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COMMODORE FORMAT

ISSUE 52 • £2.95 • JANUARY 1995

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Revealed!
The PC's
Commodore
Emulator!

State-of-
the-art disk
drives!

GEOS

The new
face of
the C64?

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 covertape. Ask your newsagent for a replacement.

Tape to disk SMART!
Turn to p.5

PLUS
Dropzone -
the complete
player's guide!

Game Diary -
the making of
10th Dan!

Extensive
Public Domain
coverage!

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THE NEW, FRIENDLY FACE OF THE C64?

This dreamy smooth Windows-style operating system is set to change the face of the C64 as we know it. We unpack the goodies and reveal why the US C64 fraternity has gone GEOS crazy...

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18 EXTENSIVE PUBLIC DOMAIN COVERAGE



This month we've devoted a massive three pages to the megademo *Camel Park* and the witty (or is that sick?) *Unpleasant Ways to Die*.

5 ON THE POWERPACK...



Mega Force.

MEGA FORCE

What can we tell you? You thought you'd just nodded off for a couple of minutes, but in actual fact, you've whizzed hundreds of years into the future where all conflicts are resolved in the virtual world of Mega Force.

What's more, it turns out that you're mankind's last hope against a tyrannical champion. Better get to it then...

EXCLUSIVE PD EXTRAVAGANZA

This exclusive selection of PD demos contains some rare treats. With 48K of top-quality graphics, two excellent music tracks and a pre-calculated vector cube animation, there's something here for everyone. What's more, it won't be in any PD libraries until some time next year!



A sample of the pics available.

TURN TO PAGE 5 FOR THE FULL COVERTAPE BRIEFING... ➤

THE MIGHTY BRAIN

After his extensive (one-month) tour of the inner-cranium and cerebral cortex, The Mighty Brain is back to answer yet more of your C64 niggles, and a darned fine job he does of it too...

Tilt experience

Yo TMB,
I have just seen my first Commodore Format in ages. Thanks for still being around. Keep up the good covertapes. Things are on the up!

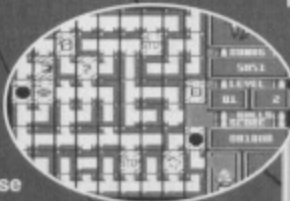
I loved *Tilt*. It's one of those cheap and cheerful games that covertapes should carry.

Got to go. See, I'm on work experience, and my boss could show up any minute now. Yours on a council printer,
N Tracey

I'm not surprised you didn't provide your address. Clearly you're trying to dodge the hate mail from the thousands of readers who hated *Tilt*, and whom have threatened all kinds of unpleasant behaviour if we ever put anything like it on the covertape again. Still, it takes all sorts... TMB

What a lemming!

Dear TMB,
I recently bought Issue 50, because I saw that The All-Time Top 50 C64 Games would be printed in that



Someone liked it!

issue. Interested (as always), I noticed that *Lemmings* was ranked runner-up by your readers. So, first of all, I'd like to thank, on behalf of the whole team (Thomas Mittelmeyer, Jeroen Tel, Leon van Rooy and myself), all the readers who voted for us, and second, Psygnosis for making it possible.

Also, congratulations must go out to John and Steve (the Apex Bros) for their wonderful C64 products, as well as for beating *Lemmings* to the top spot with their brilliant *Mayhem In Monsterland*.

A small 'not' needs to be added to this celebratory letter, though, because in the Top 50, as well as in the interview with Jeroen Tel, you claimed *Lemmings* was programmed by Alter Development. I immediately checked my contract with Psygnosis and assured myself that indeed, we, E&E Software, converted it.

Remi Ebus, E&E Software

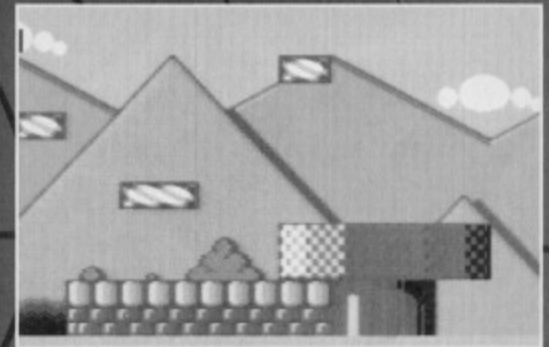
Sorry about the confusion, Remi, but it was Jeroen himself who mentioned Alter Developments. It appears he's not sure who he's working for... TMB

Spritely laws

Dear TMB,

- 1 Is it illegal to use sprites from other games (*Mayhem*, for example) in your own creations?
- 2 If so, would it be legal if you altered the sprites, say, by a few pixels or by changing the colour?
- 3 Why do hairdressers always ask where you're going on holiday?

C Corbirdling, Long Crendon, Greece



We know it's lovely, but, no, you can't rip it off.

- 1 If you intend to sell the end product, to make a profit out of it, then, yes, it is.
- 2 If your new sprites are still recognisably based on the original, then that is still illegal. It's a bit like the way Whigfield's *Saturday Night* sounds very similar to an old

BITS 'N' PIECES

- Do you think that *Super Street Fighter 2* will ever come out on the C64?
A Boot, Bulwell Hill

I think therefore I am. I think that *Super Street Fighter 2* will come out on the C64... but strangely, it won't. A glitch in my philosophy, I feel.
TMB



- I was very impressed with the Electric Boys Mean Machine demo. Are there going to be any more demos like that?
Danny Tod, Didcot

The demos certainly divided you lot. Some of you loved them, while others just couldn't see the point in something you couldn't play. But the new, poor human fool, er, sorry, Commodore Format editor,

Karen Levell, has given the go-ahead for more demos, but rest assured there will always something playable on the tape for those of you who don't appreciate art. Ahem. TMB

- Is it illegal to write levels for *Repton 3* and then sell them as a Datatape?
David Connolly, Woodstock

Yes - that's called infringement of copyright, and it will earn you a costly fine if you're caught. TMB

- What's happening about our 'Next Big Thing' games ideas?
Wayne Hill, Exeter

The response to the Next Big Thing competition was overwhelming, and it's taking time to sort things out. The entries have now been forwarded to Electric Boys for judging, and with a bit of luck these mere humans will get their act together in the next couple of months. TMB

Lemmings was programmed by E & E Software, you know!





'60s song called *Rub-a-dub-dub*, and the writers of that song are taking her to court.

3 Because they're programmed to. TMB

50/50 visionaries

Dear TMB,

I was very interested in your Top 50 games list in issue 50. Having owned a C64 for over ten years and having amassed over 700 games, I was wondering what would come out on top.

I was somewhat surprised by a few of the entries and omissions, but this could be due to the fact that the majority of readers have owned a C64 for less than three years. But *Wizball!* *Paradroid* and *Dropzone* being so high up makes me wonder if that's the real reason.

For the record, here are my

Top 10 games:

- 1 Dropzone
- 2 The Sentinel
- 3 Mayhem
- 4 Laser Squad
- 5 Bubble Bobble
- 6 Paradroid
- 7 Creatures 2
- 8 Impossible Mission
- 9 Turbocharge
- 10 Mercenary

Spot number one! And you gave it away with issue 50!

Matthew Allen, West Ewell



Top of the Pops?

Yes, there were some strange omissions from the Top 50, and a lot of the stranger results seem to have been the result of games we've carried on the covertape recently (some of you lot don't seem able to remember what you were playing more than a couple of months ago). But *Dropzone* was put on the tape after the results were in, so it's position was soundly deserved. TMB

In the Frame

Dear Mr Brain,
What-ho! How are you? I have some questions.

- 1 Someone at school said that your real name is Mike T Braine. Is this true?
- 2 I can't believe it's not butter. Can you?
- 3 Please bring back Roger Frames.
- 4 How about a Roger Frames fan club? I'd start one myself, but I can't spare the money.
- 5 My brother recently spent £800 on an Archimedes. He actually prefers it to the



THE 64 SOAPBOX MAKE YOURSELF HEARD

If you've got something to say, then TMB's letter page is the place to get your opinions heard. Write to: The Mighty Brain, *Commodore Format*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.

All letters sent to *Commodore Format* are assumed to be for publishing. We also reserve the right to edit your letters for reasons of length, grammar and punctuation.

PS of the Month

Jay Ennion, Bolton

PS Please ignore the tatty handwriting and punctuation

PPS Please don't print the PS.

C64. I think this proves that:

- a) Different people have different tastes.
- b) My brother is a brain-dead twit.
- 6 Are you more intelligent than Jason Finch?
- 7 Could you have a national C64 Week. They have a week for everything else.
- 8 Did I see you playing a Nintendo Game Boy on the telly?

Lee Clarke, Southampton

- 1 No. But your mate at school is really an alien mind-sucking shape-shifter who works for an intergalactic tabloid intent on smearing my reputation.
- 2 Yes. Because it isn't.
- 3 We can't raise the bail. Fortunately.
- 4 The problem with a Roger Frames fan club is that all his fans would be too stingy to join.
- 5 Such understanding and tolerance.
- 6 Exponentially.
- 7 We tried. But all the weeks of the year were taken up. The NNWB (National Novelty Week Board) said we would have to share with the Artificially Resuscitate a Goldfish Week, and we didn't fancy that.
- 8 No. Why? Did someone that looks like me appear on the telly last week? Was it after the watershed? TMB

Stop whingeing!

Dear Mighty Brain,

I'd just like to ask to start with - why are the majority of C64 owners the most selfish bunch of whining Walters around? If it's not moaning about covertapes, it's the number of pages each month, or the familiar 'when is my Mega Drive game coming out on the C64?'

Surely we need constructive criticism, not purely complaints. So please let's work together on this. We need to help each other. For example, in *CF50* take a look at Uncle Dave's Buy-a-rama and note the number of wanted items to the number being sold - it speaks for itself.

Also, as an idea, any chance of letting the *CF* readers review any new games. A second point of view would let readers stay involved with the magazine. After the Top 50 results I'd think this could be a possibility.

Mike Coles, Alfreton

Look, I'll let you into a secret. The vast majority of the people who write in aren't whingers. It's just that I like printing the whingey letters for three reasons:

- 1 If I print too many letters saying how wonderful we are, people think I'm 'vetting' the letters to make *CF* look good.
- 2 The whingey letters are generally more interesting. Letter after letter of 'isn't the world wonderful' can get mighty dull.
- 3 You lot react far more strongly to whingey letters; they make you write in to disagree or whatever. As this very letter proves. TMB

COMMODORE FORMAT

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The phoenix

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We are not a technical helpline and we cannot (that's cannot, NOT will not) help you. If you want technical help write to *Techie Tips* (page 21) - that's what it's there for.

ADVERTISING PROBLEMS

If you have a problem, query or complaint about an advertiser in this issue then contact The *CF* Advertising Department in writing at, Future Publishing, 30 Monmouth Street, Bath BA1 2BW. And we'll do our damndest to help you out.

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**CF53 ON SALE
TUESDAY 3RD JANUARY 1995**

POWER PACK

Karen Levell battles the demons of the tape deck to bring you this month's covertape report...

MEGA FORCE

Covertape heroes Ewen Gillies and Paul Kubiszyn have been hard at it again this month; not only have they managed to compile the covertape along with an exclusive selection of PD demo parts, but they put together the superb tank-'em-up known as *Mega Force*.

Of course, they're also responsible for the ludicrous storyline behind the game, which they assure me came about after a lengthy session on the old hop juice.

Mega Force is set in the aftermath of a devastating war. Earth's Government has outlawed the use of all weapons – in this time, conflicts are resolved in the virtual world of *Mega Force*, with national champions

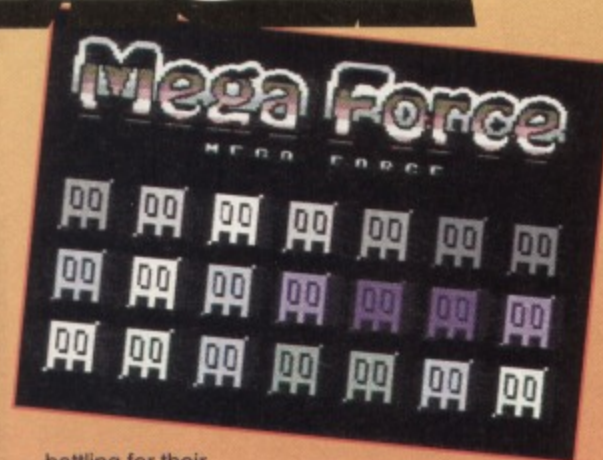
NO LOAD ZONE

If you're having trouble 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: CF52 Tape Replacement Service, Ablex Audio Video Ltd., Harcourt Halesfield 14, Telford, Shropshire.



