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CPC GX4000 PL



ISSUE No. 81
JUNE 1992
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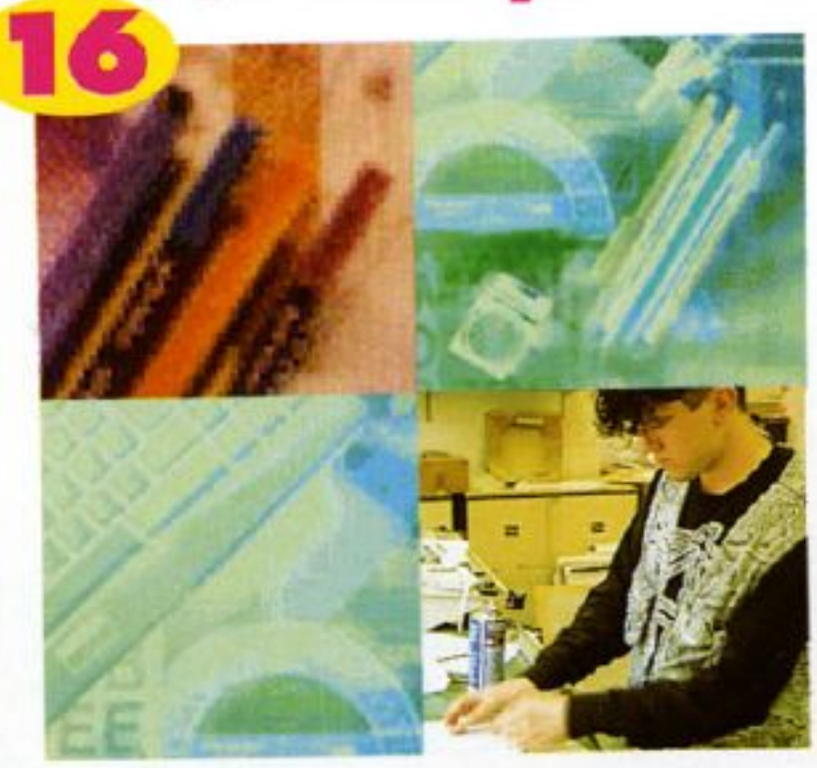
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July-December 1991

LINE UP

Get into print



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Don't like the magazines on the newsagents' shelves? Think you could do better? Then find out how to go about producing your own fanzine...

Action Replay



32

NEW SECTION! So that we can give original budget games full-size reviews, we're incorporating them into the main *Action Test* section... which means a new, separate section for budget re-releases (hurrah!)

Survey special

12


GIANT 1992 SURVEY

Change the face of Amstrad Action!

Now's your chance to change the face of *Amstrad Action* as we head into 1992. The Amstrad market is changing all the time, and we aim to keep up with it. Most of all, though, we want to keep up with our readers!

We want to know what machine you have, what you use it for, what you want to see in *Amstrad Action*. In fact, we want to know everything about you and your computing!

THE INSIDE PAGES

FILL IN THIS FORM!

All the latest CPC news... PLUS the results of our giant 1992 reader survey AND a report fro this year's European Computer Trade Show

the buyers guide

Desktop publishing

54

To go with our special feature on fanzines this month, we give you the run-down on the best desktop publishing packages for your machine.

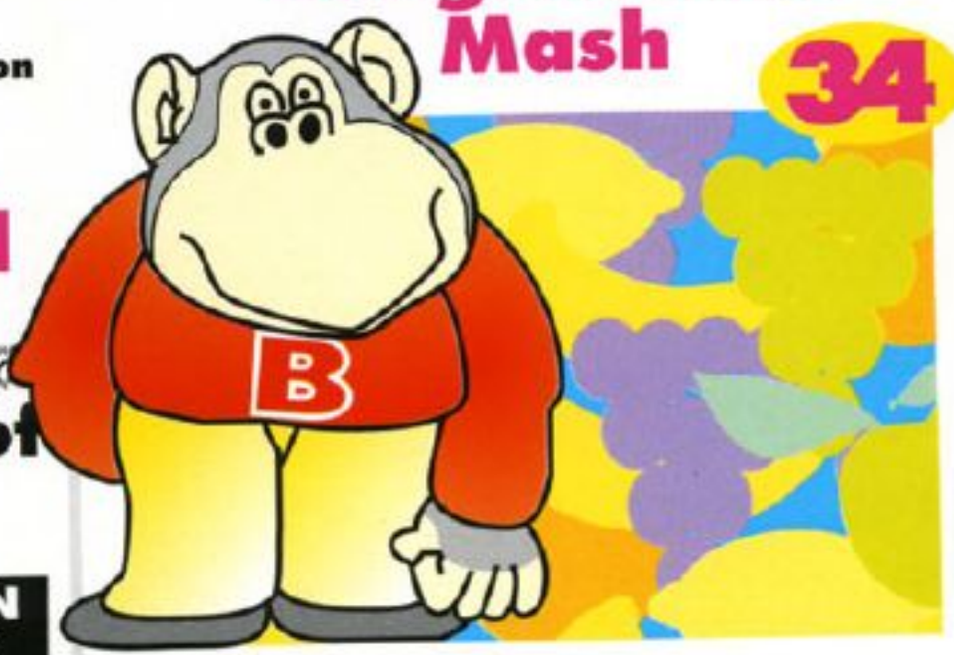
The French Resistance



30

Publishers everywhere seem to be moving away from 8-bit machines in favour of 16-bits and consoles. But not French CPC stalwart Loriciel... we look at five of their latest games

Bangers and Mash



34

No, it's not what the *AA* team is eating for lunch. In fact it's the latest release from budget softies Alternative. Bangers and Mash are the two monkey heroes collecting fruit in a forest...

serious

16 **GET INTO PRINT** Publishing your own fanzine could be a lot easier than you think

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25 **THE WACCI PAGE** Starting this month, user group Wacci presents its guide to CPC-ing

50 **TYPE-INS** More innovative readers' programs, plus Jerry Glenwright's BASIC tutorial

54 **BUYERS' GUIDE** Tempted by our feature on fanzines this issue? Then check out our survey of the best DTP software around

games

14 **ON THE GRAPEVINE** *The Addams Family* may be Ocean's last ever CPC release – but it looks like the company's going out with a bang...

27 **TOUCHDOWN** We review a new American Football sim that relies on brains not brawn

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30 **THE FRENCH RESISTANCE** French software house Loriciel is staying loyal to the CPC

32 **ACTION REPLAY** Starting this month: a new section devoted to budget re-releases

34 **BANGERS AND MASH** A bit of monkey business from Alternative Software...

35 **CHEAT MODE** This month: map for *Dizzy, Prince of the Yolk Folk* PLUS a complete solution!

40 **BALROG** More *GAC* know-how, plus loads of letters, tips and adventuring clues...

44 **HOW A GAME IS MADE** Part 2 of our special series on the development of a game, from the drawing board to the retailer's shelf

56 **BUYERS' GUIDE** For all you armchair athletes, the best CPC sports simulations of all time

regulars

4 **COVERTAPE** You wanted more space devoted to the covertape progs? Well you've got it!

7 **REACTION** Contenders for the nickname compo show their faces (but can you stand it?)

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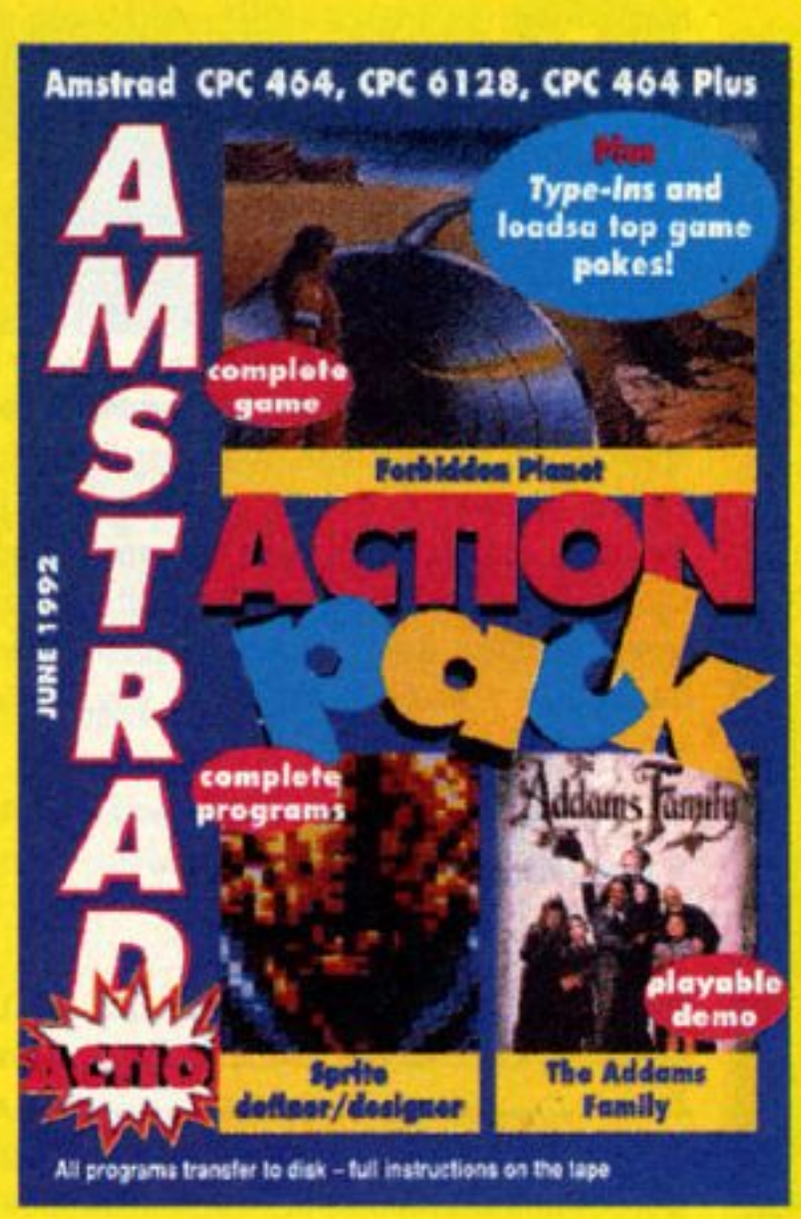
46 **SUBSCRIPTIONS/ BACK ISSUES** Missing an issue from your collection? Here's how to fill those gaps... and make sure it never happens again!

48 **SPECIAL OFFERS** We scour the CPC world for the best deals... and then pass them on to you

58 **AAFTERTHOUGHT** What are we going to get up to next month? Here are a few little teasers

15 covertape

ACTION pack



■ ***Forbidden Planet*** **– tough, 3D vector-graphic shoot-em-up on a planetary scale!**

■ ***Sprite definer/driver*** **– a pair of programs from *AA* reader Sean McManus**

■ ***Type-Ins AA79*** **– the complete set of readers' programs from the April issue – and no typing needed!**

■ ***Pokes galore!*** **Another huge crop of pokes from our resident hackers... including some help for those stuck on recent *AA* covertapes**

■ ***The Addams Family*** **We've managed to score you this fully-playable demo of Ocean's latest (and last?) film licence. The bad news is, the demo requires 128K to run. The good news is that it looks triff!**

HOW TO LOAD YOUR COVERTAPE

Loading the programs couldn't be easier! Type RUN" (followed by RETURN) and press a key to start the tape. (A shortcut way to get RUN" is to hold down CONTROL and tap the small ENTER key.)

A menu screen will appear in a short time. Select the program you wish to load. Press SPACE to highlight the program you want followed by RETURN to load the program.

Note that BASIC progams (e.g. the pokes) must be loaded direcly from BASIC with the RUN" command.

* If you have a disk drive connected to your machine you'll first have to type ITAPE to switch the machine to tape loading rather than disk loading. (The I is obtained by pressing SHIFT and @) The computer will load the next program.

program details over the page

Disk owners read this!

If you have a disk drive, you'll only ever have to load from the tape once – all programs are transferred easily to disk.

Insert a blank formatted disk into the drive and the covertape at the start of side one into your cassette player. Connect the REM socket if you have one (6128 owners) – it'll automatically stop the tape in the right places when accessing the disk drive.

Load the menu program in the normal way and select the TRANSFER TO DISK option. Follow the on-screen instructions and press a key when the computer asks you to. It's as simple as that!

If you have problems you'll be asked to rewind the tape and try again. If so, don't panic – follow the advice for tape loading troubles. Still no luck? Then Ablex will replace your tape. See overleaf.

disk offer

Owners of the 6128 Plus are unable to connect a cassette recorder to their machines. If these or any other users would like a copy on disk, simply snip off the coupon on the corner of this page and send it with a cheque/PO for £2.00 made payable to Ablex Audio Video Ltd to:

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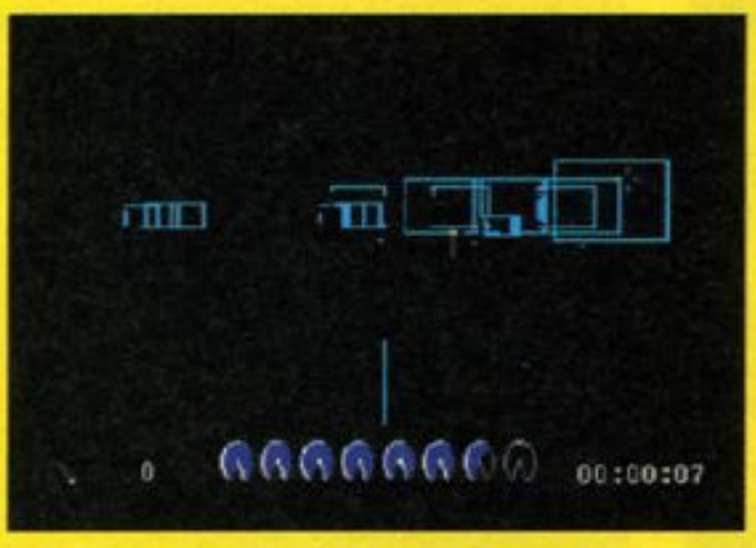
1 Forbidden Planet

complete game

Loading: *Forbidden Planet* can be run direct from the main menu.

Evil Lords, eh? They just never learn. After having his butt whupped in *Dark Star*, the Evil Lord has returned to threaten the universe in *Forbidden Planet*. As The Man Who Stands Alone, Even In a Pub (You Know, the One Who Looks a Bit Morose And Whom Nobody Asks To Join Them In A Drink), you have to stop EL any way you can. The best way we've found is to beard the villain in his lair, and then blow it up.

Forbidden Planet is a sort of cross between the *Star Wars* arcade machine and an excited beagle.



■ ***Forbidden Planet* might look a bit duff at first glance, but you'll get hooked.**

It's a full 3D vector-graphic shoot-em-up - you buzz through the Evil Lord's empire, blasting his minions and raiding his code stores in search of the dude's main base. You start your mission on Planet X, and by referring to the map have to find the four code stores and blast 'em to bits, so gathering the escape code sequence that allows you to move onto the next planet in the galaxy.

Everything is in this game is user-definable, enabling you to customise *Forbidden Planet* just the way you want it. It's a bit of a cult thang (as they say), and the kind of game that grows on you. Look at Rod and Adam – they started off much preferring *Southern Belle*, but now *Forbidden Planet* leaves them speechless. Oh by the way, we lied about the excited beagle.

freeze frame

LINES OF FIRE



Using your laser sights (1), you have to zap the enemy towers (2), while dodging the fizzling plasma bolts (3). The planetary force shields are a bit knackered, leaving useful gaps that you can nip through (4). Keep an eye on your energy level (5), cos it has a nasty habit of leaking away if you don't. (Tsch. Modern technology, eh?)

• ***Forbidden Planet controls***
Keyboard or joystick can be used

N	Up
M	Down
Z	Left
X	Right
Q	Accelerate
A	Decelerate
SPACE	Fire
1	Display map
2	Quit game
3	Display codes found
4	Return to game

3 The Addams Family

playable demo

Loading: *The Addams Family* is on side two of the tape, and can be run direct from the main menu. 128K required.

Platform japery abounds as we dish up a massive chunk of the latest big name licence from Ocean. Based on the smash hit movie, set in the Addams' famous house, this is a flashback to the platform-em-ups of old (*Manic Miner*, *Technician Ted*, and all that mob).

It's very tricky too. Lots of the puzzles you'll encounter will require precision timing and a very steady hand. We give you a few clues in the box below, but this is just for the first few screens. The rest you'll have to suss out yourselves. Yikes.



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• ***The Addams Family***
Keyboard or joystick can be used

Q	Up
A	Down
O	Left
P	Right
SPACE	Fire
R	Pause

Starting out with the Family

tips tactics



Big poles shoot out of the ground – careful timing and patience are needed here.

Two big jumps immediately on entering the screen are needed to get past this bit.

You travel across on the pot-like thing, but you must jump that white bit. Tricky.

Two jumps the moment you arrive. You use the knight as a kind of springboard.

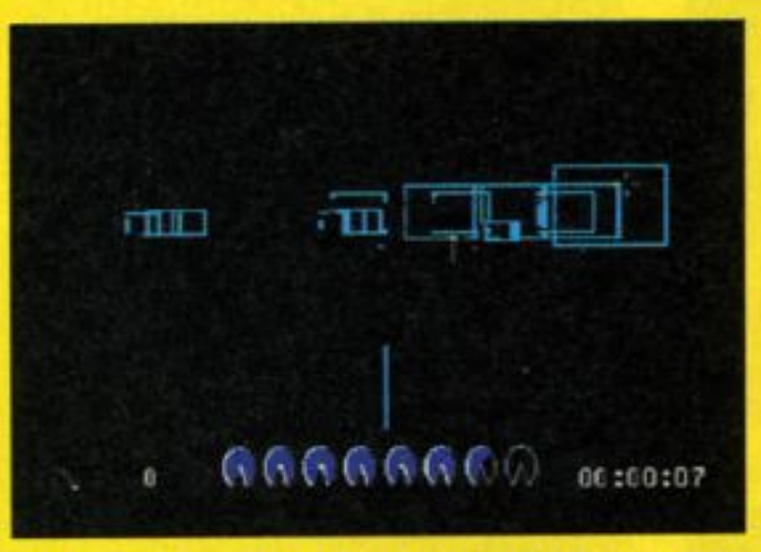
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reaction



Politics, funny old game eh? We at *AA* were most upset to see popular local comedian CHRIS PATTEN losing his Bath seat (or should that be bath chair, ho ho) at the recent election, so we offered him a chance to escape the dole queue by editing the *AA* letters pages. He declined the offer, Adam P promptly threw a sulk over us making the offer and... er... we haven't got anyone to answer the letters this month. Sorry.

A LOAD OF BULL

I have some highly valuable information for your readers. Bull Electrical, 250 Portland Road, Hove, Sussex BN3 5QT (% 0273 203500) are selling GX4000s (customer returns) for £12 and CTM644 monitors for £75. Ring for details.

Colin Byrne
Co Meath, Ireland

TALKING RUBBISH

To suggest that the word "rubbish", as used to describe something that isn't any good, is no longer in common use, is a very poor excuse for using vulgar expressions. A few minutes search through Roget's Thesaurus would give you dozens of credible alternatives!

This reader, who until recent months, has enjoyed *AA* for many years, feels that you should set a better example, for the sake of your younger readers who no doubt copy you.

Dr Alexandar Bourne
Bristol

CUT THE CRAP

It would seem to me, someone who twenty years ago (at fourteen) had his ear clipped for saying "damn", that the use of the word 'g*t' is acceptable as long as insulting the recipient is acceptable. The use of the word 'crap' would indicate that the editorial staff do not wish to be known as polite or educated, therefore I would question the wisdom of having these people in these positions, drawing pay!

I suppose I shall be told to 'get real', whatever that means, and that I am out of touch and over the hill. But I still believe that those in a position to guide our thoughts, especially the thoughts of the young, have a moral obligation to use proper English.

Ken Dunn
Tidworth, Hants

PARTY ON DUDES!

How's it hangin' *AA* dudes and babes? You are now reading the most truly outstanding letter ever! Me (James Walker) and my most excellent compadre and colleague David Purcell, are the CFE (Campaign For Eight-bits).

Like, we are totally sick and most bogusly tired of the way in which 8-bit owners are constantly slagged off by 16-bit owners and ignored by software houses! This is truly worse than bogus... it's totally BOG!

We should stop fighting one another and get together, to show the most unprecedented 16-bit scum and most truly ignorant software houses how many of us there really is. Stand up and be counted!

James Walker
Liverpool

AN EXPLANATION

I think you didn't quite understand what I meant by my question "Do you like lard?", so I'll explain roughly what I meant...

When I said lard I didn't mean the white, butter looking, human type stuff you get from Sainsbury's. Dear me, no. I meant REAL lard. Real lard can only be found in a top secret place, in a far away land. Real lard is not lumpy or white, nor is it called lard there. The only other person in the world who knows about this is my friend Daniel. I am not going to tell you any more or lard will not like it. So I don't want to hear another bad word about lard, or sprats, from you ever again.

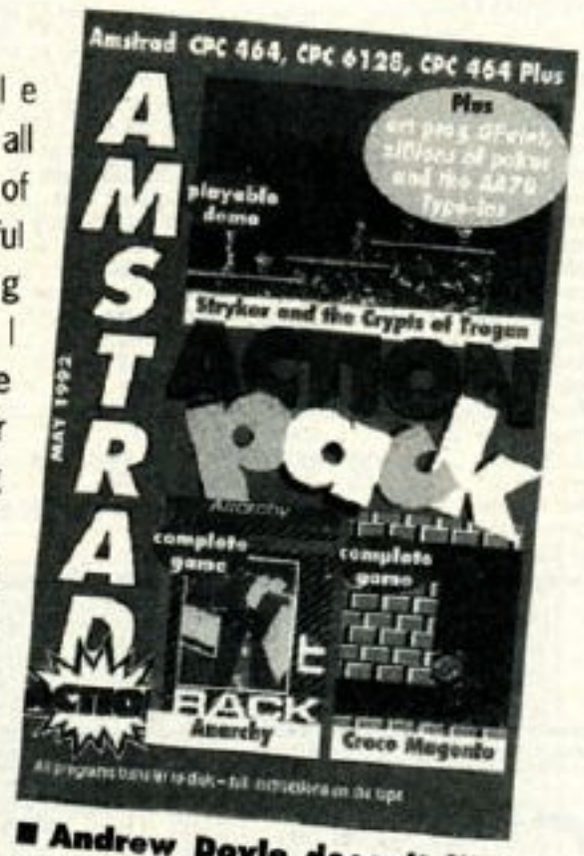
John Harrington
Horley, Surrey



■ This lard is not the sort of lard John Harrington is talking about when he talks about lard. He means another sort of lard.

STOP COVERTAPES

Please could you try not putting a cassette on the cover of the mag? Well, if you must continue, stop filling them up with the most dreadful music I have ever heard. I put the last covertape into my stereo, looking forward to a recital of 'Space Crusade - Playable Demo', but all it consisted of was an awful screeching sound. Er, I might have bad taste or something because all my friends reckoned that it was brilliant, but I found the whole thing an insult to music in general.



■ Andrew Doyle doesn't like the songs on our covertapes. We think they're ace, like summer of '88 Acid House.

Andrew Doyle
Solihull, West Mids

KICK UP A FUSS

Congrats are in order for your new section, *Games Buyers' Guide*. One snag, however: I looked hard at the Top 10 footie games and I am afraid to report the absence of a rather natty game by the title of *Matchday 2*. It may be a tad slow but it is in fact a superbly accurate and fun passing sim. It may not have fouls, but why should it? - it shows today's youth how to play cleanly (none of this 'sliding tackles' poop).

I do own eight of that top ten (except *Man Utd Europe* and *Gazza 2*) and I rate *Matchday 2* second in my list (behind *Emlyn Hughes*). Also you rated *Football Manager 2* above *Kenny Dalglish* and *Footie Manager World Cup*, which is a dweeb thing to do.

Paul 'The Egg' Elliott
Cardiff

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Alec Hay
Chelmsford

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maryanne's mail

Well hello, it's Maryanne here again. Adam and Rod have kindly allowed me the chance to answer some of your letters (two months in a row!). They wouldn't let me pick any any of the nice letters, but I managed to sneak one in. OK then, here we go:

"Maryanne, believe it or not, the creatures in Rodland aren't real, they are just a bunch of pixels that can't feel anything, so you can't kill them because they're inanimate. But I do agree that killing small animals is not fun. Torturing them is much more entertaining."
Ian Evans, Dorset

Ian, thank you for taking the time to share your opinion with me. I would like to say, though, that I am familiar with the concept of computer graphics, and of course I realise that no matter how cute and cuddly the creatures look on screen in *Rodland*, I know that when you kill them they don't really die. But yes I do worry, because it's the principle that concerns me.

It is just such a shame that young people like yourself take great pleasure in blasting to bits those pixels lovingly created by graphics artists: they do depict living, moving characters you know. The effect this mindless violence (however trivial you may think it) has on your view of defenceless animals is in reality plainly obvious from your closing statement. Killing small animals is not clever, it's not fun and it won't make you caring '90s man.

"Adam and Rod, stop being so nasty to Maryanne. You have probably had lots of letters saying the same thing but I don't care: what's wrong with not wanting to beat up little fluffy animals?

If you were walking down a street and saw a cute bunny hopping around in a cage, would you go over and swing it over your head and smash it against the ground? I don't think so. You would get done over by the big strong bloke who owned it, and people would say 'there goes Adam/Rod, the cruel one who beat up a bunny' and you would lose all street cred and be forced to live as editor/writer hoping that someone will be your friend (nothing personal).

I've had a bunny for seven years and she's still as cute and fluffy as when she was a baby. I have sent a photo of her. Give it to Maryanne so she can look at it when she is feeling sad because you have been mean to her, it will cheer her up (probably)."
Duncan Styles, Maidstone

Duncan, I would first like to say how much I appreciated your letter, which gave me renewed hope. I nearly didn't get to see either the letter or the photo, though. Adam threw the letter in the bin, and I had to rescue the picture from him - he was going to use it for target practice (Rod and Adam are currently engaged in a rubber band war). I had to bribe him, and he only agreed to hand over the bunnies if I paid for his lunch. But don't worry Duncan, it's okay: the picture is now stuck firmly on the wall by my desk.

I think your comments hit home, that's why your letter got thrown away - they couldn't face the truth. Maybe if more of our readers wrote in and expressed similar views (we can't be the only two concerned people, Duncan), perhaps Rod and Adam might see the error of their ways. So send those letters in, even Adam and Rod deserve a chance to change. Have hope Duncan. I love the picture, it's cheered me up no end!

"Dear AA people (except Maryanne), I think you should shoot Maryanne with the biggest machine gun you can find. Watch her blood and guts spew out everywhere. Then shove her in a reinforced plackie bag.

After you have done this dastardly deed, attach a note to this bag saying 'I have shot myself because I accidentally trod on a ladybird, therefore causing it undue pain'. Then wipe your fingerprints away. Call the police and run. They will immediately suspect the teddy bear and take it to prison. Then you're free!"
Naomi, Macclesfield

I was both shocked and saddened by your letter, Naomi. Rod and Adam wouldn't get rid of me because they need me. However, Naomi, could I just point out a few major problems with your plan. For one, no-one would believe I had been so careless as to tread on anything (that includes that nasty mess that you left under my desk just the other day, Adam - I know it was you). Besides which Naomi, my teddy bear and I have a very good relationship: he was deeply distressed by your dastardly plan to frame him in such a despicable, unjust murder. It has taken me ages to persuade him that the police rarely imprison teddy bears, especially after Adam told him they would knock the stuffing out of him.



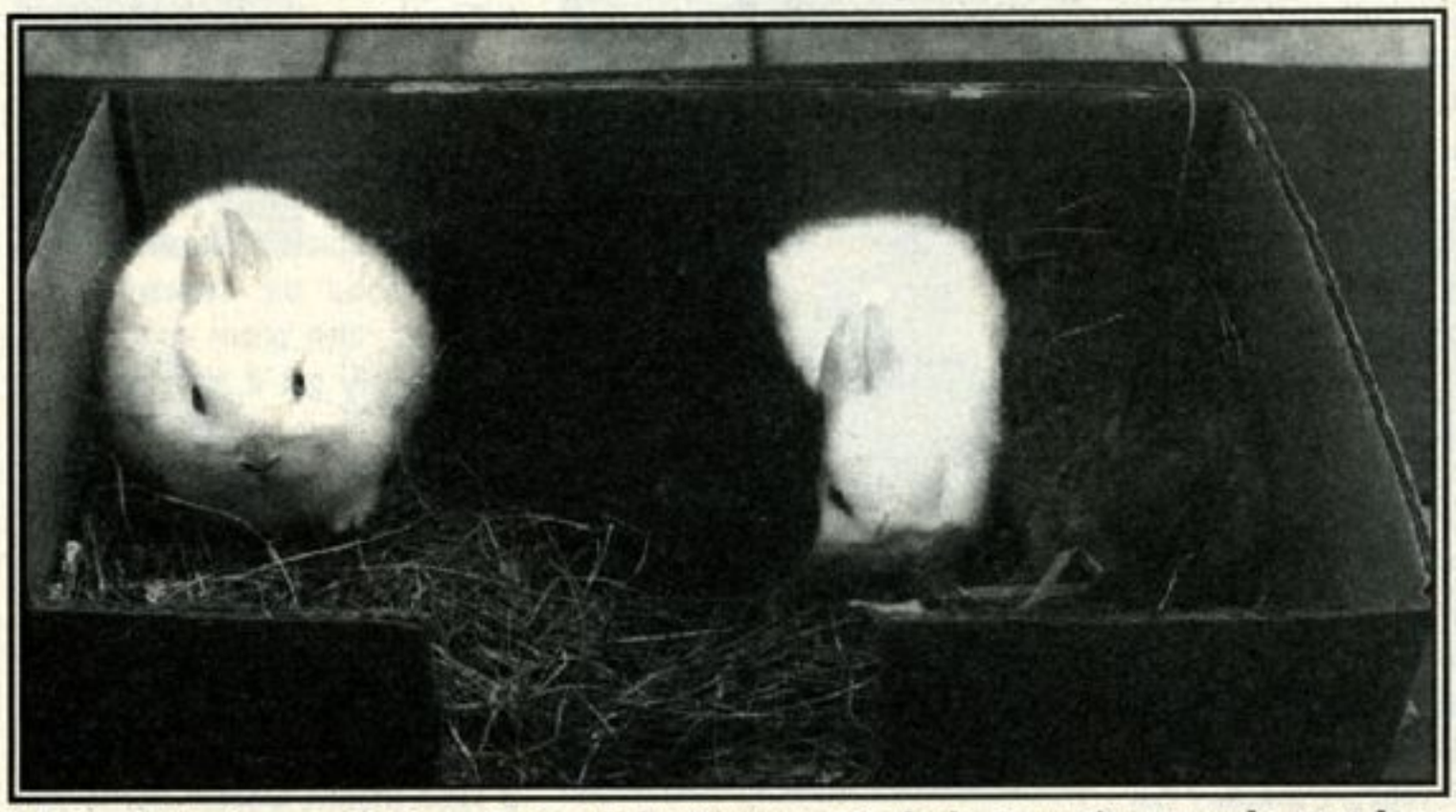
■ **Maryanne comforts Hugo after Naomi's cruel accusations. (Sounds a bit like a *Neighbours* plot that, doesn't it?)**

He is still suffering the after-effects of your letter and will not come out from under the cupboard. You haven't upset me Naomi, I know that you didn't really mean it, but just remember not everyone is so understanding. You really should think about the repercussions of such comments on other people (including teddy bears) before making them. I hope you can live with your conscience knowing what you have done to my teddy bear.

I am going now, I feel the need to look at Duncan's bunnies. But before I go, if any of you readers out there have any comments to make or if you feel you just can't speak to Rod or Adam, just scribble your thoughts to me and maybe they'll let me have some space in next month's *Reaction*. I'll reply as soon as possible I promise. See you soon (I hope).

Lots of Love,

Maryanne xxx



■ **This photo is now stuck on the wall by Maryanne's desk. Everytime people start having a go at her, she stares at it for a few minutes and starts smiling. We're so scared.**



How to start a pd library

Look out readers, here comes *AA*'s new columnist DOCTOR BERTRAM X FEGG (possibly a pseudonym?) with some tips on starting your own PD library...

So, you've always wanted to run a software house, but you can't write programs? Never mind, help is at hand. With the Dr. Fegg super turbo guide to setting up your own PD library, you can now run a software company – a PD library, to be precise – without having to write any programs yourself. Instead you can just take everyone else's hard work and make loads of wonga out of it yourself.

Let's start with the most important aspect: the name. There are a few tried-and-tested ways to select a name. The easiest is to name it after yourself. You don't even have to think of an elaborate pun on your name, either. Just stick a "y" on the end – so, for example, if your name is Terence Wall, then you can call your library "Wally PD". (Obviously, just calling it "Wall PD" would be silly.)

If your name ends in a "y" anyway, then it would probably sound pretty awful to stick another "y" on the end. Instead, just chop the existing "y" off the end. This method has been used by at least one successful PD library on the CPC today.

To finish off your PD library's name, most people put a few letters after the main title. "PD" are, funnily enough, quite common letters. To add interest, why not try putting in another word to make the title "extra-catchy". For example, if your name is Bully, then (after chopping the last "y" off your name) you get Bull PD. Add an extra word, to indicate the dynamism, popularity and quality of your library, and you get "Bull's Hit PD".

Now you've got the name, you need to get some programs for the library. Here's where you alienate every single PD library in Britain, because the secret is – you order up their whole library, and only tell them THEN that you are going to start a library using their software. This will have them frothing at the mouth and falling over backwards, but it's their silly fault for working their behinds off in every minute of their spare time – after all, you've now got as many programs as they have, and all it cost YOU was a few 50p copying fees and the odd stamp. (In fact, you could probably forget about the SAEs, even though the other libraries ask for them – nobody else ever remembers).

Your next step is to produce a catalogue. Library X has just spent all its money buying a second-hand photocopier to produce its own, whereas the librarian of Library Y spends every spare minute he has copying his on-disc catalogue. You don't have to do either of these. Just type out your catalogue, print it out on your school's laser printer, and get your Dad (who works for the local council) to photocopy it at work for free. You now have a professional-quality catalogue, paid for by the taxpayers of your district. Of course, as you're under 18 (most probably), you don't have to pay taxes anyway.

Everything is now ready. All you need to do now is to get some publicity for your library. This is easy – just send a variation on the following letter to all the CPC magazines: AA, CPC Attack and Artificial Intelligence are good places to start. It helps if your word-processor has a mail merge facility.

Dear AA/CPC Attack/AI",

I am an eager reader of your magazine, think that it is the greatest thing since sliced bread (and much better than CPC Attack/AI/AA*), and buy at least five copies of every issue. I also think that Rod Lawton / Pat Kelly / Tim Blackbond* is the hunkiest person on this earth and would willingly donate my body and all of my life savings to him.

