

HOME COMPUTING WEEKLY

AN AMSTRAD SPECIALIST PUBLICATION

July 28 1985 No. 118 30p



HCW drives you wild!



Win a disc drive from Amstrad

New releases



Reviewed inside p.12

Industry unites to combat piracy



Tim Langford of GOSM

Software theft and piracy could become a thing of the past if the industry agencies have their wishes fulfilled.

The Guild of Software, Home-Software Dealers (HSD) and the Federation Against Software Theft (FAST) are looking forward to the Copyright Computer Software Association (CCSA) before any law within the next two months which already envisaged ways in which the law can be enforced.

There seems little doubt, writes Peter Corbin, that what the bill becomes law will enable legal owners of software products including games for home computers and the protection for those found doing so, unlikely to be very high. There is no sign to the law that can be imposed, although the maximum fine per copy is £100. Private enforcement can also be proposed.

Tim Langford, Chairman of GOSM, said that GOSM is fighting the problem on a number of fronts.

"We are investigating software protection systems that make copying impossible, we are also trying to simplify publication of software for copying, and trying to educate the public that this is wrong."

"What the public clearly wants to

realise is that copying is wrong and the industry, the software industry, is very much alive despite its problems and losses and we don't simply want the hard business people to survive. It would be a real pity if the creative and living parts of the industry are the ones that disappear due to copying."

Tim Alexander, director of GOSM and managing director of Virgin Games, emphasised that it was the manager/producer who are likely to be prosecuted but that the role was the profitability.

What concerns is involved in

copying on a large scale, then they might face a criminal problem. Virgin is currently on watch for leads in copying operations and we will take action where necessary."

■ A deal between the two leading software houses after was pointed out that the second appeared to be marketing, what amounted to a "cover" version of their original program. BBC's underlined that the deal was limited to substantial although both programs will remain on sale. A year of substantial copyright infringement?

BBC B+ now £469

Acorn computers the work announced a price cut in the BBC B+ the upgraded version of the BBC B.

The BBC B+ was launched on 1 May, this year (HCW 10 April 85) and has sold of RAM available in both 128K and 256K code programs. Included a file filing system as standard.

"When launched the price of the computer was set at £499, however, the price cut announced by Acorn now means that the BBC B+ will cost at £469, a reduction of just £30."

John Cawell of Acorn gave the official reason for the price cut. "We want to bring the price in line with the earlier price of the BBC B with dual filing systems which is no longer available," he said.

The official price of the BBC B+ is now £469 (total including Acorn's warranty a £50 trade in scheme but this offer has now expired) and the price has returned to normal.

It is still not clear whether the BBC



B+ is already selling and many big retailers, for instance Dixons, have followed and W.H. Smith are now stocking it. One shop in London (Thames Valley Book Store) is selling a BBC B package with dual drive, 128K and 256K upgrade for £499 although the BBC B+ at the same price.

Inside your folder, brighter, better HCW

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HOME COMPUTING WEEKLY

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Soupbox

I agree with Dave's comments about the attitude to money in issue 117. I feel that much of the blame lies with the readers.

There are three categories of readers as far as I am concerned:

- Small income suppliers who don't want to know about "toy" computers.
- Semi-aware readers — the saving grace of the current money issue, but too few and far between.
- High finance readers — those are the ones that have done most damage to the image of the home computer and should move on selling them as dealers!

I decided to buy a printer recently. The shop which "knew my money and knew how to use it" had one in stock. I made the usual enquiries, asked for a demo from the manager and got the following response:

- There wasn't even a single sheet of computer paper in the shop!

- He couldn't connect up the computer and printer together.
- He openly admitted that he had only been on a three day computer course and had forgotten all of this by the end of the week.

I could go on — with stories about discs and cassettes but it is too depressing. If only the retailers could get their act together there perhaps "home" computing will have a chance.

C M D Lewis, Farnborough

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Editor: Dave Corrie

Editorial Assistant: Maria Curry

Software Assistant: John Conway

Group Editor: Wendy Palmer

Design: Tony Rapp

Production Assistant: Barry Fowler

Ad Manager: Gordon Purfoot

John Executive: Sarah Wilson

Classified Advertising: David Horne

Publishing Director: Peter Welford

Chairman: Jim Connell

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BASIC LIVING



Talking of winners

Our Microsoft competition had a number of you well liked. We had several winners from 300 words to four words. We did say that the words should be spelled correctly and therefore we have only allowed 16 of the possible words.

There were a number of single word readers who came to the same conclusion and they have won the 20 prize.

Winners letters go to: Yvonne Jacobs, Sutton; K. Chan, Birmingham; Eric Mann, Solihull; Nick Gray, Greenough; David Smith, Llanelli; A. T. Smith, Redditch; A. Reynolds, London; Anne Marie Mac Adam, Glasgow; J. J. Dwyer, Newcastle; John Cullen, Dundee.

Losers also written go to: William Morgan, Llanelli; A. J. Turner Harris, Llanwrtyd; D. Williams, Llanelli; P. M. Ford, Huddersfield; Chris Williams, Llanelli.

The Annual prize will come in the form of: John Smith, Sutton; P. J. J. Taylor, Solihull; Ian Williams, Warrington; Mark Jones, Solihull.

Our congratulations to all the winners.

Grannie hints

There is a hint that now available for anyone who is stuck on Synonym the adventure. If you want to help Gran win herself can then visit us Synonym at the address below.

Synonym, Addison Industrial Estate, Blaydon-upon-Tyne, Tyne & Wear NE21 4JH

New for old

New money for old is the latest idea from Microsoft's Word 3.1. Again, Microsoft will be offering a £20 trade-in on any computer or video games machine against the sale of a new Microsoft MSN computer.

This offer is running in addition to the free starter software pack which consists of 10 floppy games tapes worth over £40 and a comprehensive 160 page printing instruction manual and BASIC language handbook.

The Microsoft 128K MSN, Fox and 64K, MSN-PRO 640K computers cost around £219 and £275 respectively.

Microsoft, Harford Palace, Garsdon Way, Richmond, Middlesex TW9 3JY



Ted's money

Ted breaks out

Technician Ted has at last escaped the clutches of his treatment beds, collected his wages and gone home — all with the aid of award-winning, David Adams.

To celebrate his success, Henson Consultants, proprietors of the game, presented David with a generous alcohol allowance.

Involved in the game David exclaimed "I forced it back, but I really wanted to finish it".

Henson Consultants are now offering help to other families who are stuck, so contact them for a free sheet.

Henson Consultants, 1116 Station Trolley Works, Abingdon OX14 4PP

Hospital Benefit

Computer users in North Wales who have the chance to pick up a bargain and do a good turn in a special exhibition in August.

The event, Micro-Trip '83, will be held at Durdley General Hospital on Sunday 14th August and all proceeds will be given to the special care baby unit at the hospital. This unit has been instrumental in the

survival of some of the smallest premature babies ever born and there is always room for more help.

There will be demonstrations of computers and plenty of bargains on offer. Even HCW has been persuaded to donate a batch of software for the sale.

Please see this for adults, 50p for children and 25p for a family of two adults and two children. Doors open at 9 am and close at 1 pm, and refreshments will be on offer all day.



£20 trade-in from Microsoft

Soft Aid going strong

Soft Aid, the computer industry's equivalent to Bob Geldof's Band Aid, has now raised over £150,000 for the Ethiopian Famine Appeal.

The Soft Aid compilation tape was launched three months ago and has managed to remain consistently at number one at the software charts. It has already sold more copies than any other game in the same time period.

The tape costs £4.99 and is available from multiple retailers and computer firms.

Go for golf

CRL is to launch two new titles for the Amstrad Handicap Golf and Smuggler's Cove.

Handicap Golf is the latest in CRL's series of golf simulations and Smuggler's Cove is a graphic text adventure in which the player has to work out hidden treasure hidden by pirate captains ago.

Smuggler's Cove will cost £5.95 and Handicap Golf will be priced at £6.95.

CRL, CRL Inc., 7 King's Road, Camberwell Rd, London SE20 8PP

Gyron gyrations

Telestar's software arm, Firebird, has decided to make life a little easier for Gyron players.

The latest game, released some months ago, has had players rather frustrated and so with the help of the map reproduction team, life should be much worthwhile.

Unfortunately the map shows only the Atlantean labyrinth, thus losing the essence of the two and not having a prize!

We are assured, however, that the map depicts accurately just the same and it is only differences in terrain of layout, complexity of towers and ball and subtlety of attack. What is there left you may ask!

Those of you who are old enough to be able to pay the insurance premium of a Porsche 911 should remember that you have until November to read your contracts in Ireland. There have already been one reported injury but expect that there will be a few more before the play-off on or after November 6th.

Firebird, Wellingborough House, Upper St Martin's Lane, London WC2H 8QA



In the bag

It's in the bag

There could be the last moment of glory in this season. All you need is a little bit of luck. The last of the season is now in the bag. The last of the season is now in the bag.

The last of the season is now in the bag. The last of the season is now in the bag. The last of the season is now in the bag. The last of the season is now in the bag. The last of the season is now in the bag.

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Acorn show

The Third Official Acorn User Conference is to be staged at the Barbican Centre on 23-25 July 1985.

Over 50 companies are to attend, including Acorn, Advanced Memory Systems, Adams, BSC, Borland, Datacube, South Morris, South Phoenix, Commodore, Computer Concepts, Creative Technology, Data, Logicon, MUSE, Marsson, and many others.

Among the meeting features planned is a special area where visitors can try their hand at various games such as Elite and Nova, as well as viewing the new BBC B+ for hands-on experience.

Acorn User Exhibitions, South-west Sales, 20 Orange St, London WC2H 7DP

Come into my parlour

Paul Fry Ltd has come up with an add-on for the BBC which is a combination of software RAM and advanced ROM-based software. The add-on claims that the Spider, as it is called, extends the capabilities of the BBC into various control applications — in the home, laboratory and industry.

According to Paul Fry Ltd, the spider makes the computer respond quickly to any event in its 'web' of sensors in the same way that a real spider responds to them. Prices range from £65 to £125.

Paul Fry Ltd, Whitecroft, Ryton Rd, Cambridge CB4 1JF



The Spider for the BBC

Spirit to success?

Challenge Research has been developing a new range of products including some for use with Spectrum and Commodore computers.

Now available is the M800 Spirit which, claim the makers, loads and stores programs on the Spectrum four times faster than conventional cassette recorders. It is a Lawrence J and Microdrive compatible to further increase its versatility and Challenge claims that it provides an alternative yet inexpensive new concept in program storage.

The M800 Spirit costs £89.95

Challenge Research, 217 High St, Farnham, Surrey

BBC bangs its drum

Likely to drum up a great deal of trade in the next few months is Rite Computer Electronics' programmable drums for the BBC.

