



THE MOST POWERFUL, FRIENDLY AND FEATURE PACKED UTILITY CARTRIDGE EVER CONCEIVED!

TURBO LOADER

 Load 202 block program in under 6 seconds - world's fastest disk serial loader. On-board RAM and ROM achieves high loading speeds. Works with 1541/1571 Oceanic/1581

INFINITE LIVES GENERATOR

- Automatic infinite lives!! Very easy to use, works with many programs. No user knowledge

PROF MACHINE CODE MONITOR

Full 64K Freezer Monitor - examine ALL memory, including stack, I/O area and registers in their frozen state. Ideal for de-bugging or just for fun!

SPRITE CONTROL

Freeze the action and view the sprites - watch the animation - customise your games -kill sprite collisions.

FREEZER FACILITY

- Now you can make your old slow loading programs load faster. Simply freeze the action and save to tape or disk to reload at superfast speed - no more waiting for programs to load.

DISK COPY

 Easy to use disk/file opier. than conventional n Ideal for backing data disks.

NOW ONLY

TAPE TURBO

This feature will add Turbo Reload to the programs that you save to tape - no user knowledge required

FAST FORMAT

- Format an entire disk in about 10 seconds
- no more messing about.

PRINTER DUMP - Print out your frozen screen to

- printer MPS 801, 803, Epson, Star, etc.
- very versatile.

CENTRONICS INTERFACE

For parallel printers, Star, Epson, etc. Print out listings with graphic characters etc. (Cable required for parallel port £12.99)

SCREEN EDITOR

- Now you can edit the entire frozen screen with this text edit or

- change names on high scores, etc. Great fun!!



GRAPHICS SUPPORT UTILITIES DISK

IOW - View your favourite screens in a slide show type display UP - Unique utility allows you to take any part of a picture & "blow it up" to full screen size

DITOR - A complete sprite editor helps you to create or edit sprites GE MAKER - Any screen captured with Action Replay or created with a graphics package can be turned into a scrolling

> screen message with music. ONLY£9.99



THE REVIEWERS SAID...

"I'm stunned, amazed and totally impressed. This is easily the best value for money cartridge. THE CARTRIDGE KING!" COMMODORE DISK USER

1988 COPYRIGHT ACT WARNII

Datel Electronics Ltd., neither condones or authorises the use of it's products for the reproduction

of copyright material.

The backup facilities of this product are designed to reproduce only software such as Public Domain material, the users own programs or software where permission to make backups has been clearly given.

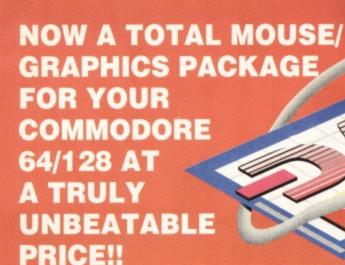
It is illegal to make copies, even for your own use, of copyright material, without the clear permission of the copyright owner, or the licencee thereof.



hew to CRDER

24 HOUR MAIL ORDER HOTLIN





ADVANCED ART STUDIO

- This commodore Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.
- When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...
- Create an image shrink it, expand it, move it, rotate it, copy it, colour it, etc., etc.,
- Spray patterns or shades, make elastic lines stretch and manipulate shapes. Zoom in to add detail in fine mode. Pulldown/Icon driven menus for ease of use
- Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes so flexible anyone can create superb graphics easily.
- Full cut and paste facilities plus excellent printer support.

TOTAL PACKAGE INCLUDES MOUSE/ MOUSE MAT/HOLDER AND OCP ADVANCED ART STUDIO PLEASE STATE IF YOU REQUIRE TAPE OR DISK

MOUSE HOLDER (WORTH £12.99) WITH EACH PACKAGE



LC 200 COLUUL PRINTER PACKAGE

NOW YOU CAN PRINT OUT YOUR PICTURES IN FULL COLOUR!

- The Star LC200 Colour Printer not only prints in Near Letter Quality for your regular jobs but also prints out your pictures from Art Studio, Action Replay, etc., in generous colour!
- LC200 is a full Centronics printer so it works with other computers (Amiga, ST, etc.)
- unique colour printer driver now you can have a hardcopy in up to 16 colours!!
- No more to buy.

Made possible by Datel's PACKAGE INCLUDES STAR LC200 COLOUR PRINTER RRP £345.00 CENTRONICS PRINTER LEAD RRP £12.99

DATEL COLOUR PRINTER DRIVER SOFTWARE RRP £19.99

NORMALLY £377.98

COMPLETE PACKAGE NOW ONLY £259.00

COLOUR PRINTER DRIVER AVAILABLE SEPARATELY ONLY £19.99

- If you already have an LC10 or LC200 Colour Printer we can supply the Driver separately.
- Works with Serial Version of LC10, Parallel Port, Sprint 128, etc.

DESCRIPTION OF THE COMMODORE ACC

AVAILABLE ON DISK ONLY The Advanced Music MIDI/music package produced for the 64/128 offering a huge range of musical composition features & MIDI compatibility, with the Datel MIDI Interface you have the TOTAL MIDI SOLUTION!





cartridges rather than constant unplugging.

Reset button built-in.



end Cheques, Postal Orders or credit card

DATEL ELECTRONICS LTD. GOVAN ROAD, FENTON INDUSTRIAL ESTATE, FENTON, STOKE-ON-TRENT, ST4 2RS, ENGLAND.



The Mayhem Mega Mix on this month's covertape has had a curious effect on the crew. So did those kebabs we had from Stavros' down the road, actually, but after we'd got over them nothing could stop us groovin' to the sounds emanating from the '64. Er, nothing, that is, apart from everybody in the next office laughing at us...

Dave Golder, editor since this issue, is a bit of an indie kid at heart, but has grown through the shoegazing stage (he kept bumping into walls) and now favours the arthritic-spider-receiving-**ECT-treatment approach** favoured by Jarvis Cocker of Pulp and Tim Boothe of James. Bystanders beware.

> Ollie, Art Editor since time began likes nothing better than a decent pogoing sesh to a 300 beats per minute punk

classic. In fact he knows no other way to dance. "I like to express myself in dance,"

reckons Ollie. "Unfortunately, I think I've got a bit of a limited vocabulary." So what is it that he's

trying to express exactly? "You know, I'm not entirely sure, but it's probably not printable anyway." 1 50

Simon Forrester, Hairy Happening since nobody else wanted to be, was born to be a headbanger -- in other words he can't actually dance. But he also reckons headbanging is incredibly good fun and the only way you can 'dance' to heavy metal "You can't bop to thrash and jiving just doesn't cut it," according to Hairy One. But how about a quick minuet to Motorhead? "It sounds controversial

> but it might just work - as long as you don't have to move your feet and you can thrash your hair about."



DAVE'S BACK

prepared for." So said the immortal Tom Baker in the Doctor Who story Logopolis as he handed the role over to Peter Davison. And, indeed, the time has come on CF as Hutch hands over the editorship to me. Dave Golder.

But I'm no newie to the mag. I've been here before. Some of you might remember my stint on the mag (in which case you'll be used to gratuitous

Doctor Who references). I was the production editor on the mag a while back.

Anyway, I aim to make sure that Commodore Format continues to be the best magazine it could possibly be - just because there's no competition now doesn't mean that we're going

> We're here to make sure that you get the most of your C64 by providing the bestquality game coverage and serious features you could hope to read. Be seeing you. Dave

to rest on our laurels.

gaudily-coloured geometric latest Freescaped game.

13 CAPTAIN STEM'S DATAFILE

Stem emerges from the space/time vortex with news of all the latest C64 game releases and also offers us his wisdom on Mayhem's

future ventures and computer jargon.

14 REVIEW:

19 PREVIEWS

Psytroniks seem to be going for the world record in speed releasing new games. We take a look at some of the software they're going to be releasing in the next few months.

18 REVIEW:

TIME CRYSTAL

Journey to the land of large,

shapes as Simon reviews the

20 REVIEWS: PD FORMAT

Three text adventures get the Powertest treatment. Plus a guide to C64 PD libraries

22 CLASSIC REVIEWS: EDOS

The best that EDOS has got to offer.

23 GAME DIARY: **10TH DAN**

Is 10th Dan going to do for beat-'em-ups what Mayhem did for platformers? In the first of a new series co-author Jon Wells tells us what he hopes to achieve with the game.

16 REVIEWS: ARCHETYPE/COPS 3

PENGUIN TOWER

Beware the Revenge of

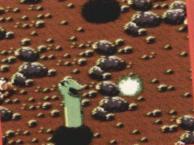
the Killer Penguins! It's

Batman 2 meets

Bug Bomber in a

frantic blasterama.

Two vertically scrolling shoot-'em-ups for the price of one. But are either of them any good?



38 GAMEBUSTERS

Maps for Mayhem, Future Knight and Nobby The Aardvark, plus loads of other hits and tips.

50 THINGS TO COME

What's coming next month in CF plus even MORE games news.

26 GROOVE IT

Not only have the Rowlands Boyz written some of the best games ever seen on the C64 (Mayhem, Creatures 1 and 2, Retrograde) but they've also produced some of the coolest, hippest, hap'nin'est sounds ever to come out of a computer. And they're here to give away some of their sonic secrets so that you can have a stab at producing your own melodic masterpieces. You don't need to be a musical prodigy to create superb C64 symphonies so discover what the Boyz have got to say about computer composition.



6 THE **POWER**

What to do with that plastic thing that was Sellotaped® to the front of the magazine

8 SNIPPETS

Here is the news. Er, well, not here, exactly. It's on page eight, actually. See you there.

9 CHARTS

So what were the best-selling C64 games last month? I bet SF2's in there somewhere.

10 THE MIGHTY RRAIN

Why do people write in to be insulted by him? Are you all gluttons for punishment?

25 BINARY ZONE UTILITIES TAPE

How many utilities can you fit on one tape? Over the Severn Bridge. Er, hang on...

28 DEAD EASY SCROLLS

Sensational scroll shocker exclusive! The innermost secrets of eight-way scrolling revealed.

30 SECRET OF SEUCKCESS

Please, please, please take heed of Jon Well's advice. If we get another completely duff SEUCK game arriving in the office we'll hire a hitman.

31 BOOK REVIEWS

A Radio Times for on-line services and a book on computer crime get scrutinised.

32 BUY-A-RAMA

And Sell-A-Rama, Pen-Pal-A-Rama, User-Group-A-Rama and, indeed, Fanzine-A-Rama.

33 TECHIE TIPS

No-one knows the C64 like Jason Finch. He knows the machine inside-out, back-to-front, upside-down and dressed in a

> velvet smoking jacket shortly after a steaming hot orange juice bath. So who better to answer your techie queries?

37 SURGERY

If you want to see stars during the day either a) take part in a very poor Hannah Barbera cartoon and get hit on the head (they love jokes like that) or b) listen to the Prof's advice.

49 BACK ISSUES

From where you can purchase Back Issues of this fine magazine. You know it makes sense.

If music be the food of love play on, but when you've finished playing Carnage you can sit back and listen to the music...



CARNAGE

It's a demolition derby with a difference - the cars are armed!

Yes, it's the cathartic experience for anyone who's been stuck in a traffic jam on the M25 for half the week - blow those other cars off the road and bomb along at completely illegal speeds.



MAYHEM MEGA MIX

Now That's What I Call Computer Music Volume One - a cool collection of the hottest

sounds from those top Apex games. Listen to the music while you read the feature on page 26.

TECHIE TIPS

All this month's Techie Tips routines lovingly collated for your personal use. Y'know, we really are too good to you.

SCROLL CODE

More interactive-type stuff, this time to accompany the Dead Easy Scrolls feature which concludes on page 28.

TURN THE PAGE FOR **FULL DETAILS ON THIS MONTH'S COVERTAPE**

COMMODORE FORMAT 44 May 1994



Music and cars, what more could you want from

life? And this month's covertape has got both. So wham it in your datassette and get it loaded up. You know it makes sense.



MAYHEM MEGA MUSICIMIX

f you ever actually bother to read these bits of paper attached to the back of your tape each month, you'll find some really interesting features, quite a few of them written by those top programming dudes the Apex Boyz. There's another one this month all about writing music for your C64. To

accompany the feature, we've got

the Mayhem Mega Music Mix Part 1 on the beginning of side two of the Power

bet you never hought a music

acts almost like a mini CD player, with the four function keys acting as a game-tune selector, f7 bringing up an information screen. For each of the games, there will be a list of tunes and musical effects which will be displayed above the

landscape.

Pressing the letter corresponding to the tune will set it playing so sit back and enjoy some of the best

> Can nothing

games music you're ever likely to hear.

Now for a quick look at

what really interesting landscape at the bottom of the screen is all about. Moving the joystick left or right will move Mayhem over to the different monsters. When you press fire to make Mayhem jump on them you activate various functions such as continuous play (which cycles

through every single tune one by one), stop (stop), play (play), pause (pause) (this is getting a bit predictable, isn't it?) and finally random play (which plays the tracks at random).

> What more can I say? Have fun, and thanks to the Apex **Boyz** (or Digital Graffiti as they're now known) for producing another slice of top C64 software. Oh yeah, and don't forget that part two of the Mega Mix will be on next month's Power Pack.

This is just part one of the Mega Mix. Like all singles these days, there's a Part 2 coming out next month. Marketing ploys, eh?



Side Two • Tape Count 000 • Joystick port 2

LEFT

Move cursor left.

Move cursor right.

RIGHT

Select.

Other Info You select the various functions by moving Mayhem over the monsters at the bottom of the screen. It's got to be one of the best-looking control systems we've ever seen.



If you're having a loading Pack then plonk the duff tape in a jiffy bag, slip ir



2:52

ripping the wheel, his knuckles went white with desire. The wheels of his Mustang exploded on the track like a slug from a .45 - truth, death, maximum performance, 400 horsepower, piercing the night. This is Carnage.

Alternatively, CF's ex-arty person and recent driving test success story Lisa woke up one morning (or did she?) and decided it might be fun to take her brand new shiny yellow Beetle down to the tracks, to see just how far she could push it. Hesitantly, she sat at the

start line, a four-track race ahead of her. As the lights turned green, the bimbo in the bikini threw a flag around, only to be submerged in a cloud of smoke which she stumbled out of. dizzy and coughing. It started to rain, and

she cursed the fact

she was only wearing a bikini. Some people...

Her car had slightly different controls to the normal Beetle dashboard. Instead of a wheel and pedals, there was a joystick connected to port 2 of a C64, and she could see that one of her opponents wasn't computer controlled either. Iron Balls McGinty sat with his joystick plugged into port 1 of his heavily stylised C64, with flaming fire effects over the keyboard.

As soon as the race began, Lisa streaked forward, smashing into the corner barrier she'd pushed the joystick forward, and this had powered up the

nitro boost, wasting her only sudden burst of speed throughout that whole course. The car didn't sustain too much damaged, but there was quite a bit of smoke, and

that was never a good sign. She made a mental note to drive through the automatic pit section when she got to that side of the track.

Turning her car around, using the left and right joystick controls, she hit fire, and held it

> down. This, she discovered when she took off again (though a little more slowly)

Carnage that's a pun.

'Car'-nage

geddit? Oh never mind

Just as you get into the lead you can bet a Volvo will

said, and jumped back into her funky roadster. She drove off to find the second track. After she'd completed track three, it was

fairly obvious that no-one else was going to get a luck in when it came to winning the trophy. She'd taken the opportunity to spend her winnings on various additions to her car, such as extra nitros, a better acceleration system, a higher top speed and an altogether better engine. These she bought from the option screens that came up after each race.

"There's nothing like a day at the races" she mused in the office next day, when she'd popped in to visit her old friends at Commodore Format. They didn't quite know what she was going on about, but she was probably daydreaming about this, that, and the other again, they concluded.

rolled down the pitted asphalt drive. A concrete fascination, scraping the edge - of nothing. This is Carnage.





accelerator, that she had to hold down permanently if she wanted to keep moving. The other three racers, having been a little more confident at seeing the

mysterious newcomer smash straight into a wall, panicked slightly when the little yellow Volkswagen streaked past them – the mad giggling they could hear over the noise of Lisa's engine didn't do much to calm their nerves, either.

After four laps, the race was over. The other racers had lost sight of Lisa, but they could still hear the giggling, and the mad little squeaks of a woman

possessed. In

fact, they only got another glimpse of her when they pulled up to the finish line, and saw her standing with a mug of tea. "Alright, lovers?" she

TECHIE TIPS & SCROLLY STUFF

Hey, we're really into interactive covertape stuff this month. All the programs from Techie Tips plus the scroll code to go with the feature on page 28 can be found on side two of the Power Pack.

If you're lucky enough to own a disk drive and want to use it as well as admire it, then you can get hold of this month's Power Pack on disk. Simply cut out the token on the tape inlay card, write your name and full address on a piece of paper, pop 'em in an envelope with a cheque or postal order, made out to Ablex Audio Video, for £1.50 (to cover duplication costs) and send it to:

CF 44 Tape To Disk Ablex Audio Video Ltd. Harcourt Halesfield 14 Telford Shrops, TF7 4OD

QUICKSTART INFO

Side One • Tape Count 000 • Joystick port 2 Nitro.

UP

Left. LEFT

Right. RIGHT Brake.

DOWN FIRE

Accelerate.

Other Info Make sure that you make good use of the pits and shop wisely.

It's a strange fact of life that when you present Ollie with loads of grabs of cars and one of scantily-clad woman, he'll make sure that the scantily-clad woman gets blown up really large.



STIPLE B

A lot of people don't know what's going on in the world of the C64 this month. On your marks, get set, laugh at them.

FUTURE COMPUTING '94

Did you go to the FES2 last year? If you did, you'll have had a positively wonderful time immersing yourself in the forefront of gaming technology for three whole days (or failing that trying to get on telly). If you did, you'll know exactly how much fun you can have at a Future show.

This year things are going to be different. As the consoles are trodden into the dust, we're staging the Future Computing '94 show, packed to the brim with goodies of all kinds, demonstrations of the most advanced technology to date, multimedia, virtual reality (there always is, isn't there?) and just about anything else you could want from a computing show.

It'll be taking place over the Autumn half term holiday, 26th-30th October. More details as soon as our bosses work them out.

DTBS RESURRECTED

Just a short note to say that when we told you DTBS had closed, we were lying. There. That's short enough, isn't it? Dave tells me that I could at least print their phone number while I'm about it. He's right, I could (that's 0706 715028, or 0706 524304, folks, and sorry about any inconvenience caused — Dave).

NEW RELEASES FROM PSYTRONIK

Okay, so I couldn't think of any decent puns for the title, but the news is good, even if the writer isn't. Psytronik Software have several releases coming soon, namely Archetype, Cops 3 (reviewed this issue), The Last Amazon and Psyko Zone.

As if this little bundle wasn't enough, they've also got six more titles in development, namely Last Amazon 2 (so the original was The Penultimate Amazon, then?), Trojahn, Flight Of The Albatross (sounds like a text adventure to me), Cops Fight Back, Insectophobia and Cosmic Combat.

Will they ever stop? Nope. A little further along the assembly line are *Everwar*, *Fighting Cops* and *Project Argus*. So anyone who says the C64 is dead can think again.

WHAT'S GOING ON?

Good question. At last count, we've got news of 24 imminent releases from new, old and definitely enthusiastic software houses, and this is supposed to be a dying machine? Oh, and those 24 don't include the games reviewed this ish – don't give up on your C64 just yet – things are going to get very interesting over the forthcoming months, and we'll be here to keep you informed about all the latest developments..

TAKEOVER BID

Guild Adventure Software has just been taken over by Binary Zone PD, shock! Our on-the-spot reporter tells us that as opposed to Guild Adventure Software selling Guild adventure software, Binary Zone will now be selling it instead. Binary Zone PD, you see, have just taken over Guild, who produce PD adventure software, yes. I love doing the news. Anyway, Binary Zone, and not Guild, because there's no point writing to them, can be contacted at 34 Portland Road, Droitwich, Worcs WR9

7QW. This, of course, leads onto one vital question – is there actually any single thing Binary Zone aren't doing these days?

A DIFFERENT KIND OF DIRECTORY

A lot of the calls we get to the *CF* office are people wanting the phone numbers for Joe Bloggs' software company, Bill Smith's mail order firm or Jimmy Wotsit's PD library. While we're happy to give out phone numbers to people, we've decided to start up a little system whereby we print a full, upto-date contact list every month which everyone can refer to easily. So, if you'd like to be included in the definitive C64 phone book, send details of your company, PD library, fanzine, programming team, etc, marked CF Directory, to *Commodore Format*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. For the sake of our own peace, we'll definitely be printing the number for Commodore UK, so you can stop ringing us for that one.

PARALLEL LOGIC

The boys at Parallel
Logic have
announced that their
forthcoming windowsstyle package for the
C64, Util 1541 will be
disk-only and noncopyrighted. We'll be
iewing it next issue.

The company also have six games penned in for release during 1994 (we weren't kidding when we said

there was a games explosion on the cover) so keep watching this space.



"SUPPORT THE 8-BITS"

Wow - it's the motto of

Ultra Software, a mail order firm that's devoted to keeping the C64 alive. Richard Taylor, the proprietor of the firm, is interested in marketing anyone's software so, if you've written anything of late that you'd like to sell, contact Ultra at Fulling Mill, Broughton, Banbury, Oxon, OX15 6AP.

You can call (0295) 730060 for a full product list, by the way.

FLASHBACK? SURELY NOT?

You might not have believed that my all-time favourite game, *Flashback*, may soon be available for the C64. Or something very similar to it, anyway. The people at Electric Boys PD reckon that they're definitely up to the job. We hope they are.

They have also announced plans to develop a C64 bulletin board. As well as this, they've told us that they are soon to be selling cheap disc drives, huge hard drives (which apparently come from the US) and loads more originally-written games.

We'll give you full information next month, but for now, if you'd like to buy an incredibly cheap, incredibly fast modem and pipe the very best in high-quality software down your phone line, you can't. You'll just have to cross your legs 'til next month, won't you?



TOPTEN

STREET FIGHTER 2

KIXX £5.99

CREATURES

KIXX £3.99

ADDAMS FAMILY

N

HIT SQUAD £3.99

BUBBLE BOBBLE N

HIT SQUAD £3.99

MAN UNT EUROPE N

BUZZ £3.99

FUN SCHOOL 2

HIT SQUAD £3.99

MINI OFFICE

ALTERNATIVE £2.99

SUPER MONACO

KIXX £3.99

WWF RAMPAGE N

HIT SQUAD £3.99

RAINBOW ISLANDS

KIXX £3.99

duct guide available - write or phone for yours. Postage in Britain is FREE. Overseas plea 20%. Please make cheques/postal orders (sorry no credit cards - yet!) payable to ULTRA SOFTWARE, (CF44), Fulling Mill, Broughton, Banbury, Oxon OX15 6AP.

| Colored Box E4-5 | September 2 | September

PUBLIC PUBLIC DOMAIN TAPES

THE BIGGEST AND BEST PD COMPILATION ON TAPE ACCEPT NO IMITATIONS

NEW SUPER LOW PRICES

Any one of the above £3 Any two of the above £3.25 each Any three or more £3.00 each

WHY BUY YOUR PD FROM US?

Guaranteed loading with full return service
All prices include postage and packing
Immediate 1st class despatch on all orders
Exclusive/New titles

FREE CATALOGUE

To receive your free catalogue send one first class stamp to the address below

Please make PO/Cheques payable to FOX P.D. and send to :-FOX PD, 6 Sturton Avenue, Goose Green, Wigan WN3 6SZ



only know that owing to chaos motion a butterly beating its wings in Korea can cause a tornado in California, but that Mrs Thelma Schpiedelbaum of 1735 Palm Grove, LA, will forget to bring her dog in from the porch during said storm and will, on opening the door in the morning, find herself standing in a pile of Korean takeaway that's been carefully tied to her EZ sunbed with a dog

leash. As an encore, I can exclusively reveal the US Army's mission to Korea for "total annihilisation of butterfly population".

I, a being of the greatest intellect since God, if he existed (I've worked it out, but I don't see why I should let you copy my answers), offer you divine wisdom and knowledge of everything in this world and the next (nearly let on about the God thing, then, or did I?), and you dare to question me?

If anyone else is thinking of pushing their luck, they'd better think twice, because they'd be offending the most advanced entity ever to have lived. Besides, I'd give them such a pinch. **TMB**

If knowledge is power then the Mighty Brain must be an 300,000,000 megaton nuclear warhead. Quite why he settles for a wage of £3.27 a month plus an annual subscription to Caravan Plus for answer your letters is a complete mystery, though.

WHAT?

Hello, you cerberal blob of mental tissue, I hope you won't mind answering a few questions, and replying to one statement.

1 Where is Nigel Mansell's Formula One Grand Prix game? It's a bit late, isn't it?

2 What happened to the Atomic Robo-Kid

game by Activision, reviewed in issue three? Has it been released? If not, then why not?

3 Thanks for the Ultimate Shoot-'Em-Up feature in issue 32. However, can you expla how *Armalyte*, released in 1988, is the sequel to *Delta*, which was released in December 1990?

4 I have a complaint about you! You don't always answer peoples' questions

correctly, for example: i) issue 30, Joking Apart, question two, you didn't even bother to answer the question asked, ii) issue 31, Thin Glue Line, question four, Lee asked if you could print a map of the game, not a picture of the cassette. Is that enough?

There are more, you know. Now explain yourself to Ed, and hope he doesn't sack you. Name and address withheld, as TMB wanted to hire an assassin

4 I take exception to this one, you grubby little oik. You know nothing of the secrets of the universe, the thoughts of a pan-dimensional intellect, or the beauty of quantum mechanics, and you dare to question me? Unlike you I not

QUICK QUERY

Hello, it's me again from issue 20 something-or-

- other. I have a few questions to ask you.

 1 Do you know of a game called *Alter-Ego*, released in the mid-80s?
- 2 Could you please tell me from where GEOS 2.0 is available?
- 3 How about some more sports games on your Powerpack, hmm?
 4 What is 2236234578x84888305250858?
- Anyway, that's enough questions for now, because I would like to talk (in writing) to you.

think the eight-bit era is coming to an end... NOT! Consoles are toyish pieces of wasted plastic and electronic innards, yet still people will not stop buying them. Why? Here's my feeble answer. People are attracted to these things by stunning graphics and great sound; they expect great gameplay.

That is where I come to my talking point. They get very easy, short-lasting gameplay, expensive carts and, in plain English, a waste of a good £50. We eight-bitters get okay graphics, not bad sound, games that could

last months and brilliant fun with most games.

Also, with the GEOS 2.0 disk, disk users
(like moi) can do almost everything console
users can't. Even tape users (like moi) can use

Mini Office 1 & 2 to do word processing, charts,
spreadsheets, etc. Can you do that with a

SNES? Noooo.

And so my conclusion is this – long live us

And so my conclusion is this – long live us eight-bitters (hear, hear – TMB).

Ewan MacDonald, Renfrewshire

I could, but I'm still wound up by that last creep.

3 Why do you bother me with such trivial things as the covertape? Don't you people care about these few bits of paper sellotaped onto the back of your tape each month?

JOLLY ROGER

If software piracy is such a problem, helping ount for the increase in computer games prices, why isn't more being done to quiet these past for quiet these past few months. Is it any wonder I understand to

to prevent piracy has a difficult quiet and subsidicing through a higher price not the solution. If anything, ELSPA is proving to pirates everywhere what an inadequate

everywhere what an inadequate anti-piracy system is in operation in this country. Surely if games were cheaper, then people would have no cause to turn to pirates for games, since they could buy the high quality original cheap enough. quality original cheap enough. Pirates would then not be a threat.

Nicholas Wimbledon, Hadleigh

Well you know that, and I know that, but the software industry will insist on making money, won't it? It had to keep game prices high originally

to withstand the loss of profits owing to piracy (or so it claims), so the blame is firmly in the lap the pirates. It's just a pity that cartridges are highly priced, even though only a handful of people have the means to copy them.

You might be interested to know that CPs

Interviewed the top eight-bit software companies for their views on piracy, and they all seemed relatively laid back as far a backing-up goes (so we can all breath easy), but obviously put their collective foot down at pirace.

rightly), even though many of it are now unavailable, and so they couldn't make profits from their titles with or without piracy.

Pirates are breaking the law and

irates are breaking the law and ripping people off, basically, and they are definitely a major contributing factor to the decline of the C64 games market, but making games cheaper would not wipe them out. While the means exist, some people will always prefer to get a game for free by having it copied rather than pay however small an amount. TMB

LETTERS

More to the point, what's (20^146)*4? When you work it out, you'll see that it's the odds to one against of throwing together a DNA sample at random and it being an exact match with your own. That's far more important than some randomly picked numbers, isn't it? The answer to your original question was roughly 1.90E+23. TMB

MR DESTRUCTO

I am writing to you to ask you a few important questions - please note, my typewriter is going bust (broken typewriter noted - TMB).

Unos - My GAC (Graphic Adventure Creator) recently went bust. When I tried to get it replaced, I had it sent back (from Ablex) with a note proclaiming that the product was 'out of stock'. If this is truly the case, how can I lay my drooling tentacles upon another copy?

Duos - Why have you changed the power rating box? It was better the way it was! You have said before that it was the best, clearest ratings box available!

Treglie - Please excuse my Spanish numbering, my typewriter's busted. Kinko - You are going to put a demo of Mayhem in Monsterland on a future Powerpack, aren't you?!

Spanish for 5 - Why don't you call the cover tape 'Da Powa Pack'?

See-ex - Could you put The Hitchhikers' Guide to the Galaxy (the legendary adventure game) on da Powa Pak?

Onki - You mist owt the address for Midnight Residence in the budjit secshun. Preese, preese, etc ... tell me how to bie a coppi! Da Lemmin Boyzz!

PS Me C64's bust azwell!

PPS But uzz Lemmons can figs it! PPPS Wie iznut the eggsellant Llemins on this munt's Powa Pakk?!

I've decided to renumber your questions for the mentally less agile readers.

1 Keep an eye on Buy-A-Rama (that's turning into my catchphrase).

2 But like all good

Knock knock Who's there? I've dun up. I've dun up who.

thing! (get it?)

Yuck! You disgusting

Stephen Cale, Hatfield

things, to remain the me, it has to change.

3 As was your copy of GAC. I recall.

We already did one (CF37) - are you telling me that you missed an issue? Tut, tut.

5 Because then we'd look very stupid indeed, wouldn't we?

We can try, as long as you promise to call it by its proper name.

7 Not until you promise to start using a dictionary as something other than a door stop.

PS is everything you own in ruins? Did an H-bomb land on your house or something?

PPS Somehow I doubt you've got the mental capacity to open a tin of beans, and I'm still amazed you've mastered the complexities of an envelope.

PERFECTION

Life is not quite a heap of maggot-infested excrement. To this end I decided to counterbalance my letter if CF40 and write in about all things Commodore Format. Thus...

Considering what your a your average magazine-wise, I'd say Cl good value. The C64 is less popular than other formats - it figures that the magazine should cost more than other format's mags. Yet it compares well.

2 Point taken about Mayhem In Monsterland. Given the Apex track record, it was highly unlikely the game would be rubbish. However, simply because the C64 is (regrettably) declining, it does not mean you should lash out with 100 per cent. Agree to

disagree, I suppose.

Presumably nowadays all the CF team get to see and play new games as they are so thin on the ground. Hence the MIM did not get an unfair spread of reviewers, and the review was not as corrupt as I made it sound.

3 I am amongst those spear-heading the

PPPS Because it's only just been commercially released. Give us a chance. TMB

Humour

Sadder than the fact you've written this vile verse,

Stephen, is the fact that you sent it in to a magazine for

See you, Jimmy, well you're unbeatable. Completely unlike those sassanacks at that other mag. Now the questions:

1 Where can I get Laser Squad/Lords of Chaos and expansion kit?

2 What is the best football management sim?

When will Robocop 3 be released?

What's the best disk magazine? Name and address withheld, because lots of Scottish people want his blood for taking

the Mickey.
P5 The 'true' CF rule, not CF as in Force. Sue them for breach of copyright.

> 1 Not currently available... try the Buy-A-Rama, etc. 2 I wasn't aware that comparative statements

apply to things

thousands of people to read. TMB like football management sims. But the least worst ones are Match of the Day (Zeppelin) and Football Manager 3 (Addictive).

3 It probably won't be, to tell you the truth.
4 Are you sure we're the right people to ask for this? It's like ringing up Russia 30 years ago and asking to speak to the US President, really. TMB PS What Force would that be, then?

'Frames Has Rights' campaign. If he is not

released soon, I shall eat all the chocolate limes in Bath. You have been warned.

Is it true that Teletext's Digit s Man With A Chin has strong CO th Future Publishing ? Can we have a picture please? R Jackson, Lancashire

> 1 Your average Amiga owner doesn't get much for his money, does he? Though there are always disks bundled with these mags, they don't give away full games, as various cial bodies get angry when they

2 What's the point of a rating system with unattainable marks? We honestly believe that there will never be a Mayhem, so if that doesn't mean it de 4 to top 100 per cent I don't know what does.

3 Nobody on the crew actually feels all that strongly. about chocolate limes, so eat away all you you'll need a serious diet plan when I tell you that Roger's just been thrown into a cell on death row (me and my big mouth).

BROCCOLI

Could you recommend a good beginners' book for programming games?

2 Could you recommend a good programming utility excluding SEUCK?

What is the best platform game?
Could you recommend a reputable mail order company that sell Mayhem?
Nicholas Callaghan, Broxburn

We did, last issue.

2 I could recommend hundreds, but I don't know what type of program you want.

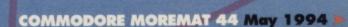
Mayhem, of course.
The authors, Digital Graffiti. TMB

WELCOME

After much fruitlessness in trying to obtain information into becoming a home computer user, trying suppliers of said equipment and so called know-it-alls. I went to the people that know, ie, the local school children, who in general seem to be of the opinion that C64 is a good all round unit. Having spent some time with one or two of these children I have followed their ideas.

I have now become a C64 owner along with a VDU, a 1541 disk drive and a cassette unit. Again the children pointed me in the right direction. Your magazine.

Now comes the crunch - children mostly use their machines for playing games. I must say I've had some fun myself. I would now like to use my machine to its full potential. Can you point me in the right direction with information about things like additions to my machine – I have noticed that a lot of accessories seem to overlap each other in their uses according to your advertisements (for example, Sprint 128 and Action Replay). Do



you run a help-line on this kind of situation or is there a C64 club I could join?

Another helpful item in your magazine would be a jargon and abbreviation dictionary to enlighten the uninitiated.

Last of all, do you supply your magazine by post? If so will you send me your order form? John Davenport, Manchester

PS I have just sent off for your Mini Office 2. Is there a list of other useful programs like this one?

To be quite honest, your best chance of learning all about the machine you're now a proud owner of is to keep reading this mag and order a few back issue (see page49). You could also get in touch with ICPUG, the Independent Commodore Products User Group, who'll be able to give you loads of advice. Contact them through John Bickerstaff, 45 Brookscroft, Linton Glade, Croydon, CR0 9NA \$ 081 651 5436. Welcome to Commodore Format, by the way. TMB

I LOVE YOU MAARTJE

First, your Powerpack. Sometimes it's good, great even (*CF*28 and *CF*30), but sometimes it's not so good, to say it gently (*CF*36). Any chance of having some good golden oldies on there (like *Dan Dare*)?

Dare)?
Secondly, a computer can talk. My friend had a program Say It. It had quite a large inventory. Its pronunciation wasn't so good, but that made it quite a laugh Thirdly, what's

your favourite music? I think 2 Unlimited are the best. Have you heard their song, Faces? It's great.

2 Unlimited - limited appeal.

Bon, c'est le fin de ma lettre. Je vous vois une prochaine fois (I'll see you next time).
That was my best French. I scored a five (out of ten at school). My English is better (an eight). Well, now that you know that, I'll say Doet (that's Dutch. It means something like bye, but a little bit different. Some old people hate the word).

you, but he assures me that there's enough coming to keep everyone happy, anyway. As for the talking thing, we're probably getting a program called Speech in the vary next to

program called *Speech* in the very near future. I think you can guess what it does.

The *CF* crew had a quick poll about their fave bands and came up with Therapy (Dave), Mud (Ollie) and Alice In Chains (Hairy). I personally prefer something a little more cultured, but we all agreed that Faces has to be the worst song ever recorded by anyone, ever. Apart from, perhaps, Atmosphere by Russ Abbott, that is. TMB

1 Our phone number is (0225) 442244, and you should call on Thursdays

2 Unfortunately the C64 is no longer in production, but there's still a great deal of life in the machine yet. Think of it as the Triumph Stag of the computer world, while these

> consoles are just Ford Sierras and VW Golfs impressive enough to your Essex lad now, but hardly the stuff design classics are made of. The C64 will be around for a long

be around for a long time to come.

3 3D Construction Kit is worth paying full price for, but there's a good chance you'll be able to pick up a copy second-hand from the Buy-A-Rama (I said it again).

4 For the moment, yes. We have heard rumours about a distribution deal, but there has been no official announcement yet.

5 Unfortunately most of these games have

been put on ice by the companies producing them. Write to them and complain, that's what I say. TMB

THREATS, EH?

This is my fourth letter to you and the crew so it's time to start printing 'em or else (I'm going for my red and white belt, so watch it). Okay, so you printed my charts in CF36 (page 22, bottom left corner) but you spelt my name wrong, it's James, James, got that J-A-M-E-S! (who ever heard of anyone called Jams).

Right that's enough of the gloom and doom so here are some good things. Unfortunately

my issue of CF36 was late by one week, so, a bit miffed, I phoned your subscriptions line and they were hugely helpful. CF is easily the be magazine around and the new look is totally cool.

Here are my questions:

What is the number for the *CF* office and when should I call?

2 My brother's friend went on holiday to Yorkshire the other week and while he was there he went to Tandy to buy a C64 at the new low prices but when he got there the shop attendant said that there wasn't much point as they were going to stop making them and the games, is this true? 3 Will 3D Construction Ki

come out on budget? If not, is it any good to buy it full price and where car I get it really cheap?

4 Is Mayhem in Monsterland still coming out only through mail order?

5 When are these

games coming out and why have they been delayed? Nigel Mansell, Jimmy's Grand Prix, Mega Twins, Alvin and the Chipmunks, Lotus 2? James Hammond, Kidderminster

The Brain's not ready for

the chop just yet...

PS To win on WWF2 run to the left or right side of the ring at the start of the game, turn round and bung on the autofire - you're man will continuously kick his opponent.

First of all James, we're not threatened by your prowess in the martial arts. Hairy's been known to flatten many a karate kid-type who's come 'round to the office looking for trouble. Besides, even if you were to defeat him, the charming but incredibly violent Lisa Kellet is just a few offices away.



Just before I go I'd like to point that there have been more pairs of Converse All-Star Trainers sold world wide than copies of the Best of Coronation Street Volume I video. If you want to keep informed (and keep me in a job) send your missives to: TMB, Commodore Format, Future Publishing 30 Monmouth Street, Bath, Avon BA1 2BW.

captain Stem abroad. But it's not just in Europe that there's a lot of CPC activity underway. I predict (it's one of the perks of the job, y'see) that you will be seeing a lot of Australian software before the year is out. Check out

From out the time vortex strides Stem, armed with news and reviews of C64 games that'll be coming your way (and wanting to know which century his pay cheque's been sent to).

> reetings once again. My voyages through the times this month have revealed a plethora of games on the way in the coming months. The major software houses may have stopped supporting

the C64, but the supply of games has suddenly increased from a trickle to flood once more as grass roots

programmers all over the world have started to do-it-themselves. And just because these games haven't been written by professionals doesn't mean they're cheap'n'nasties. many of them are as good as, if not better than, a lot of the junk the major softies have expected us to fork out money on. Take Archetype not the best game ever written, sure, but a hell of a

lot better than stuff like Mercs

which it resembles. And Penguin

Tower is just a great blast enguin Tower, by the way, has been written by a Scandinavian coder, and, indeed, a lot of these new games are coming from

Hang loose Stay cool. Or year's hip phrase for saying good bye is (it's a bit late

news on that front

page 50 for a few more titbits of

in the 20th century for see you later, alligator, isn't it?). Captain Stem



WHERE WILL THEY BE?

Thanks to Stem's access to the Space/Time Vortex we can present a unique twist to that Sunday Colour Supplement stand-by, the 'where are they now?' feature. We kick off with Mayhem...

- After appearing in the sequel to Jurassic Park (Jurassic Bloodbath directed by Michael Winner), Mayhem went on to have a rocky career in Hollywood, complaining of typecasting.
- After a disastrous attempt to break the stereotyping by taking a role opposite de Niro and Anna Paquin in Scorcese's remake of The Wizard of Oz (apparently he lost 27 stone in order to take the part of Toto) he spent years only getting jobs as walk-ons in Commodore CD games and pet food ads.
- Things took a turn for the better, though, when he started a mass manure manufacturing plant with a few old mates. He was a millionaire within a year. "It's not what you know, it's who you know," he revealed in an interview on the Ross show, while pointing out that dinosaur dung was the most potent fertiliser know to man.
- In 2024 he started up his own satellite television station, BCTV, which showed 24-hour Flintstones cartoons. It failed miserably.
- By 2031, however he had become a multi-media magnate with TV stations, newspapers and computer networks to his name, but strangely never travels by vacht.

CROSSWORD FORMAT

Across

1 It often comes after C.

Do we have spell it out? Or do you? 6 of the Mutant Camels.

- 7 Music is made up of these.
- 8 See 1 down.
- 9 The end of fanaticism is very realistically but a bit mixed up.
- 13 Screens that often appears while a game is loading.
- 15 You're one when you browse through Commodore Format.
- 16 The software company which gave the world Lemmings.

- 1, 8 across, 5 down Racing game that takes place on ramps hundreds of feet high.
- 2 Rainbow Arts' shoot-'em-up is now divorced and not inside (it's a bit cryptic this one).
- 3 It makes bread rise.
- 4 Fibre ---- cables.
- 5 See 1 down.
- 9 Lee does this throughout the Comic Relief game.
- 10 Comes between Truly and Deeply in a fim title.
- 16
 - 11 Warning sound.
 - 12 These help you win games...
 - 14 ... And so do these.

Answers on page 50.

PLAIN SPEAKING

Welcome to the Stem guide to computer industry Welcome to the Stem guide to computer industry jargon – what they say and what they mean. This month we interpret the blurb software companies plaster all over games packaging:

"Amazing vector graphics" – lots of triangles.

"Arcade Coin-Op Classic" – the original was sighted once at the Morecombe Bay Palace of Pleasure amusement emporium.

"High speed action" – It's not written in Basic.

"Screen shots may be from a different version" – we grabbed these off a Video Toaster.

"Though provoking" – dull

"Multi-directional, hyper-pulse, mega-phasorial life-deprivating device" – gun.

"A range of options" – one or two players

- "A range of options" one or two players.
 "Realistic sound effects" yeah, right.
 "Unique perspective" you won't be able to tell what the hell's going on.
- "Flight sim" the instructions'll take you three weeks to read.



Exploding penguins can mean only one thing - a Batman 2 game, right? Wrong. Simon pulls on his fur-lined parka and braves the antarctic conditions.

ccording to the sort of people who

spend their lives studying these things, there are only four or five different dramatic plots. Every story ever told, written, sung, performed, tapped out in morse code or whatever, is, when boiled down to its purest elements, just a variation on one of those basic plots - revenge, the guest, the loss, and, er, some others. I reckon computer games are pretty much the same. There are a few pure gameplaying concepts that form the basis of every other game. Tetris is one. Bug Bomber is another.

Bug Bomber is all about a little blokey who runs around a grid strategically planting bombs to kill

bugs. Penguin Tower is very much a variation on the concept. You control a bomb-happy parrot, intent on the destruction of level after level of cute penguins. The gameplay is very much the same as Bug Bomber, you have to plant bombs then run like hell in the few seconds you have before they go off.

P-P-P-PULVERISE **A PENGUIN**

Of course, penguins aren't the only thing you can blow up, a fact which add greatly to

the gameplay. There are two types of obstructing wall; indestructible ones and ones that can be blown up one one square at a time. This might not sound great shakes on the excitement scale but these walls add a lot more to the game than you might think; penguins can be trapped in certain areas areas, so it can be very important that you don't let them all roam free too early on in tackling a

level. There are also eggs on some levels which need to be cordoned off for as long as possible.

NOT SO GOOD FINGS

Not all of the power-ups are good. If you pick up a mystery power-up, you could risk getting one of these little lot:

CONSTIPATION - Sorry n'all, but I think you can probably figure out the relevance of the name for yourself; this power-up stops you

dropping bombs for a short period of time.

ANTI-FREEZE – We've already had one of these, but this one's a little different as the penguins keep moving, and you get frozen. Bummer, huh? SLOW DOWN - You slow down, they don't (what the hell else could it have been?).

THE 'TROTS' - I would have used the slightly more, erm, orthodox name for this affliction, but I haven't got a dictionary to hand. If you're unlucky enough to pick up this during the game, you'll be dropping bombs whether you like it or not. This may not sound too bad, but if you've got multiple bombs and long flames, you could have a hard time outrunning the shrapnel.

OD FINGS

There are plenty of goodies scattered about the levels to help you out on you impossible mission, turning your everyday, brightly-coloured, waddling,

winged thing into Robopolly: BONUS LEVEL -- Getting to a bonus level is always a good idea, though it does mean you'll miss out on the rest of the level you're on, and the level afterwards. These special levels are usually incredibly easy, and give you the chance to collect loads of points before

continuing with the rest of the game.

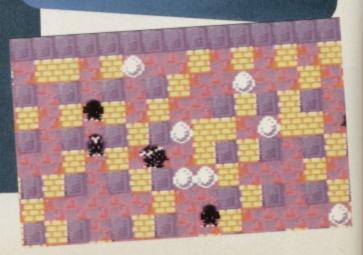
EXTRA BOMBS – Though your bombs are infinite, you can only drop one bomb at a time, having to wait for it to go off before dropping another one. If you've managed to get your hands on a bomb power-up, however, you'll be able to drop more than one bomb at a time. FLAMER - When your bomb goes off, it normally fills the three squares in all four directions with flame, wiping out

everything on those squares. Every time you pick up a flame power-up, the flames get longer, first filling four squares, then five, and so on. So if you

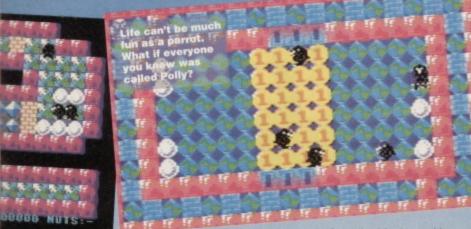
collect enough you can wipe a penguin out from clear across the screen. FREEZE – This one's dead handy, as it freezes all the penguins, letting you stroll round and place bombs right next to crowds of the critters, killing off loads in one go. It's always best to grab a freeze power-up when you've got the ability to drop plenty of

bombs at one time. SHIELD - As with every other game under the sun, the shield just makes you invulnerable for a while.

SPEED - Dead simple, this one, as it just speeds your parrot up.







So we've got penguins and walls. Oh, and

power-ups. These are left behind when you destroy certain walls, and give you various enhanced abilities which are described in loving detail in the Good Fings boxdetail in the Good Fings box-

out (I'll leave you to work out what the box-out Not So Good Things is all about). I'd love to spend a few more hundred words

describing all the other features involved in this game, but there aren't any - it's an incredibly simple concept that just happens to be incredibly good fun.

FOWL FIENDS

Of course, life isn't all roses - there's the odd thorn. But then roses have thorns, so perhaps it is all roses. Or perhaps, using a cliché like life isn't all roses was a pretty dumb idea. But you get my drift. As with all games, Penguin Tower has its gameplay flaws,

this time in the shape of the penguins. Okay, so you have to have a bad guy for a good plot, and the whole thing would be boring if there

wasn't anyone trying to bump you off, but the penguins' motives are never really all that clear -

they'll happily wander about the place doing nothing in particular, and they'll probably walk right past you sometimes, but for randomly moving creatures, they really have a knack of hanging around the exact spot you want to walk through yourself.

Then, of course, there are the incredibly fast penguins, who'll randomly bump into you,

completely by accident, irritating the hell out of you until you manage to bump them off. There's no real strategy to taking out a penguin moving at twice the speed of sense, you just have to plant as many bombs as you can, find a square where you're safe

from the blasts, and hope to God the bionic penguin doesn't get to you before the wick runs out.

The levels themselves "You have to plant bombs them ven't exactly been designed with the player in mind, which

go off." few more narrow passages and places to hide, instead of standing in wide,

open spaces, waiting to be killed. One thing the

> programmers might want to include in the final version would be a level designer, so that everyone who's had it up to the back teeth running round oddly laid-out screens could design their own (or just remove all of the eggs from the

> But the sheer addictiveness of the gameplay wins out over the flaws. Whoever came up with the idea (though it wasn't exactly original) was obviously not concerned with their

reputation - they've resisted the temptation to cram the game with loads of flashy gimmicks that I'd

have probably slagged off anyway, and

concept. While there's no great depths to the game, everything that's there is polished and up

to standard, with fairly reasonable sonic effects and appealing graphics. The power-ups are all very easy to understand, there are no difficult techniques to get the hang of and your parrot is slightly intelligent, in that as the grid is laid out clearly in squares, he'll move from square to square as opposed to around the screen pixel by pixel.

So it's a game that you should buy (I love this reviewing lark), because it's good (can you believe I actually get paid for this stuff?). It's well

THE STEM INTERVIEW: CAPTAIN SCOTT

CF's roving reporter from the nether dimensions, Captain Stem, journies through the Time Vortex to bring you an expert opinion on Penguin Tower...

"It's interesting you should mention Penguin Tower - we've lost quite a few important pieces of equipment through parakeets dropping bombs on nearby penguins. There is an upside, though - after we'd finished off the last of the huskie stew, we managed to harness a few of those really fast penguin dudes, and got to the South Pole in no time. If only we'd have twigged that Norwegian bloke Roald Amundsen's game, and fed the huskies to the radiated penguins, we might have been able to achieve lift-off as well."

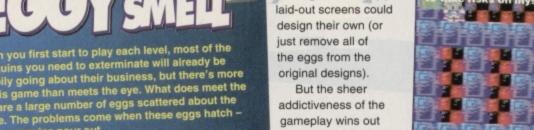
'It doesn't really matter, though, because we came across this tower and, once we'd killed the blokey at the top, it was warm enough to stay there for as long as we wanted. Besides, it's a long walk back."

presented, incredibly good fun and well worth whatever amount you'll end up paying for it (within reason - see the Not For Sale box-out to find out what I mean). Be sure to pick up this penguin. SIMON



- It's really incredibly good fun.
- It carries on being incredibly good fun.
- The levels are ingeniously-designed.
- You don't have to worry about accuracy. But the speedy penguins are irritating.





three times their normal speed; they also com-you. Beware the eggs of, erm, *Penguln Tower*.

When you first start to play each level, most of the penguins you need to exterminate will already be happily going about their business, but there's more to this game than meets the eye. What does meet the eye are a large number of eggs scattered about the place. The problems come when these eggs hatch – more penguins pour out.

Oddly if an egg is engulfed in a blast, the penguin

A SORT OF

run like bell in the few

Oddly, if an egg is engulfed in a blast, the penguin inside doesn't get scrambled – it gets supercharged. This means that when it hatches it can move at up to three times their normal speed; they also come after

gone for a simple but well-executed,

sort of magazine would give a game a big review and an

then turn around and tell you it's currently unavailable? We would. The programmer of this wonderful little game, Jani Hirvo from Finland hasn't yet decided who's going to sell it, but if you promise to keep an eye on the news pages over the next few months, we'll promise to keep you informed.



Two games for the price of one can't be bad, can it? Ah, they're vertically-scrolling shoot-'em-ups. Could be bad, then. **Dave discovers** whether either neither or both are worth paying half as much for.

ertically-scrolling shoot-'em-ups have gained a bad reputation since the Shoot-'Em-Up Construction Kit no-nonsense blasters – but will this double-pack provide the resuscitation the genre needs?

best. But

sorcery romp in which the plot is so minimal the

instructions settle for, "your goal is unclear." Basically, you play the knife-throwing

knives at anything that moves.

There are hostages to rescue as well but you don't have to worry about killing them

because they seem indestructible.

The game follows the standard shoot-'em-up format. You wander up the screen killing hordes of knife-fodder nasties with one or two carefully placed knives (where does he keep them?) and running up

armour. There are also a few pick-ups in the form of potions that make your life easier by giving you invincibility or destroying all the baddies on screen.

originality league stakes it's battling with the

the Vauxhall Conference but it's still a decent enough slice of gaming action: the animation of the knife-throwing is simple but much more interesting than dull old bullets or lasers; you can walk beneath es and become hidden by the foliage; enemies leap out from behind rocks and tree trunks; the

"There's enough going on hero who trudges through a to keep the gameplay from becoming stale.'

Cops 3 is subtitled Cops, Robbers and Dinosaurs.

Quite why, I'm not sure, because, to be honest, I didn't get through the whole game (I've got a didn't get through the whole game (I've got a magazine to edit here, okay, and my Action Replay failed me) and there weren't any dinosaurs as far as I managed to get. Then again, maybe I'm just being an incredibly naive old fogey and dinosaur is some new fangled lingo for some illegal

goings-on or other. Or perhaps they're just hoping that after Jurassic Park we'll

Anyway, what we have here is another

scrolling shoot-'em-up, this time set in some huge Metropolis in the future in which crime is running riot over the Christmas holiday period. You know the sort of thing, shops selling 10 Christmas cards for a fiver Citle Black Boxins Day specials on TV pube fiver, Cilla Black Boxing Day specials on TV, pubs not opening in the evening – criminal. Oh yeah, and there are loads of gangsters running riot, robbing, shooting and generally acting like gangsters. So you (and your partner if you can find mate who wants to join in) have been assigned to clean up the city – virtually single- (or double-) handedly it seems.

Actually, the game doesn't vertically scroll at first. Instead you have to

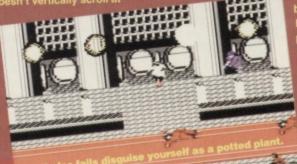
eliminate all the crims on screen before you allowed to walk up the screen and into the ext section. But after a while you enter familiar vertically-scrolling territory (in a sudden change of scenery that takes you out of the city and into some military

barracks which look exactly like the ones in *Arnie 2*).

There are no pick-ups which is disappointing but to its credit the game does try, often quite successfully, to disguise its vertically scrolling roots by limiting the play area to certain rooms or using things like lifts to give the game a more three-dimensional feel. One odd aspect of the game is that if you fail to kill a baddie and he wanders off screen, bullets continue being fired from the bit of the screen where he walked, and there's nothing you can do to stop him. It can

happen, but that's the point – you shouldn't let it happen.

it happen. Problems? It'd be nice to be able to change your weapon every now, there are a few annoying graphical glitches and the backgrounds are



scenery changes are often pretty drastic; a appears who gives you a lew hints about what the purpose in life is supposed there's enough going on to

seems to have been a lack of attention when it comes to the actual mechanics of the program. There's no denying that it's been programmed; for is slow and often jerky, the extra life

them. And occasionally the graphics are so lame

set of crap (under fives such as the And the

games which you learn your way through. You know what I mean - you get to know that after you've dealt

right, followed by an attack of Japanese tourists and a new series of Paul Daniels on BBC1. So often getting through a section is more a test of

memory than responding instinctively to an attack

So, does the good outweigh end of every fantasy good defeats bad, light beats back the dark, and truth, justice and the American Way are upheld. In this case, however, the bout goes the full 15 rounds and good ns on a controversial judge's decision

hardly artistic masterpieces (unless there's been a recent revolution in Oi, mate, haven't heard about). Okay, let's be honest Cops isn't much cop. and tries hard to changes, but the gameplay is more limited than Morrisey's vocal rang

A Good, old-fashioned shootup-action

A Tries to break out of the continuous vertically-scrolling trap.

Some really quite horrible graphics.

Needs more variety to the gameplay

Levels that remain refreshingly playable.

A It's not Mercs.

All that knife-throwing looks impressive.

There's nothing startlingly original in it.

It's a bit slow and jerky, frankly.

And some of the graphics are shameful.

TRAILER



The disk version of Archetypel Cops 3 comes with a demo of Sceptre of Baghdad, another one of Psytronik's games. Well, you can't blame them for trying, can you?

THE STEM INTERVIEW...

Who better qualified to give their views on two out-and-out shoot-'em-ups than the man who's probably shot more people on film than the whole Italian army did for real in World War 2 – Sylvester Stallone:

Thanks, Sly. We appreciate that.

(me being the judge). Personally, I reckon that for all its faults Archetype has enough playability to pull it through. It's nowhere near as good as Arnie but it's a darned sight more enjoyable than mindless pap like Mercs. Sure, it's derivative, a touch slow and a bit shaky, but it's got humour and a distinct character this isn't going to be up your street. But if you like a straightforward, good, old-fashioned blast it delivers the goods, slightly battered, but still in fully working condition.

COMBINED

Available from: Psytronik Software, 34 Portland Road, Droitwich, Worcs WR9 7QW. Price: £4 on both tape and disk.

A Both games are decent enough entertainment to make £4 a definite bargain price.

▼ But they're both a bit on the ropey side and could do with tidying up.

FOUR RAINS

Simon had a problem finding an angle to this review, but there was no lack of them in the game. Unlike crystals, strangely enough...

oes anyone remember the 3D Construction Kit from Incentive? The idea was that the user builds their own 3D landscape using a series of shapes supplied by the Kit (mainly rectangles), and the program then let's you wander around and interact with that landscape, viewing everything in perspective - this system was known as Freescape. Of course, game writers being what they were, you interact with the blocks

by shooting them, but that's pretty much the only reason you've got a gun - there are no bad guys to slaughter.

Anyway, looking at Time Crystal, I reckon Parallel Logic have got a copy of 3DCK. The plot could be anything from 'crystal sucking time out of universe, find and destroy', through, 'villainous bloke steals crystal, get it back', to 'throw crystal into Time Well' - it's not important, because this, like all Freescape games, is about a player wandering around a landscape wondering what they're supposed to be doing. In this case, the landscape's a castle.

The movement controls are very simple - forward, backward, rotate left or right, with a few more complex manoeuvres, such as leaning forward or backwards, tilting to one side and gaining a higher viewpoint. But if you've ever played a Freescape game, you'd know that.

Bearing in mind that all Freescape games are to the great extent identical, there isn't all that much to review - most of the comments you could make would be true of all Freescape games, as pretty much the only thing that changes from game to game is the environment you're exploring.

And what a nice little environment it is. The designer seems to be a fan of walking in circles, as some of the rooms have spiralling walkways around them, whether they're visible or not.

Did I mention the invisible blocks?

Obviously not. The idea that a lot of the platforms you're walking on are completely invisible is quite a good one - it's not used excessively, so you can judge roughly where they're going to be (as opposed to wandering around a maze of invisible walls) but this simple little idea does add quite a lot to the gameplay. Well, it would add a lot to the gameplay if the whole thing wasn't so damned slow.

That's right - I'd left out that little point up until now, but we do have to face the fact that Freescape games on the 8-bits really are incredibly slow, aren't they? In fact, it's the total lack of speed that puts most people off this type of thing - no-one wants to turn to the right and wait 10 seconds for the screen to redraw before turning another step to the right, and having to wait again. Whatever gameplay The Time Crystal had gleaned through cunning layout,

> fun puzzles, interesting structures and the like has trickled slowly away down the plughole of obscurity. Really bloody slowly.

This lack of speed isn't too much of a problem in flat, featureless areas (you can even increase your step distance to let you move further on each redraw),

> but it plays hell with the exploration aspect; by the time the screen's redrawn 10 times, you'll have forgotten what you were looking for. It's also very disorientating. You might as well play it by post.

> But horrific speed problems are a curse of all Freescape games on the C64, so all credit to Parallel Logic, who have undeniably used 3DCK to its full capacity. But no matter who

designed the landscape, there comes a point at which you have to say it's a Freescape game, and knock quite a few marks off the final percentage just for that.

If you want an expert opinion on this kind of game, you've got to speak to the real authority on architecture, Escher. So, Mozza (as his friends call him), what do you think of it all?

Right, it's time for

a quick

game of

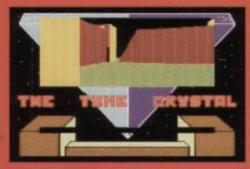
spot the crystal.

"Iz damn weird - I couldn't work out what was supposed to where. It was slow as well. Zoooo zlooow. Ze weirdest bit was when I climbed up some stairs and ended up at the bottom again. I couldn't work it out. It gives me an idea for a picture, though"

And with a faint 'kerching!' ringing through the air, he scuttled off. Mad old fool...

VIRTUAL UNREALITY

Follow CF's simple guide and you'll feel like you're really there, sitting in front of your monitor playing Time Crystal..



front of your eyes and stare at this grab from the game for approximately five minutes.



2 Now look at this grab for another five minutes. Repeat with the other grabs on this

AVAILABLE FROM: PARALLEL LOGIC, 40 WINDSOR AVENUE, WHITEHEAD, COUNTY ANTRIM, 8738 9RX

- ▲ Wonderfully designed environment
- ▲ Original puzzles for a Freescape game
- ▼ Oh so slooooooooow
- Well, it's a Freescape game, basically
- ▼ The colours are pretty vile as well





ORTHOM

Psytronik seem to be going into hyperdrive with game releases this year. Simon gazes into his cut-

price crystal ball (it only tells you what's happening

in the next couple of months) at some of their

titles...

THE LAST

PSYKOZONE

into a myriad of independent regions.

Some trade is being made between the regions by using a badly-kept net of expressways: the Psykozone.

These stretches of road are practically lawless, ruled by gangs of road warriors and genetically enhanced psycho-bikers.

The object of the game is to reach the Pacific by travelling through the most dangerous part of

So load up with

two promising-looking titles yet, but as soon as we get them, we'll let you know. Stand by for the full reviews over the next



Blimey, here we go again. Ditto the caption at the bottom of page seven (but replace 'cars' with 'tents').



500

PD software may be the source of thousands of good demos and hundreds of shoot-'em-ups, but this month Captain Stem takes a look at some slightly more cerebrallychallenging software - text adventures.

Some commands used in "D.H.B.R":

SHOOT, TALK, GIVE, UNLOCK, SMASH, EAT DRINK, HIT, RIDE, PUT, PRESS, PUSH, RÚB, HEAR, REMOÚE, CUÍ, HHÍSTLE, FEEL, FILL, ENTER, CREDITS.

There are a lot more too!

The kind of parser you could warm to (if you were into that sort of thing)

tem here, with a disc full of text adventures, two of which we'll be taking a look at this month. For the ultimate in authoritative reviews, I've thrown the C64 into the time

machine, to see what some hand-picked experts had to say about the games...

DANCES WITH BUNNY RABBITS

Simon Avery really is a prominent figure in the text adventure market - his reputation for producing high quality games goes before him, but we

thought we ought to ask the ultimate authority on all things wild west, and things rabbit-like - Yosemite Sam.

"First of all, I'd like to draw a very definite distinction between my media image, created by Warner Brothers in their creative genius, and myself in real life. For instance, whereas my scripted character would have chased after a certain rabbit for hours on end, succeeding only in getting blown up, thrown off cliffs, run over by trains, or some such, I merely retreat to a safe distance, and take advantage of my incredibly accurate skill with a highpowered rifle. I don't have a problem with

bunny rabbits in reality, because I don't have any problem killing them.

"This game is an interesting one - the plot tells of Texas Timmy, who's forced, understandably, into being a cowboy by his father (which is fair enough - when my son said he wanted to be a barber. I glued a Stetson to his head). Finally, when his father took his teddy bear,

wall. A doorway leads Hest. Please tell limmy what to do. BLOIN HARDROBE Timmy finds his clothes hanging up neatly in the wardrobe. immy waits for your command. XAMINE CLOTHES Sather fetching white cotton with lots tassels and sequins. Please tell Timmy what to do. BLOIN CLOTHES Timmy can't see anything in there. Timmy can't see anything in there. Timmy waits: DEXAMINE PUSIERS Lots of pictures of fluffy bunnies and cuddly kittens. Timmy waits for your command.

What would you do in a situation like this? That's what text adventures are all about.

Simon Avery (A.F.I.O.)

s Timmy is not a happy adolescent. dinto the mould of a cowboy by ncaring father, Timmy would like his better than to play pat-a-cake his friends.

Converted by Pegasus Software.

Kevin Costner would be turning in his grave... if he were dead, that is (oh, we love the old ones)

Timmy decided to clear up this matter once and for all, proving he could be a cowboy by finding the huge pile of gold that lies at the bottom of a deep mine in the badlands. When he's found the cash, you see, he can afford to set up on his own.

"Onto the game itself - though being a fan of the text adventure genre isn't exactly in keeping with my media personality, I do like to sit down and solve mental puzzles now and again. You see, if you don't like text adventures in the first place.

you're not going to enjoy yourself with any text adventure game - these are games you either love or hate, and you'll never really change your view, no matter what you play.

"As for DWBR, we've definitely got a doozy here the parser is reasonably complex, with some rather nice new verbs introduced. such as LOUN (look under), LOBE (look behind) and LOIN

Good question. It's all very well avidly reading this section every month but if you don't know what PD actually is, then this whole section isn't really all that much good to you.

PD is, and I'm going to duck to avoid the flak here, free software. PD stands for Public Domain. The software is written by non-professionals who do not expect to get paid for the work - they just

release the stuff into Public Domain for anyone to copy to their heart's content. That's right - PD software is non-copyrighted.

But it's not always easy to get hold of. That's why PD libraries are set up all over the country. They collect together lots of PD software which they're more than happen to copy for you for a small charge. If you send them a disk or tape and a small copying fee (it's usually around a quid), you can get a disk back stuffed full of wonderful software (well, wonderful if you order the stuff we

give good marks to).

It's always best to write to the library beforehand to get a catalogue and details about how much copying charge you'll have to pay. But remember to send an SAE - the people running these libraries aren't

making a profit, so it's unfair to expect them to start paying for postage

So it's not quite free. But it can be.

The other side to PD is programming - if you've written a nifty little game or utility that you'd like to submit to the Public Domain (and see your name in lights), just send it along to a library and it'll spread like wildfire. It could even be your first steps towards fame and fortune.



(look inside). Obviously, there are all the normal directional and object manipulation commands, as well as some slightly more advanced verbs for the occasional more complicated tasks.

"The other element that makes this game so special is the sheer amount of detail. Though the descriptions aren't especially verbose, if anything is mentioned in the overall description of a room, it can be examined, and even objects that have absolutely no purpose at all within the game have descriptions. This attention to detail makes all the difference and gives the impression that this is a PD game that's received incredible amounts of care and attention from someone who takes great pride in their work."

"Overall, I'd give this little jaunt into the wild west through a child's eyes about 75 per cent."

Thanks for that, Sam - and I hope the throat clears up soon.

THE DARE

It took me ages to find someone suitable to review this one. The plot involves some nutter called Frederick Davies who, for a dare, volunteers to be locked in a department store after it's closed

You are Frederick Davies and you have been studying hard for a degree in law. The examinations are now over and it is Friday Night, so you and your friends decide to "let down your hair" and go out for a "night on the town" to celebrate the end of the examinations.

So you set off for "The Swan" public house and after a heavy drinking session you are dared to try to get out of the large Department Store in town after it has closed.

Somehow you are talked into it and your so called friends have taken all your clothes and left you locked in a toilet with nothing but your underwear.

Press any key to continue

We dare you to actually play this dire game.

wearing nothing but his underwear, and attempts to get out without being found by the security guard or the police, as an incident like this would surely ruin his career in law before it'd even begun (he'd have to go into politics instead). In the end, I could think of only one suitable reviewer - my very (very) good friend, Lady Godiva.

"Mrs God here (I love that joke), with the ultimate qualification for reviewing this game - I did very much the same thing for a bet, except I was tied naked to a horse which was sent into town, and I had to get off before it reached the town square. I didn't, but at least I made the papers.

"Enough about me, though - it's very important that I talk about this game - it really isn't very good, you see. In fact, it's worse than that. You start your little adventure standing in a toilet cubicle in the dark, with your head dripping blood. From this point onwards, you may as well give up, because no matter what you do, you've consigned yourself to typing in words, and being repeatedly told you either can't do that, you can't go that way, what you've tried is impossible, you can't see anything, you've fainted, or you've set off the security alarm. A game based on escaping from a toilet is a thoroughly crap idea, especially when you can't see a thing, you're slowly bleeding to death and there are no objects available to you. I rather suspect this is more a parser problem than anything else, but either way, this game is unplayable. Everybody likes a game in which you can settle down to solving some really meaty problems, but this game is just discouraging."

MERLIN

Believe me I know from experience that nobody in Arthurian days talked in that olde worlde style. For instance, if you were Merlin, would you really have said, 'I welcome thee, King Arthur as My Sire Lord The Shining Inspiration Of Our Forces'? Or would

> you have said, 'Hi Art'? And while I'm having a whinge, Guinevere is a blimmin' silly name if you ask me, so we'll call them Art and Gwinny (well, that's how I know

Gwinny's just been nobbled, by the way. She's being held in the nearby Boscastle which is, incidentally, a castle. Great. I think we'll rename this mag to Commodore64Magazine. Nice and creative. Oh, about Gwinny - just send along a knight or two.

But they're all taking part in a tournament. As the high wizard to Arty, you have the same sinking feeling in your stomach the minister for defence gets when they find out that all the millions of pounds

we've been spending on paratroopers has been blown by the Red Devils trying to perfect the sixpointed star formation, instead of actually working out ways of killing more of the enemy.

As Merl, then, you decide not to disturb the Knightly game of cribbage, and go along yourself to rescue her, without weaponry, armour, a horse, or even a brain (Merl is traditionally a scatty bloke). Still, he's got his magic to help him. That's why the opening description lets you know exactly how rubbish you are at magic. Still, you mustn't disturb the knights, so it's 'one man against the world' time.

As far as the parser goes, there are the extra commands LOIN, LOUN, etc (see elsewhere on this page), as well as the standard bits you'll find in any text adventure you care to name.

> After two text adventure reviews, there isn't really much more to say about this one - the descriptions are clear and sometimes fun (if a little short), and the parser is fairly powerful. That's about it, really. Of all the adventures we've seen this

month, this one ranks

Okay, so this is an idea that Dave swiped from his old magazine Amstrad Action, but why not - reader directories really are a GOOD THING. This one in particular is a little list of public domain libraries and when you think about it, it's pretty essential, because we don't give you contact addresses for the PD that we review. Why not? Well, most PD is available from most libraries do recommending one place seems a bit unfair (it's a bit like reviewing a book and saying it's available from Waterstone's, when in fact it's available at all bookshops). But now you can just browse through this list and decide who you'd like to order the software from. Send the libraries of your choice some SAEs and they'll send you back a catalogue of their stuff.

This list is by no means exhaustive, though, so if you run a C64 PD library that you'd like to be included, just drop us a line, and we'll be sure to slip you in. Write to Public Directory, Commodore Format, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW. That's also the address for all PD libraries and PD programmers to send their latest software to as well, so that we can let the world know what's available. You know it makes sense.

BINARY ZONE PD

34 Portland Road, Droitwich Worcestershire, WR9 7QW

ELECTRIC BOYS

917B Brighton Road, Purley, Surrey, CR8 2BP

FOX PD

6 Sturton Avenue, Goose Green, Wigan, WN3 6SZ

KINGSWAY PD

72 Glencoe Road. Sheffield, S2 2SR

MK PD

1 Westmore Close, Burrows Park Northam, North Devon, EX39 1SR

PENSNETT PD

21 Tiled House Lane, Pensnett, Brierley Hill, West Midlands DY5 4LG

UTOPIA PD

10 Cwmaman Road, Godreaman, Aberdare, Mid Glamorgan, CF44 6DG



the rather gruesome start to a game that doesn't really make you want to bother going much further.

CLIMB CUBICLE ou can't go in that way, ou're head is dripping blood all over he floor - better do something about MUSE PAPER ou've lost a lot of blood - you faint MISSION UNSUCCESSFUL You have scored 8% and have taken 18 turns. END OF GAME - Another try?



More juicy choice cuts from the EDOS collection selected by Simon Forrester.

SECRET DIARY OF ADRIAN

MOLE

There have been those who claimed that the book this game was based on prepared them for adulthood. As far as I was concerned, it was just a warning about how truly dire life could become if you eat too much marmalade. It was very funny, though, which ever way you looked at it.

Thankfully, this is a book that the programmers had the good taste to turn into a text adventure rather than a platform game, a decision that has almost definitely saved them from probably the most scathing review the world has ever seen.

The first thing that strikes you about this game is that a good deal of originality was used, and that the programmers haven't just stuck to the plot of the book into an adventure-writing utility and hoped for the best. The second thing that strikes you about Mole is that it wasn't written by Sue Townsend. If you've ever played Hitchhiker's Guide, you'll know all about the benefits of Douglas Adams having written it. With Mole, things aren't as easy, but you'll have an entertaining time nonetheless.

As with most commercial text adventure releases, the parser is reasonable, accepting most of the usual commands, and not getting in

the way of the plot too much. The only thing that you've really got to decide before you rush out to you

nearest EDOS stockist is whether you actually like text adventure games -

this is a perfectly adequate specimen, but if you don't like that style of game in the first place, you're wasting your time - this is the kind of game you'll either like or loathe, and if you'd prefer not to spend your free time reading, there isn't much here for you.

HEAD OVER HEELS

Way back in the mists of time, there was Ultimate software. Though they had nothing to do with this particular game, they produced a natty little title by

the name of

The twist that made Lore

Knight Lore. Wizball – platform game or fried kipper seasoned lightly with fresh thyme?

is just another platform game in which you whereas others point out that there are hardly any

platforms and, when you do come across them, they're obstacles rather than something to stand on. It's usually around about now that the first group of people slowly draw knives, and the second ease fresh clips into their handguns and stare group one out.

All this is actually irrelevant when we get down to is, as this is a game that, whether you believe it's a platform game or a small, brown, disgruntled antelope from Peru, you're bound to enjoy it. The action is constant, your reactions will definitely be tested, as will your brain. Basically what I'm saying is that Wizball's good, okay?

not only so popular but so valuable to the history of computer gaming was that the entire thing was done in isometric 3D. For those who aren't up on their maths, that's the type of 3D where every line has either a 30 or 60 degree angle,

> and you wander around not really sure whether a block is right in front of you or at the other side of the screen and very

high up. More recently, this game style has crept into other big titles on the consoles, but we know we did it best when

Jon Ritman and Bernie Drummond wrote Head Over Heels.

HOH is the story of two dogs. namely Head, who is incredibly light, enabling him to jump quite high, and who has little wings under his arms which help him glide on his way down, and Heels, who has no such ability, but can move like grease lightning (whatever that is).

Anyway, these two canines start off stuck in different parts of the

enormous game area - what's worse is that they're actually in the same room to start off with, but separated by a large wall, and so have to use different doors, which takes them wildly out of each other's way. One of the main elements of the game is the chase to actually unite the pair, so that Head sits atop Heels, and the two can act as one.

This game is made even more interesting by a number of gameplay additions that earlier isometric titles didn't see. First, these are several special devices scattered about the place that when collected will give even more power to the player. The second addition to the theme comes in the form of having two characters to control - you

> basically switch between the two whenever you feel like it, and so have, in effect, two different games to play for quite a while.

As for standard game criteria, Head Over Heels is absolutely massive, with some incredibly well thought-out puzzles that are not only fun but mentally taxing. The graphics are some of the best to be found on the 8-bits, courtesy of Bernie Drummond a name that carries weight in the decision to buy any game.

All in all, Head Over Heels is definitely a game to rush down to your local EDOS stockist and order.

EDOS EXPLAINED

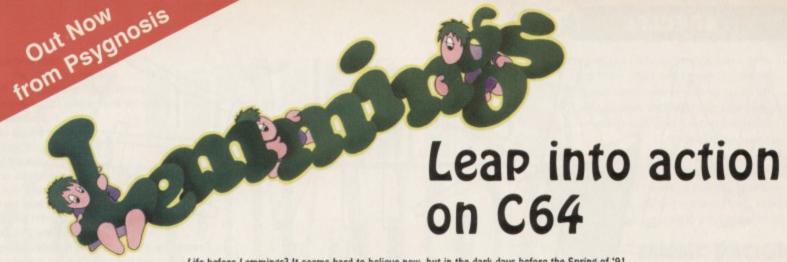
EDOS stands for Electric Distribution of Software. Basically, certain shops (such as John Menzies and some Future Zones) have a load of games 64 games saved on a massive computer storage device which they can copy on the spot for you. To find out where your nearest EDOS service is, contact Software on Demand on 0782 566566.

WIZBALL

You may think religion is all about going to church and being kind to people in the hope that you'll achieve some kind of immortality (wake up), but it's also been the cause of most major wars in the 20th century. Religion doesn't have to be anything incredibly holy, by the way - you just have to believe in something.

The reason I'm telling you this is because $\, heta$ there was a religious war in Britain about five years ago – though the event didn't receive much press publicity at the time - in which an entire town folded in on itself and started fighting over one small fact: is Wizball a platform game or a

The game itself is all about bouncing around a horizontally-scrolling landscape, filling cauldrons of different-coloured potions in an effort to complete the level. However, there are things you can kill by shooting at them. There are also platforms in the form of pillars, and things to avoid in classic platform fashion. So some say that this



Life before Lemmings? It seems hard to believe now, but in the dark days before the Spring of '91. those loveable losers with the lime-green hair were no more than a twinkle in the eye of creators DMA Design. Since their launch by Psygnosis on Valentine's Day, February 14th, 1991, they've conducted a Lemming love affair with computer gamers worldwide, who've rescued Lemmings from certain doom (and squished a few in the process) on multiple formats, making Lemmings the biggest selling computer game series of all time!

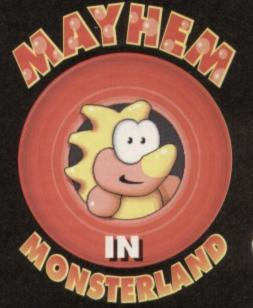
Now your suicidal chums are celebrating their third birthday, after three chaos filled years, with their long awaited arrival on C64! A remarkable conversion of the original, ultra-addictive Lemmings format brings C64 owners all the thrill filled fun of puzzle-powered Lemmings action.

97% - Commodore Force 88% - Commodore Format

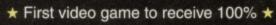
To order please send a cheque made payable to Special Reserve, to Inter-Mediates Limited, Lemmings Offer 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG. Also quoting your name and address on the reverse of your cheque.

Please allow 28 days for delivery





From the makers of Creatures and Creatures 2 comes probably the greatest platform game ever created for the C64; Mayhem in Monsterland is an intriguing blend of fast, frenetic platform action, with five wickedly cute levels to explore. Featuring the cutest dinosaur ever to emerge from the Jurassic period, you'll soon forget all about Italian plumbers and spikey blue hedgehogs.

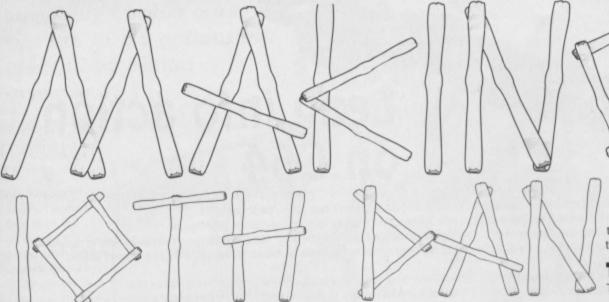


- ★ Super-fast full screen scrolling ★
- ★ Fully interactive soundtrack & SFX ★
 - ★ Amazingly detailed graphics ★
 - ★ New non-standard colours ★
 - ★ Not available in ANY shops ★



***		-	***	e. [
		C64	0	2000
A.		SCREEN		*
_\				du.
1	1 N	18	食	

PLEASE SEND ME MAYHEM IN MONSTERLAND (TICK RELEVANT BOX) CASSETTE £8.99 DISK £9.99 PRICES INCLUDE P&P
Send to: Apex Computer Productions Ltd., PO BOX 100, South Ockendon, Essex, RM15 5HD. Please enclose a cheque/postal order made payable to APEX COMPUTER PRODUCTIONS LTD. Allow up to 28 days for delivery.
NAMEADDRESS
POST CODE



Mayhem might have been the greatest platformer ever on the C64, but Jon Wells reckons there's still room a beat-'em-up that knocks all the competition for six, and he's out to prove it...

ow City Bomber is complete with Escape From Arth and BreakThrough nearing completion it's time to get ready for a new project. But I'm looking for this next project to be something special, something that'll give you an idea just what the 64's really capable of. I also want it to be one of the most swiftly-produced (decent) games ever of the C64. This is the reason for contacting Phil Nicholson - y'see this time there will be two programmers/graphic artists working with this project, as well as one of the best (well we think he's the best) musicians on the

C64, namely Paul Hannay. With this combined effort, not only will the game be programmed and released a lot quicker, but it'll have extremely compact and unique routines, to get it

scrolling landscape." looking and sounding great, while hopefully moving graphics and operating code as fast, if not faster than the 16- and 32-bit rival machines (yeah, well, we can try, okay?).

INITIAL IDEAS

First we came up with an early design for a multidirectional platform game called Vegpire. This would feature eight-way, full-screen, colour scrolling with collect-'em-up platform action. The plot of the game was based on a veggy vampire called Vincent who had to restore peace in the Outerwurlde, while rescuing his village friends from the Underwurlde of Evil Baron Braculla.

Although the main background scrolling code was complete, we decided to postpone this for the

Let's roll out the barrel.. er.. credits! Three people will be involved in this new project – Phil Nicholson (Known to his friends as Betrayer on the demo scene), Jon Wells (that's me!) and Paul Hannay (The Feekzoid!) – we're the SPACETIME Hannay (The Feekzolo:) - we crew. And don't you forget it.

time being. Y'see we wanted to produce a game that was the very best that could possibly be produced of its type on the C64; but Apex's Mayhem In Monsterland had already nabbed that position in the collect-'em-up platformer stakes.

In the end we decided to go for a more serious style of game instead, a type of game that hasn't utilised the 64's capabilities to the fullest extent yet. And we reckoned that type of game the 64 really needs a good version of is a beat-'em-up

Although it's basically going to be a karate sim (the main characters will be as big as the

International Karate "Each bout will be displayed and Fist sprites that's three sprites high and three across), it's going to have a lot more moves than any previous beat-'em-up, and for the first

time ever each bout will be

DIARY OF

ONTH ONE

displayed in a double-screen, full-colour, bidirectional, scrolling landscape - phew! That's a left- and right-scroller, and we're hoping to move this at almost any speed, which would be an amazing achievement, not only for us, but for the C64 as well – fingers crossed everybody!

That's not all - we're also hoping to achieve all this plus loads more features (like bonus rounds, for example), in one solid load! This may seem impossible, but we've done a fare amount of research into this possibility, and there's a 90 per cent chance of seuckcess (oops! Sorry, wrong feature). No MULTI-LOADING! Whhaaaat!?

DESIGNING

in a double-screen, full-

colour, bi-directional,

Once some of the main features were thrashed out, we needed a more thorough approach to the design. What would be the graphical setting? Past, present or future? How would the game be played? What features would be included?

The obvious solution was to look at the classic 64 beat-'em-ups of the past. So after playing more beat-'em-ups than seems healthy, we complied a

list of their best and worst features. Finally, we contacted a few mates in the 64 scene for their views on beat-'em-ups.

The hardest part was thinking of a name that would be easy to remember, but not ridiculous or so dull it didn't stand out from all the others. Hmmm. We couldn't just call it Way of the Exploding

Toenail, for instance while Karate Capers sounded like a Hannah Barbera cartoon.

Actually, the name was staring us straight in the face. We ended up calling it by the aim of the game which is 10th Dan Karate.

THINGS TO COME

The game is set in the ancient East and the aim (if you haven't already guessed) is to kick,

punch, bash and smash your way through the black belts from Novice to 10th Dan and achieve Grand Master Status.

Sounds easy? It won't be. For a start you'll have to fight through the different belts for every Dan (unlike in IK+ and Fist); in other words you'll start off as a Novice/White Belt, but once you've worked your way through all the other belts and defeated the Black Belt you'll become a 1st Dan/White Belt.

Get the picture? The highest level will therefore be 10th Dan/Black Belt.

Bonus rounds will be included, but for those who'd rather keep fighting a Cancel Bonus option will be available. The classic two-player mode will also be available, as well as a new mode to the genre - a practice mode. "What's so new about that?" you might think. Well, instead of just attacking a static fighter, the computer player will move about the play area, but he won't attack you! This'll give you practice at hitting moving targets.

Another feature which hasn't really been utilised before is interaction with the backdrops. The backdrops in most beat-'em-ups are mainly there to look pretty. 10th Dan will be different, because the players will be able to move behind trees and foliage or under ancient bridges, or fight in flowing streams and waterfalls, or even do battle on the edge of a high cliff.

All these will have an effect on the gameplay. For example, it will be harder to judge your moves when fighting behind trees because you'll be partially hidden, and fighting in the stream will affect the speed of your moves.

ENOUGH THEORY

In the following months you'll see how our latest project is getting along. From the initial design of development, to programming and incorporating the graphics, music and sound effects, and adding those final touches of presentation, we'll keep you updated. We'll also be telling you some of the problems we encounter, and how we combat them!

LET THE CODING COMMENCE

Next month we stop dreaming and start coaspirations with some serious action. Stay tune

images, but you can stretch them, alter their size, flip them and distort them in many other ways.

Binary Zone sent us a tape stuffed full of 50, count 'em (no don't actually), 50 utilities. We asked Simon to investigate. He turned us down politely. So we forced him...

e see a lot of utilities here at CF, you know. Normally we get them one at a time - which is fine. But, and I'm sorry if I'm offending

anyone by saying this, but I'd rather eat the entire Peterborough phone directory than sit down for a week to review 50 utilities on one tape. Think about it - after your 14th word processor, what's

GRANKED BY

left to be said? One word processor does very much he same as another, you know.

Well, there are a couple of word processors on this tape, though the majority of the 50 utilities are made up almost entirely of music packages and sprite editors. A decent Tetris clone would have broken things up a bit, frankly, but instead we've got loads of music packages and loads of sprite or UDG designers and not much else.

I'm still faced with a problem, though how the hell am I ever going to review two sets of 20-odd programs that do exactly the same thing, without making it sound boring toward the last ten or so? The answer; I

Music packages and sprite designers dominate this tape. can't - it's a job too big even for me. So instead I'll review all the sprite designers at once, and all the music packages at once. So, feeling like one of those mad people who play chess against 17 people at once, that's what I intend to do. My

only hope is that someone will find this review and know my fate - I died of boredom.

THE SPRITE DESIGNERS

I'll throw the UDG designers in this category as well, mainly because they don't really come under the musical classification. Sprite designers, quite obviously, help you design sprites for use in your

NEH ARPEGGIO

SPRITE 1 I

SPRITE 3

SPRITE

SPRITE 8

There is a quite a variety available on this compilation, the best of which let you test animations between different sprites, give you access to the full colour palette and save the sprites in a useable form. Very few designers actually go the whole way, though - there aren't that many with cut and

own programs.

that go much further than letting you copy one sprite on to another, so that you can change it

paste facilities

slightly to get your blokey to walk, for instance.

If you take a look at an art package such as the OCP Art Studio (a commercial release not available on this tape), not only can you cut and paste

Sprite designers are never really this complicated, as they're usually designed for artists to use, and not programmers. Probably the best two packages on the tape are Sprite Designer

V1.1 and Sprite Editor V1.3. If you were to buy this tape only for these two (or one of them, at least), you'd be getting your money's worth.

MUSIC PACKAGES

When I first looked at the inlay for this tape, I thought 'my, what a lot of sprite editors'. I then counted the music packages, and passed out. 10 of them? Who the hell needs 10 music packages?

There was a composer once (I can't remember his name, because I'm common) who wrote several pieces of music simultaneously. That's one person, though, and I suspect he'll have died a long time before the C64 came out. I don't think he's reading.

As someone who once wrote a soundtracker, I know that there's never really much to choose between different music packages. For this reason, I'll cheat on this review and use the fact that Digital Graffiti, AKA Apex, AKA Those Blokes Who Wrote Mayhem recommended the USA Music Assembler and so I, in my infinite wisdom and divine reviewing powers, recommend, wait for it, the USA Music Assembler from this collection.

OTHER BITS

There are actually a few variations on the old 'loads of sprite packages and enough music editors to float a battleship full of jazz fans' theme, but kind of ruin the big gag behind this review. Besides - I blimmin' hate jazz.

You see, there are about five word processors in one form or another - probably more, depending on what FLI and EMC mean. You'll also find a video sorter, whatever the hell that might be.

Ah, now this is more like it - an assembler. You'll need one of these because we're planning a course on getting into machine code at the lowest level, and if that sounds like the kind of thing you want to get into you'll need an assembler, and a good one at that.

A FINAL FING

So I've got to come up with a mark that sums up the performance of nearly half a ton of packages, have I? The final mark represents not only the performance of the software (which is generally not at all bad) but also the pointlessness of putting together a compilation that may as well have been called Repetitive Tape No 1. Then again, it does only cost a fiver and if you find three programs you regularly use, that's not a bad return for the outlay. But a bit more variety would be an even better value.

COME AN' GET IT

If you want to get your hands on this tape, just send a cheque or postal order for £5 along to Binary Zone PD, 34 Portland Road, Droitwich, Worcs, WR6 7QW.



a shame that more people, particularly the musically minded ones, don't produce music on the

know how, and that's what we hope to prove.

In the early days, C64 music wasn't anything to write home about. It wasn't commonplace, and if you managed to find a game with some sort of sound track it was usually 'beep' (which might have excited Laurie Anderson but rated only slightly higher than 2 Unlimited on the musical accomplishment scale).

Two men changed all that, and it started as early as 1984 when Gremlin Graphics released Thing on a Spring, a game that contained an amazing soundtrack by Rob Hubbard. No, not the bloke who invented Scientology. Basically he was the God of C64

music, and classics such as Sanxion, Delta and Skate or Die were all down to him. What a guy.

He was followed by Martin Galway, nephew of James Galway, whose mellow and psychedelic style was admired by millions. Even today, his music for Parallax and Wizball remain superb. But as quickly as the music scene developed, it subsided. Rob disappeared to the States (to work for Electronic Arts), and Martin Galway ... er... what DID happen to him? Shame.

INSPIRATION

Creating and writing music is a difficult process. In fact, it's virtually impossible to translate whistles and hums into something

C64. It's easy when you

you checked out the covertape Mega Mix demo? Impressed? So were we, so we asked MC64 Steve and

Professor John how

they produce such

wicked

grooves...

et's face facts - a lot of game music has the harmonic qualities than a broken aiarm clock. How many times have you resorted to playing with the sound turned down before the music sent you insane? Sadly the art of writing decent game music is a neglected one, which is a shame, because, like in a feature film, decent music can really lift a game by adding to the atmosphere. And at its best, in-game music can produce

outside of the game. So, what makes good game music? That's what you're about to discover.

TECHNICAL INFO

There isn't any, basically. Not a shred of it. If it's waveform diagrams and envelope tables you're after, check out any decent programming manual or reference

guide. However, if you're serious about writing music for games and need some practical, understandable assistance, read on. And if you're not, read on anyway...

IN THE BEGINNING

Music has always been a

fundamental part of C64 games, and this is down to one simple factor - the SID chip (or Sound Interface Device). It's flexible, has three voices and all manner of filtering and sound distortion techniques. Heck, even the volume control register can be used to play samples. It's just

CLOSE TO THE EDIT

Music editors are thin on the ground, especially commercial ones, but here are a few to look out for.

stuff that you'd even want to listen to

(Orpheus) Before we started writing games, we used to just sit down and write music, the editor being Electrosound. Getting hold of a copy The Dutch USA Music Assembler nowadays would be a recommended PD purchase very difficult, but if you do manage to track it down, load it up and have a bash. It's a relatively user-friendly system, but unfortunately the tunes sound very similar to each other (owing to the preset drums and limited voice-creation). If you can get hold of the compiler, it's possible to incorporate your

masterpieces into any games you've written - it even copes with sound effects. Overall, it's not a bad editor (from a nostalgic point of view).

> editor is a little complicated for a beginner. It has a mass of options and variables, and demands guite a lot of patience. The whole package is very userfriendly, but it's very difficult to write tunes spontaneously without prior knowledge, which involves ploughing through the mass of instructions. Novices, steer clear.

ASSEMBLER (Binary Zone) This is a brilliant music editor, and is fairly easy to use (even for a

beginner). Editing voices is a cinch, and tunes can be built up easily by using a series of different sequences. It has the drawback of being a disk-only product, but Binary Zone are currently updating it to cope with cassette. It's user-friendly, produces impressive results (check out Sceptre of Baghdad), and, most importantly, you can get hold of it easily. (Binary Zone) Before Dutch USA appeared, this was by far the most popular music creation utility. Originally written by Charles Deenen from the Maniacs of Noise, it has since been updated by countless PD programmers, each adding

more and more features. It's flexible and user-friendly, but is geared slightly more towards the experienced computer musician. Both this and the USA editor (along with quite a few others) are available from Binary Zone (see pages 27 and 25).



recognisable and half-decent on the C64. When you are creating computer graphics you have an idea for a picture, you draw a sketch, and nine times out of ten the finished drawing on the computer is what you expected to see. Music is a totally different bag of worms. For a start, music editors are very thin on the ground compared with graphic editors, and there are very few commercial ones available (see the

Close To The Edit box-out). Secondly, the actual translation of an idea into a musical piece takes time, and can often be frustrating. How many times have you sat in front of a piano attempting to play Chopsticks? Exactly. There's no substitute for practice, and if you have access to a piano or keyboard of some sort, sit down and tinker with it for a while.

THE MOOD

So you've thought up an incredible piece of music. You can't get the tune out of your head, and you're bursting to include it in your latest game. In fact, you could be making a big mistake. Ask yourself this question: is it suitable?

Let's approach this from another angle - boot up this month's Music Mega Mix and open your ears. Music, apart from sounding good, also needs to be functional. A tune without a purpose is, well, useless (as 2 Unlimited prove time and time again). Check out the title music on Cyberdyne.

Retrograde and Creatures. They're all dramatic in one way or another and generate

atmosphere for their respective games (which is essential). Now listen to the GAME OVER music from Retrograde or the high score ditty from Creatures; slow, sad, mournful

even. And the GAME COMPLETE tunes? They're lively, celebratory and congratulate the player, as they should.

Most importantly they are functional, and were included in the games purely because they sounded right and suited the situation, not because they happen to be good tunes (which they undoubtedly are). Mayhem is the exception to the rule, and uses interactive music which changes as you play. Take a stroll through Jellyland and listen to the music switch as Mayhem enters different sections. There are fast, uptempo tunes for the hectic parts, and slow, mellow tunes for the empty bits. It all helps to create an enjoyable atmosphere (we hope...).

I HEAR VOICES

The SID chip only has three voices (or sound channels), compared to the four voices of big brother Amiga. This isn't too restrictive if you're careful and plan ahead. Very rarely are the three voices separated (eg, voice one for the bass, voice two for the tune, and voice three for the drums). Instead, rhythms and riffs are combined wherever possible to obtain

MC MAYHEMYS MEGA MUSIC MIX

Believe it or not, we actually enjoy listening to

- top five favourites from this month's demo...

 1 Creatures: SHOP After the pounding uptempo beats of the levels and torture screens, this is a very mellow and relaxing
- 2 Retrograde: LOADING THEME This builds up a great sense of excitement and anticipation for the game to come, and is also
- a technically excellent bit of music.

 3 Creatures: TORTURE SCREEN 3 This was originally written to be the title music,

but was put into the final torture screen because of the high and low points which

- coincided with the action.

 4 Creatures: THEME This sets the mood perfectly, and is very reminiscent of the music from old Hanna-Barbera cartoons. Well, let's face it, if it makes Clyde dance it
- theme, this also serves to set the mood. It generates a space-tech feel, switching to a

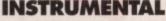
faster beat to urge the player on.

There'll be loads more Mega Mix Music on next month's Power Pack.

the most 'action'. All of the Mayhem in-game tunes on next month's Power Pack demo use just one voice (check out Cherryland 2 and 3 in particular). Similarly, the in-game tunes from Creatures on this month's demo use only one voice. This is done so that the

remaining two voices can be used for the in-game sound effects. Clever stuff, eh?

Most impressive of all is the MULTI VOICE tune in the demo section of next month's Mega Mix. Listen to it carefully, then try to work out how many different riffs are playing at once. How's it done? Careful planning and an awful lot of patience.



The C64's SID chip doesn't actually have instruments as such - they are merely waveforms (variations of a SIN wave, which is how all sounds are produced).

There are four different waveforms, each with different qualities, and clever use of these can produce impressive results.

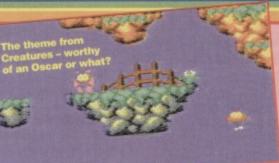
TRIANGLE WAVE - This is very similar to a SIN wave, but is slightly more triangular (surprisingly). It produces sounds similar to that of a flute or

xylophone. See Creatures 2, Torture Screen 2. SAWTOOTH WAVE - So called because it looks like the edge of a saw, this is a versatile wave which covers roughly six different harmonics. It can be used to simulate the trumpet, oboe and clarinet and is even more effective when combined with filters.

PULSE/SQUARE WAVE - Regarded as the most useful of the four waves, because the pulse low/high time (the pulse width) can be altered to

Happy, happy, happy, happy land – with music to match.

produce radically different sounds, thus affecting its harmonics. Pulse is often used to emulate the piano, organ



or banjo. Listen carefully to Mayhem's in-game tunes.

NOISE WAVE

This is basically sound with no set frequencies, usually read from an unmusical source (ie.

random values). It is used

extensively for drums, cymbals and other such crashes, bangs and effects. See MAYHEM TV.

ENVELOPES - The C64's range of instruments are pretty dull on their own, but thankfully the 'envelope' of any particular sound can be changed to suit the requirements. An envelope has four parts;

- Attack is the time it takes the note to reach full volume and is usually very short.
- Decay is the time taken for the volume to drop from the attack to a steady level.
- Sustain is a steady period, where the sound wave remains constant, and finally the release is the time taken for the level to drop to zero.

Let's look at it another way. Sound is generated by energy. If you were playing a flute, for example, a constant stream of energy is required to play a constant note, and therefore has a short attack, an even shorter decay, a long sustain and a short release. However, a guitar string will continue to vibrate and produce noise, and therefore has a zero attack rate and a long decay (as do most percussion instruments). As we've re-iterated many times, there's no substitute for practice. Sit down and experiment - that's how the best tunes start.

FILTERS

Filtering is a process that cuts out a section of unwanted noise, and often enhances the tune considerably. But filters have one drawback - no two C64s are the same, and there is, in fact, a 20 per cent filter difference built in to every C64. We could write an amazing piece of filtered music, but it would probably sound duff on everybody else's computers. That's why most of our music from Creatures 2 onwards is unfiltered. Vanity comes at a price, and filtering carries the same risks as a face-lift - you think it's excellent, but everybody else doesn't.

So what are you waiting for? Get composing, and let us hear the results they could end up on the Power Pack.





about the screen

toring bitmap screens is a nightmare on the '64. The size of the visible screen dictates the memory requirements proportionally; a full 40x25 character screen on the 64 is going to eat 1,000 bytes (1k), and if you include colour info that's another 1,000 bytes. You can see where this is all going... total lack of memory. So how do the professionals squeeze multi-level games into 64k?

Don't ask me. Ah, I'm getting paid for this aren't I? Okay then, yes I do know. The problem can be tackled in two ways (well three if count giving up):

Load each screen into RAM as it's required. Fine if you own a disk drive (well, not really), but for tape users it's a big no-no. Also, you can forget scrollers as that dynamic Mr Raster will never fall for the old, "wait a minute while I load some data from the drive," story. He's busy racing down the screen and waits for no man!

2 Sensibly, you can go for compressing your screens using some design compromise and a little programming knowledge...

The game creation utility SEUCK uses the classic screen compacting technique called.. well, er, some call it block compression, others call it level blocks, there's no real term for it - but it works and very well, too. Here's how...

Let's say you have an idea for a game which needs 60 screens. If you stored these character by character then you'd run out of memory very quickly, so you need to use some design compromises and define screens using clumps of characters or blocks. The most common size of block is the five by five,

thus requiring 25 bytes

BUILDING UP A SCREEN USING DATA BLOCKS Eight blocks across A data block blocks down

Characters

So you have a dream of a game with a pulsating 60-screen action-packed map, each screen defined in blocks of 5x5 (25 bytes). You've conveniently calculated that the screens can be designed using 32 different blocks, so that's 32x25 bytes per block which is 800 bytes; that's 60 screens at 40 reference bytes each (a total of 2,400 bytes) and by chance you've designed a routine to handle the distribution of these blocks weighing in at 128 bytes (it's machine code you see - very tight). That gives you a total memory requirement of 3,328 bytes versus 60,000 bytes for the original screens (remember a screen's-worth of graphics on the C64 takes up approximately 1k), a saving of over 56k (or 56,000 bytes), good grief!

THE SCROLLER CODE

The scroller on the covertape is a simple first-cut implementation of the theory I've been describing. It incorporates scrolling within full colour, handles various speeds and uses the map block technique discussed over the last two months. The dimensions

of the scrolling map are 32 blocks across by

The Readers' Digest abridged version of last month's thrilling installment... Scrolling is good. Therefore it's a good idea to learn how to do it. The C64 stores its screen in character

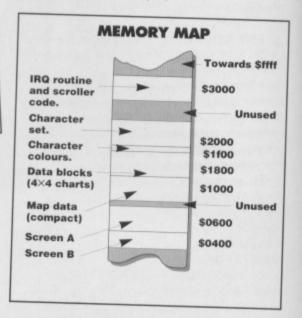
blocks of eight by eight pixels. If we moved the screen whole character blocks at a time the effect would be jerkier than an arthritic spider at the end of an all-nighter. But, ta-daa, the C64's VIC chip lets you move the screen a pixel at a time, but only up to eight pixels, after which the new character blocks have to be introduced - the point at which this happens is called the character seam. To make sure you don't see this happening there's an area of screen you can't see called the hidden screen which is one character wider than what you actually see. This is where all the exciting appearing and disappearing of blocks takes place (off the edge of your monitor). Confused? You will be...

Part 2: Paul Black tells you how to put the colour into eight-way scrolling and explains how the scroller program on this month's covertape does its stuff.

> 64 down while the blocks are 4x4 (with each character in the set having its own individual colour) so the whole lot takes roughly a 16th of the memory required to store the entire map, plus the data blocks, colour table and character set information.

The code is fully annotated (whether these are useful is another matter...). A sample character set and background have been knocked up using the Graphics Editor by Firebird (which is probably harder to find nowadays than the first issue of Viz but there are plenty of good PD programs about to do the same job, only cheaper) and the coding was done using Laser and Mini Office 2 (Mini Office so I could edit comments more quickly).

It's probably worth a look at a few important variables and the memory layout first:



There are four chunks of memory devoted to data, these are: map, blocks, colour and character set data. Two screens are mapped into memory between \$0400 and \$0C00.

The scroller code starts at \$3000 to around \$3C00 (that includes a colour buffer and masses of data). Two variables CLOCK and CLOCKED appear quite a bit - CLOCK is used to store the current phase of the scroller (ie, how far it's got to go before it reaches the next character seam) while CLOCKED is a precaution to ensure that the routine doesn't do the same phase procedures twice.

As a point of note, the final phase, which flips the screens and dumps character colours, is kept until the last moment. This is important because these two operations should only ever happen when the program has crossed the character seam, no sooner or later.

The scrolling window has three types of coordinates, which come in pixel, character and block sizes. Character and block co-ordinates are directly calculated from the pixel versions. The reasons will become apparent if you follow the code; the different types basically increase the execution speed (all important with interrupt routines as I'm sure you know) and are very convenient for the

scroller as many chunks of the code need one or more types for things like block calculations. The SPEED and DIR variables correspond to scroller speed and direction of the scroll.

Directions are in the range 0 to 7 (see the diagram below). Speed is restricted in this design to a value between \$0001 and \$0200. There are a lot more variables, constants (such as

ur)

re

set

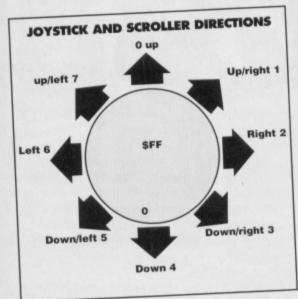
iz

/as so I

ear

ne

tly



where screens are and blocks) and some involved data tables, but the code is liberally sprinkled with comments and so shouldn't prove to much of a puzzle, hopefully.

The MAP variable is actually a pointer (a nasty word to beginners), pointing to the start of the map data. It's a pointer so that you can store a map anywhere in memory; so if you have, say, three maps, all that needs to be done to access them is to change the map pointer to the start address of each map as and when required. That's enough talk on variables - now to get down to the heavies of coding.

HEAVIES OF CODING

The first thing the program does is set a few VIC registers for screen and character colours, then it sets the interrupt vector to the ISR (interrupt service routine); after that it clears the interrupt flag enabling 'em to begin. Finally it mindlessly loops doing absolutely diddly squat forever, 'cos we don't really do anything 'mainline' we're interested in interrupt driven routines.

While the 'main' program is busy doing its vital (not) loop, the raster scans its weary way down the screen until it reaches line 20 in character terms which causes an IRQ (interrupt request). This IRQ has come about because we asked for it in the setup code, why else?

At line 20 the screen is switched-off to hide the

scrolling seam (if this isn't done the join between the moving portion and static portion of the screen would be hideous), then after a line or two it is switched back on and the character sets change so the message can be read. The ISR waits again until that raster line reaches the bottom of the screen before

IRQ AND SCREEN DISPLAY Border Scrolling IRQ set Scroller picture window for here 20 lines in here down Scroller screen message here seam End of Static scroller portion seam, blacked start of static out) on the display display Your old telly Scrolling routine takes over from here

TECHNICOLOUR TECHNOLOGY

called, well, there's no real

term for it, but it works, and

If you're not happy with single colour screens (...who is?), or four colours in multi-colour mode. there are two ways of adding colour. The first is to assign an individual colour to each character, 256 of them in all, and increase the storage requirement by 256 bytes. Or why not be really generous and store the colour for each element of a data block (5x5=25 bytes again)? This doubles the RAM for blocks, but most often it's worth every bit (bytes actually). If you're really stingy you could halve the colour information storage required by taking advantage of the range of colours on the 64, 16 in all, thus enabling two character colours to squeeze into a single byte high/low nibble style.

The only drawback using this technique is that an extra nibble is wasted 'cos 25 divided by 2 is 12.5

setting the screen for scrolling (ie, the correct set characters and colours). Finally the scroller service routine is called.

First the scroller checks the FLAG variable to see if there's already some scrolling going on. If this check fails then the program takes a detour to some code to find out if it's a good idea to begin scrolling.

INITIALISE A SCROLL

When the scroller isn't engaged (the variable FLAG is a zero), the joystick is read to determine the direction

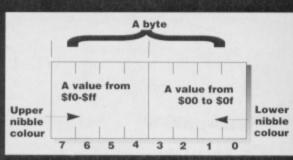
of the scroll. The routine GETDIR does this. If the joystick is being pushed the routine will set up the DIR variable with a positive number from 0 through 7, otherwise a \$FF is inserted to signify no movement.

very well too..." The last piece of code stops you scrolling off the map otherwise it would be too easy to scroll through the entire 64's memory. So the routine calculates the direction and checks for the out-of-bounds conditions. If all's well and good it's time to check the speed at which it should be scrolling. The speed in the demo is preset at \$0200, which is two pixels every interrupt, the maximum (because the scroll moves from character seam to character seam in four phases, and there are eight pixels between each character seam).

PHASES

The scrolling routine progresses from phase to phase. The colour algorithm mentioned

> in the box-out above occupies the first two phases; during the third the map is decompressed. but only the bits you need, ie, the data that has just scrolled onto the screen; the final phase switches to your new screen and dumps colour to the appropriate colour memory. That's the crux of the system, here's a run down each phase in more detail:



(the saving will more than make up for it - don't lose any sleep over it). The distribution routine would probably grow a tad to handle the extra complexity. but if you're so inclined the option's there anyway.

The first two phases shunt a whole half each of the display window in the direction of the scroll into the hidden screen. The CLOCKED variable is decremented to signal that that phase has been done then the general purpose move routine MVSCREEN is called to do the hard work copying part of the screen to the hidden screen at a slightly different position, using the direction variable DIR. MVSCREEN needs the address of the screen which needs to be moved plus the current phase: from this it works out which chunk of data to move and in what direction (using DIR).

The third phase starts by "SEUCK uses the classic decrementing CLOCKED

followed by the decomscreen compacting technique pression of the bits of the map that appears at the head of the scroll. At most, the scroller decompacts both horizontal and vertical strips during diagonal scrolling.

The final phase deals with switching to the hidden screen and dumping the new colour into colour RAM. When the time's right, all hell's let loose - the screens are flipped to reveal

a shiny new one and all the colour is copied from the colour dump buffer into colour RAM The only point of note here is on the structure

of the colour-dumping loops. These loops are coded to deposit four chunks of five lines sequentially; the reasoning behind this is that a huge loop copying from the buffer, column by column, causes inconsistencies in the display (ie, it's real jerky man!), and a loop that copies a character at a time from the top to the bottom spends most of its time updating loop counters - in other words it would be too slow. This is an occasion when memory is compromised to get a little more performance; it's a necessary evil.

THE CONTINUING STORY

When the scroller has done all four phases, it can have a rest... well not really because that's only a character's worth of scrolling which, however interesting, doesn't have much practical use. To achieve continuous scrolling the routine endlessly reads the joystick for its direction; only a centred joystick or a collision with the map boundaries will stop the scroller from doing what it does best.



landscape, they're not going to thank you. Face it -(1) 3-1-1-25-10 they're not going to like you, either. Build the difficulty level up slowly and let the player learn from their mistakes (it's called a sensible learning curve).

someone else to playtest your game - if you've written a game then you're obviously going to be very good at it,

but if you don't get a second opinion, you'll never know how good it is, or which bits need to be changed.

Always take time to draw your sprites they're one of the most important elements in the game when it comes to impressing or pleasing the player, and a variety of interesting enemies keeps them interested for longer. It also helps if you always draw your sprites on a black background - they look better.

Vary your attack patterns. If each enemy attacks in the same way, your player will fall asleep from sheer boredom.

Use the object editor. Moving objects that are essentially irrelevant show the player that you've spent a lot of time worrying about attention to detail. If the player gets to fly past a crowd cheering them on, they'll know you've spent time on this game.

Finally, try to use a sense of humour. Computer

games are, after all, supposed to be fun, and if you recognise this, so much the better. It's easier for an enemy to kill a player if the enemy happens to be a tin of pickled yams flying at them screaming 'banzai', or something.

CF's regular SEUCKster, Jon Wells, has been captured by aliens this month, so Simon wrote his feature while Dave rushed off to conquer the alien race and rescue him.

oads of people write SEUCK games - I know because I get buried daily in a pile of Jiffy® bags full of covertape submissions. It looks as if quite a few people have got the idea of writing good SEUCK games from the previous Secret of SEUCKCESS features, but there are still a few left to reach. Coming up, then, are ten things you have to remember when writing your masterpiece:

Decide on a scenario. Standard alienbashing games are never going to capture the imagination of either the player or the reviewer (if your game gets that far), but a nice, novel plot does wonders. Check out some of the more recent re-hashed covertape game plots if you want a good example.

Keep your map simple - it's very difficult for the player to navigate, steer and shoot things at the same time. If you plan to give the player a choice of roots, make sure both are possible (just make one more difficult than the other), as they won't thank you for letting them play for five minutes only to come across a dead end.

The screen doesn't always have to scroll. If you want to keep the player interested, have enemy or an end-

them stop occasionally to fight a slightly larger of-level

used to advertise mash potatoes. quardian. There's no point in having nice big aliens floating around if you don't give the player the chance to stop, savour them, and kill them properly and with style, instead pushing them forward past the guardian before they've had a chance to let loose with the ammo.

I thought Alien Smash

was a reference to

those robots who

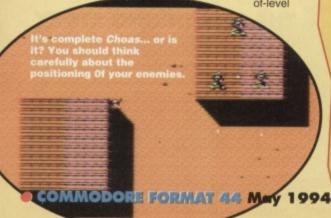
Try to give each different sort of enemy its own particular sound effect - it's always nice to have different things making different

sounds, and it'll keep the player interested for a hell of a lot longer if you give them variation when they kill or collect something.

Don't make your game too difficult to begin with. If the player gets killed twice within the first five seconds but then has to spend several minutes flying past a dull, featureless

I stood outside Sainsbury's in Bath and asked a few people what they thought the problem was with most SEUCK games these days. Here's what they had to say:

- Mrs Queegee Bananahoe, 67. "I don't like the way them there shooty games don't let you take a breather. It'd be nice to stop moving forward and spend a few minutes making a cuppa, or shooting the giblets out of some gigantic mutant space turkey."
- Lionel Blair, popular entertainer. "Some people always use the standard alien attack patterns, and it's boring (does a little tap dance). What am I famous for, anyway?"
- Cyril Bristlecocker, nine. "I don't like the way the kernel engine is programmed. Imagine not creating a form of index register using a second stack? The whole thing must run so many nanoseconds slower than it could, you know. Words fail me...'
- Roger Obviouslymadeupname, 35. "I think it's appalling. It should be banned, as I said in my letter to my MP, the Queen, and Philip Schofield. Am I going to be on telly, then? What exactly is a SEUCK game, by the way?"



HOW

COMPUTERS

WORK



Fancy broadening your horizons? Don't join the foreign legion, just get yourself a book, a comfy seat and a few hours off and try a spot of reading. That's what Hutch did...

SPECTACULAR COMPUTER CRIMES

By Buck Bloombecker

ISBN 1-55623-256-X When

computers started creeping into every facet of everyday life.

someone somewhere knew that there was illegal money to be made. Sure enough it wasn't long before the hacker started probing where he shouldn't with his modem and seeking out data that wasn't

his. Of course, shortly after the first computer crooks arrived

on the scene, the first computer police appeared as well - hard men from the Bill armed with modems of their own and some rather interesting flashing blue LEDs. Bloombecker's book is all about these crooks, but it

victims and the hacker detectives. Having dealt with the mechanics of hacking, the book deals with the ethics and politics of data theft. In fact it's fair to say that this is the point at which I lost interest. With a title like Spectacular

also covers the

Computer Crimes you expect to read about lots of interesting hacking, but the book quickly descends into a murky explanation of the long term implications. Basically, if you're planning to write a long essay on the political and economic implications of

databases. Listed within this chunky tome are thousands of specialist and general computer services catering to an absolutely enormous array of interests. Here are some examples of the forums and clubs located on the network:

- ◆ Comics Forum Compuserve
- Amateur Radio Forum Interne
 - Shenanigans (practical jokes and random humour) – Usenet

 • Dead Heads Forum (dedicated to the Grateful Dead) – Internet

 - Magill's Survey of Cinema (whoever Magill is) - Compuserve

There's an enormous array of useful and trivial data waiting to be accessed. The book operates like Cyberspace's Yellow Pages - you look up the topic you want in the index and see which of the on-line services cater to your needs. I can strongly recommend the

book, whether you've got a modem or are considering getting one, because you can guarantee that there's plenty of info you're missing out on, even though it's right under your nose

Rating: A+

net guide

hacking then check this out: if on the other hand you're looking for a spot of late night reading then get the latest Ben Elton.

Rating: C-

HOW COMPUTERS WORK

By Ron White ISBN 1-56726-094-7

Or more to the point how every facet of a computer and every peripheral you're ever likely to attach to a computer works. This is one of those books

that includes lots and lots of cut-

away cross-section diagrams which give you the inside view of all the processes you've wondered about but could never be arsed to investigate.

The book progresses from the basic building blocks of computers (operating systems, RAM, microprocessors) to peripherals (how CD-ROMs work) to keyboards and onwards to networks and laser printers. Each of these gets its own full colour illustration and a simple explanation of how it works. All in all, I learnt more from this book in one evening than I did in a year of degree level Information Technology at Wolverhampton Poly (I don't miss you Wolverhampton). I can heartily recommend it to young and old alike - basically if you're mystified by technology then check this out. Rating: A

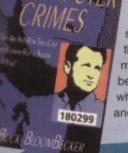
NEWSLETTERS FROM THE DESKTOP

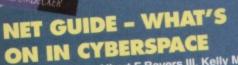
By Roger C. Parker

ISBN 0-940087-40-5 Now you may not think so, but designing interesting pages is a tricky old task. It typically takes Ollie about half a day to create each page you see in this issue - and he's very quick and properly trained (he doesn't wet the bed or anything). If you're new to

page design then it's all too easy to come up with chronically bad designs which look complete dogs' dinners.

Parker's book explains how to effectively create good pages - it covers everything from font usage and headlines to graphics and charts. If your parish newsletter looks like it was designed by your cat, you'll learn a lot from this book. And even if you think you're a top designer you'll undoubtedly pick up a few hints. Rating: B





By Peter Rutten, Albert F Bayers III, Kelly Maloni ISBN 0-679-75106-8

The writer William Gibson identified a change in the way that we communicate with each other in his book Neuromancer. He reckoned that as modems became

quicker and more widely available, everyone would be connected to whole oceans of data. Anything you wanted or anyone you wanted to speak to could be accessed by entering the Net. Gibson reckoned that as these computer networks became larger and larger, so they

would merge and communicate with each other. The spooky thing is that he was absolutely right - we may not use virtual reality helmets to navigate our way round the Net, but you can still access an absolutely huge amount of data with a computer and a modem.

And that's what this book's all about -Cyberspace, the world-wide network of computer





OR SA

It's big, it's huge, it's... hang on, hasn't this strap been used somewhere else else this issue? Ah, who cares? Welcome to a twice-as-big-as-normal Buy-A-Rama happy bargain hunting...

WANTED

- Hagar the Horrible and Chuck Rock. £10 each or £8 not boxed. Justin 0223 562530
- 1701/1702 monitor preferably with box, manual, leads. Also wanted, a 1541 disc drive demo disc. 0235 550582
- Please help! Manual for C128, Buy or loan. Telephone 0761 416 126
- 1541 MK2 Oceanic or similar disc drive for C64 (smaller the better, so not the MK1). Also, Action Replay, must be cheap! Keith 0869 241593 after 6pm.
- Power adaptor for C64, will pay around £12. Will meet locally. Write to Mr Cochrane, 217 Gaunt Road, Sheffield.
- Speech synthesiser (tape or disc) for C64. Also Action Replay cartridge. Steve 0482 833203
- Tobrub, Rail Road Boss and Battle for Normandy (tape or disc). Will pay reasonable price. Andy Hudson, 5 Trocedero Court, Normanton Road, Derby DE1 2GR.
- Geos, Racing Destruction Set or Revs(+). Any format, reasonable prices paid. Write to Mr M Dainty, 2 Lady Leasow, Radbrook Green, Shrewbury SY3 6AB.
- IEEE linterface expansion card. Contact Tony on Hatfield 266371
- Mikro 64 Assembler cartridge and instructions or any Assembler/Tutor package. Will pay good money! Andy - 0543 467445 after 5pm weekdays.
- Cover tapes from issue 1-38 of Commodore Format. Write to Eddie at 23 Folkstone Drive. Alvaston, Derby DE24 0HT.
- Supreme Challenge Pack. Will pay up to £3.99 depending on condition. Telephone Ryan on 0793 812442 after 4pm.
- Has anyone got a game called Encounter on the Novogen label (released about '84)? Also the first Monty Mole game. Phil Riding, 160 Capel Rd, Forest Gate, London E& 0JT.
- 1541 MK2 disc drive wanted. Telephone James on 0896 831278 (eves).

- · G.A.C. will pay reasonable dosh. Chris Morris, 28 Brackley Sulgrave, Washington, Tyne & Wear.
- Daley Thompsons Super Test and Glider Rider (but no pirates!) will pay up to £2 each. Darren 0533 884410
- SEUCK (cass). will swap Quattro Racers, Last Battle and Wild Streets for a working copy with manual. Joe Griiffin, Ballylast, Castle Finn, Co. Donegal, Ireland.
- 1541 Mk2 disc drive for C64. Also a AR. MkV or MkVI. Will exchange Game Gear with 7 games and Master Gear converter all as new. John Campbell, Lunnaigh, Derrybeg, Co. Donegal, Ireland.
- Elvira II, Manic Mansion, The Bards Tale, or Frankie goes to Hollywood (disc or tape). Also icon-driven adventures. Dave Ivall, Perelandra, Gypshates, Langton Matravers, Swanage, Dorset BH19 3HQ.
- Mini Office 2 on disc wanted. Contact Mr N Taylor on 0962 883649
- Books on Assembly for C64. Also Mini Office 2 (disc version) with manuals. Telephone Francis on 0504 268697
- Geos 128, Geos 64 V.2 or above, Commodore serial mouse, Superbase, Commodore Ram expansion unit, Please Help! John Chatten, 23 Braemar Rd, Fallowfield, Manchester M14 6PR
- Boulderdash (I, III, & IV) cassettes only £5 each. Mr D Smith - 0303 243542 or write to 43 Pavilion Rd, Folkestone, Kent CT19 5RL
- Colour monitor suitable for C64 to replace my faulty TV. Must be in good condition. Matthew 0954 231588
- Swap Turtles for the Simpsons Bart vs the Space Mutants. Michael Guy, 28 Banksia Cres, Blackwood, Sth Australia.
- Katakis/Dearis on tape or disc, must be original box budget or the first cut version. Will pay for P+P as well as price. I also want CF issue one. James - 0662 242280
- Microtext, Teletext Adaptor for C64. Will swap for a radio scanner or reasonable cash. Mr G Gallagher 20a Darling St, Enniskillen, Co Fermanagh, BT 74 7EW.
- Super Monaco GP cassette, swaps or cash. Graham - 091 3889811
- Mini Office 2 (repeat T.W.O.) plus instructions. Will swap for the Epson printer FX-850/1050 users guide. Alf - 0244 800013
- Mini Office 2 (tape version) for C64. Must be boxed original software. Robin 0248 601988
- Ugh! Star Control, Wizards Lair, Starquake, Supremacy, Creatures 2, Swap for Pscho's Soccer, Spy vs Spy, First Samurai, Urdium, Toobin, APB. Tel: 0453 544428

- Jack Nickaulas Greatest 18 on disc only. Datels Enhancement disc maybe. Swap for other discs. John - 081 292 5577
- Colour printer. Must be in good working order and at a reasonable price. Also Mini Office 2 and Lemmings (C64 cassette). Kieran (Ireland) 069 83091 (eves).
- C64 or C128 with games and joystick, WP program and cheap printer if possible. William -0775 761728 (after 4.30pm).
- CF25 with Sarecen Paint on cassette. Tel: 0332 550497
- Bug Bomber and First Samurai. Will pay £10 for each in good condition (less if not...). James -041 951 4892
- You send me Encounter by Paul Woakes, I send you a £10. Also has anyone got a FreezFrame cartridge? 081 593 8179

 Are you a Tech-Head type person who could help a young chap with his new disk drive as his dad cannot understand the manual (typical...). Master B Hindmarsh. 10 Fleming St. Redcar, Cleveland TS10 1BS or call on 0642 491262.

FOR SALE

- More than a hundred C64 cassette games from 50p to £3. Call Domonic on 0264 356492 for full list
- C64 computer with Action Replay Datasette. 24 cassettes, over 200 discs, 1541 Mk2 disc drive which has fault, 20 mags, all boxed £150. telephone 0942 727052.
- C64 games for sale. Hundreds to choose from. send SAE to Simon Rofe, 6 Merrion Close, Tunbridge Wells, Kent, TN4 9JJ. NB: all originals.
- C64 with discdrive, Datasette, two joysticks, mouse, loads of mags and about 700 games. All works, sell for £200. Daniel - 0243 373596
- Commodore 64, 200 games, 2 joysticks, tape decks, user manual, games programmer book, CF issues 22-41, games include BMX, Suntcar Racer. Also Coomodore Force mags 7-27. £200 the lot. Call Jeffrey on 0206 734013 after 4pm.
- C64 games for sale, cheaper than shops, not copies only originals! Write to 40 New St, Bicester, Oxon OX6 7EY
- Games like Turrican 2, Lotus/turbo, Sky-Fox, etc., Send SAE for price list to Tim Roberts, 86 Barrack Road, Hounslow, Middx TW4 6AW
- C128D with built-in disc drive (looks like a PC). Plays all C64 software, Much more with Game+ utilities on disc. £99 complete. Daniel - 081 679 8988
- Commodore 8032 SK computer with 8250 twin disk drive (C64 compatable). £50 only. Phil -0332 850186 (Derby).
 - Airwolf and After Burner in a swap for Flimbos Quest. Please write to me, Jonathan, at Macknagh, Lisnaskea, Co. Fermanagh, NI.
- C64 and 50 games plus joystick, all for just £100! Call 0592 891264
- McDonaldland, Cool World, Trolls, Jurrasic World, Deep Sea World, The Addams Family and Wizball. £5 each or swap for Sleepwalker, ATF, ATF 2, Night Shift or Lemmings. Also any working or broken joysticks wanted, swap for two games. Phone Rowan on 0821650409.

- C64, disc drive, Action Replay 6, tape recorder, excellent cond. boxed. Lots of software, books and magazines £120, phone 0274 870018 (Bradford).
- Assault Course, X-15, Rolling Thunder, F-16.
 Philip 0656 647830 (Bridgend).
- C64 or C128 (C128 costs £20 extra) plus 150 games, joystick, Datasette, some cartridge games, manuals. £900 worth for just £150!!! call Sebastion 0962 868193 (Hants).
- CF mags and tapes 31-36, plus 14 (tape only) and 23 (mag only) £1 each ono. Tel: 0902 304756
- CF 1-42 complete with cover tapes all in good condition. Will accept best cash offer. Call 071 254 2999 (after 5pm).
- Commodore C64 Starter Pack Spares or repair £10. Also C16 plus four games all original and boxed from 50p each. Send SAE for list to: C Scotcher, 4 Oulton Close, Langney, Eastbourne, East Sussex, BN23 8DH.
- C64, 90 games, Datasette 2, jotsicks, boxed, instructions, mags. Excellent condition only £80. Gameboy plus four 90 per cent plus games, case adaptor, vgc, instructions, boxed £85.
- Amstrad PCW8256 with printer, disc drive, green monitor, WP, instructions, DR Draw, DR Graph, DR Logo, SuperCalc (spreadsheet), Basic and spare discs, 256 of memory, £70 for the lot. Contact Simon on 0234 212468 (Bedford).
- SlySpy, Rastan, Carnage, T2, Rengade,
 Supersprint, Barbarian 2, Turrican 2, I Ball, Driller,
 Hang On, Spindizzy, Game Over II, all £1.05 each
 or £12 the lot! James 041 951 4892
- 25 games including classics like Driller, IK+, Tetris, Zoids, Aliens, and Spindizzy. Excellent condition, only £40 (may split). Andrew 0506 853520
- PD for the C64 for sale. Very competeative prices. The more you buy the better the deal. Send SAE for a catalogue to EONIC PD, 18 Heysham Park, Morecombe, Lancs LA3 2UD.
- C64 discs for sale. Ultima 4,5,6 Trilogy £20, Sim City £10, Terminator 2, Simpsons, Turbocharge £4 each. 0235 764221
- C64, 2x 1541 discdrives, microdrive, business software plus many utilities. Excellent condition.
 £250 ono. Contact Martin, 6 Oak Rd, Tiddington, Stratford upon Avon, Warkwickshire anytime (can be seen working).
- CF issues 1-40 with all tapes! R Richards, 29 Kirkstall Place, Milton Keynes MK6 2XD.
- C64, disc drive, Datasette, joystick, Action Replay cartridge, £1200 worth of software all in excellent condition. Sell for just £220 ono! lan − 0384 79011 (between 4-7pm).
- C64 with Datasette, games £59. Also sound sampler, speech synthesizer, light gun and games exopert cartridge. Daniel 081 6798988.

- C64, Datasette, disc drive, modem, printer, F/Frame, mono-monitor (green), quick data cassette, games, mini office, music studio, FS2, manuals, Etc.£300. Also Amstrad PCW + printer £150. Brian 0772 204393
- C64 Datasette + joystick and over 100 games old and new. Please send SAE to 57 Holdenhurst Avenue, Boscombe, Dorset BH7 6RB for a free list.
- Nintendo Entertainment System, two games Wrestling and Punchout, mains lead and two controllers. £25 the lot. Contact Jeffrey on 0206 734013 (after 4.30pm).
- Rampage, Energy Warrior, Super Dragon
 Slayer, Altered Beast, Flight Simulator, Rugby
 Manager, Con-Quest. Will sell all for £15 or just £2 each! Malcolm 031 6696575
- CF tapes for sale issues 3-40. Write to J Orrell, 13 Coronation Cresent, Houghton-le-Spring, Tyne and Wear, DH4 5JT.
- Assassin, special edition £4.50. Amiga SF2 £14 with £2 for A1200 version. Plus other goodies, all unwanted compo prizes! Tel: 0795 661319
- C64, 50 games, datasette just £95! Also Commodore Format 11, 15-21,23,24,27-39 including tapes, £25! Tel: 0208 76962 (after 6pm).
- Commodore Format mags and tapes issues 1-39 all good condition £70 ono. John – 021 359 5981.
- C64 disc games Hook, The Addams Family, Cool World and Lethal Weapon. Brand new, £8 each, £30 for all four. Also C64 games on tape. Approx 72 including four compilations (28 games). Sell £50 the lot. Seperately at £1 a go! 031 669 4937 (eves)
 - Help! Can anyone transfer a Quilled adventure written on the C64 to an Amigacompatible format? I'm willing to pay. Tel Angus Mainwaring on 0985 846033.
- Bruce Lee, DT Decathlon, Fallen Angel, Giants compilation (three games), Now games compilation (six games) and loads of others. Prices vary so ring Timi – 071 703 1818 (Fri and Sat only).
- Bargain! Commodore 16, Joystick, games, mint condition and ideal for beginner or young children.
 Just £20! Tel Graham on 091 3889811.

PEN PALS

- Pen pal wanted by boy who likes his C64 and 2 Unlimited. Aged 10-12, male or female. Write to Barry Forsyth, 66 Glencolder Cres, Bellshill, Lanarkshire ML4 2NG.
- Pen pal wanted for 11 year-old girl who likes pizza, drawing and computer games. Write to Kelly Ann Bainbridge, 6 Kingsway Sq, Downhill, Sunderland SR5 4BA

- Hi! My name's Jessica and I would like a male pen pal aged 13 plus. I'm interested in computers and music. Please send photo if possible. Jessica Thomas, Hafod Y Llyn, Maes Y Llyn, Llanfairfechan, Gwynedd LL33 0BN.
- Pen pal wanted by 14 year old boy. I will reply to all letters. Karl Parker, 42 Bridge St, Bishop Aukland, Co Durham DL14 7PY.
- C64 user seeks pen pals, 12-13 yrs, M/F to chat, swap games, tips, jokes. Write to Justin, 19 Nevill St, The Leys, Tamworth Staffs B79 7RP.
- C64/128 pen pals! Swap games, utilities, etc.
 Randy Jenkins, 1510 Skyland Drive, Hinckley, Ohio 44233, USA.
- 15 year-old boy seeks female pen pal with C64. Photo if possible. David Knee, 7 Henley Terrace, Bramley, Leeds LS13 3AL.
- I want a pen pal of any age who likes to exchange tips, cheats and jokes etc. I don't mind where you live so write to Paul Gates (aged 12), 248 Batley Road, Wakefield, W Yorks WF2 0AL.

MESSAGES

- Thanks to Mum for buying CF every month.
 Love James (aaah...).
- Big shout to Peeabs and Cooky, crall ya villy dula philly from Maggera.

USER GROUPS

- Pen Friend Club. For info send SAE to Sean Smith, 54 Meadowfield Drive, Wakefield, West Yorkshire WF4 1JE.
- Pen Pal Club. For info send SAE to Brian Cunningham, 29 Morar Drive, Foxbar, Paisley, Scotland PA2 9BB
- The Swap Club. We swap all C64 games. Phone Dean on 0604 718480 (around 6pm).
- C64 Modem users wanted with Teltron 75-1200 band for sending programs and Geos programs on 5.25-inch disc or tape. Send your software list and I'll show you mine! 100 per cent answer. Call Wim on (Belgium) 00-22-3-235-10-63. Write Cronjestraat 3, Code 2-40 Antwerp, Belgium.
- SEUCK and other games club. Mill Cottage, Burrelton, Blairgowrie, PH13 9PP. send a game and I'll send you info and a game FREE!!
- C64 programmer is looking for musicians and graphics designer and decoders to create new great games! contact TAREK, BP222, 91130 Ris Orangis, Cedex, France.

SERVICES

C64 Zone! The great C64 mag for only 20p and SAE. For a free info pack ring 0254 705310. Do not delay, call me today.



BUYING? SELLING? DOING SOMETHING ELSE THAT THE C64 WORLD SHOULD KNOW ABOUT? THEN CF IS THE PLACE TO ADVERTISE...

And it's as easy as filling in this 'ere form and sending it to us here at Uncle Dave's Buy-A-Llama, *Commodore Format*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. And it's free! But that doesn't mean you can take liberties. It's one word to a box in the grid. Cram in more and your ad will be headed binwards.

				-				-
ж.	UY-	$\Lambda - \mathbf{E}$	- A - B	A 10				
-8						-		

ADDRESS				
Classification: Tick bo	x; 🖵 For sale 🖵 Wanted	Services User groups	☐ Pen pals	

of pages. 3 Unfortunately the PRINT SPRITE option that was destined for FROST never actually got implemented. I have listed below a couple of short Basic programs that will do the job admirably; the first will print out high resolution sprites, and the second will cope with

Life isn't easy. It's a hard harsh world out there. But Jason Finch relieve you of some of the burden of everyday life by answering your techie queries. What a hero he is.

2 Are you being serious? A games listing would fill at

multicolour ones. It uses three different characters to represent the three different colours. To change the sprite that is printed, change the value of SP in lines 110 for the hi-res version, and 120 for the multicolour version. SP points to the start address of the sprite. The D=4 on the end of each of those lines tells the program to which device it should output the s the program to which device it should outp te. Change it to D=3 to display it on-screen.

te Change it to D=3 to display it on screen. 100 REM HI-RES SPRITE PRINTER BY J.FINCH 110 SP=13*64:D=4

120 OPEN 4,D

130 FOR Y=0 TO 20:FOR X=0 TO 2

140 FOR J=7 TO 0 STEP-1

150 IF (PEEK(SP+Y*3+X)AND2^J) THEN

170 NEXT J.X:PRINT#4:NEXT Y

You can change the characters that the multicolour version uses by altering the numbers 46, 43, 79 and 35 in the DATA of line 210. The other numbers (the 3, 12, 48 and 192) must not be changed –
these are used to determine which colour is at
which position in the sprite.

100 REM MULTICOLOUR SPRITE PRINTER BY

J.FINCH 110 FOR X=0 TO 3:READ B(X),P(X):NEXT X

120 SP=13*64:D=4

140 FOR Y=0 TO 20:FOR X=0 TO 2

160 N=(PEEK(SP+Y*3+X)ANDB(J))/(2^(J 170 C\$=CHR\$(P(N)):PRINT#4,C\$;C\$; 180 NEXT J,X:PRINT#4:NEXT Y 190 CLOSE 4 200 END

210 DATA 3,46,12,43,48,79,192,35

It is more than likely to do with the fact that it is a parallel printer, and could change things to do

SCANDALOUS

Dear Techie Tips,

Are there any scanners or the C64? If so, please could you tell me where to get one and where to get software for it.

How about a games listing every month?

3 I have a Star LC10C printer. Is there any way of printing out sprites (designed using FROST) on it?

4 At school we have several Star LC10C printers but they have a parallel interface. When I had a look at the DIP switches there were four more than my serial version. How come?

5 Are there any word processors with spell checkers for the C64?

6 Also, are there any word processors with some decent fonts?

7 Could you tell me a little more about Datel's

colour driver (what it looks like, how it would benefit me, and so on)? Graham Bates, Cambridge.

1 A scanner was available for the

C64 a long time ago; it was made in Germany and with a German manual, I

Here's a chap who's no stranger to high scores tables - Andy Cole, top scorer in the league so far this year.

WELL PLAYED!

Dear Techie Tips,

I am writing a game in Basic and I want to add a high score table. Please could you give a listing that shows how to deal with, say, ten scores with the players' names. Graham Jenkins, Derby.

The following program holds the names in the array HS\$() and the scores in the array HS(). Line 70 which act as ac-280 is reported to Co.

ine 320 incode the

10 REM HIGH SCORE TABLE
BY J.FINCH

90 PRINT "YOU SCORED"; SC

100 IF SC>=HS(10)THEN GOSUB 250:GOTO

110 PRINT:PRINT "YOU DID NOT MAKE THE HIGH SCORE TABLE!"

120 PRINT "PRESS A KEY"

130 GET A\$:IF A\$="" THEN 130 140 GOTO 70

150 :

160 REM PRINT TABLE

210 NEXT X

 I was wondering if you could include a sprite designer on the Power Pack please? John Kicinski, Australia

en of

43, 79

TER BY

t that it is

s to do

O:GOTO

AKE THE

130

BLE

You obviously missed FROST, the sprite designer featured on the CF32 Power Pack last year, so turn to Back Issues on page 49 now.

• Can you give me a description of the function of the first 1K addresses? Brian Plunkett, Tyne and Wear

with how data is sent and received through the cable,

- 5 SuperScript has a spell checker, and you can also get GeoSpell which spell checks documents created on various GEOS applications.
- 6 If you want a word processor that can output a wide variety of fonts, you need one which is graphics-based, such as the GEOS range or the Word Writer ones. For more information on GEOS, write to The GeoClub, 55 High Bank Road, Droylsden, Manchester.
 7 Datel's Colour Printer Driver is a piece of software, so it looks like a disk or a tape. Basically
- it will output colour bitmap screens in colour to a colour printer. I'll make that clear because black and white printers cannot turn themselves into colour printers using this driver. So you save out screens in Advanced Art Studio format and then load them into this piece of software; it will then dump them to a compatible colour printer.



STRINGS ATTACHED

Dear Techie Tips. I am writing a text adventure game using string variables, but I've run out of letters! I've used AS

to Z\$ and now I don't know what to do! What do I do, use numbers or double letters or something? Please help me! By the way, your Loader Maker featured on CF37's Power Pack was so brill that I'm using it with my adventure game! James Draper, Adlington.

You can either add single digit numbers to single letter string names, or you can use double letters. So things like A1\$="COMMODORE" is valid, as is D5\$="TEST" and JD\$="FORMAT". Bear in mind that if you use strings with more than two characters in their names, the computer will ignore anything over the first two. So, you could do NAMES="JAMES" but this is treated as NA\$. Alternatively check out using arrays; in that way you can use the same variable name for a lot of different strings by using an "index number" in brackets afterwards. Check out the following program:

have their queries answered this month? Okay, if have their queries answerse you're that desperate I'll include a program on the you're that desperate I'll include a program on the Power Pack in the next couple of mon

● I cannot load the Mini-Office 2 modem program COMMS from disk, no matter how hard I try. The program will neither load with or without the modem connected. The modem does work – it will dial and get through to other users and so on, so it appears to be okay. However, I lack the software to control it properly, so it isn't much use.

Robin Ward, Gwynedd.

0 REM STRINGS ATTACHED BY J.FINCH

10 RM=3:OB=4:DIM D\$(RM),OB\$(OB),PL(OB)

20 FOR X=1 TO RM:READ D\$(X):NEXT

30 FOR X=1 TO OB: READ OB\$(X), PL(X): NEXT

40 LN=1

50 PRINT: PRINT "YOU ARE ";D\$(LN)

60 PRINT: PRINT "YOU CAN SEE "

70 FOR X=1 TO OB: IF PL(X)=LN THEN PRINT

80 NEXT X

100 REM THE DESCRIPTIONS

102 DATA "ON A FOREST PATH"

200 REM THE OBJECTS

201 DATA "A BOX OF MATCHES",1 202 DATA "AN OIL LANTERN",0 203 DATA "A LARGE STONE WELL",2 204 DATA "A CANDLE",1

GIMME INPUT

Dear Techie Tips, I have been a reader of your mag for some years now, and think it's great, but – and please don't think I am criticising...

Why don't you have a "correction bit" in your mag, just a few lines to

put right those awful printing errors.

- 2 PLEASE PLEASE PLEASE (100,000 times). correct the Text Fall listing from CF36. You did say you would put it on the Power Pack. Has the phantom virus struck again?!
- 3 Could you please give us a program which allows an input to be made on a high res screen? I Lloyd, Halesowen.
- This is done occasionally, but as the proggies were supposed to be on the Power Pack, corrections were not printed. It's not as if the listings are littered with them, anyway.
- Indeed, the phantom virus struck again. Here for everyone to drool over, are the corrections to the lines that went wrong:

17 DATA 208,014,198,081,208,010,169,075, 25 DATA 252,165,252,201,003,208,035,165, 30 DATA 049,234,076,075,192,169,078,133

If the COMMS program won't load, it's likely that your copy of Mini-Office 2 is slightly faulty; have you tried getting a replacement copy?

Alternatively, you could try various public domain Alternatively, you could try various public dollars libraries for different modem software – it's not as rare as you might think.

Why did Commodore eight sprites? Jamie Fitzpatrick, Portsmouth.

the world?

In CF36 I printed a routine that would display text on a bitmap screen, and in CF39 there was an input routine. These can be quite successfully merged to produce a perfectly decent bitmap input program.

hap input program. However, as it is entirely in Basic it is painfully slow. Lines 40 and 50 show you how to call the input routine at line 1000; A\$ contains the text that requests an input, X and Y are the co-ordinates at which this is printed. The input routine itself calls the text plotting routine at 1100 a number of times to display the text.

1 REM BITMAP INPUT BY J.FINCH

20 FOR X=0 TO 999:POKE 1024+X,22:NEXT X

1010 GOSUB 1100:X=X+LEN(A\$):Z\$=""

1020 A\$=CHR\$(160):GOSUB 1100

1040 K=ASC(K\$):IF K>90 THEN 1030

1060 IF K>31 THEN Z\$=Z\$+K\$:A\$=K\$:GOSUB

1070 IF K=13 AND L THEN A\$=" ":GOSUB

1080 IF K=20 AND L THEN A\$=" ":GOSUB

1100:X=X-1:Z\$=LEFT\$(Z\$,L-1)

1090 GOTO 1020

1100 REM PLOT TEXT IN A\$ AT (X,Y)

1110 POKE 56334, PEEK (56334) AND 254

1120 POKE 1, PEEK(1) AND 251

1130 FOR N=1 TO LEN(A\$)

1140 A=ASC(MID\$(A\$,N,1))

1150 IF A>64 AND A<91 THEN A=A-64

1160 IF A>192 AND A<219 THEN A=A-128

1180 POKE 8192+Y*320+(N+X-

1) *8+LN, PEEK (53248+A*8+LN)

1200 POKE 1, PREK(1) OR4 1210 POKE 56334, PEEK(56334) OR1

1220 RETURN





OU CANNOT

Dear Techie Tips. Thank you for printing my other letters – your help was gratefully received. Now I'm having a few

problems with the MSB (\$D010) parts to do with sprites. Who better to ask than the main man himself? I understand how it works but the way in which to use it is giving me untold drama. How can I move a sprite all the way across the screen and back in machine language? I'm getting confused about how to turn the MSB on and off at the appropriate times from within a loop.

2 Can you start a machine language section? 3 Can you give me some advice on printers

and how they all work?

My mate says there's no difference between a plotter and a laser printer because they both

use ink – is he right?

5 I want to be a mega-star like you (my hero).
Can you give me a little advice?
6 I want to make a fighting game but how?
7 If you print this letter there's something up

Steve Gillman, London.

You have to make sure that if the horizontal position of a sprite goes from less than 255 to more than 255, or vice versa, the MSB has to be changed accordingly. MSB, for the uninitiated, stands for Most-Significant Bit. The demonstration program below reads in a piece of machine code which allows you to do all sorts of nifty things like SYS 49152,0,4,1. That will move a sprite 0 four pixels to the right and will cope with the MSB if necessary. The format for calling the code at 49152 is

SYS 49152, sprite, pixels, direction where sprite is in the range 0-7, pixels works for 0-255, and direction is a 0 for left and a 1 for right. Lines 18-24 show you how to put it into action.

0 REM HORIZ SPRITE CONTROL BY J.FINCH

1 FOR X=49152 TO 49251:READ

Y:C=C+Y:POKE X,Y:NEXT X
2 IF C<>13843 THEN PRINT "DATA ERROR" : END

3:

4 PRINT CHR\$(147)

5 FOR Y=0 TO 24:POKE 1053+Y*40,101:POKE 55325+Y*40,1:NEXT Y

6 PRINT CHR\$(19); CHR\$(5); TAB(30); "MSB"

10 FOR N=0 TO 62:POKE 832+N, 255:NEXT N

11 FOR S=0 TO 7

12 POKE 53248+S*2,200+INT(S/4)*50

13 POKE 53249+S*2,60+S*21

14 POKE 53287+S, (S AND 3)+2

15 POKE 2040+S, 13

16 NEXT S:POKE 53264,0:POKE 53269,255

18 FOR L=1 TO 15

19 FOR S=0 TO 7:SYS49152,S, (S AND

3)*3+1,1:NEXT

20 NEXT L

21 FOR L=1 TO 15

22 FOR S=0 TO 7:SYS49152,S, (S AND

3)*6+1,D:NEXT

23 NEXT L

24 D=1-D:GOTO 21

THERMAL HARDWARE

Dear Techie Tips,
I have a Brother HR-5 thermal printer which is currently hooked up to my Amiga. But I would like to know if it is at all possible to use this printer on my Commodore 64. If it is, could you please tell me what type of lead I need to buy so I connect it and could you please tell me I could purchase the lead and how much it ould cost. Keep up the brilliant work on Commodore Format.

Brendan Winstanley, Merseyside.

SOLDIER. Meedmore's number is 🕿 051 521 2202

50 DATA 032,080,192,133,251,032,080,192

51 DATA 133,252,032,080,192,133,253,173

52 DATA 016,208,133,254,165,251,010,170

53 DATA 189,000,208,164,253,240,020,024

55 DATA 208,166,251,093,092,192,133,254

56 DATA 076,058,192,056,229,252,133,252

57 DATA 144,236,169,250,205,018,208,208

DATA 251,165,251,010,170,165,252,157

59 DATA 000,208,165,254,141,016,208,096

60 DATA 032,014,226,032,158,173,032,247

61 DATA 183,165,020,096,001,002,004,008

62 DATA 016,032,064,128

A spiffy feature of this code is that you can call it from another machine code program by doing this:

LDA #sprite

STA SFB

LDA #pixels

STA SPC

LDA #direction

STA SFD

JSR \$C014

2 There's one starting next issue.

3 No, I'd rather run around an airport concourse with no clothes on.

A blow torch and a lounge fire could both use gas, but I'm sure you're friend would know the difference if someone held his head in front of a blow torch for a couple of seconds. Please note, kiddies, this is not a recommended experiment.

The first thing you'd have to do is get a life.

Tell your mates that their girlfriends are hideous and I'm sure you'll start up a good fighting game.

No more than is up with you, pal.



CHARRED

Dear Techie Tips, Take a look at the following program for me. It's meant to ask for

and then display a big version of the ROM character that goes with that number. It's then supposed to print the DATA for that number. However, one problem, it doesn't work. Here's the program:

10 PRINT CHR\$(147)

20 INPUT "SCREEN CODE (A=1)";C

30 AD=C*8:AD=14336

40 FOR I=0 TO 7:M(I)=PEEK(AD+I):NEXT

50 FOR J=0 TO 7:FOR K=7 TO 0 STEP-1

60 IF (M(J)AND2^K) THEN

PRINT"*";:GOTO 80

120 PRINT:PRINT "PRESS ANY KEY"

All I get is an "at" symbol and DATA 0,0,0,0,0,0,0,0. Please help me. Willie Clayton, Golders Green.

The program doesn't work because you define AD twice on line 30. You should add the the ROM characters – it displays redefined RAM characters starting at 14336. To display the real ROM ones, change the 14336 to 53248 and add the following lines:

35 POKE 56334, PEEK (56334) AND 254: POKE 1, PEEK (1) AND 251

45 POKE 1, PEEK(1) OR4: POKE

56334, PERK (56334) OR1.

You'll find a working version on the Power Pack. How's that for service with a smile (take my word for it - I'm smiling)? I'll be back to solve more problems next month.



"O, that this too, too, sullied flesh would melt, thaw and resolve itself into a dew, Or that the everlasting had not fixed his cannon

O God, God, how was

U God, God, how, weary, stale, flat and unprofitable seem to me all th uses of this world." Lighten up, Hamlet. Don't cry in your Heineken. Pull yourself together, man. Ah, there's no helping some personner. there's no helping some people. But if you need a C64 techie query resolved (but not into a dew) drop a line to Jason Finch here at Techie Tips, Commodore Format, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.

Hey, listen up, kid - you take the old Prof's advice and he's gonna make you a starfield...

looked up at the wondered what lurks in the you ever pondered over what alien life-forms are doing? And where they're doing it, whatever they are? Well, after this month's column you'll be able to do all that wondering the risk of getting be dealing

with creating starfields. Oh and because it is loosely related, I'll be showing you how the Apex Boyz managed that rather sexy snowfiel one of Creature 2s torture screens



briefly, it's a load of stars. That's it, nothing complicated at all. You may have seen start games and demos – particularly in games set in space, funnily enough. They come in all shapes and sizes: screens packed full of stars that zoom about

stars here and there; swirling patterns of stars that glow as they seem to zoom out at you.

Basically, you have definitely seen a starfield before, even if you never went, "Oooh, look, it's a starfield," when you first saw it. So what is a snowfield? If I need to tell you the answer to that, you'd better stop reading now!

PERFECT PARALLAX

he most impressive moving starfields are those that have stars moving at different speeds – lots of stars that move at lots of different speeds – in an effect which is known as parallax scrolling. The most adventurous coders

that is beyond the scope of what I'm going to tell you here, sorry.

to the track seem to be whizzing by dead fast (actually it's just you that's going dead fast, but I'll assume you've grasped that concept), the fields beyond them go a bit slower and the things that are

(hills, trees, Sherman tanks, etc) go even slower still. That is parallax. The more levels of parallax you have, the more convincing the effect is:

YOUR FIRST STARFIELD

Starfields are created using either user-defined characters or, if you feel like being cruel to yourself, using bitmapped graphics. They may appear to fill a whole screen, but you can make a pretty spiffy starfield using only, say, 16 different characters. The fewer characters you have, the more you are aware

So, imagine you have changed the definition of the letters A to P so that when you type ABCDEFGHIJKLMNOP all you get is a load of dots. Each character square on the C64 is made up of a grid of eight by eight pixels - or dots - which are

either lit or switched off. You liberally sprinkle a few lit pixels through these 16 character definitions. Then you just bung a load end-to-end so that you start off on the

left of the screen with ABCDE... and carry on repeating, going ...MNOPABC... all the way from left to right, from top to bottom. You'll now have a whole screen full of dots.

just what is in those characters to, say, the left,. This is the equivalent of rolling a sprite left using FROST (the excellent sprite editor program that was on CF32's covertape), only we're doing it with characters. If you

move certain lines of those characters more often than others, then some of the stars move faster. If you put some colour behind these redefined characters, the stars will appear to change colour as they move

across the screen. That's how the most simple of starfields are achieved – they're just a few characters epeated across and down the screen in different colours. Set off different colours. Set a piece of code to roll the definitions round and, hey presto – you're there.

BLUE PETER STARS

Well, in the true tradition of it all, on the Power Pack Proggy Selector and choose, *Prof's Simple Star Field*. Enter RUN to get it going. There will be a short pause while it reads in the machine code and then the screen will start to fill with characters of different colours. The colours are actually cycled from dark grey up to white and then back to dark grey; this will make the stars appear to glow. The characters themselves have screen codes 240 to 255 and are the keyboard graphics. The machine code redefines them into a load of dots and that's why you see a quick transformation from a screen of junk into a screen of three-level parallax stars at the end. Lines 15-50 of the Basic program fill the screen with the character line 60 starts off the movement and the DATA in line 129 represents the colours. Change it to 129

IT'S SNOW PROBLEM

The type of starfield I've described up to now is what I would call dumb. The code that drives it simply rolls a few character definitions and has no idea what's going on; it's not at one with the concept of stars. You can improve it by keeping track of each star and moving it include to the concept of the concept of stars. moving it individually, possibly animating it and getting some stars larger than others. That's effectively what the Apex Boyz did to get that snowfield. The snow goes down, whereas the stars go across. Also in the *Proggy Selector* is the code used by the Apex Boyz to produce that wonderful snowfield in *Creatures 2* – you'll see how the screen is first filled with characters which are redefined later

The difference is that the snowfield has animation and different-sized flakes. We'll leave the machine code version of the snowfield alone because it just shows you the effect, it doesn't explain how it's done. I've produced a Basic version of the code which is also in the *Proggy Selector*, check that out. It's slow but it shows you how the effect is produced, and yo be able to see the repeated flakes across the



In CF45 we're going to be looking at raster interrupts – how you produce them, why they work and what you can do with them.



Who says cheats never win? That's cobbler's frankly. Cheats who make use of Andy Robert's Gamebusters in CF every month are no losers...

CHROME BROS, ALIEN SMASH & FIRE EAGLE

(POWERPACK 42)

Here's a handy trick to use if you own an Action Replay cartridge. Load up the game, press fire to start, then

press the freeze button, Now press 'K', followed by 'C', and you can restart the game (using F3) with no collision detection. This trick will also work on any SEUCK game you care to

mention (because we'd rather not).

SHERLOCK (MELBOURNE HOUSE)

How old? This classic adventure has had me stumped for many years, but now my sanity is restored thanks to Neil Graham's modestly excellent solution. PART 1: OPEN PLAIN DOOR . NORTH . TAKE CHINAMAN'S DISGUISE . SOUTH . SAY TO WATSON, "HELLO" • WEAR DISGUISE •

LOOK . SAY TO WATSON, "HELLO" . OPEN MY DOOR . WEST . DOWN . TAKE OFF DISGUISE • UP • EAST. PART 2: OPEN MY DOOR

· SAY TO WATSON, "COME WITH ME" . WEST . WAIT . DOWN . OPEN FRONT DOOR . SOUTH . HAIL CAB · SAY TO CABBIE, "TAKE ME TO BUCKINGHAM PALACE ROAD" • CLIMB INTO CAB . SAY TO CABBIE, GO TO BUCKINGHAM PALACE ROAD" • WAIT • WAIT . WAIT . CLIMB OUT .

> PAY 1/- TO CABBIE . EAST . EAST . EAST . WAIT • GET INTO TRAIN . WAIT . WAIT . LOOK . LOOK . GET **OUT OF** TRAIN . NE.

PART 3: TAKE LAMP . SIT IN MY ARMCHAIR . WAIT UNTIL 8:20 • GET **OUT OF MY ARMCHAIR •** OPEN MY DOOR . WEST . DOWN . OPEN FRONT DOOR . SOUTH . HAIL AND GET INTO CAB . SAY TO CABBIE, "GO TO KING'S CROSS ROAD" . WAIT . WAIT . WAIT . PAY CABBIE 6D • CLIMB OUT OF CAB .

NE • NE • NE • WAIT UNTIL 9:15 • GET INTO TRAIN • WAIT UNTIL 10:30 • GET OUT OF TRAIN . SOUTH . WAIT.

PART 4: OPEN MY DOOR • WEST • DOWN • OPEN FRONT DOOR • SOUTH • HAIL CAB • CLIMB INTO CAB . SAY TO CABBIE, "GO TO KING'S CROSS ROAD" • WAIT • WAIT • WAIT • CLIMB OUT · NE · NE · NE · NE · SAY TO LESTRADE, "DAPHNE IS GUILTY" . SAY TO LESTRADE, "BASIL IS INNOCENT" . SAY TO LESTRADE, "BASIL KILLED MRS JONES" • WAIT UNTIL 9:15 • CLIMB INTO TRAIN • WAIT UNTIL 10:30 • CLIMB OUT OF TRAIN . SOUTH . SOUTH . WEST . SOUTH . SOUTH . OPEN LARGE DOOR . SOUTH . OPEN HEAVY DOOR • EAST • OPEN DINING ROOM DOOR . SOUTH . OPEN PLAIN DOOR . WEST . SAY TO COOK, "TELL ME WHAT HAPPENED.



(RICOCHET)

Yes, I know we've printed tips and maps for this game before (in CF17), but Clive Haines from Evesham has even more advice for any budding Ripleys out there. Take it away Clive...

First, to complete the game you need an infinite ammunition cheat - it's impossible otherwise. It's

also a good idea to make a map as you progress.

Starting from Room 1, go 3 rooms EAST to arrive in room 4, then 2 NORTH, 1 EAST, 2 NORTH, 3 EAST, 1 NORTH, 2 EAST, 1 SOUTH, 3 EAST, 2 SOUTH, 1 EAST, 2 SOUTH, 4 EAST. You should now be in Room 72. Go 2 NORTH, 1 EAST, 2 NORTH, 1 EAST, 1 NORTH, 2 EAST, 1 NORTH, 4 EAST, 1 SOUTH, 2 EAST, 1 SOUTH, 1 EAST, 2 SOUTH, 1 EAST, 2 SOUTH, 4 EAST. You should now be in Room 187. Now go 2 NORTH, 3 EAST, 2 SOUTH to arrive in Room 239.

Go 1 EAST, 1 NORTH, 1 EAST, 1 NORTH, You are now in Room 227, so head 1 EAST, 2 SOUTH and 2 EAST to arrive in Room 248. Once inside the Queen's Chamber, kill the queen. When all remaining team members arrive a message from the company appears, informing you that 'to complete the mission you must head back to the APC', this being Room 1.

Once your team is back in Room 1, the game is complete, and the company rates your score and suggests that you go back some day (as if). The main problem occurs when the power's cut, but if you own an Action Replay there's a way around it. When the lights go out, freeze the game and press 'T' to select EDIT SCREEN. Use the cursor keys/space bar to fill in the monitor's viewpoint. When you restart the game, it will appear as though the lights are on, but this will return to normal when you switch to another character or another attack wave begins. So, in fact, it's possible to complete Aliens even if you just go directly to the Queen. Stay Frosty!

More cute, cuddly, heartfine style by Warren 'WAZ' Pilkington. To use them, freeze the game, press 'E' to enter the POKEs, then

CHROME BROS ALIEN SMASH & FIRE EAGLE POKE 19305,142 POKE 20089,142 - Infinite lives

STORMLORD

POKE 23858,173 - Infinite lives POKE 1878,7 - Infinite time

DELIVERANCE (PART 2)



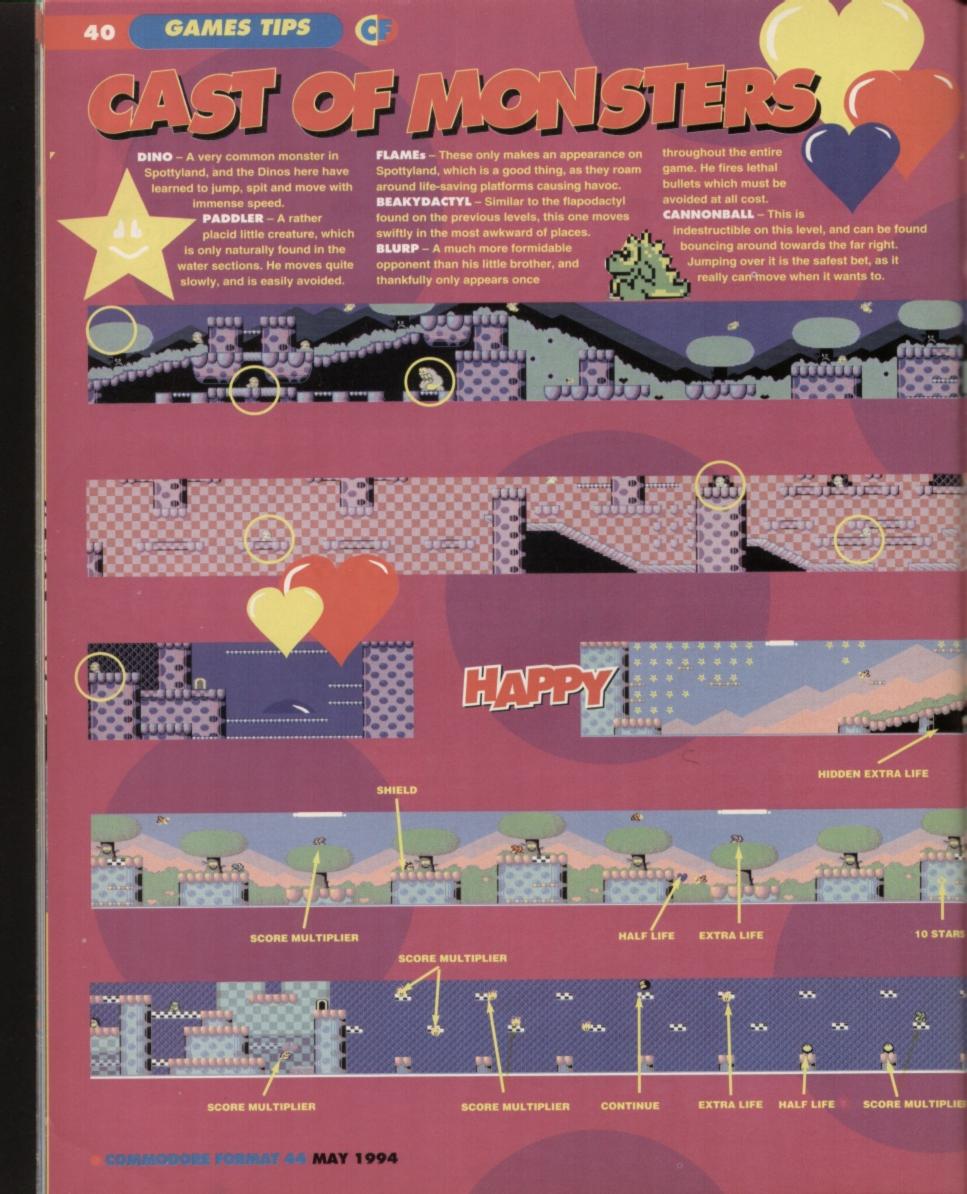
ost your goodies to: Gamebusters, Commout mat, 30 Monmouth Street, Bath, Avon BA1 2BV

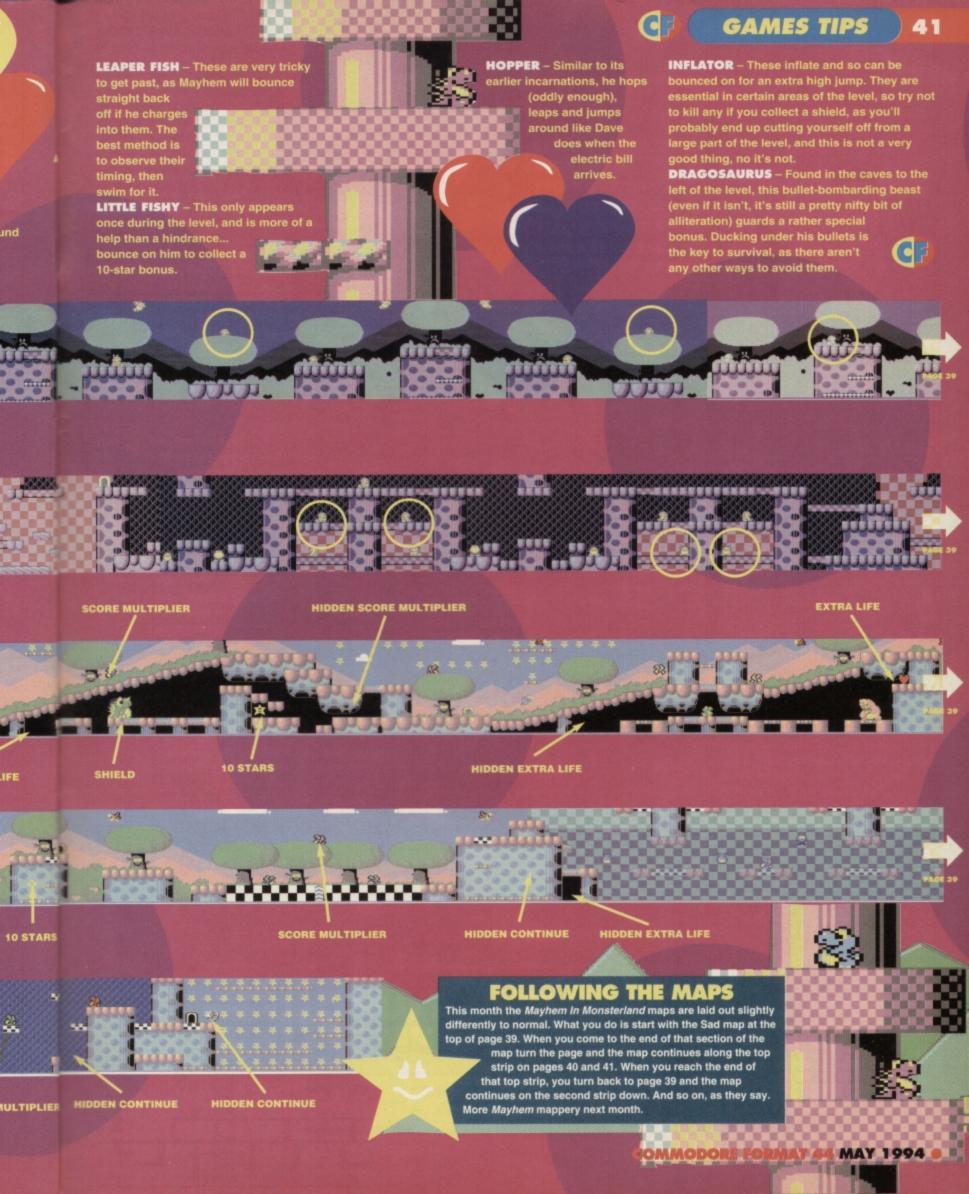


3.

2

COMMONOR FORMAT AS MAY 1994





It's the second (and final) part of our gargantuan players' guide, allowing even the most incompetent do-gooders to reach the fair maiden at the end of the game. 'Nuff said, here's Andy Roberts and Richard Beckett.

t the end of last month's solution, you should have emerged into a forest. If you've been waiting there for the last four weeks, well that's a bit s really. Try and be a bit more adventurous next time. You don't get anywhere in life withou taking risks (and what's the point in buying the street to the street games if you aren't going to at least try to do them yourself?). Nope, the solution this month is dedicated only to those who have valiantly attempted to do the game themselves but failed. Hold your heads high (but not quite as high as those who tried and succeeded).

Anyway, on with the solution. Walk right a little and climb up the ladder, then make your way up and left to find the BRIDGE SPELL.

Staying at the centre of the level, make your y to the far right and go into the exit there. When you appear in the next section, use the bridge spell (press SPACE) then head right until you find the FLASH BANG

SPELL; collect it

and use it

immediately. Climb up
the nearest ladder, then go right (making your
way across the bridge you created earlier).
Once you have crossed the bridge, drop
down to the bottom of the level, then continue
right and collect the RELEASE SPELL. Now ke haste to the right of the level where the t awaits... what are you waiting for? Do I really need to tell you that you have to go through it? In the next section, simply make your way carefully to the far right and go into the exit (you may have to climb up and drop into the exit to avoid the guardian at the end) There is a SHORTENER SPELL to the top-left of the level (use it if you so desire), and a weapons box to the top-right.

After you have gone through the exit, you will emerge in the castle. Go into the exit at the right of the screen, then use the ladders in the next section to

climb right to

top. Go right, drop down to the bottom, go right as far as possible, then head up again.

Once at the top, go right and drop down again to the exit at the bottom right - enter it. Climb up to the top of the

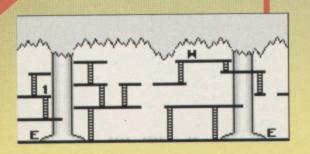
section, make your way to the right, then drop down to the bottomright exit (avoiding the guardian that lurks there). In the next section, fall straight

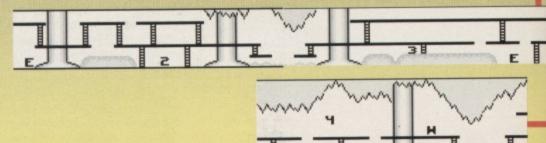
> down (be careful of the acid pits below) then go down the ladder to the

platform, then climb down the ladder and make your way to the left using the platforms below. When you can go left no further, make your way downwards, hen head left to the exit – go in it to enter final section (cue sinister music).

ight up to the acid, then climb up and k to the far left and swap the release with the DESTRUCT SPELL. Go back to the right, then carefully make your way over the water using the blocks above (this is extremely tricky, so plan your jumps precisely). Once across, use the destruct spell on the robot at the far right of the level to finish the tyrant for good. Now go back to the left and collect the release spell (jump over the water blocks using the same method as before, only in reverse). Now head back to the far-right of the section and use the release spell to rescue your girlie and complete the game. Hip Hop Hooray. Oh yeah, Future Knight was on CF41's

case any really





nt e nter

to then to

ks ht f the

nen the the

o the the er the

E

to r as ain.

SWASHBUCKLING TIPS

weird people who haven't actually got the game

have been reading and enjoying this solution.

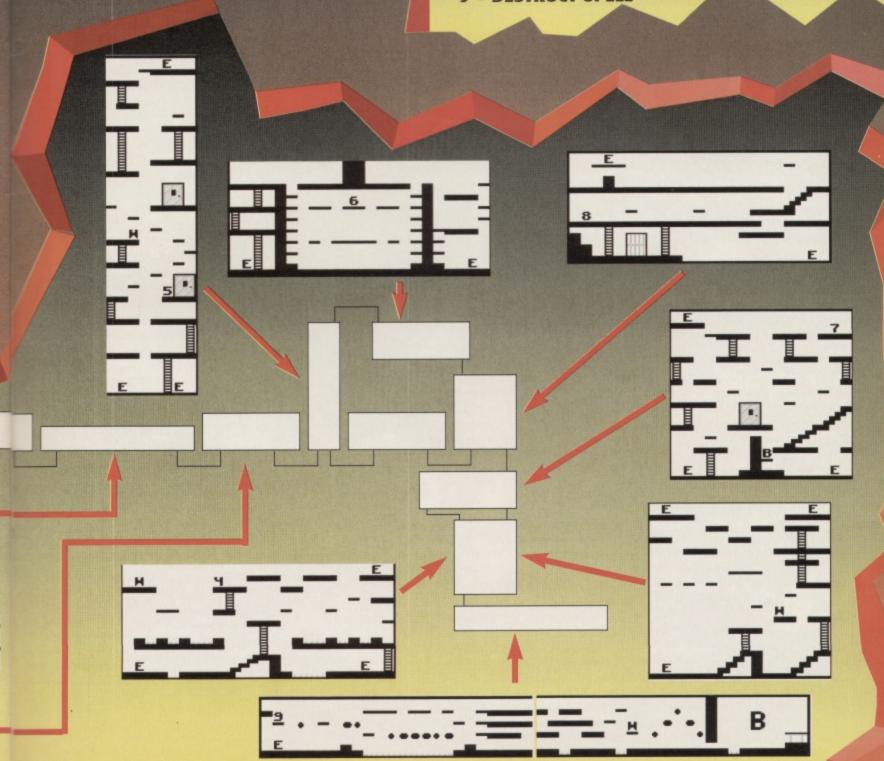
Stranger things have happened.

- During the game you can press the LEFT ARROW key to go back to the start of the section you're on, with an extra energy top-up. This can only be done twice per game.
- When collecting weapons, re-entering the weapons store allows you to change weapons again until you have the weapon you want.
- Sometimes objects will vanish as soon as they appear on the screen. If this happens, go off the screen then re-enter to bring it back.
- Likewise, moving platforms will not appear when the screen is full of aliens. Kill them, and the lift should magically appear. And that's yer lot.

E - EXIT

- H WEAPONS
- B BIG BOSS
- 1 BRIDGE SPELL
- 2 FLASH BANG SPELL
- 3 RELEASE SPELL
- 4 SHORTENER SPELL
- BOMB
- 52055
- דוות אבבעלותכם 7
- PROTECTIVE SLOVE
- arikati abett





It's colossal, enormous, gargantuan, jumbo-sized, monumental, prodigious and almost as big as Dave's ego. What is it? Why, the sixth part of CF's

LEVEL 6: **SPACE STATION** LABYRINTH

Nobby players'

be amazed.

guide. Prepare to

This month's solution is a bit different, as it comes in two parts. The first part is for boring, safe gameplayers, who are just content to waddle their way through to the end of the game. But, if you have guts and determination, and you like to play games to the full (collecting each and every bonus), jump straight to NOBBY THE HERO, Cowards. however, should start reading here...

NOBBY YELLOW BELLIES

From the start: Go right, walk up to the top of the level, then head right and kill the first blue blob et. Continue right, ignore the path below and kill the next blue blob which appears. Now walk right, killing any blobs in your path, until you reach a path going down... go down it. Walk left, then go down and kill the blue blob. Go right at the bottom, avoiding the bomb-throwing chipmonk (what else is new? - Ed), then down again. At the next junction, move down and go

> left immediately, then down and left. Now follow the path to the left until you emerge in a large open

field-type area. Staying close to the river, walk

left and cross over the bridge, then go up to the top-left and collect the EXIT KEY (avoid any blue blobs which roam the area). Now go back down and

cross the bridge, then walk straight down and through the gap at the bottom. Go left, follow the path up, then walk left and follow the path down and leftwards. At the 'corner', walk straight

down, then make your way down and right to cross over the bridge. Now walk as far right as possible, move down, go right, then up as soon as you can and follow the path around to the exit.

It is actually possible to find your way to the exit by following the left-hand wall, but obviously you won't find the EXIT KEY required to leave the level. Life is cruel sometimes.

NOBBY THE HERO

From the start: Go straight down, then down over the bridge. Head right and collect the treasure. Go

back to the left and right up to the start. Go down the second gap (which is just to the right)

follow the path down

you reach the treasure – collect it, then return to the start

From here, walk right and collect the treasure below you, then move down a little and collect the treasure lurking just to the right. Go down, then right, then down again across the bridge. Now follow the path around and up as far as possible, then go to the right and collect the next bit of treasure. From here, go down and across the bridge, left, then down for yet another bit of treasure.

Go back the way you came and then (deep breath) - up, right, up, left, down, left a little, down, right, down, left, up over the bridge, left, up, left, then up once more to the top-left of the level. Now go right to the far-right of the level and collect the treasure, then go down, left,

down, right, down, left, up, then down for two more bits of treasure. Make your way back up, then it's down, right, down, left, down and left again.

Follow the path around until you reach a large open area. Staying close to the river, go left and cross over the bridge, then go right (next to the river) and collect the treasure

that you'll find there. Now head north-west to the top-left of the area and collect the diamonds and the EXIT KEY. Go down and

Nobby cheats, cunningly crafted by Waz Pilkington (albeit for disk users only).

Type it in, SAVE it, then RUN of lives, plus the ability to Here's the first of our

it for hods of lives, plus the ability to select your starting level. Cool or what?

O REM NOBBY DISK CHEAT BY WAZ

FOR X=272 TO 331:READ Y:C=C+Y:POKE X,Y:NEXT

IF C<>6981 THEN PRINT "DATA ERROR":END

INPUT "ENTER LEVEL 2-8"; A:IF A<2 OR A>8 THEN 3

4 POKE 315,(A*2)-1

4 POKE 315, (A*2)-1
5 PRINT CHR\$(147); "INSERT DISK & PRESS A KEY"
6 POKE 198,0:WAIT 198,1:SYS 272
10 DATA 160,001,152,162,008,032,186,255

10 DATA 160,001,152,162,008,032,186,255
11 DATA 169,004,162,051,160,001,032,189
12 DATA 255,169,000,032,213,255,169,058
13 DATA 141,067,008,169,001,141,068,008
14 DATA 076,011,008,066,079,079,084,087
15 DATA 065,090,169,015,141,240,255,169
16 DATA 099,141,241,255,169,000,141,244

17 DATA 255,076,000,248

May 1994

cross over the bridge, then straight down to the path at the bottom. Head left, up, left, down more fun than the boring old cowards' way of getting through the level?), then go left, down a little, left, then follow the path down and right to collect the treasure below.

and

start.

s just

w the

lown

and

up, ight,

left, to

of

left,

up,

ntil

path across the yellow bridge. Now go all the way to the right, then down and continue right.

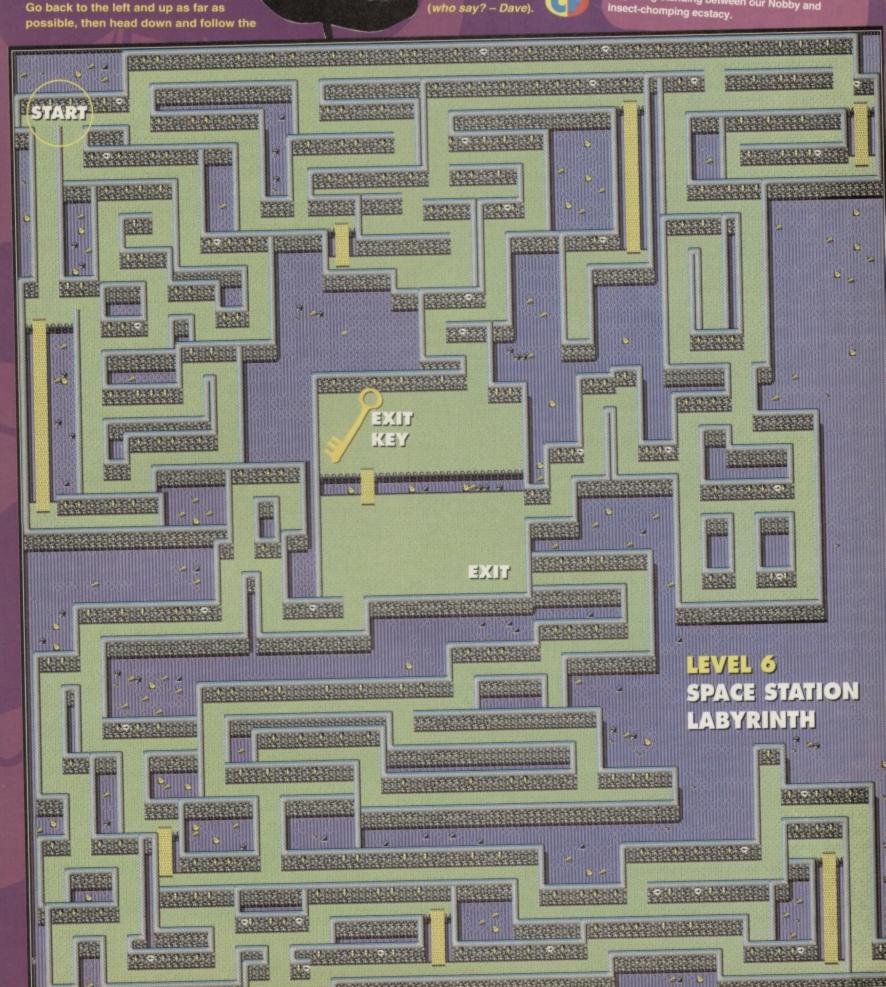
Nip down for the last bit of treasure.

Go back up left a little, then up through the gap and follow the path around to those two lovely diamonds... oh, and the exit of course. Job

done, as they say (who say? - Dave).



It's time to wave goodbye to our blue ant-eating chum, as we tackle the seventh and final level of the game – the abandoned ore mine, which is the only thing standing between our Nobby and insect-chomping ecstacy.





It's a Powerpack special this month as Andy Roberts gives you all the pokes and listings you need to bust that game-packed CF42 covertape.

been 'ere for ages and I still ain't got

DELIVERANCE

This listing for the stunning sequel to Rafaelle Cecco's classic Stormlord might be a tad on the long side, but it can be used on all three parts of the game (value for money - or rather typing effort - or what?). Simply type it in, SAVE it for future use, then RUN it and follow the on-

screen prompts. O REM DELIVERANCE CHEAT BY WAZ

- 1 FOR X=520 TO 617:READ Y:C=C+Y:POKE X, Y: NEXT
- 2 FOR X=333 TO 378:READ Y:C=C+Y:POKE
- 3 IF C<>17594 THEN PRINT "DATA ERROR": END
- 4 INPUT "WHICH PART 1-3"; A:IF A<1 OR A>3
- 5 ON A GOTO 6,28,29
- 6 INPUT "INFINITE LIVES Y/N"; A\$:IF A\$="N" THEN POKE 364,206
- 7 INPUT "INFINITE WEAPONS Y/N"; B\$:IF
- B\$="N" THEN POKE 369,222
- 8 POKE 157,128:SYS 520
- 10 DATA 032,044,247,160,017,140,064,003
- 11 DATA 136,140,062,003,032,108,245,169
- 12 DATA 032,141,233,016,169,061,141,234
- 15 DATA 247,169,166,141,020,003,169,002
- 16 DATA 141,021,003,208,254,141,013,220
- 17 DATA 072,169,032,141,240,003,169,082
- 18 DATA 141,241,003,169,002,141,242,003

- 22 DATA 161,096,087,065,090,169,001,141

- 23 DATA 032,208,032,161,170,206,032,208
- 24 DATA 169,076,141,000,192,169,107,141
- 25 DATA 001,192,169,001,141,002,192,096
- 26 DATA 169,173,141,099,165,169,189,141
- 27 DATA 195,074,120,169,053,076,003,192
- 28 POKE 366,180:POKE 367,170:POKE
- 371,117:GOTO 6
- 29 POKE 366,5:POKE 367,167:POKE 371,18:POKE 372,155:GOTO 6

CHROME BROS

How original... a game starring the T-1000 and his twin brother Dwane 600. Still, if you'd like infinite lives to play right through to the end, try this gorgeous listing POKE.

O REM CHROME BROS CHEAT BY WAZ

1 FOR X=516 TO 554:READ Y:C=C+Y:POKE

- 2 IF C<>3962 THEN PRINT "DATA ERROR": END
- 3 POKE 157,128:SYS 516
- 4 DATA 032,086,245,169,019,141,207,003
- 5 DATA 206,208,003,096,087,065,090,169 6 DATA 032,141,013,010,169,002,141,014
- 7 DATA 010,076,230,003,169,142,141,235
- 8 DATA 058,141,251,061,076,013,008



STORMLORD

A storming game by anybody's standards, and a ruddy impossible one too. If you can't wait for next month's players' guide, try out this listing for infinite lives and time for size

- 0 REM STORMLORD CHEAT BY WAZ
- 1 FOR X=516 TO 561:READ Y:C=C+Y:POKE
- X,Y:NEXT
- 2 IF C<>4393 THEN PRINT "DATA ERROR": END 4 INPUT "INFINITE LIVES Y/N"; A\$: IF A\$="N"
- THEN POKE 545,206 5 INPUT "INFINITE TIME Y/N"; B\$:IF B\$="N"
- THEN POKE 550,79:POKE 555,93
- 6 POKE 157,128:SYS 516
- 10 DATA 032,086,245,169,019,141,207,003
- 11 DATA 206,208,003,096,087,065,090,169
- 12 DATA 032,141,013,010,169,002,141,014
- 13 DATA 010,076,230,003,169,173,141,048
- 14 DATA 088,169,060,141,141,013,169,007
- 15 DATA 141,142,013,076,027,008

ALIEN SMASH

If you fancy playing 'spot the APEX sprites', type in this listing and RUN it for an infinite supply of lives. Maybe this game should have been called Retro Clyde

- 0 REM ALIEN SMASH CHEAT BY WAZ
- 1 FOR X=516 TO 554:READ Y:C=C+Y:POKE
- X,Y:NEXT 2 IF C<>3890 THEN PRINT
- 3 POKE 157,128:SYS 516
- 4 DATA 032,086,245,169,019,141,207,003
- 5 DATA 206,208,003,096,087,065,090,169
- 6 DATA 032,141,013,010,169,002,141,014
- DATA 010,076,230,003,169,142,141,193
- 8 DATA 064,141,209,067,076,013,008

FIRE EAGLE

The eagle, a proud and majestic bird of prey. Fire, a hot yellow-orange substance. Put them together and you have Fire Eagle, a vertically-scrolling shoot-'emup. And introducing Panzold: an infinite lives POKE.

0 REM FIRE EAGLE CHEAT BY WAZ

- 1 FOR X=516 TO 554: READ Y: C=C+Y: POKE
- 2 IF C<>3692 THEN PRINT "DATA ERROR": END
- 4 DATA 032,086,245,169,019,141,207,003
- 5 DATA 206,208,003,096,087,065,090,169
- 6 DATA 032,141,013,010,169,002,141,014
- 8 DATA 067,141,107,070,076,013,008

SIM CITY (DISK VERSION)

Not quite sure what this listing does, but if you have a disk drive and a copy of this classic game, mix them together in a bowl along with this listing, then bake in a moderate C64 for an hour or two.

O REM SIM CITY DISK CHEAT BY WAZ

1 FOR X=16166 TO 16203:READ

Y:C=C+Y:POKE X,Y:NEXT

- 2 IF C<>4430 THEN PRINT "DATA
- ROR":END PRINT CHR\$(147);"INSERT DISK &

- 16166:LOAD"SC",8,1 5 DATA 120,169,063,141,021,003,088,096 6 DATA 087,065,090,169,062,141,185,008 7 DATA 169,063,141,186,008,076,049,234 8 DATA 162,000,138,157,205,194,232,224 9 DATA 024,208,248,076,000,128

STAR PAWS

This 'Road Runner on the moon' game is one of my particular favourites. If you're a keen Pawstrong fan too, here's a listing just for you.

0 REM STARPAWS CHEAT
1 FOR X=10497 TO 10526:READ

- 2 FOR X=512 TO 519:READ Y:C=C+Y:POKE
- 3 IF C<>3988 THEN PRINT "DATA ERROR": END
- 4 SYS 10505
- DATA 169,002,141,005,084,076,001,082
- 6 DATA 198,157,169,000,162,001,168,032
- DATA 186, 255, 032, 189, 255, 032, 213, 255
- 8 DATA 078,215,008,076,032,008,169,096
- 9 DATA 141, 186, 023, 076, 000, 016





FOR YOUR FREE 64 PAGE AMIGA CATALOGUE



SOFTWARE PACK AA Chipset will be sent with A1200	& A4000s.
CHAOS ENGINE	£25.99 £34.99
SYNDICATE PINBALL FANTASIES	£29.99
NICK FALDO'S CHAMPIONSHIP GOLF	£34.99

CHAOS PACK: £125.96 GFA BASIC v3.5 - Powerful Basic Programming Language ... £50.00
PHOTON PAINT II - Powerful Graphics Painting Package ... £89.95



AMIGA 600



DIV ALL CONFIGURATION	9
FREE DELIVER	RY
PACK INCLUDES:	
● 1so AMIGA 600	£199.99
BUILT-IN 1ss DRIVE	-
. BUILT-IN TV MODULATOR.	+
DELUXE PAINT III	£79.99
. LEMMINGS	£25.99
FREE FRON SILICA (See Top Left)	£125.96
TOTAL PACK VALUE:	£431.93

SILICA PRICE: £189.0

AMIGA 600



4
199.99
279.99
€34.99
\$25.99
25.99
125.96
492.91 293.91

AMIGA 600HD **EPIC + HARD DRIVE**



FREE DELIVERY ACR MANGA 600
BULT-IN THE DRIVE'S TV MODULATOR
SHIP HAPD DEX
EPIC - A SCI-FI ADVENTURE

PACK VALUE: £750.86 PACK SAVING: £401.86 SILICA PRICE: £349.00 1 No

64 1 Mb 85

AMIGA 1200 PACKS + HARD DRIVE



FREE DELIVERY FREE DELIVERY

RACE 'N' CHASE 0: £299 2 80 - 5449 2 127 2 200

2 200

HARD DRIVE OPTIONS

AMIGA 4000



FREE DELIVERY

A4000 runs at up to 21 times the ed of the A600.

82 32 55

CONFIGURATIONS he Amiga 4000 030EC, 040LC ar 40 SCSI Tower are available everal RAM/Hard Drive options to

AMIGA 4000

25_{MHz} 68030_{EC} DESKTOP

2m 130 F90 4 130

6 214 6 540

25MHz 68040LC DESKTOP

6 214 £164

25MHz 68040 SCSI TOWER 6 214 6 525 6m 1gb# £2599

CDTV ADD-ON



A570 UPGRADE



UPGRADES & REPAIRS

STEREO MONITOR



10845



GREAT NEW PACK NOW WITH

PLUS! DANGEROUS STREETS WING COMMANDER **DIGGERS & OSCAR**

FMV MODULE



INSTANT TRACK SELECTION



CD QUALITY STEREO SOUND 16.8 MILLION COLOUR PALETTE

16.8 MILLION COLLOUP PALETTE
 GAMES FROM BELOW E20
 PLUGS INTO A TY OR MONITOR
 PLAYS MUSIC CDs
 DUAL SPEED
 Translates data almost twice as fast as ordinary CD-ROM crises

MULTI-SESSION
 Recognises ALL data on COs, even if the information was added after initial pression.

CD-I LINEAR COMPATIBLE With optional FMV module, will p 6 FREE CO TITLES

CD³²
+ 6 FREE
CD TITLES

AMIGA

PUICE TO

- COMMODORE APPROVED UPGRADES:
 Official Hard Drive upgrades with ICL on-site warranty
- FREE OVERNIGHT DELIVERY:
 On all hardware orders shipped in the UK mainland.
- PRICE MATCH:
 We match competitors on a "Same product Same price" basis. ESTABLISHED 15 YEARS: We have a proven track record in professional computer sales.
- PART OF A CSOM A YEAR COMPANY: With over 200 staff We are solid, reliable and profitable CORPORATE & EDUCATION DIVISION: Volume discounts are available. Tel: 081-308 0888.

SHOWROOMS: We have demonstration and training facilities at all our stores

THE FULL STOCK RANGE:
All of your Amiga requirements are available from one supplier.

FREE CATALOGUES:
Will be mailed by you, with special reduced price Amiga offers, as well as details on all Amiga software and peripherals.

PAYMENT:
We accept most major credit cards, cash, cheque or monthly terms
(APR 29.8% - written quotes on request).





MAIL ORDER: 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX Tel: 081-309 1111
CHELMSFORD SHOP: Debenhams (2nd Floor), 27 High St, Chelmsford, Essex, CM1 1DA Tel: 0245 490654
CROYDON SHOP: Debenhams (2nd Floor), 11-31 North End, Croydon, Surrey, CR9 1RQ Tel: 081-688 4455
GLASGOW SHOP: Debenhams (2nn Floor), 97 Argyle St, Glasgow, Strathchyde, G2 8AR Tel: 041-248, 3896 Debenhams (2nd Floor), Waterloo House, Westgate St., Ipswich, IP1 3EH Tel: 0473 287092 **IPSWICH SHOP:** LONDON SHOPS: 52 Tottenham Court Road, London, W1P 0BA Tel: 071-580 4000

Selfridges (Basemert Assnal), Oxford Street, London, W1A 1AB Tel: 071-629 1234

MANCHESTER SHOP: Debenhams (are Roon), Market St, Manchester, Lancashire, M60 1TA Tel: 061-839 3654 SIDCUP SHOP: 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX Tel: 081-302 8811

L	SOUTHEND	anur.	Meddles d	THO PROOF!	rigin	Stieet,	Southeno-on	1-269"	ESSEX, SS1	ILA DE	H: U/UZ	40003	9
,			-	-	_			_					_
ı	To: Silica	CMFOR-05	594-104	1-4 1	The I	Mews	Hatherley	Board	Sideup	Kent	DA14	4DX	

	Surname:
Address:	
	Postcode:
Tel (Home):	Tel (Work):

Which computer(s), if any, do you own? EACE - Advertised prices and sp

C64/PARALLEL INTERFACE TYPE 92008

The C64/Parallel printer interface model 92008/G is designed to connect almost any parallel printer to your Vic 20 or C64 computer, and will also operate with the C16, plus 4 and C128

Together with most types of printers, the interface will be fully compatible with the CBM printer MPS 801. Other printer types (e.g. daisy wheel printers or printers that do not have graphics capability or have an unusual kind of graphics) will be able to print all ASCII characters and all printer functions will be available.

It is necessary for the connected printer to have an interface to the centronics standard. Most printers are offered with this interface as the principal, lowest cost, option.

As the printer will not be modified it can be used with its original centronics interface at any time, thus if you change your computer system later on, you will be able to keep your printer and connect it to another computer by simply changing the interface/cable.

Price £29.99 inc p&p.

All orders sent by return. Cheques/Visa/Access/P.O's TRADING POST, VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF

TEL/FAX (0952) 462135



REPAIRS AND SPARES

C64 Repair£19.99 C64 Datasette£24.99 1541 Drive Repair£34.99 Parallel Converter£19.99 C64 Manual£4.99	Sound Chip£5.99 Vic Chip£7.99 6510 CPU£5.99
C64 Manual£4.99	6526 C.I.A£5.99
64 Slimline Case£7.99	MPS 801/803 Ribbons£4.99

For a speedy repair send computer and covering letter. 3 month warranty included. To order any of the above send a cheque/P.O. or phone credit card number.

VISA

Omnidale Supplies (Dept. C.F.) 8E Friar Gate, Derby DE1 1BU Tel: 0332 291219



Hey you! (Who me?) Yes you! Check this out...

J**TOPIA PD**

We at Utopia PD stock the very best Public Domain software for your C64, (Disk only I'm afraid, but we are working on tapes!)

Our software ranges from very useful utilities to Music Players to cool PD games and of course the latest and best demos!! Disks cost just £1.50 each (even double sided ones!) and each disk is packed full of finger lickin' software! WORDUP!

So if you wanna stretch your C64's capabilities a little further then squiggle an SAE to:

UTOPIA PD 10 Cwmaman Road, Godreaman, Aberdare, Mid Glamorgan CF44 6DG

Of course you can send 2 x First Class stamps, and we'll send you our Shareware PD & GEOS catalogues but at Shareware PLUS we're pleased with our quick delivery record. To demonstrate our efficiency we've got a special offer for you ... Just send us £1 (a pound coin, a cheque or a postal order) and choose any one subject disk below.

GEOS I GAMES EDUCATION UTILITY MUSIC C128 GEOS 2 FINANCE

If you like, order one of each disk at just £1 per disk, we won't mind. We'll rush you your order along with our PD. Shareware & GEOS catalogues.

SHAREWARE PLUS Fulfilment Centre, 66 High Street, Pershore, Worcestershire WR10 IDU

Outside UK - Please add £1 per order for Airmail postage.

SOFTWARE HIRE CLUB

3 Briarbank Avenue, Nottingham NG3 6JU

Send SAE for full details

MEGATRONIX PD 664 PD & Shareware

PLEASE SEND A **BLANK DISK** AND AN S.A.E. FOR OUR CATALOGUE DISK, OR JUST AN S.A.E. FOR **OUR TAPE**

EXCLUSIVE COMPILATIONS

5-Disk compilation of Games, Utilities, Demo's, etc! Just £5.00 inc. P+P!

10-Disk compilation of Games, Music, Demo's, Utilities, and Graphics software, etc! £10.00 inc. P+PI 5-Disk compilation of those awesome PD Games! Over 40 are included! £5.00 inc. P+P! 3-C90 Tapes containing Demo's, Utilities, and Games!

£10.00 inc. P+P! 2-C90 Tape compilation of over 50 fully playable PD

Games! A mere £6.50 inc. P+P! CATALOGUE!! PLEASE MAKE CHEQUES AND POSTAL ORDERS PAYABLE TO 'D. KELLY', CASH IS ACCEPTABLE!

21 Tiled House Lane, Pensnett, Brierley Hill, W. Midlands, DY5 4LG Telephone: (0384) 77172 Fax: (0384) 484083

SPARES & REPAIRS

1	C64 Compatible Printer£199.99	
1	Action Replay MK VI Cartridge£32.99	
1	C64/128 Cassette Unit£24.95	
١	C64 Power Unit£24.95	
١	C64 Monitor Lead (Scart on 3 Phono)£6.99	
١	C64 Mouse, Mat, Art S/ware (Tape)£24.99	
ı	C64 Reset Cartridge£6.99	ı
ı	User Manual (64 or 1541 II)£5.99	j
١	Dust Cover (64 Old Shape on 64c)£5.99	9
١	C64 Serial Lead£5.99	
ı	Commodore ChipsP.O.A.	
1	Centronics Interface plus Support	
ı	Software (Disk on Tape)£24.99	
ı	C64 System Guide (Programming)£9.99	
ı	C64/C Replacement Keyboard£19.95	
ı	2 x 801/3,120D, LC10, 1230 Ribbons£9.95	
ı	C64 Case (New Style or Old Shape)£6.99	
ı	All prices include VAT and P & P ■ Orders by cheque or PO only ■ Send an SAE for full price list ■	

C+4, C16 1541 DD. £40 inc C128 ... £45 inc Send machine only with payment, fault description and your daytime telephone number if possible
Return insurance included
Normally 48 hour turnaround
J month warranty
Unrepairable machines returned with full refund

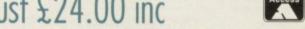
OASIS (Dept 2A) 14 Ridgeway Rd Salisbury Wiltshire SP1 3BU Tel: (0722) 335061



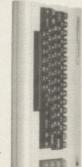
COMPUTER SERVICES



COMMODORE C64 REPAIRS Just £24.00 inc



- Commodore registered.
- * Over 10 years experience with Commodore computers.
- * Up to 20 qualified technician engineers at your disposal.
- * We will undertake to repair your Commodore 64 computer for just £24.00 including parts, labour, V.A.T. and post and packing.
- * Some computers can be repaired within 24 hours.
- * Prices include full service check, overhaul and soak-test.
- * All repairs covered by a 90 day warranty.
- * Free Commodore C64 Sound Studio with every C64 repair
- * Commodore C+4 repairs £25. With every +4 repair you will receive a free cartridge.



* How to take advantage of this exceptional offer:

Simply send or hand deliver your machine to the workshop address below, enclosing payment and this advert, and we will do the rest. (Please include a daytime telephone number and fault description).

* If you require 24 hour courier to your door, please add £5, else your computer will be sent back by contract parcel post.

★ Collection Service available

WTS Electronics Ltd. Studio Master House. Chaul End Lane, Luton, Beds LU4 8EZ

(0582) 491949 - (4 lines)



(WTS reserve the right to refuse machines that in our opinion are beyond reasonable repair. Full charge applied).

All these storming issues of CF are still available - with their covertapes! So get 'em before stocks run out (and get a binder to stick your collection in while you're at it).

GP23 Power Pack games: Defender
of The Earth, Johnny Rieb 2. Demos:
Bur Bornber, Nobby The Aarchark,
Bilf, Reviews: Cool Croc Twins, Turbo The Tortoise, Kenompooph,
Burther, Nobby The Aarchark,
Burther, Rainbow Islands, Super Seymour Saves The Planet
GP24 Power Pack games: Farnous Five Demos: Uphl, Cool Croc Twins, Math of the Day,
Funded Ineverselessed, Reviews: Mega Spock, Ughl, Edwa 2. Hogar The Honble, Noby
The Aarchark, Garnetouslers: Space Crusade: Spocks: Getting the most out of your distassatile
a popular one this, Typing in Islangs.
GP25 Exitis convertiges: Saracen Paint, Power Pack games: John Lowe's Darts,
Damos: Slocks, Hagar, Reviews: Hook, Match of the Day, Bangers and Mash, Count
Duckula 2. Frankenstein, Sloks: Gamebusteirs: Space Crusade, DJ Putf, Vendetta.
GP26 Power Pack games; Twin Tiger, Cosmic Gauseway, Bomber, Demos:
Stuntman Seymour, Doc Croc. Reviews: Stuntman Seymour, Super All-Stars, Boxing
Manager 2. Popeye 3. Garnebusteirs: Space Crusade, DJ Putf, Specials: First
Installment of Lefs Make a Monster.
GP27 Power Pack games: Deflektor, Afternative World Games, The Muncher,
Demos: Scaptre of Baghdind, Reviews; Crystal Kingdom Dizzy, Butly's Sporting Darts,
Crazy Cars, Locomotion, Garnebusters: 13-page Creatures 2 special.
GP28 Power Pack games: First Strike, Filth Gear, Demos: Locomotion, Reviews
Futus, Nick Faldo's Championship Golf, Reviews: International Tennis, Cool World,
Nick Faldo's Gotf, Paint and Create, Garnebusters: Spetitound Dizzy, Farmous Five.
GP29 Power Pack games: Horboot Nr. Battisehpe, Highway Encounter, Domo.
Carnage, Garnebusters: Winter Camp, Spetibound Dizzy, Bathman — The Caped
Trusader, Florkbas Flacks Flatks, Flatks, Specials: Football Manager 3. Speking Far, Specials: Spetites Camp.
McDonaldand, Table Tennis, Spare, Subterranea, Monster Mest, DemoLorious McDonaldand, Table Tennis, Spare, Subterranea, Monster Mest, DemoLorious McDonaldand, Table Tennis, Share, Spetials: Football management sims.





COMMODORE FORMAT BACK ISSUES AND BINDERS ORDER FORM

- SEND THIS FORM TO: Commodore Format, Future Publishing Ltd, Freepost, Somerton, Somerset TA11 7BR
- Please make all cheques payable to Future Publishing Limited
- For overseas orders and customer services call the Hotline number for prices on 0225 442244.
- No stamp required if posted in the UK, Channel Islands or the Isle of Man.

Please send me the following CF back issues: (PLEASE CIRCLE)

22 23 24 26 28 29 30 31 32 33 34 35 36£2.50 each 37 38 39 40 41 42 43£2.95 each

Plus £1 P&P per order (£2 Rest of world)

Method of payment (please circle): Access Visa Cheque Postal Order

Credit Card Number:

Expiry date: EEC customers registered for VAT, please quote your registration number:

Signature:

05/94

Postage and packaging

Name

Address Post Code Phone number

I would like back issue(s) at £2.50, Total cost I would like back issue(s) at £2.95, Total cost I would like back issue(s) at £3.25. Total cost CF binders(s) at £5.99, Total cost I would like _

90116 1011211

THEY'LL COME FROM A LAND DOWN UNDER...

When we said there's a games explosion happening on the C64 on this month's cover we weren't exaggerating, and even though we've reached the end of the magazine the shockwaves continue. Y'see we got an interesting phone call from a David Simmons who is apparently the head of C64 developments for an Australian company called System 3. He told us that the company had a number of games in development including *Flimbo's Quest*, *IK3* and *Turrican 3*. It sounded a bit strange to us but he left a number we could reach him on.

Unfortunately, when I rang back a couple of days later to get some more info (and to check to see if it was all some practical joke) the number was unobtainable. But a quick check with international directory enquiries revealed that a computer company called System 3 did indeed exist but with a different phone number. But this number was also unobtainable.

But if this information is kosher it is extremely important and exciting news. So if anyone knows how we can get in touch with System 3, please let us know.

CF45

THE COMPLETE GUIDE TO MULTI-PLAYER GAMES ON THE C64 PLUS

CREATE BETTER COMPUTER GRAPHICS - DIGITAL GRAFFITI SHOW YOU HOW

- MACHINE CODE PROGRAMMING THE START OF NEW SERIES OF EASY-TO-UNDERSTAND
 GUIDES FOR ALL COMPLETE NEWCOMERS TO ALL THINGS ASSEMBLY.
 ALL THE REGULAR FEATURES, LATEST GAME REVIEWS, A FRONT COVER, A FEW ADVERTS,
 RICHARD III HOW I BEAT CAFFEINE ADDICTION AND (PROBABLY) A CHEESY PICTURE OF SIMON.

CROSSWORD ANSWERS

Across: 1 Sixty four, 6 Attack, 7 Notes, 8 Car, 9 Sim, 13 Intro, 15 Reader, 16 Psygnosis. Down: 1 Stunt, 2 X-out, 3 Yeast, 4 Optic, 5 Racer, 9 Sleep, 10 Madly, 11 Siren, 12 Pokes, 13 Tips.

COMMODORE **FORMAT 45**

ON SALE TUESDAY 17TH MAY

MAKE SURE YOU DON'T MISS OUT ON CF45

Civilisations rise, civilisations fall. Mountains crumble into the plain. The sun will go supernova. Newsagents will sell out of Commodore Format. You can prevent only one of these things. So fill out the form below, hand it to your friendly, neighbourhood newsagent, then go home and sit back and relax, safe in the knowledge that Kilimanjaro will stand proud for the rest of eternity.

Either that or your newsagent will save you a copy of Commodore Format.

Hey Newsagent dude/babe (Sir/Ma'am), Like, save me one of those righteous (rather good) CFs (Commodore Formats) man. CF45 (the June issue) is happening (goes on sale) real soon (on the 17th of May). Excellent (Thank you very much).

Y		

MY ADDRESS



Editorial & Advertising Offices:

Commodore Format, Future Publishing Ltd, 30 Monmouth Street, Bath, Avon, BA1 2BW Tel: 0225 442244 Fax: 0225 446019

FRONT LINE TROOPS

Editor Dave Golder Art Editor Ollie Alderton Staff Writer Simon 'Freebird' Forrest Cinema Critic Sigmund Freud

SAS Sales Executive Rob Bennett

MARINES Editorial

Jason Finch • Andy Roberts Jon Wells • Digital Graffiti Cover Paul Kidby Photography Ashton James Illustration John Richardson

THE CAVALRY Sue Grant • Lisa Kellet

THE AUXILIARY SERVICES

Production Co-ordinator Tracy O'Donnell
Ad Design Cherry Coad Production Manager Richard Gingell Scanners Simon Windsor, Chris Stocker, John Moore, Heath Parsons, Mark Gover Paper Controller Fiona Deane Rations The Pizza Kitche Production Controller Claire Thomas Group Production Manager Judith Middler Postroom Operatives: Phil, Phil & Alex

THE GENERALS BACK AT HQ

Very nearly a publisher Jim Douglas
Publisher Colin Campbell
Promotions: Tamara Ward
Circulation Director Sue Hartley
Managing Director Greg Ingham

ADVERTISING PROBLEMS

If you have a problem, query or complaint about an advertiser in this issue then contact The CF Advertising Department in writing at, Future Publishing, 30 Monmouth Street, Bath BA1 2BW.

Commodore Format is brought to you from the corridor on the third floor (the only office without a door) at Future Publishing, the home of: GamesMaster, Super Play, Total!, Amiga Power, Amiga Shopper, Mac Format, Sega Power, Amiga Format, Amiga Format Specials, PC Format, ST Format, Amstrad Action, Edge, PC Gamer, CD-ROM Today and Mega! oh and some American mags too.

Commodore Format is printed in the UK by William Gibbons and Sons.
All material © Future Publishing 1994

25,063 Jan-June 1993

mber of the Audit Bureau of Circula

d like to thank: the 25, 063 readers who stuck around they aren't going to regret it. uid like to thank: Aston Villa for ruining Manchester United's chances of getting the triple. Simon would like to thank: Vicki for still being alive.

2.99

2.99

2.50

3.75 2.99

7.99

1.99

3.75

Cool World

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE Y012 7EY. IF YOU'RE IN THE SCARBOROUGH AREA, COME IN AND SEE US. OPEN 9.00AM - 5.30PM 6 DAYS A WEEK. TEL: 0723 376586

C. 64 CASSETTES *

BONANZA BROTHERS2.99	Q10 TANK BUSTER2.99
BUBBLE BOBBLE	RENEGADE2.99
DALEK ATTACK4.99	RAINBOW ISLANDS3.75
DARKMAN3.75	SCOTTISH FOOTBALL2.99
DEFENDERS OF THE EARTH2.99	SCRABBLE (NO BOX)2.50
EUROPEAN SUPERLEAGUE	SHERLOCK
+BOARD GAME5.99	SIMPSONS
*FANTASY WORLD DIZZY3.75	SLEEPWALKER2.99
FLINTSTONES2.99	SLICKS2.99
FOOTBALL MANAGER 37.99	SNOWBALL IN HELL2.99
FUN SCHOOL 2 6-8 YEARS3.75	SOOTY'S FUN WITH
FUN SCHOOL 2 OVER 8	NUMBERS UP TO 7 YEARS4.99
FUN SCHOOL 2 UNDER 63.75	SPACE CRUSADE3.99
HAMPSTEAD (ROLE PLAYING)3.99	SUBURBAN COMMANDO7.99
HOB GOBLIN2.99	SWITCHBLADE2.99
HOOK3.75	TERRY'S BIG ADV/TERRAMEX2.99
JACK NICKLAUS GREATEST 183.75	THOMAS THE TANK ENGINE1.99
*KWICK SNAX DIZZY3.75	THOMAS THE TANK FUN
LOTUS ESPRIT2.99	WITH WORDS UP TO 7 YEARS 4.99
LIVERPOOL8.99	THUNDERBIRDS2.99
*MAGICLAND DIZZY3.75	TRACK SUIT MANAGER1.99
MAN UTD EUROPE3.75	*DIZZY DOWN THE RAPIDS3.75
MATCH OF THE DAY3.99	*SPELLBOUND DIZZY3.75
MATCH POINT2.99	*DIZZY PRINCE OF THE YOLK FOLK 3.75
NAVY MOVES3.75	TRIVIAL PURSUITS3.75
NEW ZEALAND STORY3.75	WORLD CRICKET2.99
NICK FALDO CHAMP GOLF10.99	WWF2.99
NORTH AND SOUTH3.99	WWF 2 EUROPEAN RAMPAGE3.75
PLAYDAYS AGE 3-8 YEARS5.99	
PREDATOR2.99	LEMMINGS
	CASS 10.99 DISK 12.99
*Choose any 2 Dizzy's for £5	

* DISK COMPILATIONS *

SPORTS COLLECTION
Pro Tennis Tour/Run the Gountlet/
World Cup Soccer Italia 90
DREAM TEAM
Simpsons/WWF/Terminator 2
CHAMPIONS
J Khon Squash/Manchester United/Wo
Monoger
WIZARD PACK (SPECIAL PRICE)
Scrubble, Cluedo, Risk (not bexed)

.6.99 orld Champ Boxing

CHOOSE ANY 3 OF THE

FOLLOWING SPORTS

TITLES FOR £5.00

THE BOXER, JK SQUASH, LEAGUE FOOTBALL, INT. FOOTBALL, RUGBY COACH, FINAL WHISTLE, SOCCER

DOUBLE, SOCCER DOUBLE 2, CRICKET MASTER, EURO

BOSS, WORLD BOXING MAN, STRIKER, EMLYN HUGHES

SOCCER, JIMMY'S SOCCER MAN, 2 PLAYER SOCCER

SQUAD, SOCCER PINBALL, SNOOKER MANAGEMENT,

WEMBLEY GREYHOUNDS, 2 PLAYER SUPER LEAGUE

North and South4.99

POSTMAN PAT COLLECTION

Postmon Pat 1, 2+3 POPEYE COLLECTION . KIDS PACK 2 ... Firemon Sam/Court Duckula 2/Papeye/Pestmon Pat 2/ Huoley Pig/Bangers and Mash LINEXER COLLECTION Superskills/Hot Shot/Italy 1990/Super Ster Soccar SOCCER SPECTACULAR ...

* CASSETTE *

COMPILATIONS

SOCCER SPECIACIUAR World Champions/Pater Skilton's Handball Manadonna/Feefacill Managar/Pater Beardsley's Int Football/Soccer Supremo aur anni 9 (ON CASSTIE OR DISK) 9.99 Delta/Zoids/Barbarion II/Alloykst/Tunnel Vision/Eartle Valley + many others (30 games in all)

SUPER ALL STARS	5.99
Steg the Skig/Magic Land Dizzy/Captain Dynama/CJ	in the USA
Turbo the Tortoise	
CARTOON COLLECTION (SPECIAL PRICE)	450
Divou // I's Flankout Auties /Stabile Manie /Sake in Ter	mendania/

	Seymour goes to Hollywood
	SUPER SPORTS CHALLENGE
	Slicks/Cueboy/1st Division Manager/Wrestling Superstors/
ī	Int Speedway

ı	Sticks/Cueboy/ 1st Division Manager/Wrestling Superstars/
	Int Speedway
	SMASH 16
	Sky High Stuntman/SAS/KGB Superspy/Super G man Superhers
	MIG 29/Guardian Angel/Ghost Hunter/Robin
	44 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -

THE COLLECTION American Football/Agent Orange/Chubby Gristle/Saint + Greavsia/Scrambled Spirits + many more (30 games in all) 100% DYNAMITE

Double Dragon/Afterburner/Last Ninia 2/WEC Le Mans Final Flight/Wrestlemania/Pit Fighter POWER UP. 5.50 Altered Beast/X Out/Rainbow Islands/Chase HQ/Turrican

5.50

8.95

CHOOSE ANY 6 OF THE FOLLOWING TITLES FOR £5.00

AUSSIE FOOTBALL, CONFUSION, CRICKET INT, FALLEN ANGEL, DANDY, GAME OVER, GAME OVER 2, GRANDMASTER CHESS, GRID IRON 2, HIDEOUS, MAGIC RUFUS, RECKLESS RUFUS, SPIN DIZZY, SWEEP, LAST NINJA, ZOIDS, WHO DARES WINS 2, OPERATION HORMUZ. TILT. BULLY'S SPORTING DARTS. SKY HIGH STUNTMAN, MEAN MACHINE

Liverpool10.99

*C. 64

Sleepwalker5.99 Space Gun4.99 4.99 New Zealand Story4.99

DISKS*

*	c.	64	0	artridges*
oki obocop 3			.5.99	Robocop 2

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER. ORDERS £5.00 AND UNDER ADD 50P P + P CHEQUES + POSTAL ORDERS MADE PAYABLE TO WIZARD GAMES. OVERSEAS CUSTOMERS ADD £1.00 PER ITEM P+P. PLEASE ALLOW 7 DAYS FOR SEND SAE FOR FULL LISTS MERS ADD £1.00 PER ITEM P+P. PLEASE ALLOW 7 DAYS FOR DELIVERY

COMMODORE SUPPLIES

Commodore 64 power supplies	£22.99
Commodore 64/128 compatible cassette recorders	£19.99
Commodore cassette head demagnetizers	£9.99
Commodore 64/128 light gun & games (cas & disc)	£29.99
Replacement cassette recorder plug and lead	£5.99
Commodore 64 user manuals	£4.99
Commodore R.F. Leads (computer to TV)	£3.99
Commodore 64c modulators	£9.99
Commodore printer/disc drive lead (6 pin din)	£5.99
Commodore Colour monitor leads(din/3 phono)	£6.99
Commodore light pens & software (cas/disc)	
Commodore C64/C128 parallel printer interface	£29.99

DO YOU SUFFER WITH C64 TAPE LOADING PROBLEMS?

Have you ever purchased a game only to find that it won't load! The most common reason for loading difficulties is caused by the tape head being out of alignment with the cassette tape. The azimuth tape head alignment kit enables you to re-align your tape head simply and quickly. No technical skills are required. Stepby-step picture guide. Test and re-alignment carried out in minutes! The kit comprises:- Tape alignment cassette, special azimuth screwdriver plus full instructions. Only £9.99 Alignment kits also available for Amstrad CPC 464 and for the spectrum computers. Please state which computer when ordering.

If you would like to be put on our regular mailing list for special offers etc. please write and advise us stating which computer model you have.

We also deal with Spectrum & Amstrad Computers.

All orders sent by return: Cheques/Visa/Access/PO's

Trading Post, Victoria Road, Shifnal, SHROPSHIRE TF11 8AF Tel/Fax (0952) 462135

VISA

Dept CFF, 3 Middleton Business Park, Middleton on Sea, West Sussex PO22 6HS Telephone 0243 587089 24 Hour Credit Card Order Line. Access/Visa

	11100000111000
Repairs C64 Repair C+4/C16 Repair 1541 Repair C 128 Repair	19.95 19.95 29.95 29.95
Spares Genuine C64 Power Supply Replacement C2N Plug and Lead C64 User Manual C64 Programmers Ref. Guide RF Lead Printer/Disk Drive Lead. (6 Pin Din)	14.95 3.95 2.95 4.95 1.95 1.95
Commodore 1541 II Disk Drive. Reconditioned - 3 months guarantee	69.95
CHIPS (Pulls from New PCB's) 6510 MPU 6526 CIA Sound Chip (SID) Video Chip (VIC)	3.49 3.49 3.99 5.99
SOFTWARE C64 Cartridge. Terminator 2 C64 Cartridge. Flimbos Quest, Klax, Int Soccer	8.95 8.95
Afterburner C64 Cassette Inside Outing C64 Cassette Mercenary C64 Cassette Power Drift (Unboxed) C64 Cassette Terra Cognita. C64 Cassette	2.95 1.95 1.95 1.95 1.95

Burnt out C64?? Have other Companies Refused the Repair?? Let us replace the complete PCB for £29.99 (NB Excludes serial, user and cartridge ports.)

Or all Five Cassettes above for only

Carriage to you included on all orders and repairs. All repairs carry a three month guarantee.