TAPE TO DISK

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 both 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: CF52 Tape To Disk, Ablex Audio Video Ltd, Harcourt Halesfield 14, Telford, Shropshire TF7 4QD.



battling for their country's economic survival. For decades the world was peaceful. But now a new and deadly champion has appeared, and unless he's stopped mankind will be plunged into centuries of poverty. You are the world's last hope, but can you survive the *Mega Force*? (See, I told you it was ludicrous.)

The game, which can be set for either one or two players, includes 20 rounds of tank-blasting action. The only way to ensure your continued survival is to drain your opponent's shields with a healthy dose of your MK3 Crown Tank's anti-energy missiles, but the longer you stay on a particular level, the greater your chances of obtaining a power up token (marked with a T) to boost your tank's missiles.

Mega Force also includes a difficulty setting for one-player games. Just enter the option screen, highlight the Computer Weapon Start Level, then click on your joystick's fire button to increase the difficulty level.

Lt Worl models his bob hairstyle in this plported from the CD-ROM

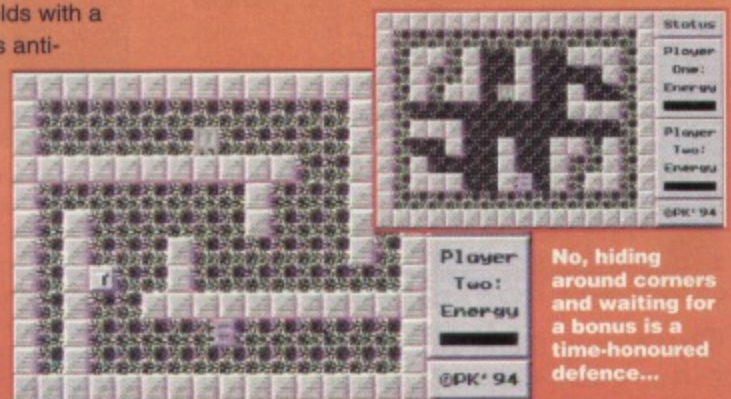


EXCLUSIVE PD EXTRAVAGANZA

Whack in your tape and you'll see three files entitled 'Start', 'Middle' and 'Final'. Each of these files contains three demos and to move between them all you have to do is hit the space bar.

These demos, which include 48K of top-quality graphics, two music tracks and a

pre-calculated vector cube animation, won't be seen in any PD libraries until next year!



No, hiding around corners and waiting for a bonus is a time-honoured defence...

COVERTAPE SUBMISSIONS

If you have any programs or demos you wish to submit for future tapes, fill in the form below and send it along with your program to: Ewen Gillies, CF Covertape Submissions, 21 Conquerors Hill, St Albans, Herts AL4 8NS.

Your name.....

Address.....

Phone number.....

Program name.....

I confirm that I am the legal copyright holder of the afore-mentioned program, and I hereby give permission for it to appear on *Commodore Format's* covertape (and any discs mastered therefrom). I further agree to indemnify Future Publishing against legal action should copyright problems result.

Signed.....



GAMEBUSTERS

DROPZONE: THE PLAYER'S GUIDE

DROPZONE

A classic C64 shoot-'em-up, a legend in the gaming world, and a very playable game to boot. Andy Roberts rustles up some advice with just a little help from Dropzone's creator Archer Maclean.

GAMES TIPS

After the devastating robot wars of 2084, the few remaining humans needed to build a tachyon-propelled star cruiser to find a Nu-Earth where they could survive. This ship needed Ionian crystals for power, though, so a consignment of men were sent to planet Io, the real life, volcanically active, orange-coloured moon of Jupiter.

It's your mission to protect the men from being attacked by a bunch of disgruntled Jovian aliens who are annoyed by the presence of humans on their moon. You are equipped with a pulse laser, a jet-powered backpack, a cloaking device, and planet-shaking strata bombs.

Getting started

You'll never attain more than a novice rank unless you familiarise yourself with the game and manage to master the coordination required to survive. This latter is greatly aided by using a decent joystick. The best sort are the ones that give a nice tactile 'click' when they're switched into position, and which have as little sideways movement as possible – the big waggly

joysticks are no good because you won't know what position it's in unless you look at the screen... by which time you're dead meat.

General tips

The most important piece of advice I can give is not to thrust too much (*Really?* – Karen). Well, not unless your reactions are really fast and you've kept a beady eye on the scanner for approaching trouble (and believe me,

there will be approaching trouble). Consult the scanner regularly as it does help to know what's coming.

At the start of every fifth wave a fresh consignment of eight men arrive and are placed near the base, making it easy to quickly save all of them for a good bonus. In the first couple of waves it's quite easy to save all eight men, but if you rush to save the men during later waves, you'll end up running into more and more aliens. So, it's often a good idea to shoot a few men – that way you're only protecting two or three. It may seem a little cruel, but it's either your life or theirs.

Generally speaking, it's best to clear each area of dangers as you enter it, except perhaps for spores, which can be distracting and may well need a strata bomb. It's a good idea to try and conserve these strata bombs, because you'll definitely need them during later waves – so only release one where it will earn you



Look, mum, I can fly!

a replacement. The alien's missiles are extremely accurate, in fact they're likely to find their target – you – 85% of the time. So, unless you change your speed and direction quickly you'll get hit.

You should destroy Blunder storms on sight, otherwise you'll end up being rained on or struck by

Name and Rank

For those of you with ambitions to become the ultimate space adventurer, here are the various ranks to which you can rise...

1. Not listed – practice recommended
2. Dextral Dodger
3. Trekkie
4. Moon Cadet
5. Planetsman
6. Ace
7. Planet Marshal
8. Planet Lord
9. Star Warrior
10. Solar Prodigy
11. Megastar – mission completed

proton lightning later in the level. If you have to pass under one, check that it's not rumbling different colours prior to striking, and time your pass accordingly.

The Spores are fairly harmless, slow-moving blobs – at least they are until they're triggered by your laser. If, or should that be when, this happens, the Spores release four trailers, which can be a damn nuisance, and very hard to hit. Strata bombs don't always completely destroy



Spores, and sometimes they leave a few trailers behind, so be cautious. Trailers can be shot more easily while you're at the top of the screen – just quickly turn from side to side and fire like hell.

Trailer invasion waves are quite easy to finish once you know how, but they have to be completed fairly quickly because the Nmeye (pronounced N-m-eye) appears after thirty or so seconds. As the wave starts, move along blasting all the Spores with a few shots, then activate the Inviso cloak and let all the trailers follow you on screen. Now simply detonate one or two strata bombs to wipe everything out, then clear up any stragglers left behind. If necessary, shoot all the remaining men – you'll get a new set during the next wave anyway.

Man-handling

The man attack sequence goes as follows: when a Planter, drifting over the planet surface, detects a man below it, it stops to attack him. The man sees this and lets out a loud whistle for help, which echoes around the atmosphere. An android then emerges from the Planter and they both descend to the ground, at which point the android is released and rolls off to kill the man.

Meanwhile, the Planter has mutated into a suicidal Nemesite, hell-bent on destroying you. When you hear the whistle, the shortest route

Sitting on a Nmeye is not a good idea. Trust me, I know!



10 Ten good reasons



Here are the prizes you could take home tonight!

to the current attack is shown on the attack direction indicator, which is situated just above the scanner. Check the scanner to see if you can save the man in time without endangering yourself.

If you shoot the attacking Planter first and then destroy the android as it falls under gravity to the surface you'll earn a 500-bonus-points reward. If the android reaches the ground, though, it will still chase the man it was initially going for. If you manage to save the man targeted, the android wanders back and forth until it detects another man to chase. If it does find someone, you'll hear a second whistle for help.

There is, in fact, a limit to the number of androids that can be active simultaneously. On waves one, two and three, this number is set at a maximum of two, so if you save or shoot the first two men attacked without blasting the androids, no more attacks or Nemesites will follow. Androids will actually invade the moonbase to kill men if you have dropped them off, but you can prevent this by either saving all eight men or by always carrying the last man about with you.

Other aliens

Listen for Nemesites entering your area, because you won't have much time to react on sight. If necessary, use the cloaking device to protect yourself. Nemesites never fly at the same height as you unless they're close enough to move in for the kill; so if you're flying low, they'll be flying high and vice versa. The best thing to do is to quickly thrust away from them and at the same time move

up or down until you match their height. This will force them to change their height and cross your firing line, at which point you can turn and blast them. If you miss, carry on and try again, but watch out for oncoming aliens.

If you do lose all the men, the planet becomes unstable and an earthquake will result. This triggers previously harmless volcanoes, which in turn start to spout highly dangerous white-hot lumps of magma. You'll either need a lot of skill or a healthy dose of cloaking technology to pass over this magma. If your cloaking device has run out of juice, then your best bet is to hover between the Ionian sea (an old lava lake) and the smallest volcano. The magma level doesn't rise much at that point, so it won't reach you. All the anti-matter nodules will eventually bounce towards you, enabling you to complete the wave – but beware of Nmeyses!

These are sent in to interrupt your wave if you're taking too long to complete it. Each one moves faster, and is generally more aggressive than the last, so you can't realistically hang around shooting them all day. The best time to hit them is within the first half second of their arrival, because at that point they haven't managed to build up any speed and are still blinking. When you complete a wave you get up to 500 bonus points for each man saved, a 50% cloak-time refill, and a chance to wipe the sweat and space flies from your helmet's visor. Then it's up and away to tackle the next alien onslaught. Will it ever end...?



Yep, we're on the lookout for suspiciously print-worthy tips, maps, cheats, POKES, and other bits of gamebusting trivia. If you know an infinite lives cheat, the entrance to a secret room, or how to kill Zarg the Incredible, let us know.

Drop your goods into an envelope then post it to: **Andy Roberts' Gamebusters, Commodore Format, 30 Monmouth Street, Bath, Avon BA1 2BW.**

Don't forget to include your full name and address, along with some **Homewheat biscuits.**

Swooping aliens, however, are able to fire bullets, but this is limited to one shot per swoop. • Often it's best to simply avoid swooping aliens rather than shoot them, especially considering that another swooper immediately replaces the one you've just shot. Avoiding them leaves you with more easy non-swooping aliens to kill (and therefore less fast-moving targets). • As you progress through the levels, there are more swooping aliens on-screen at the same time. • An extra life is awarded for every 10,000 points scored. • Use an Action Replay cartridge to freeze the game, select the 'Edit Screen' option, then place the number '9' across the last four digits of your score. Restart the game, and you'll receive an extra life the next time you shoot something. • If things are still too tough, try this listing for infinite lives...

GALAXIANS

Galaxians (PowerPack 50)

Richard Beckett from York has sent in even more of his cunning gameplaying advice, this time it concerns our positively perfect PowerPack PD prodigy, *Galaxians*. • Shoot the bottom row of aliens first so that when an alien swoops it has further to fly, thus giving you a little more reaction time. • Aliens which don't swoop, can't harm you, because they are incapable of firing at you. •



```
0 REM GALAXIANS CHEAT BY WAZ
1 FOR X=521 TO 557:READ Y:C=C+Y:POKE X,Y:NEXT
2 IF C<>4094 THEN PRINT "DATA ERROR":END
3 POKE 157,128:SYS 521
10 DATA 032,044,247,056,169,032,141,125
11 DATA 003,141,126,003,169,002,141,127
12 DATA 003,076,108,245,087,065,090,072
13 DATA 238,032,208,169,051,141,193,038
14 DATA 104,173,013,220,096
```

If you can't stand the heat...

... Better input these cheats. Yep, the following is a handy selection of Action Replay POKES. Simply freeze the game, press E to enter any (or all) of the POKEs, then prod F3 to restart the game.

