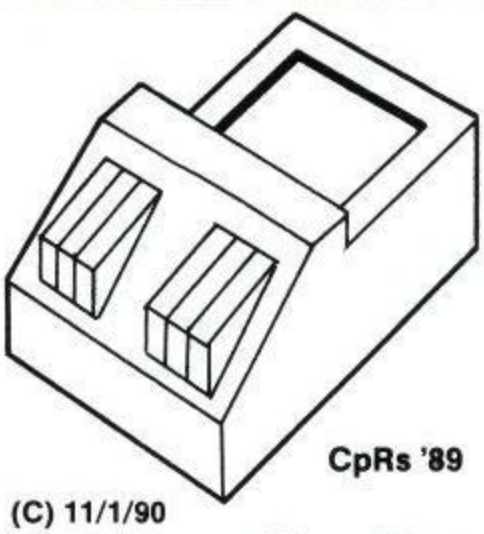
As you gain more points, your level in the game rises. You start as novice, and move up through the levels to Wizard or Witch. To get that far, you need to amass 200,000 points. If I tell you that much of the T that you will find at first has a value less than 100, you'll see that this is no mean feat, and some of the T is very hard to find. Even worse, much of it is guarded (sort of) by MOBILES - game generated creatures, many of which, as your points total gets higher, will attack you for no reason.

You can, of course, fight them to the death, and gain points for killing them. Be warned, however, some of them have a stamina level vastly greater than yours will be, and unless the Strange Little Girl arrives beside you at the right time, you may be forced to FLEE OUT, losing anything you may be carrying with you, and points into the bargain!

That, as you might say, is a quick overview of the game. There's much more to it - role playing, and a famous command 'EMOTE'. Oh boy, can this cause you trouble. One player (who must remain anonymous, or else next time I'm playing she'll kill me for certain!) has gathered four Shades husbands via this command - I'll leave its effects up to your imagination!

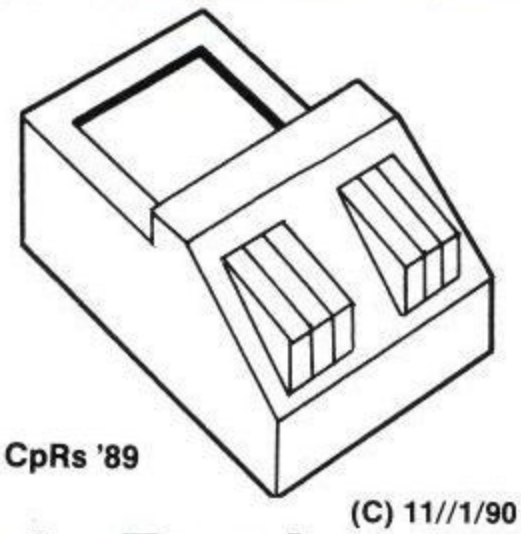
There are areas in which players may gather together to chat, in safety from attacks, there's a jail, some terrific puzzles, and, quite often, Shades Meets, where you can go (in the flesh) to meet other Shadists and swap tales, while enjoying a drink or two.

Like all MUGs, Shades can be very entertaining, and unlike any other type of game you will ever play. All you need is your CPC, modem, and some software, and you, too, can take on a role and play it out. If you do decide to try it out, look out for Koppatop, and say Hi!. If I'm in a good mood, I won't kill you!! On the other hand...



(C) 11/1/90

CpRs Design Technology
70 Potton Road
Eynesbury-Hardwicke
St. Neots
Cambs
PE19 2NN
Tel no. 0480 - 76038



(C) 11//1/90

CpRs Designs 'Black-Box'

Entertainment Hardware

The CpRs 'Black-Box' is the essential add-on for all serious 'Games Players' on the Amstrad CPC range.

Check out these features...

Ports for Player 1 & 2 (CPC only)

Power Indicator (Amiga only)

External switch sockets allowing further expansion of control options for your machine.

Built-in foot switches

Amstrad CPC Version Only £24.99 Inc P&P (UK)

Commodore Amiga 500 Version Only £24.99 Inc P&P (UK)

Cheques Payable to: Mr C.J. Price

Please Allow Up To 28 Days For Delivery

BLITZ BASIC COMPILER

At last a full compiler for Amstrad Locomotive BASIC

Have you ever wanted to produce machine code programs but never had the time? Well now you can with the comprehensive, high performance, simple to use, Blitz BASIC compiler.

With speed increases of up to 20 times Blitz can turn your slow running BASIC program into a professional saleable product. Blitz supports all standard graphic, sound and interrupt commands as well as supporting RSX's so that sprite commands can be linked in.

For scientific use Blitz supports real numbers and all the usual scientific functions such as SIN, COS, TAN. With Blitz you can now use Locomotive BASIC to solve some REAL TIME problems.

Blitz is the fastest and most comprehensive BASIC compiler ever seen on the Amstrad CPC and will revolutionize your programs.

★ All runtime keywords
★ Integer / Real / String
★ Stand alone code
★ RSX's supported
★ Many compiler options
★ Detailed manual
★ Any size programs
★ Fast loading code
★ Compact code
★ Few restrictions
★ Protect your ideas
★ Backups allowed

Because the Blitz is a complex program it requires the Bankram to run and therefore works only on the CPC 6128. The code produced will run on any of the 464 / 664 / 6128 CPC computers.

Blitz BASIC Compiler - **£19.95** incl P&P, Outside UK add £1.00

Cheques or Postal orders Payable to SPM Software

SPM SOFTWARE,
32a Albert Street,
Seaham, Co Durham, SR7 7LJ.

SPRITES ALIVE

THE ULTIMATE GAMES DESIGNING SYSTEM

IF YOU WANT TO WRITE PROFESSIONAL LOOKING GAMES, THEN LOOK NO FURTHER. SPRITES ALIVE IS THE MOST ADVANCED AND POWERFUL GAMES DESIGNING SYSTEM EVER TO BE WRITTEN FOR THE AMSTRAD CPC COMPUTER.

BASIC VERSION £22.95

THE BASIC VERSION OF SPRITES ALIVE GIVES YOU AN EXTRA 70 COMMANDS WHICH CAN BE USED WITHIN BASIC PROGRAMS.

COMPILER VERSION £29.95

THE COMPILER VERSION OF SPRITES ALIVE HAS ALL THE FEATURES OF THE BASIC VERSION, BUT ALSO INCLUDES THE COMPILER, WHICH WILL ALLOW YOUR PROGRAMS TO RUN UP TO 16 TIMES FASTER THAN AN EQUIVALENT PROGRAM WRITTEN USING THE BASIC VERSION OF SPRITES ALIVE.

BOTH PROGRAMS HAVE THE FOLLOWING FEATURES

★ USES SIMPLE BASIC COMMANDS
★ WORKS IN MODE 0 MAD MODE 1
★ SMOOTH PIXEL BY PIXEL MOVEMENT
★ TRUE COLLISION DETECTION
★ COMPREHENSIVE 75 PAGE MANUAL
★ SPRITES SIZES UP TO 32 x 32
★ 23K PROGRAM SPACE FREE
★ NO MACHINE CODE REQUIRED
★ JOYSTICK/KEYBOARD CONTROL
★ AUTOMATIC MISSILE COMMANDS
★ AUTOMATIC DIRECTION ANIMATION
★ AUTOMATIC MAZE MODES
★ 64 SUPER SMOOTH SPRITES
★ EXCELLENT DRAWING DESIGNER
★ 70 COMMANDS ADDED TO BASIC
★ 6 BASIC DEMONSTRATION PROGRAMS

COMPILER FEATURES

★ RUNS UP TO 16 TIMES FASTER THAN BASIC*
★ RUNS UP TO 10 TIMES FASTER THAN PANDORA*
★ SIMPLE TO USE
★ NO KNOWLEDGE OF MACHINE CODE NEEDED
★ 2 ADDITIONAL COMPILER DEMONSTRATIONS