*[This bit is to make sure your letter gets published. Where there is a *, delete as appropriate: make sure that you delete the right items. Telling AA that you think that Pat Kelly is the hunkiest person on earth will not make you very popular, especially after Rod spent all that money on the skin bronzer.]*

Now, I have a complaint. I sent off some tapes to Backburner PD five hours ago and they have STILL not been returned, despite the fact that I paid a whole FIFTY PENCE and only wanted two C90s filled to the brim. People like this are clearly only interested in making a profit out of CPC users.

[Make sure that you say that you sent off some tapes, not discs. Doing this will get you the sympathy vote from 464 users. Lots of capital letters here will also help your case. Where there are five asterisks, just substitute the name of any PD library, plucked out at random from the magazine's PD column.]



■ **Want to start a PD library? Maybe you need Bertram Fegg's advice...**

I am so CHEESED OFF by this that I have decided to start my own PD library. "Bull's Hit PD"* only charges two pounds to copy each disc, an absolute bargain. In addition, I will return ALL USERS' discs the day* I receive them. For details, send me an SAE and one pound to cover photocopying costs. My address is: 137 Unimportant Lane, Housing Estate, Tunbridge Wells.

[This is the crunch of your letter. Make sure to substitute in your own library's name, otherwise you will look rather silly. Also remember to substitute your own address in, or Mr Brian Wilcox of Tunbridge Wells will start getting lots of unexpected mail. Sorry in advance, Mr Wilcox.

** If you don't think you can manage next-day delivery – although, since you now have all the advantages of the established libraries, but no order backlog because you have not had to spend time collecting programs, you should be able to – then don't worry. You can always blame the Royal Mail for slow delivery.]*

Yours sincerely,

[Put a signature here. It helps if it is your own.]

John Bull

You can now just sit back and wait for the money to roll in. If any of your customers have technical queries about the software you've sold them, then 'phone up the library you originally got it from and shout loudly at them, threatening legal action (the "Trades Descriptions Act" is a good phrase to use) if they don't co-operate. After all, it's their fault for not compiling comprehensive documentation for each program: some people are just so irresponsible...

● **Next month, Doctor Bertie tells you all the ins and outs of setting up and running your own fanzine!**

photo compo

Remember the *Hudson Hawk* compo we ran a few months ago, where we offered you the chance to win a spankin' copy of the boring and unfunny (not!) *Hudson Hawk* video, courtesy of our old chums at Ocean? We asked for your silly nicknames, and here are the five winners we've selected from the big pile of entries we received:



First up it's **James Walker of Liverpool**. James' nickname is 'Cocky'. Why's that then, Jim? "Because I had no toys to play with as a child, so I..." Er, yes thanks James, you've now got a mega top Bruce Willis vid to play with now. "You guys are hardcore man, thank you very much!" Yo Jimmy, we know the score. Respect!



And here's another weirdo. **Chris McCartney, obviously a Cure fan, from Crowborough, East Sussex.** Christopher has two nicknames, 'The Hair' and 'Dead Cat'. Both refer to his devilish coiffure, the latter being a reference to the fact that "whenever a cat sees me it always thinks that I have killed one its fluffy friends and stuck it on to my head with super glue!" Oh dear. "Not that I ever have, or would even think about doing something like that." Glad to hear it. (*He looks a bit like you, Adam - Adam W.*) No, he blinkin' doesn't. (*He does actually - Rod.*) Oh, go away.

More compo winners next month (maybe)



Adam Noble of Hove, East Sussex (East Sussex again? Crivens!) has got no less than three different nicknames! And here he is to tell you all about them: "Firstly there's 'Bosanopotezuyuip'. I have no idea how I got that one, it's a bit odd isn't it? Secondly there's 'Plant'. My friend told me his nickname ('Fartically') and told me that my one was 'Plant'. Finally, there's 'Adam'. I don't know why people call me Adam, but everyone (even my teachers) does." Blimey. "By the way, in the photo I am the small one (photo taken eight years ago)."



Er, right.Who's this? Why, it's **Stephen 'Bogey Nose' Doyle of Greenford, Middlesex.** Why are you called 'Bogey Nose' then, Steve? "Because I've always got a big squirmy thing up my nose." Eurrgh. Ugh. Blublublublublublublu. Have a video Steve, and don't write to us again (please).



And here's our final lucky winner, **Rob Cairns of Aldershot.** Rob's nickname is 'Video View'. Why? "Because for some reason that I cannot understand, people tend to think I look like Mariella Frostrup. Enclosed is a photo for you to decide yourself. I do trust you are giving away the game as well as the video, and if possible Hudson Hawk's tux. I've always wanted one of them." Just the video Rob, you greedy tyke. And you don't even deserve that, since we reckon you cheated (by having plastic surgery done or something like that). Oh well...

the kitsch-in

Gaugain, Picasso, Renoir – did they rip their pictures off from current movies? No, of course they didn't. Nor have the prize winners this month. Art for art's sake – get it? Art Critic ANGELA NEAL picks up a free glass of cheap wine and waves her arms around a lot...



■ Despite my desire to see more imaginative entries to *the Kitch-in* I had to include Gavin Blann of London SW11's effort inspired by *Aliens*. We all thought it was mega top!

▼ Blam, ZZZap, PSzoooom. This could hang next to a Litchenstien. Approach the Tate, call up David Hockney, put a £10,000 price tag on and be famous, Glen Potter of Crawley!

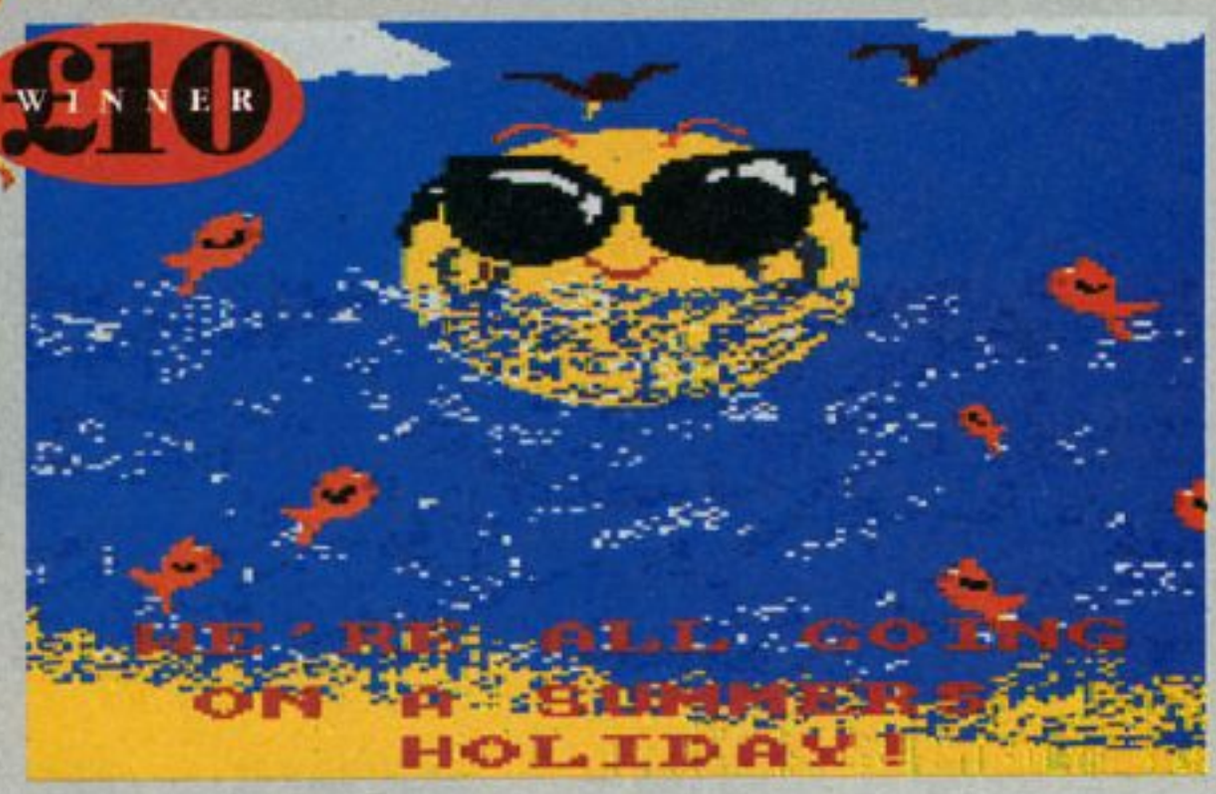






▲ Nigel Ross of We've Lost Your Address sent the above creations. What can I say Nigel? They are fab and groovy, oh yes indeed.

▼ Lots of sunshine coming my way, my oh my what a wonderful day... Asma Safaraz of Walsall you've made my day – Claim your £10! This mornning Bath is very rainy but the *AA* offices are basking in a tropical mood. Adam told me not to say (it'd ruin his image) your robin is his favourite picture this month. Tell your bruv to look out for *AA82*.



NEWS... NEWS... NEWS... NEWS... NEWS... NEWS...

amscene

Germany calling!



Fancy a 24Mb hard disk for your CPC (from £380)? Or perhaps you'd like a 512K RAM expansion (£150)? Both these products are now being supplied by Fritz Obermeier Computing in Germany.

Fritz says that any UK readers who are interested shouldn't hesitate to get in touch: "We're ready to answer any questions you might have! Send an SAE or phone us directly and ask for FRED!" Fritz (Fred) is also on the lookout for "good" strategic games – apparently there's a shortage over there. He's prepared to pay for distribution rights.

If you're interested in Fritz's hard disks or RAM expansions, get in touch! His fax number is 01049 5732 12642, or you can 'phone on 01049 5732 3246. The address is F. Obermeier Computing Ltd, Bünderstrasse 20, D-4972 Löhne-I, West Germany.

Finally, Fritz has a message for all UK companies:...

"Hallo GB! This is Germany calling... To all manufacturers, sales companies, wholesalers etc. of computers, software and peripherals and all imaginable and useful computer accessories or brand new inventions for the items mentioned above. To everyone who is seriously interested in new business contacts between their enterprises in the UK and our trade house over here in Germany. We are dealing with all Amstrad computers, especially the CPC/PCW range, and therefore we are looking for any item that could be useful and practical.

"Over here in Germany things are going far too slow. That's why we want to speed them up by getting into direct business with UK concerns.

"Being computer wholesalers and trade shop keepers over here we are, in terms of exports from the UK, free from VAT. We are very interested in permanent business connections with UK companies. We want to see all available information on products and novelties connected with Amstrad computing."

Interested? Then give Fritz a call...

RS232 INTERFACES FOUND ALIVE!

Our recent *Buyers' Guide* on peripherals reported that RS232 interfaces were now almost unobtainable, except via the second-hand market.

Well mail-order supplier WAVE has come to the rescue! The company has managed to secure a small number of Pace/Amstrad RS232 interfaces, which come with Commstar comms software built-in. The price is £61.25, plus £4.70 postage & packing.

WAVE points out that the interfaces are also Plus-compatible via the Wave Widget, which converts the Plus's D-connector to an edge-connector. The Widget costs £9.40 plus £1.17 postage and packing.

To find out more about these and other WAVE bargains, call 0229 870000.

• Got a 6128 Plus? Want to load tape software? WAVE has now modified over 1,500 6128 Plus machines so that they can do just this! The cost of the conversion is £30 plus £5.88 postage and packing.

LEARNING A LESSON

The CPC is more than just a games machine, as everyone knows. Including Rickitt Educational Media, which has just published its 1992 *Educational Computer Software Directory*. This is a 96-page catalogue containing over 500 programs, many of which are available in Amstrad versions.

Programs are separated into age and subject categories, and are accompanied by full descriptions and, in many cases screen shots (all full-colour).

Rickitt has got to be just about the largest sup-

Show Report

Our team of investigative journalists (er, Rod, actually), has just come hot-foot from this year's European Computer Trade Show in London. Here is his special report...



Hi Tec's stand during a quiet moment (I was keeping a low profile after the *Jetsons* review that Adam did).

"There was plenty going on at the ECTS this year, but most of it on the other formats. Most of the full-price publishers have pulled out of the CPC market, but the good news is that the budget software houses are continuing to support it strongly. Codemasters has loads of new, original product in the pipeline, for a start. So has Alternative Software. Hi-Tec (sort of half way between budget and full-price) had a big stand and was showing off all its cartoon licences. Psygnosis is obviously serious about doing a CPC version of the blockbusting *Lemmings*, while we've just learned that ace CPC supporter Gremlin is to go ahead with its Nigel Mansell licence later this year. Hurrah!"



The Design Centre in Islington was pretty packed, despite the ECTS being a trade-only show.



The Virgin stand, with absolutely no visitors whatsoever. Hah! – serves them right for packing in full-price CPC games...

NEWS... NEWS... NEWS... NEWS... NEWS... NEWS... NEWS...

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■ Rickitt Educational Media's latest software directory is free to AA readers.

plier of educational software in the UK, and its latest directory is essential reading for teachers and parents who want their kids to actually learn something from computers.

The directory normally retails for £1, but Rickitt will supply a copy FREE to any Amstrad Action reader. To get a copy, just call Rickitt on 0460 57152.

CALLING AA79 TYPE-INS AUTHORS...

...We've mislaid your addresses and we want to send you some money! We want to hear from: Kevin Kitchen, David Wagstaff, David Hunt and Johnny Dean. Either write or 'phone with your details please.



The Show attracted all manner of visitors. This fellow insisted on exterminating everyone until the security men ushered him outside.



The Codemasters stand... but where was that man Richard Eddy? Inside his little cubby-hole scoffing an entire bowlful of Cadbury's Mini-Eggs, it turns out.

NEWS... NEWS... NE

survey results

We had an absolutely huge response to our Giant Survey from the February issue. Over 1,000 of you sent back completed forms and enabled us to build up a more accurate picture than ever before of what makes Amstrad Action readers tick.

One of the most interesting findings was our readers' ages. As we suspected, the vast majority were under 20. What we didn't expect was that getting on for half of the total readership (43%!) was between the ages of 12 and 16. The next largest age groups were the 16 to 20s and the 8 to 12s respectively. Less than 0.5% of our readers are under the age of 8, while we have many readers in their 20s, 30s, 40s and older!

MALE/FEMALE SPLIT

Not surprisingly, the vast majority of our readers are male (95%). Where are you, girls? Is it that computers are only interesting to males? Or is it that computing is a male-dominated activity that tends to leave girls shut out?

MACHINE OWNERSHIP

We've always assumed that about half of our readers have CPC464s and the other half have 6128s. We were nearly right. In fact, only around 40% of you have 6128s. But when you count the number of readers who have added RAM expansion, about 50% of our readers have 128K machines.

But what about the Plus and the console? Well, around 14% of our readers have one or the other. Not that many, but still not too bad considering how the machines apparently flopped.

The most controversial thing in *Amstrad Action* has for a long time been the split between serious and games coverage. We have always reckoned about two-thirds of our readers are games players and about one-third serious types. We were right!

More interesting, though, is that below the age of about 18, nearly all readers are interested exclusively in games. Above that age they're only interested in serious stuff!

This is why producing a magazine to cater for everyone will always be difficult. Because *Amstrad Action* is an all-rounder, we have to compromise. However, the overwhelming response from our readers is that we've got the balance just right.

Have you won a binder?

We promised free binders to 24 readers selected at random from all those who sent in questionnaire forms. And here are those lucky winners: Ray Rowland, Simon Alderson, Nikky Copplestone, William Skilling, Mr. L. Marsh, Anthony Kay, Mr. A. K. Porter, Peter Maydell, Andrew Hughes, Colin Graham, Graham Horton, George Samuel, Mr. K. Guy, Mr. R. A. Tait, David Emerson, Mr. J. W. Murray, Matthew Howley, A. Baldwin, E. S. Teixeira, Mr. Andrew Gledhill, Dean Christian, Shane Davison, Robert Clarke, Simon Fu. Well done, folks, your Amstrad Action binders are on the way!

What the readers said

The survey form contained a space for readers to insert their own comments and suggestions. **Here are just a few of the ones you, er, sent in:**

"You should give me a free Apple Mac, or even a job – I have done a course on *Pagemaker 4*"
David Henderson, Fife
Sorry David, we use QuarkXPress 3.1. Otherwise you'd have got that Macintosh... pity.

"There should be less technical stuff, more games."
Derek Anderson, Ayrshire
Uh oh, here comes trouble...

"Get more serious or you will lose your readers."
P. Borley, Northolt
Oh dear. Told you so.

"It's absolutely brilliant. You've got the gap between games and leisure just right."
Tom Weller, Cornwall
Hurrah!

"Your magazine has revived my interest in computing"
Mr C. Hylton, London
Gosh, thanks. Makes it all seem worthwhile.

"Adam Peters is great!"
Richard Back, Leigh-on-Sea
There's some funny folk in Leigh-on-Sea.

"A lot of the serious stuff might as well be written in Hebrew, in invisible ink, back to front."
Dr Nigel Jackson, Morecambe (no jokes please)
It is. (Barely a joke)

"Unfortunately, most ideas I have would send the price of AA rocketing."
Aaron M. Lipsey
Hmm... got any that would do the same for our wages?

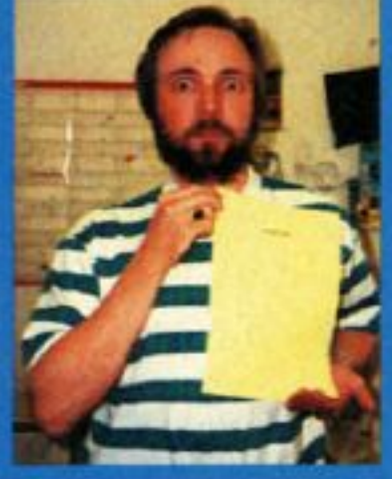
"Get rid of the French people on the front cover."
David Burch, Maidstone
We've been trying for ages.

"It is overcrowded. My eyes get tired."
Sharon McMeel
Yeah, we get that. We thought it was the coffee.

"Brilliant. Hard to improve on... Three cheers for AA... Very good!!... Fab... Covertape is brill... The articles are all perfectly balanced... You should all be given a rise... The best computer mag out. Kickin'!... Absolutely brill!... Don't lose the great sense of humour...
Various
Aw, shucks! We try to produce the best all-round CPC mag possible, and it's nice to know most of you agree. All your criticisms and comments have been noted, though, and we will keep trying to make Amstrad Action ever more entertaining, informative and essential for anyone with a CPC, Plus or GX4000 console!

Meet the Team

To celebrate our special fanzines ish, we asked each member of the *AA* team to knock up their own mag (in a school project sort of a way)...



ROD LAWTON
My fanzine's called **Mnmlsm**. It's a magazine all about minimalism. All it consists of is a single sheet of paper with the word 'minimalism' on it. Very small. With all the vowels left out.



ADAM PETERS
I've called my magazine **Play the Game**. What's in it? Er, nothing. All the pages are blank. You said, "just do a cover so we can photograph it". Oops, wasn't I supposed to say that?



ADAM WARING
Techie Widgets is the magazine for wireheads everywhere, with features on sprockets, soldering technique and sonic chip-blowing. Or something along those lines.



MARYANNE B
My magazine is titled **Fluffy Animals Monthly**. It includes pictures of puppies, kittens and little baby bunnies with ribbons in their hair. Oh, and some poems about squirrels too.



NICOLA LUCAS
Forward Planning is an important skill for a production co-ordinator, so I've done a magazine to explain about it. The title was too big though, and some of it fell off the page.

on the GRAPEVINE

Creepy ghosties, Dominik Diamond "giving it a good waggle" again, and a cartoon duck... looks like ADAM PETERS is up to his neck in games news and gossip once more...

THE ADDAMS FAMILY

Say what they wanna say, do what they wanna do, etc, etc. Hammer's crap kiddie rap has been officially recognised as the worst song of the 1990s so far. The film it ruined the opening credits of has been officially recognised as quite good, though not as good as the gnarly black and white TV series it ripped off. As for the CPC game, the official verdict is a mere four weeks away, and will be found within the pages of the next issue of this very magazine. If you can't wait that long, load up our covertape demo and make your own judgment. We reckon it's going to be pretty fab.



The full game features approximately 240 (count 'em, 240!) screens. Playing the part of Gomez, you have to rescue the other five members of your family, who have got lost. In their own house!

There are six coloured keys to be found, each of which allows access to a new part of the house, in which you'll find one of your beleaguered relatives. There are buckets of platform puzzles to be solved, and lots of skilled jumping will be needed to avoid a quick trip to death city. Which is why you've got a whopping ten lives. Er, except you're a ghost so you're dead to begin with. Oh, never mind.

Like a lot of games nowadays (*Final Fight* and *Terminator 2* spring to mind), *The Addams Family* requires 128K to run. This is perhaps an inevitable state of affairs: as programmers work hard to get the most out of the machine, they increasingly find themselves exceeding the memory limit of the 64K models. Tsch. It's narking, but what can you do?

The Addams Family (Ocean) will be out very soon, priced £10.99 cassette, £15.99 disk. We'll be reviewing it next month. The game requires 128K to run.

The Word Is Out

The Channel 4 computer games show **Gamesmaster** was a massive hit, readers. There are three pieces of evidence that we can provide to back this claim up.

Firstly, it attracted audiences of over three million. Which is quite a lot. If all the prog's viewers were laid out end to end along the M1, it would prove a very silly, dangerous and pointless exercise. But three million is still quite a lot.

Secondly, a new series of the show is going to be recorded and broadcast from October. They are looking for audiences, competitors, reviewers and the like. If you're interested send details of your fave games, your hi-scores (if available), name, address, age and a photo (if you've got one) to: Gamesmaster Stardom, PO Box 91, London E14 9GT. Go on dude, you never know your luck.

Thirdly, there's a second computer games show on the way. Yowser! Yorkshire TV are the dudes responsible, Edd the Duck's old mate Andy Crane is going to be the presenter, and 4.45pm on

DJ PUFF'S VOLCANIC ADVENTURE

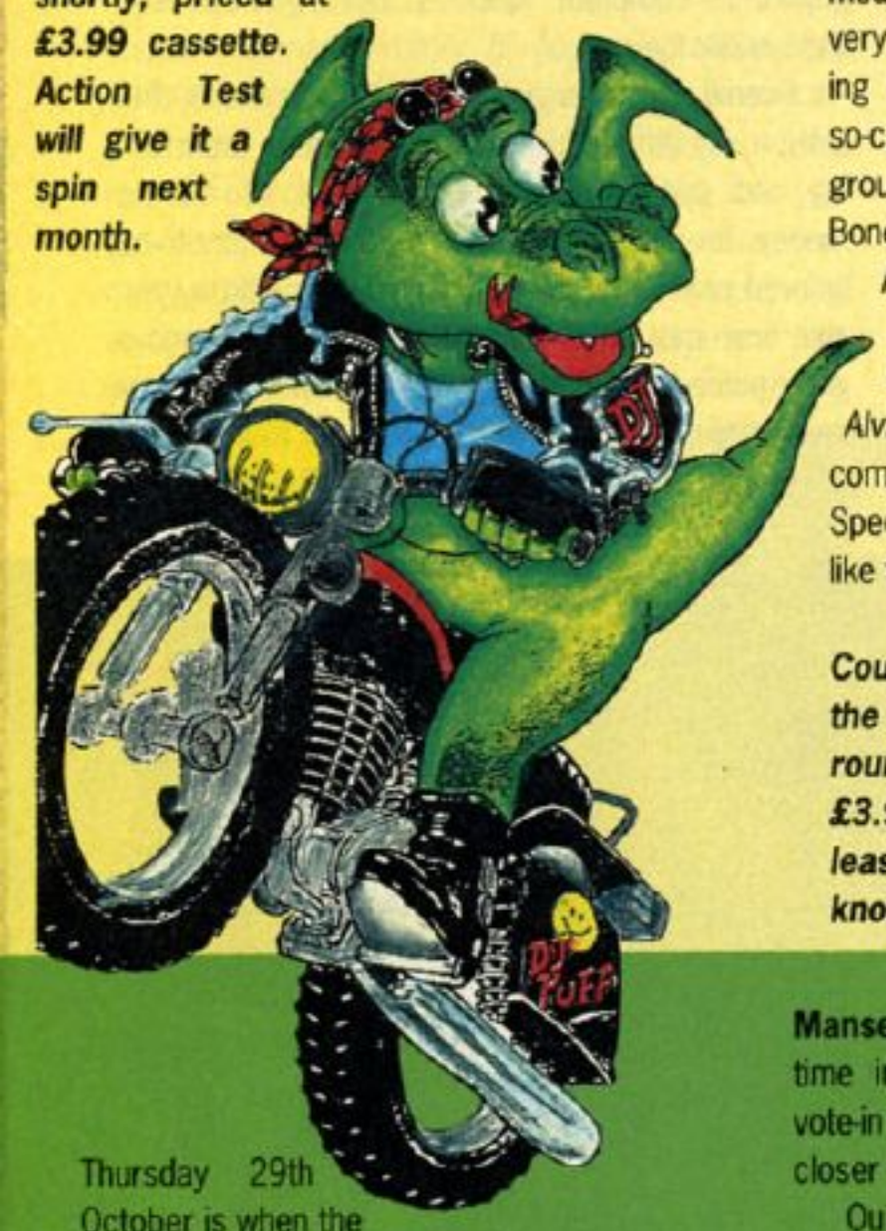
Oh no, it's a dragon on a motorbike. No ordinary dragon mind, this is Little Puff of, er, *Little Puff* fame. Only he's not little any more, he's all grown up and dressed in Stussy. DJ Puff features the most ace plot ever in computer games history. Stupid, but ace.

DJ Puff is a rave master general, spinning ace cuts for all his chillin' dragon mates at all-night raves on his home island. But a nasty dude called Captain Krip has banned raving and stolen all DJ Puff's records. Boo! Hiss! Down with the rave police!

Obviously, you've got to platform it round the place collecting the records. Oh, and there's some stuff about special weapons and so forth, but we skipped that bit. Maximum respect to Puff - he knows the score. And no, we don't mean that thing at the top of the screen with 'score' written in front of it. Tsch.

Raving, as everyone knows, is the only serious competitor to computer games as the entertainment form for the 21st century. We'll be bringing you the full *DJ Puff* review in an extended Juan Atkins mix next month, but if you'd like to practice your house stomp in preparation (you never know, it might prove useful), can I recommend Ministry of Sound in Elephant & Castle and Alpha Centuri in Bow. Safe.

DJ Puff's Volcanic Caper (Codemasters) will be rushing a computer store near you very shortly, priced at £3.99 cassette. Action Test will give it a spin next month.



Thursday 29th October is when the whole shabang kicks off. Yorkshire haven't thought of a name for the prog yet, so if you can come up with one, write to: I've got a good idea for a name for that computer games show you're doing, c/o Richard Maude, Yorkshire Television, Leeds. They'd be ever so grateful.

But enough about games on the telly, what about games on the shelves? Double mega top news coming up: Gremlin Graphics are back in the CPC scene mere weeks after threatening to leave it. The latest news from top grem Ian Richardson is that the CPC version of **Nigel Mansell** will be going ahead, and it'll appear sometime in the autumn. Anyone who took part in the vote-in we featured last month will receive an info pack closer to the time. Hurrah!

Our chums at US Gold have been pretty quiet lately. There's three big games we're expecting from them; **Bonanza Bros**, **Indy 4 – The Fate Of Atlantis** and **Mega Twins**. We first heard of these almost a year ago, but haven't yet seen hide nor hair of the games themselves (at least not the CPC versions). Oh well, not to worry, they'll turn up sooner or later, in amongst one of the big bundles of goodness our friendly postie brings to our door of a morning.

For now, let's settle down with our L7 album, a bottle of Aqua Libra, and a big box of Curly Wurlies. For tomorrow may rain, but I'll follow the sun, oh yes indeed. Summer's coming, so buy some shades. Ciao.

ALTERNATIVE GAMES

There are a few software houses that *AA* has never really featured in much detail. One of these is Alternative. Time we gave them a ring and got some games in, we decided.



The first fruits of our new relationship can be found on page 34 where we get stuck into **Bangers & Mash**. But wait... there's more! A quick glance at the old release schedules tells us that there are a further three Alternative titles racing Bathwards even as we speak (er, write).

Count Duckula 2 is the second game starring the cartoon duck who scores several million cool points for being a vegetarian.

Postman Pat 3 is the (can you guess?) third game starring big nose and his pesky flipping cat.

Alvin & the Chipmunks, meanwhile, is the very first game featuring the mega-dweeby so-called rodent rock group. Give me Boney M anyday.



Alternative are trying to avoid doing Speccy ports where possible. *Duckula* is a Speccy port, but *Postman Pat* isn't. *Alvin & the Chipbutties* is described as being "a compromise port". Presumably half of it will be a Speccy port and the other half won't. Or something like that.

Count Duckula 2, Postman Pat 3 and Alvin & the Chipmunks (all Alternative) are coming round the mountain even as we speak, priced £3.99 cassette each. Next month we review at least one of them. Maybe all of them, who knows (or dares to dream)?

The Charts

This chart is compiled by Gallup Ltd. (© European Leisure Software Publishers' Association Ltd. 1992)

FULL-PRICE

1. **Dizzy's Excellent Adventures** C/masters
2. **WWF Wrestlemania** Ocean
3. **Manchester United Europe** Krisalis
4. **Space Crusade** Gremlin Graphics
5. **Cartoon Collection** Codemasters
6. **Dizzy Collection** Codemasters
7. **Rainbow Collection** Ocean
8. **Terminator 2** Ocean
9. **Soccer Stars** Empire
10. **Titus the Fox** Titus/Palace

BUDGET

1. **Midnight Resistance** Hit Squad
2. **Bubble Bobble** Hit Squad
3. **Italia '90** Tronix
4. **Shadow Warriors** Hit Squad
5. **Manchester United** GBH
6. **Golden Axe** Tronix
7. **Robocop** Hit Squad
8. **Double Dragon** Tronix
9. **Bubble Dizzy** Codemasters
10. **Rainbow Islands** Hit Squad

games gossip/news/previews/charts/games gossip/news/previews/charts/games gossip/news/previews/charts/

Get into print

The complete guide to home publishing



What are fanzines? Where did they come from? And why? On this page MARK FRITH sets everything into its cultural context, and on the other two ADAM PETERS tips you off as to how it's all done. Stop reading, start writing!

Fanzines are the radical alternative within the publishing establishment. Like Tony Benn to the Labour Party or Marina Ogilvy to the Royal family: they are earthy, outspoken and a little embarrassing at times.

They cover many colours of the spectrum and range from grubby photocopied sheets of A4 to deluxe colour publications selling thousands. (*The Face* and *Viz* were basically fanzines when they began. *Viz* still is, really.)

Fanzines have been around for decades, they just weren't called that. In the sixties and seventies they were 'underground journals', magazines like *Oz* that reflected the growing permissive society. They were often loud, reactionary and offensive. Young people so fed up of the outside society – and the media's part in it – that they decided to get back at this enemy, unreachable through street action or the ballot box, through the art of communication. If words were your thing and you had strong opinions (and a mate with a camera), then you were sorted. If you've got it, flaunt it.

The name 'fanzine' gained prominence in the late seventies, and is a shortening of the term 'fan's magazine'. These publications came into their own with the advent of punk. Punk was marked by a glut of people with extreme views but without the means to express them, so fanzines began. *Sniffin' Glue* was one of the more notorious publications of this kind.



■ **"What are fanzines?" asks Mr Bowl. These are fanzines, Mr Bowl. Small circulation mags. All these are CPC ones.**

It was during this period that one of the main areas of worry relating to fanzines arose. The very reason that fanzines were so popular – their accessibility – is also their main worry. Anyone could do a fanzine, and they did. Racist skinhead groups utilised this punk art form, spreading their word on the streets without ethics, authorities or retail chains to censor them. Most of the time though, this lack of censorship was a benefit: radical views that would normally be suppressed were allowed free reign.

In the eighties and nineties fanzines boomed. Soon every football league club had one (many now have four or five), the official club programmes having become increasingly boring and un-objective. Music 'zines are sold outside most indie gigs today, and the computer boom of recent years has seen a growth in computer fanzines, both games-based and serious types.

Overall, fanzines are positive publications that bring many different views together in an entertaining and down-to-earth way. As well as making money for the 'publisher', which is a not-to-be ignored reason for the 'zines, they are also a valuable first step for the prospective journalist, and a great place for people to push back the frontiers of their writing style.

And, of course, they're cheap.

music fanzine DIY



Is music your thang? Do you like shaking your haircut to the latest moshing geetar sounds? Fancy writing about your obsession? Here's MARK FRITH with some hot tips for doing a music fanzine...

The most important pre-requisite for the task of producing a music fanzine is an abnormally large ego-lead need to see your name in print. If you're the sort of person who types their name on a piece of paper and looks at it for hours, fanzines are for you. It's virtually the same thing: you'll have typed, it'll be your words and you'll probably be the only person to see it.

First off, try and find some like-minded souls. Friends who are into the same type of music as you and also like seeing their name in print. These will be your 'staff'. You can order them about, patronise them and change as much of their text as you like.

Most fanzine writers tend to like music that only eleven other people in the world like. It is these eleven people that you should – and probably will – get to buy your fanzine. Most of them will be related to you, if you're lucky.

Remember, only put groups with horrid names in your 'zine: PJ Harvey, Velvet Crush, The Boo Radleys and Dodgy should be a good start.

Ignore requests by Adam Peters to put his band Hippy State in the fanzine, although it could secure you a couple of hundred extra sales. From him. (*Ho ho ho (not!) – Adam.*)

Find a printer who is either a relative or who doesn't enquire too much about immediacy of payment, your address, your phone number, etc.

Sell the magazine outside gigs by top indie bands (it helps sales if you have the band in question on the cover). Make sure that you don't engage in heavy stage-diving during the gig as you'll probably lose all the mags in the process.

Finally, keep a couple of copies of each issue, although you'll probably have hundreds. That band on the flexidisc you're giving away just might be the next James. Or maybe not.



■ **Long hair and guitars, that's what rock and roll is all about. Apparently.**

Mark Frith is a Smash Hits journalist who in his time has also contributed to a number of music fanzines, including Stripy Trousers, The Beautiful North and Wooo, Hello Preston! Mark is 21, and lives in East London. In a house.



■ Once you've got your text and piicies, it's time to work out where to put it all.



■ Buy some Spray Mount (£8): it's great fun, plus you can paste stuff up with it.

ring their bell

Fanzines cannot live by fresh air alone. They need news, reviews, and other such like. And this is where the old telephone comes in handy. Here are some numbers to cut out and keep...

