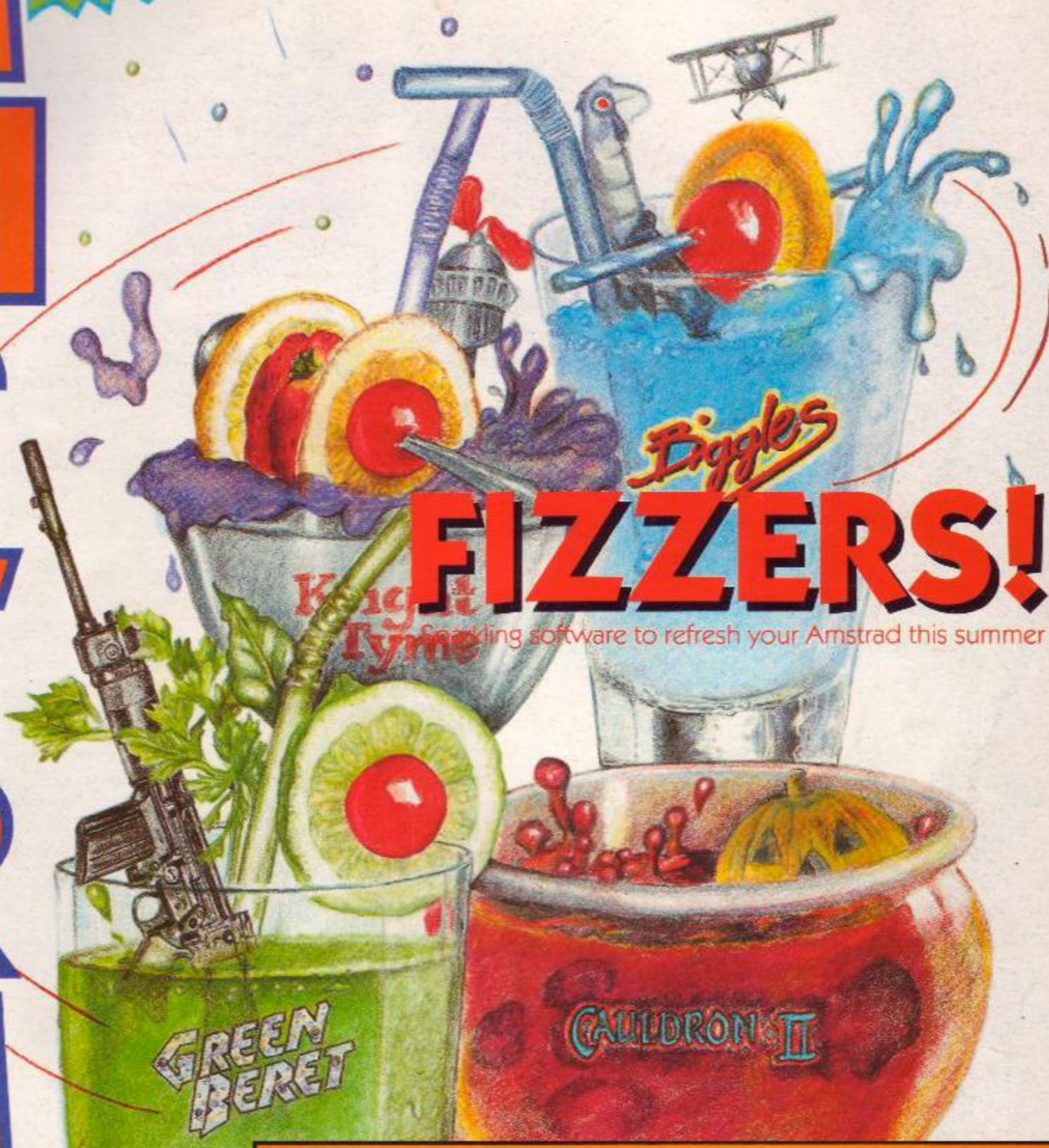


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ACTION