- POKE 2311, 100 100 lives
- POKE 2316, 100 100 strata bombs
- POKE 8575,0 Increases the attack rate
- POKE 13151,7 Increases enemy bomb firing
- POKE 5901,192
- POKE 5930,128
- POKE 5947,2 Increased vertical speed and gravitational effects
- POKE 32789,7 Mystery

And if you don't have an Action Replay, you could always use this superbly styled listing courtesy of Warren 'Waz' Pilkington. Simply type it in and RUN it for infinite lives, strata bombs, and cloaking power.

```
0 REM DROPZONE CHEAT BY WAZ
1 FOR X=521 TO 579:READ Y:C=C+Y:POKE X,Y:NEXT
2 IF C<>6615 THEN PRINT "DATA ERROR":END
3 FOR I=1 TO 3:READ W$,W1,W2:PRINT "INFINITE ";W$;:INPUT X$(I)
4 IF X$(I)="N" THEN FOR X=W1 TO W2:POKE X,234:NEXT
5 NEXT I:POKE 157,128:SYS 521
10 DATA 032,044,247,056,169,032,141,125
11 DATA 003,141,126,003,169,002,141,127
12 DATA 003,076,108,245,087,065,090,072
13 DATA 238,032,208,169,051,141,174,037
14 DATA 169,002,141,175,037,104,173,013
15 DATA 220,096,169,173,141,088,056,141
16 DATA 244,011,141,224,056,032,132,255
17 DATA 076,000,192
18 DATA LIVES,568,570,BOMBS,565,567
19 DATA CLOAK,571,573
```

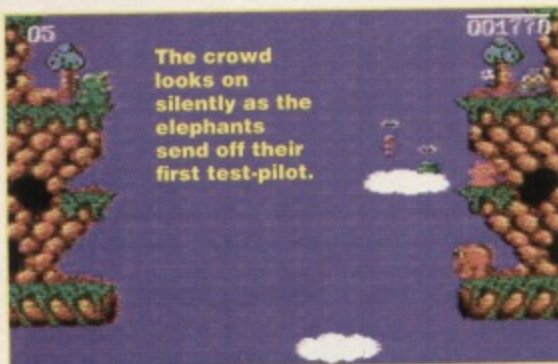
HEAVENBOUND

Heavenbound

(PowerPack 50) This is probably the most frustrating game I've played in quite some time (and the *Mayhem* intro is a bit sad too). If you'd like to actually climb the stairway to Heaven, though, here's a listing to make life (or death) much easier.



```
0 REM HEAVENBOUND DEMO CHEAT BY WAZ
1 FOR X=521 TO 594:READ Y:C=C+Y:POKE X,Y:NEXT
2 IF C<>8166 THEN PRINT "DATA ERROR":END
3 FOR I=1 TO 3:READ W$,W1,W2:PRINT "INFINITE ";W$;:INPUT X$(I)
4 IF X$(I)="N" THEN FOR X=W1 TO W2:POKE X,234:NEXT
5 NEXT I:POKE 157,128:SYS 521
10 DATA 032,044,247,056,169,032,141,125
11 DATA 003,141,126,003,169,002,141,127
12 DATA 003,076,108,245,087,065,090,072
13 DATA 238,032,208,169,051,141,173,160
14 DATA 169,002,141,174,160,104,173,013
15 DATA 220,096,169,064,141,174,088,169
```



The crowd looks on silently as the elephants send off their first test-pilot.

16 DATA 002,141,175,088,076,000,009,169
17 DATA 173,141,227,113,141,043,096,141
18 DATA 093,096,169,001,141,208,093,076
19 DATA 013,008,LIVES,584,591
20 DATA ENERGY,578,580,TIME,581,583

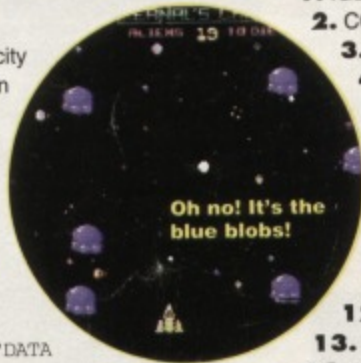


CHAOS

Chaos (PowerPack 50)

Despite *Chaos's* relative simplicity and compelling gameplay, it can be rather tricky in places. So, for infinite lives, simply type in this listing, SAVE it for future use, then RUN it.

0 REM CHAOS CHEAT BY WAZ
1 FOR X=521 TO 570:READ
Y:C=C+Y:POKE X,Y:NEXT
2 IF C<>5722 THEN PRINT "DATA
ERROR":END
3 POKE 157,128:SYS 521
10 DATA 032,044,247,056,169,032,141,125



11 DATA 003,141,126,003,169,002,141,127
12 DATA 003,076,108,245,087,065,090,072
13 DATA 238,032,208,169,051,141,215,118
14 DATA 169,002,141,216,118,104,173,013
15 DATA 220,096,169,096,141,135,198,076
16 DATA 000,179

LEMMINGS

Lemmings

(E & E software, PO Box 934, 5900AJ, Venlo, Netherlands)

To follow up the tips printed last issue, as well as the passwords for the first two different skill levels, here are the remaining *Lemmings* passwords courtesy of MP Tweedale from Swansea. Commiserations also to Dave Hood from Warley whose passwords arrived just too late. Anyway, joysticks at the ready, and squint mode on...



TAXING LEVEL

1. IGDHKDIJFA
2. CCHALCJGBB
3. CACAGJGAFA
4. JFIBIEJLAF
5. HDCGLGFELF
6. JILKFCIEK
7. HLLILAIHEL
8. GELEEAHGCC
9. JKFGGLBDGH
10. JKFIFCKKBB
11. LKJIGFCDIH
12. JAHEEEDBE
13. CAJDJKILAC
14. JAICIFCHAD
15. GCCKHEDICG
16. IHCGCJLIGB

MAYHEM LEVEL

1. BCHZAFKICG
2. JCADJFEDFC
3. GKFGJLDJLE
4. IJCFEDALI
5. EACJALHACG
6. KJKFEJCBDH
7. CABDJGHFDG
8. GJGGLCJAJC
9. LKAFLBFGJA
10. FDKBDHAGHC
11. FAFGGAHIII
12. LEFGEJCKI
13. KHKBLEDIHI
14. DHKIKBCABJ
15. CGFEEDCEHC
16. AHEFFAHEA

ACTION REPLAY POKES

You ought to know the score by now: freeze the game, press E to enter the POKES, then press F3 to restart. Many, many thanks to regular contributor Warren Pilkington for sending them in.

CHAOS
POKE 50823,96 - Infinite lives

GALAXIANS
POKE 7063,165
POKE 7065,165 - Infinite lives

HEAVENBOUND
POKE 32865,1
POKE 33518,173 - Infinite lives
POKE 33468,173 - Infinite time
POKE 38171,173 - Infinite energy

TAXING LEVEL (cont)

17. GIIHGFAIJG
18. CAJCIKFEBH
19. GDALCDJLKD
20. AHAFKJLCBL
21. CGDHAKBDCC
22. LKLGGBFKIH
23. KLIAAHAJJI
24. HAFGKGLDHK
25. JIFKIEDLEJ

MAYHEM LEVEL (cont)

17. EFGHFKCGDH
18. GJEBAKBDAC
19. EAJACHGBJK
20. AJGBDJLIIG
21. GFDILCDHEL
22. KDJAKGFCHG
23. BIDAJIKBIB
24. JIFEKAAJDG
25. FCELKBLLK



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MAKING Part 8

10th DAN

After a strenuous couple of months, Jon Wells returns to his diary with tales of troublesome crunchers and depackers. Oo 'eck!

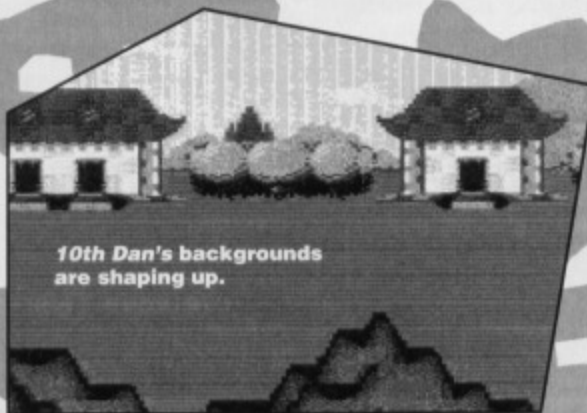
Hello again. I've been doing just a bit too much this month; my C64 keyboard melted right there in front of me – along with my scorched fingers. This burning digits syndrome didn't hamper my continued efforts with *10th Dan*, though, and you'll be glad to know that everything was up and running within a couple of days.

Anyway, enough of all the weird chit chat and on to... Yes, the sprite editor. Well, I've been hammering away at this now for the last three weeks, and it's still not quite finished! The main problems have been in coding the crunchers and depackers for the sprite memory. It's been a real pain getting that part working properly, but it's got to be done I suppose.

The plot routines and joystick controls for the cursor have been coded, although to save time at this point, I've laid out the sprites plexor so it's compatible with the fighters only (three sprites across by five sprites down – that's 15 in all, for those of you who can't count!). The actual cursor can be scrolled within a window of 28 by 21 characters in size. This window scrolls all the plot data that makes up the 15 sprites, and acts as a sort of zoom mode – this is a helluva lot easier than drawing the fighter frames sprite by sprite; I've yet to code the loader and saver parts for this, though. And the animation routines are still waiting too.

Still, I'm getting quite excited now, because it won't be long before we start seeing the fighting sequences – and I can't wait! I've had enough of the sprite editor for the time being – to be honest, I'm getting annoyed with all the tricky coding, so I'll do something else in the meantime and come back to it later.

I've also been fiddling about with the synthesis editor that I coded a few months back – you do remember, don't you? Actually, what I've been doing is making some more fighting samples. This takes absolutely yonks to do, because you have to enter each sample by hand, byte by byte. It's quite a lot of fun making weird sounds that wake



your neighbours up, though – well, I've been enjoying myself anyway!

So far I've made a whole range of sample sounds. There's the face punch, kick, foot-sweep, fall, screams, ouches, trumps... oops! Well, quite a few anyway. Whether I'll use them all really depends on the available memory. And speaking of memory...

Multi-load horror?

A few months ago you may remember me chanting and boasting about *10th Dan* being in one solid load. Well, it won't be. I've had a long hard think about this, and have decided to turn it into a multi-load project. Now, before you all start screaming 'multi-load nightmares', I'd just like to say that I've planned the whole thing, and although the game would've been nicer as a single-load, there are some very good reasons for turning it into multi-load.

For a start there are the obvious memory reasons, like the fact that I've already reserved 16K of the memory for game-related goodies, such as extra playability, and special and hidden effects. Plus, the background landscape, which at the moment is in one character set, will be turned into two character sets. This means the screen will be split, so I'll be able to use more, and better-looking, graphics.

It'll also enable me to use background animations and sprites to greater effect. For instance, a new background will be loaded after every successive Dan.

The extra memory will also give me the opportunity to use new music tracks, along with the different backgrounds and animations. Altogether, this means that *10th Dan* will now feature 12 different graphic backgrounds, instead of the original six (three of which were essentially the same graphics), 12 different bonus levels between loads, and 12 completely different, lengthy in-game tunes, instead of just one.

Yes, multi-loads can be a pain, but I think all the extra

features I'll be able to incorporate make it worth the sacrifice. What's more, the game's been planned so the multi-loads are quick. And, if you really can't face the prospects of multi-loads, there'll be a single-load option with just the one background (yipeel).

All the main titles, music and fighting code, difficulty levels and fighting graphics will remain in the memory.

The only parts of the program that will need to be loaded are the graphic backgrounds/block and data map, bonus level, level music, background animation and operation code. This may seem like a lot, but there's only about 20K there. What's more, the loaders I'll be using can load that sort of memory in about 20 seconds from the disk, or just under a minute when taken from a cassette (that's about 20 on the tape counter).

I'll also be using interrupted loaders to overcome this delay; so while you're waiting there'll be some music as well as a little intro to the next stage. If you've ever seen games like Thalamus's *Hawkeye* and System 3's *Last Ninja* series, you'll know what I mean. Interrupted loaders are quite good because they stamp out the boredom factor of waiting for loads. The only gripe I have with all this multi-loading business, is that I'm going to have more graphics and programming to do, but then again who cares? It'll be worth it in the end – I hope!

Right, that's just about all we have time for this month. Well, actually I've run out of space, y'see, and the more I waffle on the less space I have left to waffle on in. So I'll just say stay tuned for part nine. Night, night!



The individual elements.



The map and block editors in all their glory.

The story so far...

Despite the suicide of his C64 keyboard, Visualize's Jon Wells has been hard at it over the past couple of months. *10th Dan*, the game everyone is hoping will prove to be the smartest beat-'em-up ever to grace the beige box, has been undergoing the programming and tweaking treatment for around 20 months now. The graphics are done, the fighting routines are well under way, the samples are growing in number and the joystick controls are coded. So, what's next?...



