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Vol. 4 No. 9
September 1988
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MJA



Update

Will CPC go a bundle?



RACERS from the latest game by Code Masters (0978 814702) - *Race Against Time* - will go to Sport Aid III, which helps children in need. The player takes the role of the legendary Southsides athlete Omar Khalifa whose task is to race against time around the world solving puzzles in order to save lives.

"Written by the Oliver twins and featuring music by Peter Gabriel, it's no surprise the game has already received an excellent reception", said Code Masters spokesman Bruce Ewins.

Price £4.99

It's action all the way

FOUR new action CPC titles have been released by budget game specialist The Power House (01-678 7286).

Freedom Fighter is a space shoot-'em-up in which the player must destroy waves of alien fighters and a mother ship at the end of each level.

Formerly a full-price game from CPL, *Aggravant* is an arcade simulation of an articulated lorry, while *Test Match* provides an opportunity to show England's cricketers how to beat the West Indies.

Formula One is for up to six players, each controlling a racing team through a season while competing for the drivers' and constructors' championships.

Price £1.99 each.

AMSTRAD is believed to be preparing a new marketing initiative aimed at giving CPC sales a massive boost. Current rumour in the industry is that the move will shortly appear in a package designed to change its image as a games-only machine.

According to one whisper from the trade, the new bundle will include a desk, clock radio, colour monitor and TV tuner.

The package would be priced about £499 and launched this autumn - probably at the PC Show - and heavily promoted by TV commercials. An

industry source said: "Sales of the CPC have recently been unimpressive, possibly because a price tag of £299.99 is asking a lot for a games machine."

"If the rumour about the new bundle is true it could give the CPC a completely new image - that of an all purpose, useful addition to the home which can be used by father for word processing, mother for the household accounts and the kids for their studies".

Amstrad would neither confirm nor deny the CPC package rumour.

Competition bonanza fills the postbag

THERE was a double competition bonanza for readers in our May issue and double the weight of the postbag as a result!

First prize in the Rombo-Rom Box competition went to D. Tett of Bournemouth who wins a tom box fitted with Maxam 1.5, Protex, Promerge, Prosport, Utopia and BCPL.

J.R. Giddion of BPOD 107 took second prize and wins Rombo, Maxam 1.5, Protex, Promerge and Utopia.

Third prize of Rombo, Maxam 1.5 and Protex went to Jack Parker of Crawlington.

Howard Kemp of Fleetwood and Daniel Robotham of Burton-on-Trent will have no problems occupying their spare time in the foreseeable future, in our *Ballbreaker* competition they each won a supply of CPL software for a year, which works out to a new game every three weeks.

Runners up, who will each receive a copy of *Ballbreaker II*, were Kim Taylor of Yarmton, K. Pinder of Concaster, John Pearce of Crawley, Chris Skoczek of Bangood, R.M. Johnston of London, Anthony Jones of Milton Keynes, Jason Rogers of Salisbury, Brian Chandler of Cardiff, Gavin Blann of Battersea, and Richard Ormson of Bury.

100% 100% 100% 100% 100%



A NEW name in 8-bit entertainment software - *Bombozoo!* from Microsoft (01-277 4945) - marks its debut with two games for the CPC.

Bombozoo! (above) is an abstract puzzle game where the player has to negotiate a number of complex levels, blowing up mines and bombs along the way. Price £3.99 on cassette, £12.99 on disc.

Terminus Must Die requires the player to take on the army of a mad despot, battling across the country of El Diable and destroying his bases. Price £3.99 on tape, £14.99 on disc.

100% 100% 100% 100% 100%





THOSE of us who dabble in the MacK art — otherwise known as machine code — will always welcome something which makes life easier. And HackIt from Siren Software is a novel hardware device which aims to do that very thing.

It plugs into your CPC's expansion port, and has a through connector so you can attach further peripherals. On it are a red push button and an on/off switch.

If HackIt is switched off, the button functions as a reset switch, which in itself is quite useful. With HackIt turned on, however, the button has a different effect. If a non-Basic program is running, it will be stopped and control passed to HackIt. This contains a foreground rom — one that takes over the machine in much the same way as Basic.

The HackIt rom contains a number of utilities accessed by typing in commands, which can be listed with the obligatory help instruction. If you have stopped something you didn't write, the memory command is a good place to begin. It shows a map of memory usage, non-zero bytes being pixel plotted, and zero bytes left blank. This tells you where areas of program and data are located.

Now you can disassemble an area of memory to screen or file. The screen option also shows hex values, but the disassembly to file is address and memory only. I think the idea of the omission is that you can reassemble the file without modification.

It depends on your assembler, but some will not accept the address field which has to be stripped out. Given that some people will have to process the file,

Siren might as well have left the hex values in because I prefer to look through the disassembly in a text



editor rather than as sort of paper listing.

Also, the disassembly to any device doesn't show the Ascii value of the memory bytes, which is essential for identifying text.

Another useful function is edit. This takes you into a simple memory editor which allows you to edit memory in hex or Ascii. You can scroll backwards or forwards, but only a line at a time - you can't flick through page by page as you can with most monitors.

ROMs in background roms can be used, but being a foreground rom HackIt boots up without background roms being initialised. When Basic starts up it goes round initialising any background roms present, but HackIt doesn't do that and if you want to use Maxam, for example, you have to initialise it yourself with a call to the firmware.

This is understandable because if HackIt automatically initialised roms



Memory command in action

their workspace would corrupt memory. It is far better that you look for a little area of memory to allocate as rom workspace, and just initialise what you need.

However, a little more explanation in the instructions would be a good idea because if you haven't initialised a background rom before, it may seem more difficult than it actually is.

It took me some time to wake up Maxam, mainly due to my Britanica keyboard deciding not to be friends with HackIt.

Using another board I got into Maxam, and was able to use the superior memory editor. Not all roms will function 100 per cent under these circumstances, for instance Maxam's text editor wouldn't work. One thing I didn't like about the PRSX facility is that

WHERE TO DRAW THE LINE

This device is not a copier, though the ability to disassemble to disc or printer and save areas of memory gives it the potential to make Long John Silvering of software easy.

We avoid removing hard and software whose main purpose in

life is to "load up" commercial programs, but HackIt isn't designed with that function in mind. You could argue that an ordinary assembler, DisasIt, or ROM software piracy, so it's a case of deciding where to draw the line.

you can't pass parameters.

Areas of memory can be filled with a byte value, copied, moved, and saved or loaded to tape or disc. Ports can be read or written to, and individual bytes can be poked and poked. Memory can be searched, and you can clear the screen, set up the colours, select tape or disc operation, and copy screen output to the printer.

If you have a CPC6128 or non-expanded CPC6400 you can switch the extra 16k blocks into the address

code routine from within HackIt, so no doubt this feature has its uses.

HackIt is a serious tool for machine code programmers. As far as it goes it performs a useful function, and is a welcome addition to my armoury.

As well as being handy for debugging it allows you to study the work of professional programmers, and if you wish help you customise commercial programs for your own needs.

Having seen it in action it makes me

Delving into the unknown

IAN SHARPE investigates a hardware tool for machine code programmers

space between \$4000 and \$6000. Another option in connection with extra ram doesn't work with the extra 64k in the CPC6128, but only with an expanded CPC6400.

As the office ram pack has vanished it was unable to test the feature, but according to the instructions the idea is that you can get a program running in the extra 64k as if it were in the first bank. You can then press the red button, and enter HackIt leaving the 64k intact.

By typing alternate you can reenter Basic, this time in the other 64k bank. You can then load and run a game. If you stop the game you can copy the screen or a chunk of memory into the first program.

If I understand the instructions correctly, this would allow you to write your own machine code to process the second program in some way. It is possible to call a machine

code routine from within HackIt, so no doubt this feature has its uses. HackIt is a serious tool for machine code programmers. As far as it goes it performs a useful function, and is a welcome addition to my armoury. As well as being handy for debugging it allows you to study the work of professional programmers, and if you wish help you customise commercial programs for your own needs. Having seen it in action it makes me

Product: HackIt
Price: £29.99
Supplier: Sines Software, 2-4 DeFend
Ave, Bishopswood AM 50E
Tel: 081-239 1931

POSITIVE ASPECT

- A useful tool for machine coders.
- Can cut down on debugging time.
- Lets you study and alter commercial software.

AND ADVERSE?

- Can't easily restart a program.
- Some software will use memory outside HackIt's safe area.
- Not for the inexperienced.

Pretty printing

*Dress up your text
with four bright
new type faces.
CHRIS NIXON
shows you how*

THOSE of you who have seen Microsoft's Gem - Graphics Environment Manager - in action on the Amstrad PC may have been impressed by the variety of on-screen fonts available. In fact Gem has about five typefaces, and these are used in pull-down menus to indicate the status of various system options, file types and so on.

If you entered my letterhead designer from the July 1988 issue of Computing with the Amstrad CPC, you will have seen that I incorporated a similar multi-font facility.

Quite a number of you have written asking about this particular feature, so in response to popular demand I've fished out that section from the machine code, added another bit - underlined text - and made it a standalone utility called Fonts. It will allow you to display on the screen text in one of five typefaces, each generated from the character set built into the machine.

After running the program you will have the five ROMs detailed in Table 1. Simply select the font you require, and either type the appropriate ROM name or include it in your program. It should be noted that this facility does not work with text printed at the graphics cursor after using the TAG command. Some fonts, in particular the fairs style, are most effective in 40 and 80 column modes. Mode 0 unfortunately shows up fairs and italic text as being rather messy, while bold text appears altogether too chunky.

The principle behind the utility is very simple. Inside the lower rom of your CPC are the definitions of the 256 displayable characters. These are stored as a table containing 256 groups of eight bytes in the same format used by Beal's SYMBOL command. Each byte in a group of eight refers to a horizontal row in the character, and each bit in a byte lights up the corresponding pixel.

Anyone in possession of Soft 988 - Amstrad's firmware guide - has access to all sorts of behind-the-scenes trickery, and Fonts makes

heavy use of the firmware's ability to be intercepted, diverted, and generally fiddled about with. Each non-TAG character printed on your monitor is channelled through the jumpblock entry TXT_WRITE_CHAR at 85000. When run, the program diverts this entry to point to its own checking routine. It then installs the ROM commands which have the following effect on any characters passed to TXT_WRITE_CHAR:

First, a character's eight-byte matrix will be read from the rom with TXT_GET_MATRIX, and stored in a buffer for editing. The way in which the

• Boldly write
• And this on
• Old program
• They just ad

• This is now
• The slant on
• Boldly write
• And this on
• Old program
• They just ad

• This is now
• The slant on
• Boldly write
• And this on
• Old program
• They just ad

• This is now
• The slant on
• Boldly write
• And this on


```

As if you haven't written b4
om's great for doing lines
ows never die.
ide away...

normal text
Here is on italics
rite as you haven't written b4
om's great for doing lines
ows never die.
ide away...

normal text
Here is on italics
rite as you haven't written b4
om's great for doing lines
ows never die.
ide away...

normal text
Here is on italics
rite as you haven't written b4
om's great for doing lines
ows never die.
ide away...

```

```

normal text
Here is on italics
rite as you haven't written b4
om's great for doing lines
ows never die.
ide away...

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70 hex      0x00000000
71 hex      0x00000000
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199 hex     0x00000000
200 hex     0x00000000

```

DOUBLE	Makes each character pixel double-wide.
ITALIC	Shifts the top half of each character to the right by one pixel.
POINT	Blanks out alternate character pixels to create a stippled effect.
UNDER	Makes the last byte of each character a solid line.
NORMAL	Restores the old jump/lock entry for TXT OUTPUT.

Table 1: The **TEXT** commands

buffer contents are then edited depends on which style is in operation.

After editing, character 255 is re-defined with the new matrix by means of the firmware call **TXT SET MATRIX**. It is then sent to the firmware in place of the original character. When a **NORMAL** is issued, the stored copy of the entry for **ANDCO** is replaced, returning control of character printing to the firmware.

The editing process used by **Point** is as follows. If the bold font is active, each of the eight bytes in the buffer is shifted one bit to the right, and super-

imposed on top of the original byte. This results in every dot in the character being made double-width, creating the bold effect.

Italics are achieved by shifting the top four bytes of each character one bit to the right, effectively slanting the text slightly. Underlining is created by simply making the bottom byte of the new matrix equal to 255 — a line of eight pixels.

Creating the firm font is a slightly more complicated process. Each byte

in the character is declared to mask out alternate bits, creating a stippled effect. To ensure proper stippling, the mask used must be inverted for every other byte of the character. In other words the first row is **ANDed** with **&X01010101**, and the next row with **&X00101010**.

And that's it. A simple utility that will add variety and a professional touch to your text.

INFO-SCRIPT 6128

The Complete Database
with
Wordprocessor & Spelling Checker

Brunning  Software

Supplier Company Contact Street Town County Code Phone	Bob Dixon Ltd The Dixie House The Striped Lane Leeds West Yorkshire LS1 2BA 0000
Link Action	000
Order Order Order Order Order Order Order Order	
Total	
Mill Road Harrogate	

A typical database record

If all the surveys I've seen, one thing stands out a mile - most CPC owners have a word processing package for their machines, whether it was bought or bundled.

It now seems that more and more people are buying database programs, perhaps for cataloguing their record and stamp collections, or for more serious business purposes.

Until very recently it was impossible to buy an integrated package which included both these elements and a spelling checker. But now Brunning Software has released Info-Script 6128 - an integrated database, word processor, and spelling checker with a disc utilities extension available as an optional extra. To run it you need a 528k machine, which means you can use the CPC6128 or expanded CPC640 664.