The hardware add-on does not use the internal sound chip but instead generates all the rhythms and beats from samples — mathematical processes. There can be up to eight voices and up to 64 patterns each of 16 steps programmed in any one drum.

Although we haven't yet seen the product display we have noted the output from the unit and it is most impressive. We hope to hear a full review in a later issue of NEW. The unit costs £60.

Rite Computer Electronics, PO Box 3, Macclesfield, Cheshire LA4 6PT

Spring clean your power

Popular is now producing Spiderbox, a mini processor that provides electroprotection and surge-free energy interlocks, avoiding extensive damage to sensitive equipment.

The Spiderbox contains EPL filtering with high current surge

protection and can absorb induced lightning surges up to 2,000 A.

Used in sensitive electronic equipment the Spiderbox filters spikes allowing "clean" power to be supplied in an otherwise noisy environment.

Spider, Duxford Rd, 5 Barsted, Roper, Leam, W Sussex PO20 9BL



Clean up your power supply

Software update

Finished but not finished. That's the idea, after a delay to put the finishing touches to the program.

The Dragon 32 is doing well this week, for once, with several new releases from Marsfield in its new budget software range, called Pocket Money Software. All the games in this range are priced at £4.99.

Another company which has recently launched a range of budget software is CDS. CDS has shortened the range of products, The Ribbon. The titles were acquired when CDS took over MMS Software as company. The games in this Ribbon range will cost £1.99 and will be suitable for BBC and Electron computers.



Title

The New Zero

Elite

Physic, Chemistry, Biology

Reading

Simon Hood

Portrait

War Machine

Crash Fighter

Super Panda II

Clash

Second of Destiny

Castle's Colours

Adventure Movie Studio

Turnip

Machine

Spectrum

Amstrad

Amstrad

C14

Dragon 32

Dragon 32

C14

C14

Spectrum

C14

C14

C14

C14/Plus 4

Price

£1.95

£1.95

£1.95

£14.99

£14.95

£1.95

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£1.95

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Publisher

Turtle Software

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Fairs fair

The 19th FA Microfair kicked off in London's New Horticultural Hall on Saturday 26 June. At 10.00, the doors were open to give the hall and a very high temperature one, too, a warm welcome. The doors were crowded and there was a great deal of music playing over the large enclosed tables.

I think one has to accept that the major success of the show was the discussion we are still in. There were quite a number of these, and they seemed to be doing very good business.

There were some good discussions to be had on hardware too. I saw a Spectrum 48K V20, the one that isn't available any more at under £200 brand new. APC, who produce a number of Spectrum add-ons, were running a new discussion desk. If you wish to be an agent for their range of products, which is more comprehensive than any other in special Agents price.

Miles was moving from the whole affair was a major success. Even the organisers Mike Robinson admits that it is almost time to think about something new to offer. There was just a few new products being launched at the show but nowhere near the number that one might have expected a year ago.

Saga was demonstrating a new 1000 drive, showing packages that give either the Saga search pack, Claripad or a stand and joystick as computer modems.

Cosmos Micro was showing the Micro Frame motherboard and a number of new video cards. The standard frame includes a dual monitor and there's a wide range of cards for modems, printers, digital to analogue converters and paper worms. The product catalogue looks very sturdy and with its unique design should have few embarrassing problems.

Decker Decks was hoping to have a new Spectrum modem available but it moved this close.

On the software side there were a number of new products, though the bulk of them were for the QL.

Spectrum 48K V20 with 1000 drive

upgrades their BASIC will be shown and an Atari's latest version of their new BASIC 1.0 is available from your machine with a 800K or QL, with full graphics definitions, amazing graphics and full colour facilities. I cost £14.95 for the version although personal purchasers can take advantage of an upgrade offer for just £6.95.

Kempson had a new disc interface with ROM based software on offer but the model on model of the stand with new software was Oxford Computer Systems. They had a new computer to show called Micro, which isn't only aimed to reach the interest of those at the show but we hope to feature a review in this issue.

Those of you who are concerned in machine work may wish to ask to know more about Peter Computers, computer spare parts. The machine parts course designed for the absolute beginner costs a little £2.49 per line but there is the offer of help on a telephone basis too. There is a long line to your machine and you can order as many as 100, however, it is a bit like the one trying to be able to receive the cost of a card.

Overall there is no doubt that there were things to be had at the Microfair, but it still lacked the excitement that follows from a new London product. Perhaps for time will have something new for the new fair.

Satwell, 82 Oxford Rd, Mossley, Merseyside M12 8JG

Decker Decks, 28 Orange St, London WC2 7EG

Quanta Micro, 3 Colindale Rd, Westfield, Ind Centre, W9 1AB

Champion, Unit 20, Singer Way, Wokingham Rd Ind Est, Kempson Road MK42 1AD

Poker Computers, Machine House, Battery Rd, St Yarmouth, Norfolk

Saga Systems, 2 Elm Rd, West Ing, Surrey

BACK IN TOWN FOR A GREAT NEW SHOW MICROFAIR



If you have a Micro Computer from the show you can get a special offer

- FULL LIST OF EXHIBITORS
- SHOWPLAN
- ARTICLES
- NEW PRODUCTS
- MAGAZINE
- PROGRAM

16th
JUNE
1984
12 MICRO

NEW
HORTICULTURAL HALL
Saturday 22nd June 1984

THE MICROFAIR SHOW



Musical micro

If you are an Amateur and are musical with a Micro Computer, you will appreciate a title which may be of interest to you.

The book is called Making Music on the Amstrad CPC464 & 604 and was written by Ian Wright who is author of a similar book for the BBC. It is a professional musician and shows the reader how to make music of all kinds including efforts like retrans, solo, trios, polyphonic music and some from regular to modern.

The book will be launched in August and will cost £8.95.

Shirley, 12 1/2 Lifford Wayport, St. Leonards, Wokingham

Master Machine Code
100 pages
Amstrad CPC 464 & 604
£10.00





Graphics Programming Techniques on the Amstrad CPC464

Techniques is the key word in the title of this informative book.

Like most basic textbooks, *Graphics Programming Techniques* is extremely intense towards the programmer, since most of them when writing graphics programs share impressions of activation, effects of angle and perhaps most importantly, memory conservation are the three major targets.

This book points the programmer in the right direction to achieve these expensive objectives.

Containing seven chapters and an adequate index, it is only in the first chapter that any explanation of the User Manual is proffered.

This is extremely so, as the remainder of the book is dependent on the reader's total comprehension of the basic fundamentals of graphics programming.

Followed by a forthright explanation of the three most useful graphics commands, Plot, Move and Draw — an outline is given of the raster, and the limitations, of each of the three screen modes.

While taking us in depth look at the Amstrad colour palette with its 27 info, the author has drawn some extremely colourful examples, which serve to clarify any remaining ambiguity within the User Manual.

Codes and Characters, chapter two, takes an enlightened look at the control codes with numerous demonstration routines that reveal some of the intricacies surrounding their use.

Graphics, text systems and pointers are all covered in later chapters. For me, and I suspect

for the majority of readers, the main part of the book concerning moving images and the many routines culminating in the drawing patterns, along with a superb drawing and pointing program, are the parts that will be most treasured.

For the more experienced programmer, a considerable chapter is devoted to transformations, accompanied by a brief but concise explanation of single matrix manipulation.

All the topics are written in a modular fashion, enabling the reader to find the authors advice to experience by beginning each section to suit their own needs.

Indeed throughout the book the reader is prompted to experiment in various ways. Try changing the constant value of the array variables in the picture generators, once this fact is in the water you'll be on the way to becoming well-versed of most night oil.

If you are new to graphics programming in BASIC, drawing patterns or printing picture patterns on screen, then this book is an essential addition to your computing library.

Wynford Jones is well qualified to write such a book and has obviously spent considerable time at the keyboard to compose the variety of programs and routines that demonstrate the relevance of each point in the accompanying text.

Some prior knowledge of the basic principles involved in programming graphics is assumed, though the complex moves will find plenty to interest those by typing in the many listings.

All the programs are computer printed, as should all be the best. The authors provides publication Basic Programming on the Amstrad will do well for anyone who wish to follow Mr Jones along the yellow brick road. **B.H.**

Price £7.95

Publisher: Micro Press

Address: 25 London Rd, Twickenham, Kent



A Pocket Guide to Microcomputer Basic

This portable, pocket sized guide is packed with useful information about the most common basic language statements and functions.

All the popular reserved words are listed alphabetically followed by a concise explanation of their purpose.

Early in the book a general explanation of computer programming is given along with a modest demonstration listing which highlights the primary functions of input and output.

An insight into the use of variables, string and file handling, self-documentation and all the other popular commands that comprise the programmer's repertoire are subsequently covered.

Not being machine specific, it is unlikely that reference to this book would be made when the user handbook is available.

Having said that the main advantage of this booklet is its portability, to carry to struggle away with you on holiday!

All computer books should be machine specific, if they are to achieve the objective of informing and instructing without the reader having to make any allowances for the differences in BASIC dialects.

Extended basic commands are covered at about length towards the end of the book, but such is the speed of change in microcomputing that most of these commands are now obsolete or outdated.

The publisher's right couldn't produce a machine specific version of the book at such low cost as a hardcover, though I feel it could be many times more useful, and would surely sell in greater quantities than even the bargain basement price suggests. **B.H.**

Price £1.50

Publisher: Penguin Books Ltd

Address: Harmondsworth, Middlesex

AMSTRAD



KEEPING IN TOUCH



Jon Revis has been looking at Microvite's Touchtech 501. Read on to find out why he liked it.

Touchtech 501

Microvite is a company best known for the Cub range of monitors. Microvite's latest venture is well associated with monitors but provides the BBC computer with a facility which until now has been found only on specialist machines. This device is called the Touchtech 501 and is aimed at eliminating the computer keyboard as an input device.

The Touchtech resembles a picture frame behind which you sit your Microvise Cub monitor, with the monitor in place they form a very sturdy unit. Connecting the unit to the BBC takes only a matter of minutes, one lead at several inch the RS422 port, the second into the disc drive power supply unit underneath the BBC. Before the disc drive was complete, the Touchtech power lead provides a second socket to which your drives can be connected.

The Touchtech presents and directs a series of white red beams both vertically and horizontally to create a grid pattern over the surface of the monitor. By touching the screen with your finger/pencil/foamie etc you break one or more of the horizontal and vertical beams, the Touchtech's on-board

microprocessor then calculates the position of your finger and relays this information to the computer.

