

HOME COMPUTING WEEKLY

AN AMSTRAD SPECIALIST PUBLICATION

May 21-27 1983 No. 112 58p



Free speech!



20 dktronics speech synthesisers to be won

Speak easy



Read our review of **Catch**

Sweet Talker

Atari shops sidestep row

The new Atari distribution company is so far not affecting major high street stores.

Two of Atari's main distributors, TBO and Lightning, are to keep to stock the new Atari range. Lightning's Ray Lennard says: "In view of the way the market is going, they are making acceptable demands." And TBO's Joe Woods says: "They were asking us to continue carrying an excessive amount of stock."

However, the split was on both sides according to Rob Harding of Atari. He said: "We have no issues with both TBO and Lightning and divided as per usual."

As a spokesman for the UK branch chain was confused



Atari 2600 - off to a bad start

that there would be no shortage of Atari in the shops. He said: "We are not expanding any distribution in the region." He has not

shown stock of consoles, the drives and cassette recorders, and will also open the first store in the south.

US Gold: It's the real thing?

US Gold's new week touched a new game based on the exploits of World War II heroes, the desertrovers. 28 years after the famous real-life pilot.

World War II is a popular theme for games. Manywell recently released Spitfire 80 said. However, the product of America, while Allegre also brought out a distribution game.

The US Gold version allows the player to act as any member of the crew of the Lancaster and to drop the burning bombs on the Luftwaffe and Messerschmitt planes in the

RAF version, in industrial Germany.

The distributor is being backed by a massive advertising campaign and the package includes a poster, hanging display and a model Lancaster rifle from Avika. US Gold says the package is endorsed by the RAF and the RAF was which flew the dangerous mission.

At a launch in the Barber Courtroom in Reading, a spokesman said: "More than a game - more than a simulation - it's just like the real thing." Let's hope so!



Inside your order, brighter, better HCW . . .

Dracule on Zombie Island Amstrad game

Keep on trucking on your TI

Read before you buy Book reviews

In depth: The save option on your BBC



Fantastic Voyage

The journal of the first voyage


6.95 48K SPECTRUM

QUICKSILVA 

Quicksilver Mail Order,
P.O. Box 6, Wimborne,
Dorset BA21 7PY.
Telephone (0202) 891744.



Published in association with
WHISKEY  **WOODHORN**


Mighty Magus

HOME COMPUTING WEEKLY

CONTENTS

Editor: Steve Corbin
 Deputy Editor: Gai Graham
 Editorial Assistant: Marie Curry
 Software Assistant: John Denton
 Group Editor: Wendy Palmer
 Design: Art Design
 Copy Control: Kerry Fowler
 Ad Manager: Dominic Farrelly
 Sales Executive: Brett Wilson
 Classified Advertising: David Horne
 Publishing Director: Peter Walker
 Chairman: Jim Connell

May 31-May 27, 1985 No. 123

Soapbox

I read with interest the article and Soapbox on computers in schools.

Just where does the Department of Schools and Education get the idea that calculation and computers are essential in mathematics teaching? I read somewhere that when a child reaches 10, he/she should use a calculator at school, but a computer?

In my experience, as a Grade teacher, the majority of mathematics in younger children is arithmetic. I believe more time should be spent on basics before worrying about buying hardware.

It's not unusual to see young boys going to school with only a lousy grip of something as basic as the times table. Besides, most of the children I meet, although they have computers at school, don't really understand them.

One child told me she could program a computer. On investigation, I found she knew what key to press when using commercial software. She really thought that was programming.

Please tell the subscribers to get their provisions right. They please you before all.

Mr Tomlinson, Newark

If you have something to say, write us on and get it off your chest. We give a prize for all the letters we print.



SPECIAL FEATURES

Overcash Save of Talker review 8

BBC

Clear up an BBC graphics computer 16

COMMODORE

Welcome to home 17

AMSTRAD

Overcash on Zambis Island 20

ORIC

Chemicalist 24

SPECTRUM

Too much cash? 28

TI-99/4A

Keep on tracking 37

REGULARS

News 4-8

Software competition 7

Software reviews 10-15

Letters 41

Book reviews 42

Classified ads short on 44

Readers page 44

Argus Specialist Publications Ltd
 No 1 Golden Square, London W1R 3AB 01-457 0626

Home Computing Weekly is published by Argus Specialist Publications Ltd, 1 Golden Square, London W1R 3AB. Telephone: 01-457 0626. It is published weekly, except for two issues in 1985. The subscription price (which includes postage) is £12.00 per annum in advance. Single copies are available for 20p. The paper is printed on acid-free paper. All rights reserved. No part of this publication may be reproduced without the prior written permission of the publishers.

BASIC LIVING

WAF! THIS ASSEMBLY LANGUAGE LOOKS TRICKY



GA HAVE TO STAY IT ON HOLIDAYS? I KNEW THIS WOULD HAPPEN!



MY FINAL FINAL OFFER - THIRTY POUNDS CASH TO WRITE THE ROUTINE FOR HIM!



by Jon Wedge and Jim Barker

NEWS



Elizabeth Gannon receives her certificate from Dragonair author Steve Turner

First past the post

Hewlett Consultants' Gerry McGowan, Dragonair, has been completed by James McGee of Combridge.

He finished the game at 11.30pm, April 7 — only six days after he bought it.

James thinks that the game is extremely addictive. He said: "The more problems I solved, the more I wanted to go on playing it."

Hewlett will provide Dragonair, chess for all players who read it to £20.

Hewlett Consultants, 7 Graham Close, Slough, Bucks GU11 9QB

Music to your ears

New powerful ROM-based software for the BBC is being developed for the Echo three octave musical keyboard, according to IWL the makers.

The Echo Music Keyboard is a modified software with an existing disc or cassette-based software. This software allows the user to change octaves, play

notes, adjust the tempo and select different musical instruments sounds.

The new ROM-based software has additional features and uses the computer's memory to do this.

The software costs £29.95 and is supplied complete with manual.

IWL, Solihull Ave, Solihull St, Sandwell, Walsley W6 1D 2BA.

Auction for famine aid

Monday 15 June is the date set for the computer industry's auction in support of the Lifeline famine appeal. The main is the L.A. County Mall and the auction will last from 11am to 5pm.

Many leading software houses have donated software for the auction, including ICL, Gold, Visman, Sabot, and Arjan. It is hoped that it will be the biggest computer auction ever held in the UK and raise the £250,000 already raised by the Red Cross.

If you have any software or hardware you no longer need or use then visit it direct to help a good cause.

Contributors should go to Computer Trade Weekly, Gordon Road, Ipswich, Suffolk, IP1 3AA, or to the Technology Centre, Ipswich, Suffolk, IP1 3AA.

Print in colour

Small Computers has announced the availability of a four-colour printer/plotter for £299 including VAT, post and packing.

The printer/plotter prints vertically or horizontally in text and in four dimensions in graphics.

The machine can be used in conjunction with a variety for graphs, drawings, spreadsheets, lists, presentation material, charts, diagrams, circular computer art, flow charts, 3-D and operators.

Small Computers, Welton Road, Peterborough, Cambs, PE1 1JF.

The Echo keyboard



Play hardball with Bobby

Having finished his 1991 season, Bobby has the pleasure of writing the weekly Club column. The weekly Club column is a great place to see what's going on in the London computer scene. Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber. Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber. Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber.

Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber. Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber.

Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber. Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber.

Bobby Club is a weekly column in the magazine, and is available to you if you are a subscriber.



Take off in an airship

Fuji Film floppy discs are being tested by an exciting competition. Fuji Film is offering 50 people the trip of a lifetime — in an airship.

Entries in the first draw are required to have their telephone number on the spread between numbers 02 300 2300 and asked to state the location from which they would like to take off. There are seven locations: London, Leicester, Leeds, Manchester, Birmingham, Bristol and Portsmouth.

Winners will be picked out of a hat by distinguished Eric Benson and Murray Flewson on Tuesday 21 May 1991. No purchase of Fuji Film floppy discs is necessary to enter.

Fuji Photo Film, Greenhills Res. Swiss Cottage, (35) Finchley Rd, London N3 6BJ

Miracle of technology

Acad users can now take advantage of all Personal Utilities. Miracle Technology announced that this can be made possible with its new Multi-Userware/Database/Account Interface and software package.

The interface and database software also gives users access to electronic mail, data database and 2400-10-2400 communications. It also allows repeat user downloading.

The package can be used with Acad models 480, 800, 68000, 68001, 48 SLE, 48004, 48005P and 13001. It costs £29.95.

Miracle Technology, 24 Palace St, Ipswich IP1 1AQ

Printed on the Atari

Is it a bird? Is it a man?

After five months of negotiation, Supremum is to come to the computer screen.

Originally to be produced for the C64 and Spectrum the game is being written in Amigaform for the new Beyond label. Meanwhile, expected price of the cassette and disc version is £9.95.

The screen will all be arcade style with various characters controlling the screen. The arcade style will be the backbone of Marshall's release. Bill Debnary, managing director of Beyond, suggested that all Marshall's games would be capable of "fantastical play" whereas Beyond releases would have more "meat".

The official launch of the new label will come on June 26th with the release of Quaker Whose Day for the C64 and Rockford's Plot for C64 and Spectrum. Rockford is a sequel to Rollerball and has the original version on the other side of the tape box.

Mr Debnary sees Supremum as just the beginning of a whole series of comic character games, and is already talking about Supergirl and even Superman's nephew. "The mind boggles at the possibilities", he claims.

Beyond Software, 2nd Floor, Centre Ct, 121 Parkgate Rd, London EC2A 3ED

Fuji competes with all



NEWS

Software update

Activision has just released another conversion of the immensely popular *Chuzzleheads*, this time for the MSX. Activision is saying the MSX version will rocket to the top of the charts as an MSX and Spectrum programme did.

Yet another *Hexxback* game has been released, this time by US Gold and Ocean. Originally produced by Synsoft in the USA, the game is for the C64 and is called *Quasmod*. It is being billed by US Gold as "the most unique *Hexxback*-type game ever produced".

The VIC-20 is also getting a look in this week with a new game from *Bubble Box* and *Big Cavernlight*. *Bubble Box* claims a lot for this game and is asking it at VIC-20 users who have recently been "saturated of really good new software".

Title	Machine	Price	Publisher
<i>Quasmod</i>	C64	29.95	US Gold
<i>Chuzzleheads</i>	MSX	21.95	Activision
<i>Larry Jones</i>	MSX	24.95	Terminax
<i>Cavernlight</i>	VIC-20	25.95	Bubble Box
<i>Falcon Patrol II</i>	Spectrum	26.95	Vega
<i>Strengthloop</i>	C64	29.95	Vega
<i>Jet Boat Jack</i>	Amstrad	24.95	Amsoft
<i>Master of the Lamp</i>	C64	210.99	Activision
<i>Lowestest Mountain</i>	Spectrum	212.00	Michael Stafford
<i>Thunder</i>	C64	27.95	Bubble Box
<i>Confusion</i>	Amstrad/ C64/SBBC/ Spectrum	24.95	Instant
<i>Bobby Charlton Soccer</i>	C64/Spec	211.95	Holiday World
<i>Sea-Accounts</i>	BBC	225	Clara
<i>Jump Jet</i>	Amstrad/ MSX/C16/ VIC/Spectrum	23.95	Amega
<i>Herbert's Dummy Run</i>	Spec/C64	29.95	Milux-Ges



Printers and monitors

A new range of peripherals and cables has recently been launched for the Enterprise 84. There are a colour monitor, EP80+ dot matrix printer and a joystick interface.

The printer is manufactured under the Enterprise label by Magnetics Tally and costs £18.95. The colour monitor is made by Microvax and costs £249.95, while the joystick interface is £9.95.

Enterprise has also produced a colour/visual monitor cable, parallel printer cable and a serial/interlocking cable.

Mike Shaky, commercial director of Enterprise commented: "Anything with an Enterprise label has to be of the highest quality to conform with the standards of the machine itself. The printer and monitor do just that."

Enterprise Computers, 28
Pace Rd, London WC2A 4BP



A. The Enterprise colour monitor

dk'tronics



SPEAK EASY

There are 20 speech synthesizers to be won in our Dk'tronics Competition

If you've ever wished to have a chat with your computer then don't despair! Because if you enter our great competition you could be in with a chance to win a Dk'tronics synthesizer.

These synthesizers are very easy to use and you don't need any programming experience at all. Each contains detailed instructions so that you can use it to its full capabilities. There are also many games now available which can be made much more enjoyable by using them with a speech synthesizer. Don't this sound tempting? Then read on.

This week we're offering 20 speech synthesizers from Dk'tronics in our easy to enter word square competition. There will be prizes for Amimed CPC444, C64 and Spectrum owners. Each winner will win a speech synthesizer compatible with his/her own computer.

The Amimed CPC444 synthesizer is worth £29.95, the Spectrum one is valued at £24.95 and the C64 type would cost you £28.95 in the shops.

How to enter

Study the wrappage. There are a number of speech related words hidden in it. What you have found as many as you can, circle them clearly on the wrappage and fill in the coupon clearly and carefully. Don't forget to tell us which kind of computer you own.

Write clearly the number of words you found on the back of the wrappage.

Put your entry in Dk'tronics Competition. **Marko Computing Worldly, No 1 Golden Square, London W1K**

148 The closing date is this page on Friday 7 June, 1985.

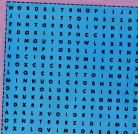
You may enter at any time as you wish, but each entry must be on an official coupon — not a copy — and sealed in a separate envelope.

Important: please follow carefully the guidelines on entering — incomplete coupons and entries with no name left on the back cannot be considered.

If you are a winner, the coupon will act as a label for your prize, so clear writing is essential.

The rules

Entries will be accepted from members of Amimed, Marko Computing Worldly, Golden Square and Marko Plus word clubs. This excludes other clubs in existence (unless not aware of the competition). The 20 or 2000 members from each of the clubs.



Dk'tronics Competition

Entry Coupon

Name

Address

post code

Number of words found

Type of computer owned — C64 / Amimed / Spectrum

(please cross out)

Competition closed and fully — If you have entered this will act as a label for your prize. For the full terms & conditions please contact Marko Computing Worldly, No 1 Golden Square, London W1K. Closing date: Friday 7 June 1985. Marko Plus / Golden Square word clubs are eligible to enter official word squares. Marko Plus / Golden Square word clubs are eligible to enter official word squares. Marko Plus / Golden Square word clubs are eligible to enter official word squares. Marko Plus / Golden Square word clubs are eligible to enter official word squares.