Word processing

The word processor part of Info-Script is Brunword, a program which has collected kudos from a number of reviewers, mainly due to the speed of its spell checking and some nice touches in the WYSIWYG department - particularly the display of sub and superscripted numbers. For those unfamiliar with it, a quick résumé is in order.

In use Brunword is more closely related to Protext than, say, Teaword,

but with a number of important differences. Printer control codes are input by using the function keys, which is less than resonant and I found irritating.

Likewise the need to save predefined printer control codes as a memory file allied to the text file you're working on seems likely to lead to a waste of disc space. The same information will be duplicated for every file unless you follow the manual's recommendation.

This amounts to defining a printer driver and setting up a one-word long text file with which to save it. Having done this, you may reload the file - and therefore the printer driver - delete the single-word text file from memory (leaving the driver) and continue with the job in hand. This arrangement doesn't suit me for one main reason: I use two printers, one for draft work and Epson compatibility, and the other for letter quality printing

and IBM compatibility. I was unable to send the text to the two printers without reloading the dummy file and the text file I wanted to print. How much simpler just to type something along the lines of printer IBM and have the IBM driver load into the right place.

That isn't to say the ram disc facility built into Brunword is a bad thing, it isn't, and it certainly speeds up a lot of the operations. It's even more effective if you have a memory expansion, as Brunword configures itself to use as much memory as it can find in the most effective way possible.

Cutting and pasting - called tearing and weaving in Brunword - are very fast and simple to carry out. In fact it is precisely this kind of speed that tends to balance my criticisms. It's just a pity that the cursor movement hasn't been swapped up to the same extent. As it is, the thing is too slow at touch typing

Three for for all?

From Page 77

Although it speeds access to records, this preoccupation with everything being memory resident can cause hassles.

For instance during the merge process Info-Script does not check file lengths and so may not do a complete merge, but miss out the last few records. Likewise, you are advised to erase manually any .BAK files before attempting to save any file larger than 50k. Should the file exceed 80k you should erase the working file, necessitating the use of two sides of a disc to be sure that your data is safe. I would have thought that it would have been a simple matter to arrange for the .BAK process to be done automatically.

In defence of Info-Script, I must point out that the command line gives access to the Amigos bar commands, as disc handling of this sort can be carried out from within the program.

Creating and maintaining records is a simple task. The three main types you are likely to need are held in an example file which I strongly recommend you play with. Quite simply, all you need to do is type the required data into the right fields, and when satisfied that everything is as you desire, press Copy. The record is then copied into the files area of memory.

The same applies when editing a record which already exists, save that the manner in which you call it up is to make it current, and enter the editor with E (or add) from the menu instead of R for new. Thus you may use the formats already there by hitting the data field on the ram disc and reusing the field specifics.

Having created your database, the usual functions can be performed upon it plus the additional linking facility. With method one, this is taken care of automatically, while reading

the directory will enable you to determine the links you require for method two. It will also assign the four markers to separate groups of files. This is not a trivial pursuit.

All new records have marker four set by default to distinguish them from older data. They can be reset to any other marker, or cleared of all markers. Records selected using the

clearly listed Info-Script's data merge facilities, as they are very simple to use and if you have set up the files correctly, very quick to run.

A skeleton text file, labels, loaded into the Runword section of Info-Script, is purpose built to make label printing as straightforward as possible.

The data for the labels is taken from all currently selected records, but you can maintain full control over individual labels by using the one-step option from the menu. Again, this is a valuable function, as the fully automated version is not always appropriate.

Many more data merging functions will work on almost any field, including the ability to run up invoices from purchase records, cross referenced to itemcost records and related to customer records. Once the methodology of this kind of job is understood and the process has been gone through a few times, while it won't be simple, it will at least be painless.

Conditional printing is also supported, based on < > <> and = operators, which are applicable to both alpha and numeric values. This conditionality can also be applied to the loading of text files. For instance it may be used to completely change a letter half way through a print run by the simple expedient of creating a dummy record and writing a condition into the text at the very beginning.

Thus two or more shorter print runs can be merged into a longer one which needs no supervision — presuming either tractor fed stationery or a sheet feeder.

This strikes me as being very useful, as there should be no need to lurk over the printer waiting for one run of documents to finish so that you can start the second, instead you can go and do something more productive.

'There's a lot of power in there once you have found how to harness it'

find function and marked with Q for quick list — those selected for actioning, printing and so on. Once records have been selected, they can have a marker set by adding them to the appropriate group.

As you can see, the process can be a little involved, and indeed it took me a while to fully grasp what was happening and the concept behind it. Essentially, you are asked to set markers on masses. Once they are assigned, the start points of the four separate groups need to be set by keying the function keys F1 to F4 as appropriate. The file is then ready to be worked with.

From this point on matters become much simpler, and are akin to the data merge facilities and database functions found in other programs. I par-

Conclusions

I am looking forward to a supplementary suite of programs in this package, but feel a little let down by the word processor. While it is particularly accessible, it lacks some refinements and has a few too many quirks for my taste.

The database, however, is something else again. Yes, it takes some learning and getting used to. Yes, the manual could be clearer, but there's a lot of power in there once you've found how to harness it. The supplied data file goes some way towards helping in this area, but there is no substitute for sitting

down and constructing your own database for discovering its depths. Whether the majority of users need that power is another matter.

If I may draw an analogy, Info-Script drives like an old Porsche 911 Targa, while other databases I could mention drive more like an automatic Mini City 850.

If you want a cheap, comfy, easy ride, buy Mini Office II, but if you want plenty of horsepower under the after drive — which won't be over-stretched — the seven day trial offer from Brunning is the thing to go for.

Product: Info-Script 8.00
Price: £46.00 (incl. vat)
Supplier: Brunning Software, 14
Milton Road, Chislehurst, Essex
CM1 3JF
Tel: 0205 357864

POINTS FOR

- Powerful database
- Integrated package
- Available on trial offer
- Fast

AND AGAIN?

- Quirky word processor

CPC

ACTED

Taylor Amegata Images
£399 box, 17495 disc
Action in town

WHEN you're dealing with the underworld you've got to be as mean and tough as your enemy - something your brother Matt didn't understand. That's why he ended up with a stay-away ticket in addition. Nobody messes with Mr Big, but perhaps it's time to meet his match!

The year is 1988 and the town of Seaside is overrun with ruffians, hoodlums and cutthroats of every description. It's there - and there are a lot of them - that stand between you and Mr Big. The fights are going to be rough, tough 'n' dirty. This is not a game for the faint of heart.

There are five locations - and therefore five levels - which get progressively more difficult. Each contains a different sort of hoodlum, with different strengths and using different weapons. All you have to do is defeat yourself and your rivals and beat, though if you do please your antagonists you can use their weapons.

If you simply knock one of your opponents to the ground they will only get up, and while he's down he will be up again. What you must do is possess the balls for feet) and give him a quick one-two render up feet ineffective for good.

The first location is a multi-story

car park which consists of three levels. Suddenly a motorcyclist is coming your way and only a flying kick will save you. Before long you are assaulted by a lot of long-haired hoodlums of the 80's - Angel variety.

The weapon of this level is a sub-machine gun, as you can imagine, it is not renowned for its accuracy.

All levels are subject to a time limit, so you must reach the end before six minutes are up. Fail, and it's game over.

Although you only have three lives, they are fairly resilient - for instance you can be knocked unconscious a good number of times before losing a life. A bar underneath the main screen shows



MARCELO RENEGADE



A spot of boating in the jail

how much energy you have left. The graphics are colourful and nicely detailed, with backgrounds providing appropriate atmospheres for each location.

The big screen technique is so subtle that it's hardly noticeable, and the foreground action is swift and fluent. Indeed, this is not the kind of game where you can sit back and rest on your laurels. You can be attacked from either the front or behind, and you are often heavily outnumbered by your assailants.

This is certainly so in the second level where the security takes the form of rather grotesque ladies of the night. The so-called mine-vipers are certainly lacking here - there's nothing subtle about them, keep in the limit!

The cover chains that protect them can be not too difficult either. It's more that you can't see too difficult than the cartridges, and it is possible to take pot shots at your enemy's feet.

If you survive this first three-minute encounter, it's time to take victory stroll in the park. Unlucky? You'll be luck! You've had the hell's Angels, now it's time for the skinheads - and commando-type skinheads into the bargain - who have a penchant for headbutting anyone who gets in their way. Some of them come at you with clubs, so it's a matter of ducking and weaving, know what I mean 'arry?

By now you should have realised that Target Remegade is about as subtle as Bernard Manning's sense



Player 1's Angels must be defeated in the car park

of humour. (But the violence doesn't end here. Aiming favors bows, knives on level four - the shopping mall - Bessy Boys fans and their anti-fur-friendly mats are looking for trouble.)

Flying bricks are one of the things you need to look out for at this point. As in the other levels, these can be used to good advantage if you get hold of them. The dogs are

almost cartoon like in the way they hurt themselves at you. They are particularly humorous, especially when a good target hit sends them flailing through the air to land unconscious with their legs pointing skywards.

The final encounter with Mr. Big and his cronies takes place in a bar where the crooked cops are turned into instruments of violence. Well, I've

never seen even Alex Higgins do this with his snooker cue!

If the level of violent activity isn't quite enough, you can always choose the two-player option and team up with a friend. This allows you to fight the hoodlums as a duo, an interesting concept which works very well.

Target Remegade is the most blatantly violent game I've played in a long while. At the same time it's also one of the most enjoyable.

Does this mean I'm sick, or is it just that violence on a computer screen is one thing and real violence another? Do the two really overlap? The debate will continue... in the meantime, top it!

Tony Renegade



A weather lady takes the bait, the pimp shoots you in the back

Presentation 85%

Two player option, you'll need good eyesight to read the minuscule print in the videoguide.

Graphics 85%

Good big screen movement, lots of action, colourful and detailed.

Sound 85%

Not brilliant, but some good jingles and spot effects to support the action.

Playability 95%

Fast rate.

Addictiveness 95%

You won't stop once you start.

Value 81%

Worth every penny.

OVERALL 90%

Ideologically unground man, but the graphics is very addictive.



FOOTBALL MANAGER 2

Football Manager 2 Addictive
£19.99 (inc. £14.99 disc)
Available on tape

So you think you could manage a football team? This game simulation from Sports Topics gives you the chance to put yourself to the test. Lead the game, choose one of 12 league teams, haggle for sponsorship, pick the squad, arrange conditioning, tending late season injuries and the injury formation, then square about on the edge of the bench as your team attempts to play to your orders. What could be simpler?

The program runs in two phases. Initially you are presented with a series of screens giving information and asking for decisions. Sponsorship is available at the beginning of the season, the number and size of offers depending on both the

division your team is in and your rating as a manager.

If you are too greedy, you might not get anything, which you'll regret later when half your squad goes down with flu and you can't afford even the most useless player. Since matches for which you can't field at least 11 fit players are forfeit, money management is as vital as player management.

You have the choice of playing with a skill rating from very easy to will 'nigh impossible. The game plays exactly the same for each rating, the difference being the strength of the opposing teams. On the lowest level losing is a bit foul, while the highest rating makes winning virtually impossible.

Having chosen the skill level you can save your position, and this deserves a note of caution. Up to 10 different positions may be saved — numbered from zero to nine — and these numbers are used later when you wish to reload.

But if you try to load a file number that doesn't exist, the program insists on searching endlessly for



the specified file. Having made this mistake, I had to reset the machine and reload the whole program from scratch.

At last it's time for the match. You are shown the name and rating of the opposing team together with the type of match, such as cup or league. Then the view changes to

show the pitch. This is divided into three sections — defence, midfield and attack — and each shows the position and strength of opposing players.

A man-to-man system operates, the idea being to place your players against a weaker opponent. The defence section has slots for the goalkeeper and up to four other players, while both midfield and attack allow up to four men each.

By scrolling through a list of your squad you can place players in one of the spaces, rearranging them as you see fit. You don't have to match a player to each opponent — there's nothing to stop you having four strikers to an opponent's two defenders, but sometimes in your defence or midfield you're likely to be overwhelmed.

Once the team has been placed



ple begins, the scene resembling a match on television. As the ball moves up and down the pitch, the view swings between the three playing areas. Initially the graphics seem rather blocky, but after a few minutes, and particularly in the closing seconds of a vital cup tie, your imagination will be filling in the details.

The ball is cleared, captured, passed, lobbed, headed and dribbled until either a goal is scored or the ball goes dead.

A game generally takes about five minutes, and may be made up of several sequences. At half time you have the opportunity to rearrange or substitute players.

After the match the score is displayed, and for league matches the other scores in the division, followed by an updated league table. There comes the time to assess injuries and finance, and perhaps reduce the wage bill or pay for the acquisition of a star by selling some players.

Selling is achieved by placing the player on the market and setting a bid, which are usually far less than the player is worth. If you refuse a bid you may not get another. Similarly, when buying players you must bid, often having to go much higher than the player's value.

Then it's down to some serious training. The squad can be drilled in various ways of passing, high and low, short and long—not that you as manager see anything of this—and future playing styles are influenced by the training programme you choose.

You don't need to know anything about football to enjoy this game, but be prepared to invest plenty of time, at least a week for one season.

Fal Winterley

Presentation 85%

Simple, effective layout set down by unobtrusive lead routine.

Graphics 25%

Smooth, realistic game displays. Edge of the seat stuff.

Sound 85%

Good fit to music and realistic crowd sounds.

Playability 80%

Simple controls, difficult decisions.

Addictiveness 30%

Oh I have to give it back!

Value 85%

You'll find it playing next year.

OVERALL 85%

If you're any interest in football, you'll have fun with this.



HOPPING MAD



Hopping Mad, File
 £29.99 (approx. £14.99 value)
 joystick or tape

It is not often you come across a game which is totally different from all the others, but Hopping Mad falls well and truly into this category. Your task is to guide three bouncing balls through a wind alien landscape avoiding the landing machines, hitting the odd ballbear or fish, and building up enough points to put yourself on the high score table.