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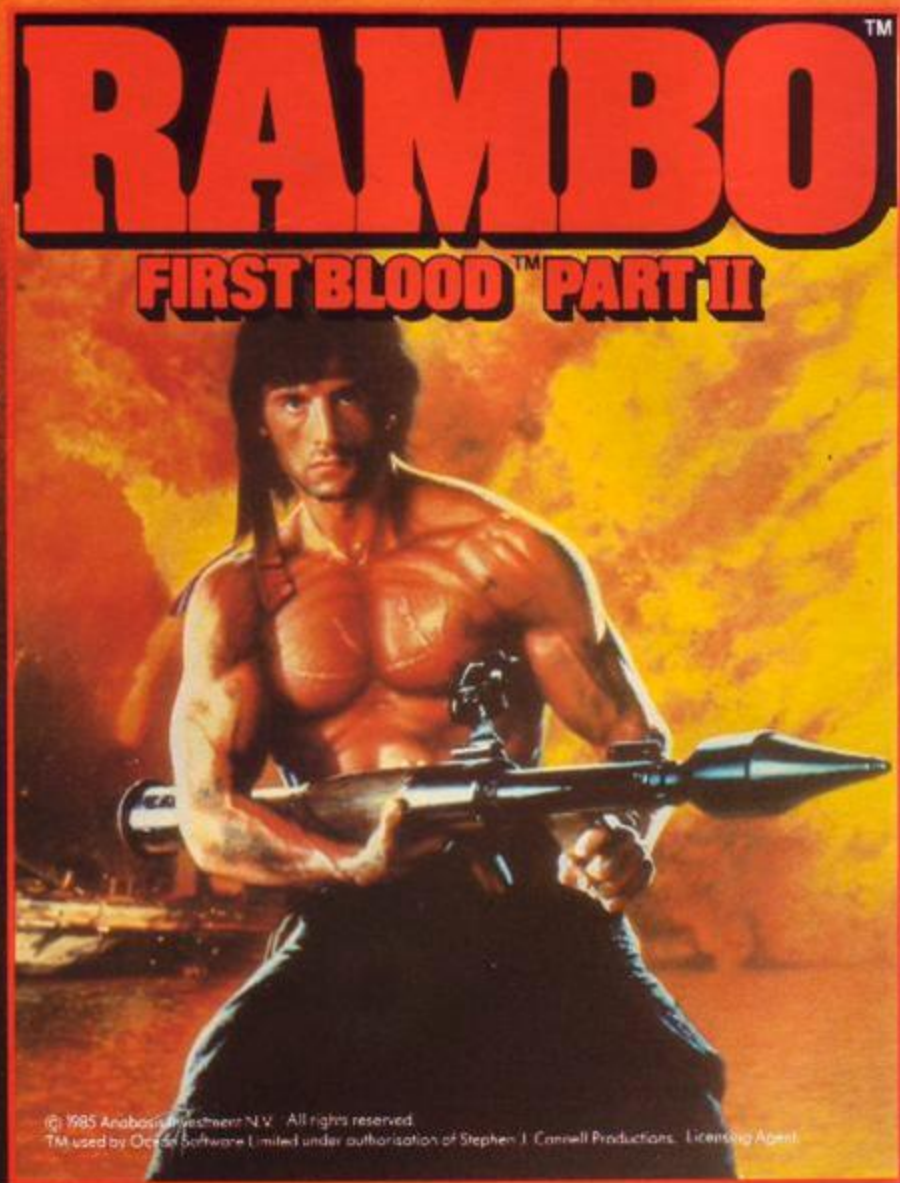