PERIPHERAL



**Margaret Norman
has been throwing her voice — and
Chetah Sweet Talker talked back**

Sweet Talker

This is the newest speech synthesizer on the market for the Commodore 64. It is allophone-based and produces intelligible, though not very clear, speech at a lower price than most of its competitors.

Allophone-based synthesizers produce a selection of vowel and consonant sounds which can be strung together to make whole words and sentences. They are more versatile than word-based synthesizers — it should be possible to program them to say just about anything — but as the range of allophones offered is inevitably smaller than the range of different sounds in the English language, the words can only be approximated. The resulting speech has an unmistakably non-human sound to it, and you have to concentrate quite hard to understand what is being said. This unit actually sounds very similar to the Clavis synthesizer, which uses the same system.

The device is a small box, about three inches square and an inch thick, made to be plugged into the rear port, and has a lead coming from it which plugs into the built-in I/O module. The sound is output by the lead through the external speaker. It looks quite elegant, but as it is plugged in to the back of the computer it is hardly noticeable in use.

The package includes a demonstration tape, which gives a brief system introduction to the unit and instructions on how to program it, with a printed version appearing on screen if case you find the speech hard to understand. The program is written in BASIC, so you can list it and copy parts of it to use in your own programs. There is

also an interactive reader, which contains a table of allophones available and a listing of a program to try the word "cheese".

Most synthesizers are surprisingly easy to program. This one is harder than most, as you have to type in a longer routine about 15 lines long to write in the speech data, and numbers rather than instructions are used to identify the allophone. When you have decided what you want the unit to say, you have to select the appropriate allophones from the list or, if available, look up the number of each of these in the table, then enter the numbers in a DATA statement.

Selecting the right allophones is the hardest part, and a certain amount of trial and error is necessary to get good results. There are, for example, six different allophones to produce an "r" sound — the sounds used in carrot, raking, rapid, razzmatazz, rime and rite — and no less than seven for "y". The same allophone is used for both "y" in talking and the "y" in wing, which doesn't sound at all alike to me!

The programming instructions are less comprehensive than I would have liked. The programs listed on the leaflet at rather oddly arranged, a line the data for the longer routine is the top-right, and the return mail is at the end, and the speech data intercalated between the two. A clearly defined routine which could simply be tacked on to the end of any program using speech would be much more useful. One has made FORK 94294, DEM SEE WOLLEME, but anyone familiar with the sound facilities of the C64 will know that it is an early machine 94296 which controls the volume, not 94295!

The instructions given on the demonstration tape are not repeated on the leaflet, so advice is given on how to vary the volume of the speech, and no suggestions for applications are included. It would have been better if the demonstration tape had included a program which didn't merely demonstrate the speech, but actually used it.

It is unlikely that such commercial software using this unit will be available, so it will appeal more to programmers than to games players, and poor though the instructions are, they do give sufficient information to enable a competent BASIC programmer to use the unit successfully. There are a good many possible applications for speech synthesizers; they can be used to give verbal prompts in business programs, to give warnings of attacks in arcade games, to enable characters in adventures to speak, to provide instructions in educational programs for children who can't get read, for speaking clock programs, spelling tests, and lots more.

If you are willing and able to write your own program to make use of it, then this package represents a good buy. It is quality and price compared well with those of other synthesizers on the market, it is sufficiently easy to use, and the intelligibility of the speech should be adequate for most purposes.

Price: £24.95

Publisher: Chetah Marketing

Address: 24 Ray St, London EC1R 3JQ

C64



MODEM HOUSE

**The Single Source Solution for
ALL Computer Communications.**

Modem House are pleased to announce the following special offers, available from your local dealer, or direct by mail.

Micro Packs

All micro packs include all necessary items to turn your micro into a communicating machine

Open the door to a whole new world.

Spectrum (all models)	
VTX 5000 modem	£49.95
Optional extra for use with VTX 5000	
User to User software (on cassette)	£3.95
Acad format software to link to bulletin boards etc	£6.95

MICRO PACKS

BBC B micropack	£59.95
Commodore 64 micropack	£59.95
Commodore Pet range	£59.95
Apple II range including IIc	£59.95
Apple IIc	£129.95
Dragon 32 & 64	£59.95
Tandy Model 1 & III	£99.95
MSX machines including word processor and database	£199.95
ACT Agnost	£179.95
ACT Sivas	£179.95
Victor 3000	£179.95
IBM PC & most compatibles	£179.95
Dec Rainbow 100	£179.95

◆ ◆ Sinclair QL Complete Communications Pack ◆ ◆
Including V21/V22 Auto Answer Modem
P.O.A.

MODEMS

Modem 1000	£49.95
Modem 2000	£54.95
Telemod 3	£129.95
Teletax Adaptors	
TTX 2000 (Spectrum all models)	£129.95
Optional Extras & Spares	
BBC (Microcentral) Rom	£15.00
IBM PC Colour Rom	£52.50
IBM PC Monochrome Rom	£37.50
IBM PC Hercules Rom	£57.50
Leads	P.O.A.

A complete range of multi band rate modems are also available at prices ranging from just over £100 to over £2,000. We think it is the biggest stockholding in Europe. Just ring:

Modem House
Computer Communication Consultants.
Isolthea Drive,
Exeter.
Tel: 0392 86286

SOFTWARE



**Colossal Cave
Adventure**
**Mountain Palace
Adventure**
Castle Dracula

I've chosen to review these together as they are written using the same programming techniques, use the same screen format, come from the same publisher, and are the same price!

Peter Dinklage's book, reviewed recently in BCW, gives all the programming details. The programs are all BASIC, using a combination of colours and windows as Mode 1. There are no pictures only text, but to my mind, this is an advantage of the descriptions are good. The BASIC is less complex, though the interpretation of your input is quite Verilicious in some instances, and you can ask to examine an object described only to be told it isn't there.

Loading is odd too. Instead of SAVING the program with suppressed file names, then allowing unstructured loading, two of these require you to mix with your machine, and press PLAY at various points, to produce the making. Even stranger, Colossal Cave Adventure has no save game

facility, so you start from the start each time you play (definitely odd).

I must admit to not being as advanced a player. The idea of sitting down to map the product of someone else's imagination has not to me as I do appreciate involvement and humour. This is Castle Dracula's strangeness. It's the terrible "do you fancy yourself as a great adventure type, do you?" Because, your computer eyes and ears in the castle also want a hearing aid on occasions, which is so great help. Your aim is to light-heartedly offer let Count look a rare mate. This applied to me, and it gets hard enough for someone starting out as an adventurer. Puh!

Mountain Palace Adventure shows a little more style than it's loaded, reminiscent of the early magazine being staples of the Spectrum. Filling the screen with words and finding colours. The adventure is OK but rather ordinary, on

occasions, using the same descriptions gets rather tedious after a while. It didn't escape me to probe the strange depths even for the promise of vast wealth.

Colossal Cave is based on the original of the adventure. I love this game, and have spent weeks on it on a socketed micro, no lemons, language and plot are very compelling. Coming back implemented I was rather disappointed. All the original locations are there, and the solutions, objects and creatures are consistent, but the descriptions seem to be lacking something. A beta map has gone far too though, that is the adventure is still for great enjoyment and pleasure.

To sum up, a varied bunch of strengths, the same weakness. Mountain Palace for starters, Eric For Dinklage, Col-Cave for a real challenge. Very ordinary professional, some programming oddities, and a rather excessive price tag.

D.M.

Price £7.95

Publisher Duxford

Address: The Old Press
Factory, 41 Gloucester Road,
London NW1 1DT

AMSTRAD





Tycoon Tax

This game appears to be original, but after a short period it becomes clear that it was a version of the classic/educational type, with only a change of theme.

The concept is simple. You must guide Tim down a page less avoiding breaks in the pipe and water take away, which breaks the pipe less along the bottom of the screen and rescue is implied by scrolling from right to left. Your horizontal position can be varied making you go short and avoid water. The first screen depicts a pipeline coating the desert and the second is the frozen north.

Apart from the pipe, the other graphical area is a collection of hills/buildings on the skyline. A taking of depth is achieved by scrolling different parts of the screen at different rates. This scrolling is well executed and quite smooth. The various figures and objects appear to be built up from several redefined characters and are well animated. The graphics are well designed and coloured with extensive use of shading.

The instructions are very weak. Consequently whilst there appeared to be a sound outline, I couldn't get it beyond my Commodore game shows the capabilities of the Commodore.

The main drawback of the game is the lack of variety. I found myself getting bored before I had got half way through the five screens. Whilst this isn't a bad game, even at the price I don't feel it's very good value. M.W.

Price: £5.00

Publisher: Granite Graphics

Address: Alpha House, 10 Carver St, Sheffield

C16



Best Four Series

To begin with, I should point out my little quips and typos. First, I don't believe there is much good educational software around and secondly I think computers are being sold on the idea that they have an educational purpose, as they are being sold wrongly.

Having made that clear I should explain that there are two packages in the series and that although they cover different subjects, across the commonality apply to both titles. The first is Best Four Maths and contains Table Adventure, Number Painter, Number Punter and Superwin. The other is Best Four Language which contains Words World, Hubs and Seek, Pocomaster and Podd.

Both parts are excellent. Their unique nature, as is seen of the programs, all have been released from some time ago but their appeal has not paled over the years.

Each program is very well written and fully aware of what the child needs to learn. The graphics are very good indeed. This is the only new part of the package. The instructions have been re-written and a number of new screen suggestions appended. There are even flash cards included in each pack.

There are some of the best educational programs yet developed for home screens and as that form they represent wonderful value for money. A must for computer minded parents of children aged 5-12. E.S.

Price: £19.95

Publisher: ASE

Address: London W6, 40 Upper Richmond Rd, London SW13 2RP



Eldon

Eldon is a land of forest, or Forest, who send the green flowers of Flowers which are woven into a garland for the fairy queen. All is not well at the bottom of the garden, the green goddess which will make the flowers bloom are scattered around the Kingdom. As the only magic to be allowed to connect with her, you must guide the fairy around Eldon to help the queen before dark.

Compared to most arcade adventures this may seem like a soft option, but if that's your view then you'll miss out on a rather entertaining, beautifully animated game.

Eldon is represented as a maze of unexciting rooms full of dangers and rewards. The games of these rooms, as far as the player is concerned, is there that which contains your Flame to fall through and preserves her life a little longer.

Apart from Flame's feet and the hot bottom of poison there are many other items which can prove useful. For example, there are many sets of rooms which have dark screens guarded by lamias, evil, thinking eyes. Carrying a torch can be very useful as these systems. Objects may be chosen carefully because a Flame can only carry three items at a time, and the kingdom is so wide ranging that a map is necessary to retrace an object which may prove essential later.

The graphics are attractive and the music is Greg which compares up images of Nordic magic. You learn the rules as you play the game, as with all adventures. Try it. E.S.

Price: £9.95

Publisher: Optima

Address: The South Unit 1, Church Farm Dr, Huxley St, Gurgaon, Bost 5019-2895



Flipped



Hooked



Keen



Viewing



Comotex



Robo to the rescue

Although it has a different name, this game is simply a version of *Hamtuck*. You aim to guide Robo Head using the backwaters of Housatonic castle and escape blind minions. On the way he must collect keys and avoid the hazards.

The first screen shows two sections of backwater linked by a rope. However, these are gears waiting to spin, which must be powered. Whilst this is happening, screens fly rapidly across the screen. These must also be jumped. Once you have collected all the keys and reach the end of the backwaters, you move on to the next screen where a smaller but you also have falling rocks to negotiate. I must admit that such is the difficulty that I haven't progressed beyond the second screen so you'll have to find out for yourself when the cat is in the hat.

As you would expect, this is very much a game of timing and judgement. It certainly has an addictive quality but if it also (perhaps) does it differs from *Hamtuck*. The backwaters are coloured in shades of green to give a 3D effect. The figures are built up in multi-layered mode and are quite effective. As seems to be the case with C16 games, the sound is limited, but I suspect you can't expect much from C16.

This is a good version of a classic game and is sufficiently tough to attract plenty of hours of frustration. Not bad at the price. M.W.

Price: £6.95

Publisher: Solar Software

Address: 77 Whip Drive, Bury, Lancs BL9 1DW

C16



Petals of Doom

In this game you play the part of a spaceman trapped in a cave. The only way on is to help the food flow. The screen are occupied by legs and other animal heads and drop on the plants. By shooting these and processing the plants, the plants will grow. Once all are fully grown, you may enter the next screen. To solve screens, you have a complex relationship with the plants in that you can hide behind them to both increase your energy level and avoid the legs.

Each cave is larger than the screen and the display scrolls from left to right to accommodate the play area. A feeling of depth is given by having a scrolling foreground and moving the map at different rates. The spaces are built up from several modified characters giving pseudo 3D. These are easily coloured and, as the use of the spaceman, rarely animated. In order to spot the approaching mines, you are provided with a radar area at the top of the screen.

The use of sound is limited to beeping sounds, but is certainly effective. The use of colour and refined characters is excellent and shows the versatility of the C16.

Overall this is a fast action shoot-on-up game which is challenging and fairly original. The plot is reasonable and overall the game represents good value. M.W.

Price: £6.50

Publisher: Gemini Graphics

Address: Alpha House, 10 Carver St, Sheffield

C16



Hot Pop

Following on the Japanese tradition of *Dandy King*, the title tells you nothing about the game. Having nothing to do with *William of Orange*, the game actually involves a kind of platformer inhabited by strange, cute cat mutants.

Looking a bit like a VW Beetle with sticky legs instead of wheels, the creature is controlled by you as a queen to find its girlfriend trapped at the top of the screen. To reach her he must first collect all the fruit on the screen by climbing rope ladders, jumping or using catapults while avoiding the enemy mutants. Should you collide with the enemy you always die the river as the foot of the screen, if you succeed you temporarily win the game.

After two screens there is a bonus screen where a lady cat in a moustache can collect the fruit and get the girl as quickly as you can.

In play the game did not appear too demanding because there was only one opponent but completion of one screen led on to progressively harder screens with an increasing number of problems to be solved. Had the boss of this been a child's play but as one saving grace is that the game can be modified by using a joystick and the function keys.

There is a second level of play which has a number of flying opponents appearing across the screen. The music is annoyingly repetitive, the game is noticeably entertaining but nothing revolutionary here. R.D.

Price: £

Publisher: Hudson Soft

Address: 26 Wycombe Close, London NW11

C64



Stringer

This game is a variation of a Japanese for *Addictive Games*. It's no weak game either than a simulation. Nevertheless, using the popular way of *Footed* (category), I consider this Addictive's best production to date.