MUSIC CONTACTS

Doing a music fanzine? Want to know where to go for band info and to arrange interviews? Simply ring the relevant number and ask for the PR person:

A & M (Bryan Adams, Extreme, Ce Ce Peniston) 071-736 3311
MCA (Guns 'n' Roses, Spinal Tap, The Commitments) 071-437 9747
POLYDOR (The Cure, Jason Donovan, Cathy Dennis) 081-846 8090
PWL (Kylie Minogue, 2 Unlimited, Opus III) 071-403 0007
WEA (REM, Seal, 808 State) 071-937 8844
PHILIP HALL (Manic Street Preachers, Stone Roses, Beautiful South) 081-740 6288
BAD MOON (Nirvana, Carter USM, Mega City 4, Soundgarden) 071-221 9612
CREATION (Ride, Primal Scream, Teenage Fanclub, Adorable) 081-986 7190
HEAVENLY (St Etienne, Flowered Up, Golden) 071-240 2474
MICK HOUGHTON (Wedding Present, KLF, Jesus & Mary Chain) 071-481 2177

CHEAP PRINTERS

So where so you go to get your magazine printed? Here are some of the most popular, affordable printers, most of whom specialise in fanzines. Give them a ring to discuss your requirements:

CATFORD COPY CENTRE Anybody 081-695 0101
JUMA PRINT Martin Lacey 0742 720915
TECHNOPRINT 2000 Mark Smee 0532 533920

computer fanzine diy



You're all set to start your computer games mag. You've got your DTP package (or Pritt Stick and scissors), but what are you going to write about? How do you fill those pages? Let's ask STUART CAMPBELL...

We get quite a few letters here at AA Towers from people wanting to know how you go about starting your own magazine. "Do you need a licence?" and "how old do you have to be?" are two of the more bizarre questions we often get asked.

The truth of the matter is that starting your own magazine is very easy, very cheap, and anyone can do it. At its most basic, all you need is a pen and some paper, plus access to a photocopier (at your school, your workplace, your local library, Prontaprint, etc).

Producing a glossy colour mag like *AA* is major league expense territory (if you've got less than £20,000 at your disposal, forget it), but what matters more than the shininess of the paper or the number of colours on the page is the fact that you get the opportunity to write about things that concern you, impart your opinions to other people, and enjoy all the fun of putting the thing together. And you can do that for a couple of quid, and maybe make a bit of cash in the long run.

A glossy high street magazine has different staff to fulfil different functions, and separate departments to deal with different aspects of the process. Writers only write, designers only design, and once the issue is finished it's straight on to the next one. The distribution, subscriptions, mail order and such like are all in the hands of other people.

Doing your own fanzine gives you full control over every aspect of the magazine. No grim-faced publisher telling you to change the size of the headings and put a photo of a man in a suit on the cover. And no legal worries. Fanzine editors are just as suable as big publishing houses, but no-one bothers. The magazines get away with things that high street mags would never dare.

Interested? Right, here's a quick guide to how to produce your own magazine in five easy stages. Yes, it really is this simple:

1) Decide what sort of mag you're going to do. If you're just picking something for the sake of it, forget it. But if you've always wanted to do your own CPC magazine... Or you're the biggest (only?) ▶ random directionless ranting) are always a good read, as well as a neat way to let off steam (assuming you've actually got some interesting opinions about something in the first place). If you can draw a bit, cartoons help to break up the walls of text, and screenshots are worth a thousand words too. (You don't need expensive technology for this – you can always just blag pics from ads or other magazines, a tactic that also works for tips sections. They do it, why shouldn't you?)

Letters pages are a big favourite with readers too, but speaking from experience I find they're much livelier if you write the letters yourself. Then you want lots of big ads for yourself (preferably altered versions of real-life ones), just to drum into the readers' minds what a fab mag they're reading and how essential it is for them to buy the next issue. Oh yeah, and competitions too. The chances are no-one will bother entering (would *you* enter a compo in a fanzine?), so make the prizes as flash as you like. If the worst comes to the worst, you can always just make sure your mum wins...

But this is just the obvious stuff. The great thing about fanzines is that you can put whatever the hell you like in them. Ripped-off adverts for Orkney Islands cheese shops, folk tales in the original Welsh, gratuitous pictures of Madonna, '10 Things More Fun Than Playing *The Jetsons*', sophisticated satires of other mags or rambling critiques on why Thatcherism will lead to the death of East End culture and why people would care anyway – anything at all. Use your imagination! And if you haven't got any imagination, you've no business writing a fanzine. So there.

Stuart Campbell currently works for Amiga Power, having previously edited Between Planets, an ST/ZX81 fanzine.

Well, this is the easy bit, really. Ideally, of course, you'll have a load of games to review to start off with, preferably obtained for nowt from the software houses. Contacts in the business, compromising photographs of the Managing Director, a reference from your bank manager or a big baseball bat and a threatening demeanour are all useful tools in achieving this aim, but if you've got none of those, don't panic. A good first issue with reviews of a few old, borrowed or even imaginary games will usually be enough to persuade the game producers that you're above board. (Of course, you can always just try bluffing and review new releases that you haven't actually played yourself, but this is a tricky one to carry off convincingly).

A mag filled purely with reviews, though, will almost certainly be deadly dull. So what else can you write about? Well, thoughtful opinion pieces (read:

ring their bell

More useful numbers to cut out and keep (if you're into that sort of thing)...

SOFTWARE HOUSES

Want the latest news from the world of computer games to chuck in your fanzine? Have a chat to the dudes below. You'll need to be quite well established before you can try blagging review copies, mind.

DOMARK Tammy Lock 081-780 2222
GREMLIN (plus GBH) Ian Richardson 0742 753423
OCEAN (plus HIT SQUAD) Ken Locksley 061-832 6633
PALACE Pete Stone 071-278 0751
PSYGNOSIS Nick Wilde 051-709 5755
US GOLD (plus KIXX) Danielle Woodyatt 021-625 3388
VIRGIN (plus TRONIX) Caroline Stokes 081-960 2255
ALTERNATIVE Roger Hulley 0703 613316
CODEMASTERS Richard Eddy 0926 814132
HI-TEC Dave Reidy 0742 587555
ZEPPELIN Darren Jobbling 091-385 7753

FANZINE OUTLETS

Here are some people you might be able to get to sell your mag (along with your local record, book or computer games shops and the odd newsagents):

NOSTALGIA & COMICS Birmingham 021-643 6143
PICADILLY RECORDS Manchester 061-839 8008
PROBE RECORDS Liverpool 051-227 5646
REVOLVER RECORDS Bristol 0272 299105
ROUGH TRADE London, Notting Hill 071-229 8541
London, Covent Garden 071-240 0105
SELECTADISC Nottingham 0602 475913
SPORTSPAGES London 071-240 9604
STRATHCLYDE PROGRAMME SHOP Glasgow 041-332 4995



■ **Break into your school/workplace late at night and run off loads of copies.**



■ **Finally, come to Bath and try to sell a copy to a man in a dodgy baseball cap.**

fan of Dribbleworth Town FC or ace rock group Colin & the Syco-Megas... Or maybe you'd like to do a magazine about your school so you can slag off that bloke in the fourth year who is always nicking your choccie bars... Whether it's a bee in your bonnet or a stirring in your loins, go for it!

2) Write some stuff. Our expert tipsters provide some clues at the bottom of these pages, but basically write about what you like and what you think will interest the punter on the streets.

3) Layout the pages. Hand written pages are naff, pages done on computer DTP packages are fab. If you can't get hold of a printer for your CPC, a typewriter will do. Photocopy some pictures out of magazines, draw some cartoons, then reach for the scissors and Pritt Stick and bung everything down onto the pages.

4) Roll the presses. Photocopy the pages and then staple them together. You'll probably want back to back printing (photocopying onto both sides of a sheet) which involves fiddling about with the copier a bit. Find someone with a degree in Photocopier Operation. To be really flash, you'll need to be centre stapled rather than side stapled. This means getting four pages onto each sheet and folding over. If the number of pages in the mag isn't divisible by four, you might encounter problems at this stage!

If you reckon you're going to sell 150 or more copiers, it will be worthwhile getting in touch with a printer. Printing is much cheaper, much better quality and much less hassle than photocopying. Check our phone list for some cheap printers.

5) Sell the magazine. Find some people who you think will be interested in the magazine and, er, try to sell it to them. Try to persuade relevant shops to sell the mag (they will want a hefty commission though), eg your local computer games shop for a computer fanzine, etc. Go where the customers will be (pop concerts, footie matches, computer shows), and start polishing up that sales pitch. Send a copy to *AA* - we'll print the address and details for any mag produced on the CPC.

Go on, go for it. It's the most fun you can have with a sheet of Letraset and a tube of Pritt Stick.

football fanzine diy



Things are afoot on the soccer terraces of Britain. Fanzines have arrived, programmes are gathering dirt in the gutter, anger and humour are on the rise: ADAM PETERS invites you to join the fun...

It's easy. Far too easy. Whilst other fanzines have trouble hunting out the punters, the football ones know where their entire target market will be (in their thousands) from 1.30–3.00 on a Saturday afternoon. They'll be walking from the station to the stadium, and their path will be littered with people in dodgy trousers shouting "fanzine, new issue, only 50p, get it here". The market is there, so how do you invade it?

Chances are the team you support already has a fanzine (probably more than one), so why not accost one of their sellers at a game and ask them how many they sell? Buy up all the back issues they've got. It'll give you some idea as to the sort of thing you can fill the pages with.

This a good plan for any sort of fanzine. Get hold of some similar publications and, er, rip them off (sort of).

AND HERE'S ONE I MADE EARLIER...

Blimey, a full colour cover! This issue (no 6) of my fanzine *Witton Wisdom* was produced on an Apple Mac, but the first four were produced on a CPC. It started off as a 16-page black and white A5 size (that's half the size of the page you're currently reading) mag with a print run of 750. By the fourth ish the circulation had risen to 2,500 and the mag was now 48 pages with a shiny three colour cover and extra colours on ten of the inside pages. All with only the aid of a CPC 6128, *Stop Press*, *Protext CP/M* and a dot matrix printer. And a writer in Stafford, cartoonist in Birmingham and printer in Yorkshire. Tip: be adventurous.

By the way, there are a lot of retail outlets around the country that sell football fanzines (see our phone list for some of them), and they'll be more than happy to stock yours.



Adam Peters is a work-shy layabout. Before blackmailing Amstrad Action into employing him, Adam used to knock out football fanzines, including Lennie Lawrence (Charlton Athletic) and Witton Wisdom (Aston Villa)

public image SPECIAL

There are new CPC fanzines appearing all the time. ADAM PETERS meets some of the old hands and gets introduced to some of the new bugs...

A-OK

Editor: Matthew Harrodine
Address: 155 Haslucks Green Road, Shirley, Solihull, West Mids B90 2LG
Price: £1.00 (inc p&p)
Content: Serious
Frequency: Bi-monthly

A-OK features the odd game review, some editorial ranting and a couple of letters. The vast majority of it is given over to techie stuff though, including tutorials on programming languages and the like. The design leaves a bit to be desired, though it has improved recently. There's very little in the way of illustration, the text is very hard to read, and the photocopying can be a bit crap. Not the best of techie fanzines, but a worthwhile read.

CPC DOMAIN

Editor: Alan Scully
Address: 119 Laurel Drive, East Kilbride, Glasgow G75 9JG
Price: £1.25 + blank disk + SAE
Content: Mainly PD
Frequency: Every six weeks

Disk fanzines are all the rage in France, but this is the only British one so far. The menu system is really smart and the whole thing is well put together, with PD reviews, news and details of the latest programs to hit the Scull PD library. Alan recently passed management of his software library over to 3D's Graeme Chesser, leaving him free to concentrate on *CPC Domain*. Oh yes, and his university degree.

PRESTO NEWS

Editor: Matthew Gullam
Address: 1 Pembroke Close, The Mount, Par, Cornwall PL24 2BT
Price: £1.00 (inc p&p)
Content: Mainly PD
Frequency: Monthly

Launched alongside the new Presto PD library (same address), *Presto News* is not afraid to examine issues like the failure of the GX4000 or the 'death' of 3-inch disks. The editor seems a little wary of legal aspects, including a note to the effect that Clint Eastwood's appearance on the cover does not mean he endorses the magazine! It's a word processed cut and paste job, with the odd bit of clip art here and there. An interesting mag, though you don't really get many words for your wonga.

AMSTRAD FUN

Editors: Keith Woods, John O'Beirne
Address: 8 Springfield Drive, Templeogue, Dublin 6W, Ireland
Price: £1.25 (inc p&p)
Content: Mainly games
Frequency: Quarterly

A new fanzine from Ireland: "the only Irish fanzine for Amstrad users" it calls itself. All we have seen of it is the prototype first issue, so what the full thing is like (if, indeed, it has got off the ground) we can't say. Messy design, which actually looks quite fab in a 'loads of piccies, scissors and glue' type of way. They've got lots of screen shots cut out of *AA* (tut tut!) and bags of enthusiasm, so give these Dublin lads your support. And your cash as well, of course.

INPUT

Editors: Simon Bathard, Sean Stone
Address: 1 Linsvale Drive, Frome, Somerset BA11 2BP
Price: £2.00 (inc p&p)
Content: Games and PD (CPC/ST/Amiga)
Frequency: Sporadic

Hmm, a multi-format mag produced by two youngsters who live across the road from each other. One owns a CPC, the other an ST. The 'zine is well put together, if pretty messy, and includes a couple of CPC reviews, a page of CPC cheats and a bit of CPC PD info. It's pretty expensive though, especially considering it only includes seven or eight pages relevant to Amstrad owners. Oh well, there's worse things you could spend your money on (Bruce Springsteen albums, for instance).

PRINT OUT

Editor: Thomas Defoe
Address: 8 Maze Green Road, Bishop's Stortford, Herts CM23 2PJ
Price: £1.10 (inc p&p)
Content: Serious
Frequency: Bi-monthly

Thomas is stopping doing *Print Out* very shortly, but a team of PD celebs (including the dudes behind Robot and Dartsma) are taking over. We'll be reporting on the new set up very shortly. In the meantime, we'll just tell you that *Print Out* is packed full of techie tips, tutorials and type in listings. Though overshadowed by *WACCI*, it will no doubt be a valuable read for all you techie types out there. We await any changes with interest.

ARTIFICIAL INTELLIGENCE

Editor: Tim Blackbond
Address: 19 Lee Street, Liversedge, West Yorkshire WF15 6DZ
Price: 70p + SAE
Content: Mainly PD
Frequency: Bi-monthly

One of our fave 'zines, *AI* is mostly full of reviews of PD disks. There's a comms column too, and buckets of humour. The latest ish is professionally printed rather than photocopied, and includes half-page reviews of no fewer than (and no more than) eleven new PD disks. The mag also includes the most comprehensive list of PD libraries available anywhere. And it's fairly cheap too. Nice one.

PLAYMATES

Editor: Carl Surry
Address: 37 Fairfield Way, Barnet, Herts EN5 2BQ
Price: £1.30 (inc p&p)
Content: Games and Bonzo news
Frequency: Quarterly

If you're into CPC games, this is the fanzine for you. The latest issue contains a whopping fourteen A4 pages of games reviews! There's also news for users of the Bonzo tape-to-disk program. It suffers a little from ego publishing (count how many times the word 'I' appears), but don't let that put you off. The monthly round-ups are stonkin' – the one in issue 11 reviews and rates no fewer than 58 different CPC motor racing games! All in all, a pretty excellent read.

WACCI

Editor: Clive Bellaby
Address: 12 Trafalgar Terrace, Long Eaton, Nottingham NG10 1GP
Price: £1.50 (inc p&p)
Content: Serious
Frequency: Monthly

The big daddie of them all is back on the block. If you're serious about CPC-ing then *WACCI* is for you. With programming tutorials, loads of letters, a hefty dose of humour and the hand of the CPC's biggest user group behind it, this is a fanzine to contend with. The *WACCI* dudes now have a regular page in *AA* (see page 25). If you're serious about getting serious, you'd better start getting *WACCI* (wacky, geddit? - oh, never mind).

technical forum

What's giving you more headaches than Kylie's latest single? If it's a problem concerned with your computer then simply ask consultant tech ed Adam Waring – he'll prescribe a dose of pain-relieving answers.

And there's more – within this section are top tips; handy hints sent in by readers eager to help and earn themselves a tenner, Ask Alex where all the thickies get put right, reviews and a helpline for when Mr W can't help.

***Technical Forum*: I never knew there was so much in it!**

Whatever your dilemma, send it in to: Technical Forum, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW

SCART SUCCESS

I have a 6128 Plus computer with the new style monitor and have tried to connect the monitor to a video recorder via the latter's Scart socket, but so far without success. I can get the sound coming out of both speakers, but no picture whatsoever. As far as I can tell the connections are correct, but the screen remains black. Would it be possible to print a wiring diagram for this set up? I'm sure other readers would find it useful as well.

Robin Brown
Smithton, Inverness

The Scart system is a standard designed to link devices that use audio/video together using a standardised set of connections. However, individual pieces of equipment may not have every single connection present, in which case those pins will be unconnected.

It's not that common for videos to be equipped with RGB output that your monitor uses. They tend to use a video signal output instead, so it could well be the case that you're going to be out of luck. Consult the manual that came with the video for details. If it does have RGB, then a local electronics store will be able to wire up a cable .

ASSEMBLY TIME

I have an Amstrad 464 computer. It is a wonderful computer and has served me well; I have upgraded it by adding two disk drives, a 64K RAM extension and a DMP 2000 printer. I have two questions:

1. I saw a 40025 upgrade ROM being advertised. What does it do and how do you install it?
2. Do you know of a good, value-for-money machine code assembler that's a reasonable price (under £50)?

James Holdaway
Wimbourne, Dorset

1. The ROM you mention is actually the ROM that's built in to the 6128. By fitting it to a 464, along with disk drive and additional memory, it becomes fully 6128 compatible. Since you already have the other two items, add the ROM and you'll be able to run any program a 6128 can.

This won't widen the scope of commercial programs you can use that considerably as they tend to be written in machine code and don't extensively use the 6128's extra commends, but it is handy for BASIC programs, especially those marked '6128 only' in Type-Ins.

Installing it is a matter of opening up your machine's casing, prising the old ROM out with a screwdriver, and popping the new one in its place. At any rate, most suppliers of these ROMs provide fitting instructions when you buy them.

2. One of the very best assemblers available for the Amstrad is the Maxam assembler from Arnor. This comes in tape, disk and ROM formats. For the latter you need to buy a ROM box, which plugs into the back of computer. The advantage of this is that it's always there to be accessed by a simple command, without having to wait it to load. It also means that you have a lot more memory available to develop programs. All three options will cost you less than £50.

An even cheaper option is to order a back issue of Amstrad Action. We gave away the complete Devpac assembler from Hisoft on issue 71's covertape. This complete package has an assembler, for developing your code, and a monitor to help you sort out why it all went horribly wrong. Turn to the subscriptions page for details on how to get hold of this issue!

WHAT'S THE USER?

I am a 464 owner and cannot for the life of me get your covertapes to transfer to different user areas of my disk. I need to get a number of covertapes, each with the same filenames, on one disk and the only way I can see of doing this is to store the different covertapes in different user areas (as you suggested in issue 79).

I have tried to change the user number before loading the tape, but on transferring I have found the files are saved in user area 0 regardless. Please could you give me some tips to get round this problem as I hate to see wasted disk space.

N Durrington
Warrington, Cheshire

Copy the files as normal from tape into user area 0 using the normal transfer method. Once this is done you will have to rename all the files individually so that they are prefixed with the name of the user are you which to store them in.

Say, for example, you wish to store some programs from the covertape in user area 2. Type this:

```
IREN,"2:1.BIN","1.BIN"
```

Repeat this process for all the files until the whole lot have been renamed. Adam's your Uncle, they will all be safely tucked away in your new area.

THE WORD IS

We use our recently acquired second-hand CPC664 as both a games machine and as a word processor along with our DMP2000 printer. There is a wide variety of type styles available on the DMP2000 which are easily accessed through BASIC (tedious) or the *Easy Electric Typewriter* type-in in the printer's manual. This only allows correction of the current line of text which is then echoed to the printer. If we are typing enthusiastically, we may be several lines past an error before noticing it, when it is no longer correctable.

We also use the *Advanced* (?) *Amsword* word processor which is tedious and inconvenient, but offers the usual editing facilities. We find

that we cannot access most of the printer control characters, none of the *Tasprint* options nor any of the second character set. Is this because the DMP2000 does not emulate the FX-80 as required by *Amsword*? Can we access the DMP typestyles in conjunction with the editing facility of *Amsword*?

A recent *AA* review of CPC word processing software packages suggests that we should be buying something else, but we would like to make the most of the software we already have if possible.

Without being sniffy, as a word processing system the CPC plus *Amsword* is light years behind the IBM PC 486 with seamless WP and *Pagemaker* desktop publishing which I use at work. It's a pity you can't get all that into 64K!

Trevor Furnass
Kendal, Cumbria

You can't seriously be comparing a state-of-the-art (for a PC) dedicated business machine worth several thousands of pounds, running professional, dedicated software costing many hundreds to a second-hand CPC running a word processor written several years ago? Oh, you are.

***Amsword* is a dinosaur, I'm afraid Trevor, when compared to any one of a number of CPC word processors available for your computer. If you're at all serious about using your machine for letter writing then you'll upgrade your word processor. Have another look at that Buyers' Guide. Particularly recommended are *Protext* by Arnor and *Brunword* from Brunning software. Then you'll see what the machine you've got is really capable of...**

There's some pretty hot DTP programs available as well. I'll be the first to admit that they're not going to be quite as capable as *Pagemaker*, but you can have a lot of fun hacking out the odd fanzine or newsletter on your CPC. ▶



Ask Alex...

Problems, problems, problems. If you've got 'em, I'm here to answer them (as long as they're about computers, not acne or girlfriend troubles – though no doubt I could offer a few wise words in that department!)

Make sure that you keep them simple, though, anything in the least bit technical should be addressed to Adam's Forum section. This section is completely for beginners only!

So if you're dumfounded by your CPC, get writing! The address is: Ask Alex, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

DRIVING GAME

One type letter that I see quite often is from those who've bought an additional higher-capacity disk drive and then can't get hold of software to run on it.

Take Gateshead's Daniel Davison, for instance:

Q "I was wondering if you can get games such as Pit Fighter on 3.5 inch disks for the 464."

A I'm afraid that the answer is no, Dan! Games manufacturers generally will only produce games on tape or 3-inch disk. This is because that these are the standard formats that most Amstrad owners have. There simply isn't a big enough user base out there to support games being released on the larger-format 3.5 inch disks. A pity as these are cheaper to produce and can store a lot more data. Sorry!

POKE PROBS

Helen Jenkins, who lives in Neath in sunny West Glamorgan, has been having problems with the pokes that have recently started to appear on *Amstrad Action's* cover tapes. She enjoyed the games that came on the tapes, she says, but comes stuck when it comes to the pokes we've given away recently.

Q "I cannot load pokes (A) or (B). I run the menu program and select the pokes but the computer comes up with a message saying that you have to load this from BASIC." Exactly how to do this is the gist of her question.

A Basically, Helen, these pokes are loaded in a very similar way to the Menu program on the cover tape, but with using LOAD "poke name" instead. The poke name should be replaced by the name printed in the magazine, listed under the heading, 'Pokes'. (You'll have to fast forward the tape a little on side B first though, or you'll be waiting for ages for them to load!)

But first you should make sure that you understand what these programs are for in the first place.

They don't actually do an awful lot on their own, but need to be used in conjunction with the games that they are designed to poke into. Make sure that you have these games or you won't get anywhere!

A fuller description of the pokes, what games they're designed to work with, and what they do exactly, is given in the Cheat Mode section of the magazine.

When you run these pokes, followed by the game itself, you will have all manner of cheats at your disposal! Should help you make short work of it!

MICE ADVICE

Alan Southerland and family from Beccles, Suffolk are new to the Amstrad. They want get into DTP and art software, and want to know:

Q "What extra memory memory do we need and what mice are suitable for the 664?

A Though you don't actually need any extra memory, the best art and DTP packages require a 64K RAM expansion. As for a mouse, the Genius is one of the best. Both are available from Datel Electronics ☎ 0782 744707

HELP

Do you have a problem? Well get some help! There are 37,000 *Amstrad Action* readers out here just itching to lend a helping hand. (Well, some of them are anyway.) If you're after an obscure double-hinged spigot interface, want to swap your Ferrari for a 464 with green-screen monitor, or maybe could do with a little bit of help with that nuclear power station control program that keeps going wrong then this is the place to write to. On the other hand you could have the sort of expert knowledge that you just know someone will benefit from. In this case, where better to offer your services?

If so, drop a line to Technical Helpline, preferably on a postcard or sealed-down envelope. Don't forget to include your phone number – sorry, we're unable to print addresses. Send your entry to: **Technical Helpline, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW**

I need a TV modulator for the CPC6182. Will swap for *Kick Off Collection*, other games, of green screen monitor.
Wayne, 071-700 0715

I have a 3.5 inch second disk drive but need a formatter for it. Can anyone help? I will pay expenses.
Alan, 061-620 1680 after 4pm

Wanted: Disk drive for 464 Plus, two-way port expansion, Wave Widget, 64K RAM expansion. Will exchange for Atari VCS Games System plus games and two joysticks.
Sue, 0501 41803

Wanted: Circuit diagram for CPC 6128 or part circuit of REM control section. Also circuit for camcorder to CPC digitiser.
Jack, 061-775 8444

I need the Microtext Teletext adaptor, tuner and software for my Amstrad CPC 6128. Reasonable price paid.
Jan Balling, Baunevej 139, DK-2630 Taastrup, Denmark

SOFT 968 wanted to borrow, buy etc. I'll pay just to lend it for the week, so please somebody, this is an opportunity to make money for nothing.
Paul, 0446 736529 after 6pm

Has anyone got a copy of AA33 with the joystick splitter thingy in it? I'll pay. Also can help in most aspects of BASIC.
David, 0869 252270

top tips

Share your cleverest ideas with 37,000-odd Amstrad Action readers and get yourself some pin money into the bargain. All your have to do is pop your stroke of genius into an envelope, stick on a stamp, and then wait for the loot to roll in. (Note: taking it to the Post Office increases your chances even further.) The address is: Top Tips, Amstrad Action, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW

DRIVE ME CRAZY



In response to Steven Carruther's letter about driving a 24-pin printer from *Stop Press*, there is a possible solution.

I have a Star NB24-15 printer that can use either Epson- or IBM-compatible control codes. When switched to IBM mode the printer steps the paper forward in units of 1/72nd of an inch as opposed to the Epson mode of 1/60th of an inch. This extra compression appears to compensate for the elongation generated by the 24-pin head.

By switching my printer to IBM mode I can now obtain perfectly-sized pages from Stop Press in both standard and quality mode, but it does not appear to work in draft mode.

Barry Eams
Hardwicke, Gloucester

FANCY FONT



A couple of weeks ago I wrote a program to create an italic font, but now have compacted it into a one liner for all you *AA* readers:

```
SYMBOL AFTER 32:a$="3E21F5CDA5BBF1CB
0E23CB0E23CB0E23CB0E3C20EDC90000":a=&
9C48:FOR B=1 TO LEN(a$) STEP 2:POKE
a,VAL("&"+MID$(a$,b,2)):a=a+1:NEXT:
CALL &9C48:PRINT"ABCDEFGHIJKLMNOPQRS
TUVWXYZ":PRINT"abcdefghijklmnopqrstu
vwxyz"
```

Mark Goddard
Tadley, Hants

MUSIC TO YOUR EARS

In answer to John Davies' question about a teach-yourself-to-read-music program (*AA79*), I have one in my PD library, Sleepwalker PD. It explains about staves, notes, sharps and piano keyboards. It's PD and is available from me either:

On tape with a few other music

QUIET AS A MOUSE



Can the AMX mouse for the PCW be converted for use on the CPC? The interface fits the 464, but not with 64K RAM expansion. Can the Atari mouse be used on the 464 with modifications? I have the *OCP Advanced Art Studio* disk and would like to use a mouse with this software.

A Taylor
Bournemouth



The answer's no, but mice are available specifically designed for the CPC that will work with the software you want. Check out the Genius Mouse from Datel Electronics ☎ 0782 744707.

LOADS OF TROUBLE



The item on tape loading in issue AA79, the offer of a disk copy of the cover tape and the scarcity of 6128 games on disk have prompted us to write concerning a problem we have using a tape drive using our CPC6128.

Using the tape socket presents us with no problems when saving and loading home-written programs or data thus it appears that there are no problems with dirty heads, tape alignment, volume level etc.

However, despite trying many times, we have never yet been able to load a commercially-produced program from tape. Covertape *AA79* was no exception.

Can you tell us whether this is a common problem and if so how it might be fixed?

Richard and Adrian Durrant
Reading



I get countless letters each month saying the same thing. I can only reiterate the same old remedies; clean the tape heads, check the alignment, play with the volume.

The problem is that a cassette that one person has trouble with seems to load perfectly well on other people's machines. We rarely have trouble loading covertapes that people have returned to us as defective. It is almost certainly your equipment that is at fault.

Although you say you have no problems with loading and saving your own programs, I still think that the alignment on your tape deck probably is at fault; you can read these files because it's 'off' to the same degree when loading and saving to tape, but a commercial, and correctly aligned, tape is causing you problems. Checking out your tape deck (or trying someone else's) is the only thing I can advise.

PRINTER PROBLEMS



I am writing to you in the hope that you can help me. I have just received an Epson FX-100 mono printer from a relative. After buying the right cable (6 foot parallel printer cable from Tandy I went home, tried it out and was glad to find that it worked. I wasn't sure what command to use to print out but found out the answer in one of your magazines.

I am sad to say that after a few print outs it is now refusing to print. I have a few questions:

1. When I tried printing out a picture I had made on *G-Paint* (courtesy of your covertape) the picture came out but was split up with white lines separating each piece. Why is this?
2. How can I stop the writing running off the edge of the paper?

review The Commercio

£11.95 ● SOFTWARE DEVELOPMENTS, PO BOX 57, USHAW MOOR, COUNTY DURHAM DH7 7EE

Cor! Just think: those games programmers, eh. They're absolutely rolling in money, drive posh, fast cars, have six holidays in the Caribbean every year, and all for writing poxy computer games. That must be the life.

The only thing between you and this and a life of luxury, is actually learning to produce those games in the first place. Bah! But wait... with the aid of this new book, all this could be yours, or could it...?

The Commercial Games Programmer's Guide doesn't actually teach you how to program, but assuming you've learnt the coding craft, it aims to help you to be successful in the games industry.

It's not aimed at any particular computer as such, but the principles contained within should be easily transposable to the Amstrad, Amiga or Archimedes. It's all about how to design a successful idea, work in a structured way, and present the finished program to a software house (who will then, presumably, offer you a contract for several million pounds and give you your own Learjet.

Where it all falls down, unfortunately, is that it's a complete pile of nonsense. Firstly, it's riddled with typos and grammatical errors. This is OK, it's a well known fact that programmers are incapable of spelling, but it's presumed that any book goes through some kind of editing process before finding its way onto WH Smith's shelves.



■ Can this book really tell you all you need to know about becoming a top-selling games programmer on your Amstrad? (Answer:no)

3. Do you by any chance know why it will not print now?
4. Could you possibly tell me where I might get a manual or instructions for this printer?

Adrian Murphy
London

1. A common anomaly with the CPC printer port is known as 'pin 14 syndrome'. This causes printouts to be double-spaced when they are output. This doesn't look too bad when printing out listings or letters (and in fact makes them easier to read) but when your printing out pictures it's very noticeable, leaving a large gap between lines of the picture.

Luckily, there is a cure. All you have to do is disconnect pin 14 of the printer cable. This can be done be either cutting the offending wire (be very careful that you snip the right one) or by putting a little bit of sellotape on the computer's printer port edge connector. Looking at the back of the machine, the tape must cover the fourth pin from the right-hand side of edge connector. It can cover the other three pins to the right as these are not connected. If you choose this method, have a look at the pinout connections in the back of the manual just to make sure that you are covering the correct pin up.

2. The number of characters the Amstrad sends to each line of the printer is controlled by the Width command. Most printers can handle a width of 80 characters comfortably, so to set your computer up for this, issue the command:

WIDTH 80

3. No, I haven't a clue, but I'll go through some possible causes.

Is the printer On-Line? It has to be set to this mode before it will output any characters. There will be a button on the front of the printer that will switch it between On-Line and Off-Line.

Have you been messing around with any of the dip switches? These tiny switches, often located towards the back of the printer, set the operating mode and it's not beyond the realms of possibility that fiddling with these could upset things.

Have you spilt a cup of steaming hot cocoa down the back? If this is the case then you've bust it!

4. I can give you Epson's telephone number to see if they can't help you out. Otherwise I'd suggest you write to Techie Helpline to see if anyone else can help. Epson ☎ 0442 61144.

ANOTHER PLUS

I am the proud owner of a 6128 I have a few queries for you:

1. Now that it's possible to use the extended functions of the Pluses (4096 colours, hardware sprites etc), will it be possible to upgrade my 6128 into a 6128 Plus by swapping or adding a few chips?
2. What are hardware sprites?
3. Can you plug headphones into the stereo socket or can you only plug an amplifier in?

James Allan
Nethertown, Cumbria

1. I'm afraid that the differences between the CPC and Plus are far to complicated to be able to upgrade it simply.
2. Hardware sprites are generated by the computer's circuitry rather that a program to display them. They are, therefore, a lot faster.
3. You can't plug them in directly as the output's too weak. Sorry!

top tips

programs (20p+SAE+30-minute tape).

On disk with a few other music programs (30p+SAE+3" blank disk).

On disk with lots of other music programs (£1+SAE+3" blank disk).

Joe Moulding,
Sleepwalker PD, 9 Meeting House Lane, Balsall Common, Nr Coventry CV7 7FX.
No tenner for you, but a free plug instead! – Ad.

KEY TO SUCCESS

If, like me, your are a regular user of CP/M Plus, you may be interested in redefining your function keys in order to save a bit of typing. I have redefined mine as follows:

f0 SUBMIT PROFILE
f1 SHOW
f2 SUBMIT VDE
f3 NSWP
f4 DISKIT
f5 TYPE
f6 DIR B:[FULL]
f7 A:
f8 DIR
f9 B:

Of course you can use any definitions that you like, but f7-f9 are especially useful for changing directiories. In most cases you can include a carriage return at the end of your definition, and you can also use passwords.

To define the keypad you need to ass the definitions to your KEYS.CCP file (or any other KEYS file that you may use regularly) using a word processor – I use the excellent VDE.

Add the following lines to your file:

E £80 "submit profile ^m"
E £81 "show ^m"
E £82 "submit vde ^m"
E £83 "nswp ^m"
E £84 "diskit ^m"
E £85 "type ^m"
E £86 "dir b:[full] ^m"
E £87 "a: ^m"
E £88 "dir ^m"
E £89 "b: ^m"

^m corresponds to Return and £80-89 correspond to f0-9 respectively.

Once you've saved this file onto your working disk, the command SETKEYS KEYS.CCP in your PROFILE.SUB file will activate the new function keys.

Andy Gibbons
Peterborough

Games Programmer's Guide

The advice is of dubious quality, and often completely goes against the grain about how the process of producing a game is all about. Contrary to what it says, you will not receive every computing title free by the act of writing computer games. (So you thought that was your passport to getting *AA* free!)