Software which utilizes the Touchtech is provided on a floppy disc, and consists of a range of nine programs. Loading the disc displays a menu, this takes the form of a series of nine boxes each one containing the title of a program. From this point onwards the computer keyboard is made redundant as all input is received via the screen. The programs provided all have an educational flavor as they are Child Care, Simon, Memory Manipulation. This gives some idea of the manner in which the Touchtech is used. When introducing computers to young children the greatest problem to be overcome is the use of the computer's keyboard. The Touchtech eliminates this barrier and therefore opens up the world of computers to very young and even handicapped children.

My two year old daughter spent a long time playing with the Artur program, by touching a coloured box in the bottom of the screen she could select a colour and then proceed to place this colour all round the screen. All of the programs provided were excellent, they were

bright, colourful, and accessible.

Finally we come to the documentation, this was in the form of a sturdy pag binder, the pages were of glossy card and liberally spattered with colour photographs. The manual was very thorough and covers setting up, touch coding, the programs provided, and finally a detailed section detailing how to write your own Touchtech programs, all of the major subroutines required were present on the software disc. Another nice touch was the fact that most of the time programs were enclosed on tape, this provided the user with more advice information on how to program the Touchtech.

The Touchtech is an extremely well built and impressive device too at a cost of £18 for the Touchtech and a further £22.00 for the monitor I don't whether it will sell as any given number in the home market. Microvite must surely be aiming at the school and junior schools.

Peter (200)

Manchester, Macclesfield

Address: Parnet Way, Bolling Rd, Bradford BD4 7TU

BBC



SOFTWARE



Elite

For some time now Elite has been one of the best games to be devised for the BBC computer. Now it is being converted for other machines everyone can enjoy the thrill of flying a Cobra class racing ship from planet to planet through the universe.

The aim of the game is to rise to the rank of Elite through careful trading and skilful flight but few reach this elevated position.

At the beginning you are the owner of a craft which is a basic trader, with limited cargo space and humble fly power, in a universe full of planets and orbits. You can choose whether to be a law-abiding trader, an asteroid miner, a dealer in illegal goods or a outright pirate. As you financial reserves increase the Cobra can be modified to suit your chosen lifestyle and increase your chances of survival.

You start your journey from the Corvids space station orbiting the planet Lave with 100 Credits to spend on cargo. Once loaded up, you can take your chosen payload to any planet within seven light years of Lave. The greater part of the journey is completed by hyperjumping to your chosen destination but it's still a long haul to the safety of the space station and there is always a chance of pirate attacks.

Players require great dexterity

using the keyboard to accelerate and decelerate, with the joystick controlling direction. Failure to use an emergency arrest drill and a new game, unless you a bonus which may be added to your coffers.

If you reach the space station safely your profits may not be vast depending on the payload you are carrying. Mining, taxation and avoided are forbidden substances and if the police suspect you are carrying contraband you are liable to attack. In the early stages of the game it is best to keep on the right side of the law as you will not last long against the powerful police vessels.

At each Corvids station you can trade in goods for cash, at the price is right, and then fresh goods and fuel or weaponry can be bought.

The game is complex and the 3-D wire frame graphics are amazing. There is a hard 3-D radar which is easy to read and the position and height of an structure can be seen as a planet.

The game allows you to save your position at any space station so you can return each stage of disaster strikes.

Although parts of the game seem very slow, it appears that a respectable business like your space travel must be occasionally slowing at times. All things considered the Elite package is substantial value and every home should have one. **E.D.**



Fiona Riders Out

This is a shoot-em-up game without rivals. Fiona is supposedly the most evil witch ever, she is so wicked that the rest of her coven have taken away her spell book and tools. Your task is to help Fiona retrieve her tools of the trade by working your way through twelve screens. The first, and many alternative screens, has Fiona flying through the sky avoiding adversaries. These come in many guises — witches on broomsticks, thunderbolts, ghosts and ghouls — and all can up her powers, then stepping her from proceeding.

The even numbered screens all provide Fiona with a means of gaining cost of her tools by shooting ghosts down and using their energy in her cauldron. Should your money reach zero you are sent to hell. You must escape from there by avoiding lava bubbles, the devil and the red hot walls. Should you find you forfeit a life.

Gradually, the game is well thought out, though in places it is quite good. There is very little sound apart from the occasional thunderbolt, or exploding witch and the title music. Control is joystick only and quite easy, though at times collecting the energy and getting it back to the cauldron can be frantic. The review of the cassette has Voodoo's Dave David Dorian — the role of a film star rider taking to find her Oscar or for the prize you get two games.

N.B.

Price: £7.95

Publisher: Your Software Ltd.

Address: 185/186, Campton Hill Rd., London W8

Price: £4.95

Publisher: Potters

Address: Wellington Hse, Upper St Martin's Lane, London WC2H 9DL

C64



C64





Rupert

Rupert isn't a great game, but it is very good value for money — it's only £1.99. Whilst other software houses have been increasing prices, Microzone has continued to produce games at such a low price that you can try four or five before the price of one from most manufacturers.

In this game, your task is to guide your amphibious toad through a combination of obstacles. There are water jumps, barrels, rivers, rough ground, gaps, walls, pot holes and up and down of all descriptions. You can select your course by choosing a sequence of three of the eight various toads, then 252 different combinations. The controls are accelerate, decelerate, wheelie and jump. It takes your reactions and exact timing not to be taking flying leaps, unless your toad. Those toads mean you loose time before you can get going again.

There are three options — one player with joystick or keyboard, two players — one joystick the other keyboard and two players, both with joysticks. You get a homoniously soft speech for the two toads — even if it's a one player game. There's optional musical accompaniment, fast load, adequate graphics and a fairly nice layout table. Apart from appalling the game to vary its resolution graphics, I can't really see what else you could ask for. So, if money is short you could do a lot worse than Rupert. **B.B.**

Price: £1.99

Publisher: Microzone

Address: 2 Park Lane, 11 Park Rd, London NW8 7TL

C64



Rupert and the Toymaker's Party

Rupert the Bear is a famous name, who's now become a computer game. To the Toymaker's party he must run, by dodging the toys. What a job!

Sam and at Quack's had a spiffing whorser to put my childhood horse into a game which has no falling. Credits, not a horrible scene at all.

Of course it had to be played by the Duke Rupert horse it wouldn't be if it didn't come up to scratch. But it didn't. It does come up to and with a vengeance. If you think on a game for kids then all I can say is just buy it. More fool you.

The graphics is wonderful in fact it runs at one of the most spectacular graphics representations what I have ever seen and the music is beautiful too.

Rupert has his around to you, but Rupert is the Toymaker's Party somewhere in the corner. To find his way there he must collect all the marbles placed in the wall but the toys and games a trouble if he doesn't do them. Credits, not a difference can there is seven characters to encourage on each one has three lives and speeds over about five minutes.

Price: £7.99

Publisher: Quack's

Address: Liberty House, 222, Regent St, London W1

At first the snake toys are snakes which march up and down and can only be jump but its not all very pretty and some of the floors lay gaps which Rupert must avoid jump. Lucky for him that a friendly bird is around and he can jump on to his tail for a double jump which the bigger birds.

When he has collected all the marbles, a dog appears and he can go to the next level. As he progresses he meets all sorts of other problems like his puppy's an explosion which are not even trouble and sometimes a double jump.

After adding all these levels, Rupert reaches the eighth level where he must his friends as just as the time limit with lots of tasks to do. Whistle!

Although the style of the game resembles a Mario Bros type of program the challenge becomes really tough as you reach the higher levels. As there I was also reminded of the possible. Mission, especially because the graphics are so superb. As a Commodore 64

shareplay this has few peers, programming at its best. Even if you think Rupert is a bit of a little pig, I recommend that you try this game and a way even change your mind. For more information see the E.N.

C64



Flipped



Hooked



Keen



Yawning



Comatose



Smuggler's Cove

Smuggler's Cove is an illustrated adventure written by Camell, but published by CRI. No instructions come with the review copy.

The screen is neatly laid out with a graphics window at the top which appears to function as mode 0. However, the text area seems to be working in mode 1, which is rather clever. I suspect that the programmer is breaking the graphics chip direct, as the screen flashes particularly after drawing a new picture. As a result, the programme may be incompatible with the 684. In any event, it won't work with the 6801-I installed on a memory full error occurs. Every time a location is entered the picture is redrawn, but the "YIP" sound is fairly slow. Waiting between a bar of a dog. The drawings, though low res, are certainly up to the Hobbit standard.

The plot appears to cast you as an underground cave system as an island, so I must presume the target is smuggler's treasure. Immediately striking is the humour of the programmer, evident in both the objects and the responses of your computer guide which has a variety of amusing remarks at its command. Unfortunately, I was soon bored off by a partially decorated corpse which carries a letter and a bag of monster excrement. The tape interpreter also denied the existence of objects not described, which is a bit odd.

Good value compared with other Amstrad offerings, but if you can't afford it, check cheaper direct from Camell.

D.M.



Modes of Tesod

This is a super game, if you go for the searching and collecting game set on the Moon. There's a super computerised back ground, but what is high down in a flat sea, are to collect the keys which will allow you to the chamber holding a 2000 type monster.

Your journey starts on the superbly drawn surface of the Moon, but you must make sure you don't drop down a crater before collecting a moon-rod! Once you do, you can drop in as a huge stage of smooth rolling mountains, who make jumping, from platform to platform difficult. Better still, it's better down there, and on occasion, the wind takes you with it. Come! Left and right movement are easy, but jumping is accomplished using a series of back flips, which are beautifully animated. And the music? When you make a wall, you can ride up the wall and get lost in it, though it is a means to escape. You'll only get back to the surface by very clever manoeuvring, or a jet of rocket air. Watch out for the moon-dog, not your person though, he's not your goodie!

I nearly forgot, there's great music at the beginning, which just shows what can be done on the Spectrum, and, would you believe, some colorful speech, though you only get that once. I found this a real challenge, and the quality of programming shows that somebody at CRI really took a pride in this work. Pretty, but could be a waste.

D.M.



Ghetto blaster

This is a blasted good game. It's the type where the music and the game music can both enjoy it. And the blast is not bombs, cockles or bullets, it's music.

At London's Radium you have to collect 10 tapes scattered around the town and deliver them to Scotland's B.D. first, before they will accept them, you've got to get the required number of the local population dancing by "blowing" the sounds in them. Unfortunately there are one or two loose-time jaywalkers who delight in crashing your efforts down to the ground. You then need to find a spot shape, in which you rotate the most amazingly specific person and you're back on the job.

The volume is controllable with F1 and F2, the faster the music, the faster it is to get points by looking out to the music. But beware, the local laws perhaps if you play the music too loud. And don't forget to keep an eye on the battery level and approximately as one either the battery or your time limit run out.