If this sounds easy, well it is... at first. Your opponent has played the game before you, skillfully avoiding everything that would cost him a life. On his globe-hopping journey through the world and into outer-space he has gobblet and papped almost all the apples and ballbears, and kept his way to a brilliant score.

He may be passed, but you soon find that it's not that easy. In the end, you must escape the jaws of the set after set of ball-eating plants, stick out of the way of bees and birds, and jump over the odd hedgehog or two.

To help you keep your trio intact, you can use the joystick or keys to control the speed and height of bounce, and the rate at which you cross the landscape. This takes a little getting used to, but after a

while you really get into the swing of things.

Having managed to escape from the forest, you find yourself in the desert where the hazards are just that bit closer together. Do you try to jump for the ballbear and increase your score, or play safely by gliding over the sand? With only three balls and three lives to lose, it's difficult to get on to the higher levels.

Graphically, the game is excellent, with plenty of detail in the landscapes. Joystick control is far easier to master than the keyboard, offering fast responsive action. The tune plays throughout, which is enough to drive the neighbourhood mad.

This is one of the most addictive games I've come across recently. If you want something to keep you out of mischief for months to come,

you'll not go far wrong with Hopping Mad.

Steve Lucas

Presentation 85%

Lots of options.

Graphics 80%

Difficult to beat.

Sound 80%

Good tune throughout.

Playability 80%

Fast response action.

Addictiveness 85%

You'll find it hard to drag yourself away.

Value 85%

A good buy.

OVERALL 85%

One of the best games I've seen for ages.



Novel wizardry

Wizard Wars, CD-ROM Gold
£39.99, £14.99 (incl.
Joystick) on disc

PROVING yourself worthy of becoming a chief wizard involves you in combat with hostile monsters and devils on a map filled as a role-playing fantasy, this game requires both strategy and magical skills to complete.

You begin as a lowly junior capable of using only four spells which you initially select from a larger range in the main spell book. Unfortunately, the spell symbols on-screen don't really match the illustrations in the instructions, so arming yourself can be a bit haphazard until you've had some practice. With spell book at the ready you

the main priority. Once the three necessary items have been collected, you progress to the third level where you must defeat seven magi in order to complete the quest.

Wizard Wars leads in three parts, and death in either the second or third level necessitates a retreat from level one.

So much experimentation is involved in this type of game that frustration quickly sets in. Even starting at the beginning of the current level would have been a help. Still, it does add a real element of fear as you watch your attributes rapidly draining while trapped by a raging monster.

On the whole I found the game very simple to understand and enjoyable, with bright clear graphics. However the instructions could have been a lot clearer, par-



then find yourself on a large scrolling map, of which you can see only a very small portion through a scud window. The map contains seven cities and six monsters, and each monster has a treasure which belongs to one of the cities.

The gameplay in part one consists of discovering each monster, entering a sensitive arena, slinging spells at your adversary until it dies, then returning the treasure to the correct city.

Only when all treasures have been returned can you move on to level two. Here there is no travelling, simply arming yourself. The aim is to collect more spells for your book, while searching for the monsters which hold the three items needed to progress to the second part.

As each monster is defeated its current spell is displayed. This may be added to your book - if you have any space left - or retained in favour of an increase in attributes.

Once allowing your physical, spiritual or mental attributes to fall kills you off, the strategy is in deciding whether a spell or rejuvenation is

particularly with regard to identification of spells. Also the impetuous response to the keys while selecting the correct spell book page killed me off once or twice unnecessarily. In addition, a poison command was undocumented, and a couple of the leopards were stronger given.

Although more of an arcade adventure than a role-playing game, Wizard Wars is fun and has that little something to make it interesting.

Pat Winstanley

Presentation 80%

Sluggish (important) response at times.

Graphics 85%

Clear, colourful and informative.

Sound 8%

Sound? What sound?

Addictiveness 98%

Starting or level one upon death is rather a disappointment.

Value 80%

Should keep you going for some time.

OVERALL 77%

Very playable, but let down by the loading system and vague instructions.

Dark Side, Incentive
£9.99, nps, £14.99 (incl.
Joystick) on disc

EASIER this year Incentive released Driller, a futuristic game which required quick thinking, and contained some devilish puzzles. Now comes the sequel, which is similar in form to its predecessor.

Once again, the planet Earth is under threat. This time the threat is constructing a gigantic weapon - Zapher One - on the dark side of Triorapid, one of Earth's two moons. The solar power needed to activate such a weapon is produced by a network of ECAs (energy collection devices) which is scattered about the moon.

Your task is to land on Triorapid, destroy each ECA in turn, and thereby render Zapher One ineffective. It is only by doing this that you will save Earth from certain annihilation.

Transported to Triorapid and encased inside your plasma-shielded spaceship, equipped with jet pack and a short supply of fuel, you survey the geometrical landscape before you. The screen displays the view from your space suit



helmet.

Movement on the ground can be forward, backward, right or left with the landscape changing accordingly. It is also possible to look up or down, and you can travel vertically using your jet pack. This, incidentally, has to be used sparingly otherwise you'll find yourself grounded fairly quickly. The movement panel contains the usual tools - compass, shield and jet gauges, and so on.

The gameplay operates in two modes - movement and attack - which you toggle by pressing the spacebar. Fortunately, you are equipped with quad beams which can be deployed against green - enemy tanks scattered across the surface of the moon. Powerbeams make travel across Triorapid's pe-

Blast away

Blind Commands, Capcom £14.99, £9.99 (incl. Joystick) on disc

ALBM times may have devalued our beautiful land, but the hour of glory is at hand! As one of the elite blind commands it's up to you to breach the alien complex and destroy their doomsday missile. So begin a session of unad-

vised shoot anything that moves based on a platform-and-ladder layout. But this game is a little different. How often have you wished you could place a ladder wherever you like to arrive at the safest spot? Now you can, as you are equipped with telescopic arms which act as ladder walkways.

There are five levels through which you must blast, swing and climb, avoiding hulkamike guns, cannon-balls, killer bees, electric pads and many other nasties. This appears to be an element of randomness in generation of movement of some of the more enemies, certainly enough to make route planning rather futile.

Upon death you parachute to the top of the screen, starting helplessly as land far enough away from the nearest ground to allow time to run and fire. More often than not ended up on top of the nearest giant's head, and promptly got another life.

Apart from hazards due to the gameplay, there are also life and death situations where it's difficult to tell what is happening, especially





form structure that much quicker, and certainly beats logging in! As there is a time limit, it is essential that these are used.

Fortunately, every time you destroy an ECD you give yourself more time because the more ECDs out of action, the slower Docthr One shoots the power necessary for its activation.

Graphically, Dark Side is very polished, though perhaps a little sombre. Sound is limited to laser and jet pack effects, which have been stylishly done. Personally, I would have preferred a game that moves a little quicker. But if you like something that requires strategic thinking interspersed with zapping, you should find Dark Side very entertaining.

Tony Managar

Presentation 88%

Good controls, brief but through playguide.

Graphics 87%

Very solid.

Sound 65%

Laser effects, principals.

Playability 87%

You'll need to familiarise yourself with a range of controls first.

Addictiveness 79%

Exploring alien territory always keeps your interest.

Value 86%

A lot of effort has gone into this game, and it shows.

OVERALL 85%

A polished performance, but you'll need to persevere.



on a green screen. Even with a colour monitor I had trouble distinguishing between bark on trees and a particularly nasty species of bat. Presumably this is intended to make the game harder. Remaining lives are carried over to the subsequent level, so you'll need a fair degree of luck to explore deeper into the game.

On the whole I found Blonic Commando quite addictive - easy to play but hard to beat. It's not the most original product, but still good fun when in the mood for blasting everything in sight.

Ped Winklerby

Presentation 78%

Type users will drink plenty of coffee.

Graphics 85%

Disappointingly bland and jerky.

Sound 65%

Spot effects help when the screen goes modded.

Addictiveness 75%

Random elements keep the challenge high.

Value 76%

Provides justified by the other side.

OVERALL 67%

Original, but a nice mix of enter, route-finding intricacies.

Riding for a fall

Stuntlike Simulator, Silverbird
£7.99/price
Available on tape



EVER fancied being a stuntman? Stuntlike Simulator provides you with few death-defying feats which would make Eddie Kidd quake in his leather. Well, maybe...

As Chad Adams, super stuntman, your first task is leap from a hang glider on to a moving motorbike. This would be easy if you didn't have to manoeuvre your bike round a range of obstacles - cracks in the road, potholes, bollards - while looking for the right moment to leap.

Not only do you lose 100 points every time you hit an obstacle, but you are also slowed down. As there is a time limit, such delays can make the difference between failure and success. Fortunately, you are allowed three attempts which at first you will certainly need.

Subsequent levels follow a similar pattern. In the second you must do wheelies over starting logs, avoiding similar obstacles as before. Some logs you can simply avoid, others are inescapable and this is where your technique is tested to the full.

On the third stage you must jump through a burning loop, making sure that your speed and height are just right. Otherwise, you might get a little hot under the collar.

After that you must catch up with a speeding lorry and wheelie up its ramp to the compartment. This wouldn't be so difficult if it weren't for the obstacles that, as usual, you must avoid if you're not going to

lose time. Finally, in a mirror image of the first level, you must leap from your bike on to a flying helicopter, falling to it!

Stuntlike Simulator contains an interesting range of tasks, but falls down on the graphics. Uncomfortably blocky sprites and disconcerting scrolling are a real flop.

The sound? You'll have to form, I'm afraid, because there isn't any. These days many budget games are excellent value. Unfortunately this one isn't, so I'd steer clear.

Tony Managar

Presentation 88%

Very polished, clean and clear the game.

Graphics 10%

Blocky figures, little scrolling.

Sound 0%

Quiet!

Playability 46%

There's a game in there somewhere.

Addictiveness 46%

Yes - a little.

Value 29%

There are many better budget games.

OVERALL 37%

Don't waste your money.



Good for a laugh

European Football: Soccer
 £1.99/age
 JoyStick or key

YET another football game. This one is arcade action at its very best, albeit at its easy pace. You can play against the computer or a friend, and the match can last 5, 10 or 20 minutes. The joystick can be used for either player, but the keys are not defensible, and those for player two are terrible unless you're left handed.

During play you see a bird's-eye view of the field. Every few seconds the computer thoughtfully gives you

control of the player who is nearest the ball, and a flashing arrow points to him. Surprisingly, this works quite well. Movement is at a leisurely pace, although your man speeds up to a walk once you get him moving down the field.

Passing is accomplished by tapping the kick button. This sends the ball off in the direction the player is facing and at the speed he is travelling. The ball can be trapped between your man and another player, and you could stay there forever because nobody comes to take.

When you're fighting your way towards your opponent's goal the other man wanders around apparently aimlessly, your own getting in the way as much as your opponent's.

If the ball comes inside your six-yard box, control automatically passes to the goalie. You can make him dive across the goalmouth to the left or right. If you're playing alone, you probably won't use him much because the computer is a lousy player. To make a game of it, it really needs some difficult levels. All the while there is the noise of



the crowd cheering. It's not very realistic, though, because no bottles come floating on to the pitch, and there's not a copper or police horse in sight. At half time you change sides and you must remember to kick in the opposite direction. Yes, you can score own goals, too.

At the end of the match you are dumped back on the menu, so if you didn't know what the score was - tough! To be honest, I don't know if this is a brilliant game or a terrible one; I was laughing so much at the end of the run on the field. Perhaps that sums it up - it's cheap. It's different, it's a laugh. But World Cup Soccer is certainly isn't!

Ian Waugh

Presentation 80%

Five defensible legs, no high scores.

Graphics 70%

Clearly characters, slow movement, but very smooth.

Sound 70%

Sampled voices and boomy tone.

Playability 80%

The gameplay is surprisingly good. It's fun and easy to play.

Addictiveness 65%

The single player version is far too easy to win.

Value 80%

Go on, buy it for a laugh.

OVERALL 80%

I just couldn't give it a low score.



Nose dive

Geobots: Air Battle Adventure
 £9.99/age 7/10/15/18
 JoyStick or key

SO you're the loneliest who wants to fly the Geobots? You're one of those daring young men, eh? OK, it's your funeral! And with those words of wisdom echoing in your ear you climb into your Geobots, determined to fly the coveted Cartwright Cup.

There are eight levels, with four courses on each. To complete one you must fly between the pylons within a time limit. If you drift off limits the clock runs at four times normal speed.

Each level levels separately, but the really annoying thing is if you don't complete a level successfully you still have to load it in again. What's more, when you get the tang of the first few courses you have to play through them each time to get to the more advanced ones. Your plane has three dials -



altitude, compass and speedometer. The needles flicker so much that they're pretty useless, and I never saw my compass twitch once. You just have to fly by the seat of your pants, which is fair enough, I suppose - the pylons are always in view, you're told when you're off course and you can't crash.

The only source of danger is the other planes. They aren't there to test you, just hinder. It's particularly annoying to manoeuvre your way past one only to see the little "PLANNED" appear again directly in front. If you collide, you fall out with a parachute and land in some pretty unusual places. If it's the pig sky, it

must be level 1. The U key is supposed to pause the game, but it only does it down while you keep it pressed.

Sometimes if you don't manage to take off properly you'll end up flying in limbo until your time runs out - no course, no crash, no control.

I read the brief, read the instructions, was hooked, but the game didn't quite deliver. On the early courses I was flying around like George Peppard and still ran out of time. You need not be keen to want to fly the Geobots, but I'd think you'd need more money than sense to put with it for this.