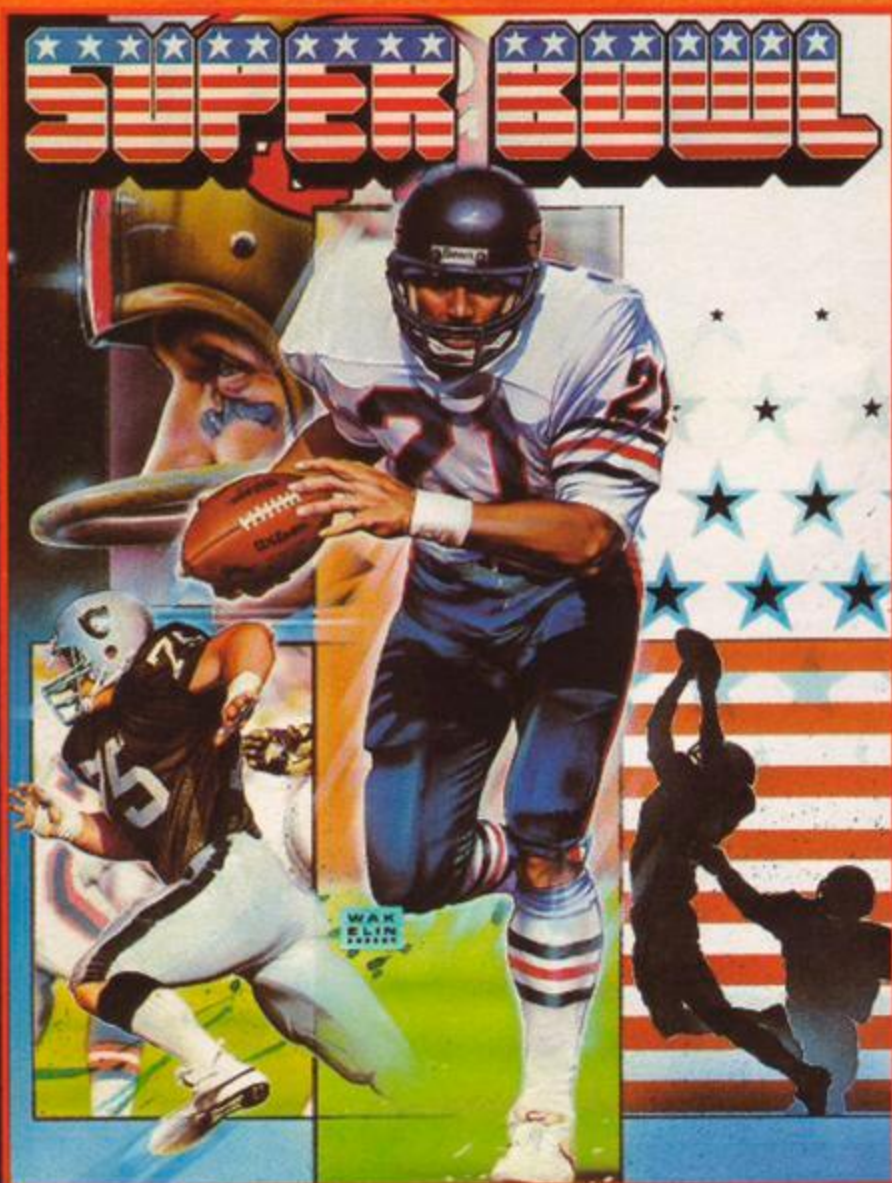
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