Playing your very ground takes a lot of getting used to in the screen suddenly changes when you go round a corner, or even over the road. Fortunately there is a map of the streets shown on your first run way from Punky Street to Yellow Road, via My Way to Strawberry Field and Blackberry Way. Overall an excellent game, 12 musical funk tunes and great graphics — a definite winner.

R.J.



Web Dimension

When reading the description of this program on the cassette sheet, I got very suspicious — "There is no time limit, there is no winning, no lives to lose and very few rules. What you are about to find, hear and witness is a totally new approach to home — competing entertainment — Where I read about "suspense visual effects and "suspicious faces", I couldn't wait to load it. Did it live up to the build-up? Sadly, no.

The game is in eight parts of three stages each, and is based on a spider's web. Shapes move around the web and the last stage is to move to an intermediate — or node — and, under-fire, trap a shape where a enemy, then off to another node for another round. The problem is that the shapes have vapour trails that you must not touch or all the shapes are freed. Having trapped all five, the spider, and stage two begins. Then comes placing the shapes while avoiding your own vapour trail. Success ends stage three — a high-score, score sheet and so to the next part. With each part the shapes evolve, become more, changing up with homepages. Complicated, all right parts and not short again.

I will like the idea of few rules, no limit of time, etc., but to add a game primarily on music and visual effects, the music has to be up to the standards, like James and the light show approaching. Jeff Blaxter's Psychedelia Web Dimension is good, but not that mind-blowing. Sorry. Actions, not try, but not a hit.

R.J.

Price £1.95

Publisher: CRI

Address: 9 Kings Yd, Corporation Rd, London E10 2HD



Price: £9.95

Publisher: Orion Computer Systems

Address: The Pedern, Stone Hill, Canning Rd, Liverpool L1 8HN



Price £3.95

Publisher: Virgin Games

Address: 2-4 Victoria Yd, Parkside Rd, London W11 2DX



Price: £10.99

Publisher: Adventure

Address: 15 Hurley Rd, Marylebone Rd, London NW1





Triangle

Triangle is three programs in one—a wordprocessor, spreadsheet and database, all for £19.95. It's undoubtedly the best value package of its type. The more you...

As I worked my way around it, I was constantly amazed at the power of the programs and their ease of use. There were even pop-up "help" windows at the touch of the F2 key when I wasn't certain.

These three programs, plus a screen/reader program and the help files, come on one disk. Whilst the three files separate, they are designed so that data from one can be used in another. For example, names and addresses from the data base go onto a letter in the wordprocessor, as data on stock into a balance sheet or order form. It's a bit involved, but it can be done.

The wordprocessor and spreadsheet are both extremely powerful, both easy to get started on but, a pity that a while to learn all the keyboard to get down to the full. The database is slightly more basic, but manages to limit you to a maximum of 17 fields, each up to 29 characters, but each that the whole record is under 201 characters. Fortunately it will happily save home-computing records.

The disk comes with a very clear and easy to follow 14 page manual. If you've been wondering about having your own home a games computer and useful office equipment, all you need is a power and Triangle. **SLJ**

Price: £19.95

Publisher: Argus Press Software

Address: Liberty House, 212 Regent St., London W1R 8DB



Timeslip

The C18 is a new sort of interest for English Software. The adventures are somewhat out and battle on about time disturbances and other odd things. What you are in the space are three swirling windows, one depicts a landscape, one, the inside of a laptop and the third, an underwater scene.

Time control is rocket ship, a man in a rocket powered suit, in a submarine, depending on the zone you're in. Each zone controls from rule to rule to be. Strangely, the idea being to destroy the 24 Time Gate — 12 is each domain. To do this you must shoot objects in your way and avoid others. Contact with any object loses you 10 minutes or away time. Since you start with 24 hours, you have roughly 48 hours. Every five hours that, the timer for each zone slips. Since the idea is to synchronise the clocks, this makes life tricky.

The game draws to good effect the colour capabilities of the 18. The design of the graphics are cool and the scrolling is very smooth. Sound is limited to zipping and other noises, but is quite effective.

What the game isn't, startlingly original, it is slick, pretty and very challenging. Each zone requires different tactics and all are unbelievably amusing. Even at the price, it's pretty good. **MSL**

Price: £5.95

Publisher: English Software

Address: 1 North Parade, Parsonage Cds, Winchester



Drop Zone

Once upon a time, there was a game called Defender. That was an all action zapping game and people flipped over it. Then, along came an unnamed hero who took the idea, improved it by 100% and called it Drop Zone.

The idea is to collect a number of good-shaped objects scattered about the surface of a planet and blow them in a protective blipper. These efforts are opposed by nasty aliens which upon getting you. The main task, therefore, is to avoid everything for as long as possible. If they find you, they drop an Android which will destroy the job. Having dropped an Android, the Planet reverts into a gasier form. There are a handful of other aliens with differing tactics which also try to get you. These appear at different levels and include acid rain clouds and erupting volcanoes.

You control a man with a jet pack, and are armed with a rapid fire gun. With this, you must shoot everything in sight. Clear a screen and it's onto the next, harder level. To help you in your task you have a protective shield and some mean bombs.

The graphics are superb, with a highly detailed, multi-layered landscape. The scrolling and expansion is smooth and many of the effects are similar to those in Defender. The most impressive effect comes when you lose a life.

If you like that, high action zapping games, you'll love this. It's a real action even if it's a little pricey. **A.M.**

Price: £9.95

Publisher: US Gold

Address: Unit 35, The Parkway Industrial Centre, Heneggs St, Birmingham



Men's Death Chase

When I first saw the cassette I expected some sort of theme game in which you have to avoid boards of various nasties until an alien you up. Much to my disappointment the game didn't quite live up to its title. What you have to do is escape from a large maze composed of the usual platforms and steps. Lured about the maze are clumps of poisonous spiders and menacing snakes, and coming with either of these results in the loss of one of your three lives. You control the little man by means of three keys: crashing him to move left, right or jump. Control of the game was very tricky and being lost to go to the keyboard suggested no means. Some of us do have problems!

The graphics were rather unimpaired with the platformer built up from basic patterns. The only animation was the writhing flicker of the man. Apart, although his movement was quite smooth. As you reach the edge of the screen, the next pattern starts again.

To put a bluntly, this is a remarkably unexceptional game with almost no excitement potential. The maze move is a pedestrian pattern leaving you to simply wait for the poisonous reptiles. Notwithstanding these comments, the game is difficult and requires good timing, but the leads to its downfall make it's very difficult to achieve the correct timing via the keyboard.

At £6.95 this game is pretty overpriced and doesn't do justice to the C18's graphical capabilities. There's better than this around! **A.W.**

Price: £6.95

Publisher: Knightsoft

Address: The Round Table, 87 Broadview St, Buntingford, Cambs

C64



C18



C64



C18





Poms

I loved this, but as I like most I might be biased. A superb future looking screen leads to an evocative adventure which casts you as Selwyn the cat, searching for your 10 lost kittens in rooms, streets, manses and parliament.

Naturally, you have many levels scattered around the 100 screen playing area is a jumble of food, different things give you varying amounts of stamina and energy, both of which you are going to need. That's because huddling belly and the mane are alive too! They count the terms making for the dog, and when 34 of them have arrived it's the end for you. There are three varieties of dog each more evil than the last, who join together given the chance. Your only chance is to fight and beat them, very energy consuming, or let fluff beds at them, though you can distract them with small purple pills of "catnip" energy — lovely really!

The graphics, though making no attempt at 3-D, stage from charming — Selwyn carrying his kittens — to menacing — in the park and woodland areas. None of the best I've seen in mainstream, with an amazing lack of interface problems. Very, very smooth movement. Sound is there too. Better still, there's a complete map with numbers on it so you don't wander blindly, full freedom for all gameplay — though Selwyn is sometimes hard to steer — and a save game option. Addictive and good fun, don't miss this one.

D.M.

Price: £5.95

Publisher: Artic

Address: House 31,
Brands Hatch, Duffield,
WY25 4EL

SPECTRUM



MasterCalc

A spreadsheet is just the old idea of a large piece of paper divided up into squares. Along the top and sides are labels, and you can write numbers or formulas, with others along the sides. You can show how many of something you have sold, bought, acquired, or destroyed for each unit of time. It could be categories of household expenditure, but it could just as easily be an analysis of anything with components which make up a larger unit.

A piece of paper, however, has a finite size, you have to draw all the squares, do all the calculating yourself, rub out errors, write new ones, and if you want to compare the first column with the last, fold the paper over! With MasterCalc, the Amstrad does it for you.

You a divided-up sheet, complete with teaching material and a series of menus, you are led to set up the sheet with the number of rows and columns. Up to 5000 squares are allowed if you find you want various columns sorted up, all the computer, and if you require more complex calculations, you can enter up to 39 different formulas. Just enter MasterCalc which asks you what you wish to calculate. Then press a key and all the arithmetic is done for you in a flash! The contents of the screen can then be output to a printer.

Enter still, however, is the possibility for asking "what if?" questions. Suppose you

had all your working details on the sheet, including sales, payrolls, repayments on the car, swimming costs, petrol costs, depreciation costs etc, and you wanted to know whether buying a more "economical" car would save money. Simply change the mpg figure, together with the relevant costs, then press a key, and the new total costs, and possibly even can be seen in a split. Equally impressive is the ability to draw histograms for up to three categories from your sheet in the blink of an eye.

Not content with that, MasterCalc allows you to transfer columns and to copy others, which would otherwise cause you to have to retype to another display, and to split the screen so that the extreme off screen sections of the sheet can be displayed under the cursor area. If you forget your formulas, it reminds you which is where, and the digits have floating point arithmetic built into numeric data with great precision.

The whole package is very friendly, though I would like to have seen all the features taught in the manual, and a screen dump of the graphs for more than just known figures, together with more examples of use. Even so, there are small gripes. Almost 100% machine code, and equally compatible with 484 and 486, MasterCalc is like Microsoft before it, a masterpiece.

D.M.

Price: £24.94 (paper) £29.95 (disk)

Publisher: Amstrad

Address: 100 Kings Rd, Bournemouth, Dorset BH1 4EF

AMSTRAD



Handicap Golf

Handicap Golf features a one or two player game over one or 18 holes. Before play starts, the course you've preferred hole by hole. Unlike similar games, the course is viewed from the side, each hole being in sections, usually three. As a result, you can't see the green from the tee, which is rather a disadvantage when aiming! Only when you reach the green does the display change to an overhead view.

Obviously the program is fairly straightforward in comparison with the best, I wonder if it's BASIC? Even so, it plays a good game.

