ACCEPT NO IMITATIONS – IF YOU OWN A CPC THE ONLY MAG YOU NEED IS...

AMSTRAD ACTION

ISSUE No. 117
JUNE '95
£3.25

PUBLISH AND BE DAMNED!

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Discover the best package for your work with our definitive guide to DTP software!

CPC 464, CPC 6128, CPC 464 Plus
JUNE 1995
Serious ACTION

GAME
NORTH AND SOUTH



UTILITY
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PLUS
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PLUS! PLUS! PLUS!



- Hackit
- Parados
- PD Update
- Basic Power



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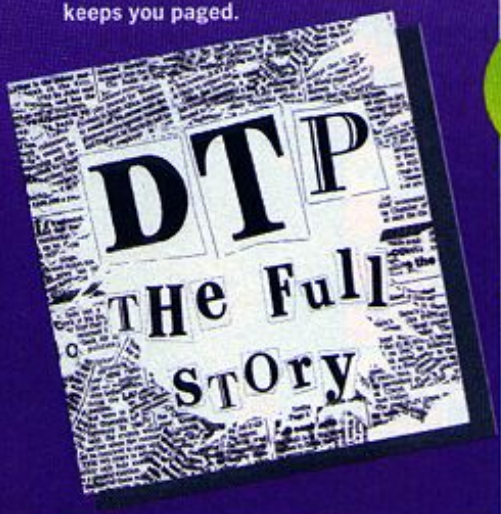
PLUS: NEWS, MACHINE CODE PROGRAMMING, FANZINES, READER ADS & COMMS

AMSTRAD ACTION Line-up

JUNE '95 ISSUE 117

11 DTP – the full story

Appearances *are* important. How a page looks may determine whether you read it. DTP can make all the difference but which package best suits your needs? Richard Fairhurst keeps you paged.



17 Parados on parade

Richard Wildey calls the Parados ROM to stand up straight and be counted and sounds the Last Post for the rank and file CPC operating systems.



WIN **A stranger in Parados? Win one and explore for yourself!**

Make it big in the world of fonts and DTP with Micro-Design Extra – free!



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How can you get into publishing? It's easy! You need your CPC, a printer, a target audience, and something to say. Got all that? Then all you need is a DTP package. Enter our competition and you might even get that for free!

On your covertape...

NORTH AND SOUTH

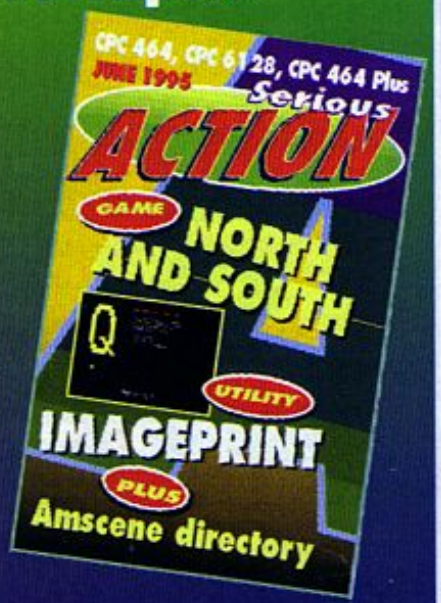
This American Civil War simulation/arcade game is 'rather wonderful' according to our tape editor. In fact it's so exciting Richard Fairhurst lost sleep and blood battling to get it for you. Oh, and *AA* awarded it a Mastergame in 1991.

IMAGEPRINT

Perk up your printouts with this print enhancer utility. Transform your text with a smart sans serif typeface. Customise your current design or create new fonts with the font editor.

AMSCENE DIRECTORY

The CPC 'Yellow Pages' only much more environmentally-friendly, of course.



Turn to page 5 now!

Regulars

3 What's happening
What have Simon Forrester's granny and *Bonzo's Scrapyard* got to do with the CPC? Is it as tenuous as it seems? And, have you won a copy of *BrunWord*?

4 Reaction
Be famous or provocative for 30 days.

5 Serious action!
North and South – this means war! And battle with dull layouts with *Imageprint*.

9 Classifieds
Small, but not insignificant, reader ads.

20 Competition!
No need to pay to display! Win one of three copies of *MicroDesign Extra*!

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Your backup in your hours of need.

Serious stuff

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Twist codes round your little finger.

16 Assembly line
It's chipper. Improve that old block game.

19 Hardware
Develop your software, hunt POKES... There's so much you can do with *Hackit*.

21 Techy forum
Richard Fairhurst 'mono'tors your colour printing problems; presents a project to build an A38; and goes shopping.

Leisure zone

6 Public image
Donner und Blitzen! It's the return of *Rundschlag*! Also *Brains & Brawn*, side B.

8 Cheat mode
From *Biff* to *Wild West Seymour* via Chuckie Egg. Keep a plastic bag handy!

15 Further reading
'ate it or love it, your CPC that is, *8BIT* is the fanzine to reckon with. Also, the start of a series of DTP tips.

AA118 on sale: Thursday, 22 June, 1995

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What's happening...

8BIT smart

Brian Watson, founder and editor of *8BIT* fanzine (Further reading, AA116, page 9) has announced changes for the multi-format fanzine that's fast finding its feet in the market. It's also been reviewed in this month's Further reading: see page 11.

Due to the increased cost of paper and printing, the cover price will rise from £1 to £1.25. This will be offset by a rise in production quality: a new paper stock making for a heavier, more durable magazine. Commendably, this quality increase was previously subsidised by the profit made though the launch issues.

Subscribers will continue to get their issues for the original £1 price tag. Subscribers can also put a small ad in the magazine connecting them with the world of 8-bit users.

However, *AA* readers can continue to buy *8BIT* for £1 per issue. Simply mention you saw this item in *AA* when you order...

A back issue service is now available for those who have missed the first four issues. They cost £1.25 each (they're reprints, misers). But issue 1 is available free when you order it with another.

As well as the regulars for which the fanzine has become known, issue 5 also contains a hot news scoop (*what? – Ed*) that we shan't spoil by stealing (*Oh, go on – Ed*). Oh, ethics be blowed – we've got room (*Yay! – Ed*). They've just found out that...

Note: don't send cash by post – use cheques or postal orders only. Brian Watson, 8BIT, Harrowden, 39 High Street, Sutton-in-the-Isle, Ely, Cambs CB6 2RA.

And the winners are...

In *AA115* we asked: 'Who wrote the poem beginning "Twas brillig and the slithy toves..."? This was Jabberwocky, of course. The answer was Charles Dodgson, better known by his pen name, Lewis Carroll. Dave Hall of Stretford wins a copy of the excellent *BrunWord* WP.

Hundreds of you returned your *AA* Reader Survey questionnaires. We are processing the results right now... Henry Bennett from Kimpton, Sharon Porter from Stoke-on-Trent, and Ray Powell from Sporle, win 10 games each. Thanks to everyone who replied.

CompuServe-ice

Those of you who screamed when you received your first Internet access bill will be pleased to hear of CompuServe's new pricing scheme. You get three free hours of unrestricted Internet access per month included in the cost of membership (£6.50/month). You could save as much as 87% on your CompuServe bill. You also get free access to 120 basic services, such as news, weather and sport

If you aren't already on-line turn to the back page, immediately, to order a back issue of AA105. This is the essential guide to getting your CPC in touch with the whole wired world.

CompuServe ☎ 0800 289378 (voice mail), or www.compuserve.com (web page), or e-mail networkinfo@cis.compuserve.com.

Get hammered

As my granny used to say to me, you can never have too many PD libraries. Were she not 80, she'd jump for joy to hear that a new Liverpool-based library, namely Hammer PD has opened its letter box to the public.

The library also deals in Spectrum software, so owners of That Other Amstrad Machine can buy software.

For a catalogue send £1 plus a tape to Hammer PD mentioning that you own an Amstrad (so that the catalogue is in the correct format).

Hammer PD, 43 Gwydir Street, Toxteth, Liverpool L8 3TJ.

Tres Bon-zo

CPC veterans will remember the series of powerful Bonzo backup utilities produced by Nemesis in the eighties, which saved the lives of disc-owning tape users everywhere. There was also a monthly *Bonzo* newsletter and now *Bonzo's Scrapyard* is returning to your mats, on an 'occasional' basis, under the editorship of one Dave Caleno.

For a copy, send them an A4 SAE plus an extra first class stamp.

Bonzo's Scrapyard, 29 Chapter Road, Strood, Rochester, Kent ME2 3PX ☎ 01634 724262 (8.30pm – 10.30pm).



Leon Brown, 'one of the owners' of Hammer PD, sent us this poster. If the project 'hits home' why not support it? See 'Get hammered'.

The scene of the prime...

...and up-to-date CPC contacts is now on your Covertape. Please help keep it current and informative by sending us changes and/or details for inclusion to Amscene Directory, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail them to us, putting 'Amscene Directory' in the subject line, to aa@futurenet.co.uk.

Be a supporter

When you thumb idly through this issue of *Amstrad Action* bear in mind that it's a magazine of over ten years standing. The writers on board have been with the machine from the start and a lot of you, the *AA* readers, are veterans, too.

When a computer like the CPC reaches this point in its life, the commercial market doesn't really want to know. We've seen the gap in the market left by the big companies as they pull out, and we've reached the era of the smaller, independent software house, run by CPC fans.

What's our point? Well, the software you see advertised in the magazine is undoubtedly of a higher quality – the games are written by programmers who spent years learning to push the machine to the limits, and the serious software is written by people who know where the CPC's strengths lie, and, how to tackle the problems of lack of speed and power. Similarly, the fanzine editors and PD librarians know the machine and its supporters so well that they can ensure the highest quality of content for their libraries and fanzines.

Not everyone has to be that supportive of the machine, though. Someone has to be a customer and buy the software the dedicated programmers produce. If you don't, the people still out there will give up as well.

So, as you thumb through this month's *AA*, think about buying some of the great things reviewed within it – and be one of the people who supports the CPC, not one of those who asks where all the support has gone.

The AA team

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NOTE: Please do not ring the office for advice. We can only answer your questions through the pages of the magazine. Please send written enquiries to one of the addresses above.

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Reaction

Simon Forrester picks the letters and holds the authors up to ridicule. To retaliate or suffer the same fate write to Reaction, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at aa@futurenet.co.uk.

PD warrior

I've come to the conclusion that you're making quite a mistake regarding PD software – you've always bottled PD up in a certain section of the magazine. I guess this was all very well in 1990 when you had no shortage of commercial software, but it seems foolish now considering how often decent full-price software (games especially) are released.

You have always almost attacked PD with the usual 'if it's cheap, it's crap' psychology by always reviewing PD in a small section of the magazine rather than as commercial software that happens to be free. As well as labelling PD software, before it is even seen as not as good as commercial, this also discourages people from entering their program into the public domain as they know nobody will hear of them and if they do, they won't think of the programmer as being any good.

You also seem to hand over PD reviews to somebody else as if they aren't good enough for the full-time *AA* staff who review full-price software. Is that what you think or do you prefer people to think you think that?

Perhaps the reason you treat PD the way you do is because you never actually see any, just leaving it for a freelancer to go through like it's not worth bothering about. Okay, there is rubbish roaming around PD libraries too, but, please don't try to tell me that all full-price games are brilliant, because they're not. All I am asking for is equal treatment for software that the programmers have generously not put a price tag on.

Thanks for the great mag otherwise.
Malcolm Dowse, Dublin

Yep – that's about the shape of it.

Seriously though, Malcolm, I think you've got us wrong. The reason full-priced software gets more space than PD software is because it costs more – if you were paying £10 for something, you'd want to read a far more in-depth review than if you were getting something for free. If you buy rubbish PD you've wasted £1, not £10.

The fact that we hand it over to a freelancer doesn't mean we can't be bothered to look at it, just that we prefer to have a PD expert reviewing it. We do the same with Techy forum, Cheat mode, and most other sections of the mag because we feel the *Amstrad Action* specialist freelancers are the best people for the job.

Full-price games aren't always better – PD software makes a massive contribution to the CPC's software base, more so than the majority of commercial software nowadays. We wouldn't want to give *AA* over to PD reviews, though, as we feel there's a lot more to cover in these pages as well.

Orthodox geeks

My name is John and my pseudo is JFMC. I'm a member of the Greek demo group Chaos.



No S.E.X. please, we're Greek.

I'd like to comment on the review of S.E.X. in *AA*113 (Public image, page 6). Please don't criticise the Greek CPC scene or think it's inactive because of stupid or childish people. The Chaos group is serious about the CPC and we're trying to organise the CPC scene despite the immature contingent.
John Fellides, Athens

Ooh – harsh words there from Athens. Though we stand by what Keith Woods said in his S.E.X. review, we don't have anything against the Greek CPC scene. In fact, if everyone in Greece could write in, we might find an excuse to come over to Greece and interview you. Yep, we love the Greek scene.

A lot of people have told us how hard it is to keep in touch with other users and companies featured in *AA*, if you're overseas, so it's time we did something about it. If any organisations in Europe want to send their details in to us, we'll run a feature and give you the indispensable CPC guide to Europe.

Oz-tracised?

I'm an Australian Amstrad user who's disappointed to hear that Amstrad have just pulled out of Australia, an unfortunate turn for us CPC fans.

Is there any way I can run CPC software on my PC?

Secondly, are there any user groups or contacts in Australia?
Martin O'Connor, Victoria, Australia

To be honest, you shouldn't worry about what Amstrad do. They stopped supporting the CPC a long time ago, and it didn't affect the users, the scene, or this magazine. We'll include Australia in our roundup (see 'Orthodox geeks') if anyone wants to get in touch, and you'll find out just how much is still going on in your country.

Get connected

Following the advice in your recent comms feature, I went out and bought a modem and RS232 interface second-hand.

I've spent a long time on bulletin boards and the Net, but can't access the Futurenet World Wide Web pages to read all about *Amstrad Action*. Why isn't there an *AA* bulletin board for people with modems to ring?
Lee Archer, Bristol

Good question – why haven't we got an *AA* bulletin board? That all depends how many people have modems, doesn't it? If you'd like to use an *AA* BBS, write in and let us know – if we get enough requests, we'll look into it.