WE HAVE HAD A NUMBER OF LETTERS FROM EXISTING COMPILER OWNERS, AND WITH THEIR PERMISSION WE ARE PRINTING EXTRACTS FROM THEIR LETTERS

MR S, DURHAM *"THE SPRITES COMPILER IS ABSOLUTELY BRILLIANT", "VERY EASY TO USE"*

MR W, SUSSEX *"THE SPRITES COMPILER PACKAGE IS IN MY OPINION ONE OF THE BEST PACKAGES THAT I HAVE EVER USED AND NOW ENABLES ME TO WRITE MY OWN GAMES WITH ABSOLUTE EASE", " AN INVALUABLE GAMES WRITING TOOL"*

IF YOU CAN PROGRAM IN BASIC YOU CAN USE SPRITES ALIVE

EXISTING OWNERS OF SPRITES ALIVE BASIC CAN UPGRADE TO THE COMPILER VERSION BY SENDING US THEIR SYSTEM DISC AND A CHEQUE FOR £7.50

BOTH PROGRAMS ONLY SUITABLE FOR CPC6128 OR CPC464/664 WITH 64k MEMORY EXPANSION, AND SUPPLIED ON DISC ONLY

PLEASE MAKE CHEQUES/POSTAL ORDERS PAYABLE TO GLENCO SOFTWARE

* TESTED USING IDENTICAL SORT ROUTINES

GLENCO SOFTWARE, DEPT ACU,
15 ALFORD LANE, WHITEHOUSE FARM,
STOCKTON ON TEES, CLEVELAND, TS19 0QP
TELEPHONE: (0642) 606358

SCHOOL SOFTWARE LTD.

FREE Catalogue Amstrad CPC, PCW, PC1512, ATARI ST, Commodore, BBC, IBM PC, MSDOS.
Additional Dealers Wanted. 24 hour Visa/Access Hotline.
Ring UK 010353-6149477 (Office Hours) (Irl. 061-45399).
Direct UK 010353-6145399 (24 hr)

PLAYSCHOOL (age 3–8). IBM PC.
Five of the best programs for the pre-school and young children.

THREE BEARS (age 5–10). Reading skills and imaginative thought.
"Any parent or teacher looking for an exciting and stimulating package for children should take a close look at this program." Computing with the Amstrad.
"As time goes on we can but hope for more and more of the same." Amstrad Action.
AMSTRAD CPC, IBM PC

MAXI-MATHS (age 9–15). Amstrad PC, IBM PC, Amstrad CPC.
1. Triangles. 2. Angles. 3. Sin Cos Tan. 4. Rectangles. 5. Circles.
Provides a very stimulating learning environment.
Also basic Algebra and full GCSE revision course.

MAGIC MATHS (age 4–8). CBM 64, IBM PC, Amstrad CPC, PCW, PC, ATARI ST
Addition and Subtraction. "A serious challenger to similar BBC programs and a good example of its type." PTM (UK).
5 Programs. Number of skills. Mathematical concepts, graphic games.

MATHS MANIA (age 8–12). CBM 64, IBM PC, Amstrad CPC, PCW, PC, ATARI ST
Multiplication and Division. "It appeals to the age group. My son has been sneaking downstairs before breakfast to play." BBC CEEFAX.
Six outstanding programs.

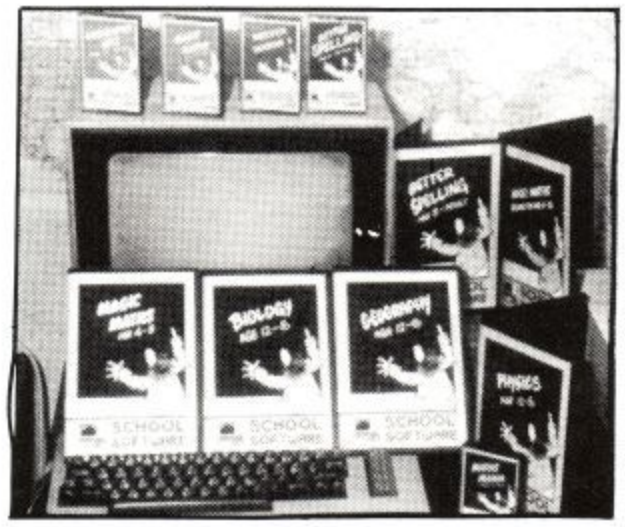
BETTER SPELLING (age 8–adult). All Amstrads, CBM 64, BBC, IBM PC.
"Well organised lessons." "A proper course with approaches to spelling problems with specific exercises." E&T (UK).

BETTER MATHS (age 12–16). All Amstrads, CMB 64, IBM PC.
Rated in the top five in an educational survey.
Four major computer tuition courses for GCSE.

CHEMISTRY (age 12–16). CBM 64, BBC, IBM PC, All Amstrads CPC, PCW, PC.
Very ambitious in terms of the range of topics. High standard of questions.
Specially prepared for the new GCSE examinations.

BIOLOGY (age 12–16). All Amstrads, CMB 64, BBC, IBM PC.
"A good excuse to play with your computer and have fun while revising." Your Computer.
Specially prepared for the new GCSE examinations.

MAPWORK QUIZ (9–adult). Amstrad CPC, CBM 64, BBC.
Excellent graphics and sound in this program covering most aspects of the Geography of Britain and Ireland. Great fun for all the family.



PHYSICS (age 12–16). CBM 64, Amstrad CPC, PCW & PC 1512, IBM.
"A colourful way of revising for GCSE/O-Level examination." Your Computer.
Specially prepared for the new GCSE examinations.

PHYSICS ELECTRONICS 2. For the advanced student.
Capacitors, electromagnetism, alternating current, digital electronics, microprocessors. IBM PC.

GEOGRAPHY (age 13–17). Amstrad CPC & CBM 64.
Comprehensive coverage of aspects of geography.

BUSINESS DYNAMICS. PC 1512, MSDOS, IBM PC.
Superb business simulation for student or adult. Be the boss, run a company and learn while you relax. £19.95.
"There's plenty of this kind of package to interest the learner for the price; it's excellent value for money." APC.

SCHOOL ADMINISTRATION SYSTEM. MSDOS Compatibles, Amstrad PC, IBM PC.
Maintain student records, exam results, issue school reports, print labels, DES. Reports £149.00.

ORDER DIRECT TO: School Software Ltd., Tait Business Centre, Dominic St., Limerick, Ireland.
Tel: (UK) 010353-6145399 (UK) 010353-6149477.
Fax Orders (010-353-61-44315)