It uses a standard platform design. You control *Stringer* who is a ball for the *Blue* which. You must retreat a lady called *Fully Pleasant* from a local screen. In order to achieve this, you must reach the hard floor and collect a camera. Each ball, game play and the key to the screen. These effects are supported by a number of the hard staff and an area resident called *Mr Angry*. Mr Angry looks within out of the screen and jumps out when you open the door.

Originally, the game is another thing, certain with style. The figures are large and well designed with the animation in detail. *Stringer* is very similar to *Inspector Clouseau*. Each screen shows a different arrangement of platforms and doors. The platforms are linked by ladders and it's back room is reached by standing in front of a door and opening it. Sound is limited to a background tone and some sound effects. I found the tone without that the volume control sorted this.

The game play is just about right with a simple first screen and a gentle progression of difficulty with four screens. True to the computer's name this is addictive and good fun. A.W.

Price: £3.95

Publisher: Addictive Games

Address: 7A Richmond Hill, Richmond, Surrey TW9 1HE

C64





Helicopter

This is a bit of a game. The effect isn't a step back to the days of the game with just one screen that only varied by having different types of items moving around it.

You are in control of a helicopter that must pick up little men from the right hand side of the screen, and fly them to safety on some bridges on the opposite side. Between you and safety is a swamp, from which a number of deadly creatures leap forth. Deciding the wonderfully named Delta-point's Your helicopter is armed with bombs which you can drop on these creatures in order to clear your route across the swamp.

And then, as far as I can see, is all there is to the game. After receiving enough aids you advance to the 'next' screen, which is really just the same, but with different creatures as you may find it mildly amusing for a few minutes, but no longer. I made the effort to get a few screens into the game, just to be fair to it, but no surprise occurred and I got bored quite quickly.

Using what else can I say about it? Well, the graphics are nice and colourful, and nice by space like most Newbird games, which makes me wonder if they're trying to develop some sort of home style? That's about it really.

Price £1.90

Publisher Newbird

Address: Wellington House,
Upper St Martin's Lane,
London WC2



Short's Fuse

This is another of Firebird's latest games, but one that doesn't match up to some of the others in the range. The game is very similar to other old favourites, *Chucky Run*, but it got away at a distance instead of collecting diamonds or other things left by a cheap called *Booby*.

As well as the platform, obstacle and ropes, each screen has a portion of some famous landmark, such as the Taj Mahal, but these seem to be for decoration only, adding little to the game itself.

I'm afraid that I simply found the game too hard to play. Having spent a couple of hours on the first screen, I gave up in frustration after being snuffed by the same obstacle on each attempt. There's a time limit on each screen which is far too brief — if you pause to take a jump, the 'game over' message seems to appear in seconds and I found this extremely irritating. Equally annoying was the time that played between games and after losing a life.

Black marks too, for the control scheme. The first time I tried to adjust the keyboard controls using the 'suspend' option, I made a mistake only to find that I couldn't re-define the controls and had to restart the game all over again. This constituted an enormous pain, and makes a bad first experience.

Personally an enjoyable game, but one 'unwillingly' for me, I'm afraid.

Price £1.90

Publisher Newbird

Address: Wellington House,
Upper St Martin's Lane,
London WC2



MCT BASIC

Over the last year or so, I've had the pleasure of looking at about half a dozen extended BASICs for the Citi Windows system — this is the most interesting. The package is certainly not the most sophisticated, although it's pretty close to it, but it's the first which is effectively a simulator.

You can choose your C64 and a C18. You might question the value of this, but even if you don't want to use C18 language, the version 3.3 BASIC is offered in a great deal better than the original version 3. To test the competitiveness of the package, I used various programs on the C18, versus them on C18 and re-creating them on my C64. They worked every time although there are one or two areas where the package doesn't behave as version 3.3 BASIC.

I won't attempt to describe version 3.3 BASIC in detail. It offers commands for text graphics in two modes, increased programming, vector commands, sound and a variety of BASIC enhancements. To offer full use of the specs on the C18, commands are covered by version 3.3 BASIC are provided but this can't be a bad thing.

The package *NOVALGADS* and an amazing you discover that you have only 30K free! If you use 8-resolution graphics, you have another 12K. I found the product user's guide quite useful to use the BASIC behind the latest ROM for graphics. Overall this is a first class package which represents excellent value for money.

A.W.

Price £19.95

Publisher: More Computer
Trading Company

Address: Group Has, Titheb
Lane, Norwich, Norfolk



Spooks

This is a joystick controlled graphic adventure, in which you have to find a hidden message of photos by collecting eight essential items and playing them all right for in the entrance. It is maze-driven, your location is shown on the left-hand half of the screen, and a central panel on the right displays the options available to you.

A very interactive info screen is displayed while the program loads, but the program for the game itself are set up to the same standard. The display does not scroll smoothly, but jumps suddenly from one section of the house to another, which I found very disorientating. The rooms are shown in photo form, and are very small, so you can see several of them at once. They all look much the same, so you will have to be looked to look in the area before you discover which is it!

Any contact with a ghost gives strength level, and being ghosts they can pass through walls, so dodging them is not easy. You can walk them by throwing heavy objects at them, but that is quite a tricky procedure which involves a lot of delicate manipulation of the joystick.

The instructions given are very brief. As the game is maze-driven, there is no mystery about the range of commands available to you, but you have to work out for yourself how to use them.

It isn't a classic game, but like the others in this range, it is remarkably good value for money.

Price £1.99

Publisher Microtronic

Address: Park Lane, 111, Park
RD, London NW8 7TL





Tower of Evil

I can't award many marks for originality for this game. The story goes through a familiar plot describing how the hero was lured from the court of King Salomon and cannot return without covering the king's lost treasury and the prince from the wicked sorcerer. He therefore enters the multi-level tower armed with an ability to hurl fireballs to do battle with the various residing demons.

Each level contains nine rooms, each occupying a full screen. In each level there are hidden a key, a pile of gold and other items which can make you more impervious to enemies. The goodies are guarded by monsters which can be trapped and can stop you. When you have the key, you can take the transporter to the next level. Once you reach the top, you must pay the gold in the chest and save the prince. You then start all over again.

Graphically it is rather unimpressive. The aesthetic concept of simple red-lined characters and the hero is rather similar to fantasy-dungeons. The animation is neat but unimpressive. The wall of each chamber are simple coloured blocks. Overall, the game doesn't reflect the potential of the C64's graphics. Sound is limited to footsteps and tapping notes.

The prose plays quite well with good opportunity to appreciate or use speed to avoid them. It's not exactly tough, but the different modes of attack by each enemy make life interesting. **A.W.**

Price: £8.95

Publisher: Creative Sports

Address: 294 Farnborough Rd, Farnborough, Hants

C16



Star Seeker

Subtitled "a guide to the night sky", this is an introduction to astronomy as well as a source of information for the amateur.

As an Intermediate Astronomer from Scotland, you need to spend a lifetime, longwinded, slow and tame in order to produce a plot of the visible sky. This is done quite quickly, and a menu allows you to re-arrange constellations maps, get detailed info on chosen stars, produce a close-up, watch the stars move by defined time intervals, change the viewpoint or time, and output the results to a printer. A second program allows much the same facilities, though focusing on solar system. Here, the information is about the moons and planets.

The program is very well user adapted, and a nice feature, with a high standard of on-screen presentation, which exploits the Spectrum to the full. A limiting factor is that the only printer interface supported is the Hamamatsu — name not specified — or the ZX Printer. Equally odd is the offer of upgrading the program to disk, but not to Microdrive cartridge, and the failure to support serial printers through interfaces.

Again, for a much too limited menu procedure, and the price, what distinguishes this from the Scottish offering is the quality of the material. This is full of technical terms, but there are all explained with the aid of tables, diagrams, screen-dumps and appendices. You will have to work, but the basic info is here. Not easy, but good. **B.M.**

Price: £9.95

Publisher: Marswell

Address: Holtspur Green, London E4 7ED

SPECTRUM



Type-Rope

Type-Rope is described as being designed for younger children with the purpose of giving them hours of educational fun. Using various/hazard type graphics of a high standard, a series of very large "toaster" characters hide a clown or a lion or are depicted using multi-colours. Shows each side of the character is a collection of letters or numbers as they appear on the keyboard. Each is counteracted by a fairly direct key to transfer on the other side of the character, but not straight across. The result is an arrangement from the clown, or whatever is hid up, and the purpose of the game is to limit them.

Playing is achieved by identifying the first letter, pressing the correct key, then pressing the one to which the rope is connected. If all the ropes are used in the limited time available, then a new character is drawn, but with more ropes. When you finally fail, your score can be retained into the full of game.

Presumably, the educational content is the reaction timer, together with the number and letter recognitions. Unfortunately, young children can never see letters in the main of their schooling, not even one as found on keyboards and in the program, so this isn't really of much value in terms educational. It would help them to learn the layout of the keyboard, but a variable time interval would have been useful. Cheap, fairly presented, fairly easy to use, but limited value. **B.M.**
Price: £1.99

Publisher: Macintosh

Address: Longs Park, 113 Park Rd, London NW9 7TL

SPECTRUM



Murder on the Zindermeer

One of the 16 passengers on the luxury steaming Zindermeer has been murdered. Fortunately, a finely equipped layout detective — Miss Agatha Martin, Inspector Klaxson or any one of half a dozen others — is on hand to succeed in the mystery. Will they succeed in solving the mystery before the ship reaches home? Highly unlikely, I think.

The game is played by moving your choice of detective around a floor plan of the ship. The graphics are rather odd, I found the patterned carpet very distracting. Passenger movement like magic when the detective enters a room, and bumping into one produces a mass of options, quite different from the other passengers, ignore them or notice them all the time. If you select the right approach, they may speak to direct you to three questions. There are also clues to be found in many of the rooms, but some, if not all, of those are of very little relevance to the case.

After a long period of searching and questioning, your detective should have collected lots of sufficient information. There is a good number of clues although it is never a logical solution to the mystery, or alternatively, a making it well proven to be the identity of the murderer. At the end of the journey, or soon if you are either earlier or more stalled than I was, the true culprit is revealed, together with an explanation of their motive which leaves the satisfaction of most of the clues still unexplained in mystery. **M.N.**

Price: £11.95

Publisher: Ansoft

Address: Appleton Way, Farnborough, Hampshire

G84



WELCOME TO BASIC

Brian Jones continues his series by explaining most of BASIC vocabulary

W e've come a long way in the last seven parts. This week I'll cover most of standard BASIC vocabulary. First, I'll deal with that weird problem I asked you to try writing a program to add up 1's, 2's, 3's and 4's using only the four function keys. Look at the

64

```
10 T=0
20 GET A$
30 IF A$="1" THEN T=T+1:PRINT T
40 IF A$="2" THEN T=T+2:PRINT T
50 IF A$="3" THEN T=T+3:PRINT T
60 IF A$="4" THEN T=T+4:PRINT T
70 IF A$="0" THEN GOTO 20
80 PRINT"THE TOTAL IS";T;"END"
```

The characters in quotes appear when you press the function keys once the double quotes have been typed. Obviously the program could be modified to add up numbers to T, including using other keys. Alternatively, the value one could be added to a different variable for each key. This could then be used to keep a count of the number of ones as up to four responses, for example (1 for one, 2 for twos/ones, 3 for threes, 4 for fours).

Some programs use GET A\$. If A\$="..." THEN They do the routine the computer does calculations to find the next of the time it gets round a loop like 20 to 30, no key has been pressed. In this case there is nothing to go by like GET T. So A\$ takes the value "nothing" - in essence this would be easy to miss or string variables. It's called the null string, and is represented by two consecutive double quotes "", trained types find this very awkward and tend to put a space between them, which one often forgets when the program is RUN. All the examples I've used to bit of GET, got characters, but if you use GET A, or GET any number variable, only digits will be acceptable and pressing a letter gives a SYNTAX ERROR.

Alter the program above - change the A\$ on line 30 to get A, and see the difference to what happens when you press a numeral and one-numeral key. In practice it only uses A\$, even if I want digits. Of course

you can't do arithmetic on name variables, even if the "names" are numbers. Suppose you wanted to use a program similar to the one at the start to add up a long string of digits, for instance the number of people to walk off passing a check point. How would I do it with GET A\$?

```
10 T=0
20 GET A$ IF A$="" THEN GOTO 20
30 IF A$="0" THEN T=0
40 GOTO 20
50 IF A$="1" THEN T=T+1:PRINT T
60 GOTO 20
70 PRINT"TOTAL =";T
```

RUN this and you have pressing the number keys add on their value, but pressing a character or function key has no effect. Now look at line 40 VAL is a BASIC function which converts any string variable to a value. If the string variable is a letter, the value is zero. Try these programs -

```
10 INPUT"LINE NO. A NAME OR NUMBER"
20 IF A$="STOP" THEN GOTO 30
30 INPUT C$
40 IF C$="0" THEN PRINT"ZERO"
50 IF C$="1" THEN PRINT"ONE"
60 PRINT C$
70 GOTO 10
80 REM TRY MAKING LINE ABOVE AND 2000
90 END
100 INPUT"ENTER A NUMBER"
110 L=LEN(C$)
120 PRINT"THESE ARE ALL CHARACTERS IN "C$
130 END
200 INPUT"ENTER A WHOLE NUMBER"
210 A$=STR$(VAL(C$))
220 PRINT"THESE ARE ALL CHARACTERS IN "A$
```



```

800 END
805 FOR I=1 TO 5
810 INPUT"ENTER ANY NUMBER"X
820 DE=TRN(DIGIT(X))
830 L=LEN(D)
840 PRINT TAB(20-I)*L
850 NEXT I
860 END
    
```

How can you try all that? The program stops at line 80. Then, just as you type **RUN**, followed by a new number, you can start the **RUN** when you like. So **RUN**, **RUN** 100, **RUN** 200 and **RUN** 300 will allow you to try each of these four programs individually.

The effect of **LEN** should be fairly obvious from the "nested part" of the program. **STR** has the obvious effect in **VAL**, and since **LEN** only works on string variables, your three nested **STR**s to convert a number to a string variable that may be 1 digit (if it's the space character in front of positive values, or the minus sign in negative values that we don't want to count).