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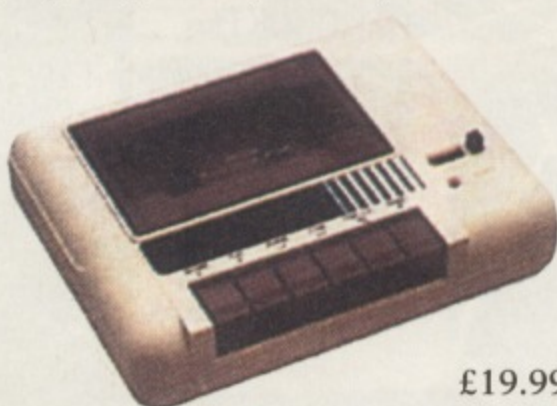
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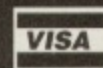
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GEOS

THE NEW FACE OF THE C64?

Russ Michaels unpacks the GEOS goodies and explains why this ultra-smooth operating system could be just the face-saver the C64 has been waiting for...

Let's face it, BASIC may be an incredibly useful programming language, but it lacks a certain sophistication when it comes to operating systems — especially in these Windows-dominated times. It's good to know then that the faithful old Commodore can now have the electronic equivalent of a face lift with the new GEOS system.

Like Windows, GEOS (which stands for Graphic Environment Operating System) is designed to create an effective desktop architecture for productivity software, such as word processors, databases, desktop publishers, spreadsheets and much more. GEOS can even be used to run a small business. What's more, it gives you all the versatility of the PC packages, but at a fraction of the cost. GEOS is the future of the C64, but to understand what you can expect in the coming months, you first need to familiarise yourself with the way GEOS works.

The initial GEOS package is available for either the 64 or the 128. Both these versions are essentially the same, but the 128 is capable of running in 80 columns — providing you have the appropriate monitor. This offers you a clearer and more well-defined display. The 128, which runs at 2Mhz (or twice the speed of the 64) also has an obvious advantage in the speed department. There's good news for anyone using a disk drive capable of burst mode as well (not 1541),

because GEOS has a burst mode in native 80 columns that makes drive access much faster than usual.

Of course, we're not all blessed with the power of the 128 — indeed that particular model never proved especially popular in the UK, so from here on in we'll be concentrating on the benefits GEOS can offer the more humble 64.

The first thing you notice when you boot up GEOS is its professional appearance. The window and icon system is reminiscent of Windows for the PC, and it works in much the same way too. Each application is accessed via the main desktop, which you can return to at any time. This means that jumping between GEOS's various applications is an extremely simple affair. What's more, because data can be easily swapped between different applications, the whole thing is very flexible.

From the main desktop you can access a number of functions via the pull-down menu

GEOS

GRAPHIC ENVIRONMENT OPERATING SYSTEM



A state of the art word processor, spell checker, graphics editor, file manager and more!
For Commodore 64 and 128 Computers

Berkeley Softworks

GEOS comes in two exciting varieties — Original 64 and the new Saucy 128 flavour. The 128 is capable of running in 80 columns, which makes for a more well-defined display.

GEOS 128

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For Commodore 128 Computers

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Fontpack Plus offers loads of fonts for Geowrite, system, which, among other things, enables you to set up the configuration you'll be using on a regular basis.

To that end, GEOS enables you to select a 1351 mouse, joystick, koala pad or inkwell as your input device.

It also offers you the choice of a wide range of different printer drivers, covering just about every printer currently on the market (and quite a few of the older ones as well).

You can even set up colour preferences that determine how the GEOS system will look each and every time you boot up. Hell, it even has an alarm clock

that'll wake you up in time for any important engagements – like a lunchtime visit to Ramsey Street perhaps.

Each disk you use with GEOS is constructed in a special way that enables it to display each individual file as an icon. The desktop can display eight of these icons at a time – they're shown as drawings on a notepad. To reach the next eight files (or their respective icons), you simply click your pointer on the turned-up corner of the current page. Each file can be manipulated via the options in the pull-down menu, or if you prefer, by using each option's shortcut keystroke (for example, Commodore key and O opens a file).

Once again, like Windows for the PC, GEOS enables you to select your file with a single click. Once the file's selected you can do all the usual stuff: open it, duplicate it to another disk, rename it and print it. You can even undo a deleted file or show the file's details, such as filetype, size, author and what have you. The details for each file have standard parameters, and although these have been set by GEOS, there is still space for you to enter your more eclectic descriptions.

File icons can also be easily moved to other notepad pages, so you can organise your files in the way you find most efficient. For example, you might choose to put all your applications on page one, your printer drivers on page two and so on. Each page will then tell you how many files are on the disk, how many kilobytes you've used, and how many more are free.

As well as using the pull-down menus, you can also manipulate the files themselves by double-clicking on their icons using your chosen input device.

There are three methods of clicking on an icon. You can

use a single click to highlight an icon, a rapid double-click to open or execute the file in question, or a double-click with a slight delay between clicks to pick up an icon.

This latter method enables you to place the file over the trashcan icon to delete it, over the printer icon to print it, over the disk drive icon to copy it to that disk, or over the border, where it will stay while you reorganise the notepad's pages or swap disks on a single-drive system, before copying it to a new page or disk.

Of course, your files don't have to be viewed as icons, because the desktop's View menu also enables you to display them by name, size, type and date, which all helps to locate the correct file.

Many of these functions can also be performed on the disk as a whole using the pull-down Disk menu. You can open, close, re-name, validate and format a disk from here – and even erase all the disk's files.

Well, that just about covers the most important desktop functions, there are others of course, but – hey – we don't want to spoil all your fun!

Geowrite

This is the word processor application that comes with GEOS, and what a great little one it is too! Well, it is

providing you're not a member of the Stone Age tape-only fraternity.

The first thing that makes *Geowrite* stand out from its

competitors is its proportional text feature. This means the text is positioned on the bitmap in such a way that it cuts out all the unnecessary gaps and spaces between letters, which enables you to fit more text on each line.

The editing area is actually about one-and-a-half screens wide; the cursor scrolls across this area to give you between 80 and 100 columns per line in a regular-size font. This makes your text easier to read than word processors that use a simulated 80 column display such as *Interword* or *Tasword*.

The functions and editing facilities, which are available from the pull-down menu, are extensive to say the least. Here's what's on offer...

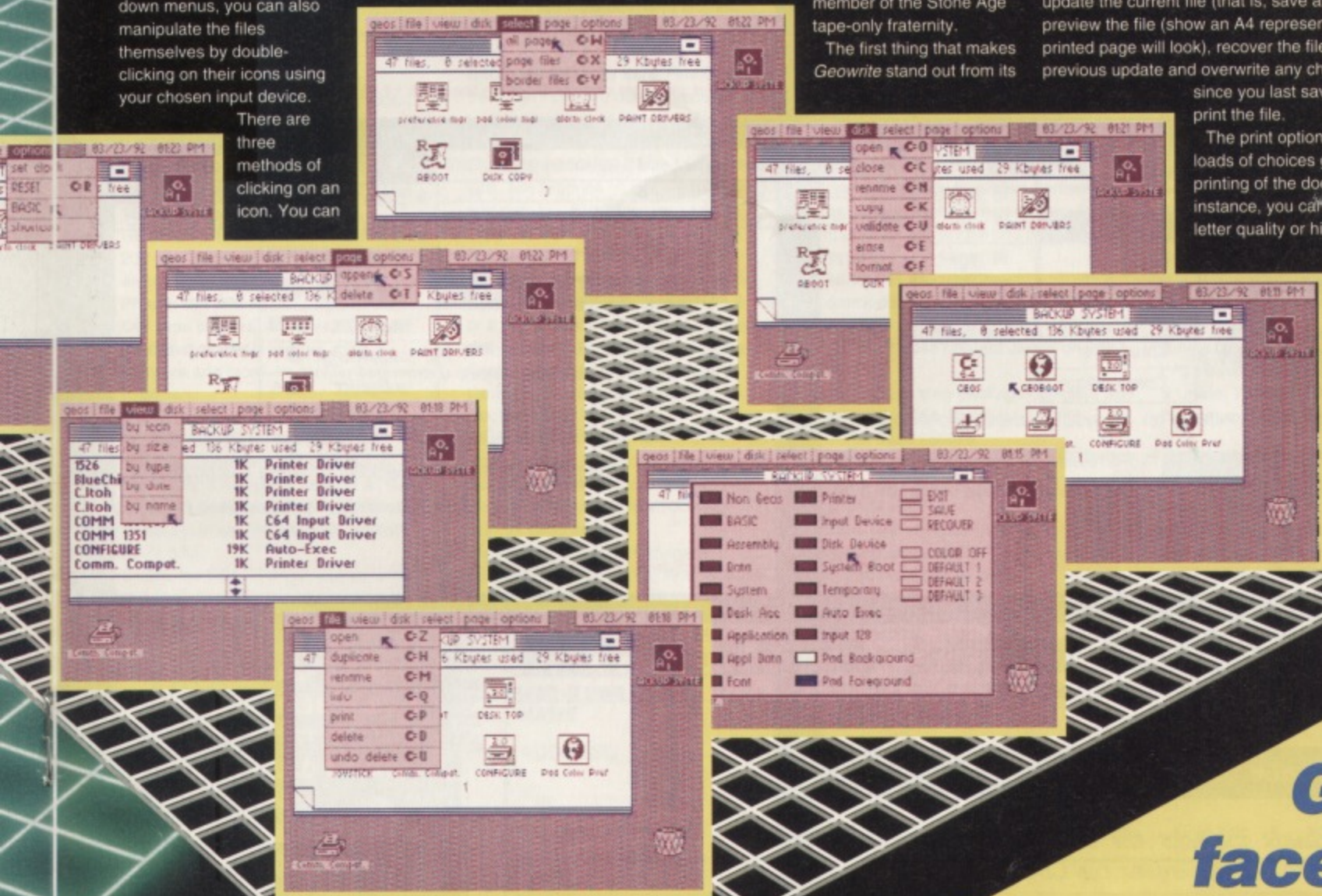
The GEOS Menu: This gives you access to the Photo Manager, Calculator and Notepad, all of which are global options that are also available in many other applications.

The Photo Manager comprises of a library of graphic objects from *Geopaint*. These are arranged in pages, with each page containing one graphic. You can select which library you want to use, and then cut and paste your chosen graphic into a Scrap before returning to the editing screen. The significance of the Scrap will be dealt with later.

The Calculator is exactly that: a calculator. It works exactly like its real-life counterpart. Next up is the Notepad. This is a bit like a diary or calendar, and again it works on the pages system. The Notepad enables you to leave yourself messages, notes, reminders, etc.

The File menu: You can use this particular menu to update the current file (that is, save any changes made), preview the file (show an A4 representation of how the printed page will look), recover the file (bring back the previous update and overwrite any changes you've made since you last saved it), re-name and print the file.

The print options also offer you loads of choices governing the printing of the document. For instance, you can choose draft, near-letter quality or high-resolution printing; to print only the start and end pages; and, of course, whether you want to use single-sheet paper or tractor feed. You



The GEOS system offers C64 users all the benefits of the Windows operating system, but at a fraction of the cost.

Get a face lift!

The combined GEOS system and *Geowrite* application (which starts at £39.99 for the C64) is available from Electric Boys Entertainment Software. If you want more details, then grab a copy of the Boys latest product guide by sending your name, address and two first class stamps to: Electric Boys, 917B Brighton Road, Purley, Surrey CR8 2BP.



can also cancel the print option from here.

The Edit menu: This is where that Scrap mentioned in the GEOS menu section comes into play. The Edit menu enables you to cut, copy and paste text and graphics to and from a document. Whatever you've placed on the Scrap (scrapboard) will be placed in your current document when you select the Paste option.

This is handy both for placing graphics and editing text. And if you want to keep a selection of different logos and graphics, you can store them in a library found in the Photo Manager.

The Options Menu: This menu enables you to search the document for specific words, change all occurrences of that word, hide graphics (to cut down on re-draw time),

open the headers and footers, select a page number and expand the document to full-width, which is useful if you've set the display to only cover a screen-width but now wish to print at A4-width.

The Page menu: This enables you to navigate easily around your document. You can choose to flip to the next or previous page, or even jump to a particular page with the Goto page number option. You can also set up page breaks, title pages and NQL printing from here.