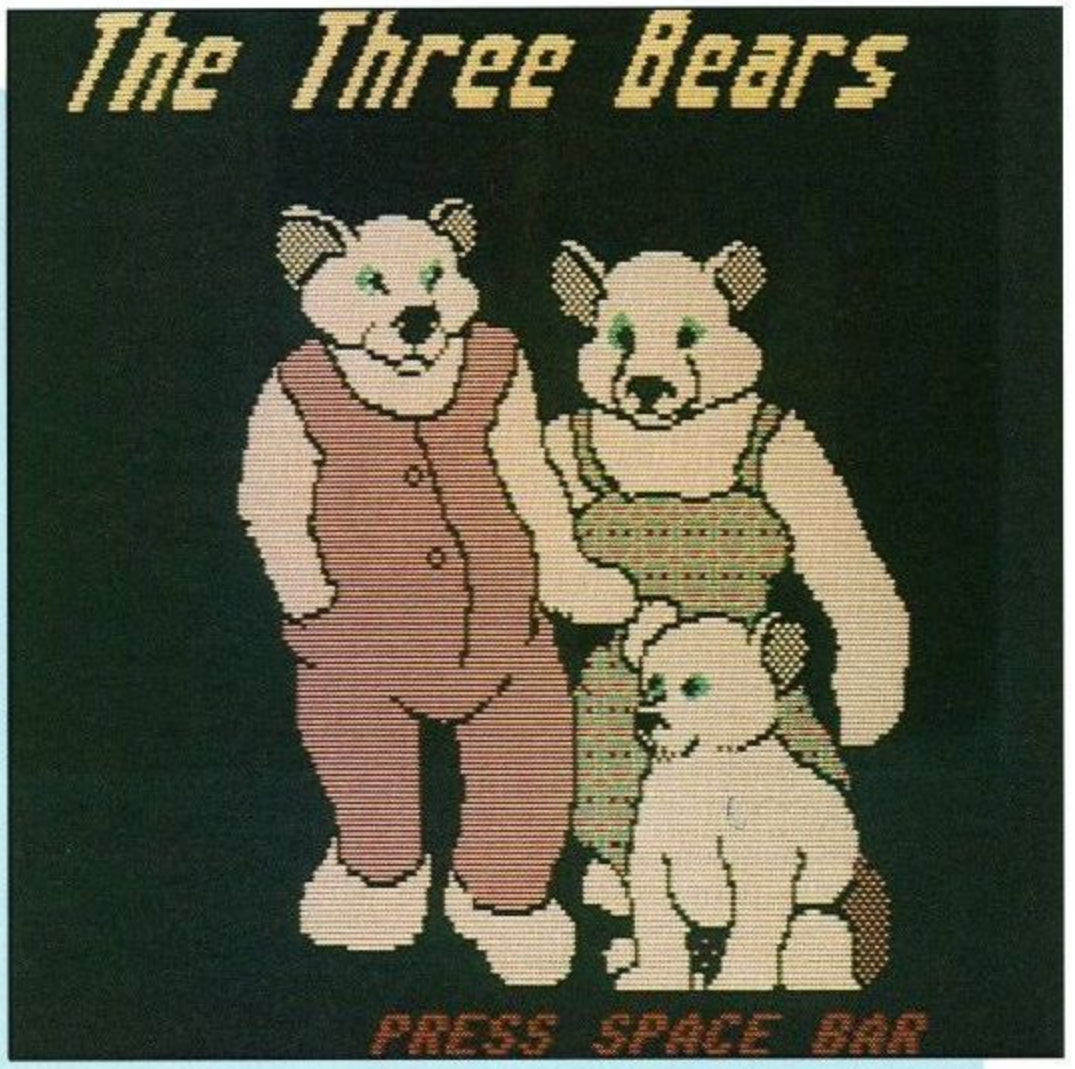
PC DISCS £22.95 (5.25", 3.5"). CASSETTES £10.95 (£1.00 P&P).
PCW & CPC DISCS £16.95 (£1.00 P&P). CATALOGUE AND PROGRAMS AVAILABLE FROM ALL GOOD DEALERS IN THE UK.

☐ **Access/Mastercard/Eurocard/Barclaycard/Visa**

☐ **Cheque/PO made payable to Easibusiness Systems**

SCHOOL'S OUT

If you go down to the woods today . . . say hello to Doctor Dorn and the three Bears.



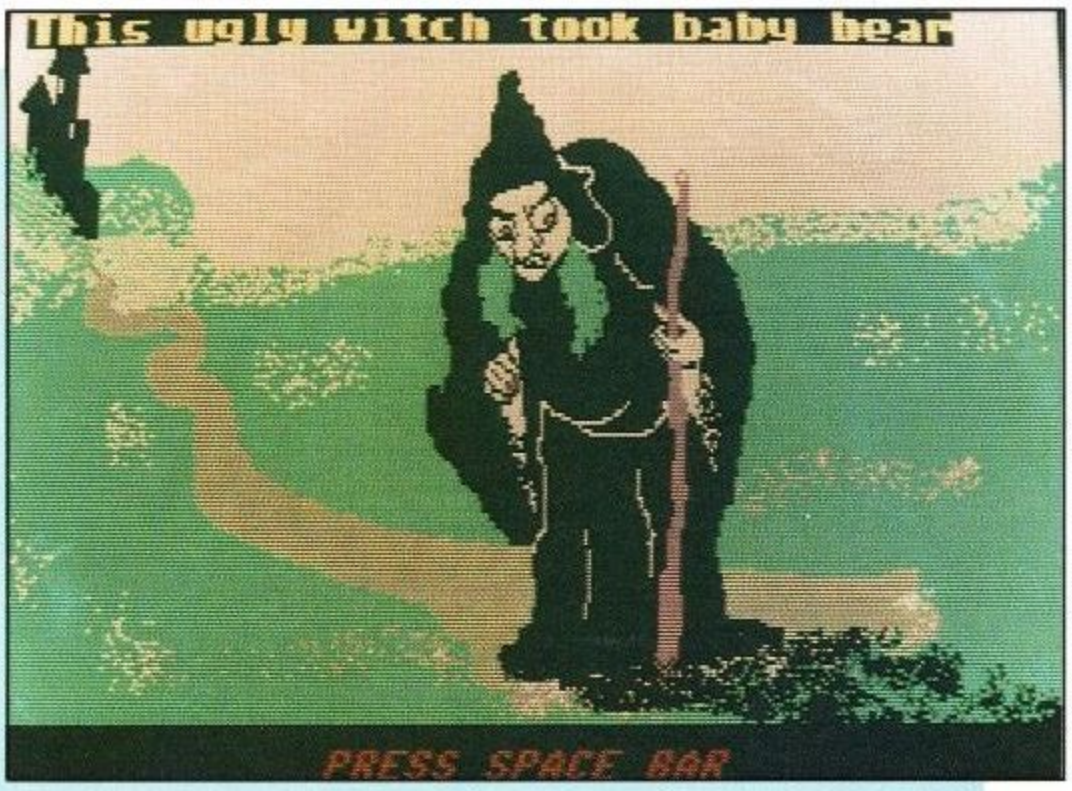
It had been my intention to concentrate on ARC education this month, but, for reasons which will become apparent, it is not to be. ARC had provided a single disc with the full range of its programs for us to peruse and check out - called the MASTER DISC. Fair enough you might say. However, for one reason or another, the disc is corrupt, hence there have been great difficulties in getting access to the programs as a whole.

One or two have presented themselves before summarily crashing - due in no way to the author, but to the corruption on the discs. So, to be fair, ARC will have to wait until later.

Instead, we shall be examining School Software's range of products.

School Software are an Irish-based company who have specialised in 'educational' computing for some time now. They support not only the CPC, but a much wider range of machines, with programs that are intended for school administration as well as what might be called 'proper' educational stuff.

SS' range of software for the CPC is almost entirely written in BASIC, a factor that has been the cause of some criticism from some observers. This writer, however, does not believe that, in this case, it makes an appreciable difference to the software's usability. As is always the case, the content and presentation of the program is most important, and School seem to have managed to get things just about right in these respects.



Goldilocks??

School's latest offering for the CPC is the Three Bears, a junior adventure game. In many ways, it is structured similarly to a full blown adventure, but has had many of the complexities of that genre removed to suit the younger generation. In essence, then, it becomes a computerised 'choice story-book' of the type you will doubtless have come across.

Once the initial loads have taken place (which amounts to a minute or so to get through) and the child has convinced the program that he or she is/is not using a 6218 or 464 (whatever hap-



pened to the 664?? hehehe!), we're into the program proper. I've got to say at this point that I was a little concerned about the blank screens while certain bits of code were loaded. There were times when the drive stopped whirring, and the screen did nothing. A simple message onscreen would have been nice, and might prevent concerned users from resetting their machines.

On with the plot! The child takes the 'Goldilocks' role (not explicitly, which is just as well if it's a little boy!), and is asked to help rescue the baby bear from the wicked old witch. I, like both of my testers, who are perhaps a little old for this program, was very impressed at the thought that appears to have gone into the language used in the program's screens. Sentences are very short, snappy, and appropriate, and use words that will easily be understood by the younger child, especially with a parent there to help.