The fourth part uses **STR**, **VAL**, and **INT** to find the number of digits before the decimal point so the values can be lined up nicely. But, suppose you wanted output to two decimal places, even if it's a whole number. If you input 10.00, the computer outputs just 10 on its own, and skips off the decimal point and zeros. It's rather easy to overcome this, but here's a program to do it. Nice — it only works for positive numbers and values less than 1,000,000,000.

```

10 INPUT"VALUE"X
20 M=INT(1/4000+.5)/.001
30 N=INT(1000*(X-INT(X)))/.001+.5/100
40 S=STR$(M)+STR$(N)
50 IF D=0 THEN D=0+"";GO TO 60
60 IF LEN(S)=3 THEN D="000"+S
70 D=M+(N/100)+D
80 PRINT TAB(20-LEN(D))*D
90 GO TO 10
    
```

Explanation: — First, I hope you remembered the rounding technique used in lines 20 and 30 to get the values to two decimal places. Why do it twice? Well, unfortunately the arithmetic in **BASIC** is not perfect in these things, right decimal places. Thus **X=12.34**; **PRINT X-INT(X)**. Instead of .34 you get .349999999. So what about lines 60 and 70? If



characters from the start or middle of string variables respectively. With **TRN**, you need to specify which position to start from, as well as how many characters to pick. Look at these programs —

processes the code 14, including those upper to lower case to code 14. You can check if a character is a digit by testing if it's code is between 48 and 57 inclusive.

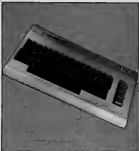
To process any character as before by its code use **POINT**

```

10 L=ASC("CROSSING")
20 L=LEN(L)
30 INPUT"HOW MANY LETTERS"X
40 INPUT"STARTING POINT"Y
50 IF X=0, THEN PRINT"INVALID"GO TO 90
60 PRINT"0000000000000000"
70 END
80 INPUT"ENTER YOUR NAME"X
100 L=LEN(X)
110 FOR I=1 TO L
120 PRINT"0000000000000000"
130 NEXT I
140 PRINT"PRINT"BACKSPACE"10"
150 FOR N=1 TO 10000
160 PRINT"0000000000000000"
170 NEXT I
180 END
190 INPUT"ENTER YOUR NAME"X
210 L=LEN(X)
220 FOR I=1 TO L
230 PRINT LEFT$(X,I)
240 NEXT I
    
```

There are two other functions in the category. **ASC** and **CHR**. **ASC** is short for ASCII, which stands for "American Standard Code for Information Interchange." All characters and screens have a code. For example, printing returns

CHR(your code) **PRINT CHR\$(113)** produces a black block, **PRINT CHR\$(144)** changes the color of output to black. Don't try **PRINT CHR\$(14)** — look up page 115 in the Commodore 64 manual to find out what would happen.



DRACULA ON ZOMBIE ISLAND



Southern Zombie Island, where you, as Dracula, are being the hapless creature and battles you so that you escape capture and death.

The game starts with three zombies on-screen, baying and howling while they hunt you down. You see the monster leaping to mow Dracula, and as you close a screen, an extra zombie appears. Alternatively, if you die, there is a zombie left.

The idea is to fight and kill as many zombies as you can and this is rewarded with a cycle of colour and sound. The pits to lure these into are placed randomly on-screen, both in number and location. There is also an exit blue door around the perimeter of the screen. This escape door brings you to a new room, but with the same number of zombies that were on the original screen.

The strength of this game is its simplicity for children and all wonderful screen sounds. Bunk, thug, splash, see, see and zap all accompany the break-down, cut of your zombies in the background you'll hear Gary's in the Hat of the Mountain King.

In this game by David and Bryan Lewis you play the star role — as Dracula

How it works

- 000 program title
- 000-000 initialise variables and memory
- 000-000 initialise movie and screen arrays
- 000-000 set up pointers and movie positions
- 000-000 put Dracula into movie array
- 000 of first game, allow player to select game mode or standard play
- 000 set movie colours
- 000-000 print title in three dimensions
- 000 print movie mode message, if in film mode
- 000-000 print initial screen positions
- 000-000 legal move and movie Dracula
- 000-000 check for collision
- 000-000 movie number routine
- 000-000 check for zombie collision
- 000 check if all zombies killed

- 000-000 print end of game message, if play again, process accordingly
- 000-000 finished game routine
- 000-000 movie sound for Dracula moving
- 000-000 movie sound for zombie moving
- 000-000 movie sound for zombies bumping into each other
- 000-000 movie sound for Dracula escaping to new island
- 000-000 movie sound for zombies falling into the pit
- 000-000 movie sound for Dracula being killed and seen by monster
- 000-000 movie end data output routine
- 000-000 data for music
- 000-000 data for movement routines
- 000-000 initialisation routines
- 000-000 real time routine to generate frames
- 000-000 movie position of escape if present



```

100 REM   Zombi Island 11/7/84           B. & D. Lewis.
110 RANDOMIZE TIMER:MODE 1:DEFINT a-z
120 PAPER 8:PAPER 80,B:ON B:OK GOLOS 1740
130 DIM screen(24,14),xpos(7,2),yoff(7),yoff(7)
140 WINDOW #1,1,40,14,80:MWINDOW #0,1,40,18,20
150 pl:=1:human=2:zombi=3:space=4:house=
160 zoe=240:level=2:play=0:flag=0:pass=0:pl:=0
170 a#=#CHR$(22)+#CHR$(3)+#CHR$(20)+#CHR$(12)+#CHR$(11)+#CHR$(25)+#CHR$(8)+#C
180 #10)+#CHR$(3)+#CHR$(285)+#CHR$(22)+#CHR$(8)
190 SYMBOL AFTER 223
200 SYMBOL 253,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8
210 SYMBOL 234,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8
220 SYMBOL 225,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8
230 REM   Initialization save & screen arrays
240 RESTORE 1570:FOR n=0 TO 7:READ xoff(n),yoff(n),direction(n):NEXT n
240 RESTORE:On 90:G0 GOLOS 1540
250 GOLOS 1590
260 FOR n=1 TO 24:screen(n,1)=pl TO screen(n,14):pl:=NEXT n
270 FOR n=2 TO 13:screen(n,1)=pl TO screen(n,14):pl:=NEXT n
280 dummy=REMAIN(8)
290 FOR n=3 TO 23:FOR m=2 TO 13
300   screen(n,m)=space
310 NEXT m,n
320 REM   Set up packages & zombie positions
330 FOR n=0 TO 8:READ
340   screen(2+RND*21,2+RND*11):G0
350 NEXT n
360 FOR a=0 TO 1:level
370   xpos(0,a)=1+2+RND*21
380   xpos(1,a)=2+RND*11
390   sum=xpos(0,a)+xpos(1,a),ypos(0,a)=2+RND*14
400 NEXT a:sum=sum/level
410 REM   Compute landing position
420 w=4+INT(RND*37)
430 w=4+INT(RND*97)
440 IF screen(w,y)=space THEN G0
450 screen(w,y)=space
460 IF play=0 THEN a#=#LOCATE(1:KEY$):IF a#=" " AND a#="0" THEN G0
470 CLS:ORDER B:INK 8,B:INK 1,21:INK 2,28:INK 3,12:pl:=y+1:zoff=0
480 TAB:FOR n=0 TO 8:zoe=y+1:IF n=3 THEN zoff=0
490 PLST 470:zoe=300+128:total=zoe,asPRINT "TOPSIDE":NEXT n:G0
500 IF a# THEN FOR pl:=LOCATE 27,18:PRINT "Down Mode":FOR z:=LOCATE 27,11:PRINT "
510   END":FOR z:=LOCATE 27,12:PRINT "to continue"
520   REM   Print the state of play
530   FOR m=1 TO 14:FOR n=1 TO 24
540     screen(n,m):IF screen(n,m)=space THEN G0
550     FOR a=0 TO 8:IF a# THEN PRINT CHR$(a+65);G0 G0
560     IF screen(n,m)=space THEN PRINT " ";G0 G0
570     IF screen(n,m)=human THEN PRINT "H";
580 NEXT m:PRINT :NEXT n
590 IF RND>.5 THEN n1=1+RND*13:IF RND<.5 THEN m1=1 ELSE m1=24
600 ELSE m1=8+RND*23:IF RND<.5 THEN n1=1 ELSE n1=
610
620 LOCATE m1,n1:FOR human:PRINT "D"
630 screen(m1,n1)=space:dummy=80:G0
640 REM   If move & check position
650 EVERY 30 GOLOS 1700:FOR #0,human:LOCATE #0,1,1:PRINT #0,"Your move ";CLS #0
660 IF a# THEN a#=#CHR$(1+RND*21):PRINT #0,direction#(a):G0 G0
670 a#=#KEY$,IF a#="1" OR a#="0" THEN G0
680 ELSE WHILE INKEY$=""&N0
690   a#=#CHR$(1+RND*21):PRINT #0,direction#(a)
700   screen(m1,y1)=space:dummy=REMAIN(8)
710   FOR human:LOCATE x,y:PRINT " ";
720   a#=#CHR$(a):y=y+1:G0:G0:G0:G0

```





```

1218 FOR sp1ash=500 TO 200 STEP -10
1219 SOUND 5,sp1ash/3,sp1ash/200,8,8,15-replash/50
1220 NEXT sp1ash
1221 RETURN
1222 REM Caught by Zombies
1223 FOR n=7 TO 3 STEP -1:FOR eat=1 TO 4000 STEP 40
1224 SOUND 5,ANDeat/3,n,8,8,7-n
1225 NEXT eat,n
1226 FOR n=7 TO 1 STEP -1:FOR tear=999 TO 1 STEP -30
1227 SOUND 5,tear/1,n,8,8,1
1228 NEXT tear,n
1229 RETURN
1230 REM Real-time music routine
1231 note=note+READ note
1232 IF note=1 THEN para=para+1:IF para=2 THEN RESTORE 1446:GOTO 1246
1233 IF <page> AND para=30 THEN pitch=pitch+1:IF pitch>3 THEN para=pitch+1:IF
1234 <page>SOUND 7,8,47,8:RESTORE 1404:GOTO 1244
1235 ELSE para=1:IF <page>SOUND 1446:GOTO 1246
1236 IF note=2 THEN flag=flag+1:RESTORE 1446:GOTO 1246
1237 IF note=3 THEN 1246
1238 IF note=8 THEN 1220
1239 IF note=8 THEN SOUND 7,8,4,8
1240 SOUND 1,note/pitch-1,9,4:SOUND 3,note/pitch,9,5:SOUND 4,note/pitch+1,9,4
1241 ON 50121 SOUND 1246
1242 RETURN
1243 REM Data for music - FOUR SYNT In the hall of the man
1244 king (1st part) by E. ORLON
1245 DATA 750,750,750,750,750,750,750,750,750,750,750,750
1246 DATA 1134,1134,1812,1812,954,954,851,851,750,750,954,954,750,750,750,750
1247 DATA 884,884,1812,1812,851,851,851,851,4,884,851,1812,1812,851,851,851,851
1248 DATA 1134,1134,1812,1812,954,954,851,851,750,750,954,954,750,750,540,540
1249 DATA 638,638,750,750,954,954,750,750,638,638,638,638,638,638,638,638
1250 DATA 1
1251 DATA 750,750,674,674,682,682,540,540,586,586,638,638,586,586,586,586
1252 DATA 478,478,682,682,478,478,478,478,586,586,638,638,586,586,586,586
1253 DATA 750,750,674,674,682,682,540,540,586,586,638,638,586,586,586,586
1254 DATA 478,478,682,682,478,478,478,478,586,586,586,586,586,586,586,586
1255 DATA 2
1256 REM Data for numeric keypad
1257 DATA -1,1,"SOUTH-WEST",8,1,"SOUTH",1,1,8,"SOUTH-EAST",-1,8,"WEST",
8,8,"STOPPED",1,8,"EAST",-1,-1,"NORTH-WEST",
8,-1,"NORTH",1,1,-8,"NORTH-EAST"
1258 REM Instructions
1259 BORDER 3:INK 8,3:INK 1,3:INK 2,14:INK 3,19
1260 POX 3:LOCATE 14,1:PRINT "COUNT DECADES..." ON "...JMWELD ISLAND"
1261 POX 3:LOCATE 14,8:PRINT "On a foggy night whilst out for a bite, you take a
short-cut over Hall's back-s& and disaster strikes!"
1262 PRINT "Your bat hits a passing voodoo shaman & you find yourself on JMWELD
ISLANDS!"
1263 PRINT "You must lure the hapless creatures into the bottomless pits scattered
all about the"
1264 PRINT "Island. They are attracted by your caps,"
1265 PRINT "and cannot see the pits!"
1266 POX 3:PRINT "To move, use the numeric keypad 11 to 114. Follow 1="
1267 LOCATE 14,8:PRINT "W" W "N" N:LOCATE 15,20:PRINT "M" STILL 8":LOCATE
14,22:PRINT "OH 0" 0"
1268 POX 3:LOCATE 2,25:PRINT "Press 0 for help, or SPACE BAR to play!"
1269 RETURN
1270 POX 3:FOR <page>=1 TO 4000
1271 <page>=400-INT (4000/3):LOCATE 1:POX 3:GOTO 1,1:PRINT CHR(32)
1272 NEXT <page>
1273 RETURN
1274 REM

```




```

159 INK7=PAPE88
160 CLS PRINT"SETTING ARRAYS - PLEASE WAIT"
170 DIMA(63)
175 FOR J=5 TO 0 STEP-1 K=2*J
180 FOR I=0 TO 63
181 IF (I AND K)=01 THEN A(I)=A(I)+CHR$(127) ELSE A(I)=A(I)+" "
182 NEXT NEXT
200 FOR I=40000+(92*0) TO 40007+(92*0)
201 POKE I, 32:NEXT
203 FOR I=0 TO 6: POKE(40000+(92*I)+1), 0:NEXT
204 POKE40015, 63:POKE40023, 63
240 CLS
250 FOR Y=17 TO 1 STEP-0
251 PLOT0, Y-1, "% "
255 FOR X=1 TO 13 STEP0
260 OOSUB500
265 NEXT NEXT
270 FOR I=1 TO 14: PRINTCHR$(10), "NEXT
272 FOR I=1 TO 22: PRINTCHR$(9), "NEXT
275 OOSUB700
290 S=0: PLOT1, 26, "STANDARD CHR. SET"
300 XH=1 YH=1 XC=0 YC=0
310 OOSUB400
311 KH=32YH: IFKH="" THENCLS
312 K=APC(LKH)
313 PLOT2, 14, "
314 IFK =127 THENGO SUB1100
315 IFK ="S" THENGO SUB1150
316 IFK ="I" THENGO SUB1200
317 IFK ="H" THENGO SUB1300
318 IFK =" " THENGO SUB1400
341 IFK ="E" THENCLS: PRINT"TERMINATED" END
342 PLOT0, Y, STX
343 IFK ="R" THENGO SUB1350
344 IFK ="", " THENGO SUB1400
345 IFK > 7 AND K < 12 THEN ON K-7 GOSUB450, 460, 470, 480
346 IFK ="0" THENGO SUB1400
347 IFK ="C" THENGO SUB1500
348 IFK ="B" THENGO SUB1600
349 IFK = 13 THEN GO TO 1700
350 GO TO 310
400 REM**ORIN CURSOR
410 X=XH*6-54 NC: Y=YH*6-7 YC
415 STX=SCRW(L, Y)
420 IF STX=126 THEN PLOT0, Y, 17 ELSE PLOT0, Y, 43
430 RETURN
450 REM
451 IF XH=3 AND YC=0 THEN RETURN
452 IF XH > 0 THEN XH=XH-1 ELSE XH=XH+1 YC=5
455 RETURN
460 REM
461 IF XH=3 AND YC=5 THEN RETURN
462 IF XH < 0 THEN XH=XH+1 ELSE XH=XH+1 YC=0