It tries to cram a lot into its 90-odd pages. Everything from learning hexadecimal to producing a business plan in order to gain a place on the Enterprise Allowance Scheme (which incidentally has a business failure rate within the first year of more than 85%). The worst section is that on developing games ideas. The author has chosen a severely sad game plan to illustrate his proposed ideas. The graphics are represented by drawings that are equally bad. OK, this is meant to illustrate simply the concept of how to go about producing a game, but it really is an example of what to do only if you want to be laughed out of Mega Software's offices.

Another thing that should be taken into account is that the way software is written nowadays. It's no longer the lone programmer working into the early hours in the corner of their bedroom. Huge teams of programmers, artists and designers work together on projects. Budget programs can be written in the old way, but if you're hoping to get your masterpiece released through the likes of US Gold or Ocean, then it's very difficult to present them with a home grown program. Don't be fooled into thinking that a book such as this will give you instant success with the software houses.

This book fails quite spectacularly in what it sets out to do. The advice in it is flawed, insufficient and in many cases actually ill-advised. The best that can be said of it is that it has a fairly complete section of valuable contact numbers. But an authoritative guide on producing next year's computer game? Forget it.

good news
- Erm, some 'useful' contact numbers at the back
- Read it if you want to find out what *not* to do!

bad news
- Flawed, incorrect, badly advised
- It won't help you make your million

17%
VERDICT

mastering machine code

This month the Amstrad's low memory vectors (a complicated term for simple routines!) are explored. These are probably the most under rated life savers of the Z80. To find out more, ANDY PRICE was locked in a little room at the AA offices, and forced to tell us all about them...

What are low memory vectors? These are little routines which are stored in RAM when your computer is switched on and which can be accessed by calling routines at the very base of your computer's memory, hence the term 'low memory vector'.

These routines can be absolute lifesavers, as you will soon discover when you start to program at any great depth. There will be many times when most of your registers will be used up and the only remaining register is not the one you need. These routines will perform otherwise 'illegal' Z80 operations legally. That is, you can perform some instruction using the wrong register.

These routines lie in the first &40 bytes of RAM and are placed there on power-up (&0000 to &003F). Another name for the low memory vectors is 'restart instructions' (RST instructions). There are routines which lie between these addresses which are accessed without the RST instruction.

So, you want to know how to use them do you? To access these gems, we use the RST instruction (restart). There are seven of these in total. Also, there are other routines held between these addresses which are accessed with the standard CALL or JP commands. I'll restrict myself to the most useful ones, both RST and those accessed with the standard jump or call.

RST 0

This resets your computer totally, as if you have just powered up. To use this instruction, type RST 0 from assembly. To see just what the effect is, try `CALL 0` from BASIC.

RST 1

This is the routine the firmware uses to access the routines in the lower ROM when you call a firmware routine. All of the firmware routines are held in the lower ROM. Using this routine, you can call or jump to a routine held in the lower ROM or RAM.

I don't really want to show you how to use this routine because it gets complicated; a simple version is RST 5, which is explained below. But, if you want to examine the routines the firmware uses, disassemble address &B000 to &BD37, which will give you a lot of RST 1 address instructions, and to get the address in the lower ROM where those routines are, subtract &8000 from the address! If you have *MAXAM*, you can then inspect the lower ROM.

`Address #000E` This is one of those lifesaving routines! What would happen if you wanted to perform a JP (HL) instruction, but the address to jump to is in the BC register? Simple, you would call this address. It does a JP (HL) with the address in BC!

`Address #0016` Yet another program saver (which I frequently use, mainly because I tend to use any free register, which is generally the register I need in a minute or two). This does the same as the routine at address #000E but performs it using the more used DE register (phew!).

RST 4

Right then, for the sake of argument, let's say that you or another program, or even your assembler, has paged in the lower ROM (so that it occupies addresses &0000 to &3FFF for reading only purposes only). You also want to read a byte from the main memory which now lies under the paged in ROM. You will need to use this instruction. It is the equivalent to the LD A,(HL) instruction but it ignores the fact that the ROM is paged in. This can save you a lot of time and effort.

RST 5

This is the routine I would recommend using if you wish to run a program in the lower ROM, in preference to the RST 1 instruction. When this routine is called, it enables the lower ROM for you, and when the program ends, it disables it for you. This is quicker than the RST 1 instruction. Just enter the actual address you want, without taking into account the ROM states, e.g. `RST 5,#3000` run the program at address &3000 in the lower ROM. It saves the arithmetic a bit!

RST 6 at address #0030

This is intended for you own use; you make your own low memory vector. Patch the address with an instruction like JP #BE00 to run a program at that address when you use RST 6. It could save you numerous program bytes.

RST 7

Used by interrupts which, if you read the previous instalment, you should know all about.

THE ONLY LISTING THIS MONTH!

Here is a program demonstrating the use of the low memory vectors. To understand what the program does and how it works, read the comments in the code...

```
ORG #9000
ENT $

; Patch routine to point RST 6 to
; program at address #BF00

LD A,#C3                    ; byte for JP instruction
LD (#0030),A
LD HL,ROUT                  ; address
LD (#0031),HL


; The part is the main program, shows how to run
; our own RST routine, executed using RST 6

LD DE,TESTED_JP_DE
JP #0016                    ; JP (HL) instruction using
                ; the DE register

TESTED_JP_DE:
   RST 6                            ; call our own RST routine
   RET

   ; This is the part which is called when
   ; RST 6 is used. This just prints a string
   ; on the screen but you can alter it to do
   ; what you wish.

ROUT:     LD DE,MESS
LOOPER:   LD A,(DE)
   OR A             ; end of string (have we reached 0)?
   RET Z            ; yes, exit
   CALL #BB5A       ; no, print character
   INC DE
   JR LOOPER
MESS:     DEFM "Just testing AA's home made RST 6 routine"
   DEFB 0
```

Programming the Z80 • JUNE 1992 • AMSTRAD ACTION • Programming the Z80 Programming the Z80 Programming the Z80

The Wacci Page

Amstrad Action has got together with its buddies at Wacci to produce a brand new section – 'The Wacci Page'. Wacci is a user group with some 400 members, all of whom are complete tech-nutters. So that Wacci's expertise and know-how can reach a wider audience, we're giving it this spot in the mag to provide its own pot pourri of techie, tutorials, top tens, news and views from the Serious Side of the CPC...

ROMDOS DOS IT ALL

Anyone who has invested in a Romboard, ROMDOS and a 3.5 inch external disc drive will not need me to tell them what a wise move it was. If it wasn't for the enormous increase in disc storage capacity which it brings, it would be easy to forget that ROMDOS is at work. And therein lies it's beauty....it's 'invisibility' makes it a doddle for anyone to use.

To achieve this, ROMDOS does not claim any memory for its own use but instead, uses the workspace already claimed by AMSDOS and patches the jumpblocks to intercept calls to disc routines. As a result, any program that works under AMSDOS will work under ROMDOS. But what about those programs that will not run from, or recognise, a ROMDOS format disc?

Two notable examples of this type of program are the Advanced Art Studio and Stop Press. The reason that they do not work with ROMDOS is quite simply that they do not look for it.

Both these programs use BASIC loaders to get the program code into memory. Control is then passed to the program code with a CALL command. At this point machine code takes over and makes a call to the firmware routine at &BD16 and then &BCCE. And that is where the trouble starts.

MC START PROGRAM at &BD16 resets the computer, but stops short of initialising any ROMS (Bye-bye ROMDOS).

KL INIT BACK at &BCCE is used to initialise AMSDOS (rom No.7) so that further files or data can be loaded from or saved to disc. This initialisation resets the Disc Parameter Blocks for both drives to their default settings (ie. Normal AMSDOS formats), then selects Drive A and User Area 0.

Now you know why you get the dreaded "Drive A: Disc Missing" or "Drive B: Read Fail" messages with these programs.

So that's the bad news. The good news is that it's perfectly possible to write a Poke to give "serious" users infinite lives just like the "gamers" get in Cheat Mode. Infinite lives? Well how about "ROMDOS compatibility". It may not sound as exciting but it's probably a lot more useful. All that is needed is an extra bit of code to initialise ROMDOS immediately after initialising AMSDOS. And lo and behold, here is just such a poke ....

```
10 'ART STUDIO Loader for ROMDOS
20 'Replaces STUDIO.BAS
30 '(c) Jess Harpur 1992
40 '
50 MEMORY 5000:adr=&700
60 LOAD"studio.bin",&1400
70 READ a$
80 IF a$="end" THEN CALL &700
90 POKE adr,VAL("&"+a$)
100 adr=adr+1:GOTO 70
110 DATA 21,00,14,11,00,00,01,00
120 DATA 84,ED,B0,2A,7D,BE,7E,32
130 DATA AB,07,21,9A,07,0E,FF,C3
140 DATA 16,BD,21,FF,AB,11,40,00
150 DATA 0E,07,CD,CE,BC,0E
160 DATA 1 'ROMDOS's slot number
170 DATA CD,CE,BC,3E,00,2A,7D,BE
180 DATA 77,C3,86,09,end
```

This BASIC program will allow you to run *Art Studio* from a ROMDOS (or AMSDOS) format disc in Drive B, and to load and save screens etc. using ROMDOS format discs. Edit line 160 to suit, if you have ROMDOS in a different slot in your romboard.

● A note of warning though; *Art Studio* often reports that there is less free space on a ROMDOS format disc than there actually is. The Disc Full error message is the true indicator

By Jess Harpur of WACCI & Campursoft

WACCI - The Club

In 1986, Wacci founder Jeff Walker decided that a computer club (dedicated to the more 'serious' aspects of computing) would find a niche for itself, he was right, and WACCI was born.

Today WACCI has over 400 club members (and is still growing). WACCI produces a 32 page, 27000 word monthly magazine covering such diverse topics as programming (Basic, Machine code and Forth), reviews of commercial and public domain software, members letters and comms. WACCI also runs a bulletin board (0252 318557), which is open 24 hours a day to both members and non-members.

The organisation is non-profit making, and supplies goods to members at near trade prices, such as blank discs at £14.80 for ten, *2-In-1* at £20 and the complete *Micro Design Plus* package from Campursoft at £28.

Club members are always willing to help and assist members in overcoming technical problems, either through the letters section or through the telephone help-line service.

WACCI currently has 30 discs in it's public domain library (and it's growing by an average of 4 discs per month) and a homegrown library with 15 discs. Discs cost £3 each, including the disc and p&p. WACCI runs tape and book lending libraries for club members.

All in all, it's a fun place for those who want to do more with their CPC than just zap aliens, to 'meet' other CPC owners who also want to do more than just zap aliens.

WACCI costs £1.50 per issue: for a 'free' sample copy send a 34p stamp and your name and address to WACCI, c/o Clive Bellaby, 12 Trafalger Terrace, Long Eaton, Nottingham, NG10 1GP

WACCI's top ten serious products

1. *Protext, Promerge & Prospell* – probably the most versatile WP package available for the CPC. (Used by WACCI to produce *WACCI*.)
2. Printer – You can't really be serious without one, any type will do, 9 pin, 24 pin or even the latest bubble jet.
3. Disc drive, essential for saving your important development work. 3.5 inch disc drives are preferable, 800k of software on a disc that costs around 60p is not to be sniffed at.
4. Modem – (and loads of money to pay the phone bill) No serious CPC user is prepared to wait for software to arrive by snail mail.
5. Programming language discs. Forth, MBasic, Cobol, Pascal, C, Lisp, Prolog, Expert86 and many others are available from good PD software libraries (and they only cost around £3 each.) They are ideal for learning the rudiments of a language before you go out and splash £40 of your hard earned cash on the commercial item.
6. *Micro Design*. Probably the best CPC art package around – Used by WACCI to fulfil all its artistic needs.
7. Alarm Clock – Set to 4am, so you'll go to bed and get at least 3 hours sleep after a hard nights work.
8. ROMDOS – no self respecting large format disc drive should leave home without it. Invisible in use, it reacts instantly to whichever format of disc you decide to stick in the drive.
9. Rombox – After all you need something to plug ROMDOS into. You'll save hours of loading time every year as your favourite programs load in a flash.
10. Your favourite games disc, it can be any of them; *Chess, Space Invaders, Elite* or *Dominoes*. There's nothing wrong with playing games – everybody needs to relax occasionally.

AMSTRAD ACTION • JUNE 1992 techie stuff techie stuff techie stuff

AA SMALL ADS

For Sale

GX4000 in excellent condition with all fittings and 5 cartridges. Pang, Navy Seals, Burning Rubber, Robocop 2 and Switchblade. Whole lot for £70 o.n.o. Phone David on (0235) 531251 after 4pm.

CTM644 colour monitor with dust cover, £65. DK Tronic 64K Memory Expansion, £20. Rombo Rom Box, £15. MP3 TV Tuner, £20. Multiface two. Phone Kevin after 5.30pm. Tel: 081-946 8084 London.

CPC6128 colour monitor, tape deck, built-in disk drive, dust covers, approximately £350 worth of software. Excellent condition, sell for £195. Buyer collects. Ring Philip 081 941 0960. (Hampton).

CPC464 with colour monitor, joystick, 30+ games, loads of AA mags. £225. Phone Steve (0708) 744444 Romford Essex.

AMSTRAD CPC464 computer with colour monitor, manual and over 70 games, 2 joysticks. Excellent condition £250 the lot. Will deliver within reasonable distance. Tel Peter (0942) 216753 Wigan.

CPC6128 GAMES. Extensive range of quality games on disk and tape. All with original instructions. As new. Including Elite, Gold, Silver, and Bronze, and the Pawn. Tel anytime (0734) 662131.

AMSTRAD 6128 + colour monitor. 4 games: Ghostbusters 2, Batman, Untouchables and Microprose Soccer. Joystick and manual. £240 o.n.o. Phone John on 081-949 4516.

CPC 464 green monitor, manuals, AA74 to AA79, over 60 cassettes inc World Class Rugby, Wheels Of Fire. £100 o.n.o. No splits. Phone (0342) 321360 and ask for Edward.

CPC6128 colour, joystick, mouse, dust covers, games, utilities, blank disks, AA cover tapes, magazines and books. £315. Phone John, Stamford (0780) 56301.

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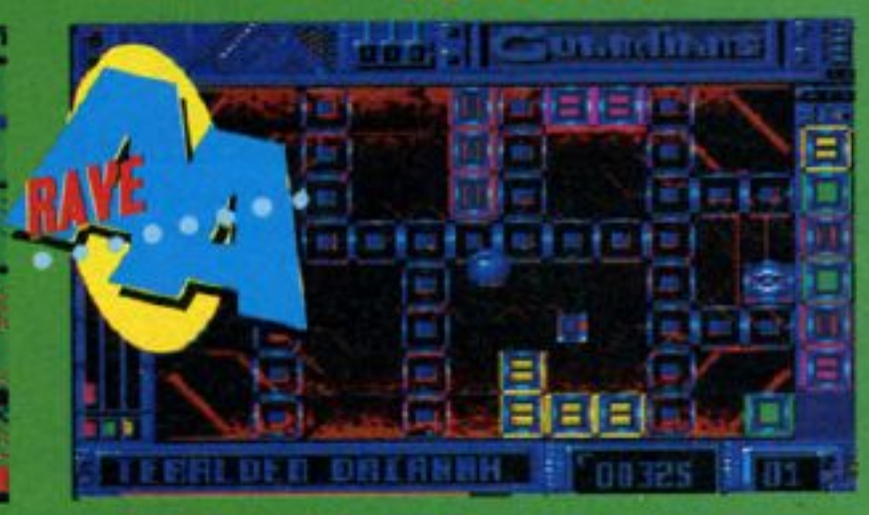
Welcome to ACTION TEST...

28 **Avalanche wargame** CCS LTD

30 **French Software** LORICIEL

34 **Bangers and Mash** ALTERNATIVE







■ European land war ahoy! Put down that *Big Boys Book of Tanks* and get stuck into the real thing (er, the real *simulation*).

■ *Guardians* (above) is a Rave, but how do fellow Frenchies *Paragliding, Thunder Burner, Steve McQueen* and *Psyborg* do?

■ A game of fruit collection based on a TV show. Quick quiz: guess how many fruit puns Rod will use in the review...

Now answer this question: if a game of American football consists of four quarters, each one fifteen minutes... no, listen... each one fifteen minutes long, why does it take half a day to finish a match?

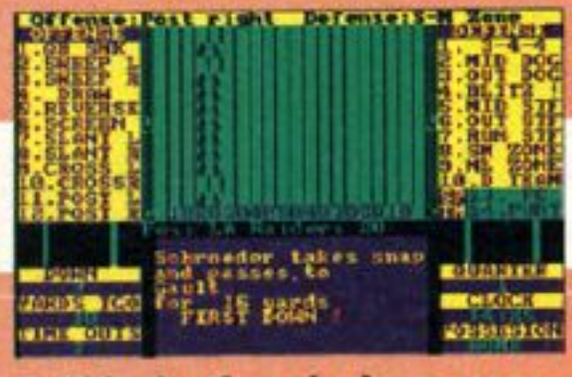
Let's face it, American Football is a weird game. But it's also America's national sport (or is that baseball?)



■ There's a whole barrage of strategi options (no way of bribing the umpire, though.



■ Time to get the wider picture... who scored what in last week's fixtures.



■ This is the playing screen. Your offensive options are on the left, defensive on the right.

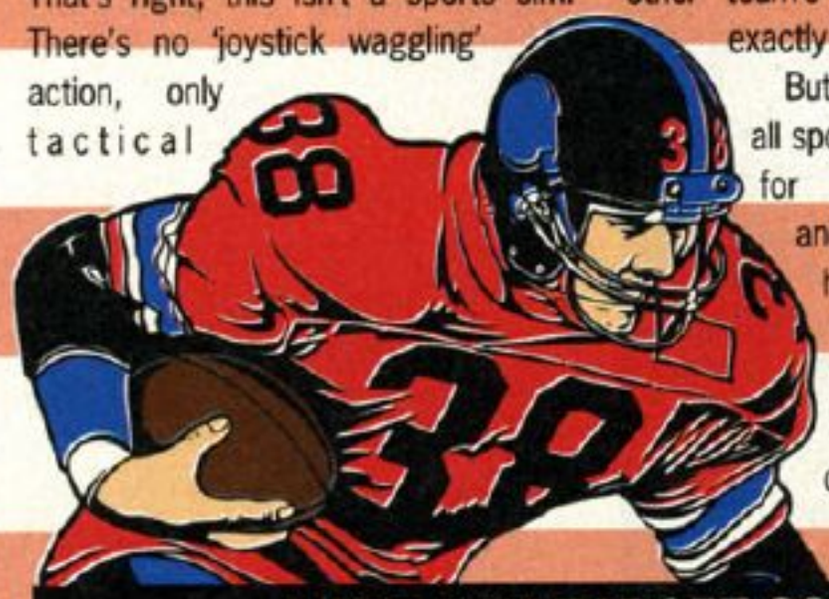
TOUCHDOWN!

STRIKE FORCE DESIGN • £4.95 CASSETTE, £14.95 DISK

and it's gained a cult following in the UK too.

And at Strike Force Design they are very serious about American Football. Serious enough to produce an incredibly detailed and deep American Football strategy game that tests your mettle as head coach of an NFL team.

Uh oh, it's that word... 'strategy'. That's right, this isn't a sports sim. There's no 'joystick waggling' action, only tactical decision-making and nail-biting tension.



So what does a head coach actually do? Well he calls the offensive and defensive 'plays'. He has to judge the abilities of the players in his own team and those of the opponents in deciding which of offense/defense is most likely to succeed. There's a lot of second-guessing involved here, as the other team's coach will be doing exactly the same thing.

But chance plays a part in all sports, and the same goes for *Touchdown!*. Offensive and defensive plays only have percentage chances of success. Whether or not the play succeeds will also depend on the abilities of the players involved in the play (make sure you do your spying) and what the other team's coach does. Tricky stuff.

Your ultimate aim is to come out as top team in the NFL. But there's a lot of football and strategy between you and your ambitions. The other teams (played by the computer) want to win just as much...

Touchdown! is a very complex game. Apart from 'spying' on other teams, you can trade players, send your team off on training and carry out an annual college draft looking for exciting new talent. The trouble is you'd have to be a real fan to (a) understand what the manual was talking about and (b) sit through all those matches during a season (though you can save your position to disk). Arcade fans will find *Touchdown!* a crashing bore, but strategists and American Football fans will just love it to bits.

FIRST DAY TARGET SCORE

Win a match!

SECOND OPINION

"American Football, eh? 10% action, 90% talk. Just like this game, really. A decent enough sim of a stupid sport (but then I like *proper* football)."

ADAM PETERS

BUT WHERE CAN I GET IT?

This game is not available in the shops... *Touchdown!* has to be ordered by post direct from Strike Force Design. The address is: 28 Noble Street, Hendon, Sunderland, Tyne & Wear SR2 8LU. Remember, it's £4.95 on cassette, £14.95 on disk.

TAPE OWNERS BEWARE...

...*Touchdown!* is available on tape, but in a cut-down form. Many of the options of the disk version are missing, and while the basic nuts and bolts of the game are still there, the tape version isn't as 'deep'. SFD recognises this – which is why the tape version is a full tenner cheaper than the disk version. Cut-down it may be, but at £4.95, *Touchdown!* on tape is a bit of a barg.

Rod Lawton

graphics **40%**
No arcade-style action, but you can see your team's position on the field

grab factor **25%**
You really have to persevere with the instructions to work out what's going on

sonics **09%**
The crowd is strangely silent... but then this is a strategy game

staying power **85%**
It's not easy, and every game is different. Plenty of lasting interest for fans

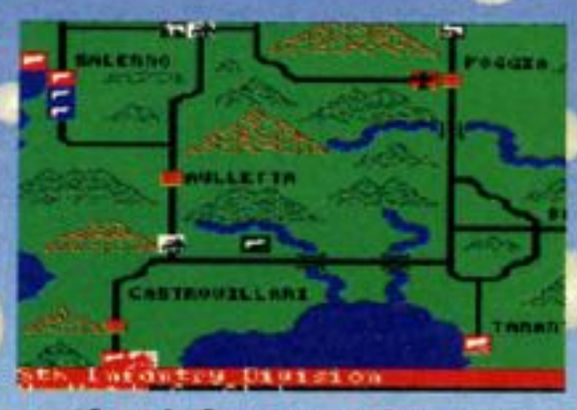
70% VERDICT



● German tanks close in on a lone British infantry unit.



● But luckily his friends have landed, and they rush to his aid.



● Oh no! Those tempting souvenir shops have waylaid them!



● And a disaster occus. The 3rd Foot and Mouth are wiped out.

aVaLaNCHe

CCS • 081 558 5274 • £12.95 CASSETTE, £12.95 DISK

1943. North Africa is in the bag. The Germans, with their millions of tanks and their lethal 88mm artillery pieces, have been given a bloody nose. The people of Tunisia, Egypt and Libya can breath a sigh of relief, knowing that the evil Nazi menace has receded (or been blown to dust).

So what next for the victorious Allies? South Africa? No, they're our chums. Gambia perhaps? They should be easy to beat. No, it's got to be Italy, land of wine, fast cars and women with large behinds.

The Allies fondly believed that if they bunged thousands of blokes into Sicily and Italy, Hitler would divert thousands of his blokes to defend it and make things easier for the English to land in France. A classic plan if ever there was one.

On the 9th of September, Operation Avalanche swung into, er, operation. The Germans, possibly having received pre-production copies of this game, were ready and waiting for them in just the right place. A fierce scrap started.

As Commander of either the Germans or the Allies, you can move your troops around, call in airborne help and basically do what you hope the enemy isn't expecting.

At the start, when you choose sides, you can also fiddle with the unshakeable facts of history. You can choose to have the Italians on either side (insert any Italian joke here), and can speed up or slow down the Allied reinforcements.

Then, as if by magic, a blocky map of Italy unfolds before your disbelieving eyes.

From then on, you're in the thick of the battle. But don't expect the urgency of War to flood out of your screen into your living room, scaring the cat. Because things do not happen quickly. First it's the German Air phase. If you're playing the Allies (which, for the sake of this review and political credibility in general, I'll assume), you must wait while the Teutonic terror makes two or three of your little unit characters flash. This, we are told, is the might of the Luftwaffe unleashed on the plucky, cowering Brits.

If you've survived the withering air assault, the Germans then move. The map scrolls slowly from unit to unit, as they chug over the green and pleasant landscape of Southern Italy. Time passes.

Then you get to drop bombs on the Germans from the air. You have three attempts. Following that, a few more phases happen, which involve a lot of SPACE bar pressing and not-very-interactive watching. Then you move. One by one, you select your units using the cursor keys. You move the cursor to where you ultimately want them to end up, and they promise to do their best. Some more time passes.

Then war happens. When two or more opposing units meet, they take it in turns to flash. Sadly, no immediate details are available to tell you what damage has been done to who. if a unit gets too knackered, it withdraws, or disappears completely.

As long as you're not stupid, beating either side on Beginner mode is just a matter of time. You have to be patient, and keep plugging away solidly. Any heroic stuff by individual units almost always results in complete death for your boys.

***Avalanche* isn't** as exciting as the real Italian campaign. There must be a lot of processing going on in the old Z80, but it's certainly very slow. All keypresses are buffered, so if you hit a key a few times in frustration, you could end up by withdrawing completely, handing Britain to the Allies and digging a shallow trench in which to fall after they've shot you.

The strategic element is well thought out, though. A lot of care has obviously gone into getting the scenario historically accurate.

This technical aspect is the game's strongest point. And it's mildly interesting to see if you, playing the Germans this time, can halt the flow of plucky Brits and turn the tide of the War back in favour of the manic teetotal vegetarian with the laughable moustache.

James Leach

SECOND OPINION

"Wargames are one of those things you really need to be a fan of to fully appreciate. I'm not, and therefore I consider *Avalanche* a load of old nob."

ADAM PETERS

FIRST DAY TARGET SCORE

Win as Allies on easy level

TWO WARS AND ONE WORLD CUP

tips tactics

Beating the Germans isn't too tough if you set the Italians on your side too (no joke is necessary here). You simply amalgamate your forces into the largest lump possible, and engulf any Nazi units that happen to stray into your path.



◀ Here, the Allies are getting together a fairly decent collection. Once it's big enough, you can rampage around the Italian countryside with impunity. The same used to be true of Trafalgar Square.

Towns, airports and naval bases are key areas to head for. Each has victory points attached, and even if your forces are taking a pummelling, you can still win by controlling vast tracts of open spaghetti-growing country, and key towns, bridges and sports-car factories.

graphics **47%**
Just like every other CCS wargame, A scrolly map with some blocky sprites moving around.

sonics **35%**
The horrifying furnace of battle sounds a bit like R2-D2, sadly.

grab factor **68%**
Pitting large amounts of military hard ware againt each other is always good for a giggle.

staying power **70%**
Play it how you want. Attack, defend, eat pasta and watch in dismay at your pathetic troops.

65%
VERDICT

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THe FReN

UK publishers of full-price games are abandonning the CPC in favour of exc
checks out five of the latest releases from this very busy software house (we

Battle against the 16-bits

What's all this nonsense about the CPC being 'dead'? OK, so in this country the machine is losing ground to the 16-bit machines and the dedicated games consoles, but the Amstrad range still has many loyal users and a lot of life left in it.

Of course, convincing the major UK software houses that that's the case is another matter. Most of the full-price games publishers have pulled out of the CPC market, or are in the process of doing so. They are being lured away by the greater profit margins and sales of the 16-bit and console machines. It's understandable enough, but it means the 8-bits are getting buried before their time.

Not enough programmers?

Even the French market – always the strongest CPC market in Europe – is shrinking, though. Ubi Soft (remember *Iron Lord*?) and Infogrames (remember, er, *Tintin on the Moon*?) are abandonning the CPC altogether (dirty rats), in favour of the more glamorous and presumably lucrative 16-bit market.

But that picture isn't typical. Titus still plans lots of CPC releases, but is being held back because the company can't get hold of any CPC programmers! It's true – programmers are being lured away by 16-bit and console products, so that even though a software house might *want* to do a game, it's not necessarily going to be possible to find a programmer to code it!

The moral? Don't just blame the game publishers – blame the programmers too!

Frog spawn

HOWEVER, top French games publisher Loriciel is still turning out full-price games for the French market. And, if we pull a few strings, it's just possible we might land a couple of exclusive offers on the best of these games.

Interested? Well, you should be. The French get some pretty funny ideas about gameplay at times, but they can also turn out some startlingly original products when they put their minds to it. We got together five of the latest Loriciel games and gave them a good going over. Read the reviews opposite to find out what we thought...

Disk only?

More and more *AA* readers are complaining that they can't buy games on disk anywhere. Well the good news is as far as the French market's concerned that disk machines are much more common over there than tape-based CPCs. In fact, the publishers *concentrate* on producing disk versions.

• All the games reviewed here were disk versions. They are also available on tape, but some game features may be missing.

But where can we buy them?

None of these games are currently available in the UK, but *AA* will be trying to get hold of the best of the French software for its special offers pages.

In the meantime, if you want to contact Loriciel direct, the number to call (it's in France) is 010 3314 752 1133.

Guardians



■ This is your family (no offence). Old Murianad is the toughest.

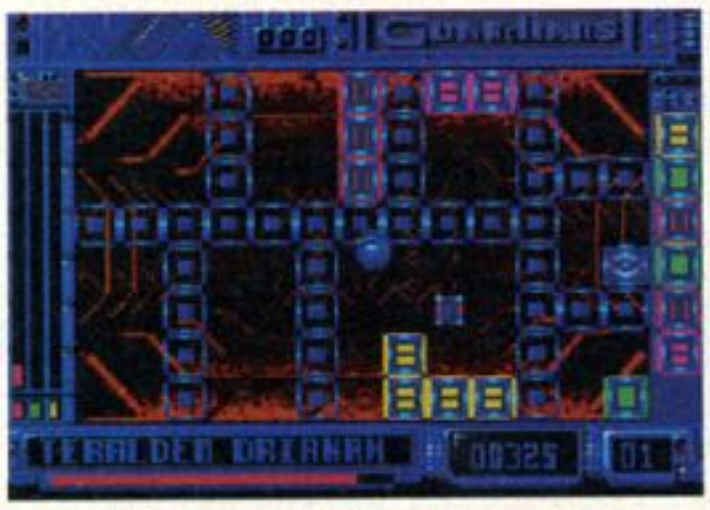
The French have got some funny ideas about plot. In *Guardians*, for example, you've got to fight off loads of rampaging triffids...

These aren't the triffids of sci-fi B-movies, though. You know, those things that looked like mutated begonias and shuffled their way round the streets zapping people with their poisonous tendrils. Instead, these 'triffids' are spheres of pure magnetic energy.

These spheres are a bit tricky to control, and can only be contained in cells made of demagnetised platinum (it says here). However, they can also be held back by 'cohesion bricks'. These are blocks which can be assembled into walls which will hold back these bouncing balls... er, spheres of pure magnetic energy.

The blocks can be picked up at the bottom right of the screen from a reservoir of the things. You then decide where on the screen you want to place it. As soon as you put together four blocks of the same colour (or six, or nine) you form a 'cohesion' and score points.

The idea is to score a certain number of points within a specified time limit. It's not quite as straightforward as it sounds, though. If one of the triffids escapes while you're placing blocks you lose valuable time. And 'magnetic storms' (bonuses, to you and me) pop up regularly. If you



■ Quick! Stamp on that magnetic storm (the, er, block on the right).

don't catch them in time, some pretty nasty things can happen...

Guardians is great. The plot is a load of old nonsense, but the game itself is a really good arcade puzzler. It's a bit odd to start with, but before long you're completely addicted.

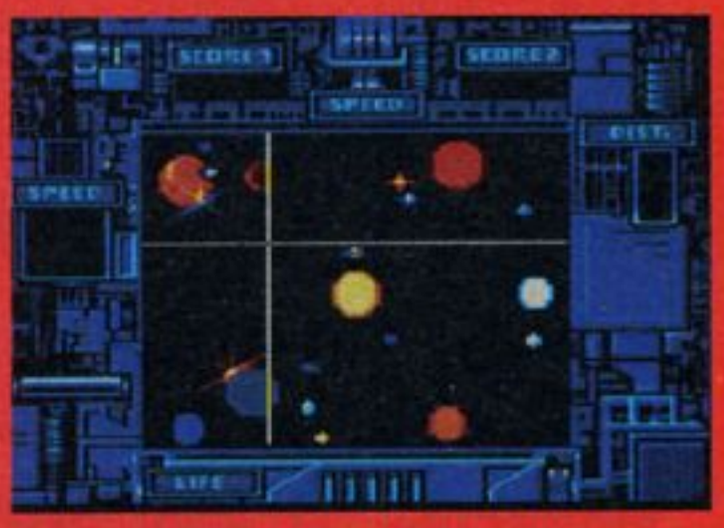


Psyborg

Hands up everyone who thought a Psyborg was a sort of android. Ha ha! – *wrong*. You're thinking of a Cyborg. No, no, no... a Psyborg is someone with psychic powers. By the end of the 21st century, science recognises these powers...

...In fact, it flippin' well has to. The Earth is being attacked by an alien race called the Andropters, whose ships can travel through space ten times faster than the puny Earthling vessels. But Psyborg Duncan Norton can send his mind through space to neutralise the alien threat wherever it appears.

To do this, our hero has to travel to a total of 40 planets in 8 solar systems. The journey is brief but



■ Pick your planet! The courses gradually increase in difficulty.



■ OK, so they're wire-frame graphics – but they move very fast.

hazardous, a spinning, racing, reflex-testing blast through the twisting planes and vortices of psi-space...

Oh look, never mind all this stuff about Andropters and Psyborgs. *Psyborg* is basically *STUN Runner* with wire-frame graphics, a kind of space-age *Bobsleigh*. You've got a fixed amount of time and a certain number of lives to complete each course.

This game suffers from '8-bit-itis'. The manual talks about shops, for instance, where you can pick up extra lives and shields and sof forth. And there's a replay function which lets you 'play back' your last series of moves to see where you went wrong. And you can pause mid-game to call up a stats screen... except that none of these options are available on the CPC version. *Grrr!*

Psyborg might be half-decent on the Amiga or PC, but on the CPC it's a bit of a bore. There's simply not enough to it.



...CH RESISTANCE

...hardware. But French software house Loriciel is bucking the trend by sticking with the trusty CPC. ROD LAWTON ...now we said 'a dozen games' last month, but that was Adam P - he thinks five *is* a dozen!)...

Paragliding

If you're the sort of person who gets vertigo standing on their front doorstep, don't read this review! Paragliding is an aerial sport which is a bit like hang gliding without those little bits of aluminium which actually keep your machine hang glider-shaped.

It's basically hang gliding with a parachute. It's a



■ **Eek! You're on target for maximum score but your 'chutes collapsing!**

sport where you spend half your time looking for 'thermals' and the other half wondering how fast you're going to hit the ground.

You'll find these thermals in all sorts of odd places. Over houses, for example, or rock escarpments, or at places where two air masses are meeting. The trick, as any good glider pilot will tell you (the bad ones won't tell you anything, being six feet under), is spotting where these thermals are and then making use of them to gain extra altitude.