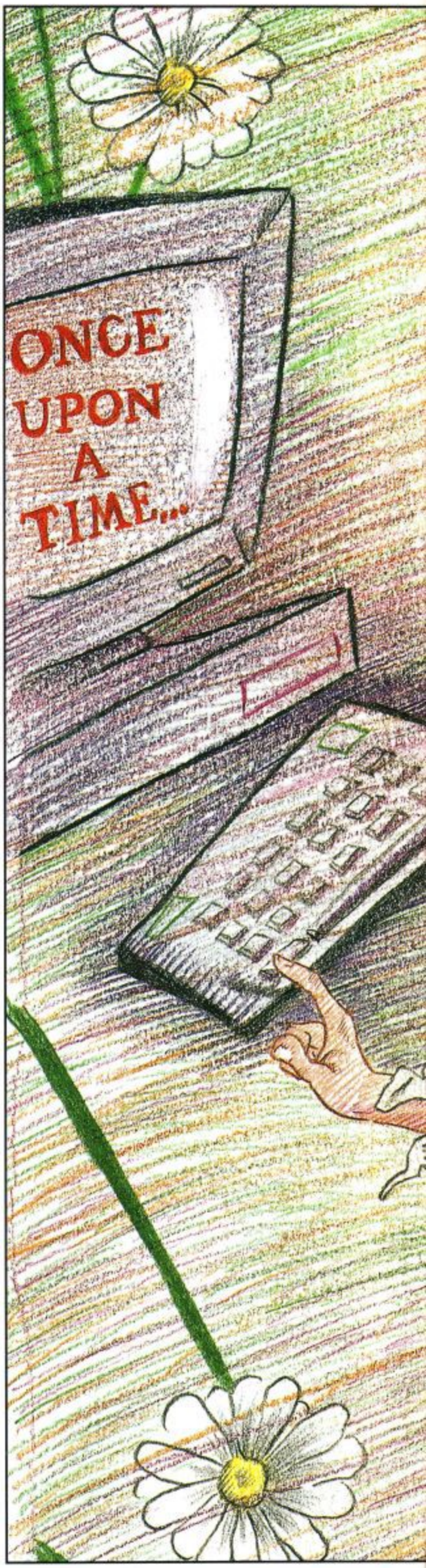


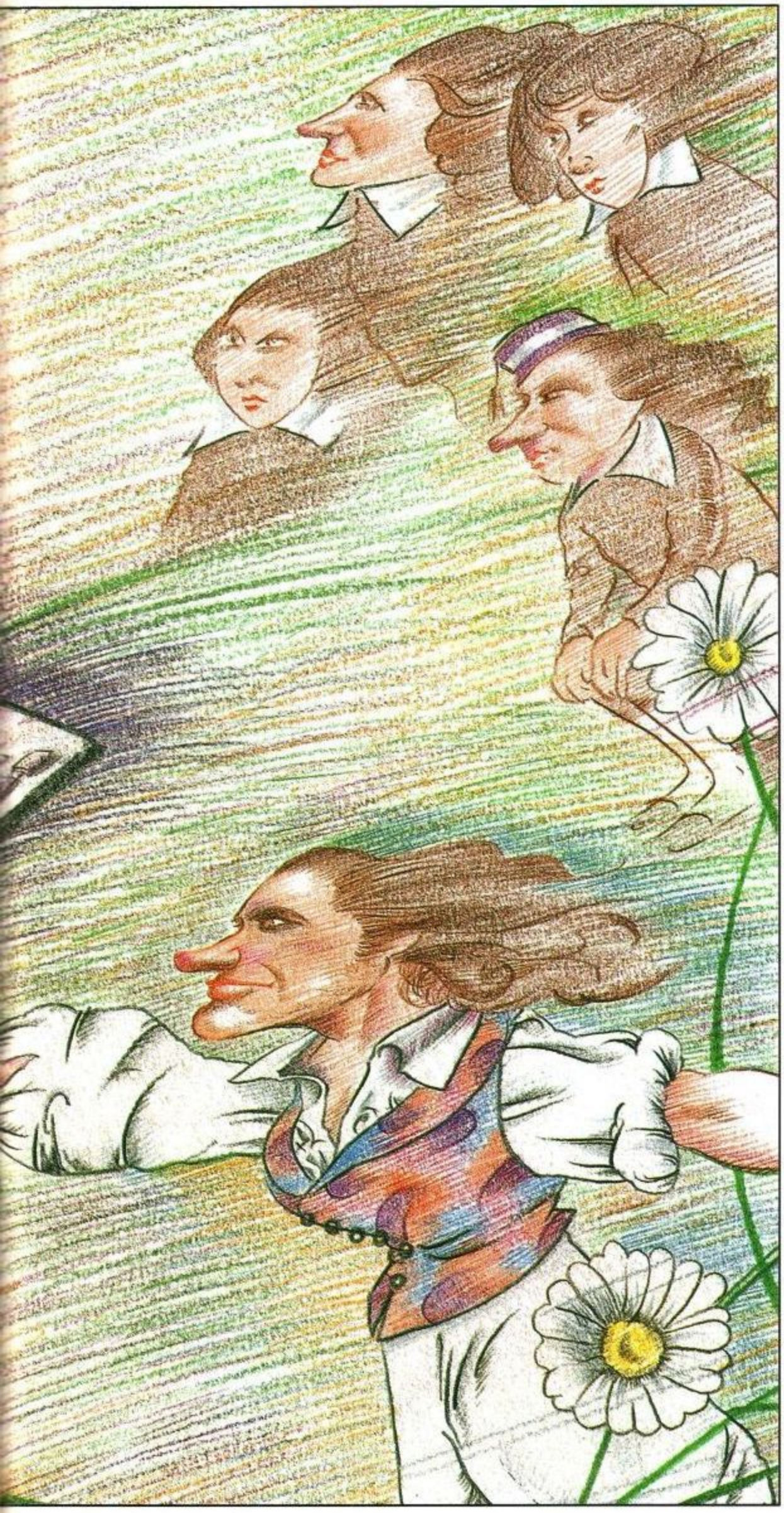
Participation is guaranteed - there's nothing better for holding attention - by the child constantly being asked to confirm whether or not she wants to help, enter the cottage, and what have you. This technique tends to draw the child into the story, to the point where the computer becomes transparent to her, and is just a means of communicating with the characters in the game.

Concepts are kept to manageable levels, which is pleasing. By this, I mean that nowhere do ideas that might be outside a child's experience get used. The whole structure of the Three Bears is kept within the limits of what a child of early school years might reasonably be expected to have seen and experienced in other books. Again, this tends to have the effect of endearing the program to its user, which, by a knock-on effect, sows the seeds of a willingness to use a computer for learning purposes later in a young life.

Now for a few of the technicalities! The art work for the graphic screens MUST be praised. It's clear and well drawn, coming as close to cartoon quality as you'll get on a CPC. Colours are kept to a minimum as in all the best cartoons, or so an art teacher colleague of mine would have me believe - and, because of this, look striking, rather than restful. Again, they have immediate attraction for children, and become talking points for them with their parents.

This, as a concept in computer based learning, is something that cannot be stressed enough. In many respects,





JULES SHARP

the computer and software is often best used as a stimulus for conversation, which in turn brings about a growth in vocabulary. You may recall that, in an earlier article, I suggested that a good deal of parental involvement in the process of using educational software was a good idea. I'd like to reinforce that concept here.

I found that, if I sat down to play through the Three Bears, I could read and see everything, and be out of the other side in less than 15 minutes. A child in the company of a parent who will use the pictures and text as stimuli will not only take many times longer than this to finish the game, but will also revisit it even when the puzzles are completed and the game beaten.

This is not so much a mark of a good game (although in this case it is certainly that!) but is also a mark of a caring parent. Lest anyone reading this think I'm preaching.... I am! I feel it's very important that in the learning situation that we're discussing, parents spend as much time as they possibly can chatting about the experiences that the child is having, and helping them further not just vocabulary, but also their understanding of the world around them - as exemplified by the game.

Can bears really talk? Do witches really exist? Have you ever seen a cottage like that? What kind of cottage do you think it is? What do you think it looks like inside? Do witches look like that, or do they look pretty to fool you? Should you try to rescue a friend or go for help? Who is it asking you to help? What do you do when someone you don't know asks you to go with them?