Ian Waugh

Presentation 40%

Defensible nose, but having to reload the same level is terrible.

Graphics 65%

Fun for the course itself.

Sound 50%

Engine sounds, and music in a 16-bit style.

Playability 40%

Controlled opponents and not enough time, especially on the early courses.

Addictiveness 80%

Yup, it's fun for a while.

Value 50%

Two really ingenious, but not a great deal.

OVERALL 50%

A great idea but it could have been implemented just a wee bit better.



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Word files especially written to be integrated with other word processing programs can any file access. BrunWord handles the text before printing, letters, reports, presentation letters... feature has custom and format using BrunWord.

Bender's back

Impossible Mission 2 (Epyx) CD-ROM
\$29.95 (MSRP)
Available on tape

AFTER being defeated in Impossible Mission 1, elite commando Bender is back with a vengeance. New tricks, deadlier tanks, longer drops, and the style of the original feature in this new Epyx title. As agent #125, you have been recruited to enter Delta's new five-tower stronghold, and prevent him yet again from dominating the world.

In his fortress you will have to extract many types of codes in order to collect the security passes required to get from one tower to the next, and also to accumulate the

pieces of music which will give you access to Delta himself—and possible victory.

There are many objects in the towers such as cars, furniture and stores, all of which may be searched. You can also activate items which, for example, give access to explosives—useful for making traps and quiet exits. Timebombs are a good way to enter safes, and there are grenades which allow you to alter the position of the lifts.

When you start accumulating pieces of music you must decide which ones are duplicated. Once you have collected a full song, you can replay it live.

The beauty of the original Impossible Mission was the tense and realistic atmosphere. This and the spy theme have been continued here with the same near misses, ethical jumps and the inevitable race against time.

The graphics could have been better—the sprites are jolly, and the use of colour is unimaginative. Also

IMPOSSIBLE MISSION II



more could have been made of sound and music than the snippets found in the safes.

I found the controls not entirely reliable, yet Impossible Mission 2 is

playable though infuriating at times. It should appeal to die-hard fans of the original—but don't expect too much.

Geoff Hastings



Streetfighter, Codemasters
£29.95 (MSRP)
Available on tape

ANOTHER combat game to while away the odd evening or two. If you've ever wondered what it's like to spend a couple of hours in unarmoured combat with a 5-foot-tall warrior, this should give you a good idea. There are no on-screen instructions and, once loaded, you're straight into the action.

The first round sees you fighting a most cunning adversary who is determined not to let you win. My attempts so far have been fairly feeble—I've still not made it beyond round two except in cheat mode.

Unfortunately the game is not addictive enough to give me that urge to keep trying. This could be

Danger on the streets

because I've seen too many oriental fighting games for my own good, or maybe it really isn't that exciting. Whatever the reason, most of my attempts to win seem to end up with the same comment from the computer: "You've got a lotta learn before you beat me kid!"

Graphically, Streetfighter is excellent. Set in a typical Japanese scene, with pagodas and trees in the background, there are some superb scrolling locations. The sprites are large, detailed and colorful. Movement is quick and smoothly animated with a good responsive action. Sound is limited

Presentation 85%

Detailed instructions, coupled with in-depth graphics.

Graphics 58%
Impassioned and intriguing.

Sound 46%
Raw effects.

Playability 73%
Interesting and atmospheric.

Addictiveness 70%

Won't be played in a hurry.

Value 60%
An expensive gamble.

OVERALL 66%
Hardly enthralling, but will give enjoyment to fans of the genre.



to some fairly average effects.

A small box at the top of the screen displays the energy levels of both contestants, and you need to keep one eye on this at all times. There is a pause option included, which can be very useful if Akuma Mariko punches right in the middle of the final round of the championship.

If you're looking for a martial arts program with plenty of action, good graphics and challenging gameplay, this could fit the bill. On the other hand, if you've already got a karate game or two, you won't find anything new here.

Steve Lucas

Presentation 85%

What I've seen looks good.

Graphics 58%
Nice smooth sprites.

Sound 56%
Not much excitement.

Playability 74%
Hard to master, but not too difficult to get into.

Addictiveness 66%
OK for an hour or two.

Value 70%
A fair price.

OVERALL 74%
Reasonable, but nothing special.

Star Trooper Players
\$14.95
JoyStick or Key

Still Trooper is yet another budget game from Players which will give most full-price games a good run for their money. You take the role of a Marine Corps Star Trooper, selected for a most dangerous mission. Mission Genesis, your last one, was only a partial success, leaving the leader of the evil alien quadruple Jabba McJabba free to threaten life on Earth.

When he learns that you had located his secret HQ, Jabba made his mutant mercenaries throw any useful equipment into the incinerators. It is believed that Earth's only supply of the fire-see super alloys stolen by the aliens in a recent raid was also thrown into the flames. Your mission is to locate and return them to Earth.

There is little in the way of printed instructions, but everything you need can be selected from the main title screen. Options are provided for joystick or user-defined keys, viewing the high score table, or playing the game. Graphically, Star Trooper appears very similar to many others, with your man-looking pretty much like any other alienoid.

Travelling down to the planet's surface seeking legions of the five super alloys, you must take great care to avoid the enemy robots. The alien bases have an automated defence system, and as soon as you get close to them the robots appear.

To make life more difficult, you will need to collect lift passes, teleport access cards, and force field protection shields if your joystick is to have sufficient energy to get you to the higher levels. Unfortunately these too have been thrown into the incinerators, so your thermal protection will be put to the test.

The landscape is highly detailed, and the scrolling excellent. Sound is used reasonably effectively, and control with joystick or joystick is easy. This game offers few really original ideas, but despite that it is difficult to fault — a budget title which is as good as many full-price ones.

Steve Lucas

Space mission



Presentation 75%

Few instructions, but plenty of on-screen action.

Graphics 65%

High quality graphics.

Sound 75%

Nothing to complain about.

Playability 65%

Good control.

Addictiveness 70%

Better than average.

Value 65%

As good as many full-price games.

OVERALL 67%

An excellent game for the price.

The Fun
March
\$14.95
\$14.95 Star
JoyStick or Key

Rim rider

HERE'S a nice idea — an early-20s saga of death and destruction set in the 21st century. You are a limo rider, a diamond racer competing in the space age Descent-like on a looping track. Your objective is to win races and kill the other competitors.

Everyone has a price on their head, and the more you terminate the more galactic credits you get.

These are used to buy equipment, weapons, a brand new car and so on. Four indicators show in turn a short section of the track around you, the positions of the 1st, 2nd and 3rd cars, the damage to your vehicle, and a multi-purpose indicator with everything else — speed, fuel, position in the race, laps to go, and primed weapons. It is particularly cramped and difficult to read, as are the menu options.

The action takes place on a very small part of the screen, and the cars are tiny. Not quite the exciting stuff the title would have you believe.

It's easy to get through the first race — grab a racer, and some ammo and blast everything in sight. The second is a timed run — see if you can get enough credits in the first race to buy a faster car. The third is a top race. The target car is constantly being damaged, so you don't want to die it.

If you don't drive well enough, the judges will back you with a rocket and deploy missile. The Fury is an unknown quantity, something in another time or space you enter if you go fast enough for long enough and hug the top of the rim.

I didn't hang around to find out. You only get one life, then it's back to square one. It all, a nice idea but badly executed.

Ian Wright

Presentation 50%

No definite line, or high score, and the menu don't tie up with the instructions.

Graphics 52%

Nice background, small brand play area.

Sound 30%

Crude sounds, ping, and a few crashes.

Playability 50%

Playability area too small.

Addictiveness 48%

Little incentive to progress.

Value 30%

Not at this price.

OVERALL 38%

Way off target.



POSTBAG



It's a bit of a multifacer

In the June issue there was a utility called Multiface Screen Loader. Reading through the article I thought to myself "this is not true", I have a Multiface myself, and my screen load and save without the need for your utility.

I was wondering if you have a different version to mine which is 70 (press 10 from the Multiface screen to make it pop up). All I have to do is use the routine:

```
10 PRINT 1111
20 GOTO 1111111111
30 GOTO 11111
40 END 1111111111 GOTO routine
```

This does not save which made you are in or what the only are defined as, because when you call 37708 it sets it all up for you. The method fails down if the screen window has been made narrower or taller as it is in some games.

I must say that the Basic downloader in the same issue is a routine I have been seeking for quite some time now, and it is excellent.

Do you have Mastertron's address, as I can't find it on their packaging?—**Martin Burke, Coventry.**

● I wasn't aware of the call, but it doesn't work very well with my version 85 of the Multiface. Running your listing brings up the saved screen, but it doesn't get as

far as the screen dump without pressing a key, at which point the screen vanishes before you can do anything with it.

Mastertron's now owns Melbourne House and lives at 8-10 Paul St, London EC2A 4JH.

Putting on the top hat

With reference to the 10-Liner Wares in the June issue, in line 20 before the second 2 is a period which is not on my keyboard. Please could you advise what to replace it with?—**J.A. Jackson, Banford.**

● Many printers show the top arrow on the C key as the top hat symbol you are referring to. The typesetting machine normally shows it correctly, and I don't know why it didn't do so this time.

Disgusted of Didcot

If you could be bothered to examine your files, you will find that I have had occasion before to seek clarification of listings that have appeared wrongly printed in your magazine.

Having spent some considerable time typing in two programs from the May 1985 edition, I am veryuffed to find that neither of them seem to be correctly

printed. Why is it that readers such as myself have to wait for the letters pages of subsequent issues to find out how to make the programs run correctly? Surely it is not impossible for you to get them right first time?

Specifically, on this occasion I am referring to Teletax on page 25, which although typed for me as printed displays the error message System error in 25.

On trying the checksum utility I find that two lines seem to be wrong: 20 comes up as 40884 instead of 37344, and 30 comes up as 40408 instead of 10272. Both lines have, however, been typed in exactly as printed.

The second program concerns the Multidump screen dump utility from pages 28 and 40. Here you have not bothered to give a checksum listing, but when I try to run it I get the following:

```
ERROR IN LINE 108
ERROR IN 108
```

Again both lines have been typed as printed, with the exception of line 120 where I have added a comma in the action pointer as —,typed 20, to make it read —,typed 20, as I was sure that this should be there if I leave out the the comma I get System error in 120, so I can't win.

Please get your act together, or I shall give up on your publication in disgust.—**Jan L. Barlow, Didcot.**

● Firstly, I don't keep files. If I archived every letter I'd have a room full. When your letter arrived I typed in the Teletax listing and checked the checksums. They are perfect. The line is about as simple as it could be, and if you can't get it to work, the blame does not lie here.

I didn't include checksums in the Multidump listing because the bulk of it (the data statements) has checksums built into each line. That's why you get the error message — you've made a typing mistake — and providing a second checksum for the line won't change that. The rest of the listing is the standard hex loader which we've been

This is the part of the magazine where you can share your experiences with other readers, air your views, and ask or answer questions.

Tell us what you think and don't pull any punches! This magazine is produced for you, the readers, and we rely on your feedback.

As an added incentive, remember that £10 goes to the writer of the most interesting and informative contributions. Every letter is read with interest, but because of the large number we receive every month it is not usually possible to send a personal reply.

No doubt you'll have noticed some changes in your favourite magazine this month. Tell us what you think of it so far, and what further improvements you'd like to see.

The address to write to is:
Postbag, CPC Computing, Europa House,
Arlington Park, Arlington, Merckleyfield SK19 4NP.

using for more than a year.

The "missing" control was caused by a blurb on the plate used for printing. This was produced at the printers, and was beyond my control and you are the only person to have remarked on it. If you look closely you will see there is something there.

Apologies if it caused confusion, but the line is identical to one in to the left and one on the following page used in the same context.

Again I typed in the offending lines to make sure they're correct, and they are. If an act is in need of getting together, it isn't ours. Incidentally, I see you didn't box your letter up with a printout of your listing.

The best bugs in 1,000

WE typed in your Biomorph program in the January edition and shortly afterwards sent in some sets of gene values hoping to win £25 worth of software. Why have the competition results not been published?

Also, why do you have so many articles and utilities for disc drive and printer owners when many people do not own them? And why has 16-Linez been given so little space in the May and June issues?

We both enjoy your magazine very much indeed. — Rachel and Stephen Myers, Rugby.

● I intended making a one page feature out of the results for the biomorph program, but owing to space restrictions never quite made it. There were over 1,000 submissions, and it took quite some time to judge them all. Most were quite good, so we ended up getting the best 50 in a hat and picking a winner therefrom. The lucky breeder was M.S. Griffiths of Basingstoke with 8, -14,188,1,088.

About 70 per cent of readers have a disc drive, and over half have a printer. We have to reflect the inter-



Prize letter

HOW many of you CP/M 2.2 owners have followed the instructions in the manual for protecting files with a password under CP/M Plus. But don't know how to use your files again?

The answer to this problem is very easy. First boot up CP/M Plus. The disc you want protecting must have set.com on it — if it hasn't, copy it using PIP. For those that aren't familiar with PIP, put side one of your system disc in the drive, and type PIP. When the * prompt appears type:

```
SAVE SET.COM
```

and follow the prompts. When you have finished press Return twice.

Insert the disc you want to protect (the one with SET.COM now copied on it) and type this:

```
01 111xxxx [0416000]
password
01 1200001-041
01 111xxxx [040117xxxx]
```

where the second password

is of our readership, and are partly governed by the submissions we get.

While it's true that printer or disc utilities sometimes clump together, overall I don't think we have overdone it. If anybody thinks different, drop me a line and tell me what you do want.

It was a tough decision shaving 16-Linez down. Again I did it owing to pressure of space, but you'll have seen that it wasn't permanent.