In *Paragliding Simulator* you have to do just this, guiding your little man back and forth across the obstacle-laden terrain, trying to make as much progress as possible. The controls are pretty simple – right and left to go forwards and backwards respectively, plus down to land.

You start off having to demonstrate your proficiency on three training courses. Only when you've scored the maximum 100 points on each are you allowed on the five proper courses that make up the



■ **You'll pick up a nice little thermal above that cottage.**

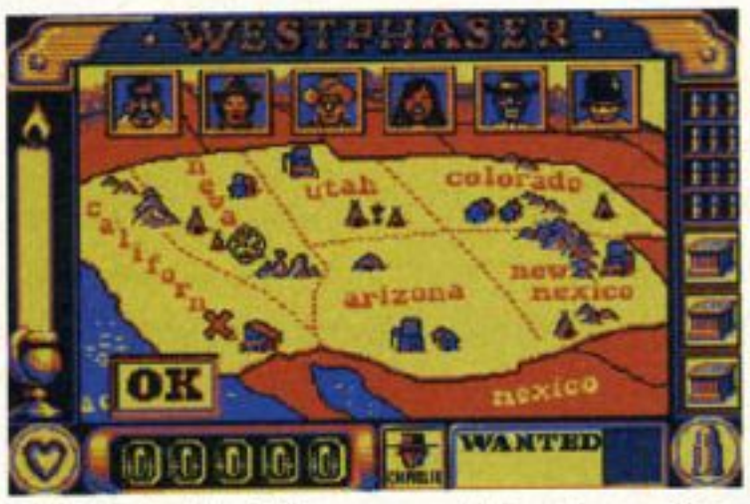
game. These take place over various mountain ranges around the world.

The graphics are none too stunning, and the controls are a bit vague and sluggish. Really, it looks more like a budget game than a full-price offering.

Despite all that, though, *Paragliding* is still an oddly addictive little game that keeps you coming back for more.

71%

Steve McQueen



■ **Pick the baddie you want to chase after and then go in shootin'...**

Aha – we've seen this game before. Loriciel was marketing it with its own light gun way back in 1990. However, it looks as if the company is now selling the game on its own.

The light gun origins are obvious straight away. Each 'level' is set against a single backdrop – saloon, wild west street etc – and you have to move the cross-hairs on the screen to aim at the baddies that appear in windows or roll across the floor shooting at you (there's a lot of them!).

You're obviously a pretty tough character, since the baddies can unload lead at you for ages before you finally bite the dust. You can keep alive that much longer, though, by waxing them before they get the chance to shoot at you.

Easier said than done, though, because there are



■ **It's just one screen per level. One screen, but dozens of bad guys.**

just too many baddies to handle. It's one thing playing a game like this with a light gun, quite another moving a set of cross-hairs around – this is a hell of a lot slower.

The ultimate aim in *Steve McQueen* is not just to stay alive, but to capture one particular baddie on that level. There are several bad guys to catch in the game, and up to six human players can take part (taking it in turns).

The graphics are really very nice, and everything moves quickly and smoothly. It's just a pity then that there's not just that little bit more gameplay.

There's an extra element of interest in a multi-player game, though, which becomes a competition to see who can score most points.

Steve McQueen isn't especially thrilling, but it's as good as the classic *Operation Wolf*, and that sold in its thousands...

76%

Thunder Burner

The French must have a thing about transformers. The toy mutating robots, that is, not electrical sub-stations. First, Titus came out with *Fire & Forget*, where your fancy car turned into a jet fighter at the flick of a switch. Then there was *Fire & Forget II* where, at the flick of a switch, your fancy car turned into, er, another jet fighter. And now Loriciel is jumping on the band wagon with *Thunder Burner*.

This time, though, it's a bit different. While you're on the ground you're controlling a lumbering robot rather than a fancy Italian sportster look-alike. In fact, *Thunder Burner* looks pretty amazing to start with. You're rumbling your way across what looks like a 3D landscape, battling all manner of weird and wonderful aliens.

Looks can be deceptive, though. For a start, it's not really 3D and the aliens might be weird, but they're not that wonderful – just hard to see coming and difficult to shoot.

Never mind, the aerial combat must be good, huh? Not really. Your jet swoops about satisfyingly, but it's almost impossible to avoid flying into rocks and those fiendish aliens.

You navigate your way across each level via special markers (which also give you extra fuel). A radar system tells you which way to go and a neat little mileometer tells you how far you've come (and how much of the level is left).

Thunder Burner represents another case of '8-bit-itis'. The 16-bit versions have extra weapons and end-of-level guardians, but the CPC version has neither. The result is a visually impressive game but a bit of a boring one.



■ **Watch out for that baddie! You don't get much warning, either.**



■ **In jet mode you travel a lot faster but you, er, tend to hit things...**

65%

action replay

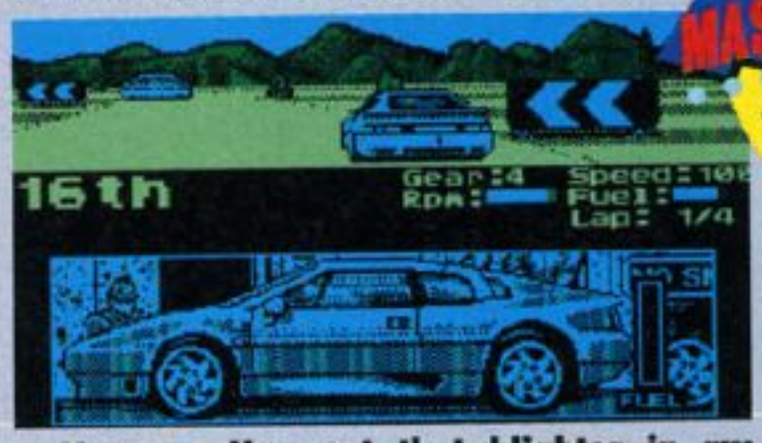
***Budget Bonanza* is no more. But hold those tears folks, we've killed off *BB* so we could give more space to reviews of budget games. New titles get full size *Action Test* reviews. Re-released games get extended goings-over in our spanky new *Action Replay* bit. ADAM PETERS shines the big light and asks some difficult questions...**

LOTUS ESPRIT TURBO CHALLENGE

GBH • £3.99

Don that helmet, stick empty fag packets, drink cans and oil canisters all over your shirt, making sure the brand names are clearly visible (sponsorship) and leap into that, er, armchair. *Lotus Esprit* is *AA*'s second favourite drive-em-up of all time, and here's why:

The beautifully detailed mode 1 graphics are a joy to behold. The split-screen two player mode will have you and your opponent on the edge of the sofa, with gritty determination etched all your faces. Nine different tracks to hurtle round means a major league long term challenge.



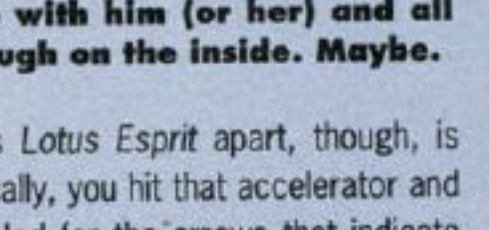
■ **Vrooom. I've got that blighter in my sights, time to put the pedal to the metal.**



■ **Ha ha! I'm up with him (or her) and all set to shoot through on the inside. Maybe.**

What really sets *Lotus Esprit* apart, though, is the gameplay. Basically, you hit that accelerator and keep your eyes peeled for the arrows that indicate an upcoming corner. Sounds just like any other racing game, huh? Maybe, but when you meet that corner, skilful steering will see you through. The back of the car ahead of you comes into view, and it's time to chase.

All driving sims are not the same. The collision detection in this one is spot on, overtaking involves a real cat-and-mouse tussle, and everything from the steering to the narrow road view has realism stamped all over it. Vorsprung durch damn good game, as we like to say every now and then.



MANCHESTER UNITED

GBH • £3.99

We love a decent footie game. Even a half-decent footie game, like this one, gets a pretty big hug.

The predecessor to current chart stonker *Man United Europe*, *Manchester United* is a similar management-cum-arcade football game. The main difference is that it's set in the gutsy domestic league, rather than glamorous Euro competition.

The arcade section is more or less identical to its successor, with the sprites being slightly smaller. It's a bit slower too, but bearing in mind that's it's a third of the price of the new game, it's still got to be a shopper's choice best buy!

So what do you do? The game is split into two sections; the icon-driven management section, and the arcade game section. Loading up the former, you can select teams, buy and sell players, train your bunch, and so on and so forth. Once you feel ready for the match itself, load up the second program and get set to start booting that ball around.

The two separate sections arrangement is going



■ ***Manchester United* – the game's not as hot as the team, but it ain't bad though.**

to cause a fair amount of irritation, seeing as it does mean you get five minutes of play followed by five minutes of loading, five minutes of play followed by five minutes of loading, five minutes of play followed by five minutes of loading, and so on.

The arcade section is nothing to write home about, the scrolling is jolty, the play is sluggish, but at least it's easy to control and the computer opponent is a sturdy one. Nothing special, but not bad.

NAVY MOVES

HIT SQUAD • £3.99

In the wild world of computer gaming there are a few perceived wisdoms; all US Gold coin-op convos are boring (not always true), all Domark games are crap (more or less true) and all Dinamic games are far too, far too difficult.

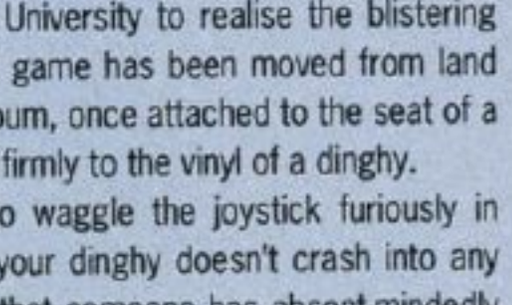
So how true is that last statement then? Here we get another opportunity to examine one of the items of evidence for the prosecution. *Navy Moves* is the sequel to *Army Moves*. It doesn't take a degree from Sherlock Holmes University to realise the blistering action of the first game has been moved from land to sea, and your bum, once attached to the seat of a jeep, is now fixed firmly to the vinyl of a dinghy.

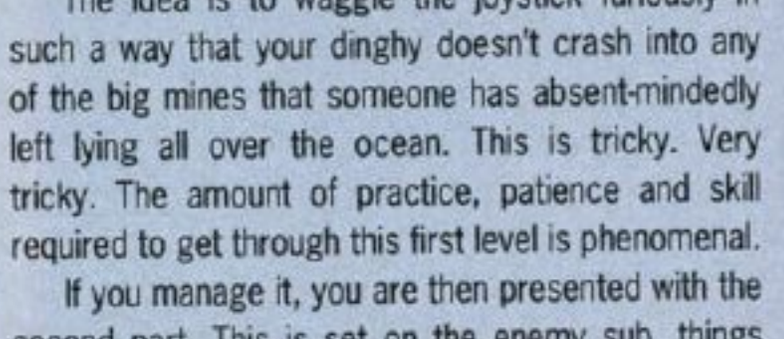


■ **Brill. I'm out for a little cruise round Greenwich boating lake. This is the life.**

The idea is to waggle the joystick furiously in such a way that your dinghy doesn't crash into any of the big mines that someone has absent-mindedly left lying all over the ocean. This is tricky. Very tricky. The amount of practice, patience and skill required to get through this first level is phenomenal.

If you manage it, you are then presented with the second part. This is set on the enemy sub, things get a tad easier, and enemy guards are the main opposition. But most people will give up before reaching this stage. A good game, spoiled by the Spanish softies' traditional over-high difficulty level.





■ **It's not a boating lake after all, and I've just driven into a mine. What a dweeb.**



■ ***Puzznic* is a lovely little puzzle game, with sweet little fruitie pictures in it.**

PUZZNIC
HIT SQUAD • £3.99

Puzzle games, dontcha just love them? The graphics are usually dire, the speed often snail-like, the action as intense as a totally un-intense thing, but still think-em-ups make for some of the most engrossing games you can get. Vorsprung durch *Tetris*.

Puzznic is one of the better puzzlies. It finished eighth in our recent *Buyers' Guide*, and any brain-twisters out there would be well advised to make a bee-line for the budgie shelves.

As with all great puzzle games, the idea is incredibly simple. There are lots of blocks on screen, some of which have little symbols on them. You can move these around the screen, but beware of that naughty law of physics called 'gravity'. The blocks will fall downwards till they reach one of the many plain blocks that make up the 'map'.



■ **This level is dead easy, but it gets harder as you progress and the mazes get bigger.**

There's eight levels, and a total of 36 different sets of four puzzles. That's a total of 144 different puzzles. You can start on any of the first three levels, and once you've completed that set of four puzzles, you can select which seton the next level you'd like to go for. It's very much a case of pot-luck, but there are more different sets of puzzles on the higher levels, so if you get stuck there are a greater number of options available.

Puzznic clocks up a whopping eight points on the spankyometer. Buy.

AA 87% VERDICT

SEYMOUR GOES TO HOLLYWOOD
CODEMASTERS • £3.99

Re-release? This is a new game surely, and didn't *AA* review it several months ago. Right, here's the facts: we reviewed *Seymour* in *AA74* thinking it was an ordinary £3.99 release. But it wasn't. It was initially only available on the *Cartoon Collection* compilation. But now it is a £3.99 release. And it's so darned spinky, spanky and sponky that we don't need much of an excuse to review it again.

Seymour is a potato-shaped ball of lard who snatched Dizzy's crown whilst the prima donna egg was busy getting lost in the *Spellbound* biopic. Seymour is an actor dude who has got to get some dynamite to blow up a safe to get a script to a film he's supposed to be starring in. Why? Who cares.

The ensuing shenanigans is set in the film company's offices, the maze-like studio network, the jungle and tree-huts sec-



■ **Hmm, choices. We recommend you try the studios first. Tip: look for a dictionary.**

tion, and a desert island. Oh yes, and on the sets of numerous films (*Grease*, *King Kong*, *Dick Tracy*, *Flash Gordon*, etc).

To say the game is difficult would be roughly akin to saying that Christina Applegate out of *Married with Children* is moderately attractive. It's very difficult. Mega super extra difficult. With hundreds and thousands on top.



■ **Pippa the grumpy receptionist: character based on a chum of Pete Ranson's (true).**

Even if you can get the script, you then have to retrace your steps, find sixteen Oscars and give one out to each character. Instant death at the hands of Emperor Ming will have you screaming in frustration.

We printed a full solution in *Cheat Mode* last month. Don't think you're not going to need (at least some of) it.

AA 92% VERDICT

TURRICAN 2
KIXX • £3.99

Yowser McTowser! This game got a whopping 95% when first reviewed, and you dudes out there in readerland voted it Full-Price Game of the Year in our readers' poll.

It's been out on a number of compilations, and now you can pick it up for only £3.99. What do you get for your money? You get five massive (and we mean massive) levels of shoot-em-up action. Massive? How many screens are there then? Er, 1500. No, that's not a misprint: there are one thousand five hundred screens in this game. Phew!

You play Commander John Turrican, you're tooled up with three different weapons (an ordinary blaster, a big laser-stick kind of thing, and some smart bombs). It's firepower city, with buckets of different bad guys and a whole wide world to explore.

It's not all running and jumping, mind. Level two sees you at the controls of a spaceship, a la *R-Type*.

What else can we say about this game? It's big, the graphics are breathtaking, and you can't keep away from it. Some of you out there will have had your gaming appetites whetted by the *AA73* cover-tape demo, but Mr Piggy Bank wouldn't let you get the game proper. Well now you can.

Steal your mates' dinner money.

Hold up a bank.

Kill to own this game...



■ **Oh no, it's a monster made out of mouldy fried eggs. A few blasts will get rid of it.**



■ **There's loads of water around the place, as well as waterfalls. And rocks by the ton.**

AA 95% VERDICT

ding-a-ling

Having trouble getting hold of a game? Give these dudes a ring:

CodeMasters • 0926 814132

GBH • 0742 753423

Hit Squad • 061-832 6633

Kixx • 021-625 3388

AMSTRAD ACTION • JUNE 1992 releases releases releases



■ Mind that spook! Your mud pies can't kill it, only send it away.



■ Uip... you've got to go through this graveyard. Mind the skellies!



■ You can send old bony-legs back underground with enough mud pies.



■ Ach! You're going to see that 'game over' message all too often...

BANGERS AND MASH

ALTERNATIVE SOFTWARE • 0977 797777 • £3.99 CASSETTE

Bangers and Mash, lovely, eh? Great, steaming plates of the stuff... just a bit of mustard and salt and pepper and... wait a minute, how can you make a game out of a plate of nosh?

Well you can't, really. Not unless you first of all invent a cartoon TV series about a couple of chimps who just happen to be called Bangers and Mash. Then you make a game out of it, see?

Bangers and Mash are mischievous little monkeys. They play their old mum up a bit and are always getting into trouble. Until one day, mum gets a bit fed up and sends them both out to collect fruit for a giant fruit pie.

Wait a minute. If there are two chimps, how come you only control one of them in the game? Bangers is the one who does all the fruit-stalking, while Mash is nowhere to be seen. According to our notes, here, Mash is way up in the trees making giant mud pies to flatten the various nasties inhabiting the forest. Bit naff, we say.

Bangers can fling a few mud pies himself, mind – at the rate of around 120 a minute, in fact. These mud pies must have a few rocks accidentally mixed in, because they do a good job of wiping out the cuddly (but lethal) hedgehogs and cute ladybirds that prowl around the vegetation.



Even worse are the ghosts that occasionally put in an appearance. You can't kill them, but you can make them go away by throwing enough pies. Look out too for Mrs Snitchnose, who flies around on her broomstick generally making a nuisance of herself.

Your aim is to climb right to the top of the forest, collecting every single fruit along the way. If you don't collect all the fruit you can't move on to the next level! Which is a bit of a pain in the neck, really, considering that you have to enter a graveyard at one point to collect more fruit – and jump down a hollow tree trunk later on.

If do eventually make it to the top with all the fruit, though, a balloon comes down and transports you to the next level. How exciting! Or is it? The next (and final) level is in the jungle again. There are no sub-levels (like graveyards or hollow tree trunks) this time, but the baddies are tougher and the jumps harder to make.

Bangers and Mash is jolly enough in a kiddies kind of way, but it's a bit flawed. It's very tough, for a start. And there really isn't a lot of variety. And the graphics, while colourful, and blocky and not very well animated. There's a fairly big game task, though, despite the fact there are only two levels.

Rod Lawton

SECOND OPINION

"It looks really blocky and doesn't move that well. But it's a decent enough platform game once you get into it. A bit more variety would have been nice."

ADAM PETERS

FIRST DAY TARGET SCORE

Collect all the fruit up to the tree trunk

freeze frame



■ Don't worry too much about these diamonds (**1**) because you don't need to collect them all to finish the level – they just give you extra points. What you do is collect all the bananas (**2**), apples and pears (your running total is displayed (**3**)). Bangers (**4**) can shoot the hedgehogs (**5**) and other nasties with his mud pies (**6**). So now you know!

graphics **54%**
Distincly cheap and cheerful. The Bangers sprite could be just about anything. The animation is iffy too.

sonics **40%**
A few minimal fx just to let you know what's going on. There's no music.

grab factor **85%**
Platform games always hook you straight away – so does *Bangers & Mash*.

staying power **72%**
Only two levels, but they're quite big and tough. It's playable enough to keep you coming back for more.

71% VERDICT

cheat mode

Welcome to another instalment of *Cheat Mode*. This is where champion cheat-finder PHIL HOWARD brings us the month's best hints, tips, solutions, passwords and more... PLUS, of course, full details on the game pokes supplied on the covertape. We pay £10 for the best cheats, and £20 for any pokes we use on the covertape. Send in your game-busting info to: Cheat Mode, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

SMASH TV

Daniel Beeston of Ashton has put together a set of tips on how to get rid of the nasties in *Smash TV* (seems to involve a lot of standing in the corner).

Fireballs Make sure you are at the opposite side of the screen.

Tank Trouble Make sure you have the fireball gun and stand at the bottom left of the screen. When the first tank comes hold down the Fire button until you destroy it. Then run to the top left corner and fire diagonally to the bottom right (it needs a bit of skill).

Mutoid Man Stand in the top left corner and fire diagonally to the bottom right. Resist any temptation to collect a power-up while he is alive 'cos you'll almost certainly get hit.

Orbs Stand in the top left corner and fire right until the last orb is on the screen. Then shoot downwards until all the orbs are gone.



Thugs Stand somewhere across the top of the screen and fire downwards. Don't let any reach the top.

Wiggly worms Stand in one top corner and fire towards the other.

Cobra death Stand at the top corner of the screen and fire to the other top corner. When the cobras get to your side of the screen wait until the go down and then run to the other top corner and fire the other way. Continue until they are all destroyed.

Red Armchair thingies (single loop) Stand at the top left corner of the screen and fire downwards.

Red Armchair thingies (double loop) Stand at the top left corner and fire diagonally to the bottom right.

Mr Shrapnel Stand behind him and fire until he goes to the other side of the screen. When he does, swap sides and continue.

● On the first level, when you get the choice go through a top door. ▶

Multiface Meritorium

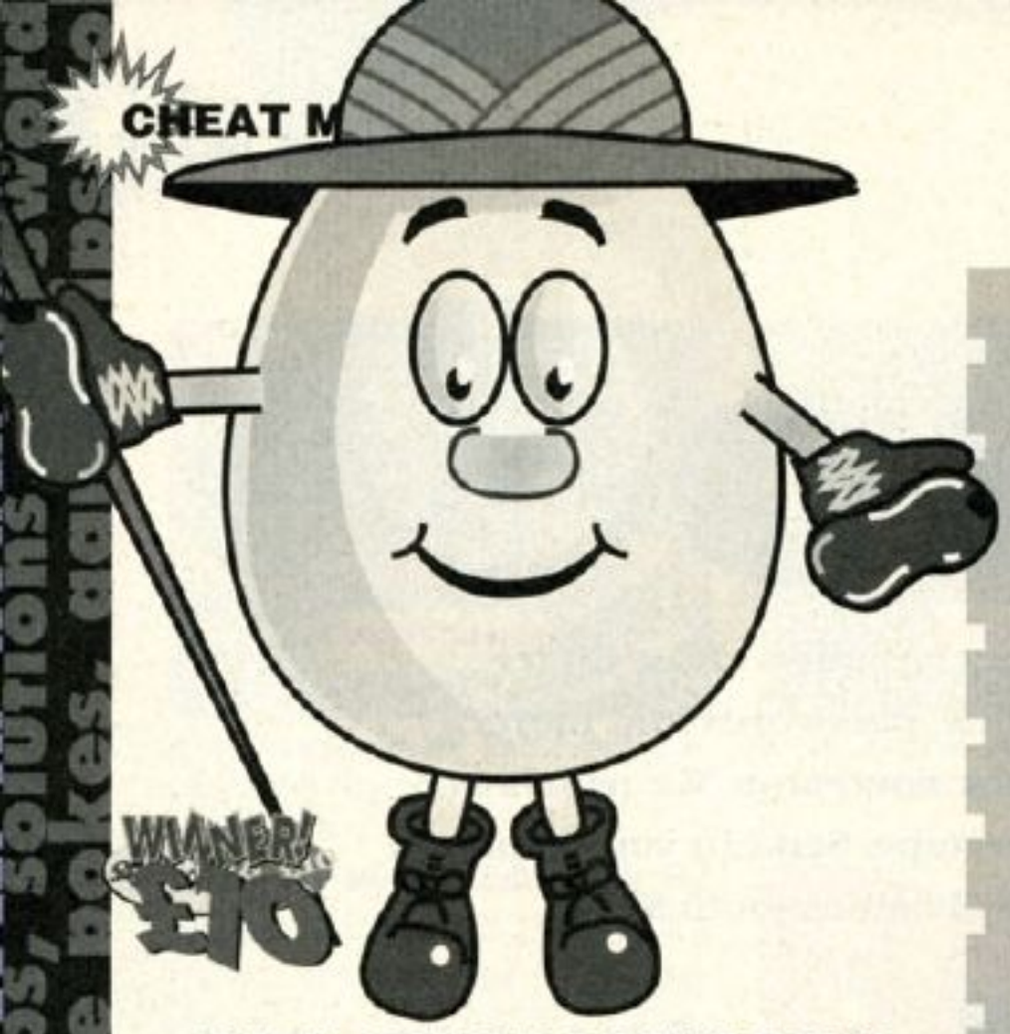


Lots of letters have been flooding in praising the virtues of CPC Network's *Tearaway* utility, and asking that I point out how good it is... well there you go. It is extremely good, and well done James Verity. Now for the Multiface pokes, all of them this time from P.L. Curgenven of Trevone Bay. Thanks, Pete!

NAME	ADDRESS	POKE	EFFECT
Seymour to Hollywood	61C8	00	Inf. lives
Wonderboy	52E2	00	Inf. lives
Troll	5461	00	Inf. lives
Jack the Nipper 2	5D23	00	Inf. Coconuts
Brainache	7312	00	Inf. lives
Titanic	41F9	00	Inf. lives
	4162	A7	Inf. Oxygen
Muggins the Spaceman	11A9	00	Inf. shots
Meganova	67C8	00	Inf. lives
Saboteur	B796	00)	Inf. time
	B78E	00)	
Spaced out	5886	00	Inf. time
Peter pack rat	8702	3A	Inf. time
	8EDF	00	Stops flys
Slug	073B	00	Inf. lives
	09A6	00	Inf. time
Strike force cobra	6943	A7	Stops timer
Chimera	9172	F8	Inf. water/food
Collapse	5F1D	AA	Stops timer
Chain Reaction	4A41	00	Stops timer
	4B81	00	Inf. lives
King tuts Pyramid	7471	00	Inf. water
	7462	A7	Inf. water
	7105	A7	Inf. lives
Cop out	195B	00	Inf. lives
I ball 2	21B2	00	Stops timer
	251D	00	No baddies
Ground zero	5AF8	00	Stops timer
Paws	293F	00	Inf stamina.
Crack up	1233	A7	Inf. lives
On the run	A48D	00	Energy
	B2F2	00	Inf. lives
Top cat	7C89	30	Stops clock.

THE MULTIFACE WAY The (t)s and (d)s before the address indicate whether the poke was written for a tape or disk game (they might work on both, its worth a try). Just in case you don't already how to put in these BLACK BOX POKES, here are the steps to success.

a) Load the game as normal.
b) Press the RED button on the MULTIFACE.
c) Press "T" for tool.
d) Press "*" to make sure you select the code.
e) Press "H" for HEXADECIMAL input.
f) Press "SPACE" for input.
g) Type in the ADDRESS (4 characters ie. 3A7C)
h) Type in the POKE (2 characters ie. A7)
i) Press "RETURN"
j) If there is more than one poke goto (f)
k) Press "ESC" back to the menu.
l) Press "R" return to the game.
"R" return to the game.



DIZZY, PRINCE OF THE YOLK FOLK

It looks to me as though everyone has been playing Codemasters games just lately. *Dizzy, Prince of the Yolk Folk* seems to be the game on everyone's CPCs and solutions have been flowing thick and fast (is that a contradictions in terms or am I mixing metaphors?).

Graham Upton, Jamie Talbot, Philip Shaw, Simon Toller, Daniel Prest, Steven Benbow (and mum), Kevin Ribbens, David Robbins, Christopher Hawken, Jason Briggs, Mark Curzon, Kerry Fotheringhame, Rachel Munns, Philip White, Noel "Nezza" Warham, Tim Johnson, Lee and Steve Kempin, Jonathan Constable, and Andrew hackett are the names I have so far... *(Now, I would give you all prizes, but you know how Rod is (tight as a filmstars frock!)* so it's hand into the sack time for a winner, who is... **Rachel Munns of Penarth.**

Well done Rachel, sorry to the rest of you... keep on trying, though.

Pick up the Jug of Water, Book of Matches, Pile of leaves. **Drop the leaves by the door, use the matches, and then the water to quench the flames.** Talk to the Bugle boy who will give you a Magic Carpet. **Go left and pick up the Heavy Pickaxe.** Go right, jump onto the platform, go right twice. **Pick up the Small Cage and talk to the lion.** Go to the bottom of the hillside and drop the Pickaxe. **Go left then up and get the Gold Nugget.** Go back to the hillside and drop the pickaxe. **Go right to the bank of the river Styx.** Catch the boat (be careful to move along with it). **Make sure that you have the gold nugget.** Talk to the ferryman. **Go right to the enchanted forest and drop the small cage by the Pogie.** Go back to the top of the hill. Jump from the right of the screen and you should land on the cloud. **Get the Acme bridge kit.** Go up to the treehouse in the enchanted treetops. Jump onto the little platform near the right of the screen. **Drop the bridge kit.** Moving up jump from the rightmost platform. You should land on a cloud. **Jump onto the next cloud and off the screen (but not from the edge of the cloud – you'll land in the nettles).** Pick up the golden harp. **Go right and jump the river.** Go up to the uppermost branches, then left. **Jump over the awfully high clouds.** Talk to St. Peter. **Drop the golden harp – he will give you some holy cheese.** Go back to Pogie and drop the cheese in the cage. **Take the Caged Fluffle to the castle's rear entrance.** Drop Pogie by Rockwart and enter the castle. **Go up the stairs and left then up the next set of stairs.** Go to the castle ramparts and pick up the rusty old key. **On the other side of the stairs and landing pick up the outboard motor.** Go back across the river Styx. **Give the motor to the ferryman. He will give you a scythe.** Return to the Tower drawbridge and use the scythe to clear the nettles. **Go up to the Double Trouble screen. DO NOT pick up the spanner.** Go through the inner sanctum into the the deserted tower. **Use the key to unlock Daisy's chamber.** Don't bother kissing her, it doesn't work. **Go back down, then past the bat and pick up the tweezers.** Go to the top of the hill. **Use the tweezers on the lion. Take the sharp thorn to the Double Trouble screen.** Drop the thorn when you enter the screen. **Go round to the top level. When the evil Dizzy walks over the thorn it will die.** Get the spanner. **Pick up the brass bugle.** Give the brass bugle to the bugle boy – he will give you a jolly jokebook. **Go to the castle drawbridge, drop the spanner on the jammed mechanism.** Enter the gardens and talk to the princess. **Give her the jolly jokebook and she will give you the regal flag.** Take this to the castle ramparts and hang it on the flagpole. **The Bugle boy comes to see if the king is back yet. Talk to him.** He calls the king, who will make you prince of the Yolkfolk. **Go to Daisy and wake her up with a kiss.** All you need to do is collect the cherries to complete the game...

...gasp!

Keypress special!

As promised last month, here's a whole host of keypresses from Paul Harper of Folkestone. As yet some of them are untested (I can't get hold of all the games), but here's their chance to reach a wider audience anyway.

SKATIN' USA

On the Urban Park title screen, type PARTY ON DUDES (inc. spaces) and a message "Let the good times Roll!" pops up. You then get infinite lives and shots. Watch out for your bonus, though, since it can still get you.

SPIKE IN TRANSILVANIA

On the title screen hold down the keys TAB,Q,J,I,U,S,A then the Space bar to start the game. When the game starts you will be in Pause mode. Press space to restart and you will have infinite energy.

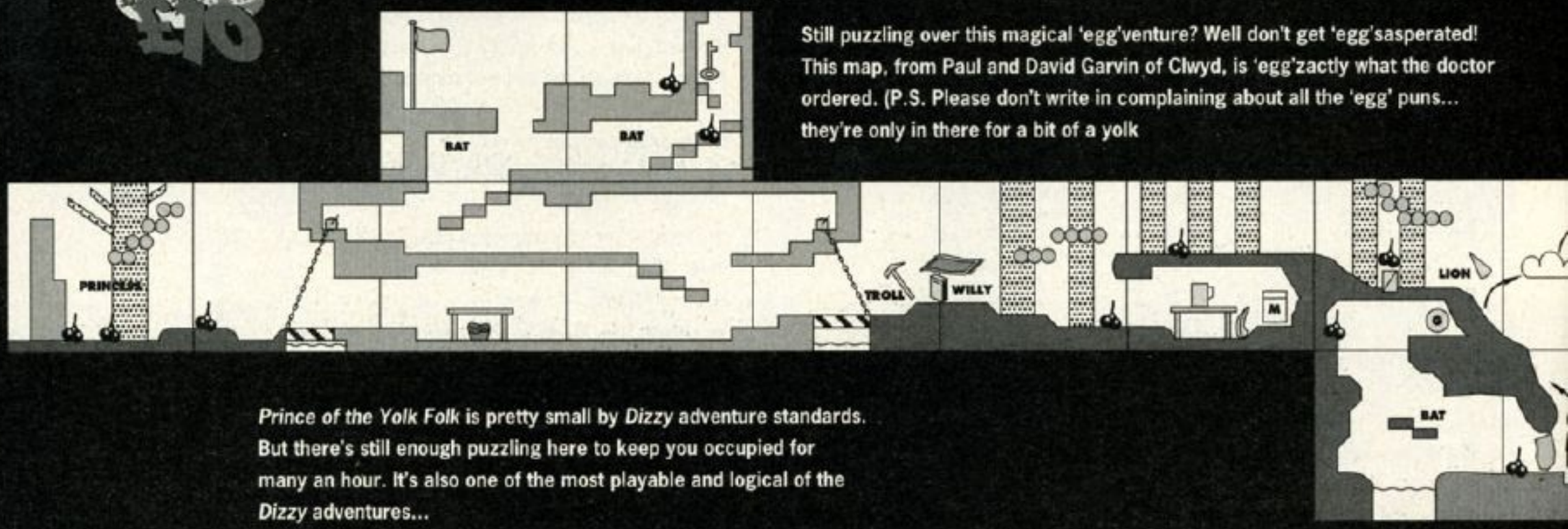
DIZZY DOWN THE RAPIDS

On the title screen, hold down the keys WIGMORE then start the game in the usual way – you will find you now have infinite energy.

SUPER KID IN SPACE

On the Save the World title screen type PUT THE KETTLE ON GEOF (make sure you include the spaces) for infinite lives.

Dizzy, Prince of the Yolk Folk



Still puzzling over this magical 'egg'venture? Well don't get 'egg'sasperated! This map, from Paul and David Garvin of Clwyd, is 'egg'zactly what the doctor ordered. (P.S. Please don't write in complaining about all the 'egg' puns... they're only in there for a bit of a yolk

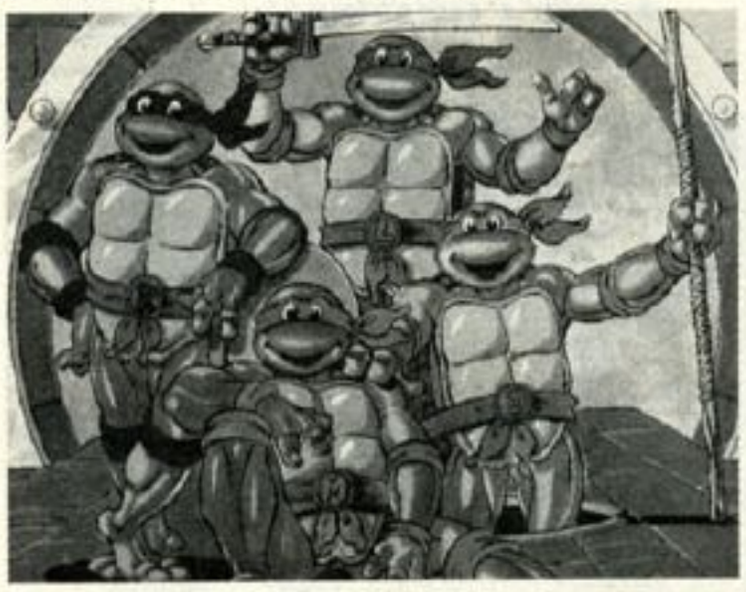
Prince of the Yolk Folk is pretty small by *Dizzy* adventure standards. But there's still enough puzzling here to keep you occupied for many an hour. It's also one of the most playable and logical of the *Dizzy* adventures...