These are all questions that the first couple of screen shots might prompt a parent to ask and discuss. I'm sure I need not elucidate further on where such discussions might go!!

In short, then, the Three Bears, although not state of the art programming, represents a very good source for broadening a child's horizons, when used properly. If a child is just plonked in front of it, then, as a parent, you've wasted your money. If you spend some time with the child, you'll have to work, yes, but you'll see a richer child for the money you've spent.

I have to say that I'm very much taken with this program, and can recommend it to caring parents everywhere!

School Software, Meadowvale Estate, Raheen, Limerick, Ireland.
tel: 010 353 61 45399
Price 13.95

SOFT OPTIONS

50p SURCHARGE FOR ACCESS & VISA ORDERS

SOFT OPTIONS
6 HOPE STREET
HANLEY
STOKE ON TRENT
TEL: 0782 204269

SALE SALE SALE SALE SALE SALE

AMSTRAD SPECIALS

THE UNTOUCHABLES £4.99
POWERDRIFT £2.99
FIGHTING SOCCER ...£3.99
BATMAN CAPED CRUS. £3.99
NINJA WARRIORS £4.99
PETER BEARDSLEY ...£3.99
WEC LE MANS £3.99
DYNAMITE DUX £3.99
CABAL £4.99
OP THUNDERBOLT ...£3.99
ALTERED BEAST £3.99
GHOSTS & GOBLINS £2.99
RED HEAT £3.99
RUN THE GAUNTLET £3.99
SUPER HANG ON £2.99
BUGGY BOY £2.99
XENON £3.99
TUSKER £3.99
MYTH £3.99
STREET FIGHTER £3.99
PAPERBOY £2.99
BIONIC COMMANDO £2.99
RENEGADE 3 .....£3.99
PACLAND £3.99
THE RUNNING MAN ...£3.99
1943 .....£2.99
TRACKSUIT MANAGER £4.99

AMSTRAD SPECIALS

ROAD BLASTERS £2.99
BOBS FULL HOUSE ...£2.99
THE CYCLES £6.99
WONDER BOY £2.99
MATCH DAY £2.99
GUNSMOKE £2.99
DOMINATOR £2.99
AFTERBURNER £2.99
R TYPE £3.99
ARTURA £1.99
BARBARIAN £2.99
EMPIRE STRIKES BACK £3.99
EVENING STAR £2.99
GFL FOOTBALL £2.99
HEAD OVER HEELS ...£2.99
INGRIDS BACK £3.99
HUMAN KILLING MACHINE £1.99
IK+ £2.99
KARNOV £2.99
KNIGHTMARE £2.99
LORDS OF MIDNIGHT £2.99
MEGA APOCALYPSE £1.99
NEMESIS FINAL CHALL£2.99
MINDER £1.99
MIAMI VICE £2.99
NEW ZEALAND STORY £5.99
OPERATION WOLF £4.99
OUTRUN £5.99

AMSTRAD SPECIALS

PASSING SHOT £1.99
PSYCHO PIGS UXB ...£2.99
HAMMER FIST £6.99
E MOTION £6.99
BLOODWYCH £6.99
VENDETTA £6.99
DAN DARE 3 .....£6.99
SLY SPY £6.99
ROBOCOP £6.99
RAINBOW ISLAND £6.99
PREDATOR £2.99
SCOOBY DOO £1.99
SKATE CRAZY £1.99
STAR COMMAND 75p
SAINT & GREAVSIE ...£1.99
SUPER SPRINT £2.99
SUPER WONDERBOY £4.99
SUPER PIPELINE 2 .....50p
SUPER SCRAMBLE SIM £2.99
RALLY CROSS CHALL £2.99
FUN SCHOOL 2 UNDER 6 .....£6.75
FUN SCHOOL 2 6-8 ....£6.75
FUN SCHOOL 2 Over 8 .....£6.75
X OUT £6.90
TEST DRIVE 2 .....£6.90
CYBERBALL £6.90
STUNT CAR RACER ...£6.90
KICK OFF 2 .....£6.90

AMSTRAD SPECIALS

Split Personalities £1.99
Soul Of A Robot 99p
Shogun £1.99
DT's Olympic Challenge £3.99
Survivor £1.99
Solomans Key £1.99
Side Arms £2.99
Thunderblade £3.99
Tau ceti £1.99
The Deep £2.99
Trivia £2.99
Top Gun £2.99
Thunderbirds £3.99
Tubaruba £1.99
Tiger Road £2.99
Wizball £2.99
Warlord 50p
Rocky Horror Show ...50p
Zorro £1.99
Vixen £1.99
Venom Strikes Back £2.99
Xevious £1.99
Vindicators £2.99
View To A Kill £2.99
W. Class Leaderboard £2.99
Desert Rats £6.99
Arnhem £6.99
Vulcan £6.99
Ancient Battles £6.99

AMSTRAD COMPILATIONS

MEGA MIX
Dragon Ninja, Operation Wolf, Barbarian 2, Real Ghostbusters.
NOW ONLY £7.99
100% DYNAMITE
Last Ninja 2, Double Dragon, Afterburner, Wec Le Mans
NOW ONLY £7.99
SPECIAL ACTION
Captain Blood, Driller, Vindicator, S.D.I., D Thompsons Olympic Chall.
REDUCED TO £4.99
KONAMI COLLECTION
Mikie, Jackal, Green Beret, Jailbreak, Ping Pong, Yie Ar Kung Fu 1 and 2, Nemesis, Shaolins Road, Hypersports
REDUCED TO £4.99

AMSTRAD COMPILATIONS

MAG 7
Head Over Heels, Cobra, Short Circuit, Frankie, Arkanoid, Wizball, Great Escape, Yie Ar Kung Fu
NOW ONLY £4.99
WE ARE CHAMPS
Super Sprint, Renegade, Rampage, IK+, Barbarian
NOW ONLY £4.99
LEADERBOARD PAR 3
Leaderboard, World Class L'Board Tourn.
ALL 3 GAMES ONLY £7.99
THE IN CROWD
Combat School, Gryzor, Barbarian, Crazy Cars, Predator, Platoon, Karnov, Target Renegade.
A CLASSIC AT ONLY £7.99
THE BIZ
Double Dragon, Op. Wolf, R-Type, Batman Caped Crusader
NOW ONLY £7.99

SALE TIME AT SOFT OPTIONS - CAN YOU AFFORD TO MISS THESE.
ALL ORDERS SENT 1st CLASS POST, P&P UNDER £5 IS 75p, OVER £5 P&P IS FREE
IN STOCK ITEMS DESPATCHED BY RETURN

SALE SALE SALE SALE SALE SALE

AMSTRAD COMPILATIONS

SUPREME CHALLENGE SOCCER
Football Manager, World Champions, Peter Beardsly's International Football, Peter Shilton's Handball Maradona Soccer Supremo
ONLY £4.99

GAME SET AND MATCH 2
Track and Field, Ian Bothams Test Match, Basket Master, Super Hang On, Match Day II, Nick Faldo Open Match Day 2 Championship Sprint, Steve Davies Snooker
ONLY £7.99

10 GREAT GAMES 3
10th Frame, Firelord, Rana Rama, Rocco Fighter Pilot, Leaderboard City Slicker Impossiball, Dragontorc, Survivor
ONLY £5.99

AMSTRAD DISCS

R Type £5.99
Scooby Doo £1.99
Compendium £3.99
Afterburner £4.99
Fun School 2 under 6 .....£9.99
Fun School 2 6-8 ...£9.99
Fun School 2 over 8 £9.99
Arnhem £10.99
Vulcan £10.99
Desert Rats £10.99
Ancient Battles ...£10.99
Real Ghostbusters £5.99
Kabal £6.99
Typhoon £6.99
Rambo 3 .....£5.99
Karnov £4.99
Red Heat £5.99
Salamander £5.99
Beach Volley £5.99
The Vindicator £5.99
Victory Road £5.99
Batman The Movie £7.99
PHM Pegasus £9.99
New Zealand Story £7.99
Op Thunderbolt ...£7.99
Run The Gauntlet £6.99
Dragon Ninja £6.99
Myth £9.99
Robo Cop £7.99