```




```

1015 E=0
1016 FOR I=1 TO 3: FOR J=1 TO 3: IF CN(I, J)=CN THEN E=1
1017 NEXT J: NEXT I
1018 IFE=1 THEN PLOT 22, 14, "CNR IN USE" RETURN
1020 GOSUB 600
1022 CH=CN, YH=CN
1024 GOSUB 700
1040 RETURN
1100 REM**BLANK CHARACTER**
1110 AD=4000+(1024*5)+CN(XH, YH)*8
1120 FOR I=0 TO 7: PLOT XH+5, YH*8-I, " " NEXT I
1130 ST=91: RETURN
1150 REM**FILL CHARACTER**
1160 AD=4000+(1024*5)+CN(XH, YH)*8
1170 FOR I=0 TO 7: POK AD+I, 63: NEXT I: CH=CN(XH, YH): GOSUB 600
1180 ST=127: RETURN
1200 AD=4000+(1024*5)+CN(XH, YH)*8
1210 FOR I=0 TO 7: POK AD+I, (NOT PEEK(AD+I))/AND 63: NEXT I
1215 CH=CN(XH, YH)
1220 GOSUB 600: IF ST=127 THEN ST=91 ELSE ST=127
1230 RETURN
1300 REM**MEMORY**
1310 AD=4000+(1024*5)+CN(XH, YH)*8
1320 FOR I=0 TO 7: POK AD+I, PEEK(AD+I): NEXT I
1330 GOTO 1450
1350 REM**MEMORY RECALL**
1360 AD=4000+(1024*5)+CN(XH, YH)*8
1370 FOR I=0 TO 7: POK AD+I, PEEK(AD+I): NEXT I
1375 CH=CN(XH, YH)
1380 GOSUB 600: GOTO 1450
1400 REM**SWP MEM & CHR**
1410 AD=4000+(1024*5)+CN(XH, YH)*8
1415 FOR I=0 TO 7: X=PEEK(AD+I): POK AD+I, PEEK(AD+I): Y=PEEK(AD+I): X: NEXT I
1420 CH=CN(XH, YH)
1430 GOSUB 600
1450 AD=1024
1451 PLOT 29, 26, "MEMORY"
1455 PLOT 29, 16, "*****"
1456 FOR I=0 TO 7: PLOT 29, 17+I, "I" NEXT I
1460 X=29: Y=17: GOTO 620
1500 REM**BLOCK SKIP**
1505 PLOT 23, 14, "GIVE DIRECTION"
1510 GET#
1515 PLOT 23, 14, " "
1520 X=ASC(X): CHR=70GOTO 1550, 1540, 1570, 1590
1540 RETURN
1550 IF X=1 THEN YH=CN-1
1555 RETURN
1560 IF X=2 THEN YH=CN+1
1565 RETURN
1570 IF X=3 THEN YH=YH+1
1575 RETURN
1580 IF X=4 THEN YH=CN-1
1585 RETURN

```





```

: 1600 REM=CONSECUTIVE STANDARD CHRS=*
1605 REM
1610 INPUT "FIRST CHAR: CHR CH=VAL(CHR)
1620 GOSUB1300
1630 IF CH<128 OR CH>119 THEN GOTO 1610
1640 FORB=1 TO 5
1650 FORA=1 TO 1 CH=CHR(A,B)=CH
1660 RR=R YY=Y GOSUB600
1665 CH=CH+1/NEXT NEXT
1670 GOSUB700 RETURN
1700 REM ** SWITCH CHARACTER SETS **
1710 S=1-S
1720 GOSUB1000
1730 IF S=0 THEN 290
1740 PLOTS.26 "ALTERNATE CHR SET"
1750 GOTO 300
1800 FORB=1 TO 5
1810 FORA=1 TO 1 CH=CHR(A,B)
1820 RR=R YY=Y GOSUB600
1830 NEXT NEXT
1840 GOSUB 700
1850 RETURN
1900 FORI=1 TO 22 PRINTCHR$(3); NEXT PRINTCHR$(11);
1910 PRINT "          "; FORI=1 TO 10 PRINTCHR$(3); NEXT
1920 RETURN
2000 PRINT " THIS PROGRAM ALLOWS YOU TO MODIFY"
2005 PRINT
2010 PRINT "THE CHARACTER SETS IN THE COMPUTER"
2015 PRINT
2020 PRINT "BY GIVING YOU AN ENLARGED WORK PAD"
2025 PRINT
2030 PRINT "AREA WHICH WILL DISPLAY UP TO NINE"
2035 PRINT
2040 PRINT "CHARACTERS BY USING VARIOUS KEYS "
2045 PRINT
2050 PRINT "THE CHARACTERS MAY BE CHANGED TO"
2055 PRINT
2060 PRINT "PRODUCE USER DEFINED GRAPHICS FOR"
2065 PRINT
2070 PRINT "GAMES ETC " PRINT
2080 GOSUB 3000
2090 CLS
2100 PRINT " THE KEYS ARE -- PRINT
2110 PRINT "ARROWS - MOVE THE CURSOR"
2120 PRINT
2130 PRINT "SPACE - INVERTS THE BIT UNDER CURSOR" PRINT
2140 PRINT "DEL - CLEARS ALL CHARACTER BITS"
2150 PRINT "S - SETS ALL CHARACTER BITS"
2160 PRINT "I - INVERTS ALL CHARACTER BITS"
2165 PRINT
2170 PRINT "O - GET SINGLE CHARACTER"
2180 PRINT "P - READ 9 CHRS. TO GRID"
2190 PRINT
2200 PRINT "R - MEMORIZE CHARACTER"

```


ZOO BREAK-OUT

Locate all the wild beasts and get them back in their cages in this zoo game by David Carter

Last night all the animals broke out of their cages and wandered havoc in the zoo. This they all climbed back, but not all the wrong way.

This morning the keepers have come in to work and found the zoo. The zoo will be open soon and they have to get the animals back into their own cages.

The two keepers each have a truck and which they can load up to three animals in order to drive them back to their own cages. The head keeper has prepared a house in the keeper who gets the most cages filled, and so the two players start out their skill to fill them up and

prevent their opponent from filling up.

So, start moving those animals... and happy hunting!

Please note: All the Spectrum listings at HCW are printed to a

special format. All user defined characters are printed as capital letters but with an underline. In order to type them into your computer you need to place the machine in "GRAPHIC" mode and then press the capital letter indicated. If you follow these instructions to the letter the graphic characters will be shown on screen. When you run the program



```

80 GO SUB 1000: REM title
20 GO SUB 1200: REM define arrays
70 GO SUB 2000: REM input player's names
40 GO SUB 3000: REM draw zoo
50 GO SUB 9000: REM get random animals
40 LET s=19
  
```

```

70 LET I=0: LET r=0: FOR i=1 TO 3: LET s(i)=0: NEXT i: GO SUB 9000: GO SUB 940
8
100 LET guessstart
110 IF guess=1 THEN PRINT AT 1,0: BAK guess:(#11:1 TO #111):'s go'..
120 IF guess=2 THEN PRINT AT 1,0: BAK guess:1' "jrn(12:1 TO #121):'s go'
130 IF guess=1 AND guess=2 THEN STOP
140 GO SUB 9000: REM save and load
150 GO SUB 9000: REM save and unload
160 IF b="q" THEN GO TO 170
170 IF a="a" OR a="c" THEN LET guess=guess: GO TO 110
180 PRINT 00
190 GO SUB 9000: LET start=0-start: REM print etc
200 INPUT "Do you want another game? "yq#
210 IF yq="" THEN GO TO 100
220 IF yq="Y" THEN CLS : GO TO 40
230 INPUT "New player? "yq#
240 IF yq="Y" THEN CLS : GO TO 30
250 STOP
2600 CLS : PRINT AT 0,10:"100 BREAK OUT""Last night all the animals broke" "ou
t of the zoo.""The zoo keepers have been""provised a bonus if they can""get
the animals back into their""own cages, with provision for""the one who can ge
t the most ""cages full.""
2700 GO SUB 9000: GO SUB 9000: REM define US0
2800 PRINT ""Each has a sorry into which they""can lure up to 3 animals in""o
rder to move them into their""own cages.""
2900 FOR i=0 TO 0: PRINT AT 0,4+0*(#11:1): NEXT i
3000 INPUT "Do you want instructions? "yq#
3100 IF yq="y" THEN GO SUB 7000
3200 RETURN
3300 DIM s(12): FOR i=1 TO 3: LET s(i)=0: NEXT i
3400 DIM a(2)
3500 RETURN
3600 CLS
3700 PRINT AT 0,10:"100 BREAK OUT"
3800 DIM #f(2,0)
3900 INPUT "Name of player 1? "jrn(11)
4000 INPUT "Name of player 2? "jrn(12)
4100 LET unload=0
4200 LET start=i-INT (3*#f#0)
4300 DIM p(2)
4400 FOR i=1 TO 3
4500 LET p(i)=0
4600 IF #f(i) > 0 THEN IF p(i) > 0 THEN LET p(i)=p(i)-1: GO TO 4900
4700 NEXT i
4800 RETURN
4900 PRINT AT 0,10:"100 BREAK-OUT"
5000 FOR i=0 TO 1: PLOT 03+000i,140: DRAW 0,-140: NEXT i
5100 FOR i=0 TO 0: PLOT 03,140-100i: DRAW 00,0: NEXT i
5200 LET #="ROOSE"
5300 FOR i=0 TO 1: FOR j=1 TO 5
5400 PRINT AT #+j,21+i*#f(1)
5500 NEXT j: NEXT i
5600 RETURN
5700 REM save & load
5800 IF INKEY(">") THEN GO TO 3010
5900 IF INKEY=" " THEN GO TO 3020
6000 LET b=INKEY#
6100 IF guess AND b="0" AND a="c" THEN RETURN
6200 IF guess=2 AND b="0" AND a="c" THEN RETURN
6300 IF b="a" OR b="c" THEN GO SUB 4500
6400 IF guess=2 THEN GO TO 3000
6500 LET x=2+1
6600 IF b="c" THEN GO TO 3010
6700 LET r=r+1: GO SUB 9000
6800 LET count=0

```



```

3120 FOR i=1 TO 5: LET c:=asc(asc(0,1)) NEXT i
3130 IF c=asc(0) THEN GO TO 3210: REM row empty
3140 IF c<31<31 THEN RETURN : REM Larry full
3150 LET i:=i: LET j:=
3160 IF c<1,10<1 THEN LET i:=i+1: GO TO 3120
3170 IF c<1,0<1 THEN LET j:=j+1: GO TO 3170
3175 IF c<1,20<1,21 AND c<1,11<1,21 THEN GO TO 3480: REM is it three
3180 LET c:=asc(0,1)
3190 PRINT AT w+1,2+2:pa(1)
3200 PRINT AT w+1,2+2:pa(1)
3210 LET c:=1
3220 IF j=3 THEN RETURN : REM Larry full
3230 GO TO 3310
3240 REM load right lorry
3250 IF w=3<3 THEN GO TO 3260
3260 LET w:=w+1
3270 LET l:=i: GO SUB 3090
3280 LET c:=0
3290 FOR i=1 TO 5: LET c:=asc(asc(0,1)) NEXT i
3300 IF c=asc(0) THEN GO TO 3310: REM row empty
3310 IF c<31<31 THEN RETURN : REM Larry full
3320 LET i:=
3330 IF c<1,1<1 THEN LET i:=i+1: GO TO 3370
3340 IF c<1,0<1 THEN LET j:=j+1: GO TO 3370
3350 IF c<1,20<1,21 AND c<1,10<1,21 THEN GO TO 3480: REM is it three
3360 LET c:=asc(0,1)
3370 PRINT AT w+1,2+2:pa(1)
3380 PRINT AT w+1,2+2:pa(1)
3390 LET c:=1
3400 IF j=3 THEN RETURN : REM Larry full
3410 GO TO 3510
4000 REM move and unload
4010 IF 5=5<3 THEN GO TO 4010
4020 IF 5=5<3 THEN GO TO 4020
4030 LET w:=w-1
4040 IF w=1<3 THEN RETURN
4050 IF w=1 AND w=2<3 THEN GO TO 4010
4060 IF w=2 AND w=3<3 THEN GO TO 4010
4070 IF w=3<3 OR w=1<3 THEN GO SUB 4090
4080 IF w=2 THEN GO TO 4010
4090 IF w=3<3 THEN GO TO 4010
4100 LET l:=i: GO SUB 3090
4110 IF l=1<3 AND l=1<3 THEN GO TO 4090
4120 LET j:=j: LET i:=
4130 IF l=1<3 THEN RETURN
4140 IF l=1<3 THEN LET j:=j+1: GO TO 4110
4150 IF c<1,20<1 THEN GO TO 4010
4160 IF c<1,1<1 THEN LET i:=i+1: GO TO 4120
4170 LET c:=asc(0,1): LET l:=i
4180 PRINT AT w+1,2+2:pa(1)
4190 PRINT AT w+1,2+2:pa(1)
4200 GO SUB 3090
4210 IF l=1<3 THEN GO TO 4010
4220 RETURN
4230 IF w=3<3 THEN GO TO 4010
4240 LET r:=i: GO SUB 3090
4250 IF l=1<3 AND l=1<3 THEN GO TO 4260
4260 LET j:=j: LET i:=
4270 IF l=1<3 THEN RETURN
4280 IF l=1<3 THEN LET j:=j+1: GO TO 4240
4290 IF c<1,20<1 THEN GO TO 4010
4300 IF c<1,1<1 THEN LET i:=i+1: GO TO 4250
4310 LET c:=asc(0,1): LET l:=i
4320 PRINT AT w+1,2+2:pa(1)