You have the choice of clubs for each shot, displayed with the distance such as capsule of. Throughout the game, the distance remaining and other scoring information is available in a window. Once chosen you set your direction by moving a small cursor taking into account the wind. Your small rock even dips into a stream, and tumbles off, followed by its caddy. After five strokes, the screen scrolls to the left, and you choose to play the next thing the green, you can choose another vector to hole the ball, having prior the distance. Sometimes the ball stops on the very edge of the hole and disappears because it's the same colour. Another frustration!

I did enjoy playing this, though to be frank, it's about the standard of a good magazine listing, and not as sophisticated as implementations seen on other machines. Good value, however.

D.M.

Price: £5.95

Publisher: CRI

Address: 9 Kings Yard, Croydon, Surrey, London SE26 5JG

AMSTRAD



BEGINNING MACHINE CODE



You'll be able to load your registers and jump around memory in this spritely second part of our series.

In this, the second in our machine code series, we will be covering machine code equivalents to the BASIC instructions: LET, PEEK, POKE, and FOR NEXT. These will enable you to write a short space graphics routine which can be transferred to your own programmes.

Firstly, it helps to understand that machine code only deals with positive whole numbers. PEEKing into the Spectrum's memory will always give a number between 0 and 255. Such numbers are called bytes. There are no negative numbers or floats in machine code.

Numbers can be stored in the computer either inside the 256 microprocessor or in separate memory chips. Within the chip itself, the registers are stored in registers. We are only going to deal with the seven registers named A, B, C, D, E, H and L. There are others but we can manage quite well with these. You can think of them as BASIC variables which can only hold a whole number between 0 and 255. See Fig. 1 for variables the registers.

The significance of the arrangement is that six of the registers can be used in pairs to represent numbers in the range 0 to 65535. Just as in decimal:

$$10 = 2 \times 10 + 0$$

so in the HL register pair,

$$10 = 2 \times 256 + 10 \quad (\text{decimal})$$

2 is in the H (high byte) register and 10 is in the L (low byte) register. Register pair BC and DE operates in the same way.

Numbers can also be stored in the Spectrum's memory. This is broken up into storage locations which are given address numbers between 0 and 65535, held in two bytes. The first 16384 addresses are for the Spectrum's ROM and the remainder form the RAM. Two-byte numbers are stored with the low byte at address A, and the high byte at address A+1.

Two machine code has an instruction LD (load) which, in its simplest form, is equivalent to the BASIC: READ

statements LET, PEEK and POKE. Make up a DATA statement with the code given in Listing 1 and load the code using the diagram loader given in the first article. Run the code with BASIC's built-in editor and the copyright symbol should be displayed.

This example included two forms of LD instruction. LD B, 127 (Load B with 127) is the same as LET B = 127. LD A, 0 (Load A with value of 0) is the same as LET A = 0. In general terms we load LD register, number and LD register, register. Another instruction is LD A, HL (Load the A register with the contents of address pair — equivalent to LET A = PEEK address).

Finally, you can only do this operation with the A register. That is a very handy instruction as it lets you look through code that you may not have entered. An obvious example is to use ROM addresses to see what entry tracks for Clive's wizard and when writing your Basic operating system.

There is a single, complementary instruction LD HL, A (Load the box at address HL with the value of A — similar to BASIC's POKE address, A).

These PEEK and POKE equivalents can be very useful for storing and retrieving numbers, as you might use coordinates in BASIC. For instance, you could convert an address to keep a record of the alien trapped in a space invaders game.

Just as you can load a single byte number in a single register, so you can load a two-byte number (up to 65535) into a register pair.

	B	D	H	High byte
A	C	E	L	Low byte

Fig. 1 Register arrangement



100001	00000	1.00	1.00	0.000000	0.000000
100002	00000	1.00	1.00	0.000000	0.000000
100003	00000	1.00	1.00	0.000000	0.000000
100004	00000	1.00	1.00	0.000000	0.000000
100005	00000	1.00	1.00	0.000000	0.000000
100006	00000	1.00	1.00	0.000000	0.000000
100007	00000	1.00	1.00	0.000000	0.000000
100008	00000	1.00	1.00	0.000000	0.000000
100009	00000	1.00	1.00	0.000000	0.000000
100010	00000	1.00	1.00	0.000000	0.000000

1111

```
0000 FOR FILE TO 16
0010 PORE 30000.7
0020 RANDOMIZE USA 30000
0030 PAUSE 30
0040 RANDOMIZE USA 30000
0050 NEXT I
0060 STOP
```

[illegible]

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BOX	PRINT (LARGE)		DEAVE
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The worst error is that the playing instructions suggest typing **HELP**, but the computer does not understand that word! Spectrum owners might also be confused by the reference to the **RETURN** key, which the Spectrum doesn't have. The computer can be directed at home by its own location: "A POLY228 remote control". However, the computer does not recognise the word **Polymer** for **polymer**, so why was **POLY228** its capital letter?

There are minor points though, that don't really spoil an extraordinary game. It is certainly a very commercial product, and deserves its record high placement in the **Goldilip** chart. Its simplicity may put some people off, but in general, I haven't had so much fun as mine! It really captures the feel of the film. My ratings looked. As usual with **AI** products, it is available for a large range of computers, including the **Dragon** and **CIS**. Only "big three" were not covered: the graphics unfortunately. Now just up the ladder, I've just won another position.

Author's Dummy Run

Price: £5.95

Publisher: Micro-Cos

Address: 44 The Broadway, Brixton, S.W.2



Granite

Price: £9.95 (Plus graphics version £7.95)

Publisher: Advancing International

Address: 85 New Summer St, Birmingham B19 3JL

Machine: Micro



Helpo

After the last time's starting confusion as to how to lose these ones in **The Hunt**, I expect many of you have completed the popular game. For those still stuck, don't forget to remember your last dream! Then super strong, you can do something with their walls as well as using one egg. The unit has a penny tendency to me too — game is useful! seems to be a good idea. You can't win what he needs.

Meanwhile in the world of **Scott Adams**, those poor wretches who have struggled to get their wits against the demonic **Sovereign Of Clapnetopie Cards**, the **Wits** of **Clay** of **Horwich**, may be having problems finding new locations. Try pushing these strong walls in an early location, Mike. Also, try using a flammable spell at something in a very early location — you never know what you may find on deeper examination of what remains.

Now, as promised last time, more **Evermore's A Wally Hunt**. We want the first to reveal how to avoid the prize. I hope you remember those who don't want a generous push towards completion, skip the next paragraph!

When you change looks one and two for objects, then look down for the first letter of the code, which the next deposit. Then can get the battery from the first left creek, which should be needed by Harry, with the pump loads, in the garage. Once seaweeded, Wally can jump up and go the final letter of the code. The game ends with you dying in the cave. Mind the looking pipe with the rock and chewing gum, in the work shed, of course. The pencil can be

stamped by Wally in the red of the post office, and the book needed using super glue, again in the work shed. Final age soon.

Valuable as very left looking the following last time. Well, if you're stuck, go to **Valhalla**, jump, go out, drop your rope, go north, and the object is in, guess what? No, not a tightly locked chest like everything else, but in a tightly locked cupboard.

The final quest is **Grimm**, but I'd leave you to find that. You will find the **HELP** function more useful now. You need to head for **Kindus**. Then more to **Valhalla** itself, and watch the world congratulate you (which is very boring — something ending, some might say). The wonderful lines were, once again, supplied by John **Kendall** from **Adrian**.

A few quick **Dummy Run** hints now work. The **Work** family and friends are happening to dominate the system! Mending the coach should not be too difficult. The box top notes not to the shape, but to what it unfolds. Today leaves next night, naturally. Take them through the dark again. Leave a rope down from the wardrobe, then the clock in water. To defeat the soldiers, load a gun you. To enter the woods, swing the obstacle case for a real aim. You need to build up to the till.

A speaker from **Gordon Sam-**

son from **Somerset** to end with. We ask how to get the rope from the operators in **Kendall**, the game with the last letter per minute typing speed. Apart from killing them all, which is not very nice and uses much money, I suggest getting them the thing more found on the basis of the time. There is the hope to a magazine and you can climb away.

Following up gives a few weeks back, I've finished several of last of help. I'd like from **Dorset** and **Lindsey G.V.** While both sent the **Interceptor** solutions, although at the time of writing I still have to play any **Interceptor** adventure. I'd like from **Kent** a responsible for the **Wally Hunt**. I'd be dealing with their letters in **Wally Hunt** now. Also, in a future **HCM**, some excellent **Interceptor** hints from **Kenn** Young of **Northampton**, **Manorville**, keep the mind coming in. To make life easier for you (and me, for that matter) I have designed...

The Coupon

You, from game to last. **Wally Hunt** will include this wonderful coupon. Now if you have a problem, all you have to do is fill in all the answers you can and post it. If you have a **Microcosm** machine I will try to convert you that way. Happy visiting.

Name	_____
Company	_____
Address	_____
City	_____
Postcode	_____
Machine name	_____
Name	_____
Address	_____
City	_____
Postcode	_____

ELECTRO



all name of highest score
allmax highest score at last
in this game
allmax game counter
allmax move listing + PRNT
co-ordinates of line of each
column
allmax **allmax** at the moment
allmax the number of columns
growing in this time
allmax number of lines from
0 to max
allmax difficulty level selected
as a user's PRNT co-ordinates
of each point
allmax only possible co-ordinates
of each point
allmax string holding "C2" and
current column in game state
allmax column currently given

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ER USER YOU'LL SPECIFICATIONS.



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AS TEST DRIVEN BY THE EXPERTS.

Now it may be, but the Triton Quick Disk is already receiving rave reviews in the computer press. For example, in a recent Home Computing Weekly article it picked up their much coveted "Flipped" award.

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Using this method, debugging is amazingly simple. Use BREAK POINTS, which are STOP statements placed strategically in a program.

For example, if you have an error but don't know where it is in the program, then place a STOP statement somewhere in your control system, then RUN the program. If the error hasn't cropped up by the time the

program STOPs, then the error takes place after the STOP statement, otherwise it came before it. Then you can place another STOP statement closer, then keep on at the error.