Location of the cherries:

- Above the dungeon in **Trapped**
- By the torch in **A Few Trees**
- Behind the small cage in **Top of the Hill**
- Near the gold nugget in **Top of the Hill**
- By the rocks in **Hillside**
- Under the railing in **The Enchanted Forest.**
- Under Pogie the Fluffle in **The Enchanted Forest**
- Under a railing in **Enchanted Treetops**
- By some stone blocks in **Edge of the Tower**
- On the cloud in **Fluffy Cloud**
- On the rampart in **Castle Rampart**
- On the stairs in **Castle Rampart**
- In the bushes in **Tower Drawbridge**
- Beneath the roof tile in **First Landing**
- Behind strange mechanism in **Inner Sanctum**
- By the wall in **The Deserted Tower**
- Behind the greasy spanner in **Double Trouble**
- Under a clump of grass in **Castle Drawbridge**
- Under a clump of grass in **The Castle Gardens**
- Under a stone block in **The Castle Gardens**

TURTLES THE COIN-OP

Ian Taylor says that after choosing a turtle to go to the define keys option and change them to CHEAT, when asked to confirm your choice press N. Then select the controls you want for infinite credits.



FIGHTER BOMBER

A. Knevett of Havant suggests that when you are within 25 miles of any building/target, press H to pause and then hold the keys F,I,G,H,T,E,R. When you let go a white square should appear on your HUD, press fire and you can watch the maverick glide to earth and wipe it out "Targ destroyed" will appear on the screen.

NARC, GOLDEN AXE & CRACKDOWN

Alan Archer of Keynsham has found a neat way of surviving twice as long on *Narc*, *Golden Axe* and *Crackdown* – select 1 player mode, then, when you are about to die, press the Space bar to activate player 2. Pretty clever, eh?



PAPERBOY 2

Darren K Jarvis, a buddy of mine from up the road in Calverton, Notts, has got together a bunch of tips for Paperboy (girl) 2. Thanks, Darren K. I wondered who it was breaking my windows! ("Don't be mardy, stay on the corsie and mek it g'backards" – People from Nottingham talk like that – except, apparently, Robin Hood!)

- The control is quite fiddly and takes a lot of practice.
- **Don't run into houses, people, cars, kerbs, hedges, in fact anything that stands still.**
- Get close to the paper box and fire. If you miss, keep firing papers until you get one in. Then, no matter how many of their windows you have broken, they will still subscribe.
- **Pick up as many bundles of papers as you can; you will soon run out and cannot go back for more.**
- It is better to go slowly until you know where each paper box is in advance.
- **On the second level, be careful! The castles fire cannon balls at you and the little chaps who run around carrying things will try to run into you.**
- On the third level, the castles fire two lots of cannon balls, and occasionally a purple van will come out of a side road in a deliberate attempt to stop you finishing the round.
- **Also, beware of running into prams. you may get extra points for saving the baby, but can lose a life if it isn't done properly.**

HELP

If you're stuck on a game, or you simply can't get hold of an old classic, send a postcard (or write on the back of an envelope) to:

Games Helpline
Amstrad Action
Beauford Court
30 Monmouth Street
Bath Avon BA1 2BW

The normal Helpline rules apply:

DO try to keep it quick and simple – name the game, name your problem, and make sure it's a reasonable request!

DO include your first name and your telephone number. Sorry, we can't print full names and addresses.

DON'T try to advertise 'games for sale' – that's what the *Small Ads* page is for. This section is for people who need help only.

Wanted: 464 tape versions of *Get Dexter 2* (or even *Get Dexter*) and/or *Doomsday Blues* bye RE International. Willing to swap or pay reasonably.
Sagar, 081 864 2276 after 6pm

I am looking for the game *War in Middle Earth* (tape/disk)
Paul, 0282 32044 after 5pm

Has anyone got *Spyke in Transilvania* for the Amstrad 464+ on tape?
Mark 0482 705051

Help needed on *Spellbound Dizzy*. Where is the aqualung? Help given on most *Dizzy* games.
Peter, 0703 667501 mon-thurs

Does anybody know the cheats for *Salamander*, *Dragon Ninja*, *Gryzor* and *Predator*? Help given on *Operation Thunderbolt*, *Night Shift*, *Nebulus 2*, *Shadow Dancer*, *Gods*, *Blood Money* and a few more.
Peter, 0302 855107 6-9pm

We want your maps!

The Cheat Mode section is set to get bigger, folks, with more space for diagrams and maps – so get those colouring sticks out! Each map that we publish wins its owner a tenner... *Don't forget to check your map before you send it to us!*

covertape pokes

Every month we put a collection of game pokes on the covertape. These short programs 'modify' the game code when it loads to give you all sorts of extra goodies, like infinite lives, energy and so forth.

Also, where we can we give you equivalent Multiface pokes so that you can get the same effect using one of Romantic Robot's little black boxes...

See below for details on this month's covertape pokes, plus instructions on how to use them for first-timers, PLUS some tasty Multiface pokes...



SWITCHBLADE



Andy Price (Dunstable's demon disassembler) has bashed together a disk poke for Gremlin's *Switchblade*, which gives your Hiro infinite lives and infinite weapons.

ROAD RUNNER, WILE COYOTE & CHEVY CHASE

WINNER!

Graham Smith, the tape gamesters hero, has been busy with his "Acme patented poke finding machine" and sorted pokes for *Road Runner* and *Wile Coyote* that will give you infinite lives and a choice of skill levels. Graham has also produced a poke to slow the timer to half speed on *Chevy Chase*.





AA77 COVERTAPE (SEYMOUR TAKE 1 & FIRELORD)

The *AA77* tape is cracked by Graham and supplies *Seymour Take 1* and *Firelord* with infinite lives.

AA79 COVERTAPE (RANARAMA & MAZE MANIA)

WINNER! £20

The poke for the *AA79* covertape slows down the energy loss in *Ranarama*, and gives you infinite lives on *Maze Mania*, I did it especially for you....



● You'll find pokes for all these games on this month's covertape!



New Kids Block

1) Load the poke you want from the covertape into your computer.

2) Take out the covertape and put in your game tape or disk.

3) Type |DISC if you are using a disk poke.

4) Type RUN to run the routine (not RUN "" (CTRL+ENTER) as you normally would)

You should find that the game will load normally, or you will be given instructions on what needs to be done.

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the Balrog

Greetings, my most excellent adventurers, and welcome to the most bodacious adventure column in computerland. So don those shades, read the column and party on, dudes!

news

MAGAZINE NEWS...

The Balg has had a few of his favourite magazines drop through the gold letter box this month so I thought I'd give them a mention.

■ First was *Adventure Coder* which is now up to issue 17 and still (just) going. I say just because the editor, Chris Hester, is having problems with lack of contributions. So if you fancy passing on some adventure creating/writing hints and tips then write to Chris to help him out.

Issue 17 includes some amusing stories, letters, a review of a Spectrum adventure disk-based magazine and the first in a series of articles entitled 'How to make a thingy' which, step-by-step, tells you how to write an adventure-creator in Z80 for the Spectrum. Since the Z80 chip is the same processor as on the CPC, it should be of interest to CPC coders.

■ Next through the gold letterbox was *Members Pack 14* from the *Adventurers and Strategy Club* – 42 pages of additional material for the *Reference Book of Adventure*. The Balg's reference book is now very useful – it has over 350 pages of adventure reviews, letters, hints etc.

The *Reference Book* is a brilliant idea and a great adventure aid but, as usual, there is little CPC content and it is quite expensive. However if you're planning on keeping with adventures for some years or if you have more than one computer it is well worth subscribing to.

This issue's *ASC* also had enclosed a voting form for the 'Golden Chalice Awards', an annual ceremony similar to the *Adventure Probe* awards. As soon as I get the results I'll print them in these hallowed pages.

■ Next through the post was the latest issue of *Adventure Probe*, which is now in its sixth year. *Adventure Probe* is of its usual high standard and as well as the regular sections there is an article/interview with nearly all of the Infocom game authors (taken from an American bulletin board) and the sad news that Peter Knowles of PK Graphics (the sister company of Guild Adventure Software) might be leaving the adventure scene as all his computers were recently destroyed in a freak accident – hope that everything works out Peter!

■ Finally, the Balg was happy to receive a surprise package from Matthew Harrodine containing his fanzine *AOK*. Thanks very much, Matthew! *AOK* appears to be mostly techie stuff, but two of its 36 pages are dedicated to adventure (written by 'The Equaliser' who has some suspiciously familiar tips!) and is quite good although the print quality is quite poor.

The details

- Chris Hester, **Adventure Coder**, 3 West Lane, Baildon, Near Shipley, West Yorkshire, BD17 5HD. UK Price £1.25 per issue
- **The Adventure & Strategy Club**, 17 Sheridan Road, London E12 6QT. Tel: (081) 470 8563. Price £24/year, £14/6 months – write for more details.
- Mandy Rodrigues HBalg, **Adventure Probe**, 67 Lloyd Street, Llandudno, Gwynedd LL30 2YP. UK Price £1.50 per issue.
- Matthew Harrodine, Editor, *AOK* Fanzine, 155 Haslucks Green Road, Shirley, Solihull, West Midlands B90 2LG. UK Price £1/issue.

WOW ADVENTURE CONVENTION VIDEO

For avid *Adventure Probe* fans who missed the convention or who went to the convention and want to see it all again, WoW software has put together an hour-long, professionally-edited video of the highlights of the convention.

Notable appearances include Mandy Rodrigues HBalg, Simon Avery, Larry Horsfield, Tony Collins, Joan Pancott HPilg, Lorna Patterson, Debby Howard, Dungeon Master (the columnist from *ACU*) and the Balg himself! The video costs £12 and is available from the WoW address at the end of the next story...

WOW NEWS

Talking of Wow, Joan Pancott HPilg, chief of WoW software, has been ill recently (get well soon Joan!) but it hasn't stopped WoW as she now has the rights to all games previously sold by Atlas software (under the guise of Mandy Rodrigues HBalg). This includes both of Bob Adams' games *Grue-Knapped* and *Helvira Mistress of the Park*, plus a couple of others.

As well as gaining the Atlas games, WoW also has two new adventures especially aimed at children – *Big Top*, written by Ronnie Slater,

continued on page 42 ▼

GAC programming clinic

If you have any questions on the use of GAC, specific GAC-related problems and queries or hints and tips of your own then jot them down and send them to: GAC Programming Clinic, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW

DEAR BALROG,

I bear great tidings for all adventure fans! Within this missive is held the secret of loading *GAC* from the covertape – without using the menu program. This, unfortunately, applies only to those of us lucky enough to own disk drives. My handy hint will allow all budding adventure writers to produce a working disc containing nothing but the GAC code, (and all that empty space to be filled by their adventures).

The first step is to transfer the tape (Number 10) onto disk by following the instructions in the magazine. Make sure the disk with all the transferred software is in drive A, then type in the following little proggette:

```
|a
memory &7fff
load "menu.bin",&8000
poke &8100,&3e
poke &8101,1
poke &8102,0
save"gac",b,&8000,&7a5,&80ea
```

NB: Since there are no line numbers, each command is executed immediately RETURN is pressed.

Once you have typed that little lot in, you should find a new file on your disk, "GAC.BIN", 3K in length. This is a modified version of the "MENU.BIN" program.

Now, all you need to do is copy the files:

1.BIN
GAC.BIN
QS.ADV

CLUE-SNIFFING with the Balrog

This month's scintillating collection of clues are from Daniel Pooley, Brendan "Legolas" McGoldrick, Phil Johnson (Northenden), Mayur Maha (Orpington), Chris Godfrey (Basingstoke), Thomas Christie (Grangemouth), Lee Hatton (Northern Ireland) and Robert Melody (Surrey).

Heroes of Karn (esp. for M C Chisel)

- Get the tinderbox and light the marsh gas.
- Kiss the frog.
- Attack the barrow wight with the bible.
- Bribe the guard with the money.

Hobbit (esp. for P L Ramsay & M C Chisel)

- To pass the eyes at the forest – wear ring, west, wait twice, west, wait twice, west, north, west to Beorn's house.
- Elrond is used to read the map.
- Wargs can be killed with swords.
- Get caught by the goblins to find the small curious key.
- Open all in Beorn's house.
- To cross the black river, look across river, throw rope across river (repeat until lands in boat), then pull it, climb into boat.

Kentilla

- To get the graphite, put the diamonds in crucible, put crucible in furnace, turn dial to on, turn dial to off, get crucible, look in crucible, get graphite.

Knightmare

- From Scullery, go right, up and right until you come to wall monster. Find odd one out and face down, open door, go down, get potion, drink potion in a permanently open exit and leave – you will now have spells.

Lord of the Rings

- You need the candle – go west from your house until you meet a guard. Wear ring, west, remove ring, get candle and light candle with the matches and you'll be able to see where you're going.

Lords of Time

- Pull out the tiger's bad tooth, and give it to the tooth fairy. Accept her second offer.
- Take hour glass, look at picture, N, look, get matches and candle, wind and enter clock, turn cog (1 to 9), swing pendulum, open door and go north.

Not a Penny More, Not a Penny Less

- Ascot: Wait until James calls in that Harvey is heading to parade rings. Enter parade rings, I say professor porter, say chemistry (wait until horse wins) invite Harvey to Oxford.

Quest for the Golden Egg-cup

- In God's temple there is a rubber duck in the bath and the "under-the-bed-object" under the cardboard cutout of the bed.
- Give the credit card to the man on the raft if he refuses to let you aboard his craft.
- Give bottle to Wongo the witch to get magic wand.

Rigel's Revenge (for Madryn P-M)

- Once in the minefield go E and SE until you are east of a hut, E (guards appear), say anything, say anything (bomb wakes up), introduce bomb. It talks in Rigellian. Guards steal mine detector and run away.

Scapeghost – Part 2

- Dig around in herb garden to get card.
- To get body to hall – run to attic, get socket, get in, tie socket to body, get out, get plug, down, examine clock, open panel, put plug in panel, close panel and push clock.

Simply Magic

- At the start, go to the room of sadness and cry.
- Go to the room of happiness and give handkerchief to clown.
- Give pearl in the room of wisdom.
- Drop key in the room of bewilderment (everything is backwards so you have to drop to get!)

Spiro Legacy

- To get Bonzo spell – While in the bathroom (of Abbeyville), stand on toilet and look in cistern – you will find a tin which has a computer disc in it. Take the disc along to the estate office and turn on the computer, put the disc in the computer and load program.

Dun Darach

- Mr D J Gahan (there's a lot of people not using their first names this month!) comes to the aid of a reader in the January issue of *AA* who was stuck in *Dun Darach* – to get through the locked door in the Alchemist shop you need to be in possession of a Platina from the Assayer, 82 Silver Street – thank you Mr Gahan!

Shadows of Mordor

Brendan "Legolas" McGoldrick has the clues needed to solve Jonathon Constable's problem in *Shadows of Mordor* – you simply 'POLE RAFT WITH BRANCH' to get the raft across the swamp.

Contacting the Balg

To contact the Balg, write to him at: Amstrad Action, Future Publishing Ltd, Beauford Court, 30 Monmouth Street, Bath, AVON BA1 2AP or e-mail at cazsjw@uk.ac.leeds.dcs.

across to a new blank disk (using CP/M or your fave disk copier) and you're away!

Alternatively, you can use it on the original disk, but it does not leave as much room free for adventures. You needn't copy QS.ADV across, but it is handy to have around when starting to program a new adventure. 1.BIN, however, is essential as it contains the main *GAC* program, whereas GAC.BIN is simply the loader.

To start up this new copy of *GAC*, simply type

```
RUN"GAC"
```

and before you know it, it's running!

By the way, if you change the last number 1 in the line

```
poke &8101,1
```

to a 2 then save, (changing the name to 'Belle'), you get a file that can run the *Southern Belle* game direct.

Austin Donnelly
Glasgow

GAC COMPETITION ENTRY FORMAT

A lot of people have written asking for what they should send with the *GAC* games they write for the competition. So here they are – the full compo rules!

1. The game must be *GACed* (It is a *GAC* competition after all!)
2. It must be one part only (the covertape won't have room for a multi-part game)
3. You can send your game on a tape or disk (although I'd prefer the game on disk), but if you want your game back you must include a stamped self addressed envelope.
4. You must send a solution and map with your entry (I can't be expected to play hundreds of *GAC* games without any help!).
5. It would help if you sent any relevant instructions.
6. It would also help if you wrote why you feel your game is good – outline any clever puzzles, amusing responses or strong points.
7. Don't forget you can also mark your game as PD if you'd like Debby Howard of Adventure PD to stock the game if you're not the lucky winner.

HELP

The Lords and Ladies of Adventure freely lend their skills to less experienced adventurers out there. Remember, though, that they are doing this for nothing. Please stick to the times specified for 'phone calls, and please keep your requests as short and sweet as possible!

Castle Blackstar • Heavy on the Magick • Mystery of the Indus Valley.
Andy Clayton, 29 Portman Road, Scunthorpe, South Humberside DN15 8PD. Tel: (0724) 872135 between 6pm and midnight.

Aftershock • Big Sleaze • Colour of Magic • DAA • Dracula • Escape from Khoshima • Espionage Island • Fourth Protocol (Pt. 3) • Frankenstein • Hunchback 1 • Imagination • Mega Bucks • Message from Andromeda • Mordens Quest • Mountains of Ket (Pt. 1) • Return to Eden • Seabase Delta • Shard of Inovar • Souls of Darkon • Star Wreck • Stormbringer • Subsunk • Top Secret • Warlord • Werewolf Simulator • Wizbiz • Wolfman.
Dawn Greastrix, 10 Chatsworth Drive, Chadsmoor, Cannock, Staffs WS11 2EW.

Help with GAC Programming.
Len Townsend, 61 Lowergate Road, Accrington, Lancashire BBS 6LN.

Crispin Crunchy • Gnome Ranger • Message from Andromeda • Scapeghost • Simply Magic • Talisman of Power • Top Secret • Yarkon Blues.
Jay Honosutomo, 41 Thriftfield, Hemel Hempstead, Herts HP2 5YH. Tel between Mon-Fri, 4.30-9pm (0442) 242957

Adult II • Boredom • Deadenders • Dungeon • Firestone • Gnome Ranger • Hitchhiker's Guide • Ingrid's Back • Jason & the Argonauts • Lancelot • Quest for the Golden Egg-cup • Rigel's Revenge • Scapeghost • Smashed • Tizpan • Venom.
Richard Jamieson, 79 Land Street, Rothes, Aberlour, Banffshire AB38 7BB.

Aftershock • Football Frenzy • Gnome Ranger • Kentilla • Knight Tyme • Mega Bucks • Rigel's Revenge • Seabase Delta.
Jon Bingham, 10 Cowslip Walk, Amblecote, Brierley Hill, West Midlands DY5 2QN.

Bestiary • Blue Raider • Firestone • Quad X • Wizards Castle.
Lee Davies, The Flat, 415 Whitehall Road, Bristol B55 7BP.

and *The Last Snowman*, written by Margaret Crewdson (authoress of the *Angelicus* adventures). Both are for ages 9 to 90 and *The Last Snowman* comes personalised with the child's name. Prices are £2 tape, £4 disk.

Joan is also releasing a new *PAW* game by Steve Clay called *The Taxman Cometh*. Apparently you play the part of a tax inspector and you have to collect money from various people (Ken Dodd and Josef Locke watch out!) Disk-only at £4, Joan asks that you please specify what machine you have so that she can configure the game.

• The address for Wow Software is: Joan Pancott HPilg, WoW Software, 78 Radipole Lane, Weymouth, Dorset DT4 9RS.

YARKON BLUES II

Jason Davis is at this moment putting the final touches to *Yarkon Blues II*, which will be released by WoW software.

If it's anything like the original, it'll be a good game. And it's a two-parter as well! Price is £3 on tape and £5 for the disk version.

GAC COMPO ENTRIES...

Edmund Spicer has already written his entry for the GAC compo and has put it in Data PD for all to look at.

You play Madman Peters who must rescue Princess Maryanne Tooth from the Bald-rog! (*Grrr! – Balg*) Edmund has also asked that I plug his adventure column in *Artificial Intelligence* (the magazine) and his games, else he'll set his retarded killer fish on me. Consider them ,Edmund!

However, please please please could I ask you readers not to send your entries into the GAC compo yet! You've got months to go before the closing date and its pointless sending your games in early as you might miss some valuable hints and tips from the GAC Clinic!

NEW ADVENTURE PD LIBRARY

KAT (Kiron's adventure team) PD has recently been set up by Kiron McLellan, who is looking for software to put in his tape-only library. Write to Kiron at: **35 Compton Place, Erith, Kent DA8 112Y** for more details.

ADVENTURE SWAP-SHOP

Simon Avery has just started an adventure swapshop. He writes in his letter, "It's sort of a helpline in which I help adventurers to find games that are not available through the various companies. The idea is that if I can get people to send me a list of adventures they have and no longer want, then I can compile a database. Then, anybody looking for a certain game, or a general list, could contact me and I'll put them in touch with whoever may have that game."

All Simon asks is that you send an SSAE when writing to him so that he can reply. If you want to sell some of your adventures then just send Simon a list of the games they want to sell along with the price for each game (P & P inc.) and his or her address. Any phone number would also be appreciated so that the buyer can check the game is still available.

A great idea, Simon, and I hope it works! For more details write to Simon at: **71 Fore Street, Chudleigh, South Devon TQ13 OHT** or phone (0626) 854339.

BALROG'S POSTBAG

Here's where the Balg gnashes open another batch of readers' letters. Got something you want to say, an adventuring query or a useful tip? Write to: Balrog, Amstrad Action, Beauford Court, 30 Monmouth Street, Bath, Avon BA1 2BW...

WHERE'S MY BOOKLET?!

After applying for your *GAC* booklet enclosing a cheque for £2.99. I also wrote another letter to you with no response...

Mr Ward
Dorset

I sent for a *GAC* booklet in December but have received nothing – What's going on!?!...

Brendan "Legolas" McGoldrick
Strabane

Six weeks have passed since I sent a cheque for £2.99 in respect of the *GAC* Booklet offer. I have not received any booklet and my cheque has been cashed...

Mr A D Urquhart
Crowborough

I still have not, over two months later, received the instruction booklet for which I paid...

John Doe
Worthing

Argh! The demand for the booklets was so great that it was no longer simply a case of photocopying copies to send out – AA had to arrange for hundreds to be specially printed, and that's what took the time. However, it's all been sorted out now – anyone still waiting should call Future Publishing's Somerton office on 0458 74011. Apologies to all who received their booklets late – but don't worry, there's still months before the closing date of the GAC compo!

YO BALROG MAN!

My friends have lent me a couple of these weird adventure games. The graphics are mega awesome but they won't respond to my totally cool £400 joystick! I tell you man if I don't find a solution to my problem I'll eat my Nikes and burst the air bubble.

The adventures puzzling me are *Heroes of Karn* and the mega wicked *Hobbit*. Get groovin' and give me some tips to get me started or I'll smash all my Public Enemy records!

Love,
M. C. Chisel

P.S. Get a grip on yourself, find some decent clothes!

Yo MC! Consider those tips printed! (Although I still think you should destroy those public enemy records!) And as to my clothes sense – I always thought bloodstained leather suited me!

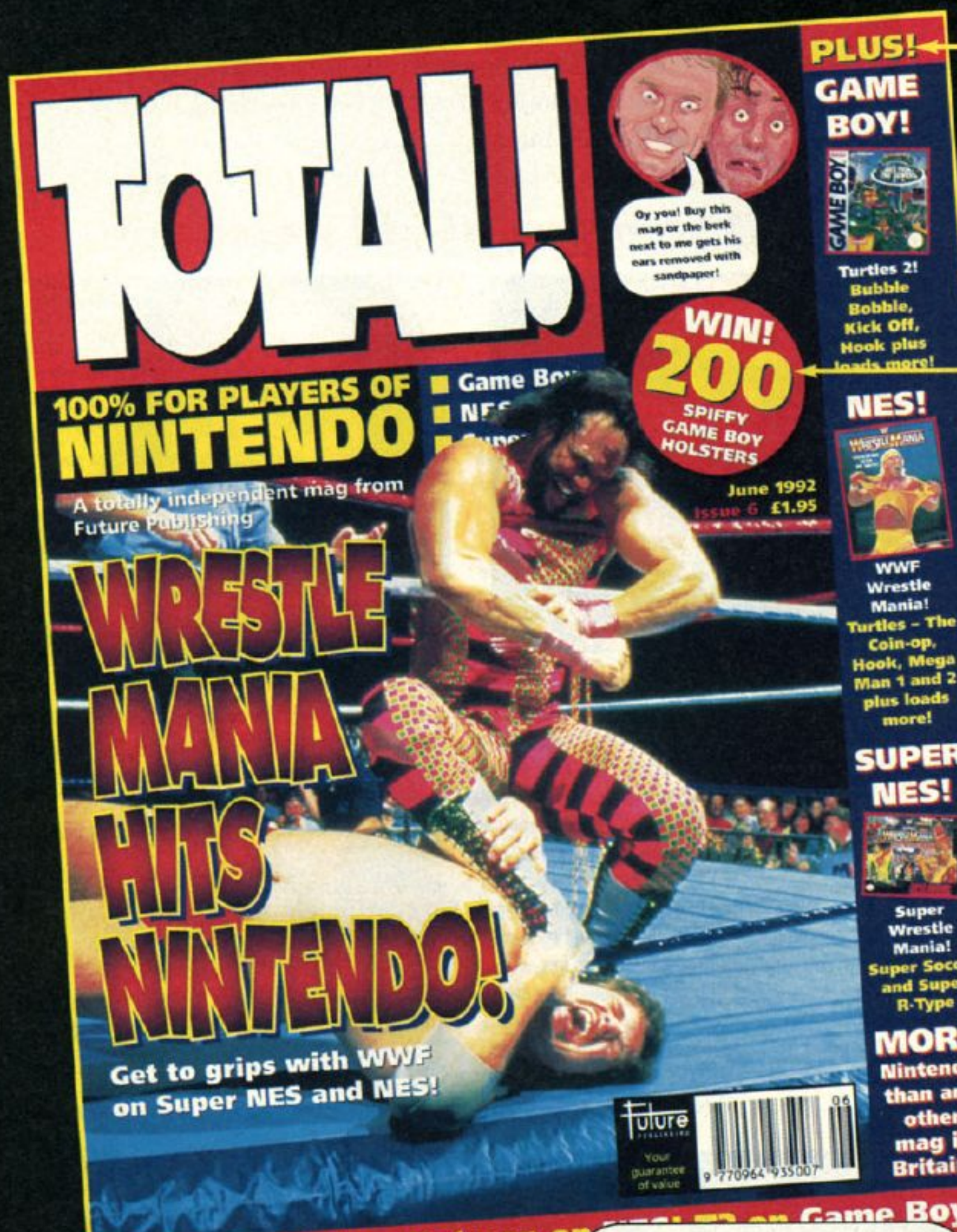
EYE OF THE BEHOLDER ON CPC?

Can you get *Eye of the Beholder* on the Amstrad (a tape version)?

Michael Parkinson
Southsea

Nope, sorry Michael, Eye of the Beholder is a 16-bit game and I very much doubt there will be plans to convert it to the little old CPC.

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making a game of it

PART TWO

Graphic detail

The second instalment of the *Seymour in the Wild West* story is all about graphics. Once again it's ADAM PETERS spending most of the AA travel budget on train fares...

Flaunting designer scruff and skate punk cool, Pete Ranson reluctantly tidies the ton of design notes, invoices and sketches covering most of his desk into nice neat piles, and places these beside his computer. Photographer Ian Fox jams his tripod between two tables, does something with a light meter, and starts snapping away.

It's month two of our *How a Game is Made* series, and the AA tour bus has landed in Macclesfield, the home of Big Red Software. Big Red, as anyone with nothing better to do than read the title screens of games will know, are the dudes responsible for the development of many of the big Codemasters games; various Dizzy games, all the Seymour games, and so on.

One of the many projects they are working on at the moment is our adopted game, *Seymour in the Wild West*. I asked Pete how it was going and he looked a bit philosophical.

"Usually we get the whole plan of a game in advance, but with this it's just a small trickle of things as they come in," he reveals, struggling to find the items in question on his now cruelly tidy desk. "What we've got at the moment is a typed-up plot for the first act and a sketch of the map for the act, which Paul has done."

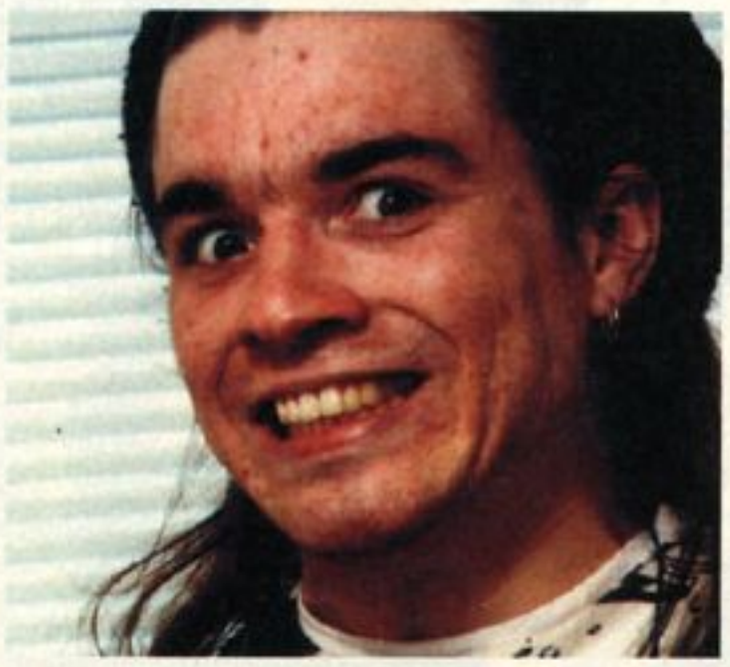
The plot, once rediscovered, reveals that *Wild West* sees the controls set firmly for in-joke city. The outset of the game places Seymour outside Codemasters HQ, inside which he will be exchanging goshes with, amongst others, jolly PR dude Richard Eddy, head honcho Dave Darling and receptionist Claire.

"Basically I'd go through this," says Pete, moving his pen down the plot sheet like a maths teacher going through your homework with you, "circling any characters or objects that we'll need sprites for. If we've done any similar games in the past, we can use the graphics from them, in this case *Seymour Hollywood* and *Super Seymour*, as a starting block."

It's not just a case of digging up the old Seymour sprite and chucking that straight into the new game, though. Whilst Dizzy looks the same throughout his adventures, the intention is for Seymour to don a different 'costume' for every jaunt. Here, as Pete explains, lies one of the first problems to be encountered in doing the graphics for *Wild West*.

"Seymour is going to be wearing a cowboy hat throughout the game, which would normally simply involve adding one to the sprites from the first

The Macclesfield posse





Here are our chums from Big Red • On the left is Pete Ranson, who is 21. He did a lot of work for his brother Paul while at school, working on games like *Strike!* and *Rasterscan* for Binary Design in Manchester. Leaving sixth form college after a year to go to art school, he decided to work for his bro full time (at Big Red) after being unable to get into any polys • Fred Williams, on the right, is 25 and he's got a degree in engineering. He tried to get a 'proper job' but couldn't. So he replied to an ad for a computer games writer, and thus the Pete and Fred partnership was born • Also involved are Terry (who lives in Devon) and the afore mentioned Paul, who now works at Codies HQ in Leamington.

softie spot

TRAVEL THE OCEAN

Stupidly getting on the wrong train at Macc station, instead of travelling home (Bristol), Adam ends up in Manchester. Making the best of it, he decides to visit Ocean Software while he's there...

As the Happy Mondays get tied up with hospitals and drug clinics, and the Stone Roses try to get their heads together after a lengthy court case, so the pivotal role Manchester held within British music culture a couple of years ago has disappeared. Baggy is yesterday's genre, with attention now focused instead on the grunge metallurgists of West Coast America and the techno boffins of Essex.

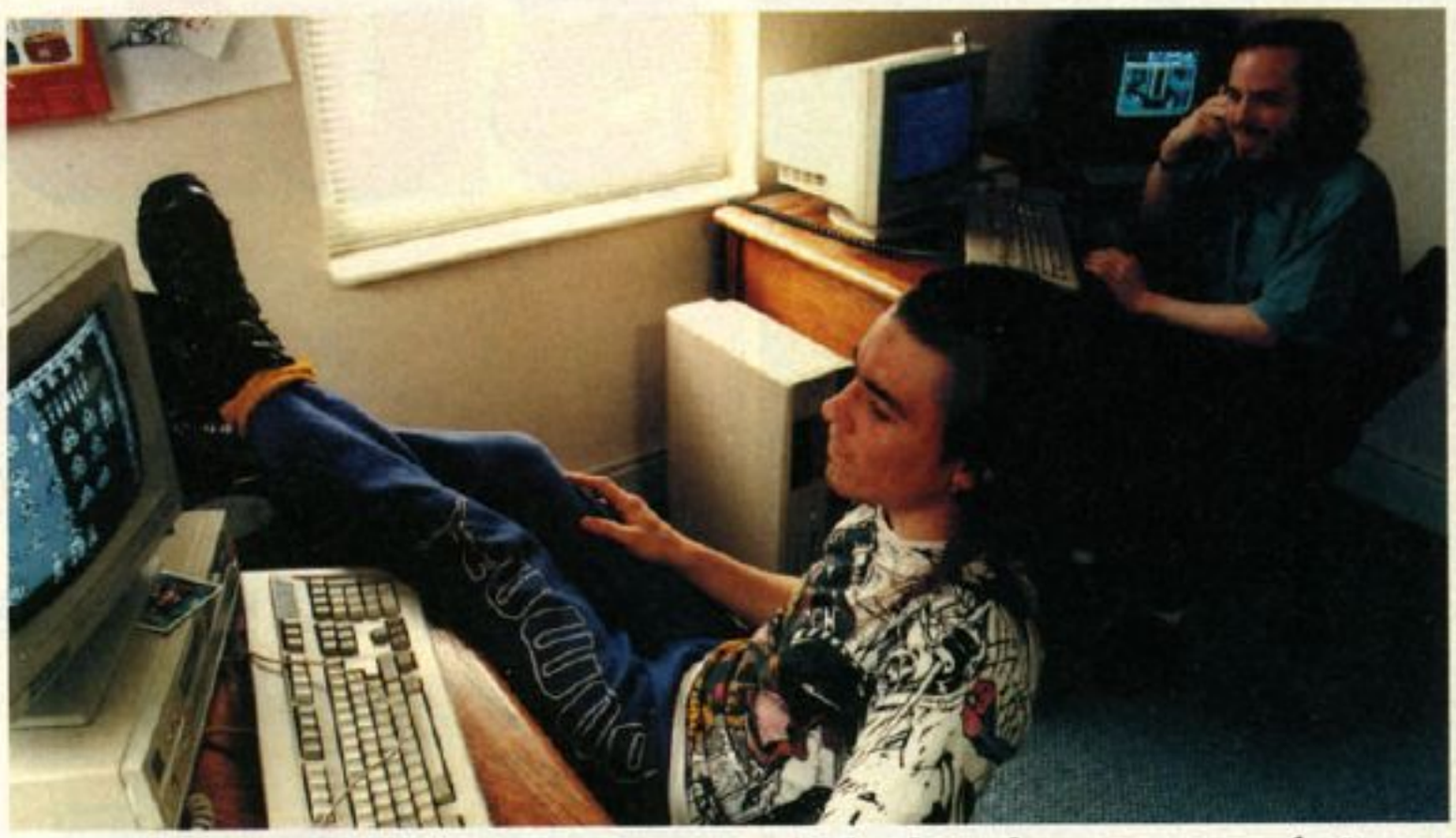
That's not to say that Manchester has got boring. Far from it, the Athens/Los Angeles of the north is still the most happening English city after London. The town is full of record shops (try Picadilly Records in Brown Street and Eastern Bloc in Oldham Street), weird pubs (the Dry Bar in Oldham Street, designed by the same interior designer as the Hacienda club) and so forth.

Probably the grooviest place for shopping is the excellent Afflecks Palace, just off Oldham Street (again - what a road!), which offers four levels of clothing stalls, record stalls, hairdressers and the like. There's a fair bit of designer stuff there, including a branch of Red or Dead shoes – they sell some ace Doc Marten boots.



■ Hai-chow. It's our finger-waving, leg-kicking, martial arts chum Ken from Ocean.

But bobbins to clothes and records, huh, you want to know about computer software, right? Manchester is home to branches of various computer games stores, including Virgin Games. Probably the best of these



■ It's a hard life eh, this game development malarkey? You have to put your feet up on desks and stare into space a lot. Ho ho. Just kidding, hard working Big Red dudes.

game. Unfortunately, the sprites are of limited size, and there isn't room in some to fit on the hat. It may be a case of doing the hat as a separate sprite, like we did with the cloak in *Super Seymour*."

Pete talks with glee about how much he is looking forward to *Wild West*, being a great fan of the whole western genre. "There's going to be all the expected stuff in it; tepees, wagon trains, everything," he says. No doubt he'll be watching plenty of westerns with a checklist by his side, if the embarrassment he says he feels when recalling an object that was missing from *Seymour Hollywood* is anything to go by.



■ Look, it's a CPC. Over there, in the corner. And it's attached to that PC. They're probably, erm, interfacing...

"It wasn't till later," he confesses, "that I realised there weren't any cameras in it anywhere – a game that was supposed to be set in Hollywood with no cameras to be seen! So we did *Seymour Take One* (*a mini-game featured on the AA77 covertape*) and made sure it had a camera in it!"

Throughout this confession, as indeed throughout the whole interview, partner in design Fred has been silent. He's been sitting in the corner fiddling about with the 16-colour graphics for the CPC version of *Grell & Fella*. He's on his feet now though, gathering his things in preparation for the long commute back to his Birmingham abode. Pete wants to go home too. Time to leave, I guess.

Macclesfield has something of a reputation as the archetypal northern smalltown; grim, grey, grimy, a little narrow-minded, a bit depressing, and possibly a tad too resentful of the outside world. But in amongst all the sullen and the smoke, on a computer screen on the ground floor of a small office block, a new world is starting to take shape.

It's a world full of brightly-coloured wigwams, saloons and three-pointed cactuses. A world where every problem is approached with a smile, and every discovery is met with a "gosh!" It's a big, brash, cute and challenging little devil of a world, and we'll be taking you back there in four weeks time. Don't be late.

Brave new world



■ A small (*small?*) selection of sprites from the CPC *Seymour goes to Hollywood*.

Big Red use two different PC packages to produce the graphics for the CPC versions of games. The first, *DPaint*, is an art package which can emulate any screen mode (CPC, Speccy, ST, Amiga, etc). The sprites are touched up and coloured in on this, having been drawn on paper and then scanned in.

Graphics from *DPaint* can then be imported into *Animator*, a dead expensive program which, as you can probably guess from its name, produces the animation. Any character that is expected to move will need lots of different sprites, with feet in different places or whatever. The more different positions there are, the more fluid the animation.

A sprite is positioned, the program moves on one frame, and then the next sprite in sequence is pasted down. It's the same technique used in those flick-book things that cool people draw in the corners of the pages in their maths books. When the frames are advanced in quick sequence, the illusion of fluid walking (or flying, or whatever) results.

The backgrounds are made up of lots of different sprites, specifically positioned when then 'map' is compiled. The leaves of a tree, for instance, is a single sprite placed lots of times in close sequence.



■ Chez Codies. Seymour's fab western adventure begins in, er, Leamington.

CPC-wise is Game, situated on the first floor of the cavernous Arndale Centre. The shop may have a minimalist name, but it's got a maximalist (huh? – ed) stock of games.

Speaking of games, the biggest software house in Europe have their HQ just behind Manchester Central Library. Let's drop in on their karate chopping games PR person (not project manager) Ken Lockley (not Locksley).

So, Ken, what's the score regarding *Hook*, *Space Gun* and *Robocop 3* – are any of them coming out on the Amstrad or what?

"Hook was never pencilled in as being on the Amstrad, but Space Gun definitely will be and it should be finished quite soon..."

Good-oh, but what about Robocop 3 on cartridge?

"That's not going to be on cartridge any more, due to some problems encountered, but it will be on disk for the 6128+."

Are these problems the same as the difficulties encountered with *Toki*, ie the 128K total memory limit on the chip wasn't enough?

"I don't know."

Like most of the big softies, Ocean are rumoured to be pulling out of the 8-bit market. Apart from *The Addams Family*, *Space Gun* and *Robocop 3*, have you got any other Amstrad releases planned?



■ Here's Manchester. Not all of it you understand, just a small little bit of it.



■ Yo, it's the Ocean playtester dudes. Hey playtesters – woo, over here! Tsch. Boring gets.

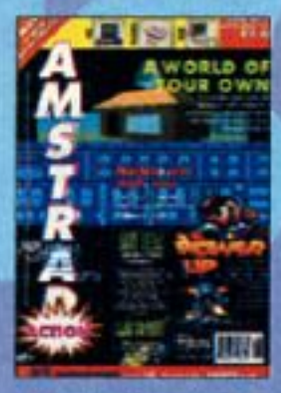
"Not at the moment, though we still plan to produce Amstrad versions of very big licences. Expect something around Christmas time.

"We've also got a really active budget re-release label, of course. Hit Squad is still doing really well. If anything it's getting bigger, and we will be re-releasing a lot more Amstrad games on that in the future."

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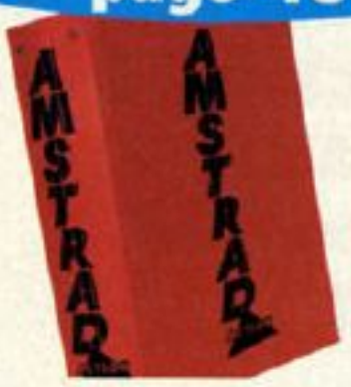
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HEY JUDE



Here's 5K of compact code that's going all the way to the top! Paul Roberts of Warwick has crammed drums, bass and melody lines into three sound channels to produce a cracking rendition of the Moptops' Sixties swinger *Hey Jude*. The junior tunesmith has coupled accurate melody representation with clever use of the noise facilities and engineered a really listenable three minutes' worth.

A well-earned platinum (3-inch) disk and twenty quid is winging its way to you as I write...

```
{FpBk} 10·REM·HEY·JUDE·by·Paul·Roberts·(age·9)
{NnBj} 20·REM·for·Amstrad·Action·March·1992.
{HlAu} 30·REM·******INITIALISE******
{BtBk} 40·MODE·1:INK·0,0:INK·1,24:INK·2,18
{NqBi} 50·INK·3,6:BORDER·1:PAPER·0:PEN·2
{PvBj} 60·EI:ENV·1,8,-1,4:ch=0:tp=0:du=0:vl=0
{MuDj} 70·PRINT·STRING$(40,"*");:PEN·1:PRINT·"*
    ***HEY·JUDE·by·Paul·Roberts·(age·9)****";:
    PEN·3:PRINT·STRING$(40,"*");
{GtBj} 80·INK·3,6:BORDER·1:PAPER·0:PEN·2
{LnAv} 90·GOSUB·560:EVERY·30·GOSUB·560
{HoBn} 100·READ·ch,tp,du,vl:IF·ch=-
    1·THEN·GOTO·580
{PkAu} 110·SOUND·ch,tp,du,vl:GOTO·100
{EpAx} 120·REM·******MUSIC·DATA******
{OvBo} 130·DATA·3,0,158,0,1,179,30,9,1,119,30,1
    0
{JnBt} 140·DATA·1,106,30,11,1,100,58,12,1,0,2,0
    ,1,100,60,12
{CwBn} 150·DATA·1,95,30,12,1,89,30,12,1,80,58,1
    2
{GqBt} 160·DATA·1,0,2,0,1,80,60,12,1,0,60,0,1,1
    59,30,12
{LuBu} 170·DATA·1,142,30,12,1,134,58,12,1,0,2,0
    ,1,134,120,12
{GiAx} 180·DATA·1,0,60,0,1,119,60,10
{CkCm} 190·DATA·1,142,120,10,1,0,30,0,1,142,30,
    10,1,119,30,10,1,106,30,10,2,358,240,10
{BxCj} 200·DATA·1,159,120,10,1,0,60,0,1,159,30,
    10,1,142,30,10,2,478,240,10
{EwCu} 210·DATA·1,134,60,10,1,89,60,10,1,0,30,0
    ,1,89,30,10,2,536,240,10,1,95,30,10,1,119,
    30,10
{LwCr} 220·DATA·1,106,30,10,1,119,15,10,1,134,1
    5,10,2,358,240,10,1,142,120,10,1,0,30,0,1,
    119,30,10
{LxEp} 230·DATA·1,106,28,10,2,536,120,10,1,0,2,
    0,1,106,58,10,1,0,2,0,1,106,30,10,1,80,30,
    10,1,89,30,10,2,536,120,10,1,95,15,10,1,89
    ,15,10,1,106,30,10
{JlCt} 240·DATA·1,119,60,10,1,0,60,0,1,179,30,1
    0,2,358,240,10,1,159,30,10,1,142,30,10,1,1
    06,30,10
{KmCu} 250·DATA·1,106,30,10,1,119,58,10,1,0,2,0
    ,1,119,30,10,2,478,240,10,1,134,60,10,1,14
    2,60,10
{CrCp} 260·DATA·1,190,30,10,1,179,90,10,1,0,60,
    0,2,358,238,10,1,119,60,10,2,0,2,0
{PjEk} 270·DATA·1,142,120,10,1,0,30,0,1,142,30,
    10,1,119,30,10,1,106,30,10,2,358,240,10,1,
    159,120,10,1,0,60,0,1,159,30,10,1,142,30,1
    0,2,478,240,10
{ApFk} 280·DATA·1,134,60,10,1,89,60,10,1,0,30,0
    ,1,89,30,10,2,536,240,10,1,95,30,10,1,119,
    30,10,1,106,30,10,1,119,15,10,1,134,15,10,
    2,358,240,10,1,142,120,10,1,0,30,0,1,119,3
    0,10
{OmGx} 290·DATA·1,106,28,10,2,536,120,10,1,0,2,
    0,1,106,58,10,1,0,2,0,1,106,30,10,1,80,30,
    10,1,89,30,10,2,536,120,10,1,95,15,10,1,89
    ,15,10,1,106,30,10,1,119,60,10,1,0,60,0,1,
    179,30,10,2,358,240,10,1,159,30,10,1,142,3
    0,10,1,106,30,10
{ExEi} 300·DATA·1,106,30,10,1,119,58,10,1,0,2,0
    ,1,119,30,10,2,478,240,10,1,134,60,10,1,14
    2,60,10,1,190,30,10,1,179,210,10,2,358,240
    ,10
{CiDv} 310·DATA·1,0,30,0,1,179,30,7,1,89,30,7,2
    ,0,120,0,1,100,30,7,1,106,30,7,1,119,28,7,
    1,0,2,0,2,0,120,0,1,119,30,7,1,134,30,7
{IjCi} 320·DATA·1,106,60,7,1,89,30,7,1,106,90,7
    ,2,536,240,7,1,89,60,7
{DlCq} 330·DATA·1,134,60,7,1,89,30,7,1,106,60,7
    ,1,119,30,7,2,638,240,7,1,134,60,7
{HvBw} 340·DATA·1,119,90,7,1,106,30,7,1,119,60,
    7,2,478,240,7,1,134,60,7
{KnBo} 350·DATA·1,142,30,7,1,159,30,7,1,179,180
    ,7,2,358,240,7
{DqEk} 360·DATA·1,0,30,0,1,179,30,7,1,89,30,7,2
    ,0,120,0,1,106,28,7,1,0,2,0,1,106,30,7,1,1
    19,28,7,1,0,2,0,2,0,120,0,1,119,30,7,1,134
    ,30,7
```

BASIC tutorial... BASIC TUTORIAL...

Boy, were we cooking with gas last month. Variables, formatting delimiters, INPUT statements – the works! And I'm sure you'll agree, especially if you've messed around with that 'butter' code, that a fragment of explanation and a bit of doodling is all you need to understand a BASIC program. They're positively designed to be understood – as we'll see in later lessons. For now though, let's continue with our ten basic (...and BASIC) keywords.

Here's a thing. Like values, strings can be assigned to variables. That is, you can assign and use string variables as well as normal number-based variables.

To denote a string variable, BASIC uses the $ symbol. Here are some examples

```
A$
NAME$
BUTTER$
HISCORE$
```

...and so on. The dollar symbol is saying "the preceding letter or word represents a string, and the string can be assigned and changed just like any other variable".

Assign strings to string variables just like you'd assign number variables. So

```
A$="XYZ"
NAME$="Troy Tempest"
BUTTER$="Devon Creamies"
HISCORE$="Baz!"
```

The string to be assigned is contained within inverted commas, and don't forget to add the $ symbol to the end of the string variable name (otherwise BASIC will assume you're trying to assign a string to a number variable and will get upset!).

Here's a thing. You can actually assign numbers, as strings, to string variables thus

```
{EnCi} 370·DATA·1,106,60,7,1,89,30,7,1,106,90,7
     ,2,536,240,7,1,89,60,7
{PpCp} 380·DATA·1,134,60,7,1,89,30,7,1,106,60,7
     ,1,119,30,7,2,638,240,7,1,134,60,7
{EjBx} 390·DATA·1,119,90,7,1,106,30,7,1,119,60,
     7,2,478,240,7,1,134,60,7
{HrDx} 400·DATA·1,142,30,7,1,159,30,7,1,179,60,
     7,1,0,30,0,2,358,150,7,1,179,30,9,2,358,30
     ,9,1,119,30,10,2,358,30,10,1,106,30,11,2,3
     58,30,11
{FjDq} 410·DATA·1,100,58,12,1,0,2,0,1,100,60,12
     ,2,402,120,12,1,95,30,12,1,89,30,12,2,478,
     120,12,1,80,58,12
{BlCx} 420·DATA·1,0,2,0,1,80,60,12,1,0,60,0,1,1
     59,30,12,2,478,240,12,1,142,30,12,1,134,58
     ,12
{MtCr} 430·DATA·1,0,2,0,1,134,120,12,1,0,60,0,2
     ,478,120,12,2,0,60,0,1,106,60,10
{JkEl} 440·DATA·1,142,120,10,1,0,30,0,1,142,30,
     10,1,119,30,10,1,106,30,10,2,358,240,10,1,
     159,120,10,1,0,60,0,1,159,30,10,1,142,30,1
     0,2,478,240,10
{AsFl} 450·DATA·1,134,60,10,1,89,60,10,1,0,30,0
     ,1,89,30,10,2,536,240,10,1,95,30,10,1,119,
     30,10,1,106,30,10,1,119,15,10,1,134,15,10,
     2,358,240,10,1,142,120,10,1,0,30,0,1,119,3
     0,10
{ErHi} 460·DATA·1,106,28,10,2,536,120,10,1,0,2,
     0,1,106,58,10,1,0,2,0,1,106,30,10,1,80,30,
     10,1,89,30,10,2,536,120,10,1,95,15,10,1,89
     ,15,10,1,106,30,10,1,119,60,10,1,0,60,0,1,
     179,30,10,2,358,240,10,1,159,30,10,1,142,3
     0,10,1,106,30,10
{DsCv} 470·DATA·1,106,30,10,1,119,58,10,1,0,2,0
     ,1,119,30,10,2,478,240,10,1,134,60,10,1,14
     2,60,10
{NtDt} 480·DATA·1,190,30,10,1,179,30,10,1,150,3
     0,10,1,142,30,10,2,358,120,10,1,127,30,11,
     1,119,30,11,1,95,30,11,1,89,30,11,2,358,12
     0,11
{PoCv} 490·DATA·1,75,30,12,1,71,30,12,1,63,30,1
     2,2,358,240,12,1,60,30,12,1,45,60,12,1,0,6
     0,0
{KsCn} 500·DATA·1,179,120,5,2,358,120,5,1,142,6
     0,8,2,358,60,8,1,119,60,10,2,358,60,10
{BtCo} 510·DATA·1,80,15,10,1,89,15,10,1,80,30,1
     0,2,402,240,10,1,89,120,10,1,0,60,0
{EiDs} 520·DATA·1,80,15,10,1,89,15,10,1,80,30,1
     0,2,536,180,10,1,89,60,10,1,0,60,0,1,100,3
     0,12,2,536,60,12,1,106,30,12
{OqDs} 530·DATA·1,119,180,12,2,358,240,12,1,0,6
     0,0,1,179,120,5,2,358,120,5,1,142,60,8,2,3
     58,60,8,1,119,60,10,2,358,60,10
{LsFw} 540·DATA·1,80,15,10,1,89,15,10,1,80,30,1
     0,2,402,240,10,1,89,120,10,1,0,60,0,1,80,1
     5,10,1,89,15,10,1,80,30,10,2,536,180,10,1,
     89,60,10,1,0,60,0,1,100,30,12,2,536,60,12,
     1,106,30,12
{BsBl} 550·DATA·1,119,200,12,2,358,200,12,-
     1,0,0,0
{DnCl} 560·IF·flag=0·THEN·SOUND·4,0,20,10,1,,31
     :flag=1·ELSE·SOUND·4,0,20,10,1,,1:flag=0
{ApAn} 570·RETURN
{BnAs} 580·FOR·vl=10·TO·0·STEP·-2
{GrAs} 590·SOUND·1,119,10,vl
{EsAs} 600·SOUND·2,358,10,vl
{PoAo} 610·NEXT:PEN·1
```

PUZZLE



Come Christmas, there's always one of those annoying little plastic puzzles at the bottom of my stocking along with the de rigueur apple and orange. You know the ones, black plastic, a couple of inches square with sliding number or letter tiles on one side. The object being to shove 'em around until something meaningful turns up. Usually, of course, you get utterly fed after a few tries, bin it and go back to eating Terry's chocolate orange.

Puzzle is an electronic rendition of same. Thomas Lovell of Peterborough decided that the seasonal dose at Christmas wasn't enough and decided to code a version which you can play all year round Oh well, some programmers just love to punish...

```
{EsAt} 20·REM·By·Thomas·Lovell
{GmAk} 30·REM
{OvBl} 40·INK·0,0:BORDER·0:INK·1,18:INK·2,6:INK
     ·3,2
{IiAn} 50·REM·Symbols
{JtAt} 60·SYMBOL·240,0,0,0,0,0,0,0,0
{JxBj} 70·SYMBOL·241,0,127,119,119,119,119,119,
     127
{IoBj} 80·SYMBOL·242,0,127,99,123,99,111,99,127
{PoBi} 90·SYMBOL·243,0,127,99,123,99,123,99,127
{CjBl} 100·SYMBOL·244,0,127,107,107,99,123,123,
     127
{DuBk} 110·SYMBOL·245,0,127,99,111,99,123,99,12
     7
{GwBl} 120·SYMBOL·246,0,127,111,111,99,107,99,1
     27
{OsAx} 130·SYMBOL·247,0,127,99,123,123,123,123,
     127
{AtAx} 140·SYMBOL·248,0,127,99,107,99,107,99,12
     7
{EtBi} 150·SYMBOL·249,0,127,99,107,99,123,123,1
     27
{GsBl} 160·SYMBOL·250,0,127,81,85,85,85,81,127
{PlBl} 170·SYMBOL·251,0,127,107,107,107,107,107
     ,127
{BkEm} 180·SYMBOL·252,0,127,81,93,81,87,81,127
{BqBl} 190·SYMBOL·253,0,127,81,93,81,93,81,127
{CtEl} 200·SYMBOL·254,0,127,85,85,81,93,93,127
{KoBl} 210·SYMBOL·255,0,127,81,87,81,93,81,127
{LoAu} 220·MODE·1:DIM·chk(15),b(5,5)
{BkAp} 230·REM·Screen
{HrAp} 240·a$="PUZZLE":p=1
{AiAv} 250·LOCATE·18,1:FOR·k=1·TO·6
{OlAu} 260·PEN·p:PRINT·MID$(a$,k,1);
{AvAw} 270·p=p+1:IF·p=4·THEN·p=1
{DpAk} 280·NEXT
{MiBk} 290·LOCATE·13,3:PRINT"BY·THOMAS·LOVELL"
{PqAv} 300·a=0:FOR·i=1·TO·4:FOR·k=1·TO·4
{FiBo} 310·c=INT(RND*16):IF·chk(c)=1·THEN·GOTO·
     310
{NqCn} 320·b(k,i)=c:chk(c)=1:LOCATE·4+k,9+i:PEN
     ·1:SOUND·1,c*40,2:PRINT·CHR$(240+c)
{JuBn} 330·LOCATE·32+k,9+i:a=a+1:IF·a=16·THEN·a
     =0
{PwBo} 340·SOUND·2,a*40,2:PRINT·CHR$(240+a):NEX
     T:NEXT
{DrBw} 350·PEN·2:LOCATE·19,11:PRINT·CHR$(130)CH
     R$(131)CHR$(131)CHR$(129)
{NoBv} 360·LOCATE·19,12:PRINT·CHR$(130)CHR$(131
     )CHR$(131)CHR$(129)
{OlBw} 370·MOVE·62,188:DRAWR·68,0,3:DRAWR·0,68:
     DRAWR·-68,0:DRAWR·0,-68
{KwBw} 380·MOVE·510,188:DRAWR·68,0,3:DRAWR·0,68
     :DRAWR·-68,0:DRAWR·0,-68
{FpBp} 390·LOCATE·13,20:PEN·1:PRINT"USE·JOYSTIC
     K·OR"
{AwBw} 400·LOCATE·5,22:PEN·3:PRINT"USE·CURSOR·K
     EYS·TO·CHOOSE·SQUARE"
{IqBs} 410·LOCATE·8,24:PEN·2:PRINT"AND·PRESS·SP
     ACE·TO·MOVE·IT"
```


BASIC tutorial... BASIC tutorial...

```
NUMBER$="150"
```

but you won't be able to perform mathematical operations on the number in a string (at least, not without using some weird and wonderful functions to convert the string back to the original number). You can, however, manipulate it just like any other text-based string – even though it's a number!

Why use string variables? Because just like when using numbers, it's never a good idea to hard wire anything into your code. If you do, it will almost certainly need to be rewritten to take account of unforeseen changes.

Now. What can be done with string variables? Well, you can add them together (known as 'concatenation'), count how many characters are contained within them, chop them into pieces, and generally manipulate them to your heart's content in order to provide useful processing. Adventure programs for example, use a lot of string manipulation to create believable environments, and sensible command parsing ('parsing' in this context means 'understanding the meaning of') from their stock of locations descriptions and your typed instructions.

Many of these operations are rather advanced, and will be covered later in the tutorial, but to whet your appetite, let's look at concatenating strings and measuring their length. Consider this:

```
NAME$="Troy "+ "Tempest"
```

Enter the above into your CPC, then type

```
PRINT NAME$
```

...and press Return. You'll see

```
Troy Tempest
```

printed on the screen. The two strings "Troy " and "Tempest" have been added

```
{NuAp} 420·REM·Main·Loop
{CrAt} 430·x=1:y=1:xx=x:yy=y
{PpBq} 440·LOCATE·xx+4,yy+9:PEN·1:PRINT·CHR$(b(x
     x,yy)+240)
{J1Dj} 450·LOCATE·x+4,y+9:PEN·2:PRINT·CHR$(b(x,y
     )+240):IF·b(x,y)=0·THEN·LOCATE·x+4,y+9:PRIN
     I·CHR$(143)
{LtAm} 460·xx=x:yy=y
{NoBx} 470·IF·(INKEY(8)=0·OR·INKEY(74)=0)·AND·x>
     1·THEN·x=x-1:SOUND·1,20,5
{BrCi} 480·IF·(INKEY(1)=0·OR·INKEY(75)=0)·AND·x(
     4·THEN·x=x+1:SOUND·1,20,5
{PuCi} 490·IF·(INKEY(0)=0·OR·INKEY(72)=0)·AND·y>
     1·THEN·y=y-1:SOUND·1,20,5
{OrBx} 500·IF·(INKEY(2)=0·OR·INKEY(73)=0)·AND·y(
     4·THEN·y=y+1:SOUND·1,20,5
{PjBp} 510·IF·INKEY(47)=0·OR·INKEY(76)=0·THEN·GO
     SUB·610
{PsBj} 520·IF·b(4,4)<>0·THEN·GOTO·440
{EnGw} 530·IF·b(1,1)=1·AND·b(2,1)=2·AND·b(3,1)=3
     ·AND·b(4,1)=4·AND·b(1,2)=5·AND·b(2,2)=6·AND
     ·b(3,2)=7·AND·b(4,2)=8·AND·b(1,3)=9·AND·b(2
     ,3)=10·AND·b(3,3)=11·AND·b(4,3)=12·AND·b(1,
     4)=13·AND·b(2,4)=14·AND·b(3,4)=15·THEN·GOTO
     ·560
{HlAn} 540·GOTO·440
{HoAq} 550·REM·Completed
{NpAv} 560·LOCATE·xx+4,yy+9:PRINT"·";
{FxAw} 570·FOR·k=5·TO·1·STEP·-1:FOR·i=0·TO·7
{CqCn} 580·PEN·i:LOCATE·16,6:PRINT"WELL·DONE":SO
     UND·1,(i*40)+40,2:SOUND·1,k*50,10
{HkCw} 590·FOR·z=1·TO·50*k:NEXT:NEXT:NEXT:LOCATE
     ·15,8:PEN·1:PRINT"PRESS·A·KEY":CLEAR·INPUT:
     CALL·&BB18:RUN
{LsAo} 600·REM·Move·Square
{DpBn} 610·IF·b(x,y)=0·THEN·SOUND·1,90:RETURN
{PuDw} 620·IF·x(4·AND·b(x+1,y)=0·THEN·b(x+1,y)=b
     (x,y):b(x,y)=0:LOCATE·x+5,y+9:PEN·1:PRINT·C
     HR$(b(x+1,y)+240):SOUND·1,500:RETURN
{BtDx} 630·IF·x>1·AND·b(x-1,y)=0·THEN·b(x-
     1,y)=b(x,y):b(x,y)=0:LOCATE·x+3,y+9:PEN·1:P
     RINT·CHR$(b(x-1,y)+240):SOUND·1,400:RETURN
{AnDx} 640·IF·y(4·AND·b(x,y+1)=0·THEN·b(x,y+1)=b
     (x,y):b(x,y)=0:LOCATE·x+4,y+10:PEN·1:PRINT·
     CHR$(b(x,y+1)+240):SOUND·1,300:RETURN·
{KvDv} 650·IF·y>1·AND·b(x,y-1)=0·THEN·b(x,y-
     1)=b(x,y):b(x,y)=0:LOCATE·x+4,y+8:PEN·1:PRI
     NT·CHR$(b(x,y-1)+240):SOUND·1,200:RETURN
{HmAt} 660·SOUND·1,90:RETURN
```

GRADISK



Usually only to be had from commercial sources, utilities such as *Gradisk* go a long way towards increasing your understanding of the way the CPC stores information on floppy disks.

Gradisk provides a graphic track and sector display of any disk, including data disks, even system disks! You can discover exactly how data is organised on a disk, check for bad sectors and generally explore the inner workings of floppies.

The program was written by R M Friend of Forest Hill, London.

```
{GkB1} 1000·REM·DATA/SYSTEM/IBM·DISC·Graphic·Lay
     out
{CvBj} 1010·INK·0,13:INK·1,0:PAPER·0:BORDER·10
{HqAs} 1020·DIM·PTrack$(10)
{JqBr} 1030·MODE·2:INPUT"Type:·Data·System·IBM·(
     1)·(2)·(3)·",DType
{GwAu} 1040·CLS:SYMBOL·AFTER·240
{KiAw} 1050·RESTORE·1310:FOR·n=241·TO·252
{JqBl} 1060·READ·Ch1,Ch2,Ch3,Ch4,Ch5,Ch6,Ch7,Ch8
{IqBo} 1070·SYMBOL·n,Ch1,Ch2,Ch3,Ch4,Ch5,Ch6,Ch7
     ,Ch8:NEXT
{HiBi} 1080·IF·Dtype=1·THEN·RESTORE·1400
{OtBk} 1090·IF·Dtype=2·THEN·RESTORE·1630
{CoBk} 1100·IF·Dtype=3·THEN·RESTORE·1860
{MnCu} 1110·Tra$="":READ·DType$:FOR·Loop=1·TO·20
     :READ·Ch:Tra$=Tra$+CHR$(Ch):NEXT:READ·TraN$
{HjEw} 1120·LOCATE·2,1:PRINT·DType$:LOCATE·8,1:P
     RINT"·DISC:·SECTORS·";CHR$(250);CHR$(249);"
     =SYS·";CHR$(251);CHR$(252);"=DIR·";CHR$(245
     );CHR$(246);CHR$(247);CHR$(248);
{LrCp} 1130·PRINT·"=DATA····TRACK":LOCATE·59,1:P
     RINT·Tra$:LOCATE·59,2:PRINT·TraN$
{OwAx} 1140·LOCATE·50,2:PRINT"SECTORS"
{IvCn} 1150·Track1$="":FOR·Loop=1·TO·19:READ·Ch:
     Track1$=track1$+CHR$(ch):NEXT
{PjCk} 1160·FOR·Loop=1·TO·2:track1$=track1$+trac
     k1$:NEXT:LOCATE·2,3:PRINT·track1$
{ItCk} 1170·Temp1$="":FOR·Loop=1·TO·19:READ·Ch:T
     emp1$=Temp1$+CHR$(Ch):NEXT
{EvCk} 1180·Temp2$="":FOR·Loop=1·TO·19:READ·Ch:T
     emp2$=Temp2$+CHR$(Ch):NEXT
{AxCk} 1190·Temp3$="":FOR·Loop=1·TO·19:READ·Ch:T
     emp3$=Temp3$+CHR$(Ch):NEXT
{AnCl} 1200·Temp4$="":FOR·Loop=1·TO·19:READ·Ch:T
     emp4$=Temp4$+CHR$(Ch):NEXT
{FrCn} 1210·Temp5$="":FOR·Loop=1·TO·19:READ·Ch:T
     emp5$=Temp5$+CHR$(Ch):NEXT
{PuBm} 1220·Dtrack$(1)=Temp1$+Temp2$+Temp3$+Temp
     4$
{FuBk} 1230·Dtrack$(2)=Temp5$+Temp4$+Temp5$+Temp
     4$
{FsBn} 1240·FOR·n=3·TO·10:Dtrack$(n)=Dtrack$(2):
     NEXT
{PpDp} 1250·Track=3:Inc=1:FOR·n=4·TO·23·STEP·2:L
     OCATE·2,n:PRINT·DTrack$(Inc):LOCATE·77,n:PR
     INT·Track:Track=track+4
{DtBu} 1260·READ·Temp1$:LOCATE·2,n+1:PRINT·Temp1
     $:Inc=inc+1:NEXT
{GpAp} 1270·READ·Sect$
{FnDj} 1280·LOCATE·10,25:PRINT·"TRACKS·are·Numbe
     red·0·to·39·&·each·has·";Sect$;"·SECTORS·Nu
     mbered·1·to·";Sect$
{PtAv} 1290·WHILE·INKEY$="":WEND:END
{FiBm} 1300·REM·****·User·Character·data·****
{DsBo} 1310·DATA·0,0,15,31,24,24,24,0,0,0,255,25
     5,0,0,0,0
{OvBo} 1320·DATA·0,0,240,248,24,24,24,0,0,0,255,
     255,24,24,24,0
{MxBu} 1330·DATA·63,32,47,47,47,32,63,0,254,2,25
     0,250,2,254,0,0
{GxBt} 1340·DATA·127,64,95,95,64,127,0,0,252,4,2
     44,244,244,4,252,0
{EkCj} 1350·DATA·0,254,254,254,254,254,254,0,0,1
     27,127,127,127,127,127,0
{BrBv} 1360·DATA·0,63,127,255,255,127,63,0,0,252
     ,254,255,255,254,252,0
{ArAl} 1370·REM
{DqBo} 1380·REM·********·····DATA·DISC
     ·DATA·····********
{JpAl} 1390·REM
{H1Ap} 1400·DATA·"DATA"
{BxDj} 1410·DATA·241,242,244,242,244,242,244,242
     ,244,242,244,242,244,242,244,242,243,32,32,
     32
{HsAt} 1420·DATA·"1·2·3·4·5·6·7·8·9"
{LwCv} 1430·DATA·241,242,244,242,244,242,244,242
     ,244,242,244,242,244,242,244,242,243,32,32
{HrCp} 1440·DATA·251,252,251,252,251,252,251,252
     ,245,246,247,248,245,246,247,248,245,246,32
     ,
{AsCq} 1450·DATA·247,248,245,246,247,248,245,246
     ,247,248,245,246,247,248,245,246,247,248,32
{BpCp} 1460·DATA·245,246,247,248,245,246,247,248
     ,245,246,247,248,245,246,247,248,245,246,32
```

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together to form one string held in the variable NAME$. Notice that trailing space after 'Troy'? Leave out that, and NAME$ would look like this:

```
TroyTempest
```

BASIC always assumes, quite rightly, that what you type is what you want. If you add a space, BASIC includes it. But forget the space, and BASIC won't add one for you! The moral is to take care with your typing.