AMSTRAD EXTRAS

JOYSTICKS
Quickjoy Junior ...£7.99
Quickjoy 2 Turbo £9.99
Quickshot 2 Turbo £11.99
Quickjoy Wizmaster £12.99
Quickjoy Superboard £16.99
Navigator £12.99
Quickjoy Jetfighter £14.99
Cheetah 125+ £7.99

AMSTRAD'S OWN JOYSTICK "JY2"
RRP ~~£14.95~~
OUR PRICE £5.99
WHILE STOCKS LAST

LEADS
Joystick Splitter ...£2.99
Cassette Leads £5.99

AMSTRAD DISC BOX
Holds 10 Discs
RRP ~~£9.99~~
OUR PRICE £3.99

Amsof CF2's Box of 10 .....£17.99

GAMES DISCS! Sold as blanks few only lets at the old price of 10 for **£14.99**
(Not many titles but still excellent value)

Please send me the following titles: (ACU08)

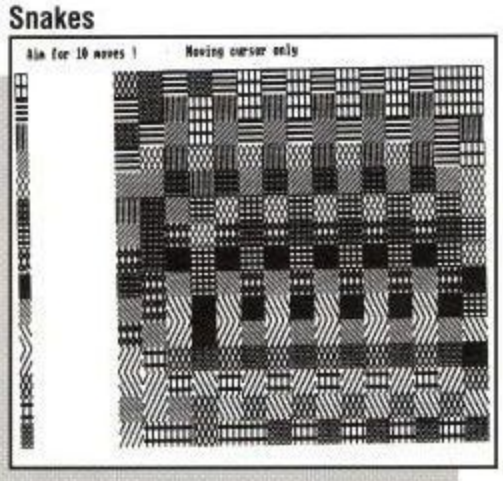
Title	Cass or Disk		Amount
		P & P (if applicable)	
		Total Amount	

Name .....
Address .....
.....
.....
Telephone No .....

Brain Teasers

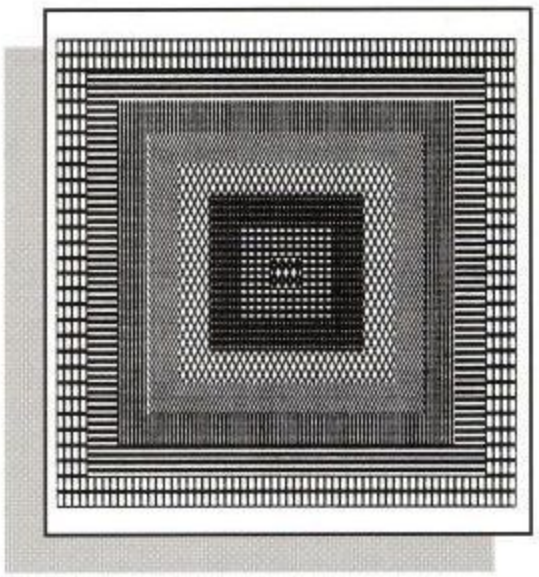
Yvonne Taylor shows you how to escape from it all with a maddening suite of puzzles from HTB Computers Ltd.

Snakes



All computer users need to relax now and then. Games provide the perfect outlet for all those tensions that have built up during a hard day's work. Some may head straight for a mega-adventure or a shoot-em-up space battle. Those who prefer a more cerebral form of entertainment will no doubt throw up their hands in horror at the mere thought. Bashing monsters and zapping the Klingons require good hand-to-eye co-ordination and fast thinking, which not all of us have. For those who like a good old-fashioned brain teaser, Pattern Puzzles are just the thing. The suite of five puzzles can be worked on at snail's pace if you choose.

The puzzles are for users of the Amstrad CPC range fitted with disc drive and colour display. The colour display is all-important because this is what the puzzles rely on to work. The puzzles are based loosely on a commonplace children's toy. You probably had one or used one: a plastic frame containing numbered or lettered tiles, which could be moved round till they



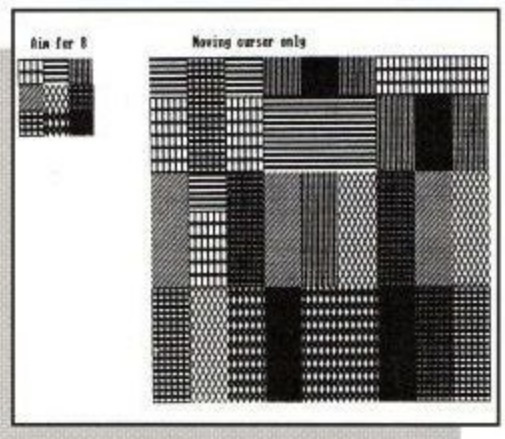
Boggler

were in order. It only took a few tries to get the hang of the toy. Things were made much easier because there was always a free space in the frame. Pattern Puzzles, however, do not have that free space and they are not that easy.

There are three basic layouts inside the "frame" of the puzzles. First, there is the basic layout, where different colours are arranged in rows across the screen. In the simple layout, there are square blocks of colour. The third layout has a loops arrangement, where colours are arranged in concentric squares. The five puzzles; Patterns, Rubicana, Boggler, Snakes and Megamind, use one or more of these arrangements. For example, Boggler can use the simple layout or the loops arrangement.

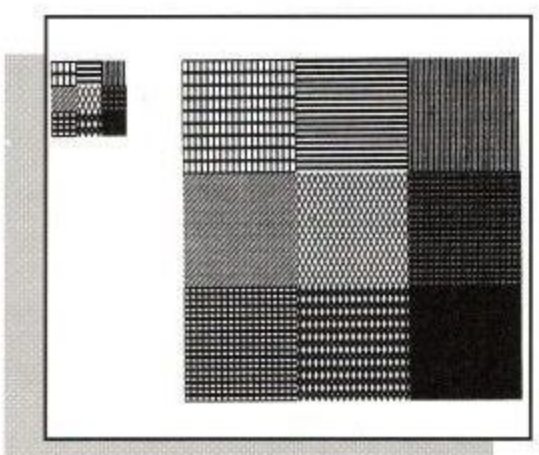
Users can attack the puzzles in four different ways. First, there is the basic layout. You can set your own problem by manipulating a square and then working back to its original state. This is much the best way to start. It will show you how to use the manipulation tools available and get your brain into gear for the more complex thinking later. You can ask the computer to set the puzzle by giving it the number of random moves to make to jumble up the original square. These jumbled squares can be saved if you choose. The manual suggests they be used to form Challenge entries. Players could compete to solve them in the least number of moves. The computer also supplies Competition squares. These have been pre-jumbled but there is no saved solution as there is with the Challenge squares.

When you are working on a puzzle, the screen will show an illustration in the corner. This tells you what colours are supposed to end where. This is all the help you will get, so make the most of it. "Tiles" within the puzzle are picked up with a cursor and moved to where you want to place them. This is where your trouble will start. There is no spare space here. If you move a tile one space to the left, the whole row will move one space to the left. The first tile will become the last in the row. There is also complete wrap-around for columns. By the time you arrive at Megamind, you will have learned all the available forms of square manipulation. These include simple left or right movements, block rotations clockwise or anti-clockwise and up or down snaking movements.



Rubicana

Pattern Puzzles is not something you will grow tired of in five minutes. It will be with you for years, if you keep your sanity for that long! It has two advantages: you can set your own puzzles or the computer can set them at random. The chances of seeing the same one twice are practically nil. The puzzles will remain as fresh and as annoying as the first time you tried them.



Patterns

Program:	Pattern Puzzles
Supplier:	HTB Computers Ltd
Telephone:	0794 516279
Price:	£11.50 incl VAT and p&p

AMSTRAD USER CLUB
It pays to belong!