```




```

4000 PRINT AT 1+1,7+2+1,4#0 (1,1)
4010 GO SUB 5000
4020 IF 1+1<0 THEN GO TO 4010
4030 RETURN
4040 IF 1+0=1 THEN GO TO 4040
4050 IF 1+1=1 THEN IF 1>1 THEN GO SUB 7000: LET 1+1=1: GO SUB 4040
4060 IF 1+1=1 THEN IF 1<1 THEN GO SUB 9000: LET 1+1=1: GO SUB 4040
4070 RETURN
4080 IF 1+1=1 THEN IF 1>1 THEN GO SUB 7000: LET 1+1=1: GO SUB 9000
4090 IF 1+1=1 THEN IF 1<1 THEN GO SUB 9000: LET 1+1=1: GO SUB 7000
4100 RETURN
5000 LET 1+1: LET 1+1=(1+1)+1+(1+1)+1
5010 IF 1+1=1 THEN RETURN
5020 IF 1+1=1 THEN LET 1+1=1: IF 1<1 THEN GO TO 5000
5030 IF 1+1=1 THEN RETURN
5040 FOR 1+1 TO 10
5050 PLOT 1+1,172-1+1: DRAW INK 1+1,1+1
5060 BEEP 1,1
5070 NEXT 1
5075 LET 1+1=1+1
5080 PRINT AT 1+1,172-1+1: PAPER 1+1: INK 1+1,1+1
5090 RETURN
5100 REM winner
5110 CLR
5120 IF 1+1=1 THEN GO TO 5000
5130 PRINT AT 1,1: INK 1+1,1 TO 1+1: INK 1+1: "is the winner by "(1+1)"(1+1)
5140
5150 RETURN
5160 PRINT AT 1,1: INK 1+1,1 TO 1+1: INK 1+1: "is the winner by "(1+1)"(1+1)
5170
5180 RETURN
7000 CLR
7010 PRINT AT 1,1: "INSTRUCTIONS"
7020 PRINT "Each player is allowed to lure""up to three animals into his""lorry each time it is his turn."
7030 PRINT "The three can come from one or""more cages.""The player may then unload the""animals into one or more cages."
7040 PRINT "There are two restrictions""1. Once three similar animals""have joined each other, either""in a lorry or cage, they will""not allow themselves to be""separated." "2. Once a player unloads any""animal he will not be allowed to ""load any more."
7050 GO SUB 7000
7060 PRINT "The up/down (7/4) cursors move""the lorrys from cage to cage."" The left/right (3/6) cursors""move the animals into or out of ""the lorrys, depending on who a""turn it is."
7070 PRINT "The object is to move the""animals so that the five of each""type are collected together in""one cage.""The winner is the one who can""get the most cages filled."
7080 PRINT "Press ""q"" to end the game when""unloading."
7090 PRINT AT 1,1: "When you are ready to start:"
7100 GO SUB 7000
7110 RETURN
7120 IF 1+1=1 THEN GO TO 7000
7130 PRINT AT 1,1: "Press ENTER to continue."
7140 PAUSE 0
7150 CLR
7160 RETURN
8000 REM compress right
8010 FOR 1+1 TO 1 STEP -1
8020 FOR 1+1 TO 1 STEP -1
8030 IF 1+1,1+1 THEN GO TO 8000
8040 IF 1+1,1+1 THEN GO TO 8000
8050 LET 1+1,1+1
8060 LET 1+1,1+1
8070 PRINT AT 1+1,1+1,1+1

```

```

0000 PRINT AT a+1,9+2a;pa#(1)
0010 NEXT j
0100 NEXT i
0110 RETURN
0200 REM example 1a-1
0210 FOR i=1 TO 4
0220 FOR j=1 TO 3
0230 IF a+i,1+2j THEN GO TO 0260
0240 IF a+i,j+1 THEN GO TO 0270
0250 LET a+i,j+1;c(i,j)
0260 LET a+i,j+1
0270 PRINT AT a+1,9+2a;pa#(i,j)
0280 PRINT AT a+1,9+2a;pb#(i,j)
0290 NEXT j
0300 NEXT i
0310 RETURN
0400 IF b+1+1+2+1+2+1+2+1+2 OR c+1,1+c(1,4) THEN GO TO 3010
0410 FOR i=1 TO 3
0420 LET b+1+c(i,1)
0430 PRINT AT a+1,9+2a;pa#(1)
0440 PRINT AT a+1,9+2a;pb#(1)
0450 LET a(i,1)=1
0460 NEXT i
0470 RETURN
0500 IF b+1+1+2+1+2+1+2+1+2 OR c+1,2+c(1,2) THEN GO TO 3010
0510 FOR i=1 TO 3
0520 LET b+1+c(i,2)=1
0530 PRINT AT a+1,9+2a;pa#(2)
0540 PRINT AT a+1,9+2a;pb#(1,1)
0550 LET c(i,2)=1
0560 NEXT i
0570 RETURN
0600 IF b+1=1 THEN RETURN
0610 IF a+1,1+1+c(1,3)+1+1,3+1+1,3+1+1,3+1+1 THEN GO TO 4010
0620 FOR i=1 TO 3: LET c(i,1)=1
0630 PRINT AT a+1,9+2a;pa#(1,1)
0640 PRINT AT a+1,9+2a;pb#(1)
0650 LET b(i)=1
0660 NEXT i
0670 GO SUB 0000
0680 GO TO 4000
0690 IF b+1=1 THEN RETURN
0700 IF a+1,2+c(1,4)+1+1,4+1+1,4+1+1,4+1+1 THEN GO TO 4010
0710 FOR i=1 TO 3: LET c(i,2)=1
0720 PRINT AT a+1,9+2a;pa#(1,1)
0730 PRINT AT a+1,9+2a;pb#(1)
0740 LET b(i)=1
0750 NEXT i
0760 GO SUB 0000
0770 GO TO 0200
0800 DIM c(10,5): FOR i=1 TO 9: FOR j=1 TO 5: LET c(i,j)=1: NEXT j: NEXT i
0810 FOR i=2 TO 9
0820 FOR j=1 TO 5
0830 LET c(i)=INT (9+999)
0840 LET a+i=INT (5+999)
0850 IF a(i,5)>1 THEN GO TO 9030
0860 IF a>3 THEN IF a(5)=1 THEN GO TO 9030
0870 IF a>5 THEN IF c(5,a+1)=1 THEN GO TO 9030
0880 LET a(i,5)=1
0890 PRINT AT 2+1+2,9+2a;pa#(1)
0900 NEXT j
0910 NEXT i
0920 RETURN
0930 DIM a#(5,5)
0940 LET a#(1)=1+2+1+2+1+2+1+2+1+2

```



```

9020 LET a$(21)="BB"
9030 LET a$(22)="Bd"
9040 LET a$(23)="Bd"
9050 LET a$(24)="Bd"
9060 LET a$(25)="Bd"
9070 LET a$(26)="Bd"
9080 LET a$(27)="Bd"
9090 LET a$(28)=" "
9100 DIM t$(10) FOR i=1 TO 9: LET t$(i)=i: NEXT i
9110 RETURN
9120 LET x=21+i: PRINT OVER 1;AT x+2,2;"BBBBBBBB";AT x+1,2;"10";AT x,3;"0"
:GOTO
: B;"TTTTTTTT"
9110 PRINT OVER 1;AT x+1,4;AT t$(1);AT t$(12);AT t$(13)
9120 RETURN
9130 LET y=24+i: PRINT OVER 1;AT x,22;"BBBBBBB";CHR$(2);AT x+1,22;"BB";A
T x
+2,22;"BBBBBBBB"
9140 PRINT OVER 1;AT x+1,22;AT t$(22);AT t$(12);AT t$(11)
9150 RETURN
9160 RESTORE i FOR n=1 TO 28: READ a
9170 FOR i=0 TO 7
9180 READ a: POKE USR 18+i,a
9190 NEXT i
9200 NEXT n
9210 DATA "a",8,12,14,16,13,10,10
9220 DATA "b",20,12,12,22,22,24,22,12,10
9230 DATA "c",8,12,12,16,13,14,14
9240 DATA "d",16,22,24,22,24,16,10,10
9250 DATA "e",8,12,13,13,7,3,3,3
9260 DATA "f",14,13,14,16,16,8,8
9270 DATA "g",8,8,8,8,8,7,12,12
9280 DATA "h",8,8,3,4,16,24,22,12
9290 DATA "i",8,8,1,1,3,4,16
9300 DATA "j",12,12,12,12,24,24,24,12,24
9310 DATA "k",8,8,8,13,13,14,14
9320 DATA "l",12,8,12,14,16,16,16,16
9330 DATA "m",8,7,7,13,17,16,16,12
9340 DATA "n",4,16,14,22,24,22,8,4
9350 DATA "o",12,12,12,12,12,12,16,16
9360 DATA "p",16,24,16,22,22,24,12,16
9370 DATA "q",22,16,16,16,16,16,16
9380 DATA "r",22,8,8,8,8,8,8
9390 DATA "s",22,1,1,1,1,1,1
9400 DATA "t",22,12,12,12,12,12,12,12,12
9410 RETURN
9420 FOR i=1 TO 8: PRINT a$(i);: TO 80;: PRINT "a";: NEXT i

```





GET YOURS EVERY WEEK!

Fed up of fighting your way through the crowd?
Sick and tired of finding your local shop has
sold out?

Fancy having a free binder for your MCM?
Why not have a subscription and get your
favourite magazine delivered to your door each
and every week?

For a limited period only all UK subscriptions,
either new or renewals, will be automatically
include a free binder. Each binder holds up to
26 copies of MCM safe and secure. No more
dog-eared copies lying on the floor or being
lost by the cat.

A year's subscription costs just
£26 to UK destinations
£41 Overseas (Accelerated Surface Post)
£51 USA (Accelerated Surface Post)
£114 Airmail!

Extra binders are also available at £5 each
(inc P&P). Allow 21 days for delivery

HOME COMPUTING WEEKLY SUBSCRIPTION ORDER

Name _____

Address _____

Town _____

County _____

Post Code _____

Commence with issue number _____

Reprint/return value _____

Access/Bank/credit card _____

Signature _____

Subscription type _____

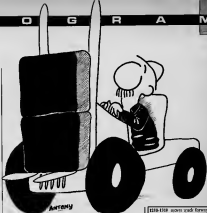
Binders (£5 each) _____

Send completed form to:
Inforest, 10-12 Tross House,
179 Marlborough, Hemel Hempstead,
Herts HP1 1BB

TI-99/4A GAME

You're in charge of a forklift truck with falling batteries. In this game by Rod Lane in TI BASIC

KEEP ON TRUCKING



In this game you play the part of a forklift truck operator putting in some overloads in the warehouse. Unfortunately, the only truck around is old and the battery is it doesn't last long! So to keep going you will probably need to recharge a number of times.

However, the recharge points behave as new batteries keep appearing and disappearing. You should therefore truly go for one if it appears near to you! To see these recharge points you must BACK your truck over things if you are successful you will gain between one and five units of power (shown as the power level number in the bottom of the screen).

The normal four corner keys control the movement of the truck. You job then, assuming your power level, is to pick up all the coloured crates by clicking the forks of your truck over to pull them from the WAREHOUSE and to load them into the corresponding containers at the right of the screen.

When you have loaded the last crate and backed your truck out of the container (in game mode) and offers you a new game at the same or a different skill level. The skill level determines the number of crates to be loaded. Levels one and two are best only for practice. Speed is not essential to you but no power when reaching still, to

plan your routes to conserve as much power as possible.

I have written the program with BASIC statements easily to understand the program and as these BASIC statements are all line numbers starting at five, if you see the BASIC commented when typing the program in, you can ignore all the BASIC. Good luck!

How it works

- 100-110 defines characters
- 110-190 set up screen
- 190-250 scans keyboard, counts number of movements
- 260-400 checks for recharge points if none, places out 20% of the total
- 410-450 checks on direction of movement required
- 460-480 moves truck down
- 490-500 moves truck up
- 510-520 moves truck back
- 530 checks if truck forks over recharge point and sets accordingly

110-110 moves truck forward
110-110 checks for and picks up crate if present in front of truck

1200-1200 moves into container
rest of line of code
decreases the power
1200-1200 loads crates on to container, loses fully
1200-1200 sets screen
1700-1700 lose routine
1700-1700 check battery
1800-1800 skill level subroutines

Variables

- BAT: power, returns position of truck
- COLLOC: row, column position of recharge point
- FRLOC: row, column position of forking crane
- Q: A,B,C,D,E: all used for WAREHOUSE
- PLANT: location of recharge point against COLLOC used in CHARG routine
- RECH: recharge every move
- XC: position of power level on screen
- X: skill code of character on level of truck clock at screen
- Y000: total number of crates loaded
- SK: skill level

```

100 CALL CLEAR
110 GOSUB 1860
120 CALL CLEAR
130 RX=1
140 CH=1
145 REM *****
150 FOR Q=40 TO 64 STEP 8
160 CALL CHR$(Q) "7848487848487848"
8">
    
```



```

1030 GOSUB 1390
1040 GOTO 710
1045 REM *****
1050 CALL GCHAR(R,C-1,6)
1060 IF G=34 THEN 1080
1070 IF G<>32 THEN 710
1080 CALL HCHAR(R,C,32,2)
1090 C=C-1
1100 IF C>5 THEN 1120
1110 C=6
1120 GOSUB 1390
1125 REM *****
1130 IF G<>34 THEN 710
1140 E=INT(44*RN3)+1
1150 BC=BC+E
1160 IF BC>0 THEN 1180
1170 BC=1
1180 CALL HCHAR(24,BC,41,32-BC)
1190 CALL SOUND(400,-8,2)
1200 GOTO 710
1205 REM *****
1210 CALL GCHAR(R,C+2,GF)
1220 IF (GF=106)+(GF=34) THEN 710
1230 IF GF=1 THEN 1920
1240 IF (GF=41)+(GF=49)+(GF=57)+
(GF=65) THEN 710
1250 IF GF<>32 THEN 1320
1260 CALL HCHAR(R,C,32)
1270 C=C+1
1280 IF C<27 THEN 1300
1290 C=26
1300 GOSUB 1390
1310 GOTO 710
1315 REM *****
1320 IF X<>141 THEN 710
1330 X=6F
1340 CALL HCHAR(R,C,32)
1350 C=C+1
1360 GOSUB 1390
1370 CALL SOUND(100,110,4,-7,16)
)
1380 GOTO 710
1385 REM *****
1390 CALL SOUND(200,-7,12)
1400 CALL HCHAR(R,C,140)
1410 CALL HCHAR(R,C+1,X)
1420 IF BATT<10<>INT(BATT/10) THE
N 1510
1430 CALL SOUND(250,560-(13=BC),
5)
1440 CALL HCHAR(24,BC,49)
1450 BC=BC+1