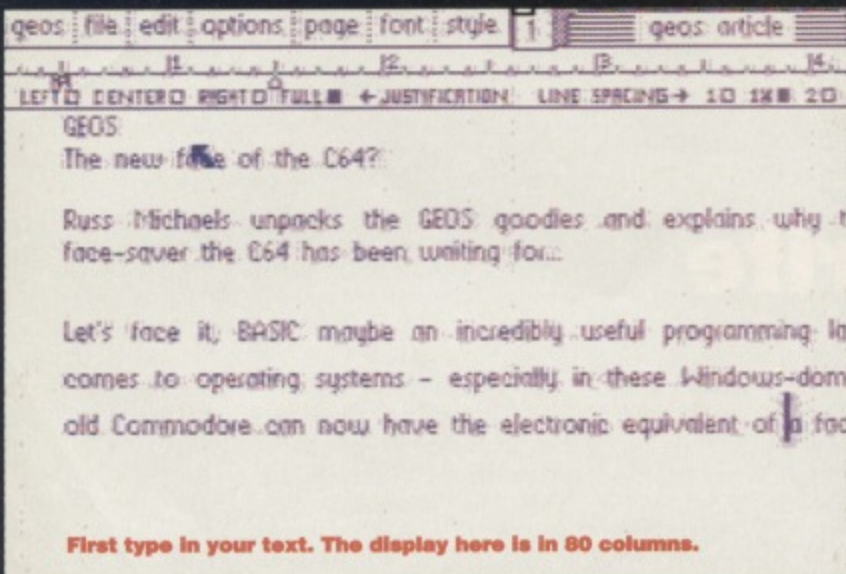
The Font menu: As you'd expect, this enables you to change your current font or change highlighted sections of text to a new typeface. GEOS comes with seven different fonts in various sizes. There are, however, a number of additional font disks available that

substantially increase this number.

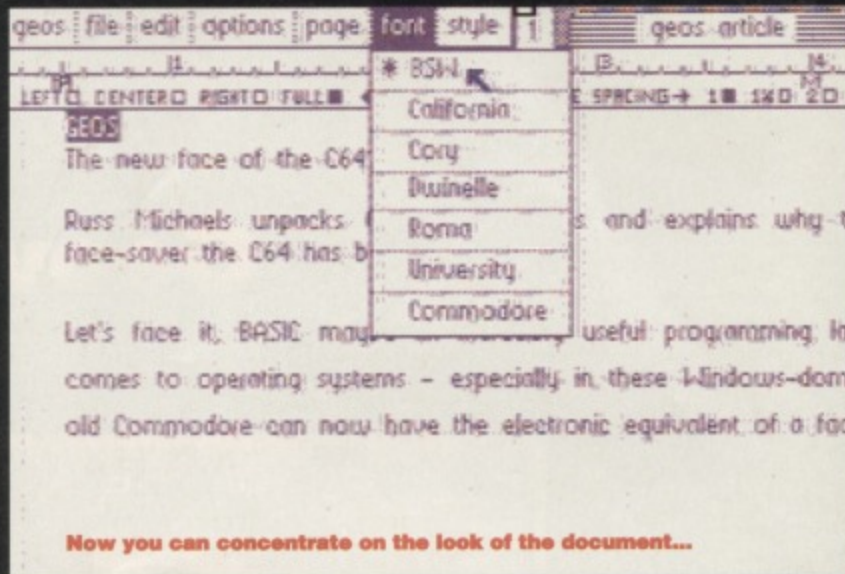
The Style menu: This enables you to use different font cuts, such as plain, bold, italics, underline, outline, etc. And they'll appear in the final print, even if your printer isn't capable of such functions.

The ruler at the top of the *Geowrite* screen enables you to set the size of your margins, tabs, the justification and the leading (the space between the lines of text).

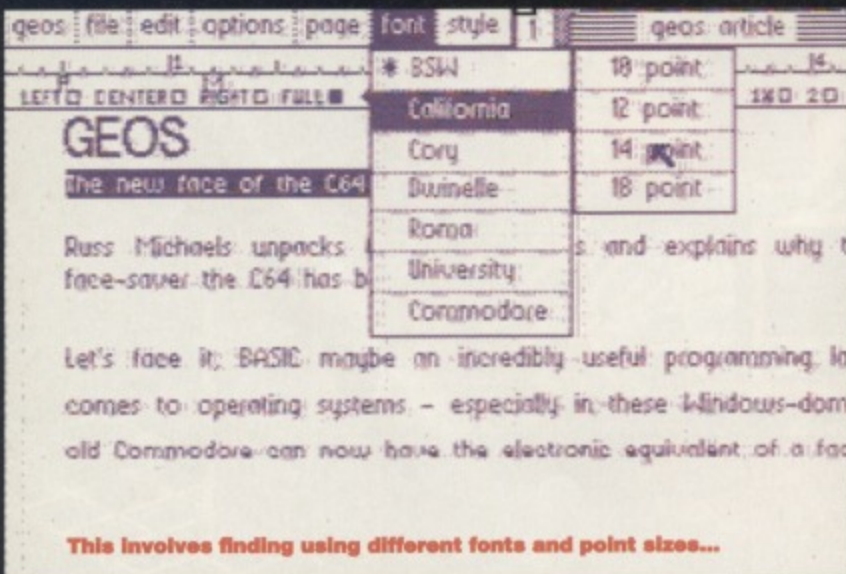
So, that's the word processor, but what else has the GEOS system got to offer? Well, 'Plenty' has to be the short answer, but you needn't worry because over the next few months we'll be covering all the major GEOS applications that come winging our way. Hurrah!



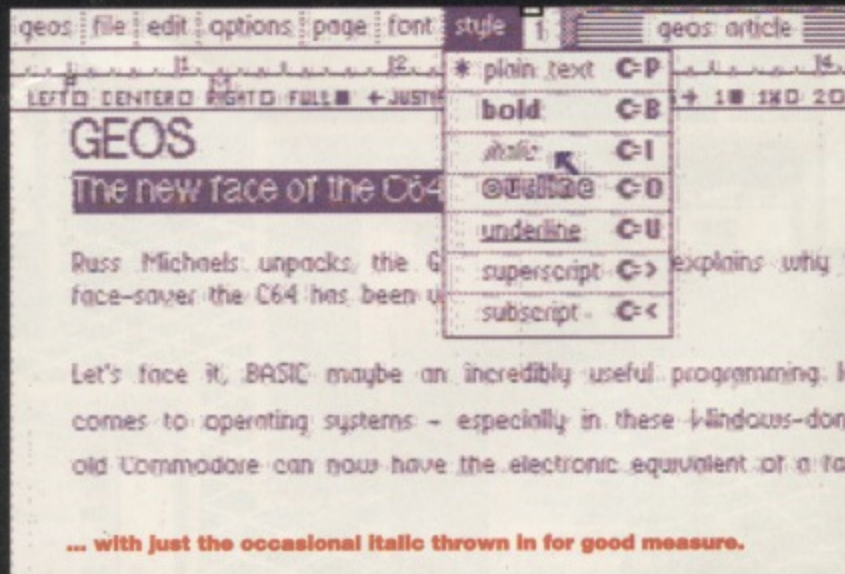
First type in your text. The display here is in 80 columns.



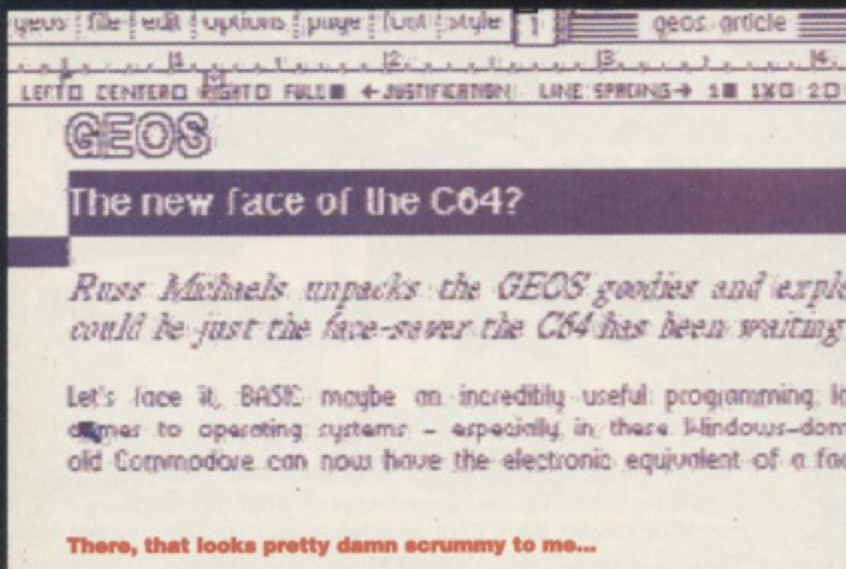
Now you can concentrate on the look of the document...



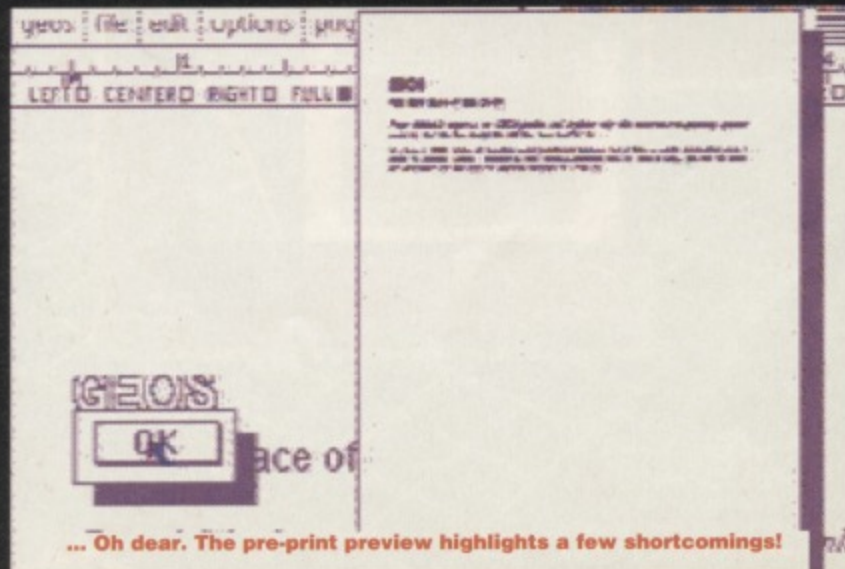
This involves finding using different fonts and point sizes...



... with just the occasional italic thrown in for good measure.



There, that looks pretty damn scrummy to me...



... Oh dear. The pre-print preview highlights a few shortcomings!

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C64 cassette originals from 50p, including Defenders, OT Crown and others. For a complete list send an SAE to: **Mark Hammond, The Horseshoes, Dereham Road, Whinburgh, Norfolk NR79 1AA.**

C128D for sale. £75 with games on tape

and disk. Games like SimCity (disk). Lightpen and tape deck included with the manuals and books.

Phone now: 0475 723181.

C64 (as new), datasette, two joysticks and all leads. All in original boxes with manuals. £45 ono.

Phone: 0403 822105 (Surrey).

Approximately 40 C64 games, plus Commodore Format PowerPacks 2 to 47. £40. 1351 mouse. £5. Action Replay cartridge (boxed). £20. Plus more.

Phone: Paul on 01795 845017.

Commodore 64 games for sale. Very cheap.

Phone 0533 849152 for complete list.

Two 64s, two disk drives, two datasettes (need repairing), two joysticks, loadsa software (200+), magazines and tapes (150+), and books. Offers? Contact: **Mike Summers, 11 Cumberland House, Warwick Street, Preston, Lancs PR1 1LH.**

Database disks for sale. First customer free disk. For more details, send an SAE to: **Iain Macleod, 24 Weavers Ave, Paisley, Scotland PA2 9DR.**

Games creator - £5. 15 budget games - £10. Ten full-price games - £10. Light gun and games - £10. Mayhem - £6. Yak's Progress - £10.

Phone: 0533 715392.

Cor! Wow! Get Trumps, the amazing new card game. Send a blank tape & 70p, or a blank tape, SAE & 20p. Also, free diary and upside-down letter programs.

Contact: **Daniel Mossop, Smithy Cottage, Murrington, Dumfries, Scotland DG2 0JN.**

Commodore 64 with 1541 Mk2 disk drive, disk container, 19 disks, joystick, mouse, mouse mat and holder. Boxed as new. £90 ovno. Won't split.