The way you can easily locate the faulty information and fix it. This is much better than trying to wade through tons of garbage programming, as I like to call it.

```

90 REM OVERALL
100 GOLOS 00000
110 GOTO 00000
120 GOLOS 100000
130 GOLOS 100000
140 GOLOS 100000
150 GOLOS 00000
160 GOLOS 00000
170 GOLOS 00000
180 GOLOS 00000
190 GOLOS 00000
200 GOLOS 00000
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990 REM OVERALL
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1910 GOLOS 00000
1920 GOLOS 00000
1930 GOLOS 00000
1940 GOLOS 00000
1950 GOLOS 00000
1960 GOLOS 00000
1970 GOLOS 00000
1980 GOLOS 00000
1990 GOLOS 00000

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[illegible]

BASIC CONVERSION



This week Peter Green looks at the complexities of the SOUND commands in part five of our BASIC conversion series

As I pointed out in Part 4, the joys of BASIC which did not form part of the early standard have developed in widely different ways on machines from different manufacturers. This was true of graphics, and is equally true of sound. Worse, sound can be much more complicated to program than graphics. Luckily most magazine listings only use sound for very simple tunes, and some and never for sound effects.

It's not possible to duplicate sounds exactly from one machine to another. The best I can do is explain briefly how each BASIC lets you construct sound waveforms, so you can roughly identify the effect a source program is trying to achieve. Then you can try to develop a similar sound on your target machine, matching the pitch, duration, attack, decay, and so on.

Beep Beep ..

Perhaps the simplest machine the sound is the Spectrum. It has one command, BEEP, which takes two parameters, duration and pitch. The duration is given in seconds, when the pitch is measured in "herztones" above or below middle C — positive numbers being above, negative below. Such numbers may be fractions as 50 BEEP 0.25, 12 would be a quarter-second note of C below middle C.

Middle C is a pitch of 440 cycles a second, and an octave is 12 herztones. Making a note an octave higher is the same as doubling the frequency. This will let you work out the frequency of Spectrum sounds, for use on other computers which use this as a parameter.

Zip, Ping — It's The Oink

The Oric/Atmos makes sound effects to games programs quite easy. RAP produces a sort of fast gun sound, PING is a bell-like tone, BRAGG is a gunshot and EXPLUD is exactly what it says! You can probably find magazine articles or books which show how to make these sounds on your machine.

More complex sounds require other keywords. SQUINT takes three parameters, channel, number, tone, and volume. The channel number is 1, 2 or 3 for one of the three tone channels, 4, 5 or 6 if you want the single tone channel mixed with the first, second or third tone channel.

The tone value is the frequency of the tone, while the volume is 1 (quiet) to 15 (very loud) or any of you wish to control the volume with the PLAY command.

MUSIC takes the parameters channel, octave, note and release, making it easier to store your musical tunes from their source for example. Channel is 1, 2 or 3, while the octave may be from 0 to 4, 9

being the lowest tone. The note is a number from 1 to 12 indicating the note on a scale as octave, C being 1 and working up through C#, D, D#, E, F, F#, G, G#, A, A#, and B, which is 12. Release means the time in for SCA/NB, which is a 0 to 0.5.

In this case, PLAY controls the volume. It takes the parameters channel number, note, octave, envelope, attack and average period. The first is a significance number from 0 to 3, the last seven defining which channels are used (channel 1 is bit 0, 2 is bit 1, 3 is bit 2) and so on. The envelope is a number. Most notable works the same way, and defines which channels have notes added.

Envelope mode is a number from 1 to 5, Figure 1 showing the corresponding waveforms generated. Envelope period is a number from 0 to 57167 controlling the duration of the envelope. As a rough guide, using 10,000 gives a note of about five and a half seconds.

PLAY 0.00,0 is useful as immediately kills any sound. Sounds are often followed by WAIT statements, which let the sound finish before doing anything else. The number after the WAIT is the number of 16 millisecond periods to pause.

Beep Beep

The BBC SOUND command takes four parameters called Q, A, P and D. Q is the channel number, zero being tape and 1-3 the three tone channels. This is the least significant part of a 16 bit number, whose higher bits control tuning, gating, channel fading and

short, overdrives them. These are really beyond the scope of this article.

The other numbers are more straightforward. A is the amplitude, from 0 (off) to 15 (loud). A positive value for A, 1 to 4, causes the volume to vary according to the corresponding ENVELOPE, 1 to 4. P is the pitch, 0 to 120, with middle C sounding when P is 39. D is the duration of the note, 1 to 255, measured in increments of a second.

The ENVELOPE command is very complicated. It takes 14 parameters, which break the sound up into three sections with independent pitch changes, and provide an overall volume envelope. Figure 2 indicates how each parameter works; a fuller description would take pages, I'm afraid.

Amplitude

The CPC464 uses a similar system to the Amib, though conversions from one V-chip to the other reveal there are three tone channels, each with a separate control. SOUND sends a sound into the system and takes seven parameters, the last five being optional. The format is SOUND C,P,D,V,E,E,C, where C is the channel number, where 0 to 2 is up to you, the voice is in channels A, B or C, and the other bits control channel synchronization and gate shaping.

P is the first period, 0 to 255, a period P producing a frequency F where $F = 12,000/P$. If P is zero there is no tone; useful when a sound is to continue when only.

If the duration of D is positive, it specifies the sound as 1/100ths of a second. If it's zero, the volume envelope controls the duration. If it's negative, the volume envelope is repeated A/E/D/E times. If D is omitted, the default is 30.

V is the initial volume, from 0 (quiet) to 15 (loud). The default

is 10. Using a volume envelope VE will cause the sound to vary according to the envelope number VE (1-15) or hold at volume V for two seconds if it is not. Similarly VE specifies which tone envelope, 1-15, to use, or keeps the tone constant if it is not.

Finally E is a number from 1 to 30 specifying the type of noise to mix with the tone channel(s). The default of zero means no noise.

ENT and ENV set up tone and volume envelopes and are complex to use (see the BBC).

The first parameter is the envelope number, 1 to 15. A negative number gives a repeating tone envelope. This is followed by up to five envelope sections made up of three numbers: step count (number of steps), step size (positive or negative) and peak (volume parameter), and pause time

(how many 1/100ths of a second to wait after each step).

This is rather simplifying things, as ENT and ENV are more complicated in practice (but as I keep saying, I'm writing an article, not a book).

Other sound commands are RELEASE, which turns off channels (given by a list of, and SO), which sets the state of a sound queue or sets up interrupt for when a sound queue has a space slot.

Commanders' choice

The Commodore 64 has, unfortunately, the best sound facilities of any home music PC is the only one that is capable of accurately reproducing a commercial synthesizer, or even the human voice, without any additional hardware. However, the

machine is unbelievably complicated to program.

In fact, it's so complicated I can only offer some of other machines the time guidance as I did for Commodore graphics (in case that is, indeed, where memory locations are PEEKed and POKE'd to effect sound commands). At least you can then figure out what parts of a C64 program are making sense, even if you can't duplicate them.

The frequency settings for the three channels involve locations 54370/1, 54376/60 and 54386/7. Waveform pulse widths involve 54374/5, 54381/2 and 54383/4, while the type of waveform is stored in 54378, 54380 and 54386. The amplitudes and sustain/volume parameters go into 54377/4, 54384/3 and 54391/2. Finally, the master volume control for all three channels is 54396.

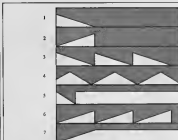


Figure 2. The seven possible BBC waveform envelopes. 1 and 2 are one-shot, while 3 to 7 produce continuous sound.

Figure 2. The BBC envelope command.

ENVELOPE N,T,P11,P12,P13,P14,P15,P16,P17,AA,AD,AS,AR,ALA,ALD

Parameter	Range	Function
N	1 to 4	Envelope number
Pitch (Tone) envelope		

T (bits 0-6) 1 to 127

(bit 7) 0 or 1

F11 -128 to 127
F12 -128 to 127
F13 -128 to 127
PM1 0 to 255
PM2 0 to 255
PM3 0 to 255

Length of each step in 1/100ths of a second

0 = auto-repeat pitch envelope

1 = don't repeat envelope

Change of pitch per step in section 1

Change of pitch per step in section 2

Change of pitch per step in section 3

Number of steps in section 1

Number of steps in section 2

Number of steps in section 3

Volume envelope

AA -127 to 127

Change of amplitude per step during attack phase

AD -127 to 127

Change of amplitude per step during decay phase

AS -127 to 0

Change of amplitude per step during sustain phase

AR -127 to 0

Change of amplitude per step during release phase

ALA 0 to 126

Target level at end of attack phase

ALD 0 to 126

Target level at end of decay phase

Unitsoft



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LABEL IT!

You too can have good looking cassettes if you use S. Donnett's label program for the Commodore printers and plotters.

If you are lucky enough to own either a 1350 printer, plotter or a MPX 501 dot matrix printer, then you can produce professional looking labels for your cassettes with this program.

The program is menu driven and allows you to print out copies onto the main menu in which you have the choice to create labels or insert. To create a label you press the desired key then the screen prompts you to write in the label title. You have a maximum of 33 letters to type and once done you are asked if it's right, if so it is saved and you go to main again. If you're answered that you are prompted to type in the label instructions, again you have up to 33 letters to play with.

Once this is done then you choose which printer you want to use, if you choose the printer plotter then you have a further choice of which colour you require your label to be printed in. When the printer is in operation the label title and label instructions will automatically be printed to the centre of the label, then when the printer has finished all you have to do is cut it to size and you have a neat printed label that fits exactly to the cassette. The felt back to glue the labels to the cassette as it's not as messy as ordinary sticky glue.

When you have done a label you are asked if you want another printer or a new one, the reason for this is many people use just one program per tape, so you will need two of the same label without having to type the same thing twice.

Once past the menu title screen you choose which of the printers you want to use because the width of the plotter's paper is slightly less than the MPX 501 so you only get to use 27 letters per line as opposed to 33 letters on the MPX 501. Again you have chosen your printer type then

labels and inserts. 9-55 APPROX
STD LOAD PRESS SHIFT/RUNSTOP KEY.
WHEN FOUND LABELS & INSERTS ERASE ON
THE SCREEN-PRESS COMMODORE LOAD KEY.

THIS UTILITY IS FOR THE PRINTOUTS OF
CASSETTE LABELS AND INSERTS FOR YOUR
OWN CASSETTE GAMES OR UTILITIES.
IT PROVIDES A NEAT AND TIDY WAY TO
RENAME AND FILE YOUR TAPES PROPERLY.
YOU WILL FIND THAT YOU WILL KNOW WHAT
IT IS WHAT AND WHERE TO FIND IT INSTEAD
OF SEARCHING THROUGH THOSE UN-NAMED
CASSETTES FOR THAT IMPORTANT PROGRAM.
NOTE-DO NOT USE PUNCTUATION WITH THIS
PROGRAM OR THE EXTRA WILL BE IGNORED.

LABELS & INSERTS C64 9-55 APPROX
CASSETTE NO. 1 C15 ORIGINAL COPY
THE PROPERTY OF S.R. DONNETT
UTILITY PROGRAM

CASSETTE LABELS AND INSERTS C64

HOME SOFTWARE LIBRARY

SHIFT-RUNSTOP WHEN FOUND HIT LOAD

you start to type in the lines. There are 33 lines in all but you can only use 20 for typing, as lines 17 and 18 are automatically printed with lines which are meant to be folded on to fit the cassette box. On line 19 you are prompted to type in the main title of the cassette so when it fits the box this title will be displayed on the edge at with commercial tapes.

Incidentally on lines 17 & 19 you can't type anything anyway as they are passed by as you will see when you run the program. The lines can be used for different titles if you have more than one program on the tape or a brief description of the program etc.

variables

To start with there are a few lines that contain more than 30 characters and give them have to be typed in with the above instructions as you will drop down to the third line which the computer will not understand.
13 and 15 tape strings for the user
14 keyboard control
16 and 17 input strings for label title
18 line strip
A the length of wrong title

- B length of label instructions
- C line count for MPX 501
- all line count for the 1350 printer
- D amount of space to count for MPX 501
- F number of space to count for 1350 printer
- G number of lines on 1350 printer
- H number of lines on 14 Pin 501

New 2 weeks

- D & A dimensions the number of lines to use on the cassette
- 15 colours together to later and colour to what
- 20-54 tape count
- 100-100 status screen
- 100-100 status and operation for printing on 1350 printer
- 200-170 printing the title and label instructions for the label
- 200-100 status and operation for printing on the MPX 501
- 400-100 status title and instructions screen
- 100-100 status status screen
- 100-100 status and print out printer for the MPX 501
- 400-100 status and print out printer for the printer plotter
- 1000 status screen with title label header and dark blue screen
- 100-100 status printing in all the lines then the title screen can be included and the particular

paper version for which you don't own, but you will have to delete the column, GOTO commands and the line numbers which will probably take you as long as just typing the list in the first place. Also you may end up deleting both papers and the software.

Conversion Note

To convert this program to use other machine models for use on the program work on a different basis to other programs but the lines between the programs might prove difficult to run a program of your own.

WIND ZUHN
CERN 64
HOME SOFTWARE LIBRARY

LOAD "WIND-ZUHN"

THIS IS AN EXAMPLE OF A CASSETTE
INSERT THAT HAS BEEN CREATED BY THIS
PROGRAM
JSD 1983

EXAMPLE INSERT OVERSIGHT

LOAD

```

5 DIM#1000
6 DIM#1000
10 FORC=0000 TO 99999999:1
20 PRINT:GOTO CASSETTE LABELS & INSERTS
30 PRINT:FOR THE COMPDOCK 64 & PRINTER
40 PRINT:BY S.J.A. COMPTON MAY 1983
50 PRINT:THE UTILITY IS FOR HARD COPY OF LABELS
60 PRINT:INSERTS FOR CASSETTES TO ADD A TOUCH
70 PRINT:FOR CLAS TO YOUR OWNERS & UTILITIES..
80 PRINT:FOR COMPDOCK PRINTERS 1-
90 PRINT:THE 1000 PRINTER PLOTTER AND AFS 801
95 PRINT:PRESS RETURN
96 GET#1:IF#1<0:GOTO13:THEN#0
100 PRINT:HOME SCREEN
105 PRINT:TO CREATE CASSETTE LABELS PRESS #1#
110 PRINT:TO CREATE CASSETTE INSERTS PRESS #2#
112 PRINT:WHEN YOU TYPE IN THE LABEL TITLE#
113 PRINT:IT AUTOMATICALLY CENTERS TO LABEL ON#
114 PRINT:THE HARD COPY PRINTOUT.
115 PRINT:NOTE:-THE TITLE OF YOUR LABEL MUST NOT#
116 PRINT:EXCEED 55 CHARACTERS LONG.
118 PRINT:NOTE:-THE TITLES OF YOUR INSERTS MUST#
119 PRINT:NOT EXCEED 45 CHARACTERS LONG.
120 GET#1:IF#1<0:THEN#0
122 IF#1<0:THEN#0
124 IF#1<0:THEN#0
125 PRINT:PRESS F1 OR F2 ONLY:IF#1<0:GOTO100:IF#1<0:GOTO100
126 GOTO#0
127 PRINT:DOES PLOTTER ON & CONNECTED#
128 PRINT:TO PRINT IN BLACK PRESS #1#
129 PRINT:TO PRINT IN BLACK PRESS #2#
130 PRINT:TO PRINT IN GREEN PRESS #3#
131 PRINT:TO PRINT IN GREEN PRESS #4#
132 OPEN#0,0
133 GET#1:IF#1<0:THEN#0
135 IF#1<0:THEN#0
136 IF#1<0:THEN#0
137 IF#1<0:THEN#0
138 GOTO#0

```

LABEL IT!

[illegible]

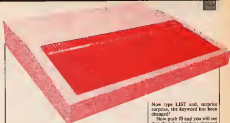

```

888 IF B="M" THEN G88
889 GOTO 888
890 PRINT "*****PRINTING NOW!*"
891 OPEN :A
892 C=0
893 PRINT "*****"
894 FOR I=1 TO L
895 PRINT " " (I) (C)
896 C=C+LEN(I) (I) (C)
897 PRINT "*****"
898 NEXT I
899 FOR I=1 TO L
900 PRINT "*****"
901 PRINT "*****CLOSE"
902 GOTO 100
903 PRINT "*****FOR THE 1000 PRINTER PLOTTER"
904 PRINT "*****YOU ONLY HAVE 37 CHARACTERS PER LINE"
905 PRINT "*****WHEN USING THE 1000 PRINTER PLOTTER"
906 K=0
907 K=K+PRINT "*****"
908 IF K=1 THEN PRINT "*****LAST LINE TO TYPE IN"
909 IF K=1 THEN PRINT "*****"
910 IF K=1 THEN PRINT "*****"
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996 IF K=1 THEN PRINT "*****"
997 IF K=1 THEN PRINT "*****"
998 IF K=1 THEN PRINT "*****"
999 IF K=1 THEN PRINT "*****"
1000 PRINT "*****"

```



SAVE THOSE FACTS



In Danny Tucker's article he shows you how to solve a particular problem with your BBC — saving data to disc

Recently, I came across a problem with my robot (don't we all? I have a long program which prints out data I wanted to save to save this data to disc. This meant either changing all the lines to "PRINT at 3.5," or changing all the PRINT statements to DATA statements. Either way, I had to edit all 150 odd lines. This is the kind of time when I wish the BBC had a replacement command as BASIC does. I don't, I decided to try to implement my own.

Before we can consider doing our substituting, firstly we must see how the BBC stores a BASIC line. Figure 1 is an example

numbers may range from 0 to 255 and the maximum number of bytes in a line, apart from the first four, is 255.

Following the length is the space after the line number, then there is the keyword PRINT in token form. Keywords are not saved as normal words, but only as one byte. The full list of keywords and corresponding token values is on page 443 of the User Guide. Following the token is the string (including the quotes). Finally there is a new line character and a terminator of 255.

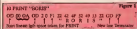
If we play about with BASIC lines in this way, we should notice that we do not

have type LIST and, surprise surprise, the keyword has been changed!

Now push things you will see that the token for DATA is 400. Rather than us having to search through a program and change all the PRINT tokens to DATA tokens (which wouldn't be any advantage over changing the keywords), a simple program will do this, we Listing 1. This program copies from PAGE to TOP for any occurrence of a PRINT token and changes any to DATA tokens. Notice we had to check for PRINT and the opening quote. This is just in case there is any " in the program (CHR\$(34)), as the program would otherwise try to change any occurrences of these in DATA tokens as well.

The program is usually tucked at the end of the program you wish to change. Note that you are not restricted to keywords, it is possible to change the whole structure and contents of lines, as long as you keep track of its length and give the computer know what you are doing.

Having armed ourselves with the understanding of a line's structure, we may see the knowledge is step people looking at all or parts of our programs. This is achieved by placing control codes in REM statements, by the same process that we used to change keywords. Type in Listing 2.



When examining programs like this, it is handy to be able to change a program to the screen as line lists above. I found the following key definition sufficient:

"KEY 00%—0% FOR 0%—PAGE TO TOP PRINT—0%".
NEXT REM

This will list out the line as in Figure 1.

The first byte in a line must always be 400. If it is not, the message "Bad program" will be printed. The next byte is the high byte of the line number (which must not exceed 255), the next is the low byte of the line number, and the last is the number of bytes in the line (including these four). This means that the line

cannot be interpreted by allowing these numbers wrongly. For example, the computer adds the fourth byte (the line length) to the address of the first 400 and expects to find

400 at that new address. If it doesn't it outputs "Bad program" once again.

Now we understand how a line of BASIC is stored, we may attempt to obtain it in some way. Since the BASIC has shown in Figure 1 into the computer and then type

NPAGE=0:4=400





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HCW tonic

I am a regular reader of HCW and, although I am in hospital at the moment, your magazine still gives me hours of pleasure.

I find it very colourful and well presented and unlike other computer magazines it is well designed and value for money.

I own a BBC Spectrum and would like to see machine code programs in the future.

D L Davies, Speke



Price slashes needed

I am writing to express my views on the new computer laws. It has been reported that a tax should be put on disk-based computers. This is very unfair to those of us who also use disk cassette for programs other than computers and the saving of records.

Surely if computer programs were of sufficient quality and offered good value for money, there would be no place for those of us who want a genuine copy of these programs. Many programs are overpriced and use of new storage, and many shops do not allow you to see programs before buying. You may pay £20 for a program which appears to be brilliant but you may get bored with it very quickly.

In the case of records it is difficult because you can have the songs on the radio before you buy. When you see an album you can get to know it and be keen. Depending on whether it's a compilation album or not. On a computer — that is an Access database — you may pay £20 for only one program so record buyers may feel the same.

Although some software houses have reduced the use of their prices, the range of programs which they give away seems to be relatively small. If some companies cut other software for about £2, more users may follow the example.

David Black, Glasgow

Girl Talk

I have just read Karen Roloff's letter (HCW 100) and I was wondering how many females are interested in computers. As the school I go to is all girls soon to get put off by computers. Let's face it, what is there apart from computers and girls?

By the way, I have an Amstrad and am 15 years of age. How old is Karen? How old I'm interested please!

Michelle Lopez, Norwich

My brother's really shocked at HCW as a boy of twelve loves Microsoft. Just if we can be of any assistance in your love life just keep writing!

Dance are the future

High computer graphics on most of the main machines now reaching a limit — that is, the Commodore 64, the Spectrum and the Amstrad — it seems that one day we may see the computer dance.

This will be an entirely "no back and forth" experience with little or no user involvement — i.e. no keyboarding or joystick wiggling.

There have been attempts at it but none up to the standard that today's graphics can command.

You needn't buy the computer movie on its own. I've suggested that film makers haven't followed up the idea with a complete package comprising, say, two games based on the film and a computer movie version of the film.

Written in the right way it could be an extraordinary idea and perhaps quite a popular one. Without the need for user input there would be additional spare memory, and speed.

It may not appeal to you yet like film, but how many times have you watched a game in drive mode? On my Commodore 64 I find Spy's Spy, International Soccer and Basketball have no real drive mode.

What do other HCW readers think? Could it no longer be play the game, but instead view the game?

Andy Clarke, Redditch Essex

Hand-me-downs

There don't exist infinite numbers of programs about wordprocessing, typing etc. This is all very clear and true.

Buy almost all these programs written by typing. This product can't be lost or stolen! This is a complete rubbish and I don't need to be taught how to write wordprocessing programs in word hand print.

You are probably within the law to sell your own program on the condition you get — if you wish, and there is no law to say that you cannot lend it to a friend or loan it to the donor's copy it.

This is probably the reason why we see very little second hand computer software for sale — you don't have to lend them concerned games. However, you know.

Andy Clarke, Redditch Essex

Ghost Gaffe

Please, please, please help me. I am writing this letter because I am desperate for help. I am waiting on a program for my 11 (which I have had for 11 months), it is called Pacman 99 — actually I am thinking of sending it to HCW.

The problem I have as concerned is that I cannot get my computer to move two characters at the same time. I am desperate to move the Pacman type and you can see I keep it to move the ghost spreads you can see it. If you can't help, help it the same time only one character moves and to you are forced to move them and it is a pain.

This is no good as in my version of the game two players should be able to move their characters simultaneously.

If what I am trying to do is impossible, could someone please write and tell me how I can get the ghost to move on its own.

Neil Lockman, Birmingham

Have Computing Weekly,
Ap1 Golden Square
London W1R 3AB

LETTERS LETTERS

Tread carefully

It seems that there has been an unfortunate combination of factors leading to your reviewer's unfavourable conclusions of our Spectrum version of *Operation* *Caravans*.

The first and most straightforward point concerns the supposed lack of instructions. I know that a one field back delay is not in the review headings. If you did this in this case then the reviewer wouldn't have seen the instructions printed on the reverse of the slide. If, on the other hand, the reviewer had received an entry as well as the program, then I can only assume that he didn't read the back of the pack which says that the instructions are printed on the back of the card. Most "bored gamers" who have seen the instructions found them comprehensive and comprehensive.

The other problem concerns the "bad" readings your reviewer must have been getting from his cassette deck. Unfortunately, there has been a problem with these early Spectrum samples sent to press and level problems on the data strip that the program was when actually checking the cassette algorithms. We are currently working closely with our distributors to resolve this problem and you will be pleased to note that no copies at all have reached the general public. All our distributors have been told to return their stock.

I would greatly appreciate if you could find some space to let your readers know these points. The BBC and Apple versions are perfectly OK, and therefore, since we have then a cassette deck, who set up with Caravans, are doing an admirable in respect of alignment as it is possible to make them, by any means.

Mike Daniels, Global Software

We are sorry that you had cause to complain about our error and, as the user a sign-up on our part, we apologise. We are glad that the problems on the Spectrum version are now being rectified and hope that it will soon be in the shops.

Weeklies blessed?

I have owned an Access Reviewer for over a year now and have watched it a long changed from the pioneering newsletter to currently the second fastest selling computer in Britain.

While the dedicated independent magazines have featured helpful articles and some very good programs, it seems that the weekly magazines are not only based upon the Electronic but have a vested interest in, indeed are mostly, reprinted that Access was withdrawing from the huge computer market and still that the Electronic was to be used for anything — really wrong — but amazing.

Obviously, every computer owner wants the machine to function in the magazine and IBCW is one of the better weekly publications as it covers a wide range of computers, especially the good old T19000A.

My main complaint about IBCW and others is not that you rarely discuss the things you "and don't have a top 10 list of it) but that there's a noticeable lack of variety week after week. Since I am not a regular reader I may have missed some features, but I have never seen any articles on the whole spectrum if you'll excuse the word of sweeping. Artificial intelligence, games debugging, colour and the use of machines for science would interest many readers who feel that games are not what their machine is best used for. I am not against games but surely featuring other areas can only be good for the computing public.

As for your software reviews, I am glad to see that you occasionally review an Electronic program (but I

do wish you would choose some good ones like Magna Medians, Elite, Countdown to Doom or Contrap non-killer more review programs). Even less review ones are a very good idea like the early review of *Panzer* — I have visions of hordes of bats under the control of armed female robots.

The Electronic is £70 cheaper than a C64, by cheaper than a Spectrum — and more work is cheaper than an Amstrad which bought with data recorder and quality software. It has numerous facilities, arguably the best, excellent peripherals available and a rapidly growing selection of quality software. I think it deserves a little more support and I know that around a quarter of a million people agree with me.

Incidentally, perhaps your comparisons could be made more accurately to a wider range of machine over.

Jon Hancock, Shrewsbury

You've brought up a lot of points in our letter, Jon, but we'll try and deal with them all.

We feature an *events* material as possible for the Electronic but our space is limited so we often have to choose between magazines.

If you had details of recent IBCW's, and also keep your eye on our *Computing* page (on page 1, you'll see that we are beginning to feature more general articles).

Our *with a review of* *Panzer* was in fact an April *Just*, but don't worry, you're not the only one who felt for it.

Check chequered

I am writing concerning the letter you printed from Lee Gaudard of Cherryfield at IBCW 114. I would like to tell him that I had the same problem with *Champion*. Hey, I wanted to lose five lbs this, after choosing your top number, the computer behaved itself.

The way I found it was to ask my computer operator or any other operator plugged into the back of the Spectrum, and then the game seemed to work fine. I hope this has solved his problem for him.

Walter Robison, Newbury Springs

Bad info

I'd start off by saying that your magazine is the best I've ever read. Unfortunately my request for a free annual delivery. This has happened for several months. I think that your magazine has too many ads which I consider completely — useless. The ads and to it of the article, one page out of five is full of ads. I believe that many people must like to pay a lot more money and read a review or an article instead of always seeing the same ads — they don't vary, do they?

Another bad thing is your article towards the Spectrum. I found that in your issue 114, 14 out of the 15 reviews were for the C64 and only three were for the Electronic. Of these three, only one was supposed to be good. Fortunately there was a review program listing to make up for the cost.

That's all I have to say, although I do believe that your next article on the Spectrum can't be that bad. Am I wrong?

Dominique Salles, Vieux, France

All magazines have to take ads to keep their thing and they like you have news of new products they can usually be easily convincing that it's not a bad thing. Spectrum, while we feature more C64 reviews, I know there have been many new releases for the C64 and we know we can't keep up with every Spectrum product.

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Games are Tom Ashberg

Our hi-score table is dominated this week by Tom Ashberg of Portland who has dominantly been working overtime on his C64 to become so proficient in so many games. Jason Downes has not managed to beat Carolyn Bell who seems to be the Checky flag champion in the moment.

Solution

In last week's puzzle
Lines 10 to 12 simply make the input number into a number number by repeating it. 125 becomes 125125.

This has the effect of multiplying the original number by 1001 — say 125125125 by 125.

1251 is 125125. Lines 10 to 12 divide by three numbers in turn. So having made the number 125125, lines 10-12 become 125125 three smaller — which takes you back to where you started from!

Comment from down under

After discovering NCW stops two months ago I have decided that it is the best computer magazine that I have ever seen. I feel it must make some comments about the situation for TI owners in Australia.

I would like to say how lucky British TI owners are to have a magazine that even knows that the TI-99/4A exists. Can there you are lucky to not own TI programs in two years, so do not take this wonderful magazine of yours for granted.

John Green, Portree, Australia

Thank you for your comments John, we appreciate them, as we do work very hard to try and cater for as many popular home computers as possible. If you want to send us a program then please use the response which often appears in the magazine and please include a tape or 5 machine things a great deal easier.

Readers' hi-score table

Name	Game	Machine	Score
Tom Ashberg	Zaxxon	C64	12,121
	Blue Mtn	C64	13,140
	Suicide Express	C64	49,500
	Toy House	C64	50,500
	Pole Position	C64	67,400
	It's a Quest for Tim	C64	1,221
Jason Downes	It's a Quest for Tim	C64	32
	Checky flag	BBC	217,580
Y Spencer	Killer Gordin	BBC	49,150

Just like clockwork?

Can you name the date/time up to produce five points to that the sum of the numbers on each point will produce these totals: 3, 10, 12, 14, 16?



Database / Micronet / Home Computing Weekly Competition

As we suggested last week we will be sending four clues for this competition in future issues of NCW. This week we can explore the link as a whole.

It won't be easy, we have already been puzzling over the clues, but there is a valuable reward to the winners.

This competition will be published in four clues with two points to each clue.

So...

"Lines parts A and B together, To snap a final clue, The answer to the crossword, Is where they all cross through."

Clue 1

Part A

"The Roman's Name Belgrum because, The Wines Capital during King Alfred's reign, In 1603 Walter Raleigh was used, In the City's past Thomas Hardy's You died."

Part B

CETOMBL sounds Welsh friends to Truburnton

This competition has been written and designed by Micronet 100.

There are 30 points. All free subscriptions to Personal Micronet 100 for one year, each month 100.

The prize winners will be announced on the "DATABASE" Television Series in September. Selected winners will be presented with their points on the "DATABASE" NCW Show program.

At the end of each competition clue there will be information as to how MICRONET 100 can be of use to you.

Comments: — A new era in home computing has begun!

Micronet 100 is a living database. Continually growing, increasing and evolving you Micronet gives you information, communications, telephones and light-hearted fun. There are major new features under development including an Annual database, Executive Micronet and much more to come.

Don't forget to buy your weekly issue, for Clue 2!

READERS PAGE

IAN BOTHAM'S TEST MATCH



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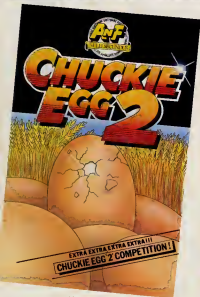
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Our integral character 'House Henry' of 'Chuckie Egg' fame has been called in to help a 'Produce Egg' manufacturer and run his expansion factory which has gone berserk. Henry using all his skills is required working in the 'Fun House' must get the wheels of industry moving.

Not only does Henry have to collect the ingredients to help the eggs, but he will also have to collect the performance eggs that get inside the eggs.

As if all these problems were not enough there are a number of other farms that Henry will have to deal with and yet he is able to complete the job. Things like systems, lots of games, eggs and many more.

Chuckie Egg 2 contains 120 screens, plenty of screens and it is a true battle (Advertise game) - you don't just find things, you actually make them and use them.



Great games. Great ideas.

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