```

```

1460 IF BC=33 THEN 1730
1470 CALL GCHAR(26,C,F)
1480 IF F<>34 THEN 1500
1490 CALL HCHAR(R,C,32)
1500 FLAG=0
1510 RETURN
1515 REM *****
1520 CALL HCHAR(R,C,32)
1530 C=C+1
1540 CALL HCHAR(R,C,140)
1550 X=141
1560 CALL KEY(0,K,S)
1570 IF S=0 THEN 1560
1580 IF K=83 THEN 1600
1590 GOTO 1560
1600 C=C-1
1610 CALL HCHAR(R,C+1,C)
1620 CALL HCHAR(R,C,140)
1630 TOT=TOT+1
1640 IF TOT=8K+4 THEN 1660
1650 GOTO 710
1655 REM *****
1660 FOR Z=1 TO 24
1670 PRINT "FINISHED FINISHED FI
NISHED"
1680 NEXT Z
1690 FOR Z=1 TO 24
1700 PRINT " "
1710 NEXT Z
1720 GOTO 1790
1725 REM *****
1730 FOR Z=1 TO 24
1740 PRINT "NO POWER`ND POWER MD
POWER"
1750 NEXT Z
1760 FOR Z=1 TO 24
1770 PRINT " "
1780 NEXT Z
1785 REM *****
1790 INPUT "MORE???" EY,N1 "Y=N
1800 IF R5<>"N" THEN 1830
1810 CALL CLEAR
1820 END
1830 IF R5<>"Y" THEN 1790
1840 GOSUB 1660
1850 GOTO 330
1855 REM *****
1860 INPUT "SKILL LEVEL? DUP TO
41 "SK
1870 IF (SK<>1)+(SK<>2)+(SK<>3)+
(SK<>4) THEN 1860
1880 RETURN

```



NEW

Azimuth Head Alignment Tape

interceptor
SOFTWARE

Azimuth Head Alignment Tape

SUITABLE FOR THE COMMODORE COMP/CASSETTE DRIVE

£8.99

Blackburn City
ON TAP 4000

interceptor SOFTWARE

HAVE YOU EVER EXPERIENCED LOADING PROBLEMS?

The majority of loading problems are associated with the tape head alignment. We have produced a head alignment cassette (RECORDED ON A SPECIAL AZIMUTH CASSETTE) which allows the user to carry out a simple adjustment whilst following a visual display on the screen, the pack retails at £8.99 and comes complete as listed.

- 1 Alignment Tape
- 2 Special Software/Printer
- 3 Fully Illustrated Instruction Manual
- 4 Free Arcade Test Game

*Some of limitations on only special Azimuth cassettes will produce the correct results.

NOW
AVAILABLE ON THE
COMMODORE 64
AND
AMSTRAD CPC 464

A FULL PROFESSIONAL
ENGINEERS REPORT IS
AVAILABLE, FREE OF CHARGE ON
SENDING A S.A.E. TO
INTERCEPTOR SOFTWARE

Mark S.A.E. Engineers Report

SPECIAL OFFER

A Data Cassette is given free with every order sent in from this advert.

interceptor
SOFTWARE

Azimuth Head Alignment Tape

SUITABLE FOR THE AMSTRAD CPC 464 TAPE DRIVE

£8.99

AMSTRAD CPC 464

Blackburn City
ON TAP 4000

Available from all good Computer Software stores or direct to **interceptor SOFTWARE**

S

K

O

O

B



Graphics Book for the Commodore 64

As anyone who has ever seen some of the games available for the C64 will agree, the Commodore is capable of some excellent graphics. On the other hand, anyone who has ever seen the C64 manual will agree that Commodore has no shortage of software design problems. It's almost ready assembled on the lines of you or I. If ever there was a book to restore this balance it must be *Graphics Book for the Commodore 64* by Axel Floga.

The author claims that by the end of chapter three you will be familiar with every type of the C64's memory map, and having read the book's index. All of the programs printed in the book, whether machine code or BASIC, are very thoroughly explained, and there must be at least one REM for each line of program. This is always welcome when you want to understand the logic behind a program and not just use it as a typing machine.

Despite some claims to the contrary, this is not a book for the beginner. The author does at one point suggest a book on machine code programming which may be of use to the less experienced reader.

However, in the hands of a competent programmer it could revolutionize the graphic aspect of your programs. An offer which could be a good bet for the two-fingered typist asking you a the chance to buy all of the book's programs, plus a few more, on a floppy disc. **\$18**

Publisher: First Publishing

Author: Axel Floga

C64



33 Programs for the TI-99/4A

I will begin by stating that I have my doubts about the value of books containing program listings. It has been my experience that such listings tend to collect, not only from typographical errors, but also from typing errors on the part of the user. In this case though, the author has taken some care to make the listings as legible as possible, for example by reducing visual confusion by not using program use of the multi-line mode, ability of Extended BASIC, to which I suspect all the programs are written.

The programs are divided into chapters with headings such as *Games for Beginners*, *Money Management*, *Curve Fitting*, *Statistics*, and so on. There is a small chapter of four games, but the book is devoted largely to financial calculating and a considerable quantity of statistics. The level of programming is moderately good, being almost exclusively machine in structure, and thereby based strongly on the use of subroutines, yet the author comments one of the cardinal uses by making REMs the demarcation of OS/US. This task is, in some degree, offset by the quantity of background information which is supplied with each chapter, and although the programs are by no means sophisticated — a sorting routine which looks very good is in fact nothing more than the author's workhorse, the Bubble Sort — they will provide good models for the less experienced programmer.

This book scores highly with me primarily because it catches the reader some mathematics as well as providing a number of elementary but useful utilities. **P.B.**

Price: £10.00

Publisher: Computer
Distributed by Holt Saunders

Address: 1 St. Anne's Road,
Buckhurst, E. Sussex BN13
3JN

TI99



Amstrad Magic

This book is aimed at programmers with their first home computers, or the sub-title, *Your First Programming Book*, suggests. It is and large it succeeds in making the workings of BASIC clear and simple. The language is almost rule, and the text is broken up by the use of colour and short paragraphs. Cartoon help to get the points across.

The two chapters on simple programming commands, and a second section introducing graphics, culminating in a simple machine code game called *Wordzap*. An appendix contains two larger games to type in, clearly laid out and explained — some passages could take lessons from them. There is a very useful glossary of commands, with explanations and examples. Each chapter ends with a 'Point to Remember' box and there are 12 exercises to tax young brains. The answers are provided at the back of the book.

Items covered include calculations, how to debug programs, strings, using your own programs, mixing and matching, colours and the different modes, FOR/NEXT loops, machine instructions, loops, plot and draw. All handled in a simple and attractive way. The book is well structured and written in a simple, friendly style, forming an easy teaching/introduction or using as an Amstrad companion.

If you are already familiar with BASIC and elementary programming then the book is not for you. If, however, the Amstrad is your first computer and you find the manual daunting then this could be the answer you have been looking for.

Price: £5.95

Publisher: W. Paulsen

Address: Yarrow Rd, Slough,
Bucks

AMSTRAD



Lineage:
35p per word



01-437 0699
EXT 322.

Send your requirements to:
David Horne
ASP LTD.
1 Golden Square,
London W1R 3AB

Send display: £7.10 per single column continuous
Ring for information on series bookings discounts.

All advertisements in this section must be prepaid.
Advertisements are accepted subject to the terms and
conditions printed on the advertisement card card available on request.

Computer Desks

THE NEW 'FOREST' RANGE OF CABINETS

A new range of computer cabinets, made by our
own craftsmen, designed especially for your home
computer system.

Send SAE for leaflet and price list

NEW FOREST CABINET MAKERS LTD

85, Derby Road, Eastleigh, Hampshire SO8 5W5

Clubs

24 Computer Club for Sunday
evening. Cost: £6 a week. Details
19 Red Lion Lane, Nantwich, Cheshire,
CW5 7EJ.

Computer Disks

FLOPPY DISCS

For both perfect 5.25" and 8" and
format. In Apple, Commodore, Atari
and IBM. In 5.25" 2" format
also, available after price £1.12 each
over £12. Please quote for catalogue
specimens and other details.
SHEPHERD WATKINS LTD, 11-13, 21, 23

For Hire

To hire a computer from £100.00 per
week onwards, please phone or write
to: Business & Computer Services
26a, Colindale Ave., London N1
1BA. Tel: 01-801 8831

ERIC, ATMOS, COMMODORE 64, LYNX SOFTWARE LIBRARY

Over 150 Eric and 200
Commodore 64 titles
Search for details -
LONDON: 180 Tottenham
Court Road, W8 7TA

WIN A COLOUR T.V.