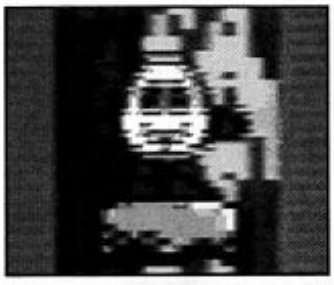
Covertape queries

1 I have the superb driving game *Continental Circus*, but have encountered one small problem. No matter how many times I reach Japan, I can't seem to complete it. Can you help me by giving me a keypress cheat for it?
2 Whatever happened to the *Fantasy World Dizzy* solution?
3 Both the *Amstrad Action* covertapes 47 and 49 were not a little disappointing. Thanks for *Titus the Fox*, though!
4 Please can you put *Purple Saturn Day* on the covertape? I'd ask for *Bloodwych* but I understand you're having trouble getting it.

Keep up the good work – *AA* is great.
Roger Gomes, London.

1 No.

2 From what I remember, we took one look at the first set of *Dizzy* solutions, realised that they were deathly dull for all but the most ardent *Dizzy* fan, and decided not to run the next one. I hate *Dizzy*, anyway.



Dizzy – not everyone is a fan.

3 We always try to get the best games on the tapes, but they're never to absolutely everyone's liking. If you've got any suggestions, let us know and we'll see what we can do.

4 *Purple Saturn Day* is, unfortunately, disc-only, making it fairly impractical for use on the covertape. As for *Bloodwych*, the search continues. It's a great game, and if we can get it for a tape we will.

If it's worth saying...

It's worth saying well. (I don't think we'll be done for abuse of copyright on that one...) All in all, we've had a good round of letters this month, so if you have any comments, queries, gripes or announcements, this is your page and your opportunity to voice them.

If you want your letter to get printed there are some points worth remembering:
● talk about something original, or
● something topical.

We are particularly interested in:
● your exploits on the Net (achieved using your CPC, of course);
● any new things you've got your CPC to do, or in ● any general CPC gossip.

Any letters about the *Stormlord*, the size of the mag, the lack of games coverage or the decline of the CPC in the shops will be ritually burnt.

CPC 464, CPC 6128, CPC 464 Plus
JUNE 1995
Serious ACTION

GAME
NORTH AND SOUTH



UTILITY
IMAGEPRINT
PLUS
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Serious ACTION

Richard Fairhurst takes a trip into American history with this month's covertape but still finds time to smarten up his image.



Avoid drafts, use Imageprint to improve the quality of your print-outs.

ImagePrint

Robot PD

If you have a 9-pin dot-matrix printer, you know how shoddy the output can sometimes be. Draft quality is fine for listings but little else. And near-letter quality... well, although you might use it for a letter to Great Aunt Agatha, it's not the best way of convincing your bank manager that you really could do with an 8000 loan, especially if your printer's an Amstrad DMP model.

Enter *ImagePrint*. By intercepting all the information sent to the printer and replacing it with its own, custom-designed font (by Geoff Short), it makes your printed output presentable, for once.

The standard Epson codes for bold, italics, and underlining are understood, as are those for pica, elite, and proportional spacing (although, as usual, bear in mind that your word processor's justification facility won't co-operate with proportional spacing). If you're bored with the standard font, *ImagePrint* even has a utility to design your own. Note that each character needs to be defined twice – once for the normal font, and once in italics.

Once *ImagePrint* has loaded, type |IP.ON to enable it, and |IP.OFF to return to normal printing. It's compatible with all word processors (such as *Protext*) which use the CPC's standard print routine.



North and South – the options screen. Get your new identity here. And have a yankee doodle of a day.

North and South

Infogrames

In AA66, we awarded *North and South* Mastergame status, with a rating of 91%. *AA* reader Nicholas Campbell of Newtonards, Northern Ireland, says it's his favourite game...

It's 1861 in America (they always were a bit behind the times) and the right-on Abraham Lincoln has decreed the abolition of slavery. The folks in the Deep South (home to double-chocolate Mississippi Mud Pie, Dallas and R.E.M.) aren't too chuffed and have formed the Confederacy. Needless to say, Lincoln's men don't really want to see half of the States break away...

Thus was born the American Civil War.

Once you've chosen your game controls, the options screen appear. You can then click (move the pointer and press Fire!) on:

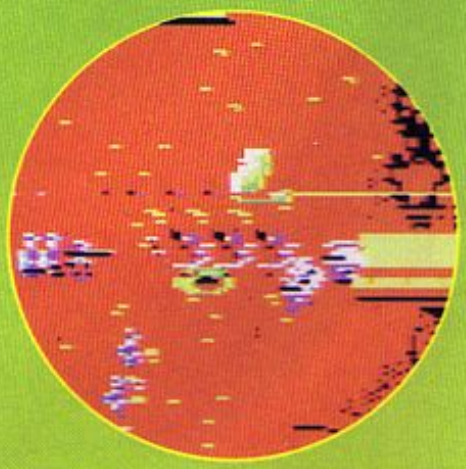
- the characters – to select the difficulty level,
- the flag behind them – to select which side you want to play and also on;
- the three small pictures at the top to turn 'disasters' (Indians, storm clouds, and European reinforcements) on or off.

If you don't want to play the arcade sequences, click on the small pictures below them. Finally, click on 'Go' to start the game proper.

To move your armies from state to state, simply click on their current location, followed by the one you wish to move them to. Moving them on to another of your armies merges them into one, more powerful force, while moving them on to your opponent's armies causes a battle. (Use the key you've defined for 'select' to switch between infantry, cavalry and cannons.)

Should you require more troops you need five bags of gold. Get these by possessing two towns, and a railroad link between them. You can conquer towns from the enemy in an arcade sequence, where your objective is to reach the flag at the far end of the fort before your time runs out.

Finally, if you have conquered South Carolina and the appropriate option is switched on, your army occasionally receives a ship of European reinforcements, which can't be bad.



Exchanging 'Civilities' in North and South, which we awarded Mastergame status.

Loading instructions

Insert side A of the tape, type ITAPE if you're a disc drive owner, and then press CTRL and ENTER. The tape menu loads. Using cursor keys and ENTER to select, you can transfer the contents to disc and load any program.

Loading troubles?

If your tape says 'Read error a' or 'Read error b', our duplicators, Ablex, are the people to contact. Write to Ablex Audio Video Ltd, Harcourt, Halesfield 14, Telford, Shropshire TF7 4QR, enclosing your tape, your name and address, a description of the problem and what CPC you use.

However, if the covertape loads okay but you are still having problems, don't shout at Ablex, instead write to Covertape Clinic, Techy Forum, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at aa@futurenet.co.uk putting 'covertape' in the subject line.

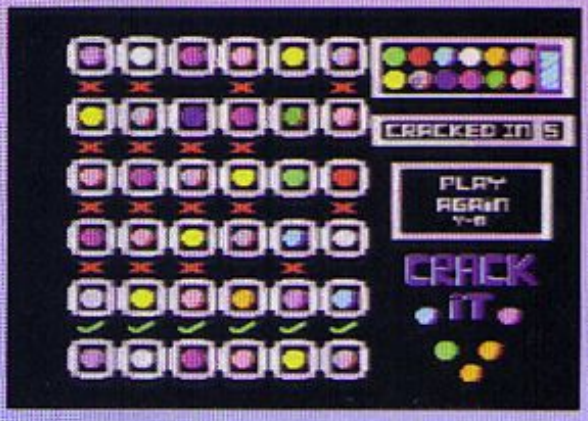
Public IMAGE

Keith Woods was shattered playing Crack-It but recovered to write a round-up of the CPC PD magazine, Rundschlag.

GAMES

Brains & Brawn – Side B

By Kevin Heywood



Crack-It: you are allowed five attempts and no passes.

1 Crack-It

Crack-It is basically a clone of the old game *Mastermind*, that is, the one without the funny Icelandic bloke questioning train spotters. Instead, the computer chooses, in order, six coloured spheres from a choice of 12 and you have to guess what colours have been put where.



Beat Crack-It: win a 'Magnus' of champers.

After each guess, the computer tells you which spheres you got completely right, which you chose correctly but put in the wrong place and which aren't included. The aim is to guess the place and colour of all six spheres in just five attempts.

Unfortunately, a mere five attempts makes this version of Mastermind just a little too difficult for my liking. As well as applying logic, you need a fair bit of luck to crack the code. The inclusion of different skill levels, which would allow you to set the number of chances you get, would have made this rather average clone a much better one.

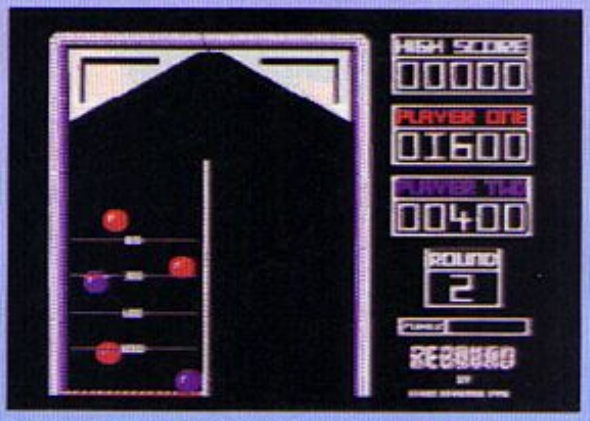
50%

2 Rebound

Rebound is a two-player game of what appears to be some form of futuristic bowls. It's not quite as your Grandpa might play it, but it's about as exciting.

No, I tell a lie, it's worse. At least in real bowls you get a ruddy great field to hurl your projectiles down, to try and get them as close as possible to a very small white ball. In this version, you have the far less considerable length of the CPC screen to play with and stopping anywhere short of the run-off area scores you points.

This just makes the thing too easy. Even worse, you aim by stopping your slow-moving ball as it moves from left to right at the bottom of the screen. The greatest fun in bowls is the sadistic pleasure gained in knocking your opponent's carefully placed ball into oblivion.



Rebound: if you play second, you come in first.

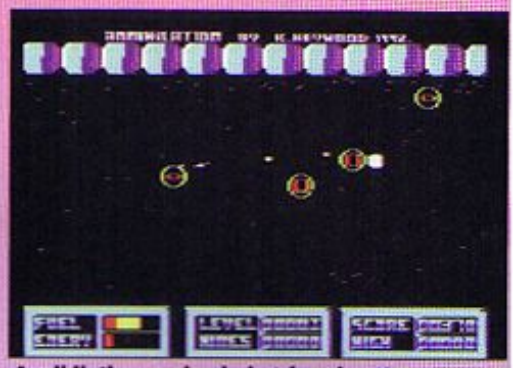
Imagine a game in which you never miss – that's *Rebound*. The winner of the game is nearly always the player that goes second, as his or her last ball is always the one which is left, because all the game consists of is taking turns to knock each other's balls off the screen.

And you don't even get to wear one of those kinky little white hats...

20%

3 Annihilation

Ah, now this is more like it. Kevin seems to have a talent for producing simple yet fun shoot-'em-ups,



Annihilation: a simple but fun shoot'em-up...



...in which it's you against an array of aliens.

and this game *Annihilation* is no exception.

Unlike *Killabeez* (AA116, page 6), *Annihilation* is a sideways scrolling shoot-'em-up. You have to fend off countless waves of alien invaders that appear from the left of the screen with the aid of just one, small and fairly pathetic, gun.

As well as saving humanity from these fiendish creatures, your action also saves yourself in the shorter term. It's vital that you pick up the fuel and energy that the aliens drop when shot if you're going to make it through 'till tea-time.

Annihilation is really nothing amazing, but it is both colourful and fast enough to make sure you are kept well occupied on a dull and dreary day.

Annihilation is another of those games that keeps me happy by proving again the great gaming truism – that simple, unadulterated gameplay is far more important than any special effects.

70%

4 Asteroids

Asteroids is another simple PD version of the classic game of the same name from yesteryear.

For those of you that don't already know (is there really anyone left who doesn't?), in *Asteroids* you control a spacecraft plonked in the middle of the screen with only rocks for company. Unfortunately the rocks don't appreciate your society, so they fly around the screen trying to ram you out of existence. Your only option is to blast them to smithereens before they succeed in doing just that.

To be honest, Kevin Heywood's *Asteroids* isn't the best version of the game



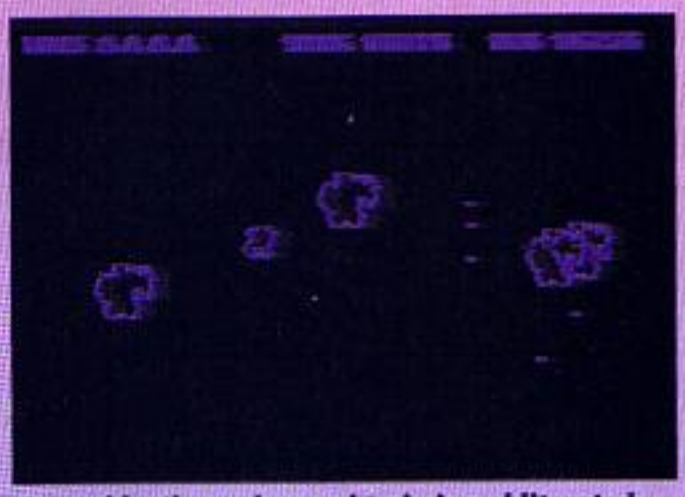
Rocks to send you reeling.

Where to go

For information on how to get Rundschlag in Britain send an SAE to Gavin Black, 2 Grae Park, Edinburgh EH4 6DJ.

I've seen, but it's not the worst either. Its big fault is that the bullets travel too slowly. This makes calculating your aim difficult and the game seem slower and duller than it actually is. Otherwise, it's a passable version of a passable game.

55%



Asteroids: the rocky road to being obliterated.

UTILITIES

Turbo Super Monitor Razormaid Mix 1994

By Antoine Pitrou

Rivalry between programmers is nothing new. It's also the best thing we ordinary punters can ever hope for. When two programmers seek to outdo each other you know the result's going to be good.

This Monitor has been written by Antoine Pitrou, as he says himself:

"Especially for assembler programmers and demomakers, for whom *SuperMonitor 1.4+* (by Crown) wasn't adapted to their needs."

Essentially, Antoine aimed to improve on the best features of *SuperMonitor*, and add some extra ones. However, if you cast your minds back far enough you'll remember that a long time hence *Amstrad Action* gave *SuperMonitor* a whopping 90% rating, which leaves little room for improvement.

Has Antoine managed it?