Where to find 3.5in drives

BY February's *Forerunners* you said that you were unaware of 3.5in disc drive availability. You may be interested to know that one is available for about £140 from MMJ Systems, 11 Sun St., Coroner EC2M 2PE. It includes all necessary soft-

Make the most of the CP/M Plus password protection system

In the first line is, of course, your chosen password, and Mode is one of the following:

READ — Password is required to load the program(s).

WRITE — Password is required to write, delete or rename program(s).

DELETE — Password is required to delete or rename program(s).

NONE — Remove password protection.

This has now set the password protection on your file. Note that wildcards are accepted, so specifying ** for the filename protects the whole disc.

If you want to run a protected program you will get an error, so to use the program you must use, for example:

```
1000,password
```

If you are using the

DR.COM utility, you will have to do something like this:

```
101,password 1011
```

Of course you're sure exactly what you are doing, I suggest you practice on a backup disc.

The next thing which may be of interest is that:

● Control+W will reselect the file you typed previously.

● Control+B will send the cursor to the beginning of the line.

● Control+F is the same as cursor right.

Finally, I can recommend *Operations and Programming Guide for the Amstrad CPC6128 & PCW8258 (Soft 837)* published by Heinemann for Digital Research. The ISBN number is 0-434-80009-5, and it costs £14.95. — Jim Snakes, Belper.

ware for both Amstrad and CP/M use.

With 3.5in drives gaining in popularity this is a valuable development, and is especially useful with larger programs such as DV Daph. I have no connection with MMJ, save as a customer who found the firm prompt and helpful. — P.C.M. Poolman, Hayling Island.

● The more adventurous may like to buy a bare 3.5in mechanism, arrange your own power supply, and write your own software. As well as the 3in drive featured in the recent project, J & M Bull (0273 734648) supplies 3.5in mechanisms at £28.95.

Dodgy drive interface

I AM wondering if the DV disc drive articles published in the April and May col-

umns could be adapted for use as the first drive with my CPC6128?

Obviously an additional interface would need to be designed and constructed, but as I defer into electronic fabrication I would welcome the challenge. Perhaps this could be a future project? — R.W. Hughes, Birmingham.

● It would be a horrendous job to make the interface. This problem is not with the physical construction, though coming up with a working design which didn't compromise Amstrad's copyright might be tricky.

The main difficulty is that in the interface is a 16k rom which contains the disc operating system. Producing this, and in such a way that it too didn't copy Amstrad's programs, would be beyond the scope of a simple construction project.

There is no reason why the add-on drive couldn't be

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4 From Page 28

used with the genuine Amstrad interface if you adapt the ribbon cable, so you might like to investigate the cost of buying this as a spare part from Combined Precision. Components 0973 86000.

The manual reveals all

(READ the review of Maxam 1.5 in the May issue and it feels awfully familiar. At the moment though, I use Maxam 1 and have no hope of upgrading.

In the review Jan Shupe said that a frequent complaint with Maxam 1 was that the disassembler would not output to a file,

but this could be overcome with a short utility. I was wondering if you could give me the listing? — David Wood, Glasgow.

● It's in the Maxam manual in my copy (it's on page 46 after the details on RST instructions, though different editions may have it in a different place.

The modified used is to redirect the disassembly to printer option to a file instead.

Relocating KDS dump

I hope Jan Shupe can give some time to the contents of the letter as it concerns a program he wrote — the screen dump in the February issue to work with the KDS 8 bit printer port.

I was obviously written with the disc drive and other programs in mind, because of the arrangement I have — CPC464 with no disc drive — there is about 7K between the small KDS set up program and the end of loading.

At the moment I am trying to get some idea of machine code and I thought I would have a go at relocating it. Now, regardless of having looked up each instruction, I

cannot make head nor tail of it.

According to what I have read, JF instructions should have the same effect no matter where the routine is located. Using the disassembler listing you published some time ago, I printed out the hexcodes, and since the opcodes are right I assumed these would likewise be right.

However, there is some thing that has me bemused:

0077 JF 0,0000

I cannot fathom this out. As it is a relative jump it cannot refer to an address, and otherwise it would be right off the end of the program, if the disassembled version is correct I am obviously missing something somewhere.

Is it possible to get this routine to run just below the KDS program?

In passing, I read a tip concerning the saving habit printers have of printing out screen dumps of a page as an ellipse on paper. It seems that the solution to this depends on whether the printer is emulated with a plotter graphic mode, and I was surprised to find that the Amstrad DM's have this facility.

On page 4 of the manual it says that it is Mode 4 and you have to override the

residue program by typing:

**PC14,0000,77,
0000**

I have tried this with Mode 0, and it works, giving a perfect circle. — David Small, Warwick upon Trent.

● A JF offset instruction points to a definite address when offset has been added to the address of the JF instruction.

When reading a disassemblable you are most likely to want to know where the JF is going to, rather than the actual number of bytes it is going to loop/loop. That is why most disassemblers do the calculation and list the destination address.

You should find that your assembler will do the reverse process. You can specify JF address or JF label, and the offset will be calculated and put in the code.

Which modulator?

RECENTLY I bought a CPC464 with green screen, and although it has given me valuable insight into computing, I now find that a lot of revision is lost without having colour.

The manual suggests that I need a domestic television and MP1 modulator, in an effort to obtain the letter I have tried many different establishments, but to no avail.

I would be eternally grateful if you could confirm that this piece of technical wizardry really exists, and where I might be able to try it: — Sgt. I.G. Bamcroft, RAFPSU Doolmansham.

● The more recent version of the modulator — the MP2 — although more expensive gives better picture quality, although it will not be as good as using a direct RGB connection to a monitor.

It should be available through any Amstrad dealer, or you might like to try K & M Computers, 40 Fairstead, Birch Green, Sheltondale, Leroc W16 8RD.

Get Maxam and become a machine code maestro

I WOULD like to offer some advice to those interested in machine code and peking games. When I first got my CPC4128, reading through magazines I was amazed how seemingly useless numbers could change games, or be programs in their own right.

Being curious, I decided to have a bash at machine code, which seemed to be the 81 thing at the time.

I found I made little progress with books on the subject until I splashed out and bought Maxam on spec. I haven't looked back since. Believe me, machine code is within everyone's grasp,

even if they don't understand Basic.

Using Maxam and typing in assembly programs soon gives you an idea how machine code works, but the important thing is to persevere. It is great fun writing your first few lines of code, say to print hello on the screen.

Anyway, as peking games I found that by disassembling games from the masters of the art soon gives you an idea of what to do, but I suppose you need a bit of practice.

When I set about hacking a game I first save it to disc with my Multifuse and,

using a decoder program I wrote, place the code at \$4000 to \$8000, thereby making it easy to disassemble.

All you have to do is look for giveaways like LD A, number whose number could be the ships or lives allowed. Once you've worked out where that is, change the value or paste a return instruction for infinite lives.

Cracking the loader is the hardest part, and that's where looking at other people's code comes in handy — most use the same breed of loaders. — Matt Brady, Sligo.



QUEEN OF CHEATS

AMONG the stack of letters I've had recently are communications from Justice Carroll, and a slightly more formal Mr. K. Noften. It looks a bit better in print if you put your first name, by the way.

These two points are having trials and tribulations with repeat poker, namely *Gryzor*, *Super Bubble Hoop*, *Pro Ski*, *Sawtooth* and *Armadillo*.

Oh, I admit it: It's all my fault! After what I said two months ago about bugs in the CPC486 running problems when you put a 2024 or "after date," I went and let a few more dodgy savings through. Sorry!

Apart from *Gryzor*, the solution is the same as for *Slory*: At the end of D422, find and remove the colon (:) and everything after it. If it still doesn't work, you put your fingers in a book while typing it in.

The *Gryzor* poke is a bit

funnier but part of worse luck. It's OK, but somewhere between leaving my desk and hitting the newspapers part of the 40 game process and nipped down a bit, it should read:

4 10 10000 10 10000 10

Jason is after some pin poke. He's 13 and wants to trap Nicks and the other people around the same age. So, if you fit the bill drop him a line at 55, Maple St., Bangor Mt., N. Sussex RM15 6JH.

Somebody else after a pin girl is James Hillary, 21 Broomfield Way, St. Dunstons Village, Gateshead. Try and wear NES JED. Thanks for the Ghostbusters tips, James. I'll see if I can fit them in at a later date.

T. Henry

Casey's Cracker

Here's Peter Casey's Cracker again in case you missed it in previous issues. Just type it in and save it. Whenever on these pages and in future columns I'll be printing some bits of program which you can add on to form a complete poke.

```

10 ' Casey's Cracker
11 00000 0000 0000 1000
12 0000 0000 000
13 0000 0000 000
14 0000 0000 000
15 0000 0000 0
16 000 000 0 1
17 0000 0000000000
18 0000 000000000000
19 0000 00
20 01 00000 0000 00
21 0000000000
22 0000 00000000
23 0000 00000000
24 0000 00000
25 0000 01,00,01,01,00,00
    
```

Shanghai Karate

(Players)

Add these lines to the end of a copy of Casey's Cracker, and substitute line 11 as shown. You will then have a poke which allows you to continue even when you've run out of energy. Revisit the topic in the beginning and run the poke.

```

11 00000 0000 0000 1000
2 0100 0000 000 0000
25 0000 01,00,01,01,00,00
27 ' Shanghai Karate
28 0000 01,00,01,01,00,00
29 0000 01,00,01,01,00,00
30 0000 01,00,01,01,00,00
    
```



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Paperboy

(Elite Hit Pack vol 3)

If you find yourself falling to deliver, here you can choose the number of hits up to 255. Just enter the variables in the 30, and Bob Powers of Bob's color circle. You don't need to fast forward the cassette past the first file, press Play, and run the poke.

```

10 ' Paperboy
11 01 000 0000 10000 000
12 00000000 000000 00000
13 0000 000000 000000
14 0000 0000 0000 0000
15 0000 0000 0000 0000
16 0000 0000 0000 0000
17 0000 0000 0000 0000
18 0000 0000 0000 0000
19 0000 0000 0000 0000
20 0000 0000 0000 0000
21 0000 0000 0000 0000
22 0000 0000 0000 0000
23 0000 0000 0000 0000
24 0000 0000 0000 0000
25 0000 0000 0000 0000
    
```

Winter Games

(Alpha)

When you play the disc version of Winter Games it saves a file called record.dat with the high scores. If your party friend, sister, brother, offspring or parents have notched up a mega score with their name permanently on the table, here's a utility to wipe that smug expression from their faces - it resets the record. John Anderson is the little tinker behind this.

```

01 010101 0000
02 01 0000 000000
03 0010 11 01 00 0000 00 11
04 0010 00 00 00 00 00 00 11
05 0010 00 00 00 00 00 00 00
06 0010 00 00 00 00 00 00 00
07 0010 00 00 00 00 00 00 00
08 0010 00 00 00 00 00 00 00
09 0010 00 00 00 00 00 00 00
10 0000 00 00 00 00 00 00 00
11 0000 00 00 00 00 00 00 00
12 0010 01 01 00 00 00 00 00
13 0010 01 01 01 00 00 00 00
14 0010 00 01 00 00 00
15 100 000000 10 0000
16 0000 00 0000 10 0000
17 0000 10 0000 00 0000
18 11 00 0000 0000 11
19 0000 000000 0
20 0000 000000 0
21 0000 0000 0000 0
22 0000 0000 0000 0
23 0000 00 00 00 00 00 00 00
24 0000 00 00 00 00 00 00 00
25 100 000000 10 0000
26 0000 00 0000 10 0000
27 0000 10 0000 00 0000
28 11 00 0000 0000 11
29 0000 000000 0
30 0000 000000 0
31 0000 0000 0000 0
32 0000 0000 0000 0
33 0000 0000 0000 0000
34 00
35 0000 00 error in the file
    
```

Sorry folks, but it's gotta come again. The private domestic arrangements of readers don't normally concern me, but recently they've been taking the not inconsiderable editorial interest to the point where the looks of editorial hair are again being torn from the editorial scalp. At this rate he'll be totally bald before he's 20.

It's better than watching Dallas working here, how-well-Mary-about-the-Scott, Winchester and Neal families? Between them they number 15 poverty-stricken souls and share a house, a pencil stub, and banderling style in Southsea.

We almost let them win the CRL free software competition out of pity. You remember that one? The one with the only-one-entry-per-person rule?

Maybe we should put them in touch with the Penrheak and Herbach families who share five desirable residences scattered around Essex. Or second thoughts, house prices being what they are and seeing as only one of them can afford a biro, maybe we shouldn't.

Newer mind Penrheak, with the postage on the 20 plus entries they sent in for the CRL and Arno's copies they must be flat broke. The

offer is trying to work out how some of them can live at two or three addresses at once. Perhaps they're innocent. Law-abiding clones, but I'm afraid their entries have been consigned to the shredder file.

Oh well, such is life, and there's plenty of it down in sunny Devonport, where one of the Turner family is in the throes of an identity crisis.

I diagnose four-way



Singe's Castle

(Software Projects)

Most pokes are for tape versions of games because that seems to be what people want, and that's mostly what I get sent. However, one or two people have been asking for a Singe's Castle poke for the disc version, so here is Tak P. Cheung of Ipswich's answer

```

10 SINGE'S CASTLE POKES TO
11 100
12 BY T.P. CHEUNG
13 111 100 (loading)
14 0000000
15 0000000
16 0000000
17 0000000
18 0000000
19 0000000
20 0000000
21 0000000
22 0000000
23 0000000
24 0000000
25 0000000
26 0000000
27 0000000
28 0000000
29 0000000
30 0000000
31 0000000
32 0000000
33 0000000
34 0000000
35 0000000
    
```

to their problems. Put the number of lines you want, up to 255, in line 20, and run the poke with the disc in the drive.

Out Of This World

(Reaktor)

From Paul Morris of Harwich come some tips and a poke to make Reaktor's chest/arm-up a bit more manageable. Over to you, Paul.

Keep shooting anything that moves and collect every capsule possible, as some allow you to go on to the bonus screens faster than wading your way through wave after wave of aliens.

If you want to see what the next screen looks like, when the computer asks you to rewind the tape, fast forward the cassette a little. For CPC6128 users, fast

T.P. Cheung

Clone corner Clone corner

schizophrenia. Nope, mate that five - jaxing's just arrived and he's sent another copy entry. I'll keep you posted on which of the three female two male personalities wins control of the body, the ball point, and the photocopier.

I've saved the best till last - the Jennings family of Bristol. We could almost have believed in mum Jennings, dad Jennings, and 17 children, but in File 3a?



GRAND

*ROBIN NIXON takes an in-depth look
at a new force in the market*

GRANDSLAM is a relatively new company with an impressive list of products and titles, including budget, full price and 16 bit games, as well as reciprocal deals with other leading publishers such as Datasoft from the USA.

However, despite a long list of products to be released this year, and the promise of some great new things for later on, little is known about the company itself.

Grandslam was born at the end of 1987 following a management buyout by Stephen Hall from the multi-national OCT, which owned the company in its previous Argus Press Software incarnation. With Hall's background at ATV, he used his experience to bring some high-quality products to the company, ensuring that Grandslam got off to a good start.

Recently the company has gained the rights to titles such as PacLand - which it publishes through its Quixote subsidiary - The Flintstones, Peter Dinklage's International Football, and Terramax. Additionally, the news that it's completely launching its Bug Byte budget label means that over the

coming 18 months we'll see yet another entry into the highly competitive budget market. But with Grandslam's buying power, we can look forward to some of the better back-catalogue software for around £1.99.

So what made Stephen Hall make the switch to Grandslam?

"Well, I'm a real believer in seeing an opportunity and seizing it. This is exactly what happened with Grandslam. The opportunity came up to reposition Argus - as it was then - and really give it a proper kick into a

leading-edge entertainment company," said Hall.

"I believe that with the sort of things we are doing now with 16 bit, Acqui-media, and of course 8 bit, we are paving the way for a very successful future."

He continued: "I'm now surrounded by an excellent team who give their full in every product we undertake. Without this and the excellent programming teams we use, we wouldn't have quite the degree of success I feel we've enjoyed under our new banner."

Indeed, it has to be said that the company's progress has been fast, leaving in mind some past disappointment with products.

Hall agreed: "That's true, but as I said, I'm a great believer in determination and being surrounded by the right people. We do owe a lot to our technical people, who've constantly come up with excellent and original game concepts.

"Tague Software, which is a couple of years who used to do great things with Green Graphics, has really turned up remarkable results - I mean have you seen the sort of graphics



The CPC is still very important to us, and in the 8 bit market continues to provide us with strong sales. I think our continuing commitment to the CPC proves our feeling.



GRANDSLAM



Stephen Hall

Thunderbirds, especially as it had been previously released by Telecom—sell without much success?

"Well, I always thought that it was never done justice in the first place. The series really is a classic, and also one that I was involved in during the late sixties when I used to work for Lord Lew Grade at ATV. I pursued it, and took it on. This time around it's going to be a great product, probably being released around the time of the PC show".

Hall's affection for strong series is obvious, and looks certain to continue into next year. In fact Grandslam is already lining up products for 1988, though again Hall plays his cards close to his chest. "The problem", he says, "is not giving the game away too early". Telling the world about new



we're got coming along with Peter Beardsley's International Football? It's got to be the best football game to date".

Grandslam has also been busy spreading its catalogue, tying up recently with major US company Datac. This means that Grandslam will also be responsible for the Alternative Reality range, as well as some of the firm's other arcade offerings later in the year.

Although Hall will not at this stage give details of products for the rest of 1988, he has confirmed that Grandslam has the rights to sell the computer version of Espionage, a new board game due for launch here very shortly. Also the company has the license rights to Thunderbirds.

"Espionage is an intriguing new board game. I don't want to say that much about it at the moment, but it'll be available across all the major formats. It is being billed as the next big board game by the toy trade", Hall says. "It is also receiving extensive press coverage in the Daily Telegraph, Toy Trader magazine and USA publications".

Why did Grandslam take on

software is always exciting, but giving the good news too early can lessen the impact of a new idea or concept.

You have to admit that the machine really is another testament to Allen Sugar's ability to produce sellable goods that continue to sell over long periods of time.

All this in just



WORD PROCESSOR

Compose a letter, set the print-out options using embedded commands or menus, use the mail merge facility to produce personalised circulars – and more!



DATABASE

Build up a versatile card index, use the flexible print out routines, do powerful multi-field sorting, perform all arithmetic functions, link with the word processor – and more!



LABEL PRINTER

Design the layout of a label with the easy-to-use editor, select label size and sheet format, read in database files, print out in any quantity – and more!



...and at a price!

Mini Office II offers the most comprehensive, integrated suite of programs ever written for the Amstrad – making it the most useful productivity tool yet devised.

A team of leading software authors were brought together to devote a total of 26 man-years of programming to the development of Mini Office II. What they have produced is a package that sets new standards in home and business software.

The sample screenshots above illustrate just a few of the very wide range of features, many of which are usually restricted to software costing hundreds of pounds. Most are accessed by using cursor keys to move up and down a list of options and pressing Enter to select.

Is it that easy to use? Several leading reviewers have

already sung its praises on this very point.

Yes, possibly the best advertisement for Mini Office II is that it comes from the same stable that produced its original Mini Office package back in 1984.

That was so successful it was shortlisted in two major categories of the British Microcomputing Awards – (the Oscars of the industry) – and sold in excess of 100,000 units!

It was up to Mini Office II to take over where the first Mini Office left off, with 12 extra features, two additional modules, a program to convert existing Mini Office files to Mini Office II format, and a 90 page, very easy to follow manual.

This is the package thousands of Amstrad owners have been waiting for – and at a price everyone can afford!

ONE package!

SPREADSHEET

Prepare budgets or tables, total columns or rows with ease, copy formulas absolutely or relatively, view in either 40 or 80 column modes, recalculate automatically - and more!



GRAPHICS

Enter data directly or load data from the spreadsheet, produce pie charts, display bar charts side by side or stacked, overlay line graphs - and more!



COMMS MODULE

Using a modem you can access services such as MicroLink and book rail or theatre tickets, send electronic mail, telex and telemessages in a flash - and more!



... that can't be matched!

Here's what some independent reviewers say about *Mini Office II*:
"Mini Office II: the program was structured and well structured, allowing complete freedom to be made with hardly a pause or the need to read special manual, and offering a wealth of user-defined functions... For the money it really is a sensation. Dedicated word processors, spreadsheets and communications packages may offer some advantages, but none are as full of features and bells as you may find yourself desire in the manual or even not using half of their power. When you get used to Mini Office II in a wallet computer to provide an all embracing small business package at a price to merit prices it really will in premium, and don't be looking for more about the features of products." - *Software/Reviews 128*

Wired Business Program of the Year - 1985 AND 1986

"Popular Computing Monthly"

"This package is incredible value. It includes a word processor, database, spreadsheet, graphics display, label printer and chart, graphics display, database, word communications module. You could well spend over £200 to get the same range of features if you bought separate programs from other firms!"

Daily Mail Home Computing Guide

Amstrad CPC 464, 664, 8128

Cassette £14.95

3.5" disc £19.95

DATABASE SOFTWARE

Order forms on Page 58

THE two-player game, said to have originated on the Indonesian island of Java, has the simplicity of draughts and the intrigue of chess. It's very much a battle of wits, and one false move can result in the destruction of a carefully worked-out plan.

The objective is to capture enough of your opponent's pieces so that only a prearranged number remain. You do this by taking it in turns to move your counters across the playing area, trying to force your adversary into piece-losing situations.

Movement is made one square at a time, and can be in any of eight directions providing the destination square is empty.

Play opens with a choice of the remaining number of pieces that will result in a win — between none and nine — and how many games to play. Cursor movement is made with the numeric keypad, where 8 is Select, and the rest indicate the direction to

Javanese checkers

Exercise your skill with this game of logic and strategy by PAUL ROBSON

move. Each player starts with 12 pieces, arranged in two rows of six at either end of the board.

To move a piece, place the cursor on it, press 8, followed by one of the eight direction keys. If all is well the counter will be moved to the new position, and the other player takes his turn.

Where Javanese differs from other board games is in the method of

capture. To take an opponent's piece prisoner you have to use at least one of the eight connecting lines at the corners of the playing area. Figure 1 shows the layout of the board, with a game in progress. A white counter occupies B2, there's a red one on B5, and we'll assume that it is white's turn. Placing the cursor on the white counter — at B2 — and pressing Return

```

10 DIM DIR$(8)
20 DIM BY Paul Robson
30 DIM S(1) 1:1:1:1:1:1:1:1:1:1:1:1
40 DIM S(2) 1:1:1:1:1:1:1:1:1:1:1:1
50 DIM S(3) 1:1:1:1:1:1:1:1:1:1:1:1
60 DIM S(4) 1:1:1:1:1:1:1:1:1:1:1:1
70 DIM S(5) 1:1:1:1:1:1:1:1:1:1:1:1
80 DIM S(6) 1:1:1:1:1:1:1:1:1:1:1:1
90 DIM S(7) 1:1:1:1:1:1:1:1:1:1:1:1
100 DIM S(8) 1:1:1:1:1:1:1:1:1:1:1:1
110 DIM S(9) 1:1:1:1:1:1:1:1:1:1:1:1
120 DIM S(10) 1:1:1:1:1:1:1:1:1:1:1:1
130 DIM S(11) 1:1:1:1:1:1:1:1:1:1:1:1
140 DIM S(12) 1:1:1:1:1:1:1:1:1:1:1:1
150 DIM S(13) 1:1:1:1:1:1:1:1:1:1:1:1
160 DIM S(14) 1:1:1:1:1:1:1:1:1:1:1:1
170 DIM S(15) 1:1:1:1:1:1:1:1:1:1:1:1
180 DIM S(16) 1:1:1:1:1:1:1:1:1:1:1:1
190 DIM S(17) 1:1:1:1:1:1:1:1:1:1:1:1
200 DIM S(18) 1:1:1:1:1:1:1:1:1:1:1:1
210 DIM S(19) 1:1:1:1:1:1:1:1:1:1:1:1
220 DIM S(20) 1:1:1:1:1:1:1:1:1:1:1:1
230 DIM S(21) 1:1:1:1:1:1:1:1:1:1:1:1
240 DIM S(22) 1:1:1:1:1:1:1:1:1:1:1:1
250 DIM S(23) 1:1:1:1:1:1:1:1:1:1:1:1
260 DIM S(24) 1:1:1:1:1:1:1:1:1:1:1:1
270 DIM S(25) 1:1:1:1:1:1:1:1:1:1:1:1
280 DIM S(26) 1:1:1:1:1:1:1:1:1:1:1:1
290 DIM S(27) 1:1:1:1:1:1:1:1:1:1:1:1
300 DIM S(28) 1:1:1:1:1:1:1:1:1:1:1:1
310 DIM S(29) 1:1:1:1:1:1:1:1:1:1:1:1
320 DIM S(30) 1:1:1:1:1:1:1:1:1:1:1:1
330 DIM S(31) 1:1:1:1:1:1:1:1:1:1:1:1
340 DIM S(32) 1:1:1:1:1:1:1:1:1:1:1:1
350 DIM S(33) 1:1:1:1:1:1:1:1:1:1:1:1
360 DIM S(34) 1:1:1:1:1:1:1:1:1:1:1:1
370 DIM S(35) 1:1:1:1:1:1:1:1:1:1:1:1
380 DIM S(36) 1:1:1:1:1:1:1:1:1:1:1:1
390 DIM S(37) 1:1:1:1:1:1:1:1:1:1:1:1
400 DIM S(38) 1:1:1:1:1:1:1:1:1:1:1:1
410 DIM S(39) 1:1:1:1:1:1:1:1:1:1:1:1
420 DIM S(40) 1:1:1:1:1:1:1:1:1:1:1:1
430 DIM S(41) 1:1:1:1:1:1:1:1:1:1:1:1
440 DIM S(42) 1:1:1:1:1:1:1:1:1:1:1:1
450 DIM S(43) 1:1:1:1:1:1:1:1:1:1:1:1
460 DIM S(44) 1:1:1:1:1:1:1:1:1:1:1:1
470 DIM S(45) 1:1:1:1:1:1:1:1:1:1:1:1
480 DIM S(46) 1:1:1:1:1:1:1:1:1:1:1:1
490 DIM S(47) 1:1:1:1:1:1:1:1:1:1:1:1
500 DIM S(48) 1:1:1:1:1:1:1:1:1:1:1:1
510 DIM S(49) 1:1:1:1:1:1:1:1:1:1:1:1
520 DIM S(50) 1:1:1:1:1:1:1:1:1:1:1:1
530 DIM S(51) 1:1:1:1:1:1:1:1:1:1:1:1
540 DIM S(52) 1:1:1:1:1:1:1:1:1:1:1:1
550 DIM S(53) 1:1:1:1:1:1:1:1:1:1:1:1
560 DIM S(54) 1:1:1:1:1:1:1:1:1:1:1:1
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3040 DIM S(302) 1:1:1:1:1:1:1:1:1:1:1:1
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3090 DIM S(307) 1:1:1:1:1:1:1:1:1:1:1:1
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MONTE VEGAS

By Pierre Foster



MOST folk enjoy putting a couple of coins in the old-fashioned roulette, even though the chances of winning are pretty slim. This one, with only four numbers, offers two possible ways of winning — either three of a kind or all four the same, which gives the magical jackpot.

It should be fairly easy for the more adventuresome of you to add other features, such as mazes and balls.

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Small may be beautiful

**— but
does
beauty
always
fit the
bill?**

TONY KENDLE *investigates an integrated
accounts package for small traders*

THE latest version of the Small Trader's Pack from SD Microsystems is a suite of utility and accounts programs. It is designed for businesses with a relatively small number of customers and stock items, and pretty unsophisticated demands.

At the heart of the package are sales ledger, purchase ledger, mailing list, and stock control modules. Of necessity some are very complex, but all do a solid job probably adequate for the targeted users.

There is, however, one important proviso: Sometimes you find that no matter how good a program is, you simply cannot work within its data limitations.

This is really a matter for individual companies to decide. For example Small Trader tends to stick to a limit of 100 for number of accounts, number of customer addresses and so on, which may not be sufficient. This is not a flaw in the software — it is aimed at small businesses after all — but remember that you have to be small enough.

Make the sale

The sales ledger is essentially a record of what items or services have been sold to which customers, and whether they have paid. The program can list or print the history of sales made, a statement of sales for any one cus-

tomers, a financial summary of incomes and sales for any month — or for the whole of the file — and a summary of the money owing, again by account or in total.

It can also automatically calculate VAT paid on eligible items. There is provision for cash sales to customers.

The main menu

The sales ledger screen

...It is probably better that an expert in accounting learns the rudiments of programming than that an expert programmer learns only the rudiments of accounting

who do not have an account number. Up to 10 definable categories may be assigned to each sale, such as mail order or credit card sales, and these can be analyzed to show trends in your business. The purchase ledger has an almost identical range of features, designed to record things that you have bought from other people.

The mailing list keeps track of customers' names and addresses, and allows you to produce labels for mailing statements and so on.

Stock control, taken care of by another module, keeps track of the items you have for sale, who supplied them, and how much they cost and sell for. The total cost and sales value of any or all items in stock can be quickly calculated. Minimum stock quantities can also be defined, so you get a warning when you need to re-order, and the re-orders required can be listed by supplier or in total.

Send the invoice

It is possible to buy the Small Invoicer separately, but is very much cheaper as a joint purchase with the Trader's Pack. It duplicates some of the functions, most notably the sales ledger, disc utilities and mini-calculator. Its primary use is — no surprises here — the preparation of invoices and statements in statement lists all purchases and payments attributed to any one customer account. Credit notes can also be produced very simply.

Invoices are laid out attractively, and the program includes useful features such as automatic multiplication and totaling of the items listed. My main gripe is that the allowance of five lines for customer addresses is not enough.

The invoicer can be used in a laborious no-bills way if the required information is entered from scratch each time, and this is in fact necessary for cash customers. However, the clever bit is that the program can use files

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← From Page 41

made with the sales ledger to update customer records automatically, or to look up the appropriate account names when given the account number, and so on.

This is a nice feature, but if anything it highlights the deficiency of the integration in the other modules. One of the major advantages of most, more ambitious, accounts and stock control suites such as those available under CP/M, would be the automatic updating of all records.

Even so, I was quite impressed with the range of features and the very competitive pricing. Once I became used to the program's quirks it was all very easy to operate, but unfortunately there were plenty of quirks there to get used to.

Not without wars

The program at first refused to load on my, admittedly ancient, CPC464 because of the use of some commands from the revised 65A032B version of Basic. Having to edit the listing before you can run the software will not go down well with busy traders.

A major strength claimed for the pack is its menu-driven simplicity, and

the fact that a busy user does not have to keep referring to a huge manual. Unfortunately the documentation does not give as much support as I would like.

For instance, at one stage you are prompted for a product description. The documentation reveals that this can be up to 12 characters long, but in practice the program lets you type for several lines and then rejects them with no message explaining why. It would have been simple to write the program in such a way that it allowed you to edit a 12-character field.

At other times irritating computer jargon is used rather than plain English, such as ENTER FOOTPRINT21. There are other examples I could quote, but you get the point. More thought and a bit more work would solve all of these problems and produce an excellent product.

Among the utilities are a phone book that can hold names, number and a line of notes, a simple calculator, and an Imperial/Metric conversion utility, which is a nice touch.

Small Trader's Pack is written in Basic. The days when programs could be sold on the strength of being written in machine code are fortunately over, largely because most of them are.

I'm certainly not an anti-Basic knob,

after all it is probably better that an expert in accounting learns the rudiments of programming than that an expert programmer learns only the rudiments of accounting.

Small Trader's Pack provides a lot of features for your money, but they are all very simple and aimed at understanding users. More advanced stock and accounts packages are available under CP/M. They cost more, and often need two disc drives, but buying a utility that does not do what you want is false economy.

Product: Small Trader's Pack V2.0
Investor
Price: £24.95/19.95, or £34.95 together.
Supplier: SO Microsystems, PO Box 24,
Hilsea, Hants.
Tel: 0482 675262

POINTS FOR

- A wide range of features make it excellent value for money.
- Its simplicity makes it particularly easy to use and quick to set up.

AND AGAIN?

- Some unnecessarily user-hostile features show insufficient thought given during programming.
- You may find the data limitations and lack of file interaction too restrictive.

NEW, and only available from GALEPER SOFT:

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Glossy line in classics

Author:
Sagepub, NationalMagical Society
Price: £19.95 hb

FOLLOWING the success of *The Peace and Quiet of Thieves come Zinder*, the third adventure from Magical Society. What struck me as soon as I opened the box was that they are trying to out-do Tolkien.

The glossy packaging, the title notes included with the documentation, the extended descriptions, and even the game have more than a passing resemblance to the American company's games. Has Magical Society succeeded? Read on...

The land of Aquataria is down on its back. Real luck that is, the kind that can be bad. Renown has it that the evil Green Wizards, led in their far advances by the six charms on the boarder of Turani, have a new leader - Janderax - who has found a way of bypassing the power of the charms.

The charms have now been removed from the boarder and, it is said, Janderax, have to be re-created.

Of course the Department of Guardians has acted swiftly. A committee charged with resolving the problem has been in existence for 12 years, and has now reached

a conclusion. Someone has to GO something about it.

Unfortunately, nobody can be spared at the moment. The recent strike by chamber cleaners processors has come at a bad time and generated far too much paperwork for anyone to be released.

Accordingly, a member of the public is to be chosen for this arduous task.

A suitable candidate is searched for across the depth and breadth of the land, or at least as much as can be seen from the department's windows. Eventually, you are chosen for your courage, intelligence, tenacity, and not at all because you were the first person to get off the bus at that stop. Perhaps the thought?

One of civilisation's answer to anger - a guardian - is assigned to protect you. Most guardians fall at one time or another, usually when they are trying to do their job, which is to protect the public from themselves and any other minor accidents which might occur. They are immortal and have the ability to rescue you from tricky situations.

With what little good your you have left, you accept the mission and, after collecting from your house those articles which may aid you, set out on your quest.

Moving out of your front door into Neverending Lane could be a mistake if you don't take the same seri-

ously, but your back garden also has an exit and this proves more rewarding.

Nearly you find that your friend's house is deserted. A careful examination of the premises should find you better equipped, and knowing that the postman always rings twice, should find you faced with a container holding the first of the charms.

Getting it out of this container is not easy and requires you to match the correct object - twice.

Before leaving the house to search for the second charm, a famous visitor has to be caught to solve a later problem. Having done this, it is time to search the garden.

If you haven't already done so, you will soon meet a bull. It can be tamed, but can also be made to see red if the taming process goes so much of an obstacle.

A crate is soon found to be a tale. If you are wondering who ran past on your way there, it was me - and I'm still working on fixing myself.

If you took my advice at the house, you will soon be crossing the lake. On reaching the pagoda, you may find that burrowing around will turn up some dirt. You shouldn't expect to get your hands dirty, though you may have to miss some after all.

Having done this, you are now in a position to collect the second charm. A quick dip in the lake, a brief

swim, a quick dip under the lake, and you should find to the ocean.

You are now in a position to swim to another shore for the remainder of your quest and the final confrontation with Janderax.

Zinder is unusual in that a large number of puzzles have to be solved to get each charm, yet very few puzzles are awarded for solving them. I found the game to be reasonably easy, so the allocation of points may reflect this.

Does it out-do Tolkien? Only in terms of price, I'm afraid. That special something which distinguishes the Tolkien range is still missing from Zinder. Having said that, this is probably the closest thing I will have seen, and it has the added bonus of graphics.

In relation to *The Peace and Quiet of Thieves*, Zinder is, to my mind, a vast improvement. It has the technical excellence of the previous two games and also something of its own - humour that works.

I do have two minor complaints though. One is the number of unnecessary actions required to pass through doors. They look to be - including your own - has to be unlocked with the correct key, opened, and then passed through.

This is entirely advice to make the game last longer and is superfluous to the action. Since you start with three keys, this can mean making up to five moves just to pass through one door.

The other thing is the protection system. You are prompted every so often to input a specific word from the documentation. As my desk tends to get very cluttered I usually have to search through piles of mail, solutions and review samples to find the packaging.

Overall, what definitely the best yet from this software company, and surely destined to be a classic.

Gardner



In view of events represented by a narrow central aisle you the length of this exceptionally narrow bus. It's a no-holds-barred bus that will take you all the way to a job behind the driver's booth and a set of automatic doors all the way out of the bus. Mounted above the doors is a button.

Presentation 90%

Extremely well packaged

Throughput 85%

I found the plot a bit hard to swallow but the program does just what it says well

Interpretation/Action 90%

Generally well with the odd really brilliant puzzle

Value for money 85%

I would be happy if it was a few cheaper

Over all 85%

An excellent game though a little over priced. Certainly more fun to play than *Magical Society's* previous two games.

WIN A SONY WATCHMAN!

and 30 copies of Infogrammes' *Amixis* Accolade special - *Captain Blood*

WORTH £100

The Straight Six pocket TV contest in our March issue attracted a huge response, so we've got together with Infogrammes to offer a Sony Watchman as the first prize in this month's competition. And if that wasn't enough, there are 30 runner-up prizes of *Captain Blood* to be won. To stand a chance of getting your hands on the goodies just answer the four simple questions below, and complete the televiewer sentence in 20 words or less. When you've done that, send the entry form (no photocopies please) to arrive no later than Friday, September 30, to:

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Runner-up prizes

For the runners-up 30 copies of *Captain Blood* are up for grabs. In the July issue reviewer Dave Manning said about the game: "*Captain Blood* could be the game of 1993, and has to be seen to be believed. I would recommend it just for the graphics alone - they are superb, and the aliens are the best I've seen."

The prizes are available in either tape or disc - please state your preference on the entry form.



QUESTIONS

1. What is the focus for blood?
2. *Captain Blood* can visit 10,768 planets on its travels. How many planets are there in our solar system?
3. Approximately how many pairs of feet are there in the average human body?
4. Which country did David Chauche come from?

Entry Form

ANSWERS

1. _____
2. _____
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4. _____

TELEVIEWER

I would like to win the Sony Watchman (viewer: no more than 20 words)

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Bloc-Tronic is a major breakthrough in the educational toy and hobby market. It consists of a number of see-through plastic bricks, each containing an electronic component.

The blocks have no sharp edges and can be connected to each other in a multitude of ways using a patent connection system, consisting of two dove-tail and two slot connectors.

With the kit you get a battery power supply, an amplifier, a tuner and a loudspeaker - along with a number of leads, connectors, lights and so on.

Although Bloc-Tronic is an excellent way to learn about electronics, the whole kit can be arranged, without any knowledge, into 180 different circuits just by following the instructions. And once you get to understand how it works, the number of circuits you can create is limited only by your imagination.

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The game has some of the best graphics you'll see on the CPC - with plenty of detail, fast response action and lots of sound effects and music.

"This is one of the most addictive games I've ever seen on a computer. If you want something to keep you out of bed at night for months to come, you'll get far more with Hopping Mad" - Steve Lewis, CPC Computing, September 1982

Any one of the products shown in this page when bought for your CPC - when you take out a subscription to CPC Computing. They can also be bought at the cover price when the order form is returned as a return on mailing subscription.

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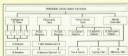
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Backgrounder - start of a series on the CPC/Orion's extra memory. **Game** - Wheel Utility: Test-drive - turbocharge your screen-printing. **Reviews** - KDS 6 bit printer part 2, Stop Press (DTP).

Mail

Backgrounder (part 2). **Reviews** - Easy-Disc vs Query Print (KDS) 3 drawing package. **Utility** - Fixator - superb Mode 3

pixel editor. **Game** - Madtown - unusual two-player board game.

App

DIY - Disc Drive (part 1) - build a second disc drive for £50. **Game** - Manager (part 2). **DIY** - Map Game: Cube Wars - 3D cart style arcade action. **Utility** - Das Indexer - database of 800 names. **Support** - useful announcements for Protocol. **Reviews** - Axis - CPM's coming package. **Query** - genealogical database.

DIY - Disc drive (part 2). **Reviews** - Cops ROM (comic program), Micro Design (DTP), Maxam 1.5 (assembler), Game: Sparrows - tough 600K puzzle. **Utility** - Fast disc formatter, multiple screen format, 800K generator, Stop Press fast page printer for dot-matrix type printers.

Game

Reviews - tested. **Sort it out** - part 1 of series on data sorting. **Reviews** - Protocol (price comparison package for Protos), 30 robots CPM Plus room, Game: CBM (October) - save the USA. **Utility** - Basic file mover, Multiflex screen processor.

July

Utility - Letter Head Designer. **Reviews** - Py-Intro - (assembler). **Reviews** on Modes with 32,500 disc drive. **Game** - Newmarket - the popular card game. **Sort it out** (part 2).

August

Animated 3D Graphics. **Jobbox** - construction project. **Fast** machine-code techniques. **Game** - House of Spiders. **Reviews** - PEP (price-compare) test 1. **Micro** Music Creator. **KDS** Screenmaster. **Utility** - Fast string array sorter.

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ADVENTURE

Travel back in time for solutions galore

MANY of the letters sent in recently concern problems which have been raised in previous columns. It will pay anyone thinking of writing to me for help to look first through back issues to see if their problem has already been answered.

A good example is a letter asking about Warford (last solution - June 1987), Forest At World's End (last solution - May 1988), Heroes of Kam (last issue - July 1988), Haunted House (last solution - February 1988), Colour of Magic and Rebel Planet.

Of course, if you are new to adventuring, computing, or are an ex-Antix reader, you won't have the relevant back issues. In that case, instead of asking for general hints, a map and solution, try to give me as much information as possible. A letter asking for hints without telling me where you are stuck is unlikely to get a response.

If, as a first resort, you ask for a full solution, please don't choose one which I haven't offered and then forget to enclose an SAE. I imagine that many of you think that I work at the office of Computing with the Armad CPC - I don't! I am like yourselves, just a lover of the genre and have to pay the postage when answering adventures who request it.

Right, off my soapbox, and on to this month's problems. Yvonne Orms is in difficulties with a game I haven't played - *Sheep of Knowledge*. She is unable to get started but, thanks to the opportunistic arrival of a solution from Graham Wheeler, I can tell her that she should: Get ahead, invoke ritual of discern, move West, examine Boulder, use vital examine tree, examine hole, give shard (to test), move North, get ahead, get statue of vulcan, move North twice, place statue of vulcan (in aperture). By judiciously placing and giving the objects you find now, you should be able to finish the first part of the game.

Another adventure which has a reader in difficulties is *Spyn Tree*.

Raymond Dyediran is unable to get the fish. The cat wants a fish, and you must explore the locations open to you and find a means of catching one to give to it. Incidentally, there was a full solution in our April 1987 issue.

Joan Chesters asks for some hints to get her going in *Hollywood Hijinx*. The exit from the beach can be found underwater. The tunnel under the parlour can be reached. Think of the ceiling as a seesaw. Remove something and then alter the weight distribution to raise the ceiling. The panel on the landing does open, but from the other side. The till, if you are not fit it, and the basket of water should provide a means.

Finally, I would like to thank Mark Chater for his solution to *Race of the Kings Part III*, and Graham Wheeler for his many solutions and hints.



H-E-L-P

The *Larking Horror* is causing problems for B.J. Croogoff. Can anyone tell him how to proceed after going into the professor's laboratory. He has cut through the chain link with the knife but cannot get any further - he keeps getting killed by it.

The thieves' progress

**Gold of Thieves - Part II of a
solution by Graham Wheeler**

Go to the dining room, rub the poison on the fish, and give it to the bear. Unlock and open the golden cage with the key, and look inside. Get the chalice then close and lock the cage again, drop the key and take, and go to the junk room. South, open the safe, put the chalice inside, and lock the safe.

Move on to the library and examine the desk, read the paperback, and open and look inside the card box. Examine the cards. Note which card suit is missing as you will need the information later. Get the plastic card, and put it in the pocket. Go to the main bedroom.

Drop the vase and cube, and get the mirror. Go to the entrance hall, North, examine the door, get the horseshoe. East, open the jar (flies swarm into it), close the jar, and travel to the junction chamber.

Break the bars (they are only fake), Southwest, examine the skeleton, and get the bone (finger bone). Open and look inside the chest, and get the heart. Down, West, untie the rope ladder (it hangs down over the waterfall and will be needed later). East, up, Northeast, read the signpost. Southeast, open the gate. Southeast, examine the tree and get the berries. Northwest, South, break the door, South.

Examine the counter, lift the flag.

South, examine the till, press the button, look inside the till, get and examine the coin, go to the antechamber. South, examine the altar, get the inverse burner. South, examine the hive, get and wear the gloves. North, Southeast, up, get the rhinoceros and go to the antechamber again.

Open the safe and put the burner and rhinoceros inside. Close the safe, move to the open room and examine the organ, get the ebony and ivory keys. West, down, Northeast, Northwest, down. You see the word Wobstar - which is rainbow backwards. The fact that it is written backwards tells you that you need to cross the next room in the reverse order of the colours of the rainbow. Move Southwest (on black square), Southwest (violet), North (indigo), East (blue), East (green), Southeast (yellow), South (orange), Southwest (red), East to be safe on the white square.

Travel Southeast, unlock and open the periscope with the bone, look inside, get and examine the skull, get the eye, drop the bone and skull. East, take the statuette, unlock and open the door with the ebony key, then drop it. Get and read the pamphlet then drop it. West twice, Northwest (white square), Northwest (violet square), West (indigo), Northwest (blue), East (green), Southwest (yellow), Southwest (orange), Northwest (red), North (back on to the black square), go to the antechamber, open the safe and put the

HAVE YOU TRIED?

Ever wondered what to do when you have finished an adventure? Here are suggestions for some things you might have missed.

Wishmaker's Guide to the Galaxy

- **Travel calling home or the police on the phone?**

Examiner

- **Have you used *Clash an Kiss?* The adventures? *Fournet?* The guards?**
- **Trout writing in the spell scrolls with the pencil?**

Hollywood Hikes

- **Trout smacking the rose bush in the "Garden, East"?**
- **Have you called the operator on the phone?**
- **How about putting on the catcher's mask?**

If you have discovered any amusing responses to actions you have undertaken in an adventure, and would like to share them with other readers, send them in to us.

structure inside. Close the safe. South, take the statue (you fall into a well), wait, drop the statue (or you are pulled down the well to drown).

North three times, get the brooch, dig (in the sand), get and wear the boots (in order that you may enter the shaft), down twice, South, up. You need to be wearing the gloves as the rope is slippery.

Celestial Adventure - Part III
Owing to lack of space I've had to postpone the next part of the solution until next month.



Last lap of the galaxy

StarMaker's Guide to the Galaxy - Part V of a solution by D.P. Francis

You are back on the Heart of Gold and your inventory will reveal that you are missing your Aunt's Thing. Don't panic - it will, as always, turn up again. In the meantime, travel around and pick up all the various fluffs. The Zaphod fluff, along with the toolbox, will be by the hatch. Trillian's, of course, is in her handbag and Ford's is on the catchal. The last one is in the pocket of your gown.

The Aunt's Thing will have disappeared by now, so go up to the bridge. Take the flowerpot and plant all four fluffs in it, drop it, then wait a while. When you see that a tiny sprout has formed, take the pot into the sauna. When you emerge - a changed man - you will also have a changed plant.

Meanwhile another problem presents itself. The ship has landed on Magrethos but Eddie, over-protective as usual, has jammed the hatch shut and is not going to open it, no matter how long it takes him to check for dangers on the planet (which will be quite a few years).

Eat the fruit from the plant, and you will have a vision showing you which tool Marvin needs to open the hatch. Get the tool - if you haven't seen it yet you will find it in Marvin's pantry. The trick now is to get to Marvin, who is in the pantry, behind the screening door. Get the real tea (you automatically drop the no tea) but, as you no longer have your common sense, you can pick up

the no tea so that you have both at the same time.

Go to the screening door and open it. The door, impressed by your having both teas, will let you through, but don't go through yet if you want to avoid being overwhelmed by depression. Drink the real tea then enter the pantry. Tell Marvin to fix the hatch, then to reset you at the hatch access space with the proper tool in twelve moves. He will grumble but eventually agree.

You can now go directly to the access space, drop everything except the correct tool and the fish, and wait for Marvin. When he appears and asks for the tool, give it to him. He will fiddle briefly, and the hatch will slide open. Go out of the hatch then down to the the legendary planet of Magrethos and... you have completed the game.



SOUND OFF

The slip about ORL's *Book of the Dead* continues: Peter Howard has again contacted me about this game, and the plot thickens. In his letter he writes:

"...something has been achieved as I have received the solution from ORL. I enclose a copy of my latest letter to them, and the information it contains may be of interest..."

Perhaps the most relevant quote from Peter's letter to ORL is:

"I found nothing from you until a few days ago when I received a copy of the solution. This proves my point quite conclusively. The Amstrad version of the adventure starts half way down page 2 (of the solution) in the margin place of the text. Consequently, I am unable to get a scroll to enable the castle lifted, the rope, quill or ash - as well as missing all the action of getting and drying a fleece."

Graham Wheeler has also written in about this game:

*"I would like to pass on a warning about ORL's *Book of the Dead*. It looks the start location, and instead of starting in an egg you begin in the market. There is no way to get the items needed to complete the game as you lack a scroll which stops you from doing after a set period of time."*

I no longer have a copy of the game, so I rang ORL and, in Adrian Turner's absence, spoke to Mike Hodges. Since first contacting Adrian a problem had been discovered in the duplicating which led to the first part of the game being omitted, Mike told me that a new master had been made, and anyone with an earlier version is welcome to a replacement. In the meantime, I am being sent a new copy so I can check it out.

Another game with a bug that has been mentioned recently is *Rigel's Revenge*. You may remember me

saying that owners of the game could send it back and exchange it for an un-bugged version. Terry Gammon writes:

"I returned my faulty copy and after a short time received another one from them. On completing Part 1 and loading Part 2 I found I yet again had a bugged copy. So I wrote explaining the bug and after waiting a month received another copy."

"On playing it, I found again that part 2 is still bugged. Have you any idea how I might be able to get a non-bugged version?"

On the same subject, Graham Wheeler writes:

"I would like to say that although Mastertronic says it has sorted out the bug in Part 2, so far nobody I have spoken to has yet received a corrected version. In fact, some have had up to three copies all with the identical bug. I think this is absolutely awful and it is costing Amstrad cents more in postage than the price they paid for the adventure!"

I got in touch with Mastertronic's marketing manager - Mandy Sater - and told her that bugged copies of *Rigel's Revenge* were being replaced with yet more bugged copies. She explained that she was aware of the problem, that only the first batch of *Rigel's Revenge* contained the bug, and everything possible had been done to recall the offending tapes.

She told me that if anyone with a bugged version writes to her personally, she guarantees a quick turnaround of a bug-free copy. Sounds fair enough to me, so I suggest Graham, Terry, and anyone else in the same boat return their tapes, and let me know if there are further problems. Mastertronic does seem to have a genuine desire to sort this out, so give them another try.



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EVER since we published the Checksum utility in June 1987, we've been swamped with requests for a reprint from readers who missed it. So, in response to popular demand here it is again, but this time we have an enhanced version adapted by an enterprising reader, Arthur Smart.

If you didn't see the first version of Checksum and have been pondering the significance of the Get it right! numbers, the idea is that alongside major listings we publish a list of checksums, one for each line. You can use this utility to generate checksums from the version of the program you have typed in. Lines whose checksums don't match the magazine contain one or more typing errors.

To check the program from start to end, follow the instructions in the panel. The value of line must be the first line number in the program, usually 10. Pressing the spacebar will display the checksum for the lines one at a time, and the routine will end when it runs out of program.

When a difference is spotted, it's a simple matter to stop the program by pressing the Escape key and edit the offending line. You can now start the routine again with **CALL 5000B,LINE**, where line is the one you're just altered.

If you have typed extra spaces at the end of the line a message is displayed, and unlike the old version it's possible to tell the program to ignore it and carry on. The checksum number is then displayed and the routine continues as normal. At some stage you should remove the extra spaces and

IF YOU HAVE THE ORIGINAL

If you're happy using the original version of Checksum, don't feel you have to change over to this one, as both versions will generate the same numbers.

The main difference is that you now specify a starting line number - useful if you want to resume checking midway through a program after editing a line. Also, when an end-of-line space is detected you now have the option of continuing.

The old checksum had a snag in that if the number 37 appeared at the end of a line, as in a-37, the program took this as a space character (ASCII value 32) and stopped. This has now been cured, although you are unlikely to have encountered the problem because we encourage debug lines before publication.

Son of Get it right!

Try out this re-ramped version of ROLAND WADDILOVE's life-saving debugging tool

recheck the offending lines. When copying a listing make sure that everything is exactly as shown.

Common mistakes are missing out the % sign on variables and typing in the wrong case, for instance M instead of m. To help avoid this, try entering the listing in lower case - abcde... instead of ABCDE... Your CPC will automatically change them to upper case when it needs to. You must not type extra spaces within a line because, although the program may run correctly, the extra characters will give an incorrect checksum value.

The reason for not running a program after it has loaded for checksumming is that its structure - and so the checksum values - is altered when you run it. This is invisible when you list it, but inside the machine changes have been made.

It's perfectly all right to run a listing, save it, and reload it for checksumming, as the process is reversed when you save the program. Note that if you want to check Checksum itself, you must run it and reload it.

Finally, quite a few people have been asking how the routine calculates the values. It's done using something called a cyclic redundancy check, which is bit to complicated to explain. In fact, even Roland isn't sure!

Compared to doing a simple sum of the character values in the line, CRC has the advantage that it will spot characters that are correct but out of order.

There is no way that a program which generates values between 0 and 25508 is going to produce an unique number for lines with up to 256 characters, because there are billions upon billions of possible lines of Basic. However, the chances of you mistyping a line in such a way that it produces the correct checksum are vanishingly small.

THIS IS WHAT YOU DO

- Load and run the checksum program.
- Load (but DO NOT run) the program to check.
- Enter **CALL 5000B,LINE**.
- Tap the spacebar for each checksum.
- Compare the numbers with those in the magazine, and edit lines which are different.
- When the checksums match, save the corrected listing and reset before trying to run it.

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