Spokane Ltd. Answer 62.
Software Library
1901, 1902, 1903, 1904, 1905,
1906, 1907, 1908, 1909, 1910,
1911, 1912, 1913, 1914, 1915,
1916, 1917, 1918, 1919, 1920,
1921, 1922, 1923, 1924, 1925, 1926,
1927, 1928, 1929, 1930, 1931, 1932,
1933, 1934, 1935, 1936, 1937, 1938,
1939, 1940, 1941, 1942, 1943, 1944,
1945, 1946, 1947, 1948, 1949, 1950,
1951, 1952, 1953, 1954, 1955, 1956,
1957, 1958, 1959, 1960, 1961, 1962,
1963, 1964, 1965, 1966, 1967, 1968,
1969, 1970, 1971, 1972, 1973, 1974,
1975, 1976, 1977, 1978, 1979, 1980,
1981, 1982, 1983, 1984, 1985, 1986,
1987, 1988, 1989, 1990, 1991, 1992,
1993, 1994, 1995, 1996, 1997, 1998,
1999, 2000, 2001, 2002, 2003, 2004,
2005, 2006, 2007, 2008, 2009, 2010,
2011, 2012, 2013, 2014, 2015, 2016,
2017, 2018, 2019, 2020, 2021, 2022,
2023, 2024, 2025, 2026, 2027, 2028,
2029, 2030, 2031, 2032, 2033, 2034,
2035, 2036, 2037, 2038, 2039, 2040,
2041, 2042, 2043, 2044, 2045, 2046,
2047, 2048, 2049, 2050, 2051, 2052,
2053, 2054, 2055, 2056, 2057, 2058,
2059, 2060, 2061, 2062, 2063, 2064,
2065, 2066, 2067, 2068, 2069, 2070,
2071, 2072, 2073, 2074, 2075, 2076,
2077, 2078, 2079, 2080, 2081, 2082,
2083, 2084, 2085, 2086, 2087, 2088,
2089, 2090, 2091, 2092, 2093, 2094,
2095, 2096, 2097, 2098, 2099, 2100,
2101, 2102, 2103, 2104, 2105, 2106,
2107, 2108, 2109, 2110, 2111, 2112,
2113, 2114, 2115, 2116, 2117, 2118,
2119, 2120, 2121, 2122, 2123, 2124,
2125, 2126, 2127, 2128, 2129, 2130,
2131, 2132, 2133, 2134, 2135, 2136,
2137, 2138, 2139, 2140, 2141, 2142,
2143, 2144, 2145, 2146, 2147, 2148,
2149, 2150, 2151, 2152, 2153, 2154,
2155, 2156, 2157, 2158, 2159, 2160,
2161, 2162, 2163, 2164, 2165, 2166,
2167, 2168, 2169, 2170, 2171, 2172,
2173, 2174, 2175, 2176, 2177, 2178,
2179, 2180, 2181, 2182, 2183, 2184,
2185, 2186, 2187, 2188, 2189, 2190,
2191, 2192, 2193, 2194, 2195, 2196,
2197, 2198, 2199, 2200, 2201, 2202,
2203, 2204, 2205, 2206, 2207, 2208,
2209, 2210, 2211, 2212, 2213, 2214,
2215, 2216, 2217, 2218, 2219, 2220,
2221, 2222, 2223, 2224, 2225, 2226,
2227, 2228, 2229, 2230, 2231, 2232,
2233, 2234, 2235, 2236, 2237, 2238,
2239, 2240, 2241, 2242, 2243, 2244,
2245, 2246, 2247, 2248, 2249, 2250,
2251, 2252, 2253, 2254, 2255, 2256,
2257, 2258, 2259, 2260, 2261, 2262,
2263, 2264, 2265, 2266, 2267, 2268,
2269, 2270, 2271, 2272, 2273, 2274,
2275, 2276, 2277, 2278, 2279, 2280,
2281, 2282, 2283, 2284, 2285, 2286,
2287, 2288, 2289, 2290, 2291, 2292,
2293, 2294, 2295, 2296, 2297, 2298,
2299, 2300, 2301, 2302, 2303, 2304,
2305, 2306, 2307, 2308, 2309, 2310,
2311, 2312, 2313, 2314, 2315, 2316,
2317, 2318, 2319, 2320, 2321, 2322,
2323, 2324, 2325, 2326, 2327, 2328,
2329, 2330, 2331, 2332, 2333, 2334,
2335, 2336, 2337, 2338, 2339, 2340,
2341, 2342, 2343, 2344, 2345, 2346,
2347, 2348, 2349, 2350, 2351, 2352,
2353, 2354, 2355, 2356, 2357, 2358,
2359, 2360, 2361, 2362, 2363, 2364,
2365, 2366, 2367, 2368, 2369, 2370,
2371, 2372, 2373, 2374, 2375, 2376,
2377, 2378, 2379, 2380, 2381, 2382,
2383, 2384, 2385, 2386, 2387, 2388,
2389, 2390, 2391, 2392, 2393, 2394,
2395, 2396, 2397, 2398, 2399, 2400,
2401, 2402, 2403, 2404, 2405, 2406,
2407, 2408, 2409, 2410, 2411, 2412,
2413, 2414, 2415, 2416, 2417, 2418,
2419, 2420, 2421, 2422, 2423, 2424,
2425, 2426, 2427, 2428, 2429, 2430,
2431, 2432, 2433, 2434, 2435, 2436,
2437, 2438, 2439, 2440, 2441, 2442,
2443, 2444, 2445, 2446, 2447, 2448,
2449, 2450, 2451, 2452, 2453, 2454,
2455, 2456, 2457, 2458, 2459, 2460,
2461, 2462, 2463, 2464, 2465, 2466,
2467, 2468, 2469, 2470, 2471, 2472,
2473, 2474, 2475, 2476, 2477, 2478,
2479, 2480, 2481, 2482, 2483, 2484,
2485, 2486, 2487, 2488, 2489, 2490,
2491, 2492, 2493, 2494, 2495, 2496,
2497, 2498, 2499, 2500, 2501, 2502,
2503, 2504, 2505, 2506, 2507, 2508,
2509, 2510, 2511, 2512, 2513, 2514,
2515, 2516, 2517, 2518, 2519, 2520,
2521, 2522, 2523, 2524, 2525, 2526,
2527, 2528, 2529, 2530, 2531, 2532,
2533, 2534, 2535, 2536, 2537, 2538,
2539, 2540, 2541, 2542, 2543, 2544,
2545, 2546, 2547, 2548, 2549, 2550,
2551, 2552, 2553, 2554, 2555, 2556,
2557, 2558, 2559, 2560, 2561, 2562,
2563, 2564, 2565, 2566, 2567, 2568,
2569, 2570, 2571, 2572, 2573, 2574,
2575, 2576, 2577, 2578, 2579, 2580,
2581, 2582, 2583, 2584, 2585, 2586,
2587, 2588, 2589, 2590, 2591, 2592,
2593, 2594, 2595, 2596, 2597, 2598,
2599, 2600, 2601, 2602, 2603, 2604,
2605, 2606, 2607, 2608, 2609, 2610,
2611, 2612, 2613, 2614, 2615, 2616,
2617, 2618, 2619, 2620, 2621, 2622,
2623, 2624, 2625, 2626, 2627, 2628,
2629, 2630, 2631, 2632, 2633, 2634,
2635, 2636, 2637, 2638, 2639, 2640,
2641, 2642, 2643, 2644, 2645, 2646,
2647, 2648, 2649, 2650, 2651, 2652,
2653, 2654, 2655, 2656, 2657, 2658,
2659, 2660, 2661, 2662, 2663, 2664,
2665, 2666, 2667, 2668, 2669, 2670,
2671, 2672, 2673, 2674, 2675, 2676,
2677, 2678, 2679, 2680, 2681, 2682,
2683, 2684, 2685, 2686, 2687, 2688,
2689, 2690, 2691, 2692, 2693, 2694,
2695, 2696, 2697, 2698, 2699, 2700,
2701, 2702, 2703, 2704, 2705, 2706,
2707, 2708, 2709, 2710, 2711, 2712,
2713, 2714, 2715, 2716, 2717, 2718,
2719, 2720, 2721, 2722, 2723, 2724,
2725, 2726, 2727, 2728, 2729, 2730,
2731, 2732, 2733, 2734, 2735, 2736,
2737, 2738, 2739, 2740, 2741, 2742,
2743, 2744, 2745, 2746, 2747, 2748,
2749, 2750, 2751, 2752, 2753, 2754,
2755, 2756, 2757, 2758, 2759, 2760,
2761, 2762, 2763, 2764, 2765, 2766,
2767, 2768, 2769, 2770, 2771, 2772,
2773, 2774, 2775, 2776, 2777, 2778,
2779, 2780, 2781, 2782, 2783, 2784,
2785, 2786, 2787, 2788, 2789, 2790,
2791, 2792, 2793, 2794, 2795, 2796,
2797, 2798, 2799, 2800, 2801, 2802,
2803, 2804, 2805, 2806, 2807, 2808,
2809, 2810, 2811, 2812, 2813, 2814,
2815, 2816, 2817, 2818, 2819, 2820,
2821, 2822, 2823, 2824, 2825, 2826,
2827, 2828, 2829, 2830, 2831, 2832,
2833, 2834, 2835, 2836, 2837, 2838,
2839, 2840, 2841, 2842, 2843, 2844,
2845, 2846, 2847, 2848, 2849, 2850,
2851, 2852, 2853, 2854, 2855, 2856,
2857, 2858, 2859, 2860, 2861, 2862,
2863, 2864, 2865, 2866, 2867, 2868,
2869, 2870, 2871, 2872, 2873, 2874,
2875, 2876, 2877, 2878, 2879, 2880,
2881, 2882, 2883, 2884, 2885, 2886,
2887, 2888, 2889, 2890, 2891, 2892,
2893, 2894, 2895, 2896, 2897, 2898,
2899, 2900, 2901, 2902, 2903, 2904,
2905, 2906, 2907, 2908, 2909, 2910,
2911, 2912, 2913, 2914, 2915, 2916,
2917, 2918, 2919, 2920, 2921, 2922,
2923, 2924, 2925, 2926, 2927, 2928,
2929, 2930, 2931, 2932, 2933, 2934,
2935, 2936, 2937, 2938, 2939, 2940,
2941, 2942, 2943, 2944, 2945, 2946,
2947, 2948, 2949, 2950, 2951, 2952,
2953, 2954, 2955, 2956, 2957, 2958,
2959, 2960, 2961, 2962, 2963, 2964,
2965, 2966, 2967, 2968, 2969, 2970,
2971, 2972, 2973, 2974, 2975, 2976,
2977, 2978, 2979, 2980, 2981, 2982,
2983, 2984, 2985, 2986, 2987, 2988,
2989, 2990, 2991, 2992, 2993, 2994,
2995, 2996, 2997, 2998, 2999, 3000,
3001, 3002, 3003, 3004, 3005, 3006,
3007, 3008, 3009, 3010, 3011, 3012,
3013, 3014, 3015, 3016, 3017, 3018,
3019, 3020, 3021, 3022, 3023, 3024,
3025, 3026, 3027, 3028, 3029, 3030,
3031, 3032, 3033, 3034, 3035, 3036,
3037, 3038, 3039, 3040, 3041, 3042,
3043, 3044, 3045, 3046, 3047, 3048,
3049, 3050, 3051, 3052, 3053, 3054,
3055, 3056, 3057, 3058, 3059, 3060,
3061, 3062, 3063, 3064, 3065, 3066,
3067, 3068, 3069, 3070, 3071, 3072,
3073, 3074, 3075, 3076, 3077, 3078,
3079, 3080, 3081, 3082, 3083, 3084,
3085, 3086, 3087, 3088, 3089, 3090,
3091, 3092, 3093, 3094, 3095, 3096,
3097, 3098, 3099, 3100, 3101, 3102,
3103, 3104, 3105, 3106, 3107, 3108,
3109, 3110, 3111, 3112, 3113, 3114,
3115, 3116, 3117, 3118, 3119, 3120,
3121, 3122, 3123, 3124, 3125, 3126,
3127, 3128, 3129, 3130, 3131, 3132,
3133, 3134, 3135, 3136, 3137, 3138,
3139, 3140, 3141, 3142, 3143, 3144,
3145, 3146, 3147, 3148, 3149, 3150,
3151, 3152, 3153, 3154, 3155, 3156,
3157, 3158, 3159, 3160, 3161, 3162,
3163, 3164, 3165, 3166, 3167, 3168,
3169, 3170, 3171, 3172, 3173, 3174,
3175, 3176, 3177, 3178, 3179, 3180,
3181, 3182, 3183, 3184, 3185, 3186,
3187, 3188, 3189, 3190, 3191, 3192,
3193, 3194, 3195, 3196, 3197, 3198,
3199, 3200, 3201, 3202, 3203, 3204,
3205, 3206, 3207, 3208, 3209, 3210,
3211, 3212, 3213, 3214, 3215, 3216,
3217, 3218, 3219, 3220, 3221, 3222,
3223, 3224, 3225, 3226, 3227, 3228,
3229, 3230, 3231, 3232, 3233, 3234,
3235, 3236, 3237, 3238, 3239, 3240,
3241, 3242, 3243, 3244, 3245, 3246,
3247, 3248, 3249, 3250, 3251, 3252,
3253, 3254, 3255, 3256, 3257, 3258,
3259, 3260, 3261, 3262, 3263, 3264,
3265, 3266, 3267, 3268, 3269, 3270,
3271, 3272, 3273, 3274, 3275, 3276,
3277, 3278, 3279, 3280, 3281, 3282,
3283, 3284, 3285, 3286, 3287, 3288,
3289, 3290, 3291, 3292, 3293, 3294,
3295, 3296, 3297, 3298, 3299, 3300,
3301, 3302, 3303, 3304, 3305, 3306,
3307, 3308, 3309, 3310, 3311, 3312,
3313, 3314, 3315, 3316, 3317, 3318,
3319, 3320, 3321, 3322, 3323, 3324,
3325, 3326, 3327, 3328, 3329, 3330,
3331, 3332, 3333, 3334, 3335, 3336,
3337, 3338, 3339, 3340, 3341, 3342,
3343, 3344, 3345, 3346, 3347, 3348,
3349, 3350, 3351, 3352, 3353, 3354,
3355, 3356, 3357, 3358, 3359, 3360,
3361, 3362, 3363, 3364, 3365, 3366,
3367, 3368, 3369, 3370, 3371, 3372,
3373, 3374, 3375, 3376, 3377, 3378,
3379, 3380, 3381, 3382, 3383, 3384,
3385, 3386, 3387, 3388, 3389, 3390,
3391, 3392, 3393, 3394, 3395, 3396,
3397, 3398, 3399, 3400, 3401, 3402,
3403, 3404, 3405, 3406, 3407, 3408,
3409, 3410, 3411, 3412, 3413, 3414,
3415, 3416, 3417, 3418, 3419, 3420,
3421, 3422, 3423, 3424, 3425, 3426,
3427, 3428, 3429, 3430, 3431, 3432,
3433, 3434, 3435, 3436, 3437, 3438,
3439, 3440, 3441, 3442, 3443, 3444,
3445, 3446, 3447, 3448, 3449, 3450,
3451, 3452, 3453, 3454, 3455, 3456,
3457, 3458, 3459, 3460, 3461, 3462,
3463, 3464, 3465, 3466, 3467, 3468,
3469, 3470, 3471, 3472, 3473, 3474,
3475, 3476, 3477, 3478, 3479, 3480,
3481, 3482, 3483, 3484, 3485, 3486,
3487, 3488, 3489, 3490, 3491, 3492,
3493, 3494, 3495, 3496, 3497, 3498,
3499, 3500, 3501, 3502, 3503, 3504,
3505, 3506, 3507, 3508, 3509, 3510,
3511, 3512, 3513, 3514, 3515, 3516,
3517, 3518, 3519, 3520, 3521, 3522,
3523, 3524, 3525, 3526, 3527, 3528,
3529, 3530, 3531, 3532, 3533, 3534,
3535, 3536, 3537, 3538, 3539, 3540,
3541, 3542, 3543, 3544, 3545, 3546,
3547, 3548, 3549, 3550, 3551, 3552,
3553, 3554, 3555, 3556, 3557, 3558,
3559, 3560, 3561, 3562, 3563, 3564,
3565, 3566, 3567, 3568, 3569, 3570,
3571, 3572, 3573, 3574, 3575, 3576,
3577, 3578, 3579, 3580, 3581, 3582,
3583, 3584, 3585, 3586, 3587, 3588,
3589, 3590, 3591, 3592, 3593, 3594,
3595, 3596, 3597, 3598, 3599, 3600,
3601, 3602, 3603, 3604, 3605, 3606,
3607, 3608, 3609, 3610, 3611, 3612,
3613, 3614, 3615, 3616, 3617, 3618,
3619, 3620, 3621, 3622, 3623, 3624,
3625, 3626, 3627, 3628, 3629, 3630,
3631, 3632, 3633, 3634, 3635, 3636,
3637, 3638, 3639, 3640, 3641, 3642,
3643, 3644, 3645, 3646, 3647, 3648,
3649, 3650, 3651, 3652, 3653, 3654,
3655, 3656, 3657, 3658, 3659, 3660,
3661, 3662, 3663, 3664, 36



HCW gold cassette awards

Cordelia (left) of EAST meets software pioneer Kevin and John

We are pleased to announce the Home Computing Weekly Gold Cassette Awards. Dave Corlis describes the first presentation

The second industry awards gold show, the film industry awards Oscars but there is no computer award in the home computer industry.

Home Computing Weekly has decided to change all this and has presented the first of its home computer industry awards to Kevin Moughan and John Cain the authors of Perford's Booby.

Why Booby? Booby has sold over 100,000 copies, a remarkable achievement by Japan's standard and thoroughly respectably.

The award takes the form of a gold cassette mounted on a wooden plaque and it will be presented in the future to all those who, in the opinion of the magazine, have made a notable contribution to the industry.

The awards were presented by Peter Williams, publishing director of Argus Specialist Publications and by Dave Corlis, Editor of HCW. In his

speech Peter Williams congratulated the authors and Perford's management on such a considerable achievement. He expressed that this was due to the high quality of the graphics and the attractiveness of the game. He also made special mention of the Perford policy of dividing its programs into ranges priced according to quality and style.

Kevin and John had travelled from the Isle of Man to accept the awards. They have been programming for a number of years and used to produce games for Rubble Software. They both worked at the same architectural office and they started programming home computers.

The game was originally called Jolly Roger and Trevor Ann the Cuban Boy who walks around the wrecked pirate ship trying to collect bars had gone of last. Only when every part of the screen has been cleared can the gold key be used to unlock

the main stash of gold.

One of the things we managed to get out of Kevin, author of the Cid version, was that there is a cheat mode in which you have 100 lives. To get to this mode you type his name, well just do it, and left alone. One difficulty is that the cheat mode adds a few extra problems of its own! We would be very interested to have details of the extra difficulties that you have to overcome.

Other organizations present at the award ceremony were Cables and EAST (Education Against Software Theft). It was particularly appropriate that EAST was there as the theme of the game is piracy. The attendance at the Copyright Bill, which EAST is keen to get through parliament, had its second Lords reading on Friday 19th March and was jointly supported.

If you have any comments for the award of a Gold Cassette please write us as and we will consider your suggestions. Please be sure to explain exactly why your nominee should be considered and don't forget your name and address.

READERS PAGE

Herbert's



Dummy Run

Trouble In Store for Herbert

Spectrum 48K £9.95

Commodore 64 £9.95

Amstrad CPC 464 £9.95



MIKRO-GEN

44 The Broadway, Bracknell, Berks. 9344 427317

Charlie is here...

In Charlie and the Chocolate Factory



Cassette + Book £9.95
Cassette only £8.50

Illustrations by
Graham Mitchell

Hill MacGibbon

43
ROOM
ARCADE ADVENTURE
4 ARCADE GAMES + BOOK