Yes! And no! A few features have been added to *Turbo SuperMonitor*, but at a price. Probably the most interesting and useful aspect is that *Turbo SuperMonitor* itself is stored in part of the video RAM. This means that ordinary RAM space is left totally free, which is a boon if you're disassembling a really long file.

The downside of this, of course, is that you're left with a postage stamp display, which is just a little annoying when you've got large volumes of information to display. Granted, *TSM*'s scrolling routines are fast, but I can't get used to peering a postage stamp.

The rest of *Turbo SuperMonitor* moves at a decent speed as well – it's clearly very well programmed. However, apart from a few cosmetic changes, it shows little improvement on Crown's effort.

One thing that may be useful, however, is that unlike *SuperMonitor* it contains full English instructions, and even the odd help message.

Turbo SuperMonitor may contain a few improvements, but it makes too big a compromise to make you want to change from using *SuperMonitor*.

It would still be well worth having, however, for those odd occasions when a program like this might make life just a little bit easier.

85%



Turbo SuperMonitor: new things at a price.

Get in touch

It's a long time since we've said this, so it's high time we repeated it again... If you've written any PD programs you'd like reviewed, if you've set up a PD library you think could do with a mention, or if you have any comments or queries to make about PD, then write in. Mark your envelopes 'Public image', Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail us at aa@futurenet.co.uk putting 'Public image' in the subject line.

Next month:

Pop quiz time. Next month's PD column will be slightly different (though still covering the essential selection of the best PD software the planet has to offer), because:

- **it'll be hosted from Uranus.**
- **we'll be sending a particularly good-looking female or rather handsome male (depending on your stated preference) to whisper the ratings into your ear.**
- **Simon Forrester will be writing it.**

Employees of Future Publishing, authors of PD software and Simon Forrester are not eligible to enter. Simon's decision is final.

Rundschlag

Rundschlag, described as "An International Magazine supporting the CPC PD" is a long running German magazine, and issue 16 recently arrived for review in the *AA* office...

Rundschlag is a magazine that has been doing Trojan work to support the CPC for many years.

In fact, in many ways *Rundschlag* is much more than just a magazine. It's more like the newsletter of an association of ardent CPC enthusiasts, because, although it lacks a formal club structure, all the readers are encouraged to help out with every aspect of the magazine's production. Indeed without the support of the readers, the magazine could not exist. n this respect, it is similar to the excellent *WACCI* in Britain.

You could be forgiven for thinking that in these, perhaps slightly leaner, times for the CPC, the quality of magazines like *Rundschlag* would founder. In fact, anyone who remembers the rather haphazardly produced *Rundschlag* of a number of years ago is surely shuddering at the thought of what it must look like today. The pleasantly surprising truth, however, is that, rather than declining, the production quality of *Rundschlag* has improved dramatically.



Rundschlag: now in English.

While the commercial world may have almost completely abandoned the CPC, ordinary users have responded by rallying around *Rundschlag* to put it among the best designed, printed and bound amateur CPC magazines. In the meantime, however, the quality of the content has remained steady.

Given its underground roots *Rundschlag* was always very much a PD magazine and, now that there are so few commercial releases, it is almost entirely so. As well as covering all the latest PD releases *Rundschlag* offers:

- 50 pages of technical articles (by the best PD programmers);
- hardware projects;
- letters;
- help pages and also;
- coverage of the computer world in general (in recognition of the fact that many CPC owners have more than one type of computer).

The biggest problem with *Rundschlag* is the same one that has bedevilled it since its inception – the lack of support from English-speaking countries, especially the largest, Britain. *Rundschlag* has sought to be a pan-European magazine, yet has always had trouble getting enough English articles and as most of it was in German no-one in Britain wanted to buy the magazine,

To overcome this *Rundschlag* has been translating most of its articles into English. In issue 16 it claims to have translated 90% of all articles, although some of these translations are summaries so the English content is still small. It's a big improvement, however.

The most exciting thing about the new *Rundschlag* is its imaginative coverdisc scheme – when you subscribe you get a coverdisc full of the latest PD. You are trusted to send back the disc when you've finished it – with any new PD you may have on it. This is not only a great service, it also helps the spread of PD software throughout Europe.

Rundschlag is one of the best things the CPC has got going for it in Europe at the moment. Each issue is brimming over with very useful information on everything from turning a GX4000 and an old CPC into a fully functioning Plus, to pages of games cheats. It's just a shame that it's something that British CPC users continue to miss out on, as their contribution would be greatly appreciated.

Cheat mode



Simon Forrester raids Phil-the-ex-para-turned-postie's bag to sort out more tips for the games you love to play.

Chuckie Egg

No – I don't care. *Chuckie Egg* is (and always will be) a truly classic game, and we're going to give it yet more coverage this month with a cheat for infinite lives that's been around since the dawn of time (well, the hatching of *Chuckie Egg*, anyway). Strangely enough, real chuckie egg is foul, unpalatable muck.

```
10 MEMORY &7FFF
20 LOAD "chuckie.bin",&8000
30 POKE &867B,0
40 CALL &9A97
```

Ah – that feels so much better.

Lemmings

Since the classic Psygnosis puzzler first appeared on the CPC, *AA* has been flooded with requests for help. Indeed, *AA* pulled it apart in October 1992. From the amount of letters we get about the game, it doesn't look as if anyone has the original, so...

- To sort out a bug with the disc version of the game use a Multiface to poke &98C8 with &3C. If you do this the game can cope with level codes.
- Holding down the keys SHIFT, Z, E and X on the screen that displays the current level moves you on to the next one. Don't go past level 60 though, as all kinds of horrible things happen.
- It's possible to turn blockers back to walkers if you get a lemming to dig under the ground he's standing on. This helps if you don't want to have to blow the sweeties up at the end of each level, reducing the amount you save.
- If you run out of blockers, dig a pit to trap the lemmings in. Build ramps to get them out of it.
- Lemmings die one by one, remember. So if you can't avoid a trap, compact a bunch of lemmings and send them in. While some are dying, the others cross to safety.
- Lemmings can't fall too far. If you are building ramps, build another one parallel to the first, so that if any of the furry fiends overtakes the ramp-builder, it drops on to the ramp below and walks back to safety. Achieve this by building your first ramp at the edge of a platform and the second a little way in.

Thanks to Jamie Turpin, Gordon Masson and Mike Wong for that lot.

Pokerama!

Over the past two months, Lee Rouane has taken you through every step of finding your own cheats for the games you like to play. Of course, you need a Multiface, but if you've been following his (excellent) advice, you should have a whole stack of your own, original Multiface codes by now.

What to do? Send them in to Cheat mode, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail them to aa@futurenet.co.uk putting 'Cheat mode' in the subject line.

Can you hack it?

Look out for the second part of Lee Rouane's guide to hacking next month. Well, everyone is entitled to a holiday...

Biff

Ever since Dave Golder and I put it on the covertape, we've had requests for help with Alternative's platform adventure. This can be a problem for him, as Dave now works for a different magazine altogether, (the soon-to-be-launched science fiction title), *SFX*. so we'll make his life enjoyable again by printing a complete solution.

1 Go left and pick up the power card.
2 Head back to the right, pick up the wire-cutters and climb the tree close by.
3 At the top of the tree, use both the objects.
4 Go to the left (along the top) and get the rope from the room.
5 Go back down the tree and use the rope to make a bridge across the unjumpable gap.
6 Go over the bridge, and take the old clothes you find there.
7 Continue to the left and make a scarecrow in the field.
8 Carry on to get the chocolate seeds (*chocolate seeds? – Ed*).
9 Go back to the field (right) and plant the seeds, producing chocolate.
10 You can now go back to the top of the tree and give the seeds to your mum.
11 Go down the tree, head to the left and take the axe.
12 Back to the field, to chop down the chocolate tree.
13 Go left and build another bridge with the tree.
14 Cross the bridge and get the oil, the key and the explosives.
15 Go to the far left and use the oil and key on the lock.
16 Go down into the mine and use the explosives on the wall.
17 Leave the mine, go back to the right and get the batteries.
18 Head back to the left to get the torch, and go back to the mine.
19 Go through the mine using the torch, and get the jewel.
20 Leave the mine, go to the left and find the broken ring. You can now use that same jewel to repair this ring.
21 Go left, return to the tree and give the ring to mum.
22 Go to the right and get the empty glass.
23 Go back down the tree, head to the right, fill the glass at the well then go to the right and get the record.
24 Go left, head back to the tree, then give the glass of water and the record to mum.
25 Go down the tree, then left, in search of the matches and banger.
26 Light the banger.
27 Go to the right and get the coin.
28 Go to the ice cream van and buy an ice cream.
29 Go left with the ice cream and lit banger, then pick up the flower seeds.
30 Back at the tree, you can give the ice cream to mum.
31 To the right of the base of the tree you find a flower pot.
32 Go to the left and get the bug spray, then continue to the field.
33 Use the flower seeds, flower pot and bug spray to grow a rose.
34 Go back to mum and give her the rose.



Wild West Seymour

As if this game wasn't already stupidly overeasy, here are some handy level codes to keep the genie off your back...

```
Act 2 - 21D135008
Act 3 - 10C700068
Act 4 - 238A35008
```

Bubble Bobble

Anyone who hasn't survived to see the final levels (over 79) on the classic *Firebird* bubble-'em-up might be grateful for the password you need to load the thing. Be careful when you type it in, though...

```
ZZZ133VZZZZZZ4ZZZ124V44ZZ1Y24V32
```

Cecco games

One way to get a few advantages in those tricky Cecco classics is to redefine your keys at the start:

Exolon – Z, O, R, B and A
Cybernoid – Y, X, E and S
Cybernoid 2 – O, R, G and Y
Stormlord – This one is easy and plainly visible to anyone who goes through memory searching for text with a Multiface (you do, don't you?).

On the title screen, type BRINGONTHEGIRLS quickly and without spaces, and the number 12 should appear in the top right corner of the screen. Pressing a number from 1 to 4 now takes you to that level with infinite lives.

Reader ads

As busy as a market in downtown Cairo on market day, this is the market place to be seen in. Market my words...

PEN PALS

Pen pal wanted by lady with an Amstrad 464 with no add-ons. Getting to grips with BASIC but would like to earn more than *AA* teaches. Nora Lees, 285 Franklin Road, Cotteridge, Birmingham B30 1NH.

USER GROUPS

Bonzo tape to disc copier, Hisoft 'C' compiler. Will pay cash or swap for loads of software including all REVEALS's products. Mark ☎ 01527 403813.

FOR SALE

Games for sale, disc/cassette, reasonable prices from 25p, swaps considered. Send SAE to Simon Pert, 23 Cleave Road, Gillingham, Kent ME7 4AY or ☎ 01634 574007.
Soft 968 firmware routines for CPC 6128, £20. Soft 158. Ditto for CPC 464, £15 ☎ 01784 254127.
Amstrad DMP 2160 printer, £90. Dead CPC 464 £30. Budget games £1 each. SAE for list. Harry Bennett, 1 Coopers Hill, Kimpton, Nr Hitchin, Herts SG4 8QT.
Used 3-inch discs. Also games on tape. SAE to Mark Johnson, 13 Ashway, Corringham, Stanford-le-hope, Essex SS17 9EB ☎ 01375 677631 for more details.
Amstrad 464, colour monitor, joysticks, Light Gun, printer, disc drive, 60 games, 12 blank discs, three manuals, 13 *AAs* plus cover tapes, £50 the lot or will split. ☎ 01223 312450.
Mags ACU 1985, 1986, Jan to Dec; CPC464 User, issues 1&2, plus various other mags. Maria ☎ 01843 299390. (Buyer collects ACU issues.) First reasonable offers accepted.
Games and some hardware for full list write or call. Will consider swaps within reason. Michael Jackscn, 41 Farm Road, Limehurst Village, Oldham, Lancs OL8 3NW.
6128, colour, second drive, MP2 adaptor, joystick, games business software. ☎ 01706 825199 (eves).
Spectrum games, with instructions £1.50, without, £1. Any game available. For list write to Password International, c/o 94 Langford Road, Mansfield, Notts NG19 6QE
CPC6128, 3.5-inch drive, DMP 2000 printer, MP-2, video digitiser, book programs, DTP, 50 *AA* tape/mags £150. Steve ☎ 01622 717467.
Amstrad 6128 with colour monitor programs. £75. ☎ 0181 395 7633 (eves).
Megabuffer or will swap for 8-socket ROM box. £30 Elite on disc for 6128. £20 or swap for toolkit on ROM. Michael Jackson, 41 Farm Road, Limehurst Village, Oldham, Lancs OL8 3NW.
Programs for Amstrad 6128/644 disc, games, educational utility £3-£10 each. ☎ 0181 3957633 (eves).
ROMDOS XL in its own ROM box, large format, 800K, 464, 664, 6128 compatible. £15 plus £1 p&p. Dave Stitson, 4 Connaught Avenue, Mutley, Plymouth, Devon PL4 7BX ☎ 01752 254404.
DMP200 Amstrad printer plus manual, £35, ono; Maxam ROM plus manual, £10. Other bits, too, including tonnes of games and hardware. SAE to Nick, 153 Hamilton Road, Felixstowe, Suffolk, Suffolk IP11 7DR.
Games and PD on tapes for CPC464. SAE for list to Gary Smethers, 13 Meadow Close, Cononley, Keighley, W Yorks BD20 8LZ.
Software for sale: discs, tapes, serious, games. SAE to Bob Miller, 55 Den Lane, Springhead, Oldham OL4 4NN.
Many Amstrad tape games for sale, classic and not so classic. SAE to Sheelagh Regan, 41 Mount Road, Braintree, Essex CMY 3JA.
Amstrad stuff for sale. Includes 3-inch disc drive, Multiface II, CPC 464, colour monitor, SSA1 speakers and much more. Write to: David Barnsby, 10 Churchill Road, Earls Barton, Northhants NN6 0PQ.
Games for sale! All tape for CPC464. For price list, SAE to G Pearson, 14 Malton Road, Rillington, Malton, North Yorkshire YO17 8LS.
Loads of CPC gear. Monitor, modulator, over 150 *AA* and other mags plus covertapes. Going very cheap. ☎ 01243 821842.
Amstrad 6128, colour monitor, joystick, light-pen, DMP2000 printer, connection leads, cassette player, much software, documentation, Hundreds of games plus AA issues. Excellent condition. £225. David Hume ☎ 0181 4236130.
6128: Lemmings/SIM City, £15; disc, £13; tape: Snoopy/ATF – £6, disc £4.50, tape (incl p&p). GC and complete only. ☎ 0116 2705577 (Wednesday, Friday, weekends, eves).
DDI1 modified interface for FD1 drive to work with 464 Plus, also 3-inch disc games wanted. Jason ☎ 01482 830438.
Can anyone help? I am after a copy of instructions for game. Bob ☎ 01723 515863, I will pay for copy.
Vidi Digitiser, Microtext Teletext adaptor, Dart scanner for DMP 2000. Good prices paid for kit in good condition. ☎ 01245 496194.
CPC 6128, printer, software, blank discs, £150. ROMBO ROM Box, Protext and MS800 ROMS £30. 3-inch drive £20. 5-inch drive £50. ☎ 01993 891346.
CPC 6128, monitor, TV modulator, printer (manual), 150 cassettes, 80 discs including Tasword/Spell/poster, Advanced Art Studio, Mini Office II, lots of games, 41 *AA* mags, Light Pen and disc, tape deck, Multiface II, joystick, 3-inch disc drive and much more. All for £350 or nearest offer.
Ian ☎ 0151 480 9931 (Liverpool, 6-9pm).
Loads of discs and tape software, ROMs, books and hardware. SAE for list. John McNally, 15 Selwyn Drive, Hatfield, Herts AL10 9NH.
Amstrad tape and disc games. Full price and budget titles, boxed with instructions. SAE to Steve Church, 'Broadmead', Park Road, Paulton, Avon BS18 5NF.

WANTED

Needed to complete the set, *Amstrad Action* no. 85 with covertape. Chas ☎ 01284 764936. Suffolk.
Multiface for 464+. Will pay up to £20. Urgently needed. *AA*90 multiface cheats section also wanted. Copy will do. Can you help find these? John Evans, 45 Edward Street, Fairview Blackwood, Gwent NP2 1NY.
Multiface 1 or 2 wanted for Amstrad CPC6128. Pay good money. Jonathan Page, 1 Queens Road, Sandown, Isle of Wight PO36 8DT. ☎ 01983 408853.
6128: Lemmings/SIM City, £15; disc, £13; tape: Snoopy/ATF – £6, disc £4.50, tape (incl p&p). GC and complete only. ☎ 0116 2705577 (Wednesday, Friday, weekends, eves).
Can anyone help? I am after a copy of instructions for game. Bob ☎ 01723 515863, I will pay for copy.
Vidi Digitiser, Microtext Teletext adaptor, Dart scanner for DMP 2000. Good prices paid for kit in good condition. ☎ 01245 496194.
Assembler (464) and Dissembler. If you have either please get in touch. Mark Townend, 6 Mount Vale Drive, York, North Yorks YO2 2DN ☎ 01904 644609.
MPI Modulator for CPC 464. ☎ 01383 737221.

Cut it out?

There's no need to destroy your copy of *AA* when sending ads to our classifieds section. A photocopy is fine. The important thing is that we can read it and that you enclose contact details should we need to check the content!

AMSTRAD ACTION FREE READER AD FORM

Want some software? Want to get rid of something? You're in the right place. Fill in the details in the box below – one word to one box – and send it to: Reader Ads, *Amstrad Action*, 30 Monmouth Street, Bath Avon BA1 2BW.

Your name _____

Your address _____

_____

_____

_____

Post code _____

☐ **For sale** ☐ **Wanted** ☐ **User groups** ☐ **Services** ☐ **Other**

Basically basic

Simon Forrester needlessly overcomplicates your life, showing you how to manipulate relocatable machine code routines easily from BASIC and then pauses to wonder why nobody's cheering.

It's the same old story – there's so much you can add to BASIC with just a little bit of machine code, but writing the stuff is just way too much hassle. This is, after all, a BASIC tutorial, and you don't want to get swamped with overly complicated stuff, such as creating new commands.

So, if I were to tell you that there's an easy way to manipulate, manage, automatically relocate and run machine code routines, a way which is already hidden in the depths of Locomotive, you'd probably want to know more. Bear in mind, by the way, that you're not going to need an indepth knowledge of machine code to use this system.

Let's start at the beginning...

Variables

You're familiar with variables – the letters to which you assign values:

```
10 FOR a=1 TO 10
20 PRINT a
30 NEXT a
```

In this situation, the variable a is given a value by the FOR/NEXT commands, which is printed by the PRINT command. This is how variables are used to store numbers. You don't have to stop at that, though...

```
10 a$="Blimey!"
20 PRINT a$
```

This time, a variable has been used to store a string. You can tell it's a string by the '$' symbol that follows the variable name. What you're really interested in is exactly how this is stored in memory.

On location

If you were to look at the area of memory in which this string was stored, you'd see the first location containing a 'B', the next containing an 'l', the third with an 'i', and so on. They don't actually contain these characters, though – the location contains the number from 0 to 255 that the CPC uses as an ASCII code for that character (B is 66, for example). Similarly, if you look at a machine code program in memory, each location contains a number from 0 to 255, these numbers this time building up the machine code program.

'Wouldn't it be great if the letters that built up the word 'blimey' meant something in machine code when converted to ASCII characters?'

You're catching on quickly...

As an example...

Type in and run the following program, without worrying that it doesn't do anything notable, but without resetting your machine afterwards:

```
10 rot$="|
20 READ byt$
30 IF byt$="**" THEN END
40 byt=VAL("&"+byt$)
50 rot$=rot$+CHR$(byt)
60 GOTO 20
70 DATA 3e,07,cd,5a,bb,c9,**
```

Don't worry too much about how the program works, suffice it to say it takes the hexadecimal numbers stored in line 70 and fills `@rot$` with the letters they correspond to on the ASCII table. If you like, you could try:

```
PRINT rot$
```

This gives you an ASCII representation of the set of numbers, and proves the program worked. If all went well, you should hear a beep, as the second character is 07, which translates to a beep when printed, displaying nothing on screen. The reason the 07 code is in there is because this is one of those stupid, annoying machine code programs that just beeps, so you can check that it works.

Tracking it down

All you really need now is to find out where in memory `@rot$` is stored. Locomotive BASIC has a provision for such a time:

```
PRINT @rot$
```

Note the @ symbol before the variable's name. This is an automatic numerical variable that hovers somewhere between 0 and 65535. If you end up with a minus figure, don't worry, that's just the way BASIC prefers to think of the number it's dealing with. You can now call the routine, though:

```
CALL @rot$
```

With a bit of luck, you should hear a beep (check the volume on your machine if you can't hear it). This means not only that the system works, but that you've learned all you need to.

Loose ends

You've done it! `rot$` contains a machine code routine, and you have found a way to run that same routine. You can use the program to create any routine by changing the figures in the DATA statement on line 70, and store the variables using the OPENOUT command (and friends) that Angela Cook and Rob Buckley explained so ably in AA115. (If you missed it turn to the back cover to see how to order a back issue.)

What about 464s?

If you are a 464 owner and you get tired of the beep, you could try the following numbers to get your own `COPYCHR$` routine. This allows them to read characters from the screen (a feature lacking on the 464). The numbers are:

```
cd,60,bb,32,80,be,**
```

To use it, move the text cursor onto the square you want to check, CALL the routine, and PEEK the value from &be80. If you wanted to read the screen position 1,2, for example, and put the value in a variable called c, you would use the following commands:

```
LOCATE 1,2
CALL @rot$
c=PEEK(&be80)
```

Looking ahead

Keep watching this column, we'll print more of these little sets of numbers whenever we can fit them in, to give BASIC just that little bit more power. But until then...

Check it

Check the program is correct using TypeChecker – see page 16.

NEXT MONTH:

Create animations and colourful displays with palette switching with that writer of many colours and many guises Simon Forrester.

DTP The Full Story

'Publish and be damned', they say. Don't burn your fingers by forking out for the wrong package – use the AA guide to desktop publishing. Richard Fairhurst plays Beelzebub.

It's thanks to desktop publishing that this page of AA looks the way it does. Buried deep on the hard disc of a Macintosh in the *AA* offices is a file which, when loaded, looks the same as the one you have in your hands now: in colour, with screenshots and everything. The Art Editor creates an outline page with QuarkXPress, flows text on to it, adds some graphics, and juggles the whole thing around to produce a clear, readable layout...

Surprisingly, for a technique that can produce such high quality results, desktop publishing has only been around for the past decade. Since 1984, in fact. The year when both the Apple Macintosh and our very own CPC were launched. Despite the huge difference in price (£3000 versus £300), the technical capabilities of the 128K Mac of 1984 weren't that different to a CPC 464 – a faster processor and a bit more memory were about the size of it. The Mac's real innovation was its graphical user interface, and this is where DTP sprang from. Although books were increasingly being produced with computers, magazine and newspaper work only became realistically possible with a computer which treated text as a graphical object, to be styled in any font or size you liked.

Surprisingly, for a technique that can produce such high quality results, desktop publishing has only been around for the past decade

Although the gap between the CPC and the Mac has widened over the last decade, a disc-based, 128K CPC is still capable of producing decent pages for a fanzine, notice or poster. Most of the fanzines reviewed in 'Further Reading' – *WACCI*, *Artificial Intelligence*, *CPC User* – are produced using the machine they write about and one of the many DTP options available for the CPC.



MicroDesign: excellent graphics features, brilliant print-outs, clean user interface.

There are four main packages. All are highly accomplished programs:

- *MicroDesign Plus* (CampurSoft),
- *Stop Press* (AMS),
- *Page Publisher* (SD Microsystems), and
- *PowerPage 128* (Robot PD), which, er, I wrote.

I've ranked them in four key categories, but bear in mind that a third or even fourth place ranking is no insult when dealing with programs of this calibre.

Graphics

All four packages provide the basic graphics functions you'd expect. You can:

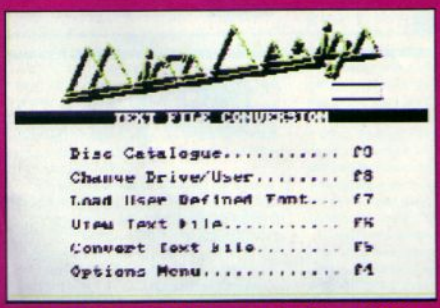
- draw lines, rectangles and circles;
- fill shapes with a user-definable pattern;
- copy an area of the page to a new location, and;
- undo your last action if you messed up.

So, no great surprises here.

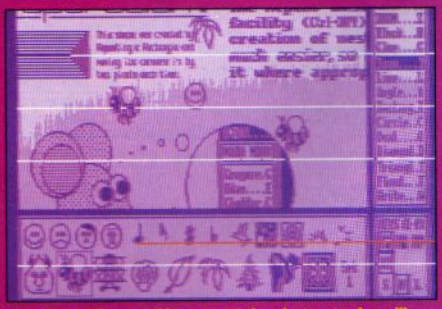
Stop Press wins on a simple numerical basis. It's packed with features, such as enlarging, reducing, reflecting, rotating and scrolling areas (although question why you should want to 'scroll' an area of the page, rather than moving it somewhere else).

Switching between operations, though, can be cumbersome. While to draw a line, you select the 'paint-pot' icon, followed by the 'shapes' menu, and the 'line' option. If you're especially unlucky, the program forgets how to draw lines, and you have to load in some code from the program disc first.

Although *MicroDesign* is missing some of the more esoteric features of *Stop Press* it wins points for sensible program design. For example, all the graphics options are grouped together in one section, where they can be accessed by a single keypress. Added to the unique icon system, which stores a set of small pictures in memory ready to be



MicroDesign Plus: some of this program's functions are held in a separate enhancer program.



MicroDesign Plus: use this program's icon feature to place silly pictures throughout your documents.

placed anywhere on the page, this gives *MicroDesign* the edge in graphics capabilities. It loses marks, though, for the enlargement routine which is in a separately-loaded program (the *MicroDesign Plus* enhancement program).

Stop Press wins on a simple numerical basis. It's packed with features such as enlarging, reducing, reflecting, rotating and scrolling

Page Publisher, too, provides the useful features of *Stop Press* as well as a clever user-definable pen shape feature, however, there is one vital omission – a zoom or magnify mode. An omission which makes fine detail work almost impossible. Another downer is the lack of visual prompting when drawing a shape. And although 'rubber-banding' is available as an option (it's standard on the other programs), it's very slow and makes the program almost unusable.

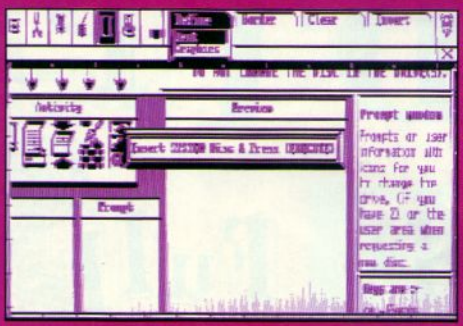
Graphics ranking
1 MicroDesign Plus
2 Stop Press
3 Page Publisher
4 PowerPage 128

PowerPage 128 does provide a zoom mode, but its graphics facilities are sparse compared to the other three. There is no rotation routine (although you can reflect shapes), no enlargement or reduction, no freehand option and there are no pen shapes.

Operation of *PowerPage 128* though, is quick and easy – drawing a line is simply a matter of pressing COPY, moving the cursor to the end point of the line, and hitting COPY again.

If it really were the case that 'the medium is the message', *MicroDesign*'s graphics power would make it a Hermes among DTP packages. However, the winner in the graphics section includes just one text option, 'Write', which lets you write in either the standard Amstrad font or a reduced version, single or double width. There is no word-wrap, no justification, nothing. The only consolation is that you can use the icon system to produce headlines and a number of excellent fonts are supplied.

For columns of text, you have to load the



Stop Press: you'll be looking at this 'Insert disc' prompt rather a lot when you use this program.

enhancer program which takes a plain text file and creates a clip art file containing this text in the font of your choice, ready to load into *MicroDesign*. However, this method still won't format your text – that's up to your word processor – and so you lose features such as wrapping text around pictures, micro-justification, proportional text, and so on.

Stop Press and *Page Publisher* have similar (good) text capabilities. You can type text directly on to the page or import it from a disc file. You can set columns anywhere on the page, and micro-justified, proportional text is no problem in any size. Both programs allow you to load three 16-by-16 fonts at once (*Stop Press*, allows you to load the standard Amstrad font, as well), and edit them any way you like. *Stop Press* has another advantage, too – the excellent autoflow option, which automatically lays text out around any pictures on the page. This is ideal for embedding clip art between columns, say.

PowerPage 128 makes up for its poor showing in the graphics department with a very respectable set of text tools. It, too, can produce columns of micro-justified, proportional text (in either an 8-by-8 font or a 16-by-16 headline font), and you can enlarge and edit the fonts easily. That nice autoflow facility is also present.

Best, though, are the bold, italics and underline options, which you can change in and out of, half-way through a paragraph. If you are importing a *Protext* document you can save these as control codes which *PowerPage 128* automatically picks up. Although rather slow these are, however, the best text-handling facilities of the four.

Text ranking
1 PowerPage 128
2 Stop Press
3 Page Publisher
4 MicroDesign Plus

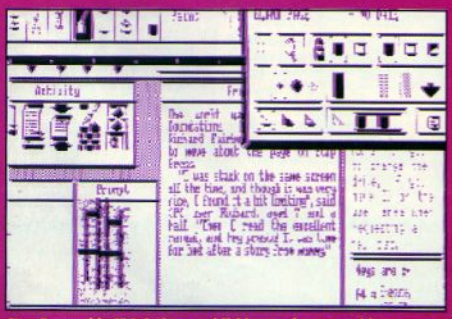
Printing

It really is a case of swings and roundabouts for CampurSoft: *MicroDesign*'s output is excellent, whether the page is printed as A4, A5 or even A6 (a quarter of the size of this page). There's also an option for a 'strip' format page which combines four of these files on one sheet of paper to create an incredibly high resolution page, with an output which is almost as good as that of a cheap laser printer. However, it's nigh on impossible to create anything more complicated than a poster in this format, as each page needs to be split over four horizontal files. A column-based fanzine layout, for example, is a definite no-no.

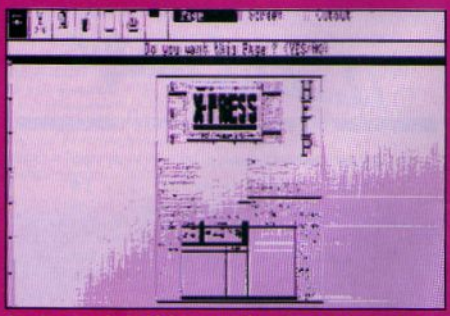
MicroDesign has a 'strip' format page which creates an incredibly high resolution page with an output almost as good as that of a cheap laser

There's more... You can select normal or 'single-pin' printing (highly impressive, but a sure-fire way of wearing out your printer), and light or dark input. *Page Publisher* and *Stop Press* can't top this, but both are capable of producing good quality A4 or A5 print-outs in draft or high quality.

Unlike the other three, *PowerPage 128* is designed around an A5 page size (as used by many



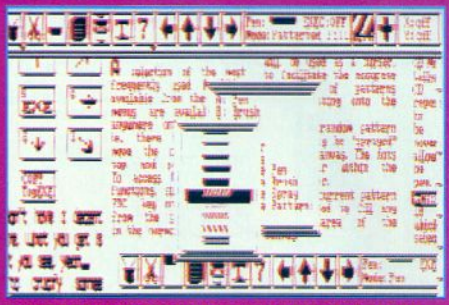
Stop Press: this CPC desktop publishing package provides every graphics option you could want.



Stop Press: packed with features and capable of doing most of what you could expect a CPC DTP package to achieve.



Page Publisher: this is a good all-rounder of a desktop publishing program for both text and graphics.



Page Publisher: with this DTP package you have all these pen shapes at your disposal to draw with.

fanzines) rather than A4. This means its A4 output is coarse and blotchy, although you can alter the 'print quality' option. A5 print-outs are more satisfactory than those produced by the other programs.

All of the four programs output to standard Epson-compatible 24-pin printers. The output is usually slightly elongated. Stardump is a utility which solves this problem for *MicroDesign* users.

Printing ranking

1 MicroDesign Plus
2= Page Publisher
2= Stop Press
4 PowerPage 128

Ease of use

After consistently high ratings throughout the test, this is where *Stop Press* falls down. Although a lot of effort has been put into the actual programming behind the human interface (which, as with the other programs on test, is a menu and window-based system), the design has lost its way a little in the process. In *Stop Press* simple operations often require not a little navigation through a set of menus and unclear icons.

The program's creators, AMS, are also renowned as mouse manufacturers. As a result mouse users will find *Stop Press* more comfortable than those with a joystick. Keyboard users will find the pointer speed uncomfortably fast and the need to simulate three mouse buttons awkward.

But, by far the worst failing, is the need for *Stop Press* to constantly load code from the program disc, even for relatively simple operations. The actual program code is very fast, and should serve as an example to all other DTP programmers. Despite this, designing a page with *Stop Press* takes more time to do than with any other of the packages I have reviewed. here.

In fact, the other packages are, in general, highly usable. *Page Publisher* and *PowerPage 128* hold all the program code in memory at one time, so you don't need to constantly flip discs. A few *MicroDesign* features are held in the *MicroDesign Plus* enhancer, a separate program (though you can easily access it from the main code). As these are generally the lesser used features, plus the slightly feeble text-to-clip art conversion routine, you probably won't be too put out by this.

Page Publisher and PowerPage 128 hold all the program code in memory at one time, so you don't need to be flipping discs constantly

The *Page Publisher* menus are rather slow to appear, which can become irritating when you know your way around the program – *PowerPage* and *MicroDesign* both bring up their option lists almost instantly, and boast more manageable cursor control. *Page Publisher* is most easily controlled with a joystick or mouse, and *MicroDesign* works happily with keyboard, joystick, or mouse. *PowerPage* users are limited to keyboard control, although this can make drawing operations, especially, faster when you get used to them.

Available keypresses are constantly displayed on the *MicroDesign* screen, which makes operation extremely easy – you very rarely need to refer to the (brief) manual. *Page Publisher*, too, is supplied with a short but complete reference.

Stop Press almost recovers some of its former glory here, with a superb manual, full of illustrations and tutorial walkthroughs. *PowerPage 128* loses out by being an (almost) PD program. There are plenty



Page Publisher: this program comes out well, if not outstandingly, in each class.

Coming soon...

Version 2 of *MicroDesign* has been planned for years. Radical's Rob Buckley has now been appointed to code CampurSoft's new DTP package. We'll keep you informed.

Other options

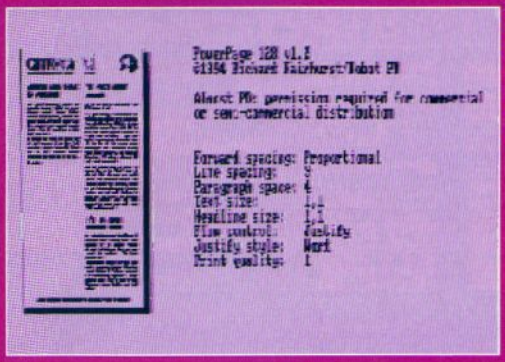
Although the programs we've tested here are the most powerful and widely-used CPC desktop publishing packages, a few others exist. You may be able to find *Pagemaker Plus*, Edition One or the originally titled DTP in a PD library. Although none of these offer anywhere near as much power as the big four, you haven't got much to lose at PD prices. In addition, there's the original *PowerPage*, forerunner of the 128K version. Although slightly clunky, it's pretty much the only option for 64K users who aren't satisfied with text-only pages.

Moving slightly upmarket, three homebrew programs, *Pagemaker Deluxe*, *Advanced DTP*, and *PageSetter*, offer a bit more welly than most of the PD alternatives. Sadly, these programs are no longer available, and they offer little or nothing that even the original 64K *PowerPage* can't muster.

One remaining commercial package, Mirrorsoft's *Fleet Street Editor*, never took off. So, if you see a cheap copy anywhere, make sure it's the second, improved version, rather than the original bugged code.

You can publish from your desktop without using a DTP package, of course. There are a number of other CPC-based options available to would-be press barons. If you're producing a more staid publication, you might like to take the approach of the serious fanzine *WACCI*. Instead of using *Stop Press*, *MicroDesign* or the like, load up a word processor – *Protext*, for example – and produce columns of text. You can produce artwork and headings with *Advanced Art Studio* or *GPaint*, and assemble the whole lot onto a sheet of A4 with scissors and glue, ready for the photocopier. If this is your route, there are several programs to spruce up your WP output including *ProPrint*, *Protype*, *Qualitas*, and *ImagePrint* (on this month's covertape) which replaces your printer's standard typeface with a quality, user-definable offering. Although these are largely irrelevant if you own a smart new 24-pin beast, those with geriatric Epsons and DMP-2000s need them.

There's also Sentinel Software's *Pro-Ext* which plugs on to *Protext* and allows you to incorporate large headlines and clip art into a standard *Protext* document, and as such is ideal for simple DTP. [And, yes, I wrote that one, too.]



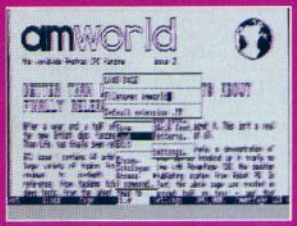
PowerPage 128: has been adopted by fanzine editors all over Britain as their program of choice.

of instruction files, but they are supplied on the disc itself, so you need to print them out yourself first.

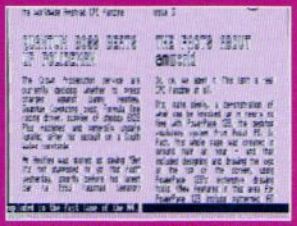
Accessing disc files isn't difficult with any of the packages although the *MicroDesign* and *PowerPage 128*'s filing routines are more friendly and powerful overall. Finally, the packages but *MicroDesign* can execute external commands, such as |DIR and |ERA. However, only *PowerPage* proved happy to access other sideways ROMs, such as Maxam and Utopia.

Ease of use ranking

1 MicroDesign Plus
2= PowerPage 128
2= Page Publisher
4 Stop Press



PowerPage: this program's page files are automatically compressed to save space.



PowerPage: the strength of this desktop publishing package is in its text handling.

Buy, buy, baby

ProPrint – CampurSoft ☎ 0141 554 4735
Protext, Protype – OJ Software ☎ 01257 421915
Pro-Ext – Sentinel Software ☎ 0181 876 7032
Stardump utility – Goldmark Systems ☎ 01707 271529, £14.95
Stop Press – AMS, was £34.95, try small ads
MicroDesign Plus – CampurSoft ☎ 0141 554 4735, £29.99
Power Page 128 – Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF, £2.25 (includes disc) plus SAE
Page Publisher – SD Microsystems ☎ 0195 483750, £25

Keeping you paged – the top four DTP packages



Stop Press

Stop Press is a true veteran of the CPC (*AA* featured a review of its original incarnation, *Pagemaker*, more than eight years ago).

Stop Press is packed with features, and does most of what you could expect a CPC DTP package to achieve. Both text handling and graphics facilities are very good indeed.

Despite all this, *Stop Press*'s awkward way of working and frequent disc accesses are likely to drive you up the wall. However, if you can survive constantly swapping discs on a single-drive machine, and you have an AMX three-button mouse, *Stop Press* could be the package for you.

Why not try using a friend's copy for a week or two before handing over your dosh?



MD Plus

MD Plus features excellent graphics features, brilliant print-outs, a clean and simple user interface...

MicroDesign has a lot going for it. If you're producing mainly graphically-based documents – posters, for example, or headlines and illustrations for a fanzine where the body text is printed with a word processor – then *MicroDesign* is by far your best choice.

Fanzine editors have to pass up the chance of the lovely headline fonts supplied, but as it stands, the current version of *MicroDesign* really hasn't progressed far enough from its MODE 2 art/design roots to be a flexible choice for integrated text and graphics work.

Few fanzines would risk printing CPC-generated fonts without being proportionally spaced, at least.



Page Publisher

Page Publisher comes out well, if not outstandingly, in each category I tested it. However, fanzine editors, in particular, will miss the ability (present in the other three packages) to import the .CUT clip art format. Originally a creation of the *Stop Press* developers this is now the standard for CPC and PCW DTP programs. It limits you to SD's own two picture discs plus a decent selection provided on the B side of the program disc.

If you can live without that and the zoom and autoflow options of other packages, and if the laid back way the menus roll on to the screen doesn't offend, then *Page Publisher* is a good all-round choice if you don't want the fanzine-centred features of *PowerPage* or the all-out graphical approach of *MicroDesign*.



Power Page 128

PowerPage 128 has been adopted by fanzine editors all over Britain as their program of choice, and it's not difficult to see why. The powerful text formatting options, with the quick keyboard-based operations that speed up page layout, are ideal for the purpose.

Its preference for A5 print-outs, although great for the fanzine editor, isn't so useful for notices and similar applications. A4 printouts are available, but they're a bit tatty. *PowerPage 128* is noticeably lacking in the advanced graphics department, too, which might either cause you to run to an art package (such as the *PD GPaint*) or to *MicroDesign Plus*. At the low PD price, though, you're not going to lose out on much by trying it.

DTP Jargon

CLIP ART Ready-made pictures which you can load on to a page.

JUSTIFICATION Adding extra space between words so that the left and right margins of a column of text are both straight. Micro-justification, adds a fine amount of space rather than a whole 'letter space', giving a more professional result.

PROPORTIONAL TEXT Writing where a letter i, for example, takes up less space on the page than the wider letter m inhabits. *Amstrad Action* is laid out in proportional text, but your Amstrad screen usually displays non-proportional writing.

RUBBER-BANDING An easy way of positioning graphics on-screen, where the line or rectangle you are about to draw is redrawn as you move the cursor to set its destination point.



Further reading

Simon Forrester trawls the clear blue ocean of fanzines and finds a silken pearl among the coarse nets. Perhaps, though, it's really just a matter of scale...

REVIEW

8BIT

PRICE: £1.25 per copy or get ten issues for £10. *AA* readers can buy individual copies for £10 – see 'What's happening', page 3.
EDITOR: Brian Watson
ADDRESS: Harrowden, 39 High Street, Sutton-in-the-Isle, Ely, Cambs CB6 2RA
☎ 01353 777006.

On its fifth bi-monthly issue, *8BIT* has changed its name. Formally known as *8BIT Mart*, the magazine dropped a word to signify the change in its stance. Brian Watson, the Cambridgeshire-based editor, says he is "primarily concerned with ideas and information for users of 8-bit computers". To this end, issue 5 is tying up the loose ends, so to speak.

What you get

You a lot for your £1. The 16-page magazine comes with two extra supplements, each consisting of four A4 sides. These work well, as the first is dedicated to readers' small ads and the second is a more relaxed, 'comic' supplement which contains more personal news, as well as supplier contact lists and helpful quotes that I can rip off, for example:

"The fear of danger is 10,000 times more frightening than danger itself". This is a quote from Robinson Crusoe by Daniel Defoe. Lower your daily fear quotient by regularly backing up your work.'

I get the feeling that this is from someone who's used to computers. Quotes aside, *8BIT* is a great fanzine: it covers topics from C64 loading problems to CPC *Protext* tips in a friendly, cheerful-yet-competent, style.

There are probably three people somewhere in Warwick who don't like the idea of reading about different machines, but *8BIT*'s editor is clearly a man with a devoted passion for the CPC, PCW, Spectrum and C64, and this clearly shows through in his work.

In the style of...

The secret to *8BIT* is the writing team, in that they don't really seem to have one – you get the feeling that the writer has abandoned writing in favour of popping round for a chat. Information and ideas are woven through happy tales of 8-bit exploits, while Tom Dean happily talks about the contents of his discmag, *Impact*. The combination of snippets and longer pieces works well, making for an comfortable and entertaining read.

The other benefit of the mag is its disproportionately high number of adverts. When Brian implements the new policy of fewer ads the abundance of information that adverts create will be missed. I have little doubt in Brian Watson's ability to more than make up for the adverts, but they do provide a useful service of their own, taking the pressure off the editorial to keep up with what absolutely everybody is doing.



8BIT

ISSUE 5 April/May 1995

Harrowden, 39 High Street, Sutton-in-the-Isle, ELY, Cambs. CB6 2RA

Editor: Brian Watson Tel: 01353 777006

EDITOR'S COLUMN - ISSUE 6

Never one to stand still, 8BIT MART is now 8BIT. This reflects the fact that although advertisements are still very much part of the whole, it is now primarily concerned with ideas and information for users of 8-bit computers.

To that end, this issue is by way of being a round-up of unfinished business. So, if I've omitted anything sent in recently, I'm sorry but will try to get it in next time.

Among items 'in the pipe' for the future I have a long piece on desktop publishing using an 8bit computer and the optional extras to get the results you want onto the page and then into your prospective readers' hands.

Instead of simply concentrating on a single computer or program as other magazines have done, I have recruited a professional design consultant with years of experience in advertising and the news media. He has gone back to first principles of presentation and set out the fundamentals for 8BIT readers, including cost implications of the options at different stages.

He said he found it a challenging exercise to work within a smaller range of options than he is accustomed to, and during the couple of days we spent on the project, he said that all the 'rules/guidelines' of good design practice could be fully implemented on a poster, magazine, or other sort of publication produced using an 8-bit computer as the heart of the process.

THE BIG SCOOP

Have we got a scoop? We have got a scoop. See page 12 for the big news. Sorry it did not make the front page, as such landmark stories should, but most of the layout work was done and I didn't want to delay the news by redesigning the whole thing.

COMING SOON TO THESE PAGES

I would like to do a comprehensive feature on prized (rather than tape or disc) fanzines on 8-bit computers, but I need your help.

If you publish an 8-bit magazine please send me a recent copy so that I can tell the world what you are doing. Ideally, a letter with the frequency of publication and subscription rates would be appreciated as well.

If you subscribe to one of more of these small-press publications I'd like to borrow a recent issue to see what I, and others, are missing. I will return such copies promptly. Please don't leave it to someone else.

The only magazines I already have to hand (so don't need more of) are CWBUG(?), Cornwall PCW Club Newsletter, CPC User, The Disc Drive, Sixty-Four, and WACCI. Whether club publications or 'open subscription', I'd like to cover both. There is no comparison or judgement element in this: I just want to get the information on what's out there to a wider audience. Thanks to all those who helped. See you in June.

Brian Watson.

8BIT, as it stands, it's a good read. More please.

Appearances can be...

The only real criticism that can be levelled at *8BIT* is its appearance, but to be honest that's not really an issue – the lack of *PowerPage* masterpieces doesn't detract from the text.

Personally, I hope *8BIT* doesn't change its style too much – to move away from the atmosphere and feel of the latest issue would be a shame. As you read this, the improved issue should be hot-footing its way to the *AA* office, and you can be sure of an update next month. In the meantime,I recommend you get issue 5 and share my high hopes.

Content: Clear, friendly, unpretentious. 85%
Appearance: Clean, acceptable, on the up. 70%
Overall: 85%

NEXT MONTH:

Bonzo's Scrapyard (see What's happening, page 3) and the *Better than life* disczine from *AA* contributor, Richard Fairhurst.



DTP – a practical guide

If you enjoyed Angela Cooke's review of *MicroDesign* and devoured Andrew Chapman's key to spotting printed material produced using desktop publishing (*AA*116) you'll already have read Richard Fairhurst's advice in our main feature this month (see page 11). Indeed you are probably just about to run out to get yourself a shiny new DTP package to run on your CPC! However, if you're planning to produce a fanzine with it, you need more than layout skills...

The beauty of fanzines is that they can survive on a small, special interest, readership. The point? You don't have to please the entire CPC user base in each issue. You could, for instance, produce a magazine aimed at general users; fill your pages with PD reviews; give advice to beginners or talk about old computer games (*Digital Press*-style).

Try to cover everything, though, and you won't have the time, energy or space to go into much detail on each subject, and you'll be wasting your talents. Don't be afraid to just rave about PD from cover to cover, as you'll have produced an excellent PD review fanzine with a readership which loves PD.

NEXT MONTH:

Simon Forrester starts a miss-it-at-your-peril series on producing a fanzine. If you want to get something into print and make it look professional don't forego this opportunity to learn from a pro!

Assembly line

Typing listings

- Type in exactly what we print.
- OMIT the first four letters in each line.
- Only press RETURN when you get to the end of a command line. If a command line goes on to two lines don't press RETURN at the break. Your lines on screen should break in the same place as those in the mag.
- The dots you see in some lines (like the one between 'well' and 'done' in the line PRINT|Well·done|) indicate spaces. The number of dots tells you how many spaces.

TypeChecker

This program enables you to check whether you've typed *AA* listings in correctly. Type it in, then SAVE it for future use. When you want to doublecheck that you typed a listing in correctly:

- load up *TypeChecker*;
- type NEW;
- type in the listing of your choice;
- when you have finished type LIST.

At the end of every line a highlighted code appears. It should be the same as the code printed in front of the same line in *AA*. If it isn't you have typed that line incorrectly.

```
FAML 10·'·TypeChecker·V1.0·--By·Simon·Forrest
     er---Dec·1992
MAOJ 20·'·For·Amstrad·Action·--·Public·Domain
DANK 30·MEMORY·&5FFF
CAJK 40·csum=0
GAME 50·FOR·addr=&A000·TO·&A05B
DAKJ 60·READ·byte$
GAJB 70·byte=VAL("&"+byte$)
FACF 80·POKE·addr,byte
GAFB 90·csum=csum+byte
DALK 100·NEXT·addr
OACI 110·IF·csum<>&2ADD·THEN·PRINT·|Checksum·
     Error|·:END
LANE 115·POKE·&A001,PEEK·(&BB5B):POKE·&A002,PEEK·
     (&BB5C)
KANI 120·POKE·&BB5A,&C3:POKE·&BB5B,&3:POKE·
     &BB5C,&A0
MACM 130·PRINT·|TypeChecker·V1.0·Installed|·:END
MABC 140·DATA·CF,FE,93,FE,04,C8,00,A0,F5,C5,D
     5,E5,FE,0D,C8,22
LACJ 150·DATA·A0,5F,16,00,2A,5A,A0,19,22,5A,A
     0,E1,D1,C1,F1,C3
LAFJ 160·DATA·00,A0,3E,2B,C3,B8,A0,3E,18,C3,0
     0,A0,2A,5A,A0,7C
LADI 170·DATA·C3,45,A0,7D,C3,45,A0,3E,18,C3,0
     0,A0,21,00,00,22
LACN 180·DATA·5A,A0,C3,1B,A0,F5,E5,0F,C6,41,C
     D,BB,A0,F1,E6,F0
KAJC 190·DATA·1F,1F,1F,1F,C6,41,CD,BB,A0,C9,0
     0,00,END
```

Turning TypeChecker off (it is automatically initialised when you RUN the program above) and back on again is quite simple:

```
POKE &BB5B,0  turns it off, while,
POKE &BB5B,3  turns it back on.
```

Fine tune last month's 'catch the block with your bigger block' to produce a classic gaming experience, with Richard Fairhurst.

How do you get an on-screen score which is constantly updated? You are using the, extremely slow, standard firmware routine (&BB5A), to print the score, so adding the score-printing routine (ld a,(score): call pr_a) to the main loop of the program slows it by a ridiculous amount. Because the score only changes when a new ball is launched from the top of the screen you can locate the score-printing routine in this part of the program, where speed of operation isn't so critical. So, delete the original score-printing code from the program's quit routine, and add a call pr_a immediately after the score is updated (ld a,(score): inc a: ld (score),a).

Theoretically, this is no problem but a couple of aspects of the program's operation conflict with this. 1 The score first appears as 000, then 000001, then 000001002, because you're not resetting the cursor position so the score is printed in the same location every time. To fix this place the machine code equivalent of a LOCATE command – ld h,1: ld l,1: call &BB75 to locate at (1,1) – before the score is printed. Put this before the score is updated. 2 If the ball comes down on the left-hand side of the screen it wipes out the score as it falls. So change the cp 2 after call random (at the .retry label) to a cp 8, so the program rejects any ball position which would wipe out the score.

Sound it out

You now have professional-quality code and graphics but no soundtrack. However, if you have a soundtrack-generating program here's your moment. (*BooTracker* users have to shift package to use their music in a game such as this: it uses the firmware sound routines which won't work in your game because... you've turned the firmware interrupts off.)

Other packages work by generating sound every 1/50 second: perfect, as your game is timed in the same way. To add sound you add a CALL to the main game loop. If the music is located at &4000, the CALL is probably to &4003, but this depends on the package. In addition, you need a CALL &4000 to initialise the music at the start of the program, and a CALL &4006 to shut it up before quitting.

Bounce your ideas

Your game can't really play any faster so how about making the bat continue in the direction you send it in and bouncing off the 'walls' for good measure?

You need to set up a new variable to do this. Add .btdir dw 0 to the variables section, with btdir standing for 'bat direction'. This initially is 0, so that the bat doesn't move until a key is pressed. Later it contains +2 for a bat moving right, and -2 for a bat moving left. You can simplify the left and right routines, then, to simply set this variable:

```
.left   ld hl,&FFFE: ld (btdir),hl: ret
.right  ld hl,2 : ld (btdir),hl: ret
```

The Z80 can't handle negative numbers as such, but &FFFE is equivalent to -2. So, if the bat position is 34, adding &10000 to it would (if the Z80 could cope with such large numbers) result in &10022. As the Z80 can only handle 16-bit numbers (four-digit hex), the result 'wraps round' to &0022 – or 34 again, so it follows that to subtract 2, you can add &10000 minus 2, which is &FFFE.

Get it right (or left)

Finally, you need to add code to move the bat right or left and bounce it when it hits a wall. Add this simple code to the start of the .bat sub-routine:

```
.bat    ld de,(btdir)
        ld a,(btcol): add e
        ld (btcol),a
        ld hl,(btaddr): add hl,de
        ld (btaddr),hl
        or a : jp z,revers
        cp 70: jp z,revers
```

This calls another routine to 'bounce', or reverse, the bat's direction. Now change 2 to -2, and vice versa and add this routine (after any sub-routine):

```
.revers ld hl,(btdir)
        ld a,h: cpl: ld h,a
        ld a,l: neg: ld l,a
        ld (btdir),hl
        jp bat
```

CPL inverts each bit of the byte in A, and NEG takes it from 0. Using your knowledge of binary, see if you can work out how this changes between 2 and -2.

Track them down

Soundtrakker – try the *AA* reader ads, page 9.
ChaRleyTraCker – coming soon from Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF.
Equinoxe – try the *AA* reader ads, page 9.
Soundhakker Pro – try *AA* reader ads, page 9.
BooTracker – covertape *Amstrad Action*, issue 92, May 1993.

NEXT MONTH:

Start on a proper maze-type arcade game. So begin planning those screens now...!

Parados on parade

Richard Wildey barks the orders and watches how the Parados ROM responds. Attentionnnnnn!

The Parados ROM has been around for a while but as the original review was over a year ago (*AA*99, page 55) it seems a re-review is necessary. This is because some people still haven't got the message that Parados is *the* large format operating system you should get.

Simply the best

No matter what system, if any, you are using, Parados will no doubt replace it with its ability to recognise 22 different formats, including RomDOS, MS800 and SDOS discs. It doesn't, however, recognise RoDOS discs, but then again not much does. Another incompatibility is that Parados doesn't work under CP/M Plus but does work under CP/M 2.2. You can, of course, use standard Data format discs under both. As well as acknowledging this myriad of formats from your initial CPC boot-up, you can read, write to and format across them.

A stranger in Parados?

Initially Parados is transparent to the user, taking up only six bytes in memory, until you issue an RSX to bring up the Parados disc utility. This is split into two windows with a pop-up menu running along the bottom row. The filename window takes up a large proportion of the screen. To the right of this is the information box, telling you what format your logged disc is, how many K are available on it and so on.

This utility lets you perform just about every option you could require, except that there's no exit – you have to reset the computer to quit.

You have two choices:

- disc and,
- file options,

each accessible from different menus. To access one you have to hold down [SHIFT], the other [CONTROL]. At first the keypresses seem a bit fiddly but you soon get used to them.

In the disc menu the main options are

- Format,
- Verify,
- Configure and,
- Log.

They do what you would expect. An important aspect in the Configure menu, which is scarcely mentioned in the instruction manual, is that you can set up Parados to read the second side of a 3.5-inch disc. This side switching is useful if you get a disc from a user who has a side switch when you don't.



Parados: software side switching is one of the, useful, options.

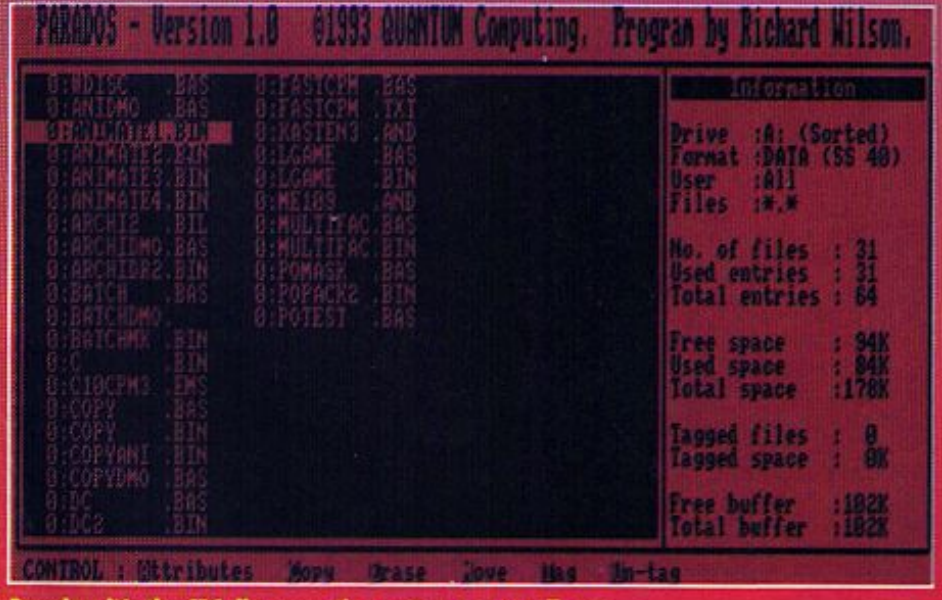
Go backwards to format

The menu bar along the bottom shows a backup option which, in fact, was never implemented. You can format discs quickly – and backwards!

Backwards formatting is a clever feature which is rarely used by other such disc utilities. This is where the computer starts formatting from track 39 and counts down to 0 which means that the directory of the disc is the last thing to be wiped.

All is not lost

Backwards formatting means that if you suddenly realise that you are formatting the wrong disc, which happens all too often, you only lose the last few tracks. If the disc were not full all the files might still be intact, and at worst some should still be there. There are several occasions on which I could have done with this facility. There is nothing worse than realising you are formatting the disc in drive A



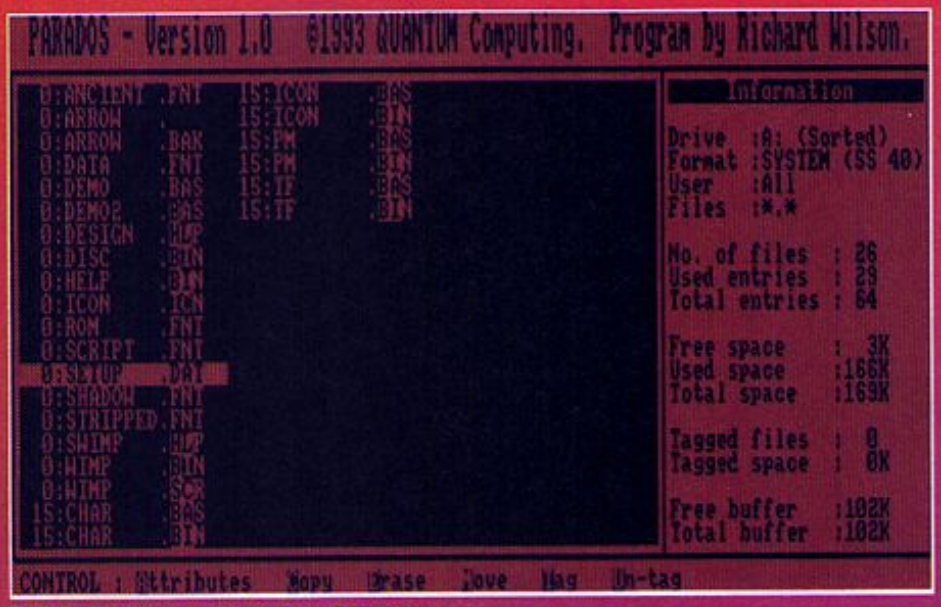
Parados: it's the CPC disc operating system par excellence.

Filling in the format

With 22 different formats on offer which do you choose? You should format 3-inch discs to the standard Data Format to ensure compatibility with other machines. Though, if you are the only person who uses the disc, then you can use one of the special Parados formats that gives you 203K on one side of a 3-inch disc.

Parados also provides compatibility for Ultraform an old *Amstrad Action* Type-in that also gives you 203K on a side.

It's on the 3.5-inch discs that Parados really comes into its own. Double-sided 80 track formats are those with the potential for more than 700K on one disc. Six of these are on offer, the most reliable of which is RomDOS D1 which gives you 716K and a possible 128 directory entries.



Parados: all users are displayed at once.

instead of B just after you have seen the track number move up past 1.

Looking at the menu

In the files menu you have the power to:

- Change file attributes;
- Rename;
- Erase and;
- Move a file to a different user area.

A header reader would have been a nice addition...

In the main window the files are spread in columns of three each with 20 rows. To select a file you must use the up and down cursor keys. If there are more than 20 and the next column is already in use you cannot use the left and right keys to jump across which is rather annoying.



Parados supports 22 different formats.

On discs with more than 60 files you can scroll onto the next page. The names are displayed regardless of the user number or whether files are hidden or not. You can set Parados to read a single user if, in the unlikely event, you have very organised disc structures. You can, however, set this figure to 229 to view all the erased files on a disc, which you can then move into user 0 to unerase them using the move option.

Play tag and win!

To Copy, Rename, Erase or Change the attributes of multiple files you tag them and perform the operation in one go. For ease you can tag or untag a whole disc with one keypress.

Copying multiple files is where the Parados buffer shines, on a 128K machine you have around 100K free memory for the buffer, it varies with the number of files on the logged disc. You may think that this is plenty but if you are lucky enough to own a silicon disc or any extra memory Parados recognises up to 576K which gives you a 550K buffer. This buffering minimises disc swapping and speeds up copying when you are transferring files.

To sum up

Parados is the best operating system of its type on the CPC. The utility is both powerful and apparently bug-free, but it does have a couple of irritating features. These aside, if you were confused as to which DOS to get you should now be convinced that there is only one worth considering.

If, on the other hand, you've already got an operating system, is it worth upgrading to Parados?

Yes! It is worth installing Parados even if you have the previous king of operating systems, RomDOS, (the original RomDOS, that is, not the bugged RomDOS XL).

The Parados disc copier is an essential utility for RomDOS, after all what other piece of software lets you copy from a RomDOS disc to an MS800 disc all in one fell swoop?

So, throw away MScopy, MaxiDOS, RomDOS and all associated programs and let Parados do the lot for you in one package.

Complete compatibility

Parados sits quite happily in any ROM slot in a ROMboard though you can use Parados as a complete replacement for AmsDOS, the original disc operating system inside your CPC. This not only saves a space in your ROMboard but, more importantly, gives you complete compatibility with other software.

This means you can use your large format discs with Stop Press, Art Studio, and all those other programs that wouldn't normally work. However, you can't use it with CP/M Plus as this uses all its own disc routines.

In the older 6128 and 664 machines the AmsDOS chip (40015) is in a socket and you can gently prise it out with a screwdriver and pop Parados in in its place. On later 6128s this Amsdos chip was machine soldered to the motherboard. Replacement should therefore only be performed by anyone with extremely competent soldering skills – this is definitely not something you should attempt if you are a novice as you could easily write off your computer.

For once 464 owners have an advantage as the AmsDOS ROM inside the DD-1 interface is in a ROM socket so you can replace it with ease. The only drawback of installing Parados directly into you CPC is that you can no longer use DR LOGO 3 under CP/M as part of this program is stored on the AmsDOS ROM.

Parados regained

Product: ParaDOS
Price: £14.99 (ROM only)
Supplier: CampurSoft, 10 McIntosh Court, Wellpark, Glasgow G31 2HW
☎ 0141 554 4735/fax 0141 227 4486.

WIN! WIN! WIN!

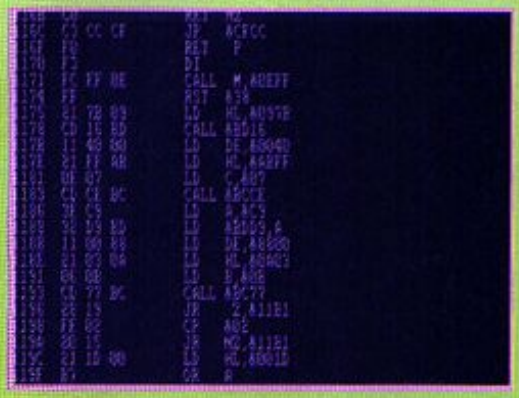
Get the top CPC operating system free – win a Parados ROM worth £14.99! Simply tell us who wrote Paradise Lost and get your answers on a postcard or on the back-of-an-envelope to us by Friday, 30 June 1995 at Paranoid, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW, or e-mail us at aa@futurenet.co.uk.



It's for the CPC, it's recommended by AA, and it's up for grabs. Parados could be yours, free!

So why do you need Hackit?

Hackit is a one-slot romboard with many uses. Could it be what you're looking for? Richard Wildey helps you decide.



Hackit: the graphical memory dump.

Hackit is a foreground ROM so it initialises before BASIC, or any other ROM, should you want it to. There is an on and off switch so it's completely out of the way when you don't need it.

What's the use?

Hackit has many uses:

- it is an excellent software development tool;
- it's pretty useful for hunting down pokes for infinite lives in games, and,
- you can use it to, er, examine, not copy of course, other people's code;

With *Hackit* you can break into a program while it's running and do such helpful things as:

- disassemble to the screen or disc;
- edit the memory, search for values;
- save areas of code.

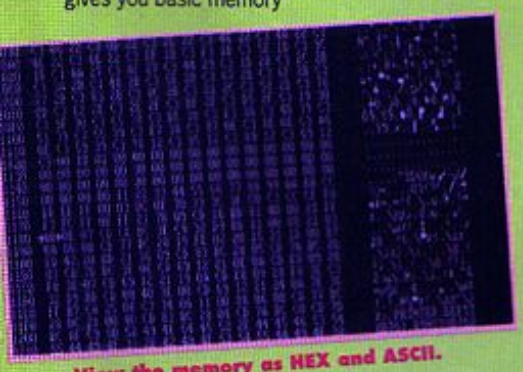
Hackit also has many other practical features. For example, it also includes an assembler. This is notoriously user-unfriendly but it does its job. For example, with the Multiface you can CALL directly, but if you use *Hackit*, once you have broken into a program you cannot return unless you know the memory address at which you stopped it.

Hackit v the Multiface

People are often under the misconception that *Hackit* is similar to the Multiface, but, in fact, the two are not really comparable. The Multiface gives you basic memory editing features whereas *Hackit* is a specialised tool for serious users with a knowledge of assembly language.

Hackit can also help you advance your understanding of machine code as you can disassemble other people's programs to find out what makes them tick. Don't always take what *Hackit* tells you as gospel, though, because, undocumented op codes fool it and cause it to stop disassembling.

Hackit doesn't like indirect addressing, thinking mnemonics such as LD HL,(&2033) are LD HL,&2033, in fact, *Hackit* has been known to make up op codes of its own! However if it's only your own programs that you're looking at, and you stick purely to programming legal commands, *Hackit* should have no problems.



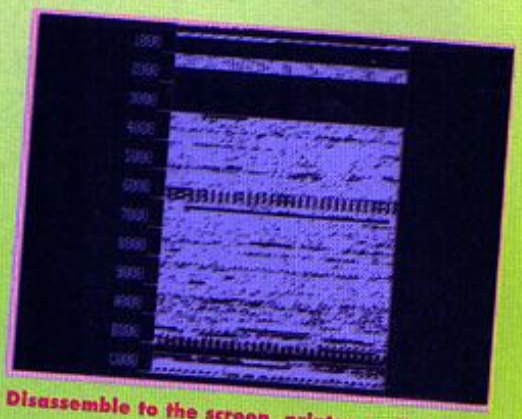
View the memory as HEX and ASCII.

Open wide and say 'ah!'

If your program has crashed you can dive in and examine the memory to check everything is in order. You could also try forcing it out of a situation by calling sub-routines directly with parameters that *Hackit* lets you set up.

Other features within *Hackit* are:

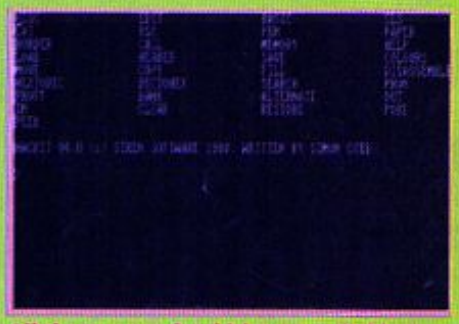
- a header reader;
- hexadecimal to decimal converter;
- the ability to fill and move code, and,



Disassemble to the screen, printer or disc.

- the ability to perform IN and OUT operations.

All in all *Hackit* is an excellent piece of hardware but it is let down by poor software. The assembler is awful to use but the dissembler certainly makes a programmer's life a lot easier.



All the commands which are available.

Where to go

Unfortunately, Siren Software no longer make *Hackit* so it's time to trawl those *AA* reader ads again, or place your own, see page 9. Clubs such as WACCI and UAUG (see the Amscene Directory on the covertape for club contact details) may also be able to help you out if you do want to get a copy of *Hackit*.

There are several versions of *Hackit*, but those beyond Version 4 have the assembler *and* are reputed to contain fewer bugs. There are also some French versions floating around so make sure what you know what you're getting. *Hackit* originally retailed at £35 but was reduced to £25 so don't pay much more, if any, than this.

Recovery positions

***Hackit* is handy if your computer crashes and you are in danger of losing hours of work. Assuming the computer has just 'hung', rather than reset, you can jump into *Hackit*, enter [D] to initialise AmsDOS then input [S] with your chosen filename to save. Then pick the relevant addresses from those in the box, use the same address for Entry and Load as the given start address, and then you should find that the panic should be over. Where the length of code varies use the graphical memory dump ([M]) to find the end then fine tune this figure with the memory editor.**

Program	Start	Length	Additional information
Protext (ROM/disc)	&172	Unknown	Save as Binary
Maxam (ROM/disc)	&170	Unknown	Save as Binary
OCP Art Studio	&4000	&4000	Change to Bank 2
TUSS clipboard	&4000	&4000	Change to Bank 4
BASIC	&170	Unknown	Save as BASIC

Make it up!



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Yup, we have three copies of *MicroDesign Extra*, worth £14.99 each, to rush to the winners of this month's coruscating competition. This is your chance to win a package which can make your posters and newsletters outshine those of the competition.

Use *MicroDesign Extra* for its

- clip art;
- sheet music facilities;
- headline fonts.

In her review of *MicroDesign Extra*, in AA116, (Designs on layout, page 18) Angela Cook concluded:

"If you have *MicroDesign* and use it a lot then *MicroDesign Extra* is an almost essential piece of software. However, if you don't use *MicroDesign* much, and then only to play around with while you are trying to work out how to use it, don't bother buying *MicroDesign Extra*. But, if you fall into the latter category, then you are really not getting the most out of your CPC."

And Angela should know because, in the same article, she confesses:

"I used to use *MicroDesign* for designing front pages, newspapers and reports in connection with my homework when I was still at school."

Angela finds that *MicroDesign Extra* enhances the versatility of *MicroDesign*. So, if you are into design or need to layout almost any kind of document, and have, or are thinking about buying, *MicroDesign* you need *MicroDesign Extra*. So, if you agree, why not take up this opportunity to win a copy? Remember, we have *three* copies up for grabs.

Simply answer the question which follows, then send your answer on a postcard or on the back-of-an-envelope to:

It's a pig of a question, Amstrad Action, 30 Monmouth Street, Bath, Avon BA1 2BW or e-mail it to aa@futurenet.co.uk before Friday, 30 June 1995.

And the question is:

What was the original name of the original company that produced the original *MicroDesign*?*

*Clue: look in the *MicroDesign Extra* review in AA116.

New designs?

For more information about *MicroDesign Extra* and to find what's happening with the proposed updated version of *MicroDesign – MicroDesign 2* – contact CampurSoft, 10 McIntosh Court, Wellpark, Glasgow G31 2HW ☎ 0141 554 4735, fax 0141 227 4486.

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Future Coming soon SFX

TECHY forum

AA's resident archivist Richard Fairhurst returns with a hardware project from the past and also answers some of your more up-to-date questions.

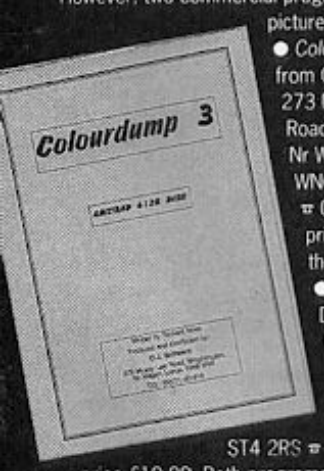
QUESTIONS AND ANSWERS

Colour dumped

I recently got the Citizen ABC-24 colour printer and the OCP *Advanced Art Studio* for my 464. I have used different colours in my pictures but when I print them out they only print in black and white. And yes, I do have a colour ribbon.

Please tell me how to print in colour.
Paul Walker, Harrogate

Advanced Art Studio's built-in print routine is only for black and white printers – affordable colour printing is a relatively recent development and OCP is an old program! However, two commercial programs print pictures in colour:



- *ColourDump 3* from OJ Software, 273 Mossy Lea Road, Wrightington, Nr Wigan, Lancs WN6 9RN ☎ 01257 421915), price £15.95, and the slower,
- printer driver from Datel Electronics, Govan Road, Fenton Industrial Estate, Fenton, Stoke-on-Trent ST4 2RS ☎ 01782 744707, price £19.99. Both programs are on disc only.

However, a word of warning...

Both programs are designed for Star colour printers. If – as is highly likely – your Citizen doesn't use the same codes (of the form ((C)) to set a colour), you need to ask a friendly hacker to tweak the program, or give up on printing pictures in colour altogether.

Check your printer manual!

Pin-head

Can you tell me a firm which supply a plug-on side switch for my 3.5-inch disc drive? Avatar doesn't seem to be supplying them now or, at least, not for me – they sent my money back.
Derrick Frost, Northampton

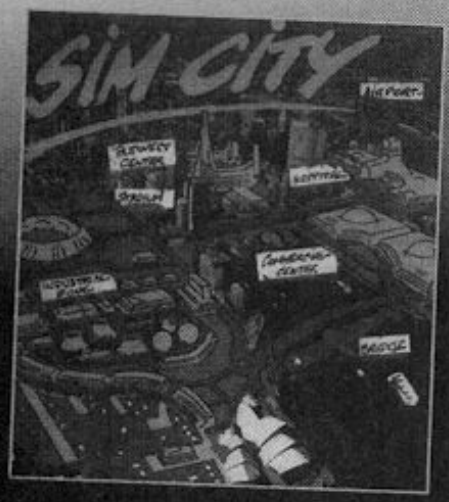
Sadly, no other CPC firm ever supplied plug-on side switch units. However, it is relatively easy to add a (nonplug-on) side switch yourself. If you're not happy with a soldering iron try giving the following instructions to a bod at your local electronics shop...

Look for a 34-wire cable connecting your CPC to the 3.5-inch disc drive. The red wire on one side connects to pin 1, the wire furthest from it connects to pin 34. So, by counting between them, locate the cable which connects to pin 32.

Now whip out your soldering iron and connect a switch (SPDT, meaning, single pole, double throw) between this and one of the cables immediately next to it. In other words, I mean pin 31 or pin 33, which are both ground.

Now use this switch to flip between side 0 and side 1, to use RomDOS or ParaDOS double-sided formats, set it to side 0.

That should do it!



Disappearing acts: first the software company, then the game?

Evaporated disc

I do not know if others have had this problem, but perhaps you can help.

I have two Infogrames disc games (*Teenage Queen* and *Captain Blood*), both of which have evaporated off the discs. These have been stored with other discs which are still okay.

How do I go about replacing my games as the company, which used to advertise in *AA*, has disappeared. I am now worried about *Sim City*, produced by the same company: on side

Covertape clinic



Save our sprites

I've managed to capture a couple of sprites using *TUSS* off the *AA*115 covertape, but I can't save them. Option 9 from the menu doesn't access the disc or anything. And how can you save a sprite as ASCII anyway? Does it save a description of what the sprite looks like or something?
Robert Waring, Southend

Okay, here's how to do it. First of all, select the appropriate saving method using option 9. Save as ASCII generates db statements with a hex dump of the sprite, so it can be directly incorporated into assembly language source code. You should also use this option to enter the filename to save the sprite under.

Now, return to the sprite display screen, and press COPY. You can then use the cursor keys to wipe any rubbish you don't want saved off the screen. Finally, press COPY again, and the sprite is saved to disc.

The full (and rather hefty) *TUSS* manual is available from the original authors of the program, Sentinel Software, priced £2 ☎ 0181 876 7032.



Do anything you wanna do: save sprites using TUSS and option 9.

Spelling checker blues

I can't get *PowerSpell* to work on my computer – a 464 with 3.5-inch disc drive.

Is there an error in the program, or do I need a memory expansion?
Sally Tomlinson, Salford

The latter, I'm afraid. *PowerSpell* has a 48K dictionary, and because the 464 only has 39K available for programs (the rest is taken up by the firmware and screen memory), there's no way it will work on the oldest Amstrad.

Getting hold of a memory expansion, too, could be tricky now that Datel are no longer supplying them, so it's back to trying the *AA* classifieds section on page 9. But, because *PowerSpell* uses its own bank-switching routines (rather than relying on the 6128-only *Bank Manager*), you can run it without problems should you purchase a 64K expansion.



Don't back off, back up. But no need to exert yourself – Xexor will back up most discs for you.

A, I have ADH.BIN (15k), ADL.BIN (40k), DISC. (1K) and nothing on side B.
Does this seem right?
G Hayes, London

I doubt you need to worry about *Sim City* in particular. The 1K file is the loader, the 15K file the loading screen, and the 40K file the main code – all perfectly above board. Side B of disc games is usually blank, too.

You might like to try backing up your disc games and storing the backups in a safe place, to prevent future catastrophes.

The best program currently available for such a job is Richard Wilson's *Xexor* (from Sentinel Software, 41 Enmore Gardens, East Sheen, London SW14 8RF, cs94rnw@brunel.ac.uk, £14.99). Although it won't back up all games it can cope with more software than any other copier.

Are you, by any chance, storing your discs near a magnetic field of any type, as produced by monitors, power supplies, TVs, speakers and such like? This could be the source of your problems.

Alternatively, it could be that someone might merely be trying to prevent you playing vile and depraved software such as *Teenage Queen*...

Insane in the membrane

I have a 664 with a damaged keyboard membrane, and I am having difficulty finding a replacement.

If I can't find one can I remove the disc drive, make a casing to house it and connect it as a first disc drive for my 464? And if so, how?
W Gilhespy, Aylesbury

If you haven't done so already, CPC PLC are the people to contact for all your replacement Amstrad parts (CPC PLC, Component House, Faraday Drive, Fulwood, Preston PR2 4PP ☎ 01772 654477).

You could also try the *AA* classifieds on page 9. You might find that someone, somewhere, has a dead 664, with a perfectly decent keyboard that he or she is willing to get rid of. (Having said this, though, I must admit that keyboard failure is probably the most common fault with 664s!)

Disc drive mechanisms are pretty much the same on all CPCs, but, sadly, there's more to a 464 'first drive' than just the actual disc drive itself.

The CPC 464 doesn't have any circuitry to control the disc drive, or even an AmsDOS ROM. This is why a first drive for the 464 originally cost £160, whereas a second drive was priced at a much more reasonable (ahem) £100. Again, your best bet is to try the *AA* classifieds to see if anyone is offering the working part of a DDI-1 which has partially broken down.

TOP TIPS

Hardware to port...!

By popular demand, this month's Top tips presents a project to build an A38. We could have reprinted another project which graced the pages of an even older copy of *AA*, but the, by far the more professional, design of this one bears repeating. (If you want to build the other project it worked by routing the cassette motor on/off signal to bit 8 of the printer. This is fine if you can stand a 'click' every time you want to print a character above 127, but it's a little tatty!)

If you're not confident with a soldering iron, or you don't know what IC stands for, get someone else to assemble the project for you. Attempting to build a hardware project where you are not quite sure what you are doing is a sure-fire way to damage your printer, your CPC, and various parts of your anatomy.

On the up side, however, this isn't a particularly complex project, so if you have a reasonable amount of experience with such things you shouldn't really encounter too many problems.

Plus owners, by the way, needn't bother with this – you have an 8-bit printer port built into your machine, which only requires a short listing to get up and running, and which we'll deal with when the original CPC project is finished.



Map-lin it out. You can build an A38.

Shopping list

All of these parts should be readily available from any reputable electronics components supplier. Get the Maplin Electronics (mail order company) catalogue (below, left) from your local W H Smith's, look out for branches of Maplin in large cities or try their customer services ☎ 01702 552911 to find your nearest branch.

You need:

- one each of the following ICs: 74-133, 74-138, 74-273, 74-241, 74-02, 74-121. These are usually catalogued as, for example, 74HC133 (the CMOS version) or 74LS133;
- a socket for each, so add two 14-pin IC sockets, two 16-pin sockets, and two 20-pin sockets to your list;
- one socket to hook up to the (50-way) edge connector on the CPC;
- one 36-way Centronics connector for the printer. If you use a CPC-specific printer lead you need a more standard male-to-male lead to use this interface.

The port also requires:

- three R1/2/4 4K7 Ohm resistors;
- an R3 150 Ohm resistor; and a
- C1 1 5F capacitor;
- a Vero-Q stripboard, although difficult to get hold of, is ideal for mounting the whole project on, thanks to its 'IC-ready' etchings. And finally,
- the wire! Wire wrap, which is thinner than the normal stuff, makes fine electronics work such as this a good deal easier.

Hard facts

The project sits on the expansion port of your CPC, rather than on the printer port, and implements a whole new 8-bit data port. In addition, there's the necessary strobe output (used to tell the printer that a new character has been sent) and 'busy' input. Theoretically, then, you could connect two printers to your CPC at once, one off each port, although why you should want to do so is a different matter...

To let software (including BASIC) use the new port, you need to type in a short listing that redirects the firmware print routine to use I/O addresses &FBF9 (the new data port) and &FBF8 (the strobe/busy port).

Here's a simple listing to do the job.

```
100 MEMORY &9FFF
110 FOR n=&A000 TO &A058
120 READ a$: POKE n,VAL("&"+a$)
130 NEXT: CALL &A000
140 DATA 3E,C3,21,28,BD,11,00,A0
150 DATA CD,52,A0,11,27,A0,CD,52
160 DATA A0,11,2D,A0,CD,52,A0,11
170 DATA 37,A0,CD,52,A0,21,F1,BD
180 DATA 11,43,A0,CD,52,A0,C9,C5
190 DATA CD,43,A0,C1,C9,C5,01,F8
200 DATA FB,ED,48,CB,41,C1,C9,C5
210 DATA 01,F9,FB,ED,79,0B,ED,79
220 DATA C1,37,C9,01,32,00,CD,2D
230 DATA A0,20,EC,10,F9,0D,20,F6
240 DATA B7,C9,77,23,73,23,72,23,C9
```

Note, however, that any software that reinitialises the firmware or uses its own print routine – which, incidentally, includes anything which is CP/M-based – needs to be hacked severely before it can use the new facilities.

NEXT MONTH:

For probably the first time, Techy Forum, presents a, sort of, 'Next month' box! (*AA* readers faint all over Britain.)

Due to space restrictions, you'll have to wait another four weeks for information on how to put the port together. Sorry. However, if the amount of mail we've received on this subject is anything to go by, Maplin needs to stock up on parts...

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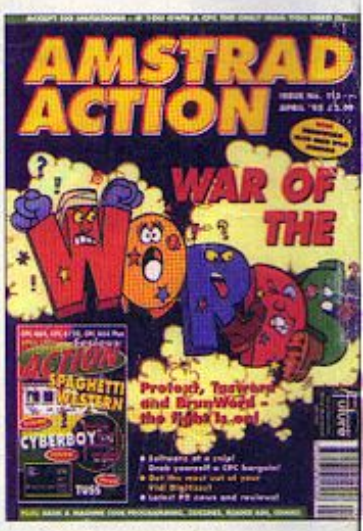
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