How long is that NAME$? Remember to count the space between the two names. 12 characters, right? But what a drag having to count them, a dull and repetitive task which seems perfectly suited to being solved by the CPC. So try this

```
10 REM This is a program to count the characters in a string
20 INPUT "Please type a string"; A$
30 PRINT "The string '"A$"' is "LEN (A$) "characters long."
40 END
```

Don't panic. You've met INPUT and PRINT before. That REM statement in line 10 means simple 'REMark' or 'REMinder'. When BASIC sees REM it ignores everything else on that line. So you can use REM followed by some pertinent information to remind you what a program (or a part of it it...) is doing.

Don't laugh. When you're writing hefty slabs of code, it's all too easy to forget what a particular slice of it does!

The only keyword you haven't met in the above program is LEN, and that's what BASIC uses to measure the LENgth of the string. Now type in the program – watch out for all those single and double quotes in line 30 – and press Return to run it. You'll be prompted like this:

```
Please type in a string?
```

Respond by typing, say, your name like this

```
Fielding Mellish
```

```
{LuCp} 1470 DATA 247,248,245,246,247,248,245,24
       6,247,248,245,246,247,248,245,246,247,248,
       32
{MrCp} 1480 DATA 245,246,247,248,245,246,247,24
       8,245,246,247,248,245,246,247,248,245,246,
       32
{IjBt} 1490 DATA "..........02..03..0.4..05..06.
       .07..08...09..0A..0B..0C..0.D..0E..0F..10.
       .11"
{HrCi} 1500 DATA ".12..13..14..15..1.6..17..18.
       .19..1A...1B..1C..1D..1E..1.F..20..21..22.
       .23"
{JlCj} 1510 DATA ".24..25..26..27..2.8..29..2A.
       .2B..2C...2D..2E..2F..30..3.1..32..33..34.
       .35"
{BuCn} 1520 DATA ".36..37..38..39..3.A..3B..3C.
       .3D..3E...3F..40..41..42..4.3..44..45..46.
       .47"
{OxCq} 1530 DATA ".48..49..4A..4B..4.C..4D..4E.
       .4F..50...51..52..53..54..5.5..56..57..58.
       .59"
{NkCn} 1540 DATA ".5A..5B..5C..5D..5.E..5F..60.
       .61..62...63..64..65..66..6.7..68..69..6A.
       .6B"
{JjBq} 1550 DATA ".6C..6D..6E..6F..7.0..71..72.
       .73..74...75..76..77..78..7.9..7A..7B..7C.
       .7D"
{DxBt} 1560 DATA ".7E..7F..80..81..8.2..83..84.
       .85..86...87..88..89..8A..8.B..8C..8D..8E.
       .8F"
{EsCj} 1570 DATA ".90..91..92..93..9.4..95..96.
       .97..98...99..9A..9B..9C..9.D..9E..9F..A0.
       .A1"
{AjCk} 1580 DATA ".A2..A3..A4..A5..A.6..A7..A8.
       .A9..AA...AB..AC..AD..AE..A.F..B0..B1..B2.
       .B3"
{OvAm} 1590 DATA "9"
{MwAk} 1600 REM
{GqBr} 1610 REM ********.........SYSTEM DISC D
       ATA.............*********
{MqAk} 1620 REM
{DvAs} 1630 DATA "SYSTEM"
{FwDj} 1640 DATA 241,242,244,242,244,242,244,24
       2,244,242,244,242,244,242,244,242,243,32,3
       2,32
{KtAt} 1650 DATA "1.2.3.4.5.6.7.8.9.."
{EnCx} 1660 DATA 241,242,244,242,244,242,244,24
       2,244,242,244,242,244,242,244,242,243,32,3
       2
{NnCm} 1670 DATA 250,249,250,249,250,249,250,24
       9,250,249,250,249,250,249,250,249,250,249,
       32
{NkCn} 1680 DATA 250,249,250,249,250,249,250,24
       9,250,249,250,249,250,249,250,249,250,249,
       32
{PwCo} 1690 DATA 251,252,251,252,251,252,251,25
       2,245,246,247,248,245,246,247,248,245,246,
       32
{IlCq} 1700 DATA 247,248,245,246,247,248,245,24
       6,247,248,245,246,247,248,245,246,247,248,
       32
{EoCp} 1710 DATA 245,246,247,248,245,246,247,24
       8,245,246,247,248,245,246,247,248,245,246,
       32
{MuBm} 1720 DATA "..........
       ..................02..03..0.4..05..06..07.
       .08"
{FvBx} 1730 DATA ".09..0A..0B..0C..0.D..0E..0F.
       .10..11...12..13..14..15..1.6..17..18..19.
       .1A"
{HnCj} 1740 DATA ".1B..1C..1D..1E..1.F..20..21.
       .22..23...24..25..26..27..2.8..29..2A..2B.
       .2C"
{GsCl} 1750 DATA ".2D..2E..2F..30..3.1..32..33.
       .34..35...36..37..38..39..3.A..3B..3C..3D.
       .3E"
{LrCo} 1760 DATA ".3F..40..41..42..4.3..44..45.
       .46..47...48..49..4A..4B..4.C..4D..4E..4F.
       .50"
{IwCq} 1770 DATA ".51..52..53..54..5.5..56..57.
       .58..59...5A..5B..5C..5D..5.E..5F..60..61.
       .62"
{JnCn} 1780 DATA ".63..64..65..66..6.7..68..69.
       .6A..6B...6C..6D..6E..6F..7.0..71..72..73.
       .74"
{DlBp} 1790 DATA ".75..76..77..78..7.9..7A..7B.
       .7C..7D...7E..7F..80..81..8.2..83..84..85.
       .86"
{DjBx} 1800 DATA ".87..88..89..8A..8.B..8C..8D.
       .8E..8F...90..91..92..93..9.4..95..96..97.
       .98"
{EuCi} 1810 DATA ".99..9A..9B..9C..9.D..9E..9F.
       .A0..A1...A2..A3..A4..A5..A.6..A7..A8..A9.
       .AA"
{CkAm} 1820 DATA "9"
{FnAl} 1830 REM
{NkBo} 1840 REM ********.............IBM DISC
       .DATA.............********
{JpAl} 1850 REM
{CpAq} 1860 DATA "IBM"
{PjDi} 1870 DATA 241,242,244,242,244,242,244,24
       2,244,242,244,242,244,242,243,32,32,32,32,
       32
{DvAu} 1880 DATA "1.2.3.4.5.6.7.8"
{CiCx} 1890 DATA 241,242,244,242,244,242,244,24
       2,244,242,244,242,244,242,243,32,32,32,32
{NoCl} 1900 DATA 250,249,250,249,250,249,250,24
       9,250,249,250,249,250,249,250,249,32,32,32
{LjCp} 1910 DATA 251,252,251,252,251,252,251,25
       2,245,246,247,248,245,246,247,248,32,32,32
{HiCp} 1920 DATA 245,246,247,248,245,246,247,24
       8,245,246,247,248,245,246,247,248,32,32,32
{ClCq} 1930 DATA 245,246,247,248,245,246,247,24
       8,245,246,247,248,245,246,247,248,32,32,32
{NoCo} 1940 DATA 245,246,247,248,245,246,247,24
       8,245,246,247,248,245,246,247,248,32,32,32
{HlBn} 1950 DATA ".....0
       2..03.....04..05..06..07.....08..09..0A..0
       B"
{ErBu} 1960 DATA ".0C..0D..0E..0F.....10..11..1
       2..13.....14..15..16..17.....18..19..1A..1
       B"
{DkBu} 1970 DATA ".1C..1D..1E..1F.....20..21..2
       2..23.....24..25..26..27.....28..29..2A..2
       B"
{BtCi} 1980 DATA ".2C..2D..2E..2F.....30..31..3
       2..33.....34..35..36..37.....38..39..3A..3
       B"
{AmCl} 1990 DATA ".3C..3D..3E..3F.....40..41..4
       2..43.....44..45..46..47.....48..49..4A..4
       B"
{PwCm} 2000 DATA ".4C..4D..4E..4F.....50..51..5
       2..53.....54..55..56..57.....58..59..5A..5
       B"
{PnCk} 2010 DATA ".5C..5D..5E..5F.....60..61..6
       2..63.....64..65..66..67.....68..69..6A..6
       B"
{OuBp} 2020 DATA ".6C..6D..6E..6F.....70..71..7
       2..73.....74..75..76..77.....78..79..7A..7
       B"
{OlBr} 2030 DATA ".7C..7D..7E..7F.....80..81..8
       2..83.....84..85..86..87.....88..89..8A..8
       B"
{NsBv} 2040 DATA ".8C..8D..8E..8F.....90..91..9
       2..93.....94..95..96..97.....98..99..9A..9
       B"
{PvAm} 2050 DATA "8"
```

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and press Return. Seconds later, this appears on screen

```
The string "Fielding Mellish" is 16 characters long.
```

BASIC counted all the characters in your name, and the space between your for- and surname and told you how many characters were contained within it. Simple, and without application as far as you can see at the moment, but damned clever, right?

In coming months, we'll use such BASIC constructs time and again to provide useful applications – but you can't run before you can... etc, so be patient. You'll get there.

What if you had a whole collection of strings, and you wanted to know the length of each? You'd have to run the program anew each time. There is, however, a way of automating the process, known as the 'loop'. Probably the most basic yet most necessary concept in the whole of programming! And not just in BASIC.

We'll meet it next month.

For now though, there's one other type of string you should know about. The null string. That is, a string which contains absolutely nothing. No spaces, no punctuation, and of course, no characters or numbers.

```
A$=""
NAME$=""
HISCORE$=""
```

are all perfect examples of null strings. Assign a null string when you want to clear the contents of some existing string variable.

● Don't forget, you can learn a lot about BASIC and how programs work by studying the *Type-Ins* printed in the magazine! Some of the code may look a bit 'greek' to start with, but carry on reading this series, and you'll soon be an expert...

the buyers guide

desktop publishing

You've read our excellent fanzines feature (p 16) and you want to get into publishing. You could use the scissors and glue technique of course, but there is an easier way to go about it. ADAM PETERS examines the DTP phenomenon and weighs up the options...

Desktop publishing, eh? What's all that about then? Basically it's an excellent way of laying out pages that has revolutionised British publishing over the last eight years. Instead of hot metal and blokes with tweezers in dank basements, newspapers and magazines can now be designed entirely on computer.

As well as reducing costs and increasing control over the finished 'look', the computer DTP boom has led to one other major change: it has empowered 'ordinary people' with the ability to produce decent looking magazines with nothing more than a home computer and a printer. Previously such a task required a warehouse full of equipment that cost tens of thousands of pounds.

Now, anyone can produce professional looking newsletters and magazines from the comfort of their own kitchen. They can use their computer to manipulate pictures and text on screen to produce well-designed pages. Desktop publishing is one of the growth areas of CPC computing at the moment, and if you want to produce a brill looking fanzine, or maybe just produce your own headed notepaper, the occasional poster, earn extra marks for that project, or simply write letters with drawings on, then desktop publishing is for you.

So let's size up some of the options facing the CPC owner keen to get into DTP. Like most serious programs, the majority of these require 128K and a disk drive to run. There are quite a few excellent 464-compatible types as well though. Here comes that product info now ...

MICRO DESIGN PLUS

£29.99 complete • Campursoft, 16 Slatefield Street, Gallowgate, Glasgow G31 1UA (Telephone 041-554 4735)

What's going on here then? Turns out that WACCI ace Peter Campbell has come to an arrangement over marketing Siren's weird but wonderful *Micro Design* program (£19.99), together with his own enhancement program for it (£13.75). £29.99 is the all in price for the two.

Micro Design is excellent for drawing, and its square pixels, compared to the more common rectangular ones, means the printout is of a better quality than ordinary DTP packages (*Stop Press* included).

Unfortunately the text-handling facilities were virtually non-existence, making *Micro Design* pretty useless for producing fanzines and the like. For producing diagrams it was fab, but a DTP package it was not (and never claimed to be).

The advancements in *Micro Design Plus* take care of all that. The program has been speeded up, it handles text wonderfully (importing ASCII files is no problem) and it can also be used a print enhancer for *Stop Press*. The printouts are superb.

We hope to bring you a full review in *Technical Forum* very, very soon, so stay tuned...

PAGE PUBLISHER

£25 • SD Microsystems, PO Box 24, Holbeach, Lincs PE12 7JF (Telephone 0406 32252)

Page Publisher has always been the only real commercial challenger to *Stop Press*. The program offers excellent text-handling facilities, including word wrap, columns and justification.

What about the graphics, though? There's a choice of 10 pens and 50 brush patterns, plus sprays, fills and all that other gubbins. And it's very fast too. Best of all, it will work with both 9-pin and 24-pin printers (unlike *Stop Press*, which is designed for 9-pins only).

Stop Press has the edge, but *Page Publisher* is definitely a classy program: 24-pin printer owners, start queueing today. Incidentally, SD also produce the £15 art package *Picasso* which can be used in conjunction with *Page Publisher*.

PAGE SETTER 64

£12.50 • SD Microsystems, PO Box 24, Holbeach, Lincs PE12 7JF (Telephone 0406 32252)

Hurrah, a 464-compatible DTP package, and the only prog in this list that is available on tape (you can get it on disk too, mind). *Page Setter* consists of three separate files; a text editor, a graphics prog, and the main program, which combines the text and graphics into... pages.

Like most cheap DTP packages, *Page Setter* cannot import text from word processors. You are therefore left having to use the primitive text editor

POWER PAGE

cheap & cheerful

45p + blank disk + sae • Robot PD, 2 Trent Road, Oakham, Rutland LE15 6HF



The biggest tussle between PD librarians at the moment seems to be a battle over who can produce the best DTP package. We reckon Robot PD's *Power Page* has the edge over its main rival *Pagemaker Deluxe* (by Scull PD), not least because it is totally public domain (ie free).

There are a loads of options available, including a variety of fonts, headlining, graphics, invert, proportional text, autoflow, justification, various text styles, importing of clip art, etc. Utilities such as a text editor, font editor and headline creator are included on the disk, together with a graphics conversion program.

Text can be entered at any point on the page, and there's a selection of printing options. The program is mainly designed for producing A5 size pages. Each page is around takes up an area about two and a half times the screen size. A file compressor keeps the size of pages down to a manageable level.

***Power Page* is very user-friendly, with lots of useful help documentation included (a total of 32K's worth of help files). Sounds great, eh? Now get a load of this - thanks to a special arrangement with the program's prolific writer, Richard Fairhurst, the full uncut version of *Power Page* is going to be on the *AA* covertape next month. Gadzooks - place that order with your newsagent today, folks!**

Though it will work with 64K, *Power Page* needs to be run from disk. So if you haven't got a disk drive, you've got a few weeks to get one. It'll be worth your while, believe us.

that is included with the package.

Page Setter 64 is a bit basic, though it does include some advanced features such as the facility to flow text around graphics. But if you're a tape-based 464 owner your choice is limited as far as DTP goes, and this program is more than adequate.

●●●●●

PAGEMAKER DELUXE

£3.50 + blank disk + sae • Scull SL, 44 Echiline Grove, South Queensferry, West Lothian EH30 9RU

Alan Scully's brainchild, *Pagemaker Deluxe* is a pretty usable desktop publisher which we reviewed in AA73. Deluxe allows you to flow text around graphics, invert or flip sections of the screen, and enter text in any position you like.

The programmer is constantly updating the program (recent editions have included the facility to import *all Stop Press* clip art) and you can get a copy for free when you subscribe to Scully's *CPC Domain* disk fanzine (write to the address above for details).

The editing facilities, as with all packages other than *Stop Press*, are fairly limited. The graphics facilities are reasonably good though, and for the price, *Pagemaker Deluxe* is hard to fault.

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TINY DESK TOP PUBLISHER

£5 contribution (shareware) • Scull SL, 44 Echiline Grove, South Queensferry, West Lothian EH30 9RU

Tiny Desk Top Publisher is indeed tiny, and also quite tricky to get the hang of. Previously released commercially, *TDTP* is now available as shareware: you can get a copy for free (though you have to subscribe to *CPC Domain* before you can do so), but you're supposed to send the author some cash if you find the program useful.

When it first appeared, *TDTP* scored points for being so 'competitively priced' (ie cheap). Now that the PD scene is swamped with DTP packages of a similar quality, it's a bit of a donkey. It works and you can do pages with it, but *Power Page* is a better program and it's free.

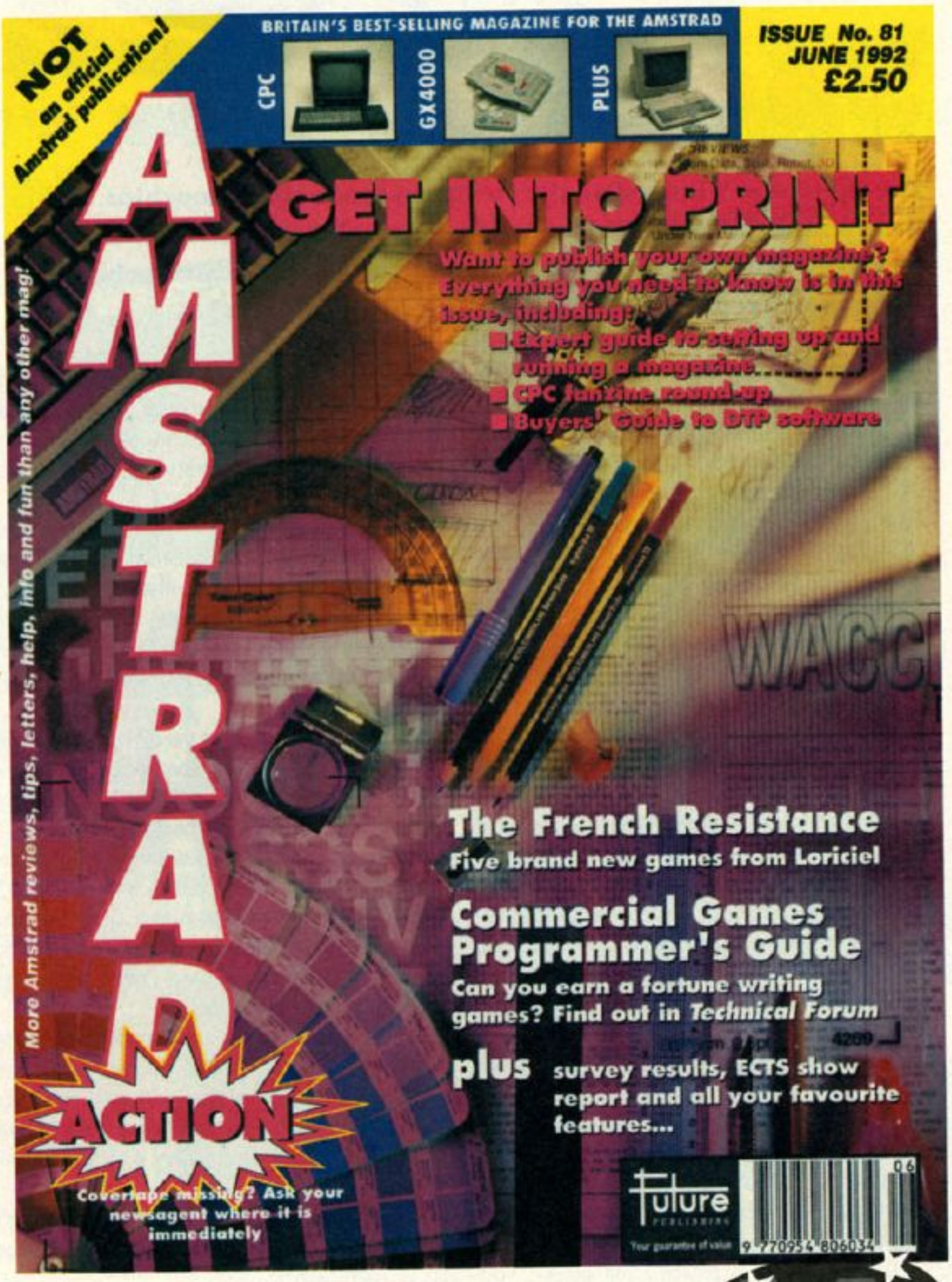
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AND THE REST...

There are positively oodles (*oodles (n.) - about eight*) of DTP packages scurrying round the public domain. Apart from those we've outlined above, there's also Alan Scully's DTP prototype, *Pagemaker Plus*, featured in a special tape-compatible version on the AA76 covertape (back issues are selling out fast).

A recent addition to the fray has been *Edition One*, very similar to *Pagemaker Plus*, but faster and with more graphics functions. "Another desktop publisher? Aarrgghh!" declared *Artificial Intelligence* when this one appeared a few months ago.

Whilst it's certainly true to say that PD DTP packages are reproducing like rabbits, we don't see any harm in that. After all, time was when you couldn't get a DTP package for less than £50. Now you can get half a dozen decent and usable packages for the price of a few stamps.



STOP PRESS

£65 with mouse, £35 without • MJC Supplies, Unit 2, The Arches, Icknield Way, Letchworth, Herts SG6 1UJ (Telephone 0462 481166)

best buy



The daddie of them all, *Stop Press* is the only full-featured commercial DTP package there is. It was originally released under the name *Pagemaker*, and was full of bugs. These were quickly removed and the prog was re-released under the new name.

Stop Press has every option imaginable, plus a few that you'd never think of. You can produce text of any size, there are loads of fonts included, and there's an excellent zoom mode which allows you to edit text and illustrations pixel by pixel.

Brilliant text-editing facilities, the ability to fill shapes with text, patterned fills... *Stop Press* has got the lot! And that's why it is the package to consider first if you're deadly serious about DTP and have got the money.

You might be tempted to go for the cheaper no-mouse option, but be careful: using a joystick with *Stop Press* is very troublesome, since the controls are incredibly sensitive. Even the lightest tap on the 'stick can send the crosshairs halfway across the screen. Gah!

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the buyers guide GAMES

Sport Sims

The Olympics, Wimbledon, the European footie championships... there's loads of sporting things going down this summer. And if you get bored of what's happening of the telly screen, you can always boot up some sport on the CPC screen. ADAM PETERS reports...

Right. First of all, we'd better point out that if you're expecting some blurb on your favourite motor racing or football games here, you might just as well be waiting for a hand-gliding squirrel. Drive-em-ups (*AA76*) and footie games (*AA79*) have already had a *Buyers' Guide: Games* of their own. Here we'll just be looking at all the other sports that have made their way to the screen of the Straddles (that's Look-in's nickname for the CPC, by the way). And there's a lot, believe you us.

Secondly, we ought to also point out that *Amiga Power*'s games mastermind Stuart Campbell, who we usually get to give us details of the original prehistoric arcade machines that started the genre, wasn't in when we called round this month. So we'll have to skip that bit, and jump straight to the home computer story and a bloke called Daley Thompson.

Dales (as we call him, cos we're good mates) featured in a number of decathlon-inspired multi-sport packages. *Daley Thompson's Decathlon* featured the actual ten sports involved in Dalie's record-breaking exploits. But *Daley Thompson's Supertest* didn't. Both packages were stonking hits, being the first packages to feature a double figure number of diff games all bundled together.

The problem with the Daley Thompson games was their stupid joystick-destroying wiggle-back-and-forth-very-fast control method. Later games have tried to avoid this mindless approach to sport simulation.

Some sports have proved more popular than others: golf and tennis are the most common (and the most successful) of computer sports, whereas things like rugby and cricket are rarer, and in the case of the latter, usually pretty pathetic when they do appear.

There have been loads of multi-game packages (*Epyx World of Sports*, *California Games*, *Winter Sports*, *Summer Sports*, etc), many of them including very obscure sports like surfing and, er, skateboarding. There have also been a number of compilations, including two very successful *Game, Set & Match* packs.

Cycling games, of either the motorised or pedal-power variety, have also abounded, though few (with the exception of the reasonable *Super Hang On* and *BMX Simulator*) have been much cop.

There's also been a fair few computer renditions of faithful old British pub games, like darts (*180*, *Wacky Darts*) and snooker (*Steve Davis Snooker* and, er, *3D Pool*). But while some have looked to more obscure sports to base games on, others have just invented new games.

These invented games have included weirdsome futuristic American Football clones, such as *Speedball/Cyberball*, together with even more violent 'sports', such as *Smash TV* (which doesn't make the top ten because we classified it as a Shoot-em-up).

Sport sims – love 'em or hate 'em, you can't change the way they feel. (*What the hell are you on about, Adam? – ed.*)

best sport sim

Bobsleigh

(DIGITAL INTEGRATION)

We weren't really sure whether to chuck this in the Sport Sims category or the Simulations category – that's how fab and gnarly the actual sleighing bits are. The white blur or snow shoots towards you, and it's a case of some seriously tricky bend-judging and some majorly intricate joystick work to see you through.

Add to this some excellent strategy/management aspects – you can pick teams, buy equipment, train (a bit of joystick waggling boosts your fitness) and tool up your bob – and you get a game that can only be adequately defined using the word 'fabbo'.

The 'feel' of the arcade section has never been beaten by any other simulator, and the sheer sense of speed as you take a bend is totally exhilarating. All this adds up to a totally brilliant combination of strategy and simulation, and a game we advise you to hunt out wherever you can. Most excellent, as those righteous time-travelling dudes Bill and Ted would say.



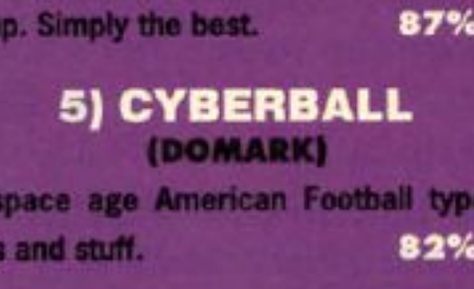
■ Sorry this picture is a bit blurry (technical difficulties, don't you know). *Bobsleigh* is a classic.

top 10

1) BOBSLEIGH
(DIGITAL INTEGRATION)

Frighteningly fast and tactically terrif', *Bobsleigh* can be summed up in a single word, and that word is 'mrega top boss ace'. **91%** (AA24)

2) JACK NICKLAUS GOLF
(ACCOLADE)



The best golf sim, with awesomely detailed graphics and three courses to battle round. **89%** (AA53)

3) WORLD CLASS LEADERBOARD
(US GOLD)

The second best golf sim, with neat graphics and trees and bunkers galore. **84%** (AA26)

4) WORLD CLASS RUGBY
(AUDIOGENIC)

Brilliant rugby sim that arrived just after last year's World Cup. Simply the best. **87%** (AA75)

5) CYBERBALL
(DOMARK)

Hi-tech space age American Football type thingy, with guns and stuff. **82%** (AA58)

6) 3D POOL
(FIREBIRD)

The best green baize game you can get for the Straddles: the two player mode is ace. **80%** (AA47)

7) 3D INTERNATIONAL TENNIS
(PALACE)

This 'un looks a bit nob – the line drawing graphics hardly draw you in – but the playability is spot on. **73%** (AA75)

8) WINTER GAMES
(US GOLD)

A brilliant bunch of snow-based sports. The bobsleigh bit is the only dodgy game on here. **90%** (AA9)

9) WWF
(OCEAN)



Somewhat repetitive gameplay, but the large array of moves and the fun of playing your fave wrestling stars makes up for that! **90%** (AA77)

10) LEADERBOARD
(ACCESS)

The first classic golf-em-up. Very limited by recent standards, but still super playable. **83%** (AA21)

Next month's *Sega Power* (the magazine with bags of Plymouth Argyle) makes hay while the sun shines in the six yard box! There are some wicked FREE earphones on the front too!



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June issue on sale on Thursday 7 May. We've booked it to be sunny, so you'll get a tan on the way to the newsagents too.

Pukka!

Next month in AA



We've kidnapped Bonnie Langford. Buy the July issue of AA or we'll release her...

July issue on sale 18th June

How to become a professional programmer



Ever wanted to write your own games and see them on the shelves of your local computer store? Fancy making a bit of cash doing something fun? Maybe you've got a good idea for a game and want to find out how you go about convincing a software house to produce it? Next month's main feature reveals all...

Programming Seymour

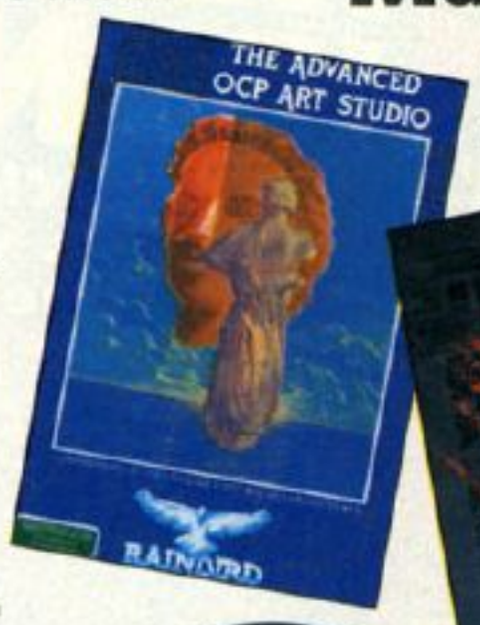


Seymour in the Wild West **has reached the programming stage, and our game development series takes another train to another town to meet the mysterious programmer and pick up some useful tips...**

State of the Art

Buyers' Guide **reviews and rates, tries and tests, examines and eats (*eats? – ed*) its way through a box full of CPC art packages. We sort out the scribbles from the masterpieces, and provide some tips for art on the Amstrad.**

Mad about magazines





Our fanzines special issue isn't the end of our home publishing blitz. Next month look out for the start of a new series called *Hold the Front Page!* PLUS Dr Fegg's guide to producing a CPC fanzine PLUS the brilliant DTP package *Power Page* on the covertape!

Games galore!

There aren't many big game reviews in this issue, are they? Not to worry, we'll have loads next month – including a massive review of *The Addams Family*!



Plus We really, truly, honestly don't know what else (it's still only April, you see)

don't miss it!

Next month's **AMSTRAD ACTION** is likely to be an absolute stonker. You wouldn't want to miss out, would you? Don't risk being *AA*-less in four weeks' time. Cut out this form, write on it, and give it to your caring, sharing newsie.

Dear kindly Newsagent person, I don't want to go to hell, so please reserve *Amstrad Action* for me every month, beginning with the July issue, out on Thursday 18th June (allegedly).

My name .....

My address.....

.....

.....

back page competition

We've got a caption competition for you this month, readers. Take a look at this rather puzzling snap of Uncle Rod's recent car park meeting with Ollie and Lam from Commodore Format, and jot down what you reckon denim-clad Ollie is saying. Write to Back Page Compo (AA81) at the usual Bath address. Closing date: June 18th. Prize: £10. No-one got Maryanne's teddy bear's name right last month: he's called Hugo. The £10 goes to Tanya Winston of London NW11 who suggested, er, 'Pipplethwaite' (oh dear).



back page back page back page

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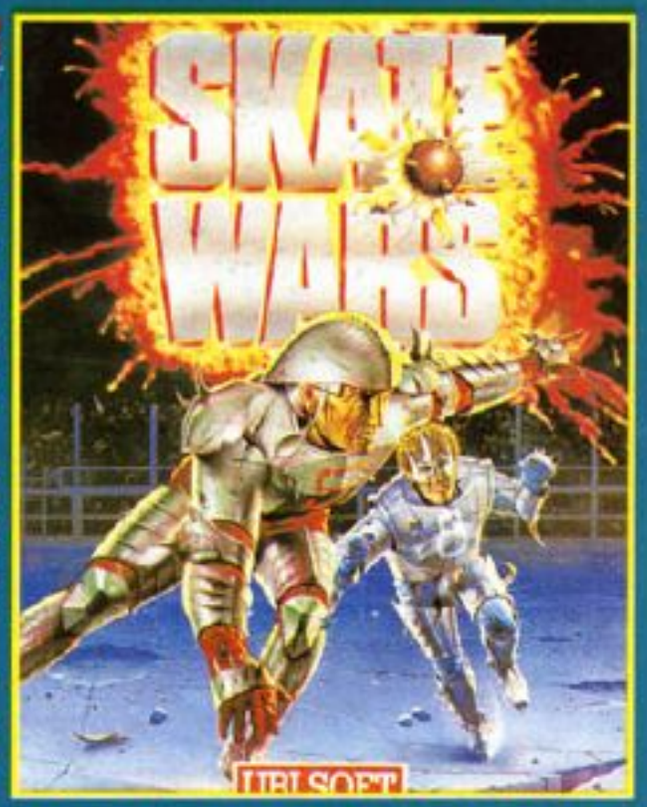
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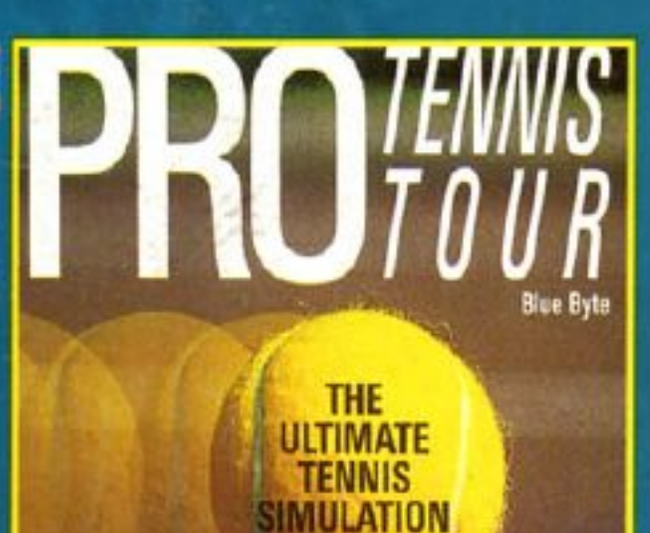


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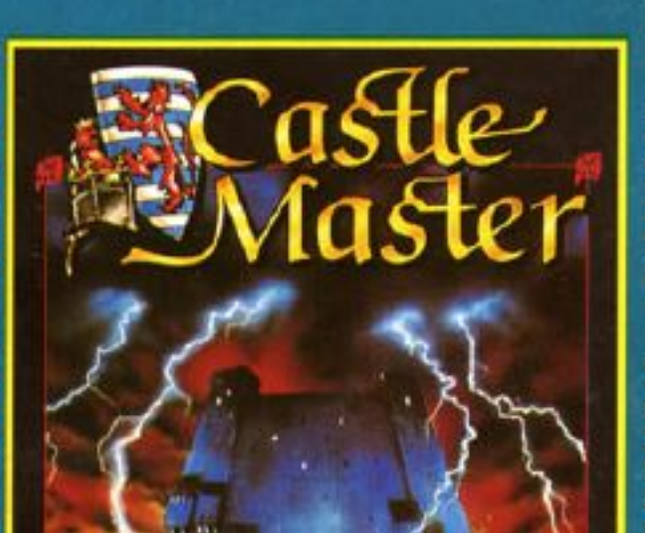


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