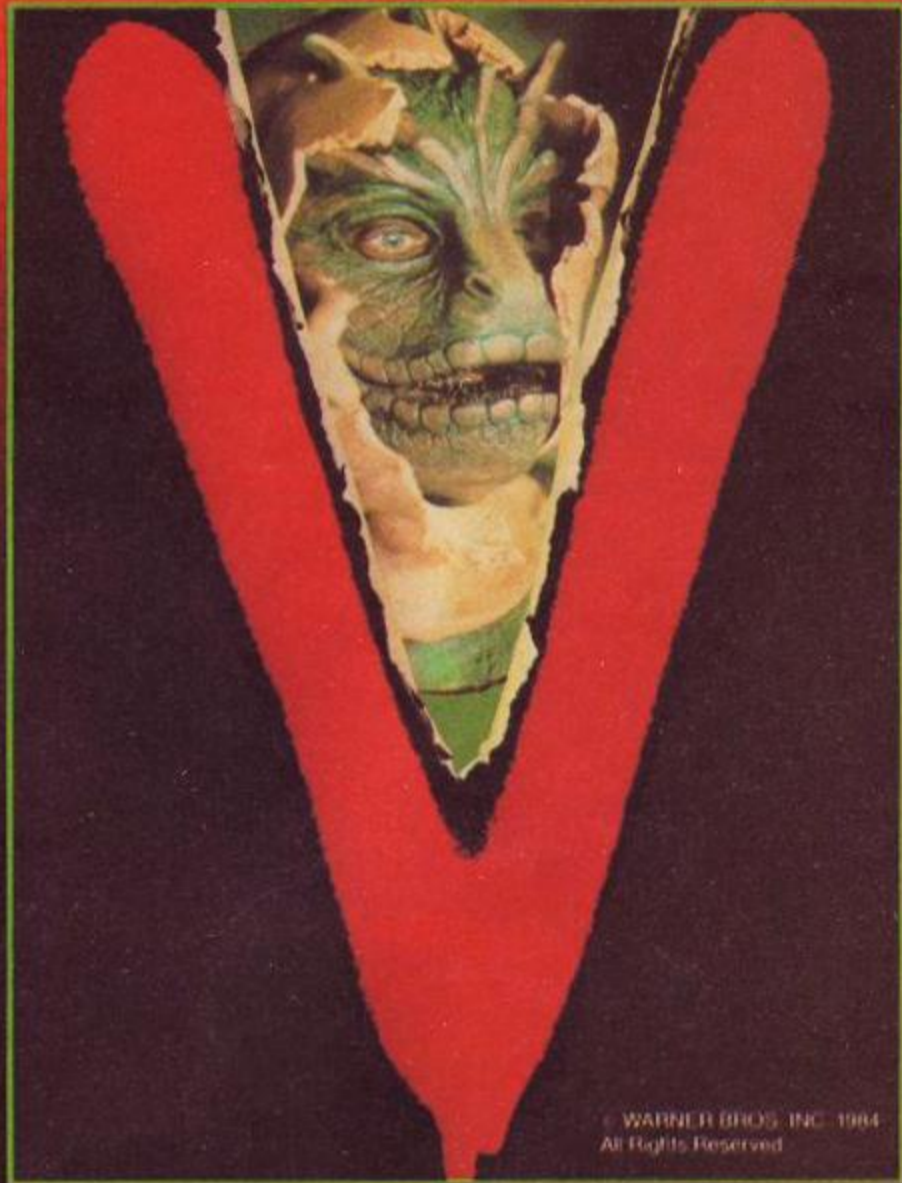
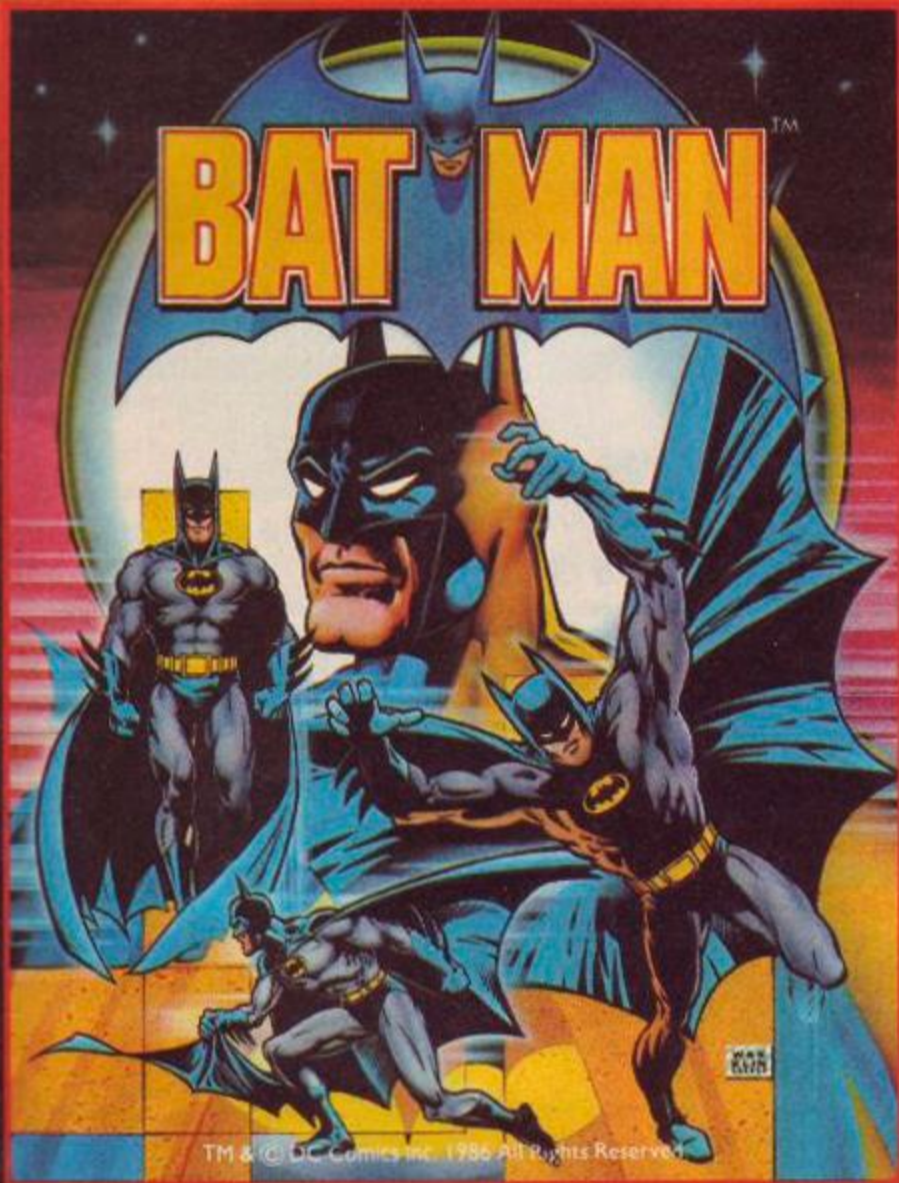


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AMSTRAD

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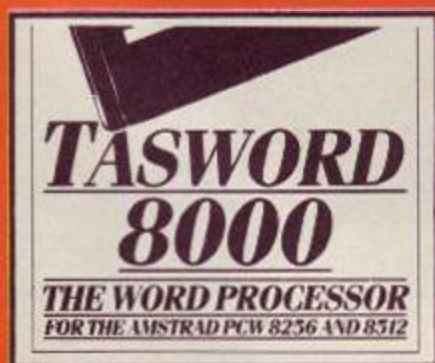
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It took its time coming but the wait was worth it. Wonderfully violent.

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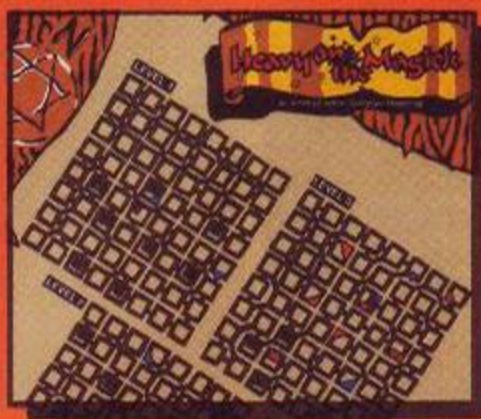
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Packed with Pokes, cheats and cunning tips for getting further with games than you ever thought possible.



Summer is supposed to be the time when everyone bungs their computer into cold storage and toddles off down to the beach. A fatal mistake. This issue should convince you that if there's any question of your going on holiday the Amstrad just has to come along.

For a start there's been a minor heatwave of new entertainment software, with Mastertronic raising the temperature more than most. This remarkable budget software house have come up with THREE hot new titles including our first ever Mastertronic mastergame. It's a cracker.

There again, how about spending some time getting to know your machine better? Our series on Basic Programming and on CP/M should help. Or you might like to while away some time on our maddeningly addictive type-in listing. PCW owners can look forward to being tempted by our reviews of the important new packages *Tasword 800* and the *ESP Lightpen*. Not to mention the release of the first arcade game on the PCWs, the superb *Batman*.

Then there are our maps of *Shogun* and *Heavy on the Magick*...another bumper collection of cheats and tips on games...a look at colour printers...a profile of the headline-making business software house Caxton...the Pilgrim's adventuring...the nation's greatest letters column... Maybe you better cancel that holiday altogether.

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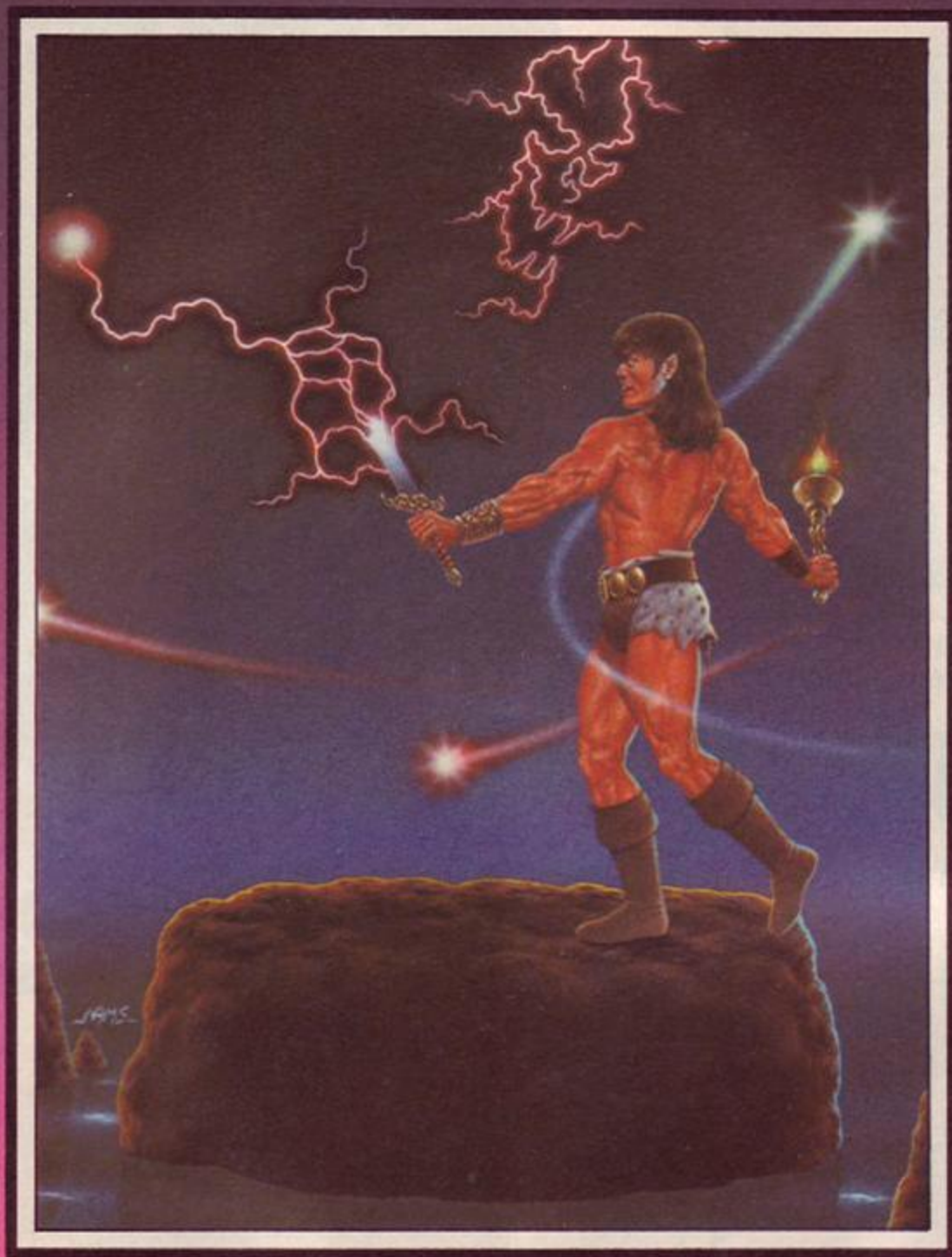
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96 FREE WIDGETS

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The Amstrad rumour machine

Amstrad's planned launch of an IBM-compatible machine has probably provoked more unsubstantiated claims and counter-claims than any other computer launch of recent times. Depending on who you talk to the machine will or won't have colour, may or may not have two built-in drives, which might or might not be 3". It could, or there again could not, feature a built-in hard disc, but without doubt, well without much doubt, will feature the GEM mouse-driven operating environment. Selling, as is widely believed, for a mere £399 (no, sorry, £599) one thing at least is clear - the new machine will be a raving success or possibly a damp squib.

How is it, you may wonder, that Alan Sugar can keep his secrets so well. Simple. The man has developed a unique technique for preventing company leaks. We have it on good authority that no one in Amstrad apart from Sugar actually knows (and can be sure he knows) all the details of the new machine. Different departments and the various companies Amstrad are working with, are given only as much information as they need to do their own planning. And in giving out such information Sugar has been known to mix in a few red herrings - even to his own staff. A very effective way of tracing the source of leaks, wouldn't you say?

And therefore, a very effective method of preventing them. Don't take what you read too seriously.

July issue delays

Apologies to subscribers. The company who pack and mail out our subscription copies were late on the job last month and that's why your copy arrived about a week late. Normally the mags are posted out five days before they're due in the shops. We've been assured the delay won't happen again.

Binders arrive!

Yes, folks, at long last you can preserve copies of your favourite magazine for your grandchildren, simply by ordering one of our spanking-new, super-quality, spine-embossed binders - see p89 for the exciting details.

AA modest claims department

It's always nice to get free publicity, so we were grateful to one of our competitors for publishing yet another reference to Amstrad Action in the letters section of their July issue. The reply they printed was a little misleading, however.

A Mr Grant Currie from Peterborough had requested that they review more games, saying that Amstrad Action had 'absolutely slaughtered' them on games reviews in the May issue. Quite so. But their reply suggested that AA was first with the reviews simply by virtue of going on sale a week earlier in the month.

WILLS DIPPED.

Just one more thing: Review more Games!! I buy Amstrad Action as well as this great mag, and in the May issue they absolutely slaughtered you in games reviews. After buyin' 'em 'n' then!

Come on, chaps, be fair. As Mr Currie had spotted, our May issue contained a long string of reviews which appeared in this competitor not a week later, but a whole issue (five weeks) or more later. They were, