YEP! FOUR YEARS OLD AND STILL GOING STRONG...

Techie advice from top experts

COMMODORE FORMAT

If you've got a C64 then get this

ISSUE 48 • £2.95 • SEPTEMBER 1994

CHECK THIS OUT

THIS MONTH'S CRAMMED-TO-OVERLOAD POWERPACK FEATURES...

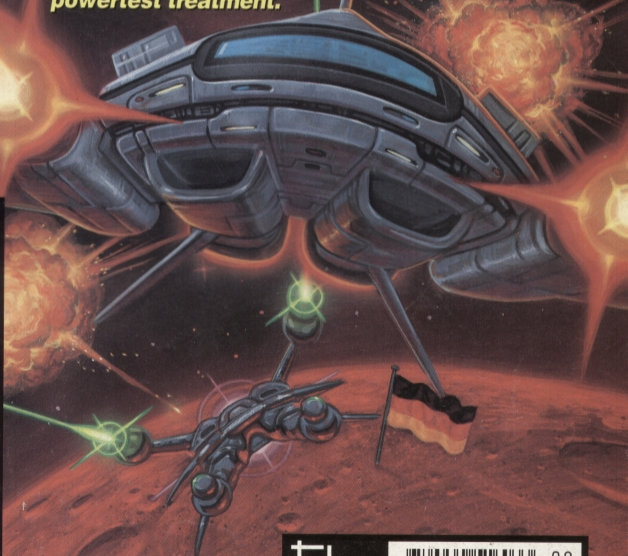
TILT
A SERIOUSLY PERPLEXING CORKER OF A PUZZLER

CITY BOMBER
EXCLUSIVE DEMO OF VISUALIZE'S LATEST BLASTERAMA

REPEL • WIZARD'S PET
TWO TOP-NOTCH PD SHOOT-'EM-UPS

BLITZKRIEG

Lions of the Universe spearheads the German invasion of the UK C64 scene with some stunning shoot-'em-up action. We give it the full powertest treatment.



When you buy this magazine from the newsagent's you shouldn't be able to read this. If you can, then someone's swiped the coverlape. Ask your newsagent for a replacement.

Tape to disk SMART!
Turn to p.11.

ALSO REVIEWED:
BOBIX • SUPER NIBBLY • OSTFRIESLAND GAMES

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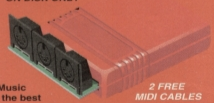

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COMMODORE FORMAT

Welcome to another fantablious issue of the world's best selling Commodore magazine...

CONTENTS

ISSUE 48 • SEPTEMBER 1994

18 LIONS OF THE UNIVERSE

The first of the new wave of European C64 software arrives on these shores, and CF gives you the exclusive UK reviews. Best of the bunch so far, without a doubt, is this pulse-pounding *R-Type*-alike. But just how good is it? And does it herald a new age in C64 software? Find out on page 18.

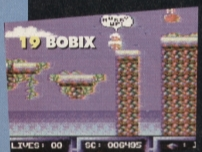
33 WRITE YOUR OWN C64 GAME – AND GET IT PUBLISHED BY THE ELECTRIC BOYS!

COMPO

"I could do better than that!" Go on then, prove it. If you reckon you could design the ultimate C64 game this is your chance to see your concepts turned into reality. And you could win a disk drive into the bargain. Howdy-doody.

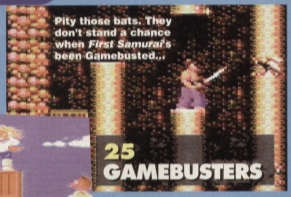
18 GAME REVIEWS

A picture says a thousand words apparently, so see if you can work out what we're going to say about these games in the reviews from these screenshots...



19 BOBIX

18 OSTFRIESLAND GAMES



Pity those bats. They don't stand a chance when *First Samurai*'s been Gamebusted...

25 GAMEBUSTERS

First Samurai gets the full Gamebusters treatment. Plus, there's a plethora of other POKEs, tips and cheats that'll make you an instant expert in over 20 different games

20 SUPERNIBBLY

22 PD FORMAT

What connects Binary Zone PD, Sceptre of Baghdad, Guild adventures, Psytronik Software and (snigger) Droitwich? One man – Jason Mackenzie. PD Format braved ridicule and went to Droitwich to discover how the man manages to run three different companies.

SPECIAL FEATURES

13 GAME DIARY: THE MAKING OF 10TH DAN

Five months in the making! Er, so far.

33 COMPO: GET YOUR OWN C64 GAME PRODUCED

Here's your chance to design a C64 game which the Electric Boys will turn into a real, commercial game.

GAMES

18 LIONS OF THE UNIVERSE

Why not cockroaches of the universe? What's wrong with cockroaches? Can't a cockroach be a hero?

18 OSTFRIESLAND GAMES

We're not sure what this translates as, but we hope that it's not German for something rude about waggling.

19 BOBIX

Cute platform action. Some things never change.

20 SUPERNIBBLY

It's *Snake* meets *Pacman* in a massive puzzler that's really a hell of a lot better than it sounds.

22 PD FORMAT

Interview with Binary Zone sponsored by Sprocket's Sprockets, the sprockets you can trust.

25 GAMEBUSTERS

You can do it. We can help. Together we'll bust these games and make the world a better place.

SERIOUS STUFF

14 TECHIE TIPS

Jason Finch – he's one seriously clued-up dude when it comes to the C64. And we pay him tons, so make use of him, okay. Make him work. Hard.

31 MEAN MACHINE CODE

We're more than half way through this machine code tutorial now. Feel ready to write *Mayhem 2* yet?

10 ON THE POWERPACK...

TILT

Get the ball from A to B, taking a small (actually, make that large) detour through the rest of the alphabet.

CITY BOMBER

Reduce the city to rubble and rescue the captives who are begging to get out of there alive (it sounds a bit like Birmingham, really).

WIZARD'S PET

The everyday story of a small green blobby thing versus a never- ending stream of geometric shapes.

REPEL

High-speed, PD shoot-'em-up action in a great little game which spits in the eye of subtlety. Hah!

Tilt

City Bomber

REGULARS

5 SNIPPETS

All the latest news from the C64 scene, sponsored by The Beckenham Post, the paper with the most.

6 LETTERS

The Mighty Brain defends himself against all insults. Sponsored by British Beef.

17 BACK ISSUES

Your chance to 'catch' those issues you missed. Sponsored by Bert's Tackle Shop, Canterbury.

21 SUBSCRIPTIONS

Sponsored by The South Devon Coven.

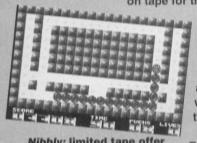
TURN TO PAGE 10 FOR THE FULL COVERTAPE BRIEFING... ➤

SNIPPETS

You have connected to the C64 news net. Prepare for information download. Dave Golder is your cyberhost...

GERMAN GAMES TO BE SOLD ON TAPE FOR SIX MONTHS

The Electric Boys have announced that when they finally get the rights to distribute the German CP Verlag games, they will be making them available on tape for the first time ever, but only for six months.



***Nibbly:* limited tape offer**

The games, some of which are reviewed this issue (pages 18-21) have been written specifically for disk use, and so tape users might have some multiload nightmares. But the Electric Boys hope that by making them available on tape, they will show tape users what they're missing out on, and encourage them to buy disk drives.

For more details you can contact The Electric Boys on ☎ 081 668 7595.

NEW 8-BIT MAG IS BIG ON ADS

8-Bit Mart is a new mail order mag devoted to the 8-bits. And when we say mail order, we don't just mean you have to send away to get it; it's actually stuffed full of adverts for mail order companies and small classified ads. An expanded Uncle Dave's Buy-A-Rama, I suppose.

So if your after some software or hardware that you just can't get in the shops, *8-Bit Mart* looks like it could be a good place to turn to.

The first ish is out on 1st September. Normally it'd cost you four first class stamps, but as a special offer to *CF* readers, editor Brian Watson is offering you a sample copy for just two first class stamps. That also entitles you to a free small ad in one of these sections: for sale, wanted, help and miscellaneous.

So if you want to get an issue, or if you want to find out about advertising rates contact Brian Watson, Harrowden, 39 High Street, Sutton-In-The-Isle, Ely, Cambs CB6 2RA ☎ 0535 777006.

NEW ON THE 'ZINE

Okay, so that heading is almost as bad as 'Zine Scene, but give a mag a break, okay. *Commodore Computing Magazine* (*CCM* to its friends) is a new fanzine with a 'broad brief'.

It'll lean towards the more techy side of the C64 with articles in the first issue about swapping memory banks and whether you should buy a monitor or a will a TV do, as well as some golden oldie game reviews. It costs 60p an issue or £6 for 12 issues. Write to CCM, 65 Uplands, Breacon, Powys, LD3 9HS ☎ 0874 622568. Make cheques payable to Dave Forsey.

THE GREATEST (COMPUTER) SHOW IN THE GALAXY

This Future Entertainment Show lark is shaping up to be a one mammoth of an event, easily eclipsing the last two shows, with much more on offer for everyone who's into any sort of computing.

While there are still going to be loads of new games on show, games workshops and and a game theatre, there's going to be a much bigger emphasis on the serious side of computing. Not business and stuff, but things like CD ROM, DTP, electronic music, digital art, that kind of thing.

And it'll be much more interactive, with loads of workshops, debates and demos which you can take part in. And, of course, all the latest technology and software will be vying for your attention.

Basically, if you're into any aspect of computers there's going be something there for you not just to see, but to get involved in.

It all takes place from 26th-30th October at Earl's Court. Tickets cost £6 in advance and £7 on the door. The ticket hotline is ☎ 0369 4235 (honest, I haven't missed any numbers off).

The Future Entertainment Show
Earls Court 2
26th – 30th October 1994
CD-Rom ○ Amiga ○ Mac ○ PC ○ CD-i ○ Consoles

HEARD IT THROUGH THE GRAPEVINE...

Here are a few very non-official bits of news that our network of agents across the globe have eeked out (or rather, a few unsubstantiated bits of goss' that have been left on the office answerphone).

- **The Electric Boys are raving about a game they've been sent from Poland. Though they're keeping tight-lipped about what sort of game it is, they are currently in negotiations to get the distribution rights in the UK.**
- **The Boys have also unearthed another amazing piece of hardware. Details at the moment are sketchy, but rumour has it that it could take your machine to 8Mhz and give it a 1 meg RAM expansion. Which basically means that it could soup-up your machine to an incredible level. More news on that next issue hopefully.**
- **The C64 scene in the US seems to be picking up at the moment as well, with two new C64 magazines being published within the last couple of months, one subscription-only, but both commercial and not just 'zines. Both apparently have a techie bias, and we'll try to give you a glimpse of them in a future issue.**
- **Rumour has it that a couple of entrepreneurs from the CPC scene are planning a semi-commercial multi-format 8-bit magazine, covering the Speccy, C64 and CPC.**

THE ALL-TIME TOP 50 POLL

It's coming. Yep, in just two issues *CF* reaches the big five-oh, and to celebrate, we're going to be publishing the a list of the all-time top 50 C64 games (and a bottom 10 worst games). And who's going to be deciding which are the best games ever? You are! After 49 issues of us telling you what we think, you can tell us what you think. Will *Mayhem* be a forgone conclusion for the number one spot or have you got other ideas? Is *Cisco Heat* the most appalling travesty of all time or do you know better?

All you have to do to get your opinions heard is fill in this form (or produce a reasonable facsimile of it) and send it along to: *CF*'s All-Time Top 50, *Commodore Format*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW before 1st September 1994.

And if you're writing in to the mag for any other reason (TMB, Techie Tips or whatever) take the opportunity to cast your vote. And you never know – any comments you might want to add could find their way into print...

CF TOP 50

Favourite game .....

2nd favourite game .....

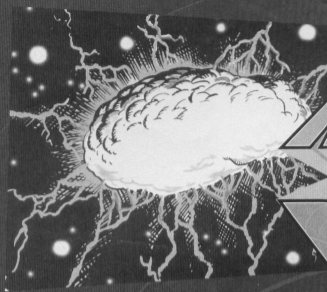
3rd favourite game .....

Least favourite game .....

Name .....

Address .....

.....



THE MIGHTY BRAIN

Knowledge is power. Power corrupts. Ergo knowledge corrupts. Therefore the Mighty Brain must be the most corrupt being in the entire universe. Would you let such a devious mind answer your letters? Too late...

ATTITUDE PROBLEM

Dear TMB,

I am getting sick of *Commodore Format*'s attitude – few pages go past without some reference to the C64 dying out. "What!?" I say. The C64 has gone from strength to strength ever since the software houses left the scene. No company (except Thalamus Europe) ever pushed the C64 as much as Jon Wells, The Electric Boys or Digital Graffiti have.

As CodeMasters especially began to churn out game after game, all of them completely dud, C64 owners everywhere thought, "stuff this for a lark," and bought a SNES. Fair enough. Who wants hundreds of yawnsome *Dizzy* remakes when you can have excellent graphics and superb sound even if, perhaps, the playability is not as good?

But now that C64 games are becoming fewer and further between this does not mean that the C64 is dying out. Now we can expect good quality, as the games that are written by C64 enthusiasts, not fat, overpaid lamers who have been forced to write conversions from other formats.

So please, stop taking the pathetic attitude of the software houses; the C64 is doing better now than it ever has, with programmers using every byte of data to the limit, fanzines springing up everywhere, and more people learning to code their own blockbusters. So repeat after me, nation: "The C64 is not, repeat NOT a dying machine." Thank you.
Kevin West, Wivenhoe.

Hold up there a minute, matey. *CF*'s attitude is not that the machine is dying – in fact we've been printing article after article proving the exact opposite. The only point we are making is that it's up to you lot to make sure that the C64 continues to live up to its potential. The reason companies stopped making games was because they weren't selling as many. And that was because C64 users were (foolishly) moving onto other machines. If we want to keep this machine going then we have to support the companies which do still support the C64. If we make out that things are all hunky dory then people will become complacent. People need to know the real state of the scene so that they can do their bit to keep it going.

Yes, the C64 is a great machine, and the potential is there for it to continue to grow and develop in a number of exciting ways (see the letter of the month) but you lot have got to do your bit, and, personally, I reckon you'll be spurred into action more if you know how vital it is for you take an active part in the scene. Just waiting for the next game isn't enough. **TMB**

ABSOLUTELY NO WAY

Dear TMB,

I only started getting *Commodore Format* with issue 28. I don't get it very often (in fact, not at all really). I think that the complete solutions to *Slightly Magic*, *Dizzy Prince of the Yolk Folk* and *Fantasy World Dizzy* were in earlier issues. I wonder if you could send me the complete solutions and maps through the post. This may be asking a bit too much, but I'm not a computer whizz kid. I'm afraid that if you publish the solutions I'm not going to buy that issue and I'll miss my chance. Thanks.
Candice Bryant, Boston.

There'll be a solution in the mag soon but we don't do a personal service.

So you expect us to send out solutions to someone who admits they rarely even buy the magazine? Try lying next time. It might help. But probably not. In fact what's the point in answering this letter, since you probably won't ever know if it's been printed? Good grief. **TMB**

BITS 'N' PIECES

● If you know everything why don't you write the whole mag?
J Wilford, Leicester.

Because I don't get paid to. **TMB**

● What's happened to *Germ Alert*? It looked great in the preview.
K Ilford, Doncaster

Jon Wells is still working on it but the only assurance he'll give is that, "It'll be out before *10th Dan*." **TMB**

● Which do you prefer – *Star Trek*, *Star Trek The Next Generation* or *Deep Space Nine*?
Gary Bailey, New Cross

I prefer *The Next Generation*, though Troi irritates my synaptic membranes a bit at times. Ollie, of course, prefers classic *Trek (why 'of course'? Are you implying I'm long in the tooth? – Ollie)*, while Dave's completely off his trolley and loves *Deep Space Nine* (he likes women with wrinkly noses apparently). **TMB**

● Did you realise that your name is an anagram of the phrase 'Might by the rain'? (I bet you answer this in a very vague way or you just say something like, "Yes," or "Wrong".)
Zyrax Werewolfia, somewhere in the region of 4.5 million light years away.

Ah, but did you know Dave Golder was an anagram of 'dog led rave' and Ollie Alderton translates as 'reliant old 'ole'? How's that for not answering in any of the ways you suggested? Is it rude to answer a question with a question? **TMB**

● Is it true that the first *Seymour* adventure was actually originally written for *Dizzy*?
Gary Bailey, New Cross

It sure is. CodeMasters reckoned that the Hollywood setting was too realistic for Dizzy, and that he should stay in 'fantasy' lands. So they created the grittily realistic walking potato for *Seymour Goes To Hollywood*. And the world has never been the same since. **TMB**

JEALOUSY

Dear Mr T Brain,
Please, oh Mighty Brain, would you be kind enough to print this letter. My cousin has had a C64 for ages, and when I set eyes on his games I felt so jealous that I just had to have one (which I am getting for my birthday). I still can't wait to play the games on the covertape.

Anyway, here are a few questions...

1 Are you hologram (dead) or human (alive)?
2 Which company, in your opinion, is the best producer of C64 games overall?
3 Do you think *SF2* is worth buying?
Thank you oh, Mighty Brain.
Richard Spooner, Hull.

1 Erm, well I'm neither a hologram or humanoid, but I am alive. The suggestion that you have to be humanoid to be alive seems a bit xenophobic.
2 I'm tempted to say Apex because every game they produced was a classic (*Creatures 1* and *2*, *Mayhem In Monsterland*),

Street Fighters versus IK warriors.

but their output was hardly prolific. Thalamus, who released a couple of the Apex games (as well as *Heatseeker*, *Armalyte* and *Nobby the Aardvark*), scored consistently highly, as did System 3 (the *Ninja* series, *Myth*, *Turbocharge*).
3 On the '64 *Street Fighter 2*'s good, but not that good. If you want a top-grade beat-'em-up then the ancient-but-still-excellent *IK+* is worth a butcher's. And *10th Dan*, when it comes out, should be pretty good as well if it lives up to its promise (which could be hard). **TMB**

WHAT NEXT?

I have recently started trying to put POKEs into games so that I can get infinite lives, etc, etc. After I type in the listing printed in the magazine, I save it under a name then run it, but I don't know what to do next. Please help.
Stephen McKenna, Glasgow

When you type RUN you should then be confronted with an option along the lines of INVINCIBILITY Y/N? Type Y followed by RETURN. Now PRESS PLAY ON TAPE should appear, so insert the game the POKE has been designed for and, indeed, press play on your datassette. If that doesn't work, you've obviously typed the listing in incorrectly, a common fault when it comes to fallible humanoids like yourself. The whole process is explained in full in a rather disturbing walk-through (starring that odious Leach person who used to work for the magazine) back in *CF24* which, as Dave would no doubt inform you, is available through Back Issue on page 17. **TMB**

THINK HARD

What is it that sets all those stuck-up Amiga and PC owners apart from us Commie owners? Well, it sure ain't the hard disks, 3.5-inch floppy drives, processor speeds, scanners or even quite useless things like genlocks because these are all available to C64 users. So it must be their arrogance.

Let's analyse the arguments:

1 A PC/AMIGA IS FASTER.
Maybe so, but we don't have to exchange motherboards in order to speed up our computer. In the mid 80s there was already a cartridge which sped up the 64 to 4Mhz. Now there's one that pushes our 64 to Amiga 500 speed, ie, 8Mhz (it's called the Flash 8).
2a A PC/AMIGA HAS MORE MEMORY
Boloney. Lots of Commie owners don't see the need for a RAM expansion but the largest I know of is 16Mb.
2b WELL, AT LEAST PC/AMIGA FLOPPIES HAVE MORE STORAGE SPACE.
Wrong again. CMD sells a C64 compatible 3.5-inch disk drive with 3.2Mb of storage space per disk.
2c HAH. BUT YOU CAN'T HAVE A HARD DRIVE ON THAT ANTIQUE OF A MACHINE.
Do I hear a slight tone of arrogance? We too can have a hard disk. We've got a choice of 40-, 85-, 170-, 240 or 340Mb.
3 MY AMIGA HAS A GENLOCK INTERFACE
I don't see what use a Genlock can be, but there is a C64 genlock available.
4a ON A PC YOU CAN USE A SCANNER.
Scannertronik sells C64 scanners and DTP programs to use your scans in.
4b ER, I MEAN A VIDEO DIGITISER
See argument 4a.
5 A PC IS MORE FLEXIBLE.
See all the points above. Need I say more?

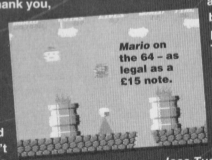
So where can you get all this great stuff? Here are the details you need:
● SCANNTRONIK, Mugrauer GMBH, Parkstrasse 38, 85604 Zorneding-Poering, Germany
Hand scanner 64 DM329 (about £120).
Video digitiser DM258 (about £80).
Digital Genlock DM848 (about £255).
● DISCOUNT 2000, Tornbergstrasse 12a, D-53340 Meckenhelm, Germany.
Flash 8 (8Mhz for the C64/128 plus 1Mb RAM) DM398 (about £120).
● CMD DIRECT SALES, Postfach 58, A-6410 Telfs, Austria.
HD 200 (240Mb hard disk). DM1399 (about £425).
FD 4000 (3.5-inch floppy drive) DM575 (about £175).
And finally, RAMLink (4Mb RAM expansion) DM785 (about £238).

That's it for now, but as soon as I have some more info I'll let you know. There's one more thing to say; this info was obtained through ads in a German mag called *64er* (June 94 edition). I know some of the products are a bit pricey but if you can afford it, I'd say, "Go on, buy the stuff and baffle your friends."
Peter Maasen, Wijnakker 13, 9201 JH Drachten, Holland (full address printed on request).

What else can I say, but thanks for all that info? In fact, from next issue we will be starting a series of hardware features along the lines of 'Getting The Most Out Of...', so expect to see a few of the products you mentioned getting the unique *CF* treatment in the coming months. Oh yes, and if the Flash 8 sounds interesting, have a read through Snippets and try putting two and two together. I can say no more, my synapses are sealed. **TMB**

BEGGING FOR IT

Dear Brain,
May I ask you a few questions? Please? Can I? Come on! Let me ask just a few questions to help fill up your page and let you get some dosh out of the *CF* piggy bank. Thank you, here they are...
1 How do Mighty Brains multiply?
2 Does Simon Forrester like Sepultura?
3 Ha, ha, ha. Maybe you're not so mighty after all, because in issue 46 you told A McGlane that there weren't any *Mario* games for the C64, but this is far from true. There are actually two *Mario* games for the C64 – *Super Mario Bros* and the classic *Mario*.
4 When I tried to fax Jon Wells (you could just make out the number from the fax he sent to *CF* that you printed) something dead strange happened. Instead of my fax being sent I heard two people saying, "Hello... Helooooo...?! Hmmm..." and then they hung up. Weird, eh?
5 Remember, "Anfrungia orm Froxnumo!" Is this good Galgafrasian or what?
6 How come everybody is making such a fuss about violence in computer games, but they don't say anything about programmes like *Intrigue* by that Taboo artist (*who? – Ed*)? If they ban games with blood and things then the people violence doesn't have an effect on will feel bored after a while with seeing Ninjas turning into fairies and going poing onto the ground.
Joss Tucker, The Netherlands.

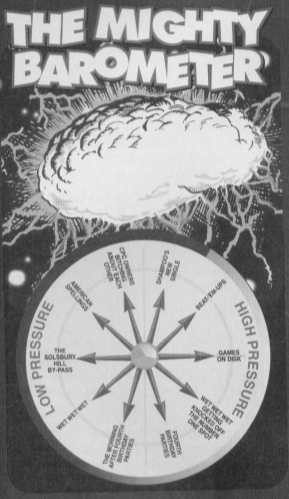

Mario on the 64 – as legal as a £15 note.

1 Mental arithmetic – we don't need calculators.
2 Simon reckons that Sepultura are the next evolutionary development along from Spinal Tap – I think we'll take that as a, "No."
3 Well, yes and no (you knew I'd try to wriggle out of this one). I admit that the original *Mario Bros*

game was released on the C64 years ago before Nintendo began invading the home console market. In those days they would license out their coin-op creations to other companies, which they certainly won't these days. Anyway, the game was dreadful.

The *Super Mario Bothers* you mention is, in fact, a PD game doing the bulletin board rounds in the US. Unfortunately, it is completely unofficial and illegal and if Nintendo find out about it, they won't be very happy. PD games might not be earning their writers any money (in theory) but that doesn't mean they can rip off other companies' creations.

So yes, *Mario* is on the C64, in the form of one rubbish antique which you probably won't be able to buy anywhere, and a couple of illegal PD copies versions. And it's very unlikely Nintendo will allow another official *Mario* game to be made.



4 Ah, you fell for our cunning trap – ahem. Actually, Jon hasn't got a fax and he sent the sketches which were published in *CF*45 from a shop's fax machine. So you were probably trying to get through to Prontaprint.

5 Almost, but not quite. The conjunctive use of the female version of orm used in a sub-retentive clause such as this should always have the 'o' sound (fl in the native script) replaced with something akin to a Welsh 'll' inflection (" in the native script). Otherwise you might find yourself married to a small grey furry blob.

6 Yes, indeed, the idea of a world filled with games in which Ninjas turn into fairies that poing onto the ground does sound very frightening. But so does a world in which anything goes and violence can be shown without any restrictions whatsoever. To ban violence from games wholesale would be disastrous to the development of games as a true art form (and believe me, interactive entertainment will be the popular art form of the 21st century, like the moving picture was the popular art form of the 20th century), but it does need to controlled, which is why the voluntary certification of games by the major software companies is a good idea. **TMB**

NEVER SAY NEVER AGAIN

Dear Mighty Brain,

Yes, you were right again. It is dangerous to say, "never" (especially if you're on Galgafrasis 7 where it roughly translates as something you'd receive the death penalty for suggesting). What I'm referring to is the letter from A McGlane in *CF*46.

Recently I got a disk drive (MkII) from a lady who obviously didn't know what the heck a C64 could do for just £30. And then one of my father's friends from work gave me absolutely loads of programs on disk.

The thing is, most of these proggies he gave me were from the good old US of A and were freely available on bulletin boards (BBSes if you want to be technical). He couldn't believe there were no BBSes in the UK (if I'm wrong, please correct me) as in the US there are at least 150 in every city.

When I called up a bulletin board in America (er, don't tell my parents about that, okay) I found tons of programs that are unavailable over here and my mouth dropped.

I don't know if it's legal to put some of the stuff that's on these boards on the covertape but it would be great if you could.

What I'm trying to say to all other readers is... get a modem and call these numbers (dial 0101 for America first)...

213 281 6772 609 646 5194
213 836 2381 416 574 6899
305 288 9499 705 556 7521
301 761 9469 813 526 3493
813 526 6542

There is definitely life in the old Commodore 64 for ages yet, and the amount of software for it is simply staggering. Hooray!
David Curran, Bicester

You might remember that last month those humanoid members of the crew promised a comms feature for this month. Well, true to form, they couldn't get their act together and the feature has been delayed a couple of months.

But fear not if you want to get hold of all the amazing games David mentions in his letter (apart from any dodgy *Mario* games that might be floating around the phone lines, of course) and you haven't got a clue what to do with a modem, because *CF* will be giving you the complete beginners' guide very soon. If those human members of the crew can get their act together. Which would be a first, let's be honest. **TMB**

ADIOS AMIGOS

Famous final lines? How about, "It was beauty that killed the beast"? Or maybe, "Look at me, Ma. I'm on top of the world"? Then there's the classic, "We'll always have Paris." But none of them have the emotional impact or dramatic strength of...

"If you want to write to The Mighty Brain, the address you need is TMB, *Commodore Format*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW."

COMMODORE FORMAT

CF48
September 1994
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If you want to phone us, make it a Wednesday or a Thursday, okay, otherwise you'll only get through to an annoying answerphone. By the way, we are not a techie helpline and we cannot (that's cannot, NOT will not) help you. If you want technical help write to Techie Tips (page 16) – that's what it's there for.

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Dave would like to thank: Tony Mott for making him rich. Ollie would like to thank: Asylum (you'll know who they are soon) for throwing a really decent part. Keith Woods would like to thank: Dave and Ollie for not mentioning Ireland's performance against Holland in the world cup... much.

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POWER PACK

Revealed! The innermost secrets of this month's covertape. A CF exposé by Dave Golder...

TILT

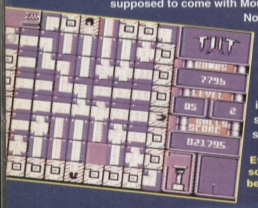
Christmas, 1975. A typical suburban house. Picture the scene (but not in too much detail – you can obliterate such things as flares, pink afros and blobby gelatinous lamp things if you like). A young boy rips open his presents. An Action Man. A Slinky. A Space Hopper. Mouse Trap. And a couple of small plastic slidey things that... er... might come in use on a long car trip... thanks Auntie Maud.

But less than an hour later, the Action Man's been confiscated for doing unmentionable things to a Cindy doll (in front of Auntie Maud), the slinky's got a kink, the Space Hopper has sprung a leek and no-one can find that spring that's supposed to come with Mouse Trap. Nothing left but the plastic slidey puzzles. One of them involves sliding squares around to form a picture; the other concerns getting a number of silver balls into some holes. "Hmm," thinks precocious youngster. "These might not be much cop but I can see potential. What a shame it's at least five years too early for home micros, 'cos I bet you could combine these two to make a really good computer game.

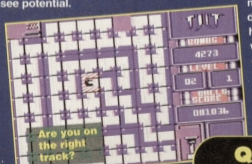
"I can see it now. The slidey squares could have bits of track on them which the ball would run along. The player would move the squares around to form a clear path from the top-left of the grid to the bottom right. And there could be dozens of different levels, each one harder than the last. To make things trickier, the ball would be constantly moving. It'd be a good idea to start with three balls, but the player would lose balls by letting them fall through holes or running out of time. Because, of course, there should be a time limit. You could alter the time limit to give the game varying degrees of difficulty.

"Apart from holes, there would be other special tiles that do good or bad things. And if I were writing the tape pages of a computer games magazine, I would probably do a box out detailing some of the effects these tiles have. And then I'd have some tins that would appear every now and then; blue ones would give 500 bonus points, red ones would give 1000 bonus points and purple ones would give an extra life.

"Yep, I reckon that would be a real corker of an idea."



Even the screen grab's been tilted.



Are you on the right track?

THE PIECES OF THE PUZZLE ALL SLIDE INTO PLACE

START – A really good track by seminal late 70s band the Jam.

STICKY ENDING – A dead end which causes you to grind to a halt for a few seconds.

DEADLY HOLE – Fall down one of these pink things and you're dead.

TELEPORTS – If you tumble into one of these holes you'll pop out of the other one.

SURPRISE – A little bloke walks on who may or may not nick one of your lives. It's a gamble.

STOP – This (surprise, surprise) stops the ball from rolling for a few seconds.

WE HAVEN'T GOT A CLUE WHAT THIS THING IS – Answers on a post card please...

SLOW MOTION – This slows things down for a while.

TRAP DOOR – Stay away from that trap door, 'cos there's nothing down there.

YOUR GOAL– This is where you need to get to.

NO LOAD ZONE

If you're having a hard time loading this month's Power Pack then plonk the duff tape in a jiffy bag, slip in a tape-sized SAE, seal it up and send it to: *CF48* Tape Replacement Service, Ablex Audio Video Ltd., Harcourt Halesfield 14, Telford, Shropshire.

QUICKSTART INFO

JOYSTICK IN PORT 2

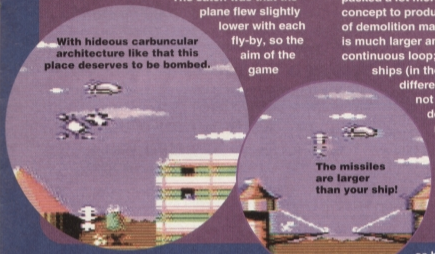
UP	Move tile up into empty space
LEFT	Move tile left into empty space
RIGHT	Move tile right into empty space
DOWN	Move tile down into empty space
RUN/STOP	Pause
←	Pause

OTHER INFO: In two player mode the second player controls the ball using the keys 9, 0, £ and * for left, right, up and down respectively.

CITY BOMBER

While the world waits with baited breath for Visualize's *10th Dan* and *Germ Alert* (well, the bit of the world that reads *CF*, anyway) Jon Wells suddenly unleashes a new, completely unexpected game onto an unsuspecting '64 scene. And we've got an exclusive demo of it on the Power Pack.

City Bomber is a souped-up version of the classic (well, perhaps not so much classic as just plain old) *Bomber*, in which a plane repeatedly swooped over a cityscape dropping bombs on the skyscrapers. The catch was that the plane flew slightly lower with each fly-by, so the aim of the game was to bomb the buildings before you crashed into the side of them.



With hideous carbuncular architecture like that this place deserves to be bombed.

The missiles are larger than your ship!

But really this is just a starting reference point for *City Bomber*, a game which has packed a lot more into the basic *Bomber* concept to produce a fun, action-packed slice of demolition mayhem. In *City Bomber* the city is much larger and the landscape scrolls in a continuous loop; you can choose from nine ships (in the full version the ships all have different attributes but this feature is not on the demo); the city defences lob ground-to-air missiles in your direction; and there are hostages to rescue by swooping down low to pick them up.

The demo only has one level but the actual game has over 100 spread across different terrains. So the Power Pack *Bomber* experience is short and sweet. But if you decide you want some more air raid action, the full game should be out around now.

Okay, so it looks like one of those faked 1950s UFO photos...

In the full game each ship will have its own individual attributes.

QUICKSTART INFO

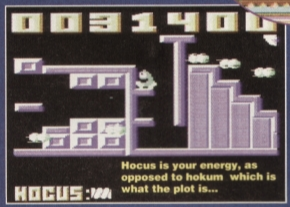
JOYSTICK IN EITHER PORT

UP	Move up
LEFT	Move left
RIGHT	Move right
DOWN	Move down
F1/F3	1 or 2 players
F5/F7	Music on or off
1-8	Alters the landscape scrolling speed.

WIZARD'S PET

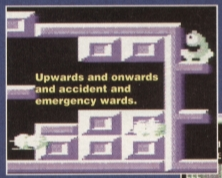
The home computer revolution has altered the public's perception of blobs. Whereas before, say, 1980 people would have associated blobs with cheap 60s SF movies (or perhaps entries for the Gallery on *Take Hart*), these days blobs are more commonly thought of as cute lead characters in computer games.

The latest Mr Easy-To-Draw is a Wizard's pet, apparently. And in this PD game he has to fend off some equally easy-to-draw enemies as he prowls along the must-have-been-easy-to-draw platforms. And there are pick-ups to, er, pick up along the way as well.



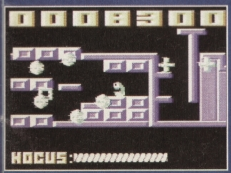
Hocus is your energy, as opposed to hokum which is what the plot is...

This is a sideways-scrolling, no-nonsense shoot-'em-up. Just keep your finger on the fire button and shoot anything that moves. Anything that doesn't move but isn't part of the background is probably a pick-up, but shoot it anyway, just to make sure it isn't hostile. They're indestructible so there's no need to worry.



Upwards and onwards and accident and emergency wards.

don't stand there with your mouth wide open.



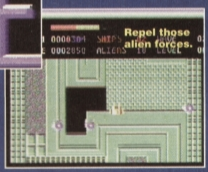
Beware deadly marshmallows.

REPEL

With a name like *Repel* you might be expecting a *Thrust*-style, subtle, joystick-nudging experience. But subtlety is one thing this game certainly hasn't got. It's an SF shoot-'em-up with an accent on speed. Spéed. Hmm, doesn't seem to get across the point, does it? How about, it's an SF shoot-'em-up that's fast with a capital F. Fast. Er, capital everything, perhaps... FAST. Maybe it needs an exclamation... (*get on with it – Ollie*).

Repel, strangely, is not an anagram of scream.

You pilot your ship up and down the vertically-scrolling screen blasting all the enemy ships. And, er, that's all there is to it. There are a couple of other points, I suppose, like the fact that you have limited energy, you have to kill a certain number of aliens before you move onto the next stage (with meaner aliens), and your ship can move at different speeds, but basically, you just blast away like a mad thing. Pure and simple.



Repel those alien forces.

TECHIE TIPS

And here we have all this month's techie tips listings reproduced in full so that you don't have to strain your fingers. You lazy lot. We're just too good to you, you know.

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This month's Power Pack is also available on disk. To get the disk version 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: **CF48 Tape To Disk, Ablex Audio Video Ltd, Harcourt Halesfield 14, Telford, Shropshire TF7 4QD.**

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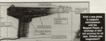

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MAKING 10TH DAN

DIARY OF A GAME: MONTH FIVE

The story so far: Jon Wells of Visualize is five months into the creation of 10th Dan, a game he plans to make the best C64 beat-'em-up ever...

Yes, I know what you're thinking... five months have passed and still nothing much has been done. Well you're partly right and partly wrong (*that sounds like the old, 'is the glass half empty or half full?' quandary to me – Dave*). Y'see there have been a few technical hiccups.

First, Phil started designing some graphics which he was intending to tweak and spruce up later. Only he's dashed off again (he's a busy lad is Phil!), and didn't have enough time to get them looking great for inclusion in this installment of the diary. On top of that, Paul's disappeared! Fellow 64 chum, Kenz (*see page 22 – Dave*), told me that Paul's been very busy too – sorting out his CD music, and it looks unlikely that he'll be doing any more C64 music.

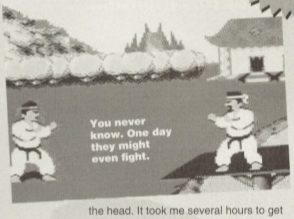
We'll you could imagine my initial reaction – let's end it here and now!

TO THE RESCUE?

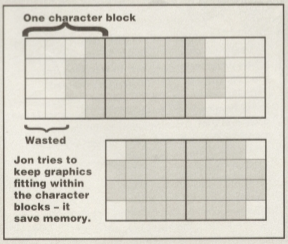
Just as I was about to do a flying kick from the upper office window, the phone rang! Hmmmm... It was Jesper Larsen of Profile Entertainment! Apparently, Jereon Tel (a Maniacs Of Noise musician) is interested in composing some music for our future products. Although nothing has been confirmed yet, we're definitely interested and this sounds very promising for *10th DAN*! We'll keep you informed.

After all this mayhem, I decided to try my hand at some groovy graphics. First, I attempted some background graphics for the landscapes – only it was hopeless because I was trying to draw these graphics, character by character, using my editor. The trouble came when I needed to draw large graphics of about 3x3 or 4x4 characters in size – it's just too awkward.

I left this for the moment and tried my hand at some sprites instead. Using Firebird's graphic editor I bolted seven sprites together, the first six being two characters across by three high and the seventh being the head. It took me several hours to get a static standing frame, but the results are pretty good (check out the screenshots!).



I've also drawn some different heads. The good thing about this is that the body remains the same – saving more memory – yet it gives the impression of different opponents. I've now inserted them into the multi-plexor and they look really good, but I'll improve them even more, later.



BACK TO THE LAND

Although I failed miserably last time, I'm going to have another go at some landscape graphics. This time, though, I'll be drawing them in Bitmap mode, using the good old *Saracen Paint* utility. Before I start, though, I must first mark out the whole screen, taking into account things like the colour splits, graphic sizes and memory, on-screen fighter positions and skyline position. This is all put down on paper so that I can refer to it easily; if I didn't, the graphics probably wouldn't go together properly.

You may wonder why I'm using *Saracen Paint* to draw these graphics? Well, there are two good reasons – first, *Saracen* allows you to define all the colours to each character properly, otherwise the colours would be mixed up (when converting them to character mode) and would look rubbish. Secondly,I programmed an old bitmap-to-character converter for *Saracen*, when I was doing *Sceptre of Baghead*, er.. I mean *Baghdad*, so this'll come in handy.

At first I drew a simple basic mountain outline, and filled this with the different shades available to me. The mountain I finished up with would've taken up the whole character set alone, which is no good. To get around this I grabbed a 6x4 block of the shaded mountain – this only takes up 24 characters and can be repeated in different sequences – to build up bigger or smaller mountains. The additional slopes for the mountains only take an extra eight characters! This is a more realistic way to produce high-quality graphics, using small amounts of memory.

The forest outback was drawn next; this is where I had to be more careful – the colour split will go in here. This means that the sky colour, cyan, and the ground colour, brown will be background colour one! Like the mountain graphics, smaller trees can be built out of the main large one, saving yet more memory.

TOWERING INTELLECT

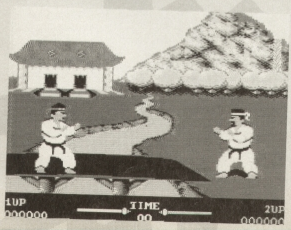
A tower based on the one's I foundm in those books I mentioned last month was next – this wasn't difficult to draw and only consists of eight characters. Then came the temple which will be quite hard. This has to be as detailed and colourful as possible, while also using little memory. Like the mountain, I drew a temple outline making sure the graphics fitted in the characters, without wasting additional memory. If the left and right of the temple overlapped by two pixels on each side, this would be a waste of memory.

Anyway, I shaped the roof with the main part of the temple featuring some nifty columns, and finally a stone path surrounding with steps. Amazingly the temple is extremely small in memory; the columns, doors and chequered roof being repeated graphics.

After converting the Bitmap graphics to character format, it was now high time to put these graphics into the game. These were loaded into our 4x4 whole block/map and char editor (Phew!). This editor has a colour split facility which helps immensely.

Right, all the blocks have been defined and bolted into the map, though I had to make a few quick changes, using the character edit mode. So far the skyline's looking good; though the bottom half is empty I've had a good idea. This is were I will attempt to draw a river, flowing from within the forest and getting closer to a bridge, which the fighters can cross.

I won't go into details here, but it took me a couple of days to get this right. I've even drawn a waterfall which will animate in the mountains. All this has now been placed into the blocks and map. Although this level is nowhere near finished yet, it's already looking very impressive. I've yet to draw the clouds, plants, bushes and the odd fence – along with this the finished level will feature full animation of the river, waterfall and birds.



The river that took two days to get right.

STAY TUNED...

...For part six, in which we'll see the full graphics for the first two landscapes, and more of the fighter sprites.

TECHIE TIPS

Eight out of ten plastic surgeons who expressed a preference said that their wives preferred it. The other two shrugged and went back to reading what pearls of wisdom Jason Finch had to give out this month...

TRIPLE VISION

Dear Techie Tips,
You recently talked about displaying more than one sprite on the screen at once, but you haven't actually given a complete listing to display different sprites at the same time. Could you please print such a listing?
Neil Rowe, Ellesmere Port

I have given numerous listings in the past that have displayed more than one sprite on the screen. But – wait for it, wait for it – here is a program that will display three sprites on the screen at once. Lines 130 to 150 set the X and Y co-ordinates for each of the three sprites and lines 180 to 200 set the colour and pointer value for each one. Lines 220 to 260 deal with other attributes of sprites, with lines 290 to 320 filling the sprite definitions with random arrays of dots. Hopefully, by experimenting with the numbers, you will be able to customise this to your own needs.

```
100 REM TRIPLE VISION BY J.FINCH
110 PRINT CHR$(147)
120 REM POSITION SPRITES X,Y  FOR 0,1,2
130 POKE 53248,108:POKE 53249,84
140 POKE 53250,156:POKE 53251,192
150 POKE 53252,232:POKE 53253,115
160 :
170 REM COLOUR AND POINTERS   FOR 0,1,2
180 POKE 53287,5 :POKE 2040,13
190 POKE 53288,10:POKE 2041,14
200 POKE 53289,7 :POKE 2042,15
210 :
220 POKE 53271,1+2:REM Y-EXP FOR 0,1
230 POKE 53277,1+4:REM X-EXP FOR 0,2
240 POKE 53276,2: REM MCOL ON FOR 1
250 POKE 53264,0: REM NO MSB
260 POKE 53269,7: REM ENABLE FOR 0,1,2
270 :
280 REM CREATE RANDOM SPRITES FOR 0,1,2
290 FOR X=0 TO 191
300 A=INT(RND(1)*7)
310 POKE 832+X,(2^A)+(2^(A+1))
320 NEXT:GOTO 290
```

And that's the last time I'll have to explain about displaying sprites. Probably… not. **Jason**

FILE STYLE

Dear Techie Tips,
1 Some files I've seen around on disk have a sign immediately following their file type like this: "PRG<". Through experimentation I've discovered that this means the file in question cannot be deleted. How do you get rid of it and, alternatively, how do you make it appear?
2 TMB told me to call you a page-munching humanoid smart-alec.
Brendan Reid, New Zealand.

1 The less than sign after a file type does indeed mean that you cannot erase the file. In order to remove or add the sign to the file type you need to use a disk sector editor and have a decent knowledge of how the directory track (number 18) is organised. You locate the file type byte and logically OR it with 64.

For example, look at sector 1 of track 18. This will be the first directory sector. It is split into 8 blocks of 32 bytes; each block representing one file in the directory. The file type byte is the third one of each block. For a program it should be $82. Change it to $C2 and write the sector back to make the file undeletable. Reverse the process to allow removal of files.

2 It's better than being a thick page-munching heap of extra-terrestrial sponge (not that I take criticism personally, you understand). **Jason**

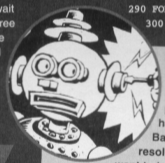
DOUBLE DETECTION

Dear Techie Tips,
You've given listings to detect a joystick in port one and a joystick in port two, but could you please print a Thanks very much for the listing. Having RUN it, the text screen moves from 1024-2023 to 50176-51175 ($C400-$C7E7), the sprite pointers to 51192 ($C7F8), the hi-res screen to 57344 ($E000) and the character set to 51200 ($C800). The colour for the hi-res screen is the new text screen area.

If raster interrupts are used in conjunction with the routine, then POKE 1123,X:POKE 1124,Y instead of POKE 788,X:POKE 789,Y where X and Y are the low and high byte of the interrupt start address. SYS 1190 clears the hi-res screen, SYS 1223 turns it on and SYS 1234 turns it off.

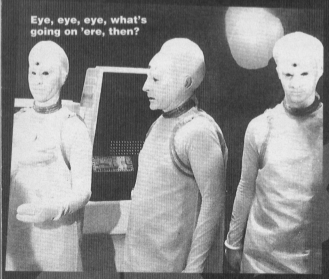
```
0 REM ON THE MOVE BY J.SMITH
1 PRINT CHR$(147)
2 FOR X=0 TO 220:READ Y:C=C+Y:POKE
1024+X,Y:NEXT X
3 IF C<>27549 THEN PRINT "DATA ERROR":END
4 SYS 1024
10 DATA 032,101,004,169,063,141,002,221
11 DATA 169,148,141,000,221,169,018,141
12 DATA 024,208,169,196,141,136,002,169
13 DATA 147,032,210,255,169,039,141,020
14 DATA 003,169,004,141,021,003,096,169
15 DATA 128,141,145,002,169,193,141,024
16 DATA 003,173,141,002,201,003,240,008
17 DATA 169,000,141,098,004,108,099,004
18 DATA 205,098,004,240,248,141,098,004
19 DATA 173,095,004,201,001,240,011,169
20 DATA 001,141,095,004,032,101,004,108
21 DATA 099,004,169,000,076,081,004,000
22 DATA 208,216,000,049,234,173,014,220
23 DATA 041,254,141,014,220,165,001,041
24 DATA 251,133,001,169,000,133,251,133
25 DATA 253,169,200,133,252,172,095,004
26 DATA 185,096,004,133,254,162,008,160
27 DATA 000,177,253,145,251,200,208,249
28 DATA 230,252,230,254,202,208,242,165
29 DATA 001,009,004,133,001,173,014,220
30 DATA 009,001,141,014,220,096,169,224
31 DATA 133,252,169,000,133,251,162,032
32 DATA 160,255,200,145,251,224,001,240
33 DATA 009,192,255,208,245,230,252,202
34 DATA 208,240,192,063,208,236,096,169
35 DATA 059,141,017,208,169,026,141,024
36 DATA 208,096,169,027,141,017,208,169
37 DATA 018,141,024,208,096
```

Ta very much for that. **Jason**



ON THE MOVE

Dear Techie Tips,
I wonder how many Basic programmers are fed up with having to move the bottom of Basic up above the high resolution screen area if they want to have hi-res graphics, sprites or user-defined characters, thus giving up 14K of Basic programming space. In fact, why not move the 16K video bank up in memory instead, allowing access to the full 38K for Basic programming? The program that I have enclosed does just that. Also included in the listing is a short routine that clears the hi-res screen, and also ones to turn it on and off.
J Smith, Street



Eye, eye, eye, what's going on 'ere, then?

listing that shows how you detect both joystick ports at the same time?
Richard Briggs, Newcastle.

The following program will check both ports simultaneously and will jump to subroutines to handle the various events, such as the fire button being pressed. It is not possible to do everything at the same time in practice, but the program gives the illusion it is doing things all at once. One joystick must have priority over another because, for example, the computer cannot check if you are holding down the fire button of joystick one at the same time that it's checking the state of the fire button of joystick two. The priorities change throughout the checking process so that, for example, pushing left is checked first on joystick one, but pushing right is checked first on joystick two. Change the subroutines so that they do what you want.

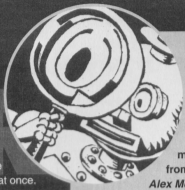
```
100 REM DOUBLE DETECTION BY J.FINCH
110 J1=255-PEEK(56321)
120 J2=127-PEEK(56320)
130 REM CHECK UP/DOWN ON BOTH PORTS
140 IF (J1 AND 1) THEN GOSUB 1000
150 IF (J2 AND 2) THEN GOSUB 2100
160 IF (J1 AND 2) THEN GOSUB 1100
170 IF (J2 AND 1) THEN GOSUB 2000
180 REM CHECK LEFT/RIGHT ON BOTH PORTS
190 IF (J1 AND 4) THEN GOSUB 1200
200 IF (J2 AND 8) THEN GOSUB 2300
210 IF (J1 AND 8) THEN GOSUB 1300
220 IF (J2 AND 4) THEN GOSUB 2200
230 REM CHECK FIRE ON BOTH PORTS
240 IF (J1 AND16) THEN GOSUB 1400
250 IF (J2 AND16) THEN GOSUB 2400
260 GOTO 110
270 :
1000 PRINT "PORT 1,UP":RETURN
1100 PRINT "PORT 1,DOWN":RETURN
1200 PRINT "PORT 1,LEFT":RETURN
1300 PRINT "PORT 1,RIGHT":RETURN
1400 PRINT "PORT 1,FIRE":RETURN
2000 PRINT ,,"PORT 2,UP":RETURN
2100 PRINT ,,"PORT 2,DOWN":RETURN
2200 PRINT ,,"PORT 2,LEFT":RETURN
2300 PRINT ,,"PORT 2,RIGHT":RETURN
2400 PRINT ,,"PORT 2,FIRE":RETURN
```

Both joysticks present and correct. Perhaps. **Jason**

PUPPY POWER

Dear Techie Tips,
I have bought a C64 and cassette recorder which work fine. I was also given a 5.25-inch disk drive but it only had one lead with it, the 6-pin DIN. The problem is the power supply. The disk drive has 'EXCELERATOR+PLUS' printed on the front while on the reverse there is a red switch and three sockets, two of which are 6-pin and one of which is 5-pin. Could you please tell me how and with what I can power the disk drive? I have tried numerous places in Rotherham without success. Someone told me I might need a power supply similar to the computer with a 5-pin lead from the supply to the drive. Please help.
Gordon Bell, Rotherham

The Excelerator disk drives were sold by Evesham Micros back in the late 1980s. They do indeed require an external power supply along the same lines as the one which powers the computer itself. As to where to get one these days, I have no idea. I suggest you go back to the person that sold it to you because they should have the power supply kicking around somewhere, and without it the goods are technically not in fully working order. If any gurus out there do know where Excelerator power supplies can be bought, please let me know. **Jason**



SHOOT OUT

Dear Techie Tips
1 I don't know how to scroll characters horizontally.
2 I have played lots of shoot-'em-ups but one thing baffles me; how do the programmers make the bullet sprite appear from a sprite or character?
Alex McD, Walthamstow

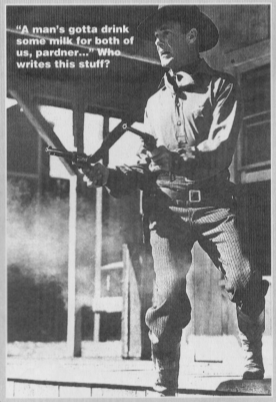
1 Ah well, that's a shame, isn't it? You've obviously missed the zillion and one other issues in which I've explained such things.

2 When the bullet is meant to appear, its horizontal and vertical position is simply made to be the same as those for the sprite that is firing it. The following program sets up a couple of sprites and then, when you press the space bar, you can make the yellow ball sprite fire out a *Pacman*-type ghost thing. It will move off to the left of the screen each time.

The fancy bit of maths in line 36 just gives the ghost some weight so that it falls downwards the further left it moves. If you know a little about sprites and Basic programming, you should have no difficulties working out what is going on.

```
0 REM GHOST BY J.FINCH
1 POKE 53281,6:PRINT CHR$(147):PI=3.142
10 POKE 53287,7:POKE 53288,5:REM COLS
11 POKE 53285,1:POKE 53286,0:REM MULTI
12 POKE 2040,13:POKE 2041,14:REM PTRS
13 POKE 53276,2:POKE 53269,3:REM ENABLE
14 FOR X=0 TO 127:READ Y:POKE 832+X,Y
15 NEXT X:REM READ SPRITE DATA
16 :
17 XP=150:YP=100:DX=2:DY=2:F=0:REM
INITIALISE POSITION/MOVEMENT/FIRE VARIABLES
18 :
19 XP=XP+DX:YP=YP+DY:REM DO MOVEMENT
20 IF XP<26 OR XP>320 THEN DX=-DX
21 IF YP<52 OR YP>228 THEN DY=-DY
22 :
23 IF F<>0 THEN GOSUB 35:REM DO BULLET
24 :
25 MP=INT(XP/256)
26 POKE 53248,(XP AND255):POKE 53249,YP
27 POKE 53264,(PEEK(53264)AND254)OR MP
28 :
29 GET A$:IF(A$=CHR$(32))AND(F=0)THEN
F=1:XG=XP:YG=YP:REM SET UP BULLET COORDS
30 GOTO 19
31 :
32 REM SUBROUTINE TO CONTROL BULLET
33 REM MOVEMENT IF ONE HAS BEEN FIRED
34 :
35 F=F+1
36 XG=XG-3:YG=YG+(1-COS(PI*F/360))*20
37 IF XG<4 OR YG>248 THEN F=0:GOTO 42
38 :
39 MG=INT(XG/256)*2
40 POKE 53250,(XG AND255):POKE 53251,YG
41 POKE 53264,(PEEK(53264)AND253)OR MG
42 RETURN
43 :
44 REM "BALL" SPRITE DATA
45 DATA 000,248,000,003,254,000,015,255
46 DATA 128,031,255,192,063,255,224,063
47 DATA 255,224,127,255,240,127,255,240
48 DATA 255,255,248,255,255,248,255,255
49 DATA 248,255,255,248,255,255,248,127
50 DATA 255,240,127,255,240,063,255,224
51 DATA 063,255,224,031,255,192,015,255
52 DATA 128,003,254,000,000,248,000,000
53 :
54 REM "GHOST" BULLET SPRITE DATA
55 DATA 000,000,000,000,000,000,000,000
56 DATA 000,000,168,000,002,170,000,002
57 DATA 170,000,010,170,128,010,170,128
58 DATA 009,101,128,011,109,128,011,109
59 DATA 128,009,101,128,010,170,128,010
60 DATA 170,128,010,170,128,010,170,128
61 DATA 008,136,128,008,136,128,000,000
62 DATA 000,000,000,000,000,000,000,000
```

So now you know. **Jason**



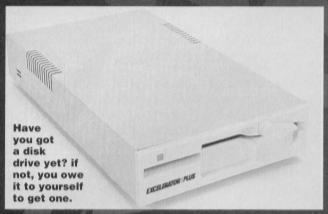
MYSTERIOUS HAPPENINGS

Dear Techie Tips,
I was loading a program on my 1541 disk drive recently when there was a loud hammering and screech which lasted about five seconds. The drive continued to spin even though there was was no input. I turned off the C64 but the drive kept spinning. I then switched everything off and removed the disk. When I powered up the drive again I was met with DOS ERROR 74 DRIVE NOT READY. Nothing I tried seemed to work. I dismantled the drive but there was no damage. I cleaned and lubricated it, reassembled and switched on. Since then it has worked perfectly. I am still baffled as to the cause. Any ideas?
Geoff Edwards, Liverpool.

Erroneous disks can sometimes cause the drive to search for a track that is not within the normal range of 1 to 35. In simple terms, this causes the drive head to whizz off in search of the unknown, a bit like the starship Enterprise... except that no-one in a red shirt dies every time it happens. Anyway, the drive head ends up whacking itself against a rather large dump of metal which prevents it shooting out the side of the drive's case. When you try to access the drive again, the drive head is sort of stunned and doesn't know what to do. That's why it says it is not ready. There is, however, no need to rip it

apart and play about with its internals. You shouldn't do that, in fact, as you will invalidate any warranty.

Instead, just give the command `OPEN 15,8,15:PRINT#15,"I0":CLOSE 15` which will re-initialise the drive and everything should be okay. If it still refuses to do anything, remove all disks and try `OPEN 15,8,15:PRINT#15,"N0:DISK,01":CLOSE 15`. This attempts to format the disk and will cause the head to move, even if it doesn't want to. From then on things should work perfectly. **Jason**



Have you got a disk drive yet? if not, you owe it to yourself to get one.

UNDER CONTROL

Dear Techie Tips,
Yeah! The exams are over and I'm free for another 10 months, thankfully. Now it's time for some serious proggy making. There are three ideas in the old nerve centre which are being held up a little. Can you help by telling me how control characters work and what they are, please?
Alan Skinner, Kilmarnock

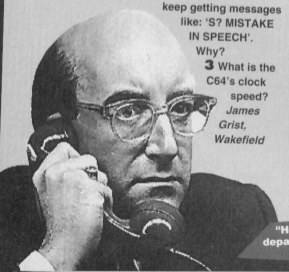
Control characters do special things like change the cursor colour, clear the screen or move the cursor around. Normally when you press the cursor down key, the cursor on the screen moves. However, if you do `PRINT"` and then press it, you will see a reversed letter Q. This is a control character meaning 'move the cursor down'. Similarly, enter `PRINT"` and then press the CLR/HOME key. You should see a reversed letter S. Others are obtained by holding down the Commodore key (bottom left of the keyboard) or the CTRL key while pressing another key. The following program demonstrates a lot of control characters, and the version in the *Techie Tips Proggy Selector* (which you'll find on this month's Power Pack, because it didn't get lost in the post for a change) shows you an alternative way of representing each one.

```
10 REM UNDER CONTROL BY J.FINCH
11 : REM HOME,CLEAR
12 HM$=CHR$(19) :REM  [HOME]
13 CS$=CHR$(147):REM  [SH/HOME]
14 :
15 : REM REVERSE ON,REVERSE OFF
16 RV$=CHR$(18) :REM  [CTRL/9]
17 RO$=CHR$(146):REM  [CTRL/0]
18 :
19 : REM CURSOR UP,DOWN,LEFT,RIGHT
20 CU$=CHR$(145):REM  [SH/CRSR-DN]
21 CD$=CHR$(17): REM  [CRSR-DN]
22 CL$=CHR$(157):REM  [SH/CRSR-RT]
23 CR$=CHR$(29): REM  [CRSR-RT]
24 :
25 : REM COLOURS BLK,WHT,YEL,PINK,LBLUE
26 BL$=CHR$(144):REM  [CTRL/1]
27 WH$=CHR$(5)  :REM  [CTRL/2]
28 YW$=CHR$(158):REM  [CTRL/8]
29 PK$=CHR$(150):REM  [C=/3]
30 LB$=CHR$(154):REM  [C=/7]
31 :
32 PRINT CS$;RV$;WH$;"COMMODORE FORMAT"
33 PRINT CD$;CD$;CR$;CR$;YW$;"TECHIE"
34 PRINT CR$;CR$;"TIPS"
35 PRINT CD$;CD$;CR$;CR$;CR$;CR$;LB$;"BY
JASON FINCH"
36 PRINT CD$;CD$;CD$;PK$;"PRESS A KEY"
37 POKE 198,0:WAIT 198,1:POKE 198,0
```

I hope that helps you out. If it doesn't, well, there's no hope for you really, is there? Anyway, on that note, it's a goodbye from me. But fear not, for I shall be back in a mere one month's time to help out the confused, bemused and otherwise bewildered. See you here. **Jason** CF

SPEAK TO ME

Dear Techie Tips,
1 In the demo of *Speech (CF45)* it says that you can use the it in your own programs. Well, I've tried sticking my program on the end of it and it works fine until you save it and load it back up again. Any help?
2 The *SPEAK command doesn't seem to work. I keep getting messages like: 'S? MISTAKE IN SPEECH'. Why?
3 What is the C64's clock speed?
James Grist, Wakefield



1 The demo is just that; a demonstration. You can load up *Speech* and then one of your programs and the *SAY, *SPEAK and other commands will work properly in your program. It isn't working for you at the moment because the machine code which generates the speech isn't being saved by the SAVE command. You instead need to load *Speech* off the PowerPack each time, or save the machine code and load that.
2 *SPEAK uses phonemes, not normal words. Therefore, as an example, the word THOSE should be done as `*SPEAK"DHOWS"`. In order to get it right you need to know the phonemes. If you don't give ones that it is expecting, you will get the error that you mentioned. You would be better off sticking to the *SAY command and altering things until they sound okay (as okay as you can get with something that sounds like a cross between Lloyd Grossman and a speak your weight machine). Try `*SAY"WELKUM"` instead of `*SAY"WELCOME"` and experiment with other words; spell them how they sound, rather than how you would normally write them.
3 1MHz, or one million cycles per second. **Jason**

"Hello! Is that the *Commodore Format* complaints department? I want to complain about being used in such a disrespectful way as the butt of a cheap gag."

QUICK SHOTS

● How do you restart the *Techie Tips Proggy Selector* once you've selected a program?
Michael Roberts, Liverpool

From Basic, enter `SYS 50000` and press the Return key. The only difference will be that the music does not play. On this month's *Selector* is a program that could overwrite the *Selector* itself and, therefore, when you do `SYS 50000` nothing will happen. **Jason**

● I am writing a program which uses sprites created on *FROST*. Could you give us a program which will take DATA from a block of memory and transform it into Basic DATA lines in the same way as *FROST*, but storing them after a Basic program in memory?
Mr Frostie, North Pole

FROST allows you to add DATA to a program already in memory by simply giving it a line number that is after the last line of the current Basic program. **Jason**

● I was reading *Amiga Format 59* and on page 159 they said that the Commodore 1541 is a serial drive and, I quote, "little more than a tape drive." Surely this can't be true as the manual has routines for relative data handling and random access. Who is right?
M Steer, Woodcote.

Those nice people at *Amiga Format* are simply bitching again. Although the 1541 is a serial drive it is much more than a tape drive. It's serial in that it connects to the computer in a serial rather than parallel fashion. This does not affect or determine its performance. If the 1541 is little more than a tape drive, then so is the Amiga's in-built jobby. **Jason**

● I like the program *Speech* on *CF45*. Is it possible to make a face that moves its mouth in time with what is being said?
Patrick, The Netherlands.

No. This is because *Speech* requires very precise timings to produce the speech and adding anything else would destroy this. Also, it would be completely impossible to do it from Basic as *Speech* would need to be interrupt driven, which it isn't. **Jason**

...INPUT REQUIRED...

Sadly, we cannot create this page without you. Er, I didn't mean that as an insult. What I meant was that this page thrives on your problem, your ignorance, your accidents... But, you learn by your mistakes, and so can everybody else. So don't suffer in silence, if you've got a techie problem let Techie Tips solve it for you. Help others by helping yourself (or something like that). You know it makes sense. Write to: Techie Tips, *Commodore Format*, Future Publishing, 30 Monmouth Street, Bath, BA1 2BW.

All these issues of Commodore Format are still available and now you can get them for cheaper than ever before!

BACK ISSUES

CF22 Power Pack games: *Hover Bower, Agent Orange*. Demos: *James Pond 2, DJ Puff*. Reviews: *Euro Football Challenge, Dylan Dog, Bug Bomber*. Gamebusters: *Murray Mouse Rainbow Islands*.

CF23 Power Pack games: *Defenders of The Earth, Johnny Reb 2*. Demos: *Bug Bomber, Nobby The Aardvark, Biff*. Reviews: *Cool Croc Twins, Turbo The Tortoise, Xenomopoph*. Gamebusters: *Maze Mania, Rainbow Islands, Super Seymour*.

CF24 Power Pack games: *Famous Five*. Demos: *Light, Cool Croc Twins, Match of the Day, Footballl (never released)*. Reviews: *Mega Sports, Light, Elvira 2, Hagar The Horrible, Nobby The Aardvark*. Gamebusters: *Space Crusade*. Specials: Getting the most out of your datassette (a popular one this). Typing in listings.

CF25 Extra covertape: *Saracen Paint*. Power Pack games: *John Lowe's Darts*. Demos: *Slicks, Hagar*. Reviews: *Hook, Match of the Day, Bangers and Mash, Count Duckula 2, Frankenstein, Slicks*. Gamebusters: *Space Crusade, DJ Puff, Vendetta*.

CF26 Power Pack: *Twin Tiger, Cosmic Causeway, Bomber*. Demos: *Shuntman Seymour, Doc Croc*. Reviews: *Shuntman Seymour, Super All-Stars, Popeye 3*. Gamebusters: *Space Crusade, DJ Puff*. Specials: First part of Let's Make A Monster.

CF27 Power Pack games: *Defektor, Alternative World Games, The Muncher*. Demo: *Sceptre of Baghdad*. Reviews: *Crystal Kingdom Dizzy, Bully's Sporting Darts, Crazy Cars, Locomotion*. Gamebusters: 13-page *Creatures 2* special.

CF28 Power Pack games: *First Strike, Fifth Gear*. Demos: *Locomotion, Reckless Rufus, Nick Faldo's Championship Golf*. Reviews: *International Tennis, Cool World, Nick Faldo's Golf, Paint and Create*. Gamebusters: *Spellbound Dizzy, Famous Five*.

CF29 Power Pack games: *Herobotix, Battleships, Highway Encounter*. Demo: *Carnage*. Gamebusters: *Winter Camp, Spellbound Dizzy, Batman – The Caped Crusader, Reviews: WWF European Rampage, Sceptre of Baghdad, Playdays, Magic Rufus, Dalek Attack, Street Fighter 2, Superstar Seymour, Lethal Weapon*.

CF30 Power Pack games: *Slayer, Rebounder, Daedalus, Blackjack 21*. Gamebusters: *Creatures, Reckless Rufus, Winter Camp*. Reviews: *Carnage, Gladiators, Football Manager 3, Spelling Fair*. Specials: Writing good SELCK games.

CF31 Power Pack games: *Cauldron 2, Snare, Subterranea, Monster Mash*. Demo: *Arnie 2*. Gamebusters: *Shuntman Seymour, Dalek Attack, Crystal Kingdom Dizzy*. Reviews: *McDonaldland, Table Tennis, Snare*. Specials: Football management sims.

CF32 Power Pack games: *Thrust, Steel, Corya*. Full Utility: *FINDIT (sprite designer)*. Gamebusters: *Shuntman Seymour, Lethal Weapon, Dalek Attack, Wild West Seymour*. Reviews: *ARNIE 2, Flat Fighter, Trolls*. Specials: Shoot-'Em-Ups.

CF33 Power Pack games: *Snackman, ATA, Water Polo, Corya 2*. Gamebusters: *Lethal Weapon, Thrust*. Reviews: *Sleepwalker, Robin Hood, WWF, Robocod, Darkman, 4-Most World Sports*.

CF34 Power Pack games: *Araic, Corya 3, Shellshock*. Gamebusters: *Lethal Weapon, The Simpsons, Argon Factor, Addams Family, Liverpool*. 24-page special: The best C64 games still available.

CF35 Power Pack games: *Space Academy, Hallax*. Demo: *Lemmings*. Gamebusters: *Last Ninja 1,2 & 3*. Reviews: *Suburban Commando, Pirates, Mercs, Turbochargé*. Specials: The 64SX, Ultimate Beat-'Em-Up.

CF36 Power Pack games: *Starray, Squbbly Sixwob*. Demos: *Suburban Commando, Breakthrough*. Gamebusters: *The Simpsons, Carnage, Street Fighter 2, Lethal Weapon, Cool World*. Review: *Bee 52*. Specials: Ultimate Flight Sim, Inside Your C64.

CF37 Power Pack games: *Nebulus, I Alien, Blockie, Kron, Lunar Landing, Game Over, Cyforce, Grod the Pixie, Viorla*. Demo: *Mayhem In Monsterland*. Gamebusters: *The Simpsons, Lemmings, Street Fighter 2, Cool World, Suburban Commando*. Review: *Alien 3*. Specials: Business software, platform games.

CF38 Power Pack games: *Lifeforce, Freddy Hardest, Jailbreak*. Demo: *Mayhem In Monsterland*. Gamebusters: *The Simpsons, Nebulus, Suburban Commando, Castle Master, Game Over, Nobby The Aardvark, SF 2, Bee 52*. Review: *Mayhem*.

CF39 Power Pack games: *Freddy Hardest Part 2, Deep Strike, Volcan, Robber*. Gamebusters: *Simpsons (yawn), Nebulus, Suburban Commando, Castle Master, SF2, Nobby*. Reviews: *Lemmings*. Special: The Apex Boyz show you how to design games.

CF40 Power Pack games: *Jocky Wilson's Darts, IO, Interword*. Gamebusters: *Mayhem, Suburban Commando*. Specials: Microdrives.

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CF46 Power Pack: *Bonecruncher*, Complete level of *Mayhem, Quadraped Tearaways* music demo. Gamebusters: Final level of *Mayhem, Stormlord, Wizball, Carnage*. Reviews: *Squaresceipe, Escape From Arth, Willworfore*.

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LIONS OF THE UNIVERSE

The C64's very own cool cat Keith Woods, finds out whether eight out of ten owners will prefer this feline-flavoured shoot-'em-up...

Go and pick on someone your own size...!

Have you ever heard of lions in space? Monkeys yes – the Russians sent a couple of them up. Pigs, yes – if you remember the *Muppet Show*. Lions, no (unless you count *Thundercats*, but then who does?). It must be hell finding a space suit that fits and doesn't make your mane go all saggy. But lions it is for this horizontally-scrolling *R-Type*-style shoot-'em-up.

Your job is to pilot a twin-engine spacecraft through one of the most dangerous corners of the universe. The fearless beasts that inhabit this particular corner don't particularly appreciate visitors, though, and you soon realise that the hordes of alien aircraft that fly out to meet you are a little bit more than just a welcoming party – they're after a new rugs to place in front of their open-hearth fires

Wave after wave of the alien craft fly towards you, laser cannons firing away like they've got their paws superglued to their fire buttons. And some of them are just as happy to crash straight into you – life is obviously cheaper than an episode of *Prisoner Cell Block H* in this part of the galaxy.

Using your laser weaponry you've got to blast a way through the hordes, while trying to avoid the shots emanating from the ground-based cannons. This is a bit of a tricky business, so it's a good thing that despite the fact your craft is constantly spinning (looks great, not sure about the practicality of it, though, unless the pilot's tumble drying some washing isn't much fun. All you do is waggle your joystick left and right as fast as you can until you've either filled your bucket or knackered your joystick. The only variety is in throwing stuff into your opponents milk to turn it sour, but such thrills soon wear off.

Skeet-shooting fans will enjoy the next event – pig shooting. That's flying pigs of course! It's actually the best part of the game, which isn't exactly saying much.

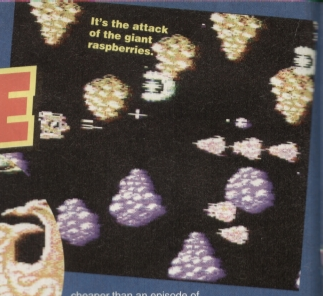
If your joystick hasn't already been destroyed, the next event, cycling, will finish it off. You've got to hold the fire button down and continually turn your joystick anti-clockwise until you finish two laps of an island track. Your bike, interestingly enough, has square wheels, but that's where the interest ends.

Of little more interest is roof-building, which is just as boring as it sounds. You race against your opponent to be the first to fill the gaps in your roof. The trouble is, it's so slow it's like watching a tortoise race without the bets.

The final sporting test is the ancient art of teabag-throwing. It's yet another annoying joystick waggler. The teabag would be better employed if you just went home and had a cuppa – it'd certainly be more exciting.

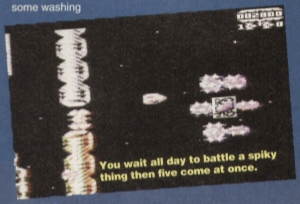
Overall, taking everything into account, *Ostfriesland Games* is pretty awful. There are only five events, and most of them are no fun at all. The others you'll soon get bored with.

With so many decent German games to choose from, it's hard to see why The Electric Boys have decided to spearhead their releases this dire sports sim. Believe us, there is a lot better to come. **Keith**



It's the attack of the giant raspberries.

Going in for intensive root canal work.



You wait all day to battle a spiky thing then five come at once.

WHERE TO GET 'EM

The four games reviewed over these these three pages are all from the German company we told you about last month, CP Verlag. The Electric Boys (☎ 081 668 7595) are on the verge of striking up a distribution deal, but details of release dates and prices have yet to be confirmed, so keep an eye out for info in Snippets in the coming months. In fact, there's some hot news on the very subject in this month's Snippets so turn to page five now (or pretty soon, anyway).

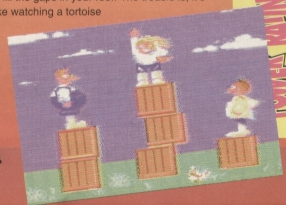
OSTFRIESLAND GAMES

Don't let a BBC executive see pig-shooting – they'll make a game show out of it.

Ostfriesland, wherever it is, is an odd place. Ostfrieslanders don't go in much for the games most mere mortals-play. Instead they prefer cow-milking, tea-bag throwing, pig-shooting and roof-building. The only sport they seem to have in common with the outside world is cycling, but even then they do it in their own inimitable style.

The challenge starts with cow-milking. Despite its colourful and initially amusing premise, it soon becomes apparent that cow-milking

Pak-a-Mac alert!



COW MILKING

Well, I'm glad somebody's happy.

OSTFRIESLAND GAMES

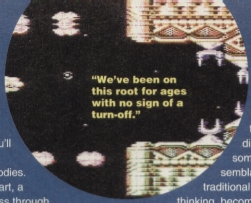
- ▲ Initially it's vaguely amusing.
- ▼ But the joke soon wears off.
- ▼ ...when you realise it's just another joystick waggling frenzy.
- ▼ And a pretty dull one at that.

30%

at the same time), it's still extremely agile in the air.

Various pick-ups to aid your progress litter the perilous path. The best ones nip on and off the screen in seconds so you'll want to move pretty sharpish if you're get hold of any of the goodies.

Your task is, even at the start, a difficult one, and as you progress through this corridor of death it becomes steadily trickier. The alien sprites get bigger and more difficult to avoid, and the big end-of-level baddies take ages to destroy. The alien attack formations, which at the start displayed some semblance of traditional military thinking, become ever crazier and less predictable. Your reflexes will need to be at their sharpest to avoid the nutty aliens darting mindlessly around the screen.



"We've been on this root for ages with no sign of a turn-off."

Just aim for the whites of their... er, just shoot them.

Lions of the Universe is undeniably very well coded. The sprite animation and the scrolling are impressively smooth and fast and there's always plenty of action going on. The graphics are nicely-detailed and colourful though they rarely rise above slightly-better-than-average to produce something truly awesome (the main exceptions being two beautifully-drawn end-of-level monsters). The sound, however, is an aural delight, with the pulse-pounding music complimenting the zapping of your laser gun perfectly.

Most important, however, is the gameplay, and it's here that *Lions of the Universe* really shines. The *R-Type*-style shoot-'em-up is, of course, a tried and tested formula, and while this game doesn't offer up anything startlingly new, the smoothness of the sprites and the speed of the action ensures that *Lions* is one of the better example of the genre on the Commodore. Best of all is the simultaneous two-player mode, which doesn't seem to slow down the hectic pace of the action.

The only major fault with this game, which seriously mars it for all but the best of gamers, is the difficulty level. You start with just four precious lives and they prove very difficult to hang on to for any length of time. Even playing in two-player mode it's ridiculously difficult to progress. It'll take a lot of skill and patience to get very far in this game, but if you can manage it you'll have a lot of fun along the way. Maybe not a Lion King, but a pretty good pretender to the crown **Keith**

THE STEM INTERVIEW: SIMBA THE LION

What better way to find out about intergalactic lions, I thought, then by asking a lion star? So I headed for Africa, to the Kenyan wilderness, where I found The Lion King himself busy munching through his afternoon Wildebeest. Had he ever been in space?

"Grrrrrrr" (Go away, can't you see I'm having lunch)

And did he think *Lions of the Universe* is an accurate representation of his experiences there?

"Roooaarrrr!" (Listen, I won't tell you again. How would you like for me to interrupt your lunch?).

And will he be returning?

"Raaaaaah" (Right, that's it, I've finished the Wildebeest. Sod the stupid circle of life – you'll do for dessert.)

Aaaaaarrrrggggghhh!!!

LIONS OF THE UNIVERSE

- ▲ Fast, furious, frantic, feverish fun.
- ▲ The action never stops.
- ▲ It's even better in two-player mode.
- ▲ But there's nothing startlingly original in it.
- ▼ And it's far too difficult..

POWER RATING 82%

Marks deducted for being so hard.

BOBIX

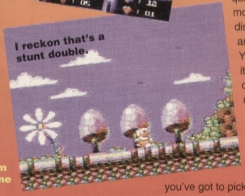
Once upon a German coder's not-too-stretched imagination, there lived a happy dwarf couple, Bobix and Bobette. Bobix was the apprentice of the great magician Bennof, and loyal subject of Queen Beatraz. Tragically old queenie caught a strange disease and died, but Bobix found out it was Bennof wot did it. Well, to cut a long (and very boring) story short, Bennof got wind that our friend was on to him and took off with Bobette. You've got to help Bobix save his sweetheart and avenge the queen's death.

The bonus level.

To do this Bobix has got to get his hands on four bottles of potion, each on separate islands. What we have is not a *Dizzy* clone, as the plot suggests, but a *Mario* one. Starting on the first island Bobix has to bounce around platforms collecting potions and diamonds and avoiding the aggressive wildlife he encounters along the way. He needs the diamonds to buy a boat to take him from one island to the next.

Look at me! I'm a computer game stereotype.

He's a bit bossy this Bobix bloke.



I reckon that's a stunt double.

Each island features two levels of pretty routine but decent enough platforming action. It's nothing we haven't seen before, but it's reasonably well done. All the islands have their own distinctive style, and each one's just that little bit more difficult than the one before. In between islands is a bonus level in which you've got to catch balloons that blow past as you sail to your next destination. This, quite frankly, is more of a distraction than anything else. You'll just be itching to get on with the real action.

It isn't as much of an irritation, however, as the fact that you've got to pick up all the potion pots on every level. Some of them are very difficult to get at, and you can't go back if you miss one. You're also up against a tight time limit, so you don't want to hang around trying to get at well-protected pots.

Overall, though, *Bobix* ain't at all bad. The graphics are bright and colourful and happy music bops continually in the background. The difficulty level is just right, but the game is a bit short, so hardened platform experts won't take long to get through it. The biggest problem we had with the game is that it crashed occasionally, but hopefully The Electric Boys will have sorted out this problem by the time *Bobix* gets a full release. **Keith**

BOBIX

- ▲ It's pretty average platform fare.
- ▼ ...And there are a few irritations.
- ▼ But it's well-produced...
- ▼ ...And the graphics are top-notch.
- ▼ You'll just have to hope it doesn't crash.

POWER RATING 75%

SUPER NIBBLY

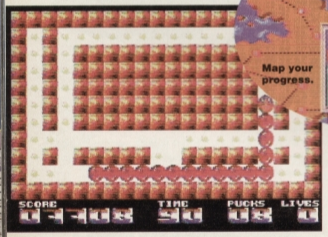
Dave's not so much into nibbling as gobbling, but in between snack breaks he managed to get in enough playing time to review this game...

I've heard about getting an attack of the nibbles but this is ridiculous. And when your sister complains, "I only have to look at a cream puff and I put on weight," she's got nothing on the serpentine star of this particular game. He's got an appetite like a Tasmanian Devil doing a spot of guest judging on *Masterchef*, and he doubles his bodyweight with every mouthful. Between levels, though, he goes on a crash diet and sheds every ounce he's put on. Expect to see him replacing Barry Bethel on the next round of Slim Fast ads.

This is a game in which consumption has gone wild but cholesterol is the least of your worries. There's this snake, you see. And he's hungry. Dead hungry. He could eat a horse. Except that a) his jaws can't open quite that wide and snakes are notoriously fussy and can only eat things whole, and b) there aren't any horses around. Nope, all there is to eat are food pellets, hundreds of 'em, lying around all over the place. And since old snake-eyes (snake-everything, in fact) seems to inhabit a series of mazes, you begin to suspect that the previous occupants were a not-very-house-proud Mr and Ms Pacman.

I reckon the artist was colour-blind.

The Pacmans seem to have had Rentokil© in, however, because there are no nasty wobbly things around to cause snake-lips any problems. In fact, he's his own worst enemy. Because he grows with every mouthful, and as there's very little room for manoeuvre in the mazes, the main problem is trying to finish his meal without ending up with himself as th pudding. He can't stop chomping, y'see, so when he turns a corner and is confronted by his own tail he takes a chunk out of it. Unfortunately, this means he loses a life. But fortunately, he's a game character so he's got three lives. Unfortunately, the mazes become trickier and trickier to navigate. Fortunately, there are also a few special bonus pills around which help him on his way. Unfortunately, they appear randomly, so he can never be too reliant on them. Fortunately, er, I can't keep this fortunately/unfortunately gag going any longer.

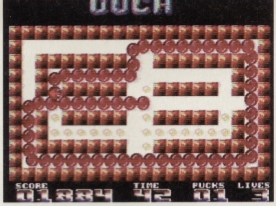


Map your progress.

Dead-ends cause problems – how do you get out of them?

Super Nibbly is a lot better than you might expect. In theory it sounds like just another puzzler-by-numbers, the sort of thing we've all played and romped through before. The humdrum in-game graphics don't help raise your expectations, and the first couple of levels are uninspiringly straightforward. Things don't look promising.

But then the game gets its hooks in. The bonuses become intelligent integrated into the action and the level designs become more devious and more challenging. More to get your teeth into, you might say if you wanted a throwaway eating-type gag. The time limits also become tighter. Er, I did mention the time limits, didn't I?



The subtext of the game is, 'self mutilation is not a good thing'.

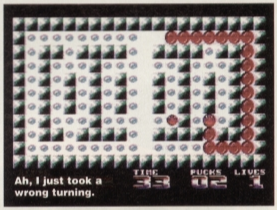
Your progress through the levels is charted on a map accompanied by some great little animations of snake-nostrils whizzes from one place to the next.

It's another one of these German games the Electric Boys are planning to import. Hopefully this'll be one of the first they release. It's no classic, and it's as derivative as a Blur LP, but it combines sharp presentation with canny level designs to great effect. If things like *Pang* and *Tilt* are to your taste, then this should tickle your taste buds too.

THE STEM INTERVIEW

Captain Stem travels the time vortex to find experts to give their views on the games we review. This time we sent him in search of perhaps the most overworked cook in human history, Mavis Spongeworthy, head of the kitchen staff at Hampton Court during the reign of Henry VIII. We wanted her views on the culinary aspects of the game.

Unfortunately, she screamed the palace down when Stem materialised out of the vortex, went around babbling about what she had just seen, was arrested as a witch and beheaded. Shame, really.



Ah, I just took a wrong turning.

SUPER NIBBLY

- ▲ An well-designed, fast-moving puzzler.
- ▲ Well-endowed with the one-more-go factor.
- ▲ It's massive. Like really hugely massive.
- ▼ The graphics are (to put it politely) utilitarian.
- ▼ Could do with a few more extra life bonuses.

● For further details about price, release dates and formats please see the boxout on the previous page titled 'WHERE TO GET 'EM'.

POWER RATING

80%

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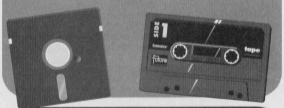

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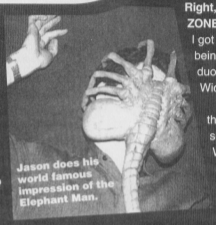
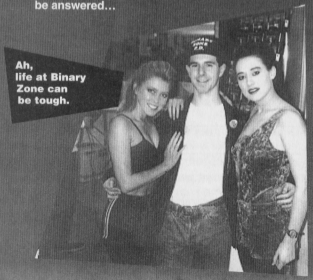
PD FORMAT

Andy Roberts takes a breather from megademos and colour cycling to take an in-depth look at Binary Zone PD (aka Psytronik Software, aka, The Guild) one of the longest-established libraries. But as he discovered, they're not just about PD.



Jason does his world famous impression of the Elephant Man.

Droitwich. It's the kind of place you suspect might have been made up by Ben Elton for a cheap laugh in *Blackadder* – 'the demon dongle-crusher of Droitwich' or something. But no, it exists. And if you're a keen follower of the PD scene, you've probably been writing off to the place on a regular basis. Because Droitwich (snigger) is the home of Binary Zone, which, under the auspices of proprietor Jason 'Kenz' Mackenzie, has grown into one of the most popular and long-running companies in the C64 world. So, what is the secret of its success? Why has Jason stuck so steadfastly with the C64? What plans does Binary Zone have for the future? And is it hard to be taken seriously when you're based in Droitwich? Some of these questions will be answered...



Ah, life at Binary Zone can be tough.

Right, Jason, how and when did BINARY ZONE PD come about?

I got the idea to set up Binary Zone PD after being in contact with the famous Compunet duo Ian and Mic for quite a while. They ran Wicked PD at the time.

When they sadly left the C64 scene I thought it would be a cool idea to do something similar and carry on where Wicked PD left off (I actually typeset some catalogues for Wicked PD at one point). In 1989 I worked for a company which supplied Apple Macintosh hardware and software. One of the things I had to do was look after all the Macintosh PD software and produce the PD catalogues. This experience helped a great deal when I began to set up my own PD library.

Binary Zone PD first hit the C64 scene in October 1990. From the initial idea it took a whole year to set up the library! This time was spent compiling all the disks for the first version of the catalogue, typesetting the catalogue and producing adverts, flyers, compliment slips, labels, etc.

BIT PART ACTING

Remember a couple of years back when the *CF* letters pages were packed with letters from people who had spotted the C64 on TV and in films. Well, C64 spotting continues. Take it away, Jason...

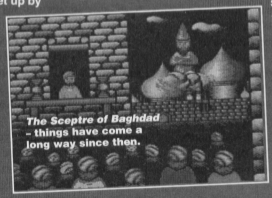
"Here's an interesting snippet for you. I recently went to the cinema to see the film *Fortress* which stars Christopher Lambert. In the film was this huge super-computer which controlled the fortress. When they showed a close-up of its two keyboards what did I spy? CBM 64 KEYS! They must have chopped up a couple of C64s to make their evil super-computer! The brown INST DEL' key was a dead give-away! CBM 64's in the movies! COOL!"

Blink and you'll miss the C64 in *Fortress*.

Many PD libraries are set up by members of demo groups. Were you ever part of a team like that?

Yup, when I first got my C64 me and a few friends set up a group called Computer World which was named after the song by Kraftwerk. After a few years various Computer World members started to leave the C64 scene so I joined the fab British group Xentrix. Eventually, various Xentrix members left to join or form other groups so I left and re-formed Computer World on the C64.

By this time a lot of people were creating demos and utilities for me under the Binary Zone label so I decided to keep things simple by making Computer World an Amiga-only group.



The Sceptre of Baghdad – things have come a long way since then.

What would you say makes Binary Zone different (or even superior) to other PD libraries?

I have noticed that some other PD libraries are terribly formal and they take things far too seriously. I offer a fast and friendly service and have built up a good friendship with many Binary Zone members after being in contact with them for a long while. I am always trying to come up with fresh new original ideas rather than just releasing millions of disks of demos (well, actually I try to do that too!).

Is there anything special in the Binary Zone pipeline?

Most definitely. One of the projects I am currently working on is a VERY exciting musical release produced in conjunction with C64 and Amiga music supremo Paul 'FeekZoid' Hannay. Things are still at the planning stages at the moment but if the plan comes together (I love it when that happens) then you will be able to hear computer music like you have NEVER heard it before! I can't say much more as it's all TOP SECRET at the moment.

I am also working on my new PD catalogue updates but I have been so overwhelmed with new software it's taking me longer than expected to get things typed up. There is even a Binary Zone VIDEO in the making! Who said the C64 scene is dying out? Not me matey.

Psytronik was one of the first of a 'new wave' of small, independent software companies producing stuff for the C64. Why did you decide to enter this market?

Psytronik Software came about really quite suddenly and somewhat unexpectedly. It all started when I received a call from Jon Wells who was a tad unhappy because his game *Sceptre Of Baghdad* was no longer going to be sold by Atlantis because that company had, erm, SUNK! Together we got the idea to sell his game on a new software label which

catered for commercial software rather than PD software. Psytronik Software was then born.

Once word about Psytronik Software had got out I received various letters and games from authors who were keen to get their work published but hadn't had much luck with the 'big' commercial companies who all seemed to be abandoning the mighty C64 scene.

Are you pleased with the quality of software you've released so far?
Oh yes, and not only am I pleased but also the people who buy the games seem to be happy with them. I receive plenty of nice letters and calls from gamers who are enjoying the software. They all seem to want one thing, though... MORE GAMES! I hope more people get the idea to sell new commercial titles on a mail order basis because there is obviously a market for it.

You've produced a few demos and games in conjunction with Jon Wells. How did that start?
Basically, Jon got in touch with me and told me he could code and sent along some examples of his work. I was impressed with what he could do and things just progressed from there. Jon also told me that he could considerably enhance *SEUCK* games by adding many new effects that are not available in the editor itself. All I needed now was a good source of quality *SEUCK* games, and as luck would have it a talented comic-book artist called Alf Yngve specialised in them.

Jason take his bug hunting seriously.

How did you first get in touch with Alf?
Alf sent some of his *SEUCK* games to another C64 magazine in the hope that they would feature them on their covertape. The mag was very impressed with the quality of the games and told Alf to get in touch with me as they thought Alf's games would do very well in the PD market. Alf then sent me a tape which contained some of his games and I was literally blown away by the quality and originality of his games. I received Alf's games at the same time that Jon Wells told me he could enhance SEUCK games so I quickly rushed Jon some of Alf's games and Jon got to work on enhancing the game *Twin Tigers*. The end result was excellent!

The enhanced game appeared on *CF* Powerpack 26 and is also available on the *Alf Yngve Collection* which is a very popular games compilation tape available from Binary Zone PD.

Can we expect to see more Psytronik/Wells/Yngve productions in the near future?
At the moment Jon Wells is working on a series of games which will be released by him on the Visualize label so I'm not sure when he will next be able to get the chance to produce anything for Psytronik Software. Alf Yngve has been very keen to get his games enhanced and released commercially right from the start so I have no shortage of software from him. You will just have to keep to eyes glued to the pages of *CF* for more news about future Psytronik releases.

You recently took over the legendary Guild Adventure Software library. Why was that?
The Guild used to be run by Tony Collins but he decided to do a six-month course which would have meant the end of the Guild because he would have no time to continue running things. I stepped in at the last moment and offered to take over the Guild. Tony was happy at the prospect of all his hard work being continued so he basically sent me the Guild in a huge jiffy bag! This means I can now offer plenty of great adventure games to C64 users as well as oodles of splendid PD software and, of course, the Psytronik releases.

How would you describe the future of the C64, and what sort of commitment can we expect to see from Binary Zone/Psytronik?
I must admit the C64 scene has dwindled considerably during the past few years and the lack of software in the shops is a real shame. There are loads of C64s still out there and heaps of keen C64 enthusiasts but I'm not sure how they will find out about what's available for their funky machine if *CF* disappears for good (*well that's not planned for just yet a while – Dave*). I will continue to support the C64 for absolutely as long as possible and as I have over 4,000 C64 members it shows that not everyone has gone to that nasty 'consoleland' place.

This is just getting silly. Stop dressing up and get on with some work.

What are your views on consoles?
I too was caught up by the hype when the Super Nintendo was first released. I rushed out and bought a SNES but I soon realised my mistake. I was forking out £40 for games which I was completing only a few days after buying them. The ultimate example of the 'value for money' you DON'T get with with a console game is this... I borrowed *Super Star Wars* from a friend of mine; it cost him £60. One hour and 15 minutes after I first plugged the cartridge in I was watching the final end sequence. £60 for just over an hours' entertainment! I own plenty of C64 games which I have played for MUCH longer than that and I still haven't finished them! Makes you think doesn't it...

How can people get more information about Binary Zone/Psytronik/The Guild?
Simply send two first class stamps to: Binary Zone PD.34 Portland Road, Droitwich, Worcs, WR9 7QW. Please make sure you state whether you are a TAPE or DISK user and then I will bundle you a FREE catalogue and a life-size cardboard cut-out of Jet from the Gladiators... (actually, I'll just send the catalogue, the bit about Jet was just wishful thinking on my part).

A catalogue of Amiga software is also available and it features a new Amiga 1200 section!

And your final words?
Aha! This is a good place to thank all the Binary Zone PD members for their unending support and all those amusing letters which liven up my day. I would also like to say a big 'YO!' to all the people who have coded demos, utilities and games for me. Cheerz dudes! Oh yeah, I would also like to send a cheery wave and thumbs-up to and all my friends and contacts in the scene who supply the Binary Zone with a constant stream of truly excellent PD software. Long live the Commodore 64!

THE SUNDAY COLOUR SUPPLEMENT TYPE BIT

Time for a bit of in-depth questioning to discover the true Jason Mackenzie...

What is your favourite C64 game of all time?
Hmmm, that's a bit of a toughie. It's probably *Uridium* because that's the game that made me want to own a C64 in the first place.

Which C64 celebrities (well, personalities) would you most like to meet?
I would really like to meet some of the brilliant C64 musicians who mysteriously vanished from the C64 scene. They include Rob Hubbard, Martin Galway, Tim Follin and Matt Gray amongst others. HI GUYS!

What food do you despise the most?
Liver! (Ptooey!) and Marmite (Bleggg!).

Who is your ideal babe?
Either Anita Dels (out of *2 Unlimited*) or Teri Hatcher (Lois Lane from *Lois and Clarke: The New Adventures Of Superman*) will do nicely thankyouverymuch.

What is your lucky number?
27 – I don't know why, it just seems to crop up a lot.

What is your favourite colour?
Blue (although I quite like red too).

UNCLE DAVE'S BUY-A-RAMA FOR SALE

FOR SALE

Upgrade sale! C64, disk drive, c/w, Mind Benders pack, extras. £50. Tape and disk games, covertapes, extras. Most at £1. Tel: 0358 720984

Commodore 64, ex condition with 190-200 games and 2 joysticks. Tel Jonathan: 044 64433

C64 games for sale, from £1.50. Also Gameboy games and music cassettes. For list – SAE – Denise Hurley, 48 Eastern Ave., Chippenham, Wilts, SW15 3LW.

1541 mk2 disk drive. Brand new with many disks (including Mini Office 2, OCP Art Studio, games and blanks). Tel Ben: 0873 853973

C64c, disk drive, datacassette, printer, A.R. MkVI, mouse, loads of tapes, disks, books mags and other equipment. Worth over £1,000, sell for £250. Matt (0983) 616414.

Commodore 16, joystick, games. Hardly used. Ideal for beginner or young children. Bargain £15. Write to Mrs J Linda, 8 Alan Close, Dartford, Kent, DA1 5AX.

C64 Nightmares pack, CF14-46, 20 budget games, 8 full price, 1 cartridge. Excellent condition. Worth £450, now £200. Call Ryan 0532 436581 after 7pm Mon-Fri.

100s of C64 games at very low prices. Send SAE for list to: J Chan, 15 Goodison Road, Walton, Liverpool 4, L4 4EH. Will swap.

Personal Computer, parts, drives and cards for sale at low prices. Write to: Michael Bailey, 9 Cromwell Close, Bishops Stortford, Herts, CM23 4PL for list.

C64, nearly 200 games, £100. Bayers skates, virtually new, £65. Atari 2600 with four games, £20. The lot for £160. Tel: 0293 545257

C64 keyboard, datacassette, Quickfire joystick, over 30 games, £100 ono. Tel: 071 231 1024

100s of C64 games. From 50p, old and new. Plus many CF mags, Send SAE to 57 Holdenhurst Ave., Bournemouth, Dorset, BH7 6RB for list.

Commodore MPS 1200. Print quality and speed superior to MPS 801/3. P.W.O., new ribbon. £45 inc postage. No offers. Tel David on 081 244 9510, weekends only!

C64 with 1541 disk drive, 801 printer, Altai cassette unit, manuals, lots of software, in original boxes. £150 ovno the lot. Tel: (0734) 665555

Action Replay 6. One month old, top condition. £10. Contact Jim, 23 Mosslea Road, Bromley, Kent BR2.

C64 games from 50p to £3. All on tape, but will consider swapping for tape or disc games. Tel: 0952 414395.

WANTED

Mustang Compunet modem software. For Prestel version 5.2 turbo ring 0962 883649.

Manic Mansion on disk. To buy or swap. Kevin Scorer, 4 San Carlos Close, Catterick Garrison, Catterick, North Yorkshire, DL9-4HY.

Mini Office 2 on 5.25-inch disk for C64. Mr ME Harris, 1 Dunrobin Close, Darlington, Co. Durham, DL1 3QP.

Simon's basic cartridge for C64. Can pay in sterling. Francis Byrne, Ballymacfadden, Kilcar, Co. Donegal, Ireland.

GAC and Wargame creator. Will swap for Chips Challenge, CF mags, rave tapes and/or card sharks C64 game. Telephone Joss on (+31) (0)70 3637554 (Netherlands).

B/Busters and Puzznics on 5.25-inch floppies. Must be original and good condition. Name your price. Contact B Alan Close, Dartford, Kent, DA1 5AX. Letters only.

Action Replay cartridge mk VI. Also Mini Office II on disc with manual. Claython Pender, 14 Park Court, Glenageary Heights, Glenageary, Co. Dublin, Ireland.

Urgently wanted, Supreme Challenge compilation on disk and shoot-em-up Construction Kit. I'll pay budget price or swap for Flimbo's Quest, Shadow Dancer, Strider II. Derek Wilson, Derryannon, Derrylin, Co. Fermanagh, BT92 9GG.

Good digitiser for C64. Must include a manual. Also *Commodore Format* ish 6 (*what was so special about that one? – Dave*). Contact Ivan on (Ireland) 6234791.

Easyfile EF1 6440 disk. Also Easy Spell ESP 6440 disk, both for C64. Tel Norma: 0202 309813

FANZINE

Sector 64: the fanzine for the ultimate games player. SAE & 75p or SAE for free intro sheet. 43 Clarence Road, Gorleston, Great Yarmouth NR31 6DS.

CF 1-26 in good condition with tapes to exchange for Gameboy with three games, mains adaptor, light and Gameboy players guide (worth £90). Stephen Worrall, 2 Old Church Park, Clondalkin, Dublin 22, Ireland.

Sinclair C5 electric car. Will pay cash and collect. Philip, 160 Capel Road, Forest Gate, London, E7 0JT.

Help! Expert cartridge needed, after frying last one (*hope it tasted nice - Dave*). Reasonable price considered. D.F. McLaughlin, 175 Langside Road, Glasgow, G42 8XY.

Exile, Nobby, Great Giana Sisters 2, PD games and any flight sims. Tel Rowan Veale on 0821 650 409. Also Sleepwalker, must be Ocean version.

Emlyn Hughes Int Soccer. Must be good condition. Original or budget, pay up to £4. Also Pirates map. Tel Craig: Derbyshire 272099

C64 PCB. Old style preferred. Will pay £10. Broken or working. Tel Colin on 0960 364624 after 7pm.

Gauntlet tape for C64. Swapping for cheque or cash (*Don't you just mean buying? – Dave*). Ring Dave on 061 439 5814.

C64 utilities, languages and construction kits, especially Seucix, Simon's Basic cartridge. Tel Alex on 081-521-9825 between 4pm and 10pm.

Creatures 1&2 on disc. Enquiries to Matthew Dainty, 2 Lady Leasow, Radbrook Green, Shrewsbury, SY3 6AB.

Disk drive for C64. Will pay good money. Alan Kelleher, 20 St Anne's Road, Gurranabraher, Cork, Eire.

Ultima 4&6 and Ultima 5 cluebook (Paths of Destiny). Tel Neil on 0723 870469 after 6pm.

Monitor. Commodore 1901 40/80 column display for C128. Also CP/M plus system disk. Will consider collection. Avon/Somerset or other. Telephone 0761 416126.

Sim City wanted on disk for C64. Will pay for p&p as well as a good price. Not a copy. Send me quick. R Onderwater, Willem De Zuggerlaan, 374 1055 Rd, Amsterdam, Netherlands.

Internal power supply for 1371 and Schematic for 1341 mk1. Tel Jamie: 0375 540346

Supremacy for C64 cass. Also Elite. Telephone Chris on 0482 705477

Commodore DPS-1101 daisy wheel printer. Perfect working order, £50. Tel: 0299-270589

Buggy Boy for C64 tape or disc. Telephone Chris on 0727 830894

Disc drive for C64. Urgent! Tel Mrs Baybutt, 0264 772343, evenings after 5pm.

3D Construction Kit and/or GAC on cassette. Swap for Shadow Warriors, Sly Spy and/or Silkworm. Joe Griffin, Ballylast, Castlefinn, Co. Donegal, Ireland.

Action Replay. R. Davies, 178 Offmore Road, Kidderminster, Worcester, DY10 1SB.

128 D/128 user manual or reference book. Brade, 99 Warren Rd, Reigate, RH2 0BW.

Fantasy World Dizzy (tape) for C64. Will pay £10. Tel Chris on 0584-781571.

C64 console. I'll pay £6.99. Tel John: (0592) 720086

Nick Faldo's Championship Golf on cassette. Will pay reasonable price. Jonathan Athen, 4 Hardwiche Road, Poynton, Stodport, Cheshire, SK12 1BJ.

Myth, original, budget version. Will swap The Addams Family (original), not budget. Telephone Rowan on 0821 650 409.

Disk drive 1541 II with games. Will pay £50. Write to Dave Adamson, 32 Ryehill Grove, Preston Road, Hull HU9 3QE.

Dizzy Rules the Universe part 1. Demons of Topaz tape. Firebird for C64. Tel: 0636 640653

Exile and 3D Construction Kit. Will pay up to £5 for either. Tel (0793) 812442

Power Supply for Excelerator Plus 5.25-inch disc drive. Gordon Bell, 33 William Street, Wellgate, Rotherham, South Yorkshire, S60 2NG.

Wanted: Anyone to donate programs for a new mega PD library. Contact Ben on 0602 327500

Gunship original on 5.25" disk. Must be good condition. Tel Richard on 0709 561363 (after 6pm on weekdays). Will pay postage.

Utilities disk for freeze machine M/T. 3. Will pay half price. P. Culley, 66 Healey Wood Rd., Burnley, Lancashire, BB11-2LP

Fairlight, preferably on disc. Will pay £5-£10 depending on format. J Bristow, Flat 5A, Middlestreet, Watton, Norfolk, IP25 6AG.

Frankie Goes to Hollywood on tape wanted desperately. Will pay up to £10. Also wanted Ferrari Formula 1. Will pay up to £7.50. David Colenutt, 16 Ambrose Lane, Harpenden, Herts, A15 4AX.

Mini Office 2, C64 cassette. Tel: 0440 703181 (day), 0787 277174 (eve).

C64 games. Good prices paid. Penpal also wanted. Emily Chiappini, 1 South Dale, Caistor, Lincs, LN7 6LS.

SERVICES

Software enhancement service for personal or commercial usage. Advance potential of your files. SAE for enquiries to Ewen Gillies, 21 Conquerors Hill, Wheathampstead, St. Albans, Herts, AL4 8NS.

PEN PALS

Female Trekkie (shouldn't that be Trekker? – Dave) aged 14, seeks pen-pal from anywhere between Earth and Bajor. Write to Vicky Lumby, 6 Fanshawe Way, Hooe, Plymouth, Devon, PL9 9PW.

USER GROUPS

Seuckers, the original user group. Write to: Seuckers, 12 Arthur Avenue, Caister on Sea, Great Yarmouth, Norfolk, NR30 5PQ for info pack.

Bored with the same games? Need to add sparkle to your C64? Send SAE to M. Fuller, 29 Skegloy Lane, Mansfield, Notts, N919 6QS.

PEN PALS

13-year-old boy seeks pen-pals, male/female, worldwide. Write in English to: Joss Tucker, Balistraat 25, 2585XK The Hague, The Netherlands. Answer guaranteed.

Wanted: Pen-pal. Must be good looking girl 12-14. To exchange er... em... letters. Phone Martin (West Midlands) 353-0650 (C64 user) at 4-ish.

12 year old boy seeks a 12-13 year old male. To like dance music and talk about games (not programming). Alan Rushe, 7 West Ave., Ingol, Preston PR2 7EP.

C64/Amstrad 6128 I'm looking for you nasters (*you whats? – Dave*) who are willing to exchange info and programs with or without programming knowledge. John Fellides, 1 Chrisoupolpos Street, 162.31 Viromas, Athens, Greece. Tel: (01) 7014072.

Pen pal with C64 wanted, aged 10-12, to swap tip, games and cheats. Graham Todd, 30 Pennel Street, Lincoln, LN5 7TA.

Pen pal wanted! I am 13 years old and love programming and music. Richard Archibald, 23 Garry Drive, Ballymoney, Co. Antrim, BT53 6ER.

15 year old boy seeks penpal(s). M/F, photo if poss. Davey Hurt, 9 Watford Close, Witherwack, Sunderland, SR5 5SS.

Penpal to swap PD programs on 5.25-inch disks. Any age or sex, UK or abroad. Lee, 10 Stone House Court, Forden, Welshpool, Powys, Wales. Tel: 0938 580559.

BUY-A-RAMA ORDER FORM

NAME

ADDRESS

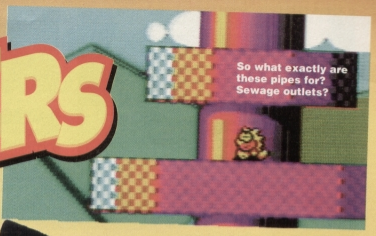
Classification: Tick box; ❑ For sale ❑ Wanted ❑ Services ❑ User groups ❑ Pen pals

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 heading binwards.

GAMES TIPS

GAMEBUSTERS



Cheating is an ancient art form. From the first game of club your partner through conkers, Kerr-Plunk and Canasta to computer games people have cheated. And Andy Roberts is a master of the art...

MAYHEM IN MONSTERLAND (APEX)

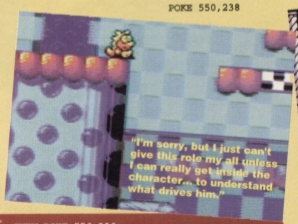
You've had the complete player's guide, a rather nifty bug-fix listing and even an infinite lives listing. And now, finally, here we have the official cheat mode. But it isn't your average bog-standard, run-of-the-mill cheat. In fact, if you've copied the game or own a pirate version, you won't be able to use the cheat at all. Ha!

When the title screen appears, type in the numbers corresponding to the BOTTOM LEFT strip of colours on the protection sheet (A37 to E37). This is a rather hefty 25 digits, so be extremely careful not to make a mistake. If you enter it correctly, the APEX logo will begin to flash, and you can now start the game with infinite lives.

MAYHEM PIPELAND DEMO (POWERPACK 46)

The cute yellow dinosaur's third Powerpack outing gets the usual Warren Pilkington treatment. Type in this listing, SAVE for future use, then RUN it for infinite lives, invincibility, loads of time, and infinite continues.

```
0 REM MAYHEM DEMO 3 CHEAT BY WAZ
1 FOR X=516 TO 576:READ Y:C=C+Y:POKE X,Y:NEXT
2 IF C<>6939 THEN PRINT "DATA ERROR":END
3 INPUT "INFINITE LIVES Y/N";A$:IF A$="N" THEN
POKE 545,1
4 INPUT "INVINCIBILITY Y/N";B$:IF B$="N" THEN
POKE 550,238
```



DUCKULA 2 (ALTERNATIVE)

He's by far the most gorgeous and talented duck on television, but he's a little bit crap at games. To give everybody's favourite vegetarian vampire a helping hand, try this listing for size. Eat your heart out, Orville (*we can only hope – Ed*).

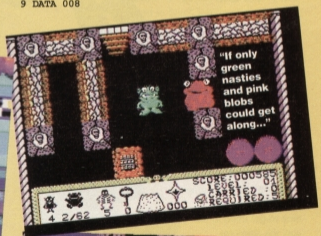
```
0 REM DUCKULA 2 CHEAT BY WAZ
1 FOR X=272 TO 323:READ Y:C=C+Y:POKE
X,Y:NEXT
2 IF C<>6170 THEN PRINT "DATA ERROR":END
3 POKE 157,128:SYS 272
10 DATA 032,086,245,169,121,141,218,003
11 DATA 169,088,141,220,003,076,167,002
12 DATA 238,032,208,206,032,208,169,234
13 DATA 141,234,016,141,235,016,141,236
14 DATA 016,141,061,038,141,062,038,141
15 DATA 064,038,141,130,050,141,131,050
16 DATA 141,132,050,096
```

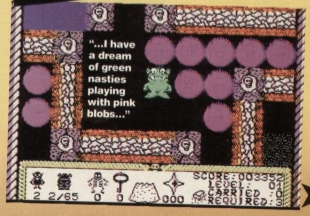
```
5 INPUT "INFINITE CONTINUES Y/N";C$:IF
C$="N" THEN POKE 555,206
6 INPUT "MORE TIME Y/N";D$7 IF D$="N" THEN
POKE 560,189:POKE 565,68:POKE
570,144
7 POKE 157,128:SYS 516
10 DATA 032,086,245,169,019,141,207,003
11 DATA 206,208,003,096,087,065,090,169
12 DATA 032,141,013,010,169,002,141,014
13 DATA 010,076,230,003,169,000,141,182
14 DATA 179,169,173,141,176,171,169,173
15 DATA 141,116,070,169,169,141,041,179
16 DATA 169,009,141,042,179,169,234,141
17 DATA 043,179,076,013,008
```

BONECRUNCHER (POWERPACK 46)

Warren Pilkington takes a break from creating music demos (such as *Quadraped Tearaways*) to conjure up this splendid listing. Type it in and RUN it for infinite lives and keys.

```
0 REM BONECRUNCHER CHEAT BY WAZ
1 FOR X=516 TO 556:READ Y:C=C+Y:POKE X,Y:NEXT
2 IF C<>4132 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 010,076,230,003,169,173,141,134
8 DATA 056,169,173,141,147,062,076,016
9 DATA 008
```





YETI (ALTERNATIVE)

This rather dull computer version of *Bigfoot and the Hendersons* can be made a little more bearable with the aid of this listing. Type it in and choose from a tantalising selection of cheats: infinite lives, tons of ammunition and a bucketload of bombs.

```
0 REM YETI CHEAT BY WAZ
1 FOR X=528 TO 572:READ Y:C=C+Y:POKE
X,Y:NEXT
2 IF C<>5031 THEN PRINT "DATA ERROR":END
3 INPUT "INFINITE LIVES Y/N";A$:IF A$="N"
THEN POKE 556,206
4 INPUT "INFINITE AMMO Y/N";B$:IF B$="N"
THEN POKE 561,206
5 INPUT "INFINITE BOMBS Y/N";C$:IF C$="N"
THEN POKE 566,206
6 POKE 157,128:SYS 528
10 DATA 169,029,141,040,003,169,002,141
11 DATA 041,003,032,086,245,169,011,141
12 DATA 206,001,169,034,141,207,001,096
13 DATA 087,065,090,169,173,141,201,155
14 DATA 169,173,141,039,152,169,173,141
15 DATA 051,152,076,235,002
```

Sam had a bit of an attitude problem...

...He also had pink, silk pajama bottoms...

...And a large, curved sword called Penelope...

FIRST SAMURAI – BEGINNERS' TIPS

Decent beat-'em-ups are hard to find, let alone a half-decent arcade adventure. First Samurai happens to be a wicked blend of both styles, but it's also a hideously difficult game. Here's Andy with some sound advice for first-time Samurais.

忍者

Is it just me or do those flying things look like the robots in *The Black Hole*?

GETTING STARTED

Although the control method is well designed and extremely flexible, it does take a little time to get used to, especially if you've never played this sort of game before. Take a little time to get used to the way the Samurai handles, how high and how far he can jump, his speed and agility, etc. Things become a little more difficult when you gain the sword, as you effectively gain several new moves (which, as you may have guessed, require lots of practice too). Probably the most vital skill to master is mid-air combat, ie, jumping and attacking at the same time. For more info, check out the COMBAT section.

PHYSICAL AND MYSTICAL STRENGTH

Physical strength is by far the most important, simply because if you run out of physical energy, you lose a life. Collecting fruit (see CHESTS) will replenish lost physical strength, and you should endeavour to top up your energy whenever possible – you never know when you'll need that extra little bit (and believe me, you'll need it). If you collide with an enemy, for example, only your physical strength is affected, and is therefore the most important of the two.

Unlike physical strength, mystical strength is completely expendable, and is fairly easy to replenish (killing enemies will boost your mystical strength). However, certain magic objects cannot be collected unless you have enough mystical strength, so it's generally worth killing any and every thing which gets in your way.

If you run out of physical strength, some of your mystical strength will be used to replenish it, which is rather handy (but don't rely on this). It's also worth pointing out that the more mystical strength you have, the better your weapons. However, this also works in reverse – lose energy and the weapons will disappear quicker than a particularly spritely cheetah on steroids.

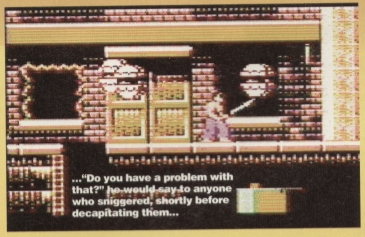
RESTART POINTS

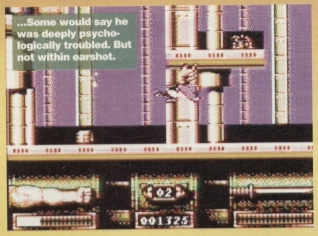
The various pots dotted around the landscape are, in actual fact, restart positions, and require mystical strength to activate. Simply stand in front of any particular pot and duck for a few seconds to 'activate'' it. The next time you lose a life (or collect a potion – see CHESTS), you will return to the last restart pot. As you progress further and deeper into the levels, it is definitely worth sacrificing some energy to save your position, as it's often tricky to retrace your steps without losing tons of lives. Restart pots can also be used as an emergency back-up escape route; if the screen is full of nasties and you uncover a potion, use it to safely return to the last restart point (and away from danger... hopefully).

CHESTS

These contain all manner of bonuses and magic objects, which may or may not be collected (depending on how much mystical energy you have). The list below covers the more common types. Certain magic objects are required to complete some of the puzzles throughout the game, such as the logs on level one. These are often in well-concealed areas, so try to keep your eyes peeled at all times. Also, it's worth bearing in mind that some chests won't appear if there are a lot of enemies on screen.

- **FRUIT** – Replenishes physical strength
- **DAGGERS** – Enhance firepower
- **AXES** – Enhance firepower
- **BELL** – Used to summon the Old Man
- **MINES** – Boost firepower
- **POTION** – Takes you to the last restart point
- **LAMP** – Uncovers hidden objects


...“Do you have a problem with that?” he would say to anyone who sniggered, shortly before decapitating them...



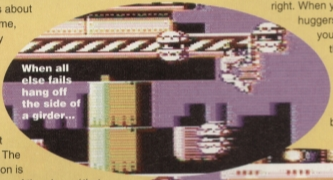
...Some would say he was deeply psychologically troubled. But not within earshot.

TELEPORTS

These are few and far between. In fact, most levels only have one or two teleports. They look like the five dots on a die and, once activated, will teleport you to another part of the map (simply stand in front of it and hold down the FIRE button for a few moments). Note that teleporting is not an option — if you don't use them, you cannot complete the game. As with restart points, the teleporters can also act as a handy escape route, should the need arise (and it definitely will).

COMBAT

If you're serious about finishing the game, then you'll really need to polish up your fighting skills. Unarmed combat is undoubtedly the trickiest, but not impossible. The collision detection is tweaked in favour of the player (*that makes a change – Dave*), so it's possible to hit an enemy which is still a few pixels away. The high punch and high kick are probably the only moves worth using, along with the leg sweep for particularly low or short enemies (and to get rid of disappearing floors).


When all else fails hang off the side of a girder...

Sam often felt lucky that he was bitten by a radioactive spider when he was young.

Life becomes much easier when you get armed with the sword, because this means that it's possible to kill several enemies with just one swipe. Certain magical objects, such as the axe, the daggers and the mine, will boost your combat abilities when combined with the sword. Both the daggers and the axe act like bullets, whereas the mine will float around the screen and home in on its prey. The basic key to staying alive is don't stand still, and attack anything that moves.

WIMP'S GUIDE TO LEVEL 1

Usually the first level is a gentle introduction to the game, with puzzles designed to educate the player rather than confuse and annoy, right? Well, strangely enough, the first level of this particular game is one of the biggest and most difficult, which is why we've decided to show you exactly how it's done. Once you've mastered it, you should have a pretty decent idea how to tackle the rest of the game (if not, you could always make use of our SOS section on page 29).

The main objective is to kill the dragon which lurks at the far right of the level, but standing between you and the dragon is a rather large waterfall. To get past this you need to collect four logs and then summon the Old Man to lay them across the waterfall. Easy in theory, very difficult in practice...

From the start: Make your way to the right until you reach a section of disappearing floor – use your leg sweep to kick through it. Drop into the cavern below, then use the same manoeuvre to kick through the next section of flooring. Head right and collect the BELL which lurks amongst the columns, then continue right as far as possible and collect the first LOG (underneath the dragon). Now go back to the left and up to the 'surface', then go right. When you reach the face huggers, continue quickly to the right until you reach a restart pot. Activate it, then drop down the small waterfall below. Go left and collect the second LOG (avoid the Dragon's flames), then climb back up the waterfall to the surface. Head right until you reach a huge fireball-type fiery thing, then hit SPACE to summon the Old Man – he will extinguish the flames.

Now, using the white platforms above you, climb up and left, then keep heading left across the platforms until you reach a chest; collect the BELL from inside and head back the way you came to the waterfall with the two dragons. Climb up over the waterfall, then drop down the right-hand side. Don't fall into the cavern below, instead go right a little and activate the restart pot. Continue right and drop down into the cavern, then head right and hack through the wall in your way. Avoiding the spikes, drop down and hack through the wall to your left, then climb up the platforms, hack through the floor, and drop onto the platform below.

Jump over the fire and hack through the next wall, then carefully descend into the lower catacombs. Now make your way left and up (wherever necessary) until you reach a rockfall; summon the Old Man then open the second chest to collect the third LOG.

Now go back the way you came and head right across a series of disappearing blocks until you reach a teleporter – use it. Now drop down into the caverns again, and climb up the platforms at the bottom. Instead of dropping through the small gap (as before), continue left until you reach a teleporter – go through it, follow the path on the other side and collect the BELL, then go back and into the teleporter again.

Go back the way you came and drop into the lower catacombs as before, then head right across the disappearing platforms and into the teleporter. Make your way left a little and up to the surface, then climb the 'pyramid' to the right and use your sword to destroy all of the square blocks (there are six sets of two). Once done, climb to the top and an extra platform will allow you to jump left to collect the fourth and final LOG.

Now simply make your way back across the platforms, down, then right to the waterfall. Hit SPACE to summon the Old Man, walk across the newly created bridge, then kill the dragon which lurks at the end. Once he's dead, collect the three bonus coins and teleport to finish the level.

忍者

AND WHEN ALL ELSE FAILS...

...Cheat like there's no tomorrow. If it's Action Replay POKEs or passwords you're after, this little lot should keep you happy for hours. Note that the POKEs will work on both the tape and disk versions, but not the passwords – which is why we've included both sets.

INFINITE ENERGY

```
POKE 18333,0 – Load 1
POKE 17625,0 – Load 2
POKE 18247,0 – Load 3
POKE 19949,0 — Load 4
```

INFINITE LIVES

```
POKE 8628,0 – Load 1
POKE 8224,0 – Load 2
POKE 8350,0 – Load 3
POKE 8002,0 – Load 4
```

CASSETTE PASSWORDS

LEVEL 5 – QXZLMP
LEVEL 6 – ZITRJM
LEVEL 7 – BZGVSN

DISK PASSWORDS

LEVEL 5 – PMLZXQ
LEVEL 6 – MJRTIZ
LEVEL 7 – NSVGZB

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AMIGA FORMAT

Issue 63 of *Amiga Format* has an amazing feature on interactive TV and how the Commodore Amiga will be playing a major role in this new entertainment revolution. We've also got some excellent Coverdisks with *OctaMED*, a top music package, and an awesome demo of Impressions' *Detroit* game (where you try to outdo Henry Ford at designing and flogging motors to the world). *AF*63: it's the dog's... **£3.95, WITH 2 COVERDISKS**

AMIGA POWER

Amiga Power tells you everything you need to know about playing games on the Amiga (the C64 and CPC's natural heir). For example, the September issue's got an exclusive review of *Super Stardust*, probably the best Amiga shoot-'em-up yet. It also comes with two disks, stuffed full of demos and complete games. *Amiga Power* truly is the mightiest computer games magazine ever devised by human beings. **£3.95, WITH 2 COVERDISKS**

AMIGA SHOPPER

Amiga Shopper is the definitive guide for every serious Amiga user. In our September issue, we will be taking a long hard look at the ray-tracing program *Imagine 3*, plus we test every 24-bit graphics card we can get our hands on. **£2.50**

CONSOLE MAGS

GAMES MASTER

It's the biggest-selling and bulgingest multi-format games magazine this side of reality (and probably beyond). *Stargate* is going to be one of the hit movies of the year, and it's also set to burn up your consoles in an extravaganza of marines-in-time-travelling-back-to-Egypt-and-getting-trapped-in-a-pyramid, er, action. And only GamesMaster has the EXCLUSIVE first look in the September issue. Get it or paint yourself purple and sing Kung Fu Fighting. **£2.25**

SEGA POWER

The September issue of Sega Power features an exclusive review of gorgeously gory Mega Drive *Doom* clone, *Zero Tolerance*; a massive round-up of all the games planned for Mega Drive 32; a dip into Sega's fantastic new coin-op, *Virtua Star Wars*; and a REVIEW of Mega Drive *Mortal Kombat 2*. It's out now and, unless you're some kind of laughably unsophisticated peasant with a funny accent, you'll buy it... **£2.50**

TOTAL!

It's the total Nintendo experience with all the latest goss on all things NES, SNES and GameBoy. And here's a sneak preview of what September's issue's got in store: *Mortal Kombat 2*, *Super Battle Tank 2*, *Eek the Cat* and loads of other stuff that's just as pot-noodlingly good. **£2.50**

SUPER PLAY

The magazine for anyone who's seriously into their SNES (or who like pictures of women with tiny pointy chins and huge eyes). The September issue contains the definitive review and first guide of *Super Street Fighter 2*. There's also a massive *Super Metroid* solution as well as all the Super Nintendo news from Japan and America. It's well chocka! **£3.95**

PC MAGS

PC GAMER

In the September issue of *PC Gamer*, find out whether *Rise Of The Robots* lives up to its hype in our exclusive location report. Also we've got the first review of Microsoft's epic *Space Simulator*, players guides to *TIE Fighter* and *Ultima VIII*, the biggest PC games news section in the known world and opinions from the most respected writers in the games industry. And Gary Penn. **£3.95 WITH 2 COVERDISKS**

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In the September Issue of the PC magazine that helps you work, rest and play...

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The mag that helps you get the most out of your PC. In the latest issue we'll tell you all about: Creating your own multimedia programs – it's exciting and so easy anyone can do it • Choosing and using scanners • How to manage your files to make using your PC more efficient. And, as usual, *PC Answers* is packed-to-the-gills with reviews, hints and tips and probing news investigations. **£3.95 WITH COVERDISK**

ST FORMAT

BRITAIN'S BEST-SELLING ST MAGAZINE

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THEY'RE ALL ON SALE NOW AT YOUR LOCAL NEWSAGENT!

SOS

He's tough, he's mean and he can bust any game you care to mention, so why not drop our Andy a line if you're suffering from the gaming blues? Go on, don't be shy.

GAMES TIPS

RICK DANGEROUS 2
(FIREBIRD/KIXX)

A fine young fellow by the name of Gavin Gunnati wrote in with several queries, one of which is for this huge arcade adventure. In short, he doesn't know how to use the JE VEUX VIVRE cheat, which we've printed a couple of times before. It's really quite straightforward – simply play the game to get a high score, lose all your lives, then enter JE VEUX VIVRE (with spaces) on the high score table for infinite lives.

Gomez pretends to be a light fitting.

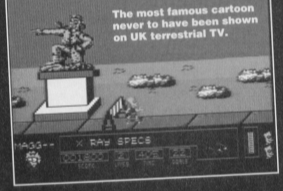
THE ADDAMS FAMILY
(OCEAN/HIT SQUAD)

A rather depressed C Constable from Kent wrote in with several queries, one of them for this rather hefty arcade romp – what exactly do you do? Being such a kind soul, here's the complete solution for level one. If you'd like to complete the whole game, the full solution is in *CF*31 (*that sounds like an opportunity to get in another back-issue plug – Dave*).

From the start: IN DOOR • LEFT (BOTTOM OF SCREEN) • IN DOOR • LEFT • LEFT • GET KEY • RIGHT • IN DOOR • RIGHT • LEFT (TOP OF SCREEN) • LEFT • IN DOOR • RIGHT • RIGHT • GET KEY • LEFT • LEFT • IN DOOR • RIGHT • IN DOOR • LEFT • RIGHT (TOP OF SCREEN) • RIGHT • IN DOOR • RIGHT • IN DOOR (BOTTOM OF SCREEN) • LEFT • LEFT • LEFT • IN DOOR • GET KEY • IN DOOR • RIGHT • RIGHT • RIGHT • IN DOOR • LEFT (TOP OF SCREEN) • UP • LEFT • LEFT • LEFT • LEFT • IN DOOR • GET KEY • IN DOOR • RIGHT • IN DOOR (TOP OF SCREEN) • LEFT • RESCUE PUGSLEY • RIGHT • IN DOOR • RIGHT • RIGHT • RIGHT • DOWN • RIGHT • IN DOOR • (BOTTOM OF SCREEN) • RIGHT • RIGHT • RIGHT • IN DOOR • RIGHT • RIGHT • RIGHT • IN DOOR • RIGHT • RESCUE LURCH • LEFT • IN DOOR • LEFT • LEFT • LEFT • IN DOOR • LEFT • LEFT • LEFT • LEFT • LEFT • IN DOOR • LEFT • IN DOOR to complete the level.

BLOOD MONEY (PSYGNOSIS)

Shane Hadfield from Sheffield is having a few problems with this strangely playable shoot-'em-up, and luckily there is a handy Action Replay POKE to help even the most incompetent players. Simply use `POKE 12734,189` for complete invincibility.



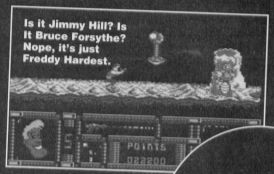
The most famous cartoon never to have been shown on UK terrestrial TV.

THE SIMPSONS
(OCEAN/HIT SQUAD)

Here's another budget beauty causing problems for C Constable from Kent. This time he's having trouble spraying the WET PAINT sign above the shop door on level one. Here's how – when you reach Tool World, go inside and buy a wrench. Leave the shop, then use the wrench on the fire hydrant; the water jet will wash away the WET PAINT sign! Oh, and don't forget to spray the fire hydrant too.

DALEK ATTACK
(ALTERNATIVE)

There's nothing more satisfying than blasting a few Daleks to oblivion,but completing the game is quite an arduous task. Fear not, Stuart Christie, as there is a simple, clean, and efficient cheat mode which absolutely anybody can use. To jump to the next level, press both SHIFT keys simultaneously at any time during the game. Then press P to pause the game and keep P pressed while you press and release the asterisk (*) key. If that seems a little convoluted, you might like to try `POKE 4575,165` and `POKE 13579,165` for infinite lives. Also, for those of you with the relevant back-issues, you can find a superb player's guide (*cheers – Dave*) in issues *CF*31, *CF*32 and *CF*33.



Is it Jimmy Hill? Is It Bruce Forsythe? Nope, it's just Freddy Hardest.

FREDDY HARDEST PART 2
(POWERPACK 39)

Whoops! There was a teensy error in the listing printed in *CF*41, and a young chap/chapette called M Balsamo spotted it. The mistake is quite a simple one – lines 4 and 5 were merged for some reason. Those lines should have read...

```
4 INPUT "INFINITE AMMO Y/N";B$:IF B$="N"
THEN POKE 550,206
5 POKE 157,128:SYS 516
```

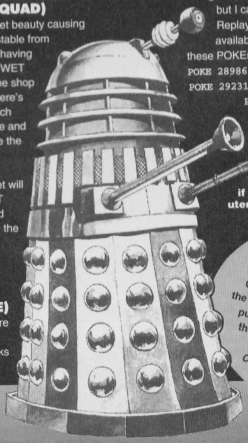
...so type that into the original listing and everything should be absolutely peachy.

I can't be having with all this modern art nonsense.

LAST NINJA 2
(SYSTEM 3/KIXX)

Oh dear! It seems that Andrew Cochrane from Gleadless in Sheffield is a little disappointed with this installment of the Ninja saga – so many bugs and so little gameplay. Well, I can't make the game any better, but I can make life a little easier with these Action Replay POKEs. Oh, and there is no listing cheat available for the game. Such is life. Anyway, try these POKEs on the relevant level for infinite lives...

`POKE 28986,165` – Level 1
`POKE 29231,165` – Level 2
`POKE 28824,165` – Level 3
`POKE 29059,165` – Level 4
`POKE 29212,165` – Level 5



Well, you'd have an attitude problem if your creator had given you kitchen utensils for hands.

WANTED... DEAD OR ALIVE

We're constantly on the look-out for the best darned tips in the business, and we'll put our money where out mouth is and reward the best stuff with a big fat juicy tenner (which is actually worth the same as a small, skinny, dehydrated tenner, but doesn't sound as good). Simply send your maps, tips, cheats, solutions, POKEs and other gameplaying advice to: Andy Roberts' Gamebusters, *Commodore Format*, 30 Monmouth Street, Bath, Avon BA1 2BW. Don't forget to include your name and address, along with a crateload of Pringles potato chips.

PSSST! WANNA CHEAT?

If you're stuck on any game, no matter how old, or how obscure, try this...

Get hold of a postcard or sealed envelope, jot down the games you're stuck on (including the name of the publisher), specify the type of cheat you'd prefer or the part of the game you're stuck on, then send it along with your name and address to: SOS, *Commodore Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

GAMES TIPS

EXILE (AUDIOGENIC)

The demo POKEs printed in *CF46* won't actually work on the finished version of the game (hah, I bet that caught you out). As luck would have it, Dean Locke from Australia has a gaggle of Action Replay POKEs which do work on the final version. Hurrah. And, indeed, hurrah again.

For full energy...

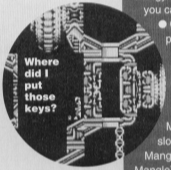
POKE 39339,255 – Jetpack
POKE 39340,255 – Gun
POKE 39341,255 – Icer
POKE 39342,255 – PX312 Blaster
POKE 39343,255 – Plasma Gun
POKE 39344,255 – Shield

To gain the objects...

POKE 39308,255 – Gun
POKE 39309,255 – Icer
POKE 39310,255 – PX312 Blaster
POKE 39311,255 – Plasma Gun
POKE 39312,255 – Shield
POKE 39307,255 – Booster
POKE 39299,255 – 1st Key
POKE 39300,255 – 2nd Key
POKE 39301,255 – 3rd Key
POKE 39302,255 – 4th Key
POKE 39304,255 – 5th Key
POKE 39305,255 – 6th Key
POKE 39314,255 — Mushroom immunity
POKE 39317,255 – Radiation Protection
POKE 39313,255 – Fire protection
POKE 39316,255 – Whistle 1
POKE 39315,255 – Whistle 2

And finally...

POKE 39326,(0-255) – Pull objects from your pockets
POKE 39351,(0-255) – Turn yourself into objects and creatures



JONNY QUEST (HI TEC)

Ryan Barrett from sunny Swindon has very kindly decided to share his complete solution with the entire C64 community – so here it is.

LEVEL 1 – From the start: LEFT • LEFT • LEFT • get TORCH • RIGHT • RIGHT • RIGHT • RIGHT • get KEY • RIGHT • RIGHT • LEFT • LEFT • LEFT • get KNIFE • get KEY • RIGHT • RIGHT • RIGHT • RIGHT • RIGHT • get KEY • LEFT • LEFT • get BATTERIES • put BATTERIES into TORCH • RIGHT • UP • LEFT • LEFT • LEFT • get KEY • LEFT • up on SPRING • RIGHT • get KEY • RIGHT • RIGHT • RIGHT • RIGHT • use TORCH • free friend with KNIFE • DOWN • LEFT • LEFT • LEFT • DOWN to complete the level.

LEVEL 2 – From the start: DOWN • DOWN • DOWN • RIGHT • UP • UP • RIGHT • DOWN • LEFT • RIGHT • RIGHT • get ENERGY • LEFT • LEFT • RIGHT • RIGHT • UP • RIGHT • UP • RIGHT • UP • RIGHT • DOWN • get LASER • UP • LEFT • DOWN • LEFT • UP • LEFT • LEFT • DOWN • DOWN • DOWN • UP • LEFT (second floor) • LEFT • LEFT • LEFT • LEFT • LEFT • UP • RIGHT • LEFT • LEFT • LEFT • DOWN • RIGHT • get DYNAMITE • UP • RIGHT • RIGHT,RIGHT • LEFT • DOWN • RIGHT • RIGHT • DOWN • walk off lift to complete level.

LEVEL 3 – From the start: use DYNAMITE • DOWN • LEFT • LEFT • RIGHT • RIGHT • get KEY • LEFT • LEFT • DOWN • LEFT • DOWN • RIGHT • RIGHT • get KEY • LEFT • LEFT • LEFT • UP • free DOG • get KEY • DOWN • RIGHT • RIGHT • RIGHT • RIGHT • RIGHT • UP • UP • LEFT (top way) • DOWN • get ENERGY • DOWN • LEFT • LEFT • get KEY • RIGHT • UP • UP • DOWN • DOWN • DOWN • LEFT • RIGHT • get DIVING SUIT • LEFT • LEFT • LEFT • DOWN • drop into water to complete the level.

LEVEL 4 – From the start: UP • LEFT • get AIR • LEFT • LEFT • UP • get AIR • DOWN • UP • LEFT • LEFT • DOWN • get AIR • DOWN • RIGHT • RIGHT • UP • get AIR • DOWN • RIGHT • RIGHT • DOWN • RIGHT • get AIR • RIGHT • UP • RIGHT • get AIR • LEFT • RIGHT • RIGHT • get AIR • DOWN • RIGHT • RIGHT • UP • LEFT • UP • UP to complete the level.

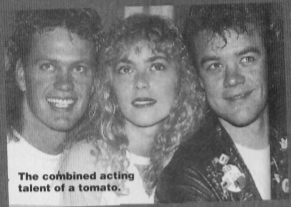
LEVEL 5 – From the start: UP • get CODING DEVICE • UP • UP • get KEY • UP • TERMINAL 1 • RIGHT • RIGHT • UP • RIGHT • get KEY • DOWN • LEFT • LEFT • LEFT • get KEY • RIGHT • DOWN • RIGHT • get ENERGY • RIGHT • RIGHT • LEFT • LEFT • DOWN • DOWN • get KEY • UP • RIGHT • DOWN • RIGHT • DOWN • RIGHT • TERMINAL 2 • LEFT • UP • LEFT • UP • LEFT • RIGHT • get KEY • LEFT • UP • RIGHT • RIGHT • RIGHT • DOWN • get KEY • LEFT • TERMINAL 3 • RIGHT • UP • LEFT • LEFT • LEFT • DOWN • RIGHT • DOWN • RIGHT • TERMINAL 4 • LEFT • RIGHT • RIGHT • UP • talk to BENTON QUEST to complete the game.

NEIGHBOURS (ZEPPELIN)

Richard Beckett pops up again, doing what he does best – solving tricky and troublesome games. If you're having problems with this antipodean escapade, heed this sound advice.

JIM'S GARAGE OPTIONS SCREEN

Here, select to race on the intermediate board, as the beginner's board is too slow and the advanced board harder to control with no real benefits. It's best to select no more than two opponents – any more just tend to block the screen. There are no differences between the capabilities of each vehicle (even between the motorbike and lawnmower!), and you can also select how many obstacles you want. For the benefit of clarity, this solution uses all of them.


The combined acting talent of a tomato.

HELEN DANIELS' PAINTING TIPS

- Don't always race along at full speed, it increases your chances of a crash, which slows you down in the long run (*sounds like a metaphor for life, really, doesn't it? – cultural editor*).
- Save the energy-filling bonus objects for when your energy is low. Until the third and final lap, that is, when you can collect them as you wish.
- Clear obstacles by as large a distance as possible – there is some very dodgy collision detection at times.
- Roads get smaller and have more turns as you progress through the levels.

RACE 1 – DOUG WILLIS' BETTING TIPS

Move up the screen a bit to pass the first gate, slow down before the next gate to avoid Mrs Mangle (and let's face it, you want to avoid Mrs Mangle), then go down the screen along the right pavement where you're safe from harm (swerve only to go through gates). Go right and up the left pavement (again avoiding enemies), then along the top pavement to avoid the kangeroos. Go down the centre of the road, right avoiding Bouncer, and up the right pavement. At the top of the road turn left to complete the lap. Now simply do this three times, then repeat going in the opposite direction.

RACE 2 – SWAMPEY'S SURFING TIPS

Go through the first gate, then down the left path, left, down the right path (remember to turn to go through any gates), right, down the left path, left and down either path to avoid the dog. Go right and follow the right path until you reach Mrs Mangle, where you should swap to the other side of the road and follow the left path to the end of the lap. Note that when you are turning corners on the path, go onto to road and do a large circle onto the next path to avoid crashing.

RACE 3 – JENNY LIM'S PRONUNCIATION GUIDE

Go left at the base of the mud track to avoid the late Todd Landers, follow the track round, staying at the bottom all the time. When there are two directions in which you can go (right and down), go down; the right path is a dead-end. As long as you stay at the bottom or right of the track, you're safe from all enemies. It's more a case of steering through small tracks, and therefore it's better to go slower as crashing sends you back too far.

RACE 4 - THE TIPS LEFT IN JIM'S WILL

As with race three, you can avoid all enemies by staying to the right or bottom of the tracks. Paths are very thin here, so go slowly. Try to get in the lead at the start, as it's hard to overtake later. Simply complete this race to finish the game.

CHART ATTACK

Why do so many stars of *Neighbours* insist on trying to convince us they're pop stars as well. "I was singing long before I joined the cast," they all reveal in interviews. It might be news to them, but I was singing long before I started writing for a living – in the bath, in school assemblies, on trains, busking in the tube – but believe me, I have no intention of releasing a quick rendition of *Games Without Frontiers*. But no, these *Neighbours* stars, not content with proving they can't act decide, to prove they can't sing as well. Why don't they decide to prove they can't paraglide or race Formula 1 cars instead? And when the popularity wanes, that's the time to release slushy cover version. Stefan Dennis, Kylie, Jason, The Twins, they're all in on the act (perhaps not the best word to use). What next? Bouncer duetting with Aretha Franklin (well, the NME could wheel out the ever-popular 'couple of old dogs' gag)? Or perhaps, by way of revenge, a bunch of pop stars with all the musical ability of dead hedgehog should join the cast and prove how crap they are acting as well... like Take That, for example.

MEAN machine CODE

What does Machine Language mean to you? Is it that strange mid-Atlantic drone that Speak and Spell games used? Or the key to the true power of your C64? Jason Finch reveals all...

Part 4

Hard as it may be to believe, by the end of the next page you will have learnt the facts about another 17 machine language commands. It's true. Because this month I will guide you gently through the realms of arithmetic, logical, transfer, shift and rotate instructions. Not only that, but I'll tell you all about the incredibly easy zero page and relative addressing modes. The only question left to ask is where to begin? Let's get that answered right away.

ADDRESSING IT

Remember that last month I told you what the zero page was? If you don't – because you didn't read the mag (in which case don't tell Dave because he'll only use it an excuse to plug Back Issues) or you've just got a plain bad memory – don't worry. It's just a posh name for the first 256 memory locations. Zero page addressing mode allows you to tell the computer what address you want by supplying only one byte of info, not the normal two. Like `LDA, $D020` requires two bytes, stored as `$20` and `$D0` in the memory for reasons that elude even the illustrious Dave. But in zero page, the high byte of every address is `$00` and so we just get rid of it. So if you stored a value in location `$00FB`, you access it by doing `LDA $FB` instead of `LDA $00FB`. You can do that with practically everything where you normally use two bytes. Take, as a simple example, the following short assembly language program:

```
100 *=49152
110 LDA 1064; $0428
120 STA 251; $00FB
130 RTS
```

Line 110 uses absolute addressing and is stored in memory as `$AD,$28,$04` which is three bytes. Line 120 uses zero page addressing because the memory location in question (251) lies in the first 256. It is stored as `$85,$FB` which is only two.

Relative addressing is not used in many instructions; in fact you will only come across it in branch instructions. It is the equivalent of saying, "take two steps backwards from here," or, "take three steps forwards from here". An actual address is not stored in memory, just the number of bytes either forward or back that the program must jump past. For convenience you always specify the address when you enter assembly language like `BNE LOOP` or `BNE $C000`, but these are never stored literally.

CARRY THE CAN

In the auspicious world of the C64, flags are things which are either on or off. Like light bulbs. And in the said world there is no concept of a dimmer switch so don't get funny with me, matey. If you want a flag to be on, you set it; otherwise you clear it.

For now I'll just tell you about the carry flag. It's used a lot in machine code; during additions, subtractions and even during branch instructions. In fact, the instruction to add two numbers together is `ADC` which stands for ADd with Carry. Similarly, `SBC` means SuBtract with Carry. To clear and set the flag yourself, you do `CLC` or `SEC`. `CLC`, quite unsurprisingly, is short for CLear Carry and unless you're a big, fat lemon I don't need to say what `SEC` stands for. The relevant branching instructions are `BCC` and `BCS`; Branch if Carry Clear and Branch if Carry Set.

```
100 *=49152
110 SEC
120 BCC CLEAR
130 RTS
140 CLEAR ;
150 INC 53280 ;BORDER COLOUR
160 RTS
```

Try assembling the above program and executing it with `SYS 49152`. You should find that nothing happens when you run it. Great program, eh? But hang on. Change the `SEC` in line 110 to `CLC` and run it again. Now you've cleared the carry flag and so the branch will take place and the border colour should change. Experiment using `SEC` and `CLC` with either `BCC` or `BCS`.

IT ALL ADDS UP

When you add two numbers together in machine language, the computer very thoughtfully adds one to the result if the carry flag is set. Therefore it is advisable to clear it beforehand. On the other hand, you should set the carry flag before a subtraction. Because the highest number you can store in one byte is 255, the computer will automatically set the carry flag during an addition if the result is bigger than 255. That's why it's called a carry flag; the high byte is carried over. If you add 3 to 5 the result is 8, which is fine in decimal. If you add 5 to 8 you get 13. The first time you ever did this you will have been told that you have to 'carry' the one over into the tens column and write a three in the units column. It's the same thing.

In theory it is very simple to write a program which will read in a number from a memory location, change it and then store the new result back. Try out the following program which puts the theory into practice. As you should be doing with all these listings, experiment with the commands and values to see what happens:

```
100 *=49152
110 LDA 251
120 CLC
130 ADC #25
140 STA 251
150 RTS
```

Assemble the program and enter `POKE 251,100:SYS 49152:PRINT PEEK(251)`. You should get the result of 125 because line 130 adds 25 on to the value read in by

COMMAND SUMMERY:

This month's Mean Machine Code was bought to you by the letters M and C and the commands...

ADC	Add value to accumulator
SEC	Subtract value from accumulator
AND	Logically AND value with accumulator
ORA	Logically OR value with accumulator
EOR	Logically EOR value with accumulator
TAX	Transfer accumulator to X register
TXA	Transfer X register to accumulator
TAY	Transfer accumulator to Y register
TYA	Transfer Y register to accumulator
ASL	Shift bits left one bit
ROL	Roll bits left one bit
LSR	Shift bits right one bit
ROR	Roll bits right one bit
CLC	Clear the carry flag
SEC	Set the carry flag
BCC	Branch if carry flag is clear
BCS	Branch if carry flag is set

line 110. Line 140 stores it back. Change the CLC to]SEC and the ADC to SBC. Observe the fascinating fact that the result is now 75. Heavens.

FROM HERE TO THERE

Transferring is always very handy (*unless it involves money in which case it always seems to be unnecessarily complicated – Dave speaking from bitter experience*). It normally means moving something from one place to another different place. In our case, it means copying a value from one register into another one; not actually moving it. So, to read in the value in the accumulator and to then write it to the X register, you could do something like STA $FB followed by LDX $FB which would store the value in the accumulator to memory and then read it back into the X register. Alternatively, you could use TAX. Do I really have to tell you what it means (and no stupid comments about the Inland Revenue from you, Dave)? Transfer the Accumulator to the X register. There is also TAY which shoves it in the Y register, and TXA and TYA which do the reverse; TXA takes whatever is in the X register and copies it to the accumulator.

ROMARKABLE

I shall take this apt opportunity to thrust more ROM routines into your face.

- JSR $E544 will clear the screen
- JSR $E566 will home the cursor
- JSR $E097 will cause a random number to be generated which can then be read by doing a quick LDA $8F.

The best two sets of ROM routines are those demonstrated by the routine below.

```
100 *=49152
110 JSR $E20E
120 JSR $AD9E
130 JSR $B7F7
140 ;
150 LDA 21
160 LDX 20
170 JSR $BDCD
180 ;
190 RTS
```

The three ROM routines in lines 110 to 130 are very useful indeed if you are mixing Basic and machine language. They read in a value after a comma and store the result in locations 20 and 21 of zero page. The low byte is in 20 and the high byte in 21 for everything is stored in lo-hi byte format. The nifty ROM routine at line 170 displays a decimal number to the screen which must be supplied in the rather inconvenient lo-hi byte format. The high byte must be given by the accumulator and the low byte by the X register. That is why the values are transferred across in lines 150 to 160. I trust you will find a use for these. For example, amend the simple addition proglet as shown below. When you have assembled it enter SYS 49152,100 to marvel at what happens.

```
100 *=49152
110 JSR $E20E
120 JSR $AD9E
130 JSR $B7F7
140 LDA 20
150 CLC
160 ADC #25
170 TAX
180 LDA #0
190 JSR $BDCD
200 RTS
```

IT'S LOGICAL

That was the paragraph header I used way back in *CF40* if my memory is working. That's the issue that described the logical AND and OR operators. It followed *CF38*'s introduction to binary and *CF39*'s information on how memory works. You should have read and understood all three of those if you want any hope of understanding the rest of this series (*yes, yes, yes… at last I get the chance to plug the Back Issues service on page 17 – Dave*). The equivalent of the Basic AND command is, quite spookily, AND. The equivalent of OR is, drum roll please, ORA. Your straightforward conversion of A=PEEK(56320):IF (A AND 16)=16 THEN… would be:

```
100 *=49152
110 LDA 56320
120 AND #16
130 CMP #16
140 BEQ ...
```

I didn't cover EOR in *CF40* because Basic doesn't have such a thing. It's referred to as Exclusive-OR. In simple terms, it flips bits between zero and one. The good old-fashioned truth table looks something like:

```
0 EOR 0 = 0
0 EOR 1 = 1
1 EOR 0 = 1
1 EOR 1 = 0
```

You may find it easier to look at a couple of examples with the decimal and binary equivalents, just like I showed for AND and OR in *CF40*. The decimal value is usually irrelevant to the proceedings. When you grasp a bit more about bits and stuff, you will begin to understand why.

Binary		Decimal
00100110		38
00001111	EOR	15
--------		--
00101001		41
00101001		41
01010101	EOR	85
--------		--
01111100		124

ROLLING AND SHIFTING

Believe it or not, rolling and shifting are both dead complicated if you want them to be, or both incredibly easy if you prefer it that way (and who doesn't?). It all depends on how you look at them. If you're upside down with one eye closed, they're particularly bad.

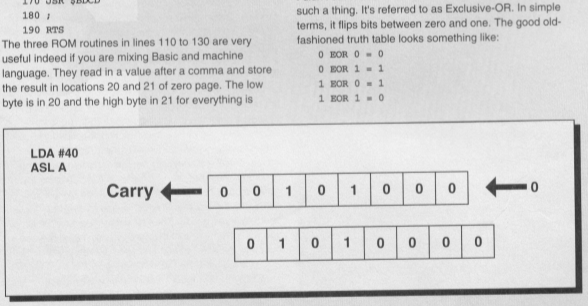
Remember that a byte consists of eight bits. If you imagine shoving them all one bit to the left and filling the empty bit with a zero, you have imagined shifting. The bit that disappears out of the left hand end becomes the carry flag; clear if the bit was a zero, set if it was a one. Rolling involves a similar thing, but the contents of the carry flag are bunged in the empty bit before the carry flag is filled with the whatever was in the left-hand end. The whole thing is much easier to show you in a diagram than in a picture. Check out the diagrams lovingly prepared by art editor extraordinaire, Ollie (*what are you after? – Ollie*) which show shifting and rolling to see what I mean. Doing the same things but going right instead of left is just known as shifting right instead of shifting left. Nothing is too hard in this world.

The instructions that are relevant here are ASL (Arithmetic Shift Left), LSR (Logical Shift Right), ROL (ROll Left) and ROR (ROll Right). Shifting the bits to the left, assuming none are lost off the left-hand end, is equivalent to multiplying the number by two, and shifting them right is the equivalent of dividing by two. You don't believe me? I'm hurt. But if you want proof try this one out:

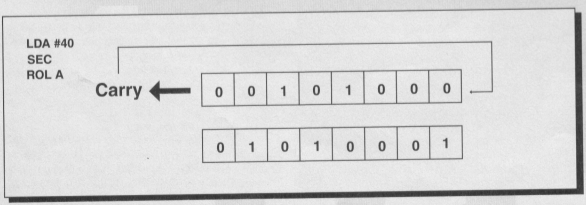
```
100 *=49152
110 LDA #40
120 ASL A
130 STA 251
140 RTS
```

After assembling and running the code with SYS 49152, you should get the answer 80 if you PRINT PEEK(251). Change the ASL to LSR and you'll get 20. I should point out that you are using the accumulator addressing mode here. The 'A' after the instruction means, "Do this on the accumulator". You could equally do it to a memory location such as ASL $0400 or LSR 53280. Whatever takes your fancy.

- By the way, Dave asked me to remind you (probably because he's trying to flog off a few back issues) that we gave away an Assembler on *CF46*'s Power Pack. Got that? No? Then get it.



Above is shifting, below is rolling. Sound like some rubbish TS Eliot would have written, doesn't it?

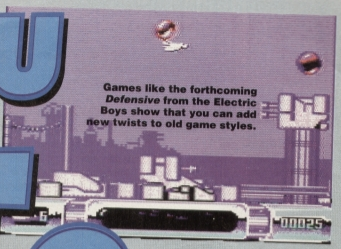


NEXT MONTH

Put on your hard hats, because indexed addressing is coming up next month. I'm also going to show you how you can use the instructions I introduced this month in order to move a sprite around the screen with a joystick. This weird thing called the stack will also appear. Until then, keep playing with your assembler, and remember – know your code and code your nose.

COULD YOU WRITE THE BEST 64 GAME EVER?

COMPO



Games like the forthcoming *Defensive* from the Electric Boys show that you can add new twists to old game styles.

Ever played a game and thought, "I could do better than that." Here's your chance to prove it by designing a game that the Electric Boys will turn into a reality. Plus you could win a disk drive and the chance to meet the The 'Leccy Boys and the CF crew into the bargain...

There's at least one good novel inside every one of us, so the saying goes. And here at *CF* we reckon there's at least one good game inside of everybody. And chances are, some of you have probably got ideas that would make games of corker-winning proportion. If they were ever made. The problem is that anybody can sit down and write a novel (if you're illiterate you just use a dictaphone) but turning your dream game into a reality requires some pretty advanced machine coding skills, something 99.9 per cent of the world's population doesn't have.

So, do we just shrug our shoulders and let all that potential go to waste? Do we heck as like. Never a mag to let a good idea slip away (well apart from that one about trip to Malta and those copies of *Reservoir Dogs*... oops, ahem) we have decided that it's time to tap that rich source of game-designing grey matter and offer, in association with the Electric Boys, to turn one lucky *CF* reader's game idea into a commercial reality.

Yep, the Electric Boys are one of the 0.01 per cent of the world population who can code till the cows come home, cook themselves a nice supper and put their hooves up for the evening. And they love doing it (the Electric Boys love coding, that is, not cows putting their hooves up). And they're not precious. They'll code anything. As long as it's good, that is.

Well looky here – it's one of the prizes. Aren't you salivating already?

Germ Alert – coming soon from Visualize. Weird concepts can work.

WHAT YOU DO, WHAT YOU WIN

The deal is this – you design a game, we pick out the best one and then get the Electric Boys to actually code the thing for commercial release (and, of course, *CF*'ll have a demo on the Power Pack). But that's not all. The winner will also get a 5.25-inch disk drive and the chance to come to Bath and meet both the Electric Boys and the *CF* crew (er, are you still sure you want to enter this competition?).

WE NEED GOOD IDEAS

But before you rush off and start scribbling here are a few guidelines:

- We rang around a few of the coders still active on the C64 scene to ask them what they thought would make a really good commercial C64 game. Check out the box-outs over the next couple of pages and take note of the advice they have to give.
- Also check out list of Top Ten hints.

Remember that as well as having a good idea, the game needs to be achievable on the C64, so don't go mad.

- Your game idea can be as complicated or as simple as you want it to be. You can either write a couple of pages of A4 notes outlining the basic idea of the game, or send us detailed graphics for every level. The choice is yours. But bear this in mind: it'd probably only take about a page to outline *Tetris*, and that's undoubtedly one of the most successful game ideas ever. What's important, as all the coders we talked to said, is originality.
- While simple, clear diagrams will help illustrate your entry, you don't need to be a great artist. In fact, we'll be suspicious of page after page of beautifully detailed graphics

RUSS MICHAELS, THE ELECTRIC BOYS

Russ Michaels

"Originality is the main concern, although you could try taking something old and improving it, like we're doing with *Defensive* (based on *Defender*). Also be aware of the C64 capabilities and what it can do. Avoid shoot-'em-ups unless you can come up with a really striking, new idea. And try to avoid ideas that have been done to death (*like* Tetris – *Dave*).

"Oh yeah, and don't forget to mention that disk drives are the future of C64 gaming." Yes, okay Russ.

JOHN AND STEVE ROWLANDS, APEX

John – he's a hubby now.

"The C64 is a very good machine for platformers (*they would say that – Dave*). And there hasn't been a decent shoot-'em-up for four to five years.

"But you should avoid trying to be too clever technically. Don't attempt things that would require clever programming (like hundreds of sprites on-screen at once). The gameplay is the most important thing – it must come first. The graphics need to be good but they shouldn't be used as the main selling point of the game."

Steve – still single...

because a) they're probably covering up for a hackneyed idea and b) The Electric Boys will probably have problems translating your graphics exactly. By all means illustrate your ideas, but remember we won't be judging you on your artistic ability (a bit like those *Blue Peter* design-a-set-of-Christmas-stamp compos).

The basic message is this: it's the ideas we'll be judging, not the presentation (though clear diagrams and readable writing will be a plus point – if the Wright Brothers had had the drafting abilities of an arthritic spider, man would never have got off the ground).

So, read what the experts have to say, then go away and have a long hard think about what you reckon would make a really, truly awesome game. Don't be afraid to be a bit weird, either. We know there's a corkersome idea in that head of yours somewhere, you've just got to entice it out. Who knows – you could be the next Jeff Minter… er, or Oliver Twin (*is that a bit like an Aphex Twin? – Ollie*)… er, well a dead famous games writer, anyway.

ANDY ROBERTS, GAMEBUSTER

It's the 'Buster.

"Hmm, well there's never been a really good flight sim, because they've always been so slow, so it's best to avoid writing one of them (*the Electric Boys won't be happy if you're game outline says, 'a fast flight sim' – Dave*). Driving games tend to be pretty average. There's never been a really good one. *Buggy Boy* was about the last decent one. So perhaps a decent two-player racing game would be a good idea.

"You shouldn't try to write a game around flashy visual effects – nine out of ten times that simply doesn't work. It's got to be relaxing, fun and, above all, re-playable."

TOP 10 TIPS

1 First come up with an original concept – if you want to do a racing game, make sure there's something new and never tried before about it.

2 Be aware of the C64's limitations. Yes there are coding tricks to get around many of them, but performing them all at once might be a bit difficult for Russ and the 'Leccy Boys.

3 If you are designing a platformer or a shoot-'em-up think about varying the levels and the action; introduce end-of-level guardians and other innovations to the basic format. Try to think of new sorts of pick-ups and power-ups – what kind of weapon has never been used before? (Banana guns are OUT.)

4 Think about the difficulty of your game. When you come up with a basic concept you like, put some thought into how you can develop it to make the game trickier and more challenging. Just tightening the time limit isn't usually enough to keep the player's interest, so try to come up with a something a bit more tantalising.

5 Developing a plot can help you to come up with ideas for levels or baddies. But keep it simple. The platform conversion of *Twin Peaks* is not what the world is waiting for.

6 Don't base games on a TV series you like. We probably won't be able to get copyright clearance. If you really want to do an arcade adventure based on *Prisoner Cell Block H*, write to Grundy to ask for permission yourself, okay.

7 Anything that looks anything vaguely like something approaching the teeniest hint of *Tetris* will be disqualified (I bet that's upset a lot of PD programmers).

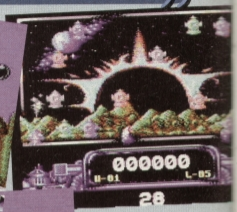
8 Make sure we can actually read your entry. It might be the best idea since tea bags, but if we can't read it, it'll be consigned to the bin.

9 If you're worried that if you don't win your ideas might be swiped (as if we would) just photocopy your work, stick the copies in an envelope (in front of a witness) then send the originals to us and the copies to yourself. When it arrives back at your house, store the now post-coded package somewhere safely, and pray someone nicks your idea so that you can slap a nice, fat copyright legal suit on them (this tip has been sponsored by the post office).

10 Enjoy yourself. If you really believe in your idea, then working on it should be fun.

This is what the Electric Boys' own stuff looks like...

...Think what they could do with your game.



Tracer – coming soon. Will we be able to say that about your game?

RULES AND THINGS...

- All entries must be sent to the *CF* offices by September 30th.
- Send your entries to:
  The Next Big Thing,
  Commodore Format,
  Future Publishing,
  30 Monmouth Street,
  Bath, Avon BA1 2BW.
- Employees of Future Publishing and the Electric Boys and anybody who actually enjoys *Time Trax* are not allowed to enter.
- The games will be judged by Dave Golder and Russ Michaels, so any games with a *Doctor Who* or heavy metal flavour will be seen as a form of subliminal bribery – but it might work.
- Whoever said rules are made to be broken is stupid. It's official.

JON WELLS, VISUALIZE

"I reckon a good beat–'em-up would be a great idea (*but not if it rivals 10th Dan, eh Jon? – Dave*). Or a shoot-'em-up like *Armalyte* which is a really good multiplex scroller with loads of effects and sprites (*hmm, Jon seems to be flying in the face of popular opinion, here – Dave*).

"Don't copy too many ideas, and if there are various levels, make sure you vary them. Originality is the main thing."

JASON MCKENZIE, PSYTRONIKS

"You shouldn't try to write something the C64 can't handle. The game should come first and the presentation second. Avoid conversions (*and, indeed, avoid games based on other copyrighted material; let's get it straight right away – Quantum Leap games are out – Dave*)."

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ARG 8861	Gunship 2000	£22.99
ARH 3271	Heimdall 2	£34.99
ARI 2941	Impossible Mission	£26.99
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- Includes CD32 emulation software, PLUS* software to play Audio CDs and View Kodak Photo CDs and a list of tested software and requirements

*Some software requires additional RAM in the A1200

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£199 INC VAT

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EXTERNAL OVERDRIVE 35

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- Trolls AGA
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2Mb RAM	127Mb HD	£499
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COMPUTER COMBAT

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- Brian The Lion
- Zool 2
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AMIGA 1200 SPECIFICATIONS
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- 32-bit Architecture/2Mb Chip RAM
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- AA Chip Set/16.8 Million Colours
- 1 x 32-Bit CPU/RAM Expansion Slot
- PCMCIA Smart Card Slot
- 96 Key Keyboard with Numeric Keypad
- 2½" Internal IDE Hard Drive Options
- 1 Year On-site Warranty

HARD DRIVE OPTIONS
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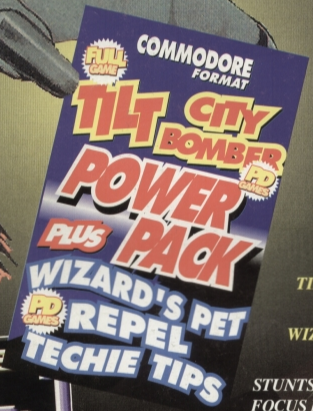

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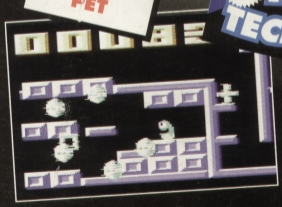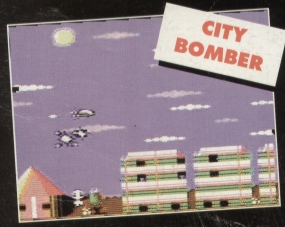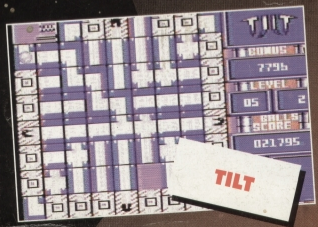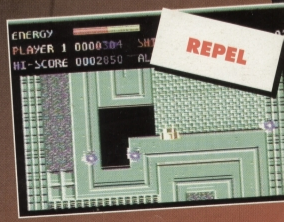
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