MAKE AN IMPRESSION

Andrew Banner takes a detailed look at the 9 pin dot matrix printer market in this month's edition of Amstrad Computer User and we are delighted to offer readers a range of machines which span the cost and facilities spectrum.

WE NATURALLY LEAD OFF WITH...

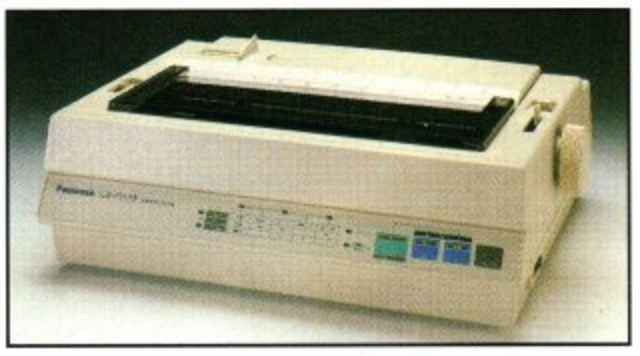
Citizen Swift 9: Normal Price 309.35; Readers' Price £265.00; Members Price £250.00. Order Code FSWIFT9.



For a real "all singing, all dancing" printer there is the Citizen Prodot 9x: Normal Price £642.85; Readers' Price £550.00; Members £530.00. Order Code FPRODOT 9x.

Next we have two popular Panasonic models:-

Panasonic KX-P1181: Normal Price £251.85; Readers' Price £210.00; Members £200.00. Order Code FKXP1181.



Panasonic KX-P1180: Normal Price £309.35; Readers' Price £230.00; Members £220.00 Order Code FKXP1180.

Our pair of Stars feature:-

Star LC10 MKII Normal Price £228.85; Readers' Price £199.00; Members' Price £184.00. Order Code FLC10.

Star LC10 Colour Normal Price £297.85; Readers' Price £234.25; Members' Price £224.25. Order Code FLC10C

Our next items show that your Amstrad is as good a teacher as it is a playmate!

On page XXX Yvonne Taylor reviews the sensational Pattern Puzzles. Guaranteed to give you many, many hours of mind-wrenching pleasure. Normal Price £11.50; Readers' Price £10.50; Members' Price £9.77. Order Code FPattern 0001

David Dorn's recent series on education has certainly opened a few eyes as to the real value of the home computer as a powerful, and enjoyable, education tool.

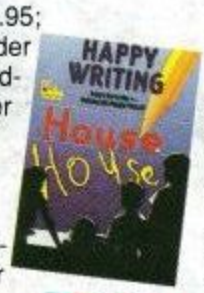
Direct lines are delighted to offer our readers this splendid selection of Bourne Software's enchanting and instructive programmes.

Wordhang Tape: Normal price £9.95; Readers' Price £8.95; Members price £8.45. Order Code FSOFT101. DISC: Normal price £14.95; Readers' Price £13.25; Members price £12.70. Order code FSOFT1101. Up to and including Physics O'Level Revision.

Happy Numbers - Tape: Normal price £9.95; Readers' Price £8.95; Members' Price £8.45. Order Code. FSOFT 102 Disc: Normal Price £14.95; Readers' Price £13.25; Members' Price £12.70. Order Code FSOFT 1102.

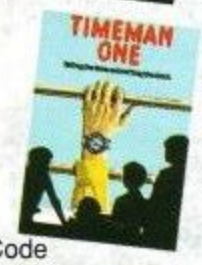
World Wise - Tape: Normal Price £9.95; Readers' Price £8.95; Members Price £8.45. Order Code FSOFT 103. Disc: Normal Price £14.95; Readers' Price £13.25; Members' Price £12.70. Order Price FSOFT 1003.

Animal, Vegetable, Mineral - Tape: Normal Price £9.95; Readers' Price £8.95; Members' Price £8.45. Order Code FSOFT 104. Disc: Normal Price £14.95; Readers' Price £12.95; Members' Price £11.95. Order Code FSOFT 1104.



Happy Letters - Tape: Normal Price £9.95; Readers' Price £8.95; Members' Price £8.45. Order Code FSOFT 105. Disc: Normal Price £14.95; Readers' Price £13.25; Members' Price £12.70. Order Code FSOFT 1105.

Happy Writing - Tape: Normal Price £9.95; Readers' Price £8.95; Members Price £8.45. Order Code FSOFT 106. Disc: Normal Price £14.95; Readers' Price £13.25; Members' Price £12.70.



Time Man One - Tape: Normal Price £9.95; Readers' Price £8.95; Members' Price £8.45. Order Code FSOFT 107. Disc: Normal Price £14.95; Readers' Price £13.25; Members' Price £12.70. Order Code FSOFT 1107.

Time Man Two - Tape: Normal Price £9.95; Readers' Price £8.95; Members' Price £8.45. Order Code FSOFT 108. Disc: Normal Price £14.95; Readers' Price £13.25; Members' Price £12.70. Order Code FSOFT 1108.

Map Rally - Tape: Normal Price £9.95; Readers' Price £8.95; Members' Price £8.45. Disc: Normal Price £14.95; Reqaders' Price £13.25; Members' Price £12.70. Order Code FSOFT 1148.

Chemistry 'O' Level Revision - Disc: Normal Price £19.95; Readers' Price £17.95; Members Price £16.95. Order Code FSOFT 1959. Physics 'O' Level Revision: Normal Price £19.95; Readers' Price £17.95; Members' Price £16.95.

JOIN THE AMSTRAD USER CLUB

the specialist support company for Amstrad Computer Users. We are the largest organisation of our kind with membership currently standing at 30,000 and open to anyone resident in the U.K.

Enjoy the benefits:

- ► on-line technical support
- ► 24 hour sales line for discounted hardware and software
- ► priority subscription to the Official Amstrad Magazine
- ► monthly news letter and price lists including the latest release
- ► special members only offers
- ► all for only £27.95 inc VAT – **what are you waiting for?**

Priority Order Form

Membership Number (where applicable) .....

Name: Mr/Mrs/Miss Initials ..... Surname .....

Company Name (where applicable) .....

Address .....

.....

..... Postcode .....

Daytime phone number .....

Computer model number .....

Please send Cheque/Eurocheque/Postal Order made payable to:
Amstrad User Club

Access/Mastercard/Eurocard/Barclaycard/Visa

☐☐☐☐/☐☐☐☐/☐☐☐☐/☐☐☐☐ Expiry Date: ___ / ___

Signature of card holder .....

Code	Description	Qty	Unit Cost	Total
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....

Total .....

Send to: **Amstrad User Club,**
PO Box 10, PRE Complex, Pallion Industrial Estate,
Sunderland, SR4 6SN.

Offer closes: 31st July, 1990.

Prices include VAT and delivery within the U.K. mainland.
Overseas despatch on application.
Please allow up to 28 days for delivery.

A10

☎ ORDER HOTLINE 091 510 8787 (23 Lines)

24 Hour Orderline

Faxline
091 510 0155

EMAIL/Telecom Gold
MAG 90320(72)

AMSTRAD
USER CLUB
It pays to belong!

JACKSON COMPUTERS LIMITED

JOIN OUR DISCOUNT CLUB!

Life membership for £8.50

Software/Hardware Discounts of 5–20% off RRP.
All AMSTRAD and other leading makes of software available.
Complete computer system, printers, modems, cables.

Amstrad CPC464 with colour monitor £287.50
Amstrad CPC6128 with colour monitor £389.90
PCW8256/512.....£424.35/£539.35
Amstrad PCW 9512 .....£557.75
Amstrad PC 1640 ECD .....Ring for details

PPC portable computers in stock and also PC2000 range. Ring for details.

All prices include VAT.
Also free Life Membership when you purchase any CPC or PCW AMSTRAD computer. Tel: Between 9am-5pm 081-655 1610

Send for full price list and membership form to:
25 Spring Lane, Woodside, South Norwood
London SE25 4SP

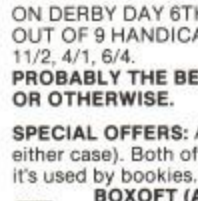
MAKE YOUR AMSTRAD EARN!

Yes making money with your Amstrad becomes incidental when you know how. Your micro is, if only you knew it, a gold mine. The size and make is irrelevant. Make the initial effort **NOW** by starting your own.

HOME BASED BUSINESS.

This may be the most important move you will ever make!

REMEMBER: You'll never get rich by digging someone else's "ditch". Anyone in the country, including YOU, can become very rich in a relatively short period of time just by doing a few basic things! It's more rewarding than playing games. The benefits are many and varied. Full or part time. For FREE details send S.A.E. to:



HOME BASED BUSINESS
31 PILTON PLACE (ACU 22)
KING AND QUEEN STREET
WALWORTH, LONDON SE17 1DR



£1000 REWARD

FOR INFORMATION LEADING TO A PROSECUTION & CONVICTION

THIS CAMPAIGN IS ORGANISED BY ELSPA

***ANY* INFORMATION ON PIRACY SHOULD BE PASSED TO F.A.S.T. (THE FEDERATION AGAINST SOFTWARE THEFT)**

TELEPHONE 071-497 8973

PIRACY IS THEFT

£ £ £ £ BANK BALANCER V1.0 £ £ £ £

Software to manage any type of Home Accounts. (664/6128 DISC ONLY)

Menu driven from 12 menus with up to 10 choices each (f0. to f9.)
Capable of storing 7000 transactions on one disc.
Each entry has No., Date, Description, Code, Debit/Credit, Balance.
Coding facility allows thousands of codes for each account category.
Automatic balance calculation and triggering of standing orders.
Standing order definitions for 1 week, 2 week, 4 week, 1 month, 4 month, 1 year.
Global search and display facility. eg. Find and display all CHEQUES etc.
Password protection of stored data. (Up to 20 characters long).
User definable colours and key definitions.
Autorun facility will load and display any file of your choice on start up.
Browse through transactions page by page.
Print page, section, file or control codes to Epson compatible printer.
Uses two disc drives if required.
Disc management from within program. Erase, Cat, User, Drive etc.
Status screen shows Date, Last date, Balance, Drive, Title, Edit No. etc.
File handling includes Edit, Insert, Remove, Search, Exchange, Browse.
Change amount, preset balance, running totals for all standing orders.
Custom alarm system traps all illogical inputs and user mistakes.
Example files on disc, comes complete with full user manual.
Telephone helpline available if needed.

Limited Introductory offer of **£14.99** ***From.....***

CHEQUE/PO Payable to:
OSPREY SOFTWARE (Dept A.C.U.)
Allow 28 Days delivery.

DISCOUNT FOR BULK TRADE ORDERS WELCOME
TEL: (0742) 696863

Osprey Software
11 Medlock Road
Sheffield
S13 9AY

ONLY POOLS AND HORSES

FOOTBALL BOXFORM £14.95 (+£2 for 3" disc)
Not a gimmicky plaything but a genuine statistical analysis of football form the sole object of which is to improve the chances of winning on the pools or fixed odds.
Written by a pools expert it has forecast over 50% more draws than would be expected by a chance.
★★ Now incorporates **SOCCEROO** specially written for **AUSTRALIAN POOLS** ★★

POOLS PLANNER £14.95 (+£2 for 3" disc)
The perm book on a computer. Gives details of and checks 369 easy to enter block perms ranging from 9 to 73960 lines and from 12 to 56 selections.

RACING BOXFORM & HANDICAP WINNER £14.95 (+£2 for 3" disc)
Two programs for the price of one. BOXFORM weighs up a race by considering the many facets of form. Easily amended to suit the user's ideas. **HANDICAP WINNER** shows the value for money bets. Over 1000 winners in 1989 handicaps at 28/1, 25/1, 20/1, 16/1, etc. Hundreds this year at prices up to 20/1

ON DERBY DAY 6TH JUNE 1990 HANDICAP WINNER GAVE THE WINNERS OF 7 OUT OF 9 HANDICAPS AT EPSOM, YARMOUTH AND BEVERLEY. 20/1, 10/1, 7/1, 11/2, 4/1, 6/4.
PROBABLY THE BEST DAYS RESULTS EVER FROM ANY SOURCE, COMPUTER OR OTHERWISE.

SPECIAL OFFERS: Any 2 of the above £24.95 or £34.90 for all 3 (+£4 for 3" discs in either case). Both offers include **FREE** program to work out almost any bet. So good it's used by bookies.

BOXOFT (ACU), 65 Allans Meadow, Neston, South Wirral. L64 9SQ
Credit card holders may phone 051-336-2668 (24 hrs)

ADVERTISERS INDEX

Amstrad Computer User 19
Arnor 47
Beau Jolly 26
Boxoft 66
Brunning Software 22, 23
Chris Price 57
Connect Software 55
Database Software.....24
Datel Electronics 8, 9
Entertainment Intl.....3, 4
First Choice 50
Glenco 58
Goldmark Systems 50
Homebased Business 66
Jackson Computers 66
MJC Supplies 13
OJ Software.....55
Osprey Software.....66
Pop Shop .....IFC
Romantic Robot 49
School Software.....58
Silica Shop 37, 41
Soft Options 62
Software City.....40
SPM Software 58
Turbosoft 44
US Gold .....OBC
Virgin Mastertronic.....IBC, 17

olivetti

ITALIA'90 OFFICIAL SUPPLIER

WORLD CUP SOCCER ITALIA 90
THE ONLY OFFICIAL WORLD CUP COMPUTER GAME FOR THE 1990 CHAMPIONSHIP

ACCEPT NO SUBSTITUTE

AVAILABLE ON:

IBM PC	CBM 64 DISC
AMIGA .1 MEG	SPECTRUM 48/128
AMIGA .½ MEG	SPECTRUM +3
ATARI ST	AMSTRAD CASS
CBM 64 CASS	AMSTRAD DISC

PACK CONTENTS:

Free World Cup wall chart

Plus

World Cup Story 1930-1990

Plus

Amazing facts & figures from all championships

Plus

Competition to win :- weeks at the Bobby Charlton School of Football (to be coached by 1st Division Footballers). Plus a Football Strip of your own choice.
Videos of the 1990 World Cup Championship.
Footballs.
T-Shirts.

IBM

ATARI ST

AMIGA



ITALIA'90®

Licensed by OLIVETTI official supplier ITALIA'90'.

Available from W.H. Smiths, Menzies, Boots, Woolworths your local VIRGIN store and all leading software retailers.

℗1990 Virgin Mastertronic, 2-4 Vernon Yard, 119 Portobello Road, London W11 2DX.

SNOWSTRIKE

MISSION ZONE COLOMBIA-MISSION TARGET DRUGS !





.... U.S. CONGRESS IN EMERGENCY SESSION – MOTION TO DECLARE WAR ON COLUMBIAN DRUG BARONS NARROWLY DEFEATED ....

.... COVERT OPERATION PLANNED BY MILITARY. U.S. CARRIER SETS SAIL FOR GULF OF PANAMA.

.... DRUG BARONS READY TO SHIP THEIR LARGEST EVER CONSIGNMENT OF THE DEADLY COCAINE OR 'SNOW'.

.... DAWN. SQUADRON OF F14 JETS TAKE OFF FOR COLUMBIAN COAST. THE TIME FOR TALKING IS OVER – AND YOU WILL MAKE THE FIRST SOLO ATTACK!



Screen shot from ATARI ST version.

Available on:
CBM 64/128 Cassette & Disk · SPECTRUM & AMSTRAD Cassette & Disk · ATARI ST · AMIGA · IBM PC & COMPATIBLES.

EPYX®

U.S. GOLD®

U.S. GOLD LTD, Units 2/3 Holford Way, Holford, Birmingham B6 7AX. Tel: 021 625 9008 35.50