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Wec le Mans, Target Renegade, Renegade, Ghosts 'n' Goblins, Vigilante,

Kick Box Man - £2 each. Odus (as new) - £3.99. Contact: **Richard Herbinger, 18 Cherry Orchard, W-U-E, Gloucester GC12 7HT.**

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Multi-player Soccer Manager by Cult on tape. I will buy it from you. Contact:

Stephen Windridge, 41 The Channies, Stoke, Coventry CV1 5AL.

C64 cassette version of Pictionary and Puzznics. Will pay up to £5 for both together. Contact **8 Alan Close, Dartford, Kent DA1 5AX.**

Disc drive, Commodore 64, Great Giana Sisters. Plus instructions for Elvira and Popeye. Write to: **2 Brookdale Street, Melin, Neath SA11 1PB.**

Wanted on tape: Stormbringer (Mastertronic), Spellbound (Mastertronic) and Entombed (Ultimate). Will pay £7 for each original game. Write to: **Alex Dijkstra, Margrietenaan 27, 4382TE Vlissingen, Netherlands.**

Big Box 2 wanted urgently on cassette. Good price paid.

Please phone: 0271 25885 after 5pm.

Commodore C64 business software wanted. Especially Company Pac1.2.3 by Impex. Plus any wages and payroll program.

Phone: 041 639 9757.

Commodore Format issue 40 with covertape, wanted desperately. Will pay up to £5. **Please contact Jamie on 0282 459621.**

Word processing package complete with manuals for C64. Disc only.

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SWAPS

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USER GROUPS

SEUCKERS: now over 230 games. For the latest list send an SAE to: **SEUCKERS, 12 Arthur Ave, Caister on Sea, Great Yarmouth, Norfolk NR30 5PQ.**

Do you program or write music on the C64? Yes? Well, write to me and join our programming group. Contact: **10 Roseberry Rd, Norwich, Norfolk NR3 3NA.**

A new fanzine is starting soon. For more information please send an SAE & 50p to: **S Lewis, 13 Shelly Close, Catshill, Bromsgrove, Worcester B61 0NQ.**

PEN PALS

Male or female pen pal wanted to swap ideas and games for the C64. Contact: **Jason Page, 8b Peabody Estate, Farringdon Lane, London EC1R 3BA.**

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COMMODORE EMULATOR

A PC-dominated future maybe inevitable, but Sean McManus reveals how you can take your C64 into the 21st Century and beyond...

What the petty squabbles between computer users often fail to recognise is that each computer is ideal for a different purpose. The Commodore is great for games, but, let's face it, it's not exactly going to infiltrate any top business institutions.

As some C64 users upgrade for greater applications potential and a gateway to multimedia, many will find the PC far from ideal. Careering back down the learning curve, they will have to dump their obsolete software and programming experience. But all is not lost, with the help of a shareware emulator C64 enthusiasts can hide a software Commodore inside a PC.

This emulator can be copied freely as shareware, but suffers from premature release. Hoping to pick up on feedback, Miha Peternel released this version prior to the final cut, which was due out in November 1993. Miha Peternel is no longer at the address quoted, however, and this version appears to be the only one to have seeped through the shareware network. The trouble is it has a major bug: the sound doesn't work. And while it should be compatible with a Soundblaster card or the PC's internal speaker, all it can manage is a high-pitched squeak with blobs of tune buried way beneath it.

The emulator does look and feel like a Commodore, though. The graphics and colours appear authentic and the keyboard has been intelligently reproduced. TAB has become RUN/STOP, the Commodore key lies behind ALT, and F12 (whose position varies from PC to PC) acts as the RESTORE key. The conversion is so intuitive that most of the time you can unleash your fingers on the keyboard and the functions are more or less where you would expect to find them.

To get things running smoothly, you have to balance the sliders for the raster and the screen refresh rate. The raster rate represents a compromise between speed and smoothness. If it's set too slow for your PC, the sprites will jerk from one side of the screen to the other, without even ghosting in the middle. If it's set too fast, things grind to a

halt, devoting all the processor time to refreshing the sprites. Once this rate is set sensibly, the screen refresh rate can be adjusted to the fastest setting possible - this tends to suddenly halt everything when it reaches its optimum point.

Running beneath both screen sliders is



moves at the Commodore's normal speed. Although fiddly at first, the settings enable the emulator to run at its maximum potential on all computers, instead of dithering to account for extra fast PCs.

Transferring software from a 1541 disk drive is no problem if you're handy with a soldering iron or if you take the instructions included to a local electrical specialist. Software can be transferred using programs

on the disk, although it's a little bit awkward, because the PC needs to be artificially slowed down first. Images for use with the emulator can then be saved to a DOS format disk. Quirky formats will bring things to a halt, making some commercial games non-transferrable. A comforting on-screen message would have been nice during the dark delay in unpacking software. The first few times I tried to load a game, I assumed the machine had hung up, when it was in fact too busy unscrambling the game to worry about good manners.



...to this!



For anyone interested in writing software using the emulator, there is the option to convert from

DOS back to a 1541 drive for more mainstream distribution. The main barrier to program development will be the lack of utilities, unless you transfer them all yourself. The software supports 6510 CPU instructions, memory management and sprites and, to all intents and purposes, behaves just like a C64.

BASIC programmers will certainly have no problem. Machine coders might be dubious about the risk of the firmware differing somewhere along the line, though.

You'll need to be packing a fairly fast PC to really enjoy this emulator. A 386 running at 40Mhz or a 486 at 33Mhz is recommended, although there is also a cut down 286 demo on the disk. VGA display is recommended for best results.

If you've played with fishtank simulators and personalised backgrounds on the PC, this emulator is ideal for you. At the end of the day, it's a trainspotter gimmick, separating the tinklers from the real enthusiasts. Lacking the sound and bogged down by the relative difficulty of transferring software, it's not ideal for entertainment. Being short of utilities and a genuine user base on the format, it's not perfect for programming. That said, until the full version surfaces, this one will be welcome on many a hard disk. A real home from home.

COMMODORE EMULATOR

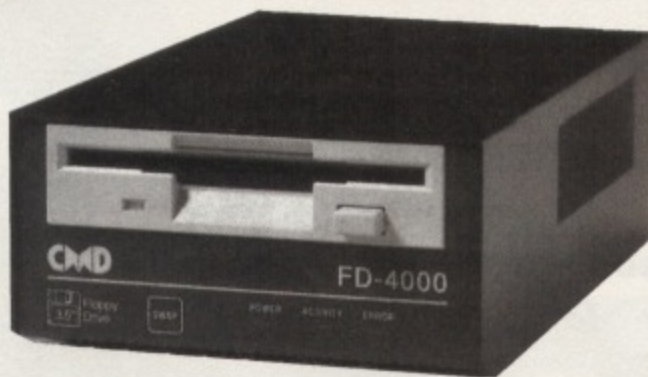
Price: £5 copying fee.
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- ▲ Looks and feels authentic.
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- ▲ It's shareware!
- ▼ Not so golden silence!
- ▼ The speed calibrations can be tiresome at first.

75%

WELL 'ARD DISK DRIVES

Cast your mind back to CF47, a time of barmy summer nights and our first Well 'ard feature. If you remember, Russ Michaels of Electric Boys fame was revelling in the delights of the American hardware scene. Well, now he's back with the details...



Okay, so you liked the sound of the floppy drives we mentioned during our last encounter, but how will they sit with your current set up? What exactly are they going to add to your life? And how will they make your friends spit with envy? Well, just shove this feature under their noses and watch the lava spew.

High-capacity 3.5-inch floppy drives

This month's premier attraction immediately shows you the power of your C64. While Macintosh and PC owners struggle along with 1.44Mb disks and Amiga owners are left stranded with laughable 880K disks, C64 owners with Creative Micro Design's FD series drives can justifiably smile.

The FD2000 offers you an astounding 1.6Mb, while the FD4000 will blow your mind with its 3.2Mb disks. These FD drives also offer you far better compatibility than even Commodore's own 1581, and with an easy-to-use operating system and all the utilities you'll need to run and maintain them, you really can't lose.

Compatibility

One question that always seems to arise when upgrading your system, especially with a new disk drive, is what you should do with all your old disks and software; do you still have to use your old slow drive with them? And what about the software that's only available on 5.25-inch floppies?

Well, the FD drives are actually compatible with quite a number of different disks and formats. Both drives can format double-density disks at 800K (which means they're fully compatible with the 1581) and high-density disks at 1.6Mb. What's more, the FD4000 can use the new,

enhanced-density disks, which offer up to 3.2Mb of storage space.

By using the *Big Blue Reader* utility it's also possible to format disks for 720K, 1.44Mb and 2.88Mb for use on PC machines. This is extremely handy because it enables you to share files between both platforms.

That's not all: the powerful operating system in the FD not only enables you to create multiple partitions and sub directories, but also enables you to create partitions that emulate the 1541, 1571 and 1581 drives. Each of these partitions identically copies the track and sector layout of the emulated drives. This means you can run software written specifically for the Commodore drives on the FD. And because of the FD's higher storage capacity, you can have many emulation partitions, each acting as a full disk on the Commodore drive.



And here it is: the FD 4000 drive in all its compact loveliness. Its vital statistics in inches are: 7.7 by 4.11 by 2.5, making it Commodore's smallest ever floppy drive.

15. On top of that, there's also a useful Swap button on the front panel that enables you to swap between device 8, 9 and default, giving you maximum efficiency and compatibility with software that expects to be loaded from a specific device.

The FD is also available with optional RTC (Real Time Clock), which automatically 'stamps' your files with the date and time. And should you be running GEOS (see page 12 for all the mouth-watering details), RTC will automatically set its clock too. But don't worry if you can't afford to shell out for this at the same time as the drive,

Where to get them

The FD2000 and FD4000 are both available from Electric Boys Entertainment Software. And the prices are as follows:

FD2000 (800K and 1.6Mb)	£159.00
FD2000 with RTC	£169.00
FD4000 (800K, 1.6Mb and 3.2Mb)	£199.00
FD4000 with RTC	£209.00

For a copy of the Electric Boys latest product guide, which includes the prices and details of all the latest American hardware and GEOS software, send your name, address and two first class stamps to: Electric Boys Entertainment Software, 917B Brighton Road, Purley, Surrey CR8 2BP. (Please state whether you're a disk- or tape-user.)

because you can always buy it as an add-on later.

Software

All FD drives come complete with *FD-Utilities*, which is a comprehensive collection of copying, backup and partitioning tools. Included on the disk are: *MCopy* (a whole disk copier), *FCopy* (a two-drive file copier) and *BCopy* (a powerful backup utility that enables HD and RAMLink owners to back up large partitions or entire drives to several disks). You can also use *BCopy* to back up FD disks to 1541 or 1571 drives.

The *FD-Tools* program has a simple-to-use menu system that enables you to perform all your formatting and partitioning with ease – and without having to plough through loads of manuals.

Then there's GEOS, of course. CMD's *GEOMakeBoot* can boot up the GEOS program on your FD drive, while the *CMD-Move* tool on the *Utilities* disk will enable you to access partitions of it. (FD drives are only compatible with version 2.0 of GEOS.)

And if you're still worried about your old tape and 5.25-inch disk software, then you'll be pleased to hear that Electric Boys Entertainment Software now runs a re-mastering service to transfer your programs to ordinary and FD disks. Electric Boys also has a number of titles in production for the US market. (*Oi, Russ! Stop plugging your company and get on with the article – Karen*)

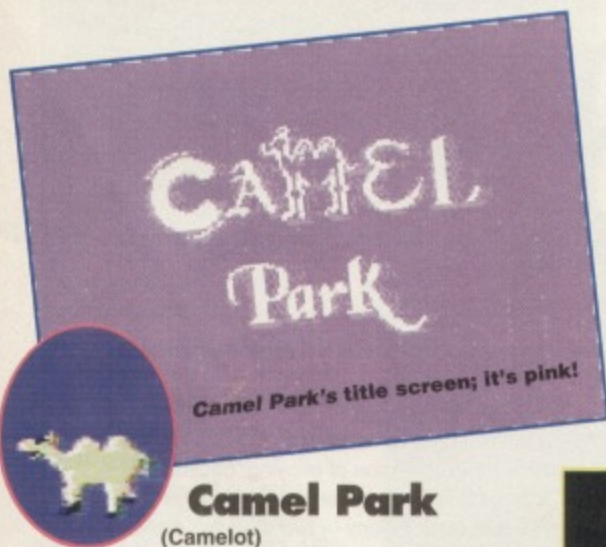
So, now you know what the FD2000 and FD4000 are all about, the decisions is yours – do you want to struggle on with low-capacity drives or deprive yourself totally by using tape alone? Or do you want to become one of the thousands of Commodore users who already enjoy a current and productive system? The choice is yours...

Next Month

We'll be looking at the wonders of JiffyDOS, the disk drive speed enhancement system that can increase normal loading times by a factor of 15. See you there!

PD FORMAT

It's cheaper than a car boot sale, more fun than a day at Alton Towers, and is known to the world as PD software. Andy Roberts test drives a handful of the very latest megademos – but which one will turn out to be the rusty old Skoda?



Camel Park's title screen; it's pink!

Camel Park

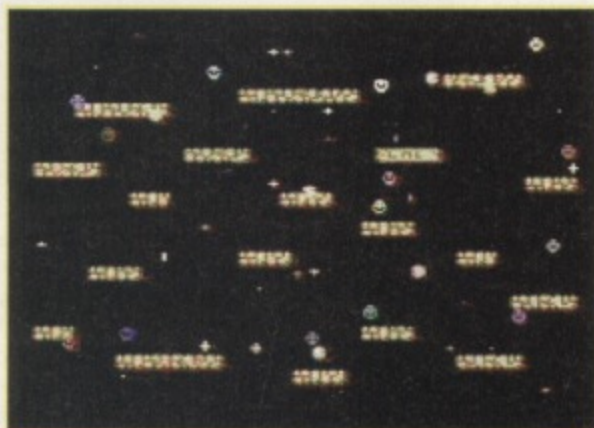
(Camelot)

Camel Park is another megademo from the world-famous group responsible for the classic *Ice Cream Castle* and the critically acclaimed *Tower Power* demo (well, critically acclaimed by me at least). I'll cut the suspense straight away: *Camel Park* is not as good as *Tower Power*, but it's still a formidable piece of software. The first section of the demo is basically a menu that enables you to view either the whole demo, or to start from one of four selected points. This is an original concept, which enables you to skip straight

to your favourite bits with the minimum of fuss.

As for the rest of the demo, well, read on...

- **Introduction:** this is actually a fairly sparse list of details about the demo – although the radius plots behind the text are quite stunning, and can only really be described as monochrome fireworks. Calculated gravity has never looked so good.
- **Pacman Loader:** this is basically a filler, which occupies the monitor while the next program is being loaded. As you may have guessed, it features the world-famous Pacman (or Pac, to his friends) working his way down the screen and devouring the text as he goes. Unfortunately, it doesn't offer much entertainment value, and is really a little too bland for a demo of this type.



Goodness gracious, great jumping balls.

- **Fullscreen Plasma:** if you've never heard of plasma before, except while watching an episode of *Casualty*, allow me to explain. Computers such as the Amiga and PC enable you to have dozens of colour changes on each rasterline. This creates a surreal swirling colour effect called plasma. How is this effect possible on an 8-bit machine with only 16 colours? Beats me, but the effect is breathtaking.



Look out, look out, there's a Predator about!



Another job for Kirk and co.

- **Cool Camel:** this is the first of three appearances made by Cool Camel, and it comes in the form of another bland loader. This animal celebrity remains motionless as letters drop on to the screen to spell out the word Camelot. And in case you hadn't guessed, Cool Camel's humps form the letter 'M'. Rivetting stuff.



- **Jumping Balls:** this isn't the sort of thing you really expect to find in a quality demo. A myriad of tiny balls bounce down and across the various 'platforms' dotted around the screen. If you've never had the chance to mess around with a sprite multiplexor, it probably won't impress you very much.



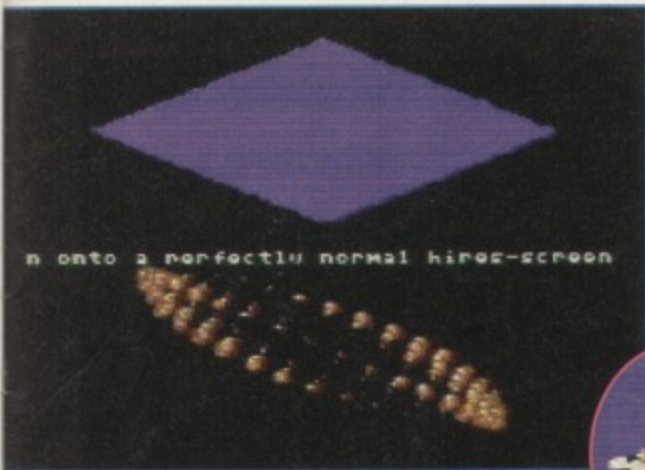
Parallel

This month sees the birth of another PD library, Parallel Logic Public Domain. The new library is based in Northern Ireland, and is, according to its founder, the first one ever to be based there. This latest addition brings the total number of libraries to ten – but is there a gap in the market for another company? Well, Philip Boyce seems to think so, indeed his software company, Parallel Logic, has already released one PD product called the *Time Crystal* (reviewed in CF44).

PLPD goes on-line on the 1 January 1995, and Boyce assures us that it already has several demos and

Trust us, this looks amazing when it's in motion.





n onto a perfectly normal hires-screen

The impressive Asymmetric Zoom.



● **Camel Splash:** this is another brief loading interlude, but this time our old friend Cool is squashed by an appallingly drawn *Python*-esque foot. Oh dear, can things possibly get any worse?

● **Chessboard:**

thankfully, the programmers make up for the embarrassing camel interludes with an extremely well-programmed visual effect. Imagine a tiny chessboard, no bigger than eight by eight pixels (a single character). Now imagine that chessboard zooming smoothly towards you until it fills the whole screen.



Chill out with the Fountain.

Got it? Well, now you

know what to expect, because that's precisely what this part does. What's more, the overall effect has to be seen to be believed.

How can they possibly follow that?

● **Camel Jumper:** No, I'm not talking about Jeff Minter's favourite item of clothing. As the next

section loads, Cool Camel bounces around the screen. Then bounces some more. And finally, bounces again.

● **Asymmetric Zoom:** this is a very slickly programmed effect, in which various shapes merge and morph into a variety of different silhouettes. It's the nearest the 64's come to vector graphics, and it moves ever-so-smoothly. The 'unlimited bobs' effect at the bottom of the screen warrants special attention too.

● **Waterfall:** this isn't so much a demo part, as a brief effect that happily fills the loading interlude. It's a rather simple two-colour fountain effect, and it's quite relaxing compared to the cycling colours and loud music that accompanies the rest of the demo.



Okay, so where's the dead parrot, eh?



● **Cyber Vector:** this is another variation on the vector graphics theme, but this time the data is repeated at the edges of the objects to produce a clever 'serrated' effect. It's nothing spectacular, but it does go to prove that imagination is not dead.



Cool Camel? I think not!

● **Tetrisload:** sadly, you don't actually get to play a *Tetris* variant as the next part loads in. Instead, various *Tetris* blocks fall down the screen to form a logo. Once that's complete the top of the screen is filled with a various sinus patterns.

● **Heat Fun:** this is another relatively simple effect, a similar version of which can be found in various other Public Domain demos. In this character version, blobs of colour fly around the screen, increasing in brightness wherever they overlap.

● **Bobby Border:** this is one for technical freaks who strive to squeeze as much out of the C64 as is humanly possible. This part features dozens of bobs moving in and out of the side-borders. Occasionally it switches the bobs



PD Format Directory

It would be biased, unfair, and downright naughty to recommend any one particular library – PD software is free, and most libraries will have the latest software in stock. That's why we've spared no expense and produced the PD Format directory.

If you've never ordered PD software before, write to a few libraries (enclosing an SAE) and ask for an up-to-date catalogue. Some libraries only stock disk-based software, so it might also be a good idea to mention whether or not you own a disk drive. To make life easier, we now specify whether the companies stock tapes (T) or disks (D) next to the company's name – all at no extra cost.

If you run a PD library and can't find your company listed here, write to us at: PD Format, Commodore Format, 30 Monmouth Street, Bath, Avon BA1 2BW. And if you're a programmer or PD library manager, that's also the address to which you should send your latest software.

Binary Zone PD / The Guild (T & D)
34 Portland Road, Droitwich, Worcestershire WR9 7QW.

Electric Boys PD (D)
917B Brighton Road, Purley, Surrey CR8 2BP.

Fox PD (T)
6 Sturton Avenue, Goose Green, Wigan, WN3 6SZ.
KDPD (T & D)
9 Failford Place, Kilmarnock, Scotland KA3 1UJ.

Kingsway PD (D)
72 Glencoe Road, Sheffield S2 2SR.

MK PD (D)
1 Westmore Close, Burrows Park, Northam, North Devon EX39 1SR.

Megatronix PD (T & D)
21 Tiled House Lane, Pensnett, Brierly Hill, West Midlands DY5 4LG.

PLPD (D)
40 Windsor Avenue, Whitehead, County Antrim, Northern Ireland BT38 9RX.

Shareware Plus (D)
Fulfilment Centre, 66 High Street, Pershore, Worcestershire WR10 1DU.

Utopia PD (D)
10 Cwmaman Road, Godreaman, Abedare, Mid Glamorgan, CF44 6DG.

Domain

games in production. As an initial taster, however, Boyce has put together a two-disk compilation that includes various demos, games, pictures and utilities. Admittedly, much of the software is either old or badly coded (some of the programs are written in BASIC), but there are a few classics on there too.

If you'd like to get hold of this sample set, simply send a cheque or postal order for £2 (made payable to Phillip Boyce) to the address listed in the PD Format directory on the right. Oh, and don't forget to tell them exactly who sent you.



for a scrolling message that's virtually impossible to read. After a brief bitmap picture entitled 'Odin's Skyride' (which is a superb bit of fantasy artwork) comes the end section. Here the credits are displayed over a backdrop of wibbly-wobbly pseudo vectors.

Camel Park is quite an unusual release for Camelot. After the incredible *Tower Power* demo, you'd have expected them to release nothing but top-quality productions, but some of the sections of this megademo are mediocre to say the least. It is entertaining, though, and that's what counts in the end, right?

85%

Unpleasant Ways to Die

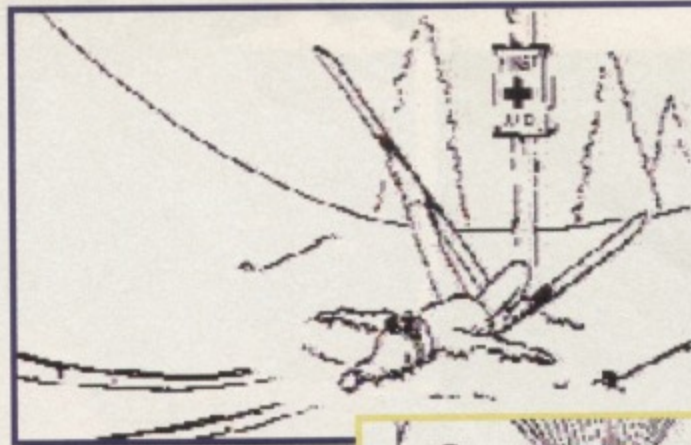
(Hysteric)

Original demos are a truly rare breed nowadays – practically every effect you could possibly think of has already been done to death, whether good, bad, or indifferent. In a world where originality is scarce, it's quite unusual to find an enjoyable demo without the rasters, colour cycling, vectors, plasma, and other such stimulants of older demos.

Unpleasant Ways to Die is basically a slideshow, comprising 21 high-res monochrome pictures depicting... well, 21 unpleasant ways to die. The idea comes from a book by the artist Elan Fleisher, who also produced the digitised versions seen in this particular binary display. The demo is self-running, with each picture loading as the previous one is displayed. There's also a scrolling message and a choice of five different music tracks (including one from the legendary Reyn Ouwehand).

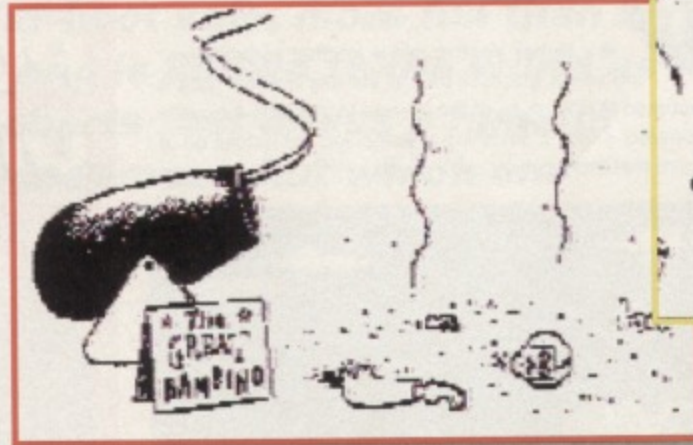
While the pictures are only mono, they use FLI-Interlacing effects for extra detail and are, on the whole, quite superbly drawn. They have life, movement and, above all, they're funny. My particular favourites are the window cleaner (who never actually makes an appearance), the 'Great Bambino' (a rather unfortunate human cannonball), and the parachutist who gets in the way of a helicopter's rotor-blades. Yes, it lacks any sort of polish or colour; and yes, it may become tedious after the first couple of viewings. However, it's funny, witty, sick, and shows great thought and imagination. If you liked *Pulp Fiction*, this demo will be right up your boulevard. Recommended.

80%



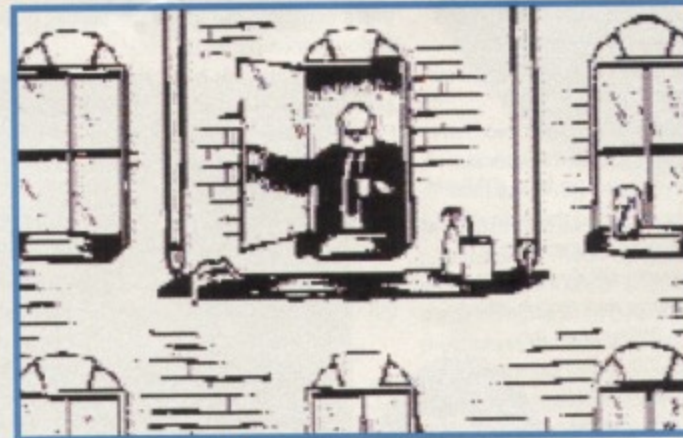
'Whatever happened to the St Bernards and brandy?'

'He just went to pieces.'



Mike Smith takes to the skies once more...

Unpleasant Ways To Die

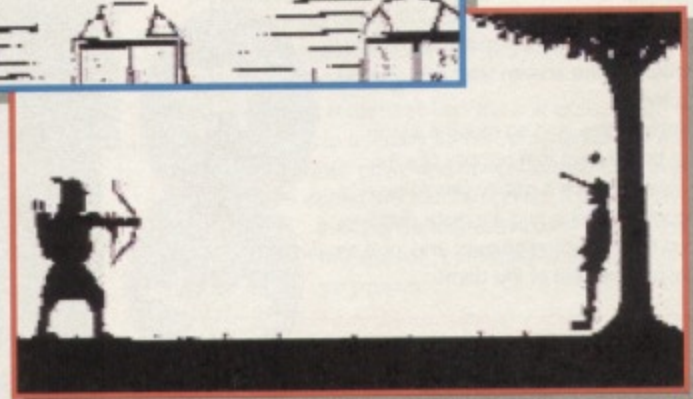


'Could I offer you a cup of tea by any chance, Mr...? Oh, he must've left early today.'



'Glug, glug, gluuugggh!'

William Tell's hangover was playing havoc with his aim!



'How's the new power flush, dear?'



Next Month

Hold on to your hats, nail down your valuables, batten down the hatches, lock up your daughters, rinse out your milk bottles, blow your nose, brush your teeth, and comb your hair in preparation for the top ten demos of all time. Miss it and regret it.

TECHIE TIPS

When it comes to sorting out your assemblers, sprites, hit counts and cursor colours there's really only one man who can help - unfortunately, he was out, so we asked Jason Finch to lend a hand instead...



CF32's sold out, but a new sprite editor should be on the tape in a few months time:



Max Headroom

Dear Techie Tips,

- 1 How do you make a maximum limit for the height of a sprite when it is jumping?
- 2 How can you make a sprite picture bigger

than the 21 by 24 grid without enlarging it - in other words, by using quadrants?

3 Please could you give me the graphics data for platforms, creatures and bonus things to help me make my new games look like *Mayhem*.

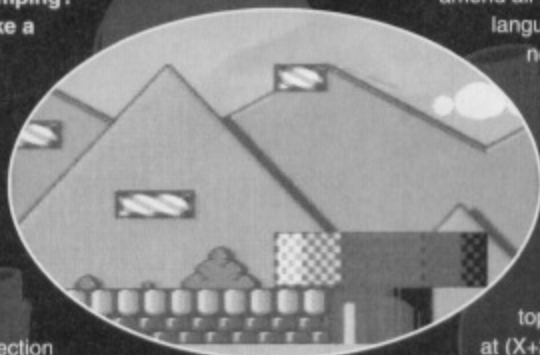
Jason Cumings, Australia

1 A simple way to govern jumping is to have four variables: the current height (CH), the direction flag (DF), the jumping counter (JC) and the maximum height (MH). CH would be the vertical position of the sprite when, say, the fire button is pressed. This could be something like 140 if the sprite were near the centre of the screen. In other words, CH=PEEK(53249). The direction flag would initially be set to -1 for jumping up, and would switch to +1 later for down.

JC is a variable that keeps track of how far has been jumped via the loop JC=JC+DF. Also, you need to check to see if the maximum height has been reached and, if it has, switch over the direction of jumping: IF JC=MH THEN DF=-DF. You'll also need to check to see if the

jumping has finished in order to reset everything: IF (JC=0) AND (DF=-1) THEN DF=0 should do the trick.

In your main routine, include something like this line: IF DF<>0 THEN GOSUB 1000. Here, line 1000 would be the start of a short subroutine that is called whenever the sprite is jumping. You can, of course, amend all this for machine language if necessary.



2 Keep track of the X and Y coordinates of the upper left sprite and then simply position three more. The top right would be at (X+24,Y), the bottom left at (X,Y+21) and the

bottom right at (X+24,Y+21). Make sure the colours are all the same, and that the pointers are set correctly. POKE 53269,15 will switch on four sprites, and the X positions would be governed by 53248, 53250, 53252 and 53254, with the Y positions being in 53249, 53251, 53253 and 53255.

3 Originality is the key component in all new games. You shouldn't be aiming to produce clones of current games - apart from anything else, you're breaking copyright laws by blatantly reproducing graphic data from other games. Jason

sent off for a back issue of CF32 but it was sold out! James Draper, Chorley

1 If you're using BASIC, dimension an array at the start of the program. So, if you're using 20 baddies the array would be: DIM BADDIE(20). Then assign each one with a value equal to the number of hits needed to kill the baddie in question. The line BADDIE(1)=40:BADDIE(2)=50 would make the type 2 baddies harder to kill than type 1 baddies, for instance.

2 You could use separate hit counters for separate people and then add them together to make a total hit count. In this case, P1 and P2 are the numbers of hits made by each person, while PT=P1+P2 is the total number of hits inflicted on the baddie.

3 The sprite designer, Frost, which appeared on CF32's covertape, is the best and most versatile sprite editor designed for the C64, but then I would say that, because I wrote it. Maybe we will see another one on the Power Pack in the near future. Who knows? Jason



Nothing's impossible!

Dear Techie Tips, I've just bought a Commodore 64, and I remember reading somewhere that 64 software can be run on the C128

without any problems - but surely the opposite is true. I have only tried a couple of programs labelled for the C128 on my C64, but neither worked. Is there a way of doing it, or is it impossible? Justin Spears, Princethorpe

Programs for the C64 can only be run on the C128 when it has been put into its 'C64 mode'. This causes the C128 to emulate a C64 exactly, enabling it to run



Who's bad?

Dear Techie Tips,

1 I'm making a beat-'em-up game involving lots of mythical beasts and creatures, but I have a few problems. I want some of the baddies to be tougher than others, but I don't know how to increase their hit counts.

2 Could you also tell me how to get the Commodore computer to count two hits when a baddie is hit by two characters simultaneously?

3 How about a sprite designer on the Power Pack? I



If the game you're writing looks just like this, you're heading for serious legal trouble.

SCORE 000218450 STARS 072 TIME 174 LUP x01



64 software. There are also a few C64 programs that run properly on the 128 while it's operating in its native mode. These are mainly BASIC programs, which don't contain any machine code and don't do an excessive amount of POKEing around in the memory. Other programs can't do this because of the two machine's different memory maps.

Conversely, the majority of programs for the C128 won't work on the C64 because the BASIC used in the C128 includes a number of added keywords not found in the C64's BASIC. Most 128 programmers utilise these extra commands, which the C64 simply doesn't understand. On the whole, it's best to keep C128 programs on the C128 – not that I'm saying it's impossible to use 128 programs on the 64, you understand. Jason



TECHIE QUERIES – DON'T CALL US!

If you have any technical queries about your CPC, the only person on the magazine who can help you is Jason Finch, and he can only be contacted by post as he doesn't work in the CF office. If you phone up the office there is no-one here that can help you – as much as we'd like to, we simply aren't brainy enough – and it prevents our already stretched team from getting on with the job of producing the magazine. In fact, if you phone the office, all you'll get is an answering machine that tells you the same as it says here, so there's no point wasting your phone bill. Please send all techie queries BY POST to: Techie Tips, Commodore Format, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.



Slimline characters

Dear Techie Tips,

1 I've had my Commodore MPS803 dot matrix for over a year now, but I still haven't found a way to output high-

quality letters. Also, I would like to know if there is a way I can make the printer go over characters twice to produce a bold effect. If it is possible, could you give me a BASIC listing to do it, please?

2 Could you also tell me if there's any way of producing condensed characters on the C64's display. I've had an idea that involves reducing the number of bits in a character grid from eight to four,

thus halving the size of the characters on the screen to produce a sort of 80 column display. This seems to work in theory, but would it work in practice?
Nicholas Lines, Southampton

MPS
803

QUICK SHOTS

● *Is it worth keeping my C128 and C64 or should I upgrade to an Amiga?*
Dean Lennell, Co Dublin

Erm, I think you mean downgrading there, don't you? Why change computer when the one you've got is already doing everything you need? Try getting into programming and have a go at writing your own games. This will give you hours of creative fun, rather than numbing your brain with an array of Amiga games that generally score a big fat zero where gameplay is concerned. Allegedly. Jason

● *In Commodore Format 49 Paul Gander asked about using a 1084S monitor in RGB mode to get the 80 column display with his 128D. I've made a lead up which is a 9 pin D type to an 8 pin DIN and it works a treat. I would be glad to supply a lead for this guy in return for a copy of the 128D user manual.*
J Anderson, Aylesbury

If anyone would like such a lead and can supply the 128D user manual, let me know and I'll pass your address on. You never know, even if J has the manual by the time you write (or if you haven't got one to offer) he or she may make one for you in return for a cash donation instead. Jason

● *Many thanks for the excellent machine code series; it has helped me enormously in my learning and*

mastering of the machine code language. Could you possibly tell me what the start and finish addresses are for the 6510+ Assembler please?
Andrew McCombe, Cannock

I'm glad you found the Machine Code series helpful, and I hope you find the follow-up articles just as useful. Next month we'll be chucking hefty wadge of information about Interpreter and Kernal ROM routines your way in order to help you get the most out of machine code programming.

As far as the 6510+ Assembler is concerned, it is located from \$7200 to \$9FFF inclusive. Jason

● *What is the POKE code for the screen ink?*
Chris Neville, Maidenhead

To change the cursor colour – or screen ink if you prefer – you store a number between 0 and 15 at location 646. In other words, do POKE 646,1 (for white) or similar. The numbers correspond to the standard C64 colour codes: from 0 to 15 these correspond to black, white, red, cyan, purple, green, blue, yellow, orange, brown, pink, dark grey, medium grey, light green, light blue and light grey. How's that for a memory? Jason

1 The only way to produce such letters on your printer would be to use the graphic mode to define your own letters. Of course, you'd need quite a complex machine code routine to decide which character you wanted to print and then to output the necessary bits to the printer, rather than just reprinting the characters again. However, although the characters would be different, the dots that make them up would neither be any denser nor darker. If you need better quality prints for professional reasons, then you'll be better off investing in a new printer that incorporates such styles – the effort required to produce your own wouldn't be justified by the result.

2 There are a couple of programs on the Public Domain market that give this very effect. They don't actually reduce the physical size of the characters, however, instead they use the C64's bitmapped graphics mode. A routine is set up that intercepts the computer's routines every time a key is pressed. The relevant dots are then plotted to the bitmap screen to give the illusion of 80 columns of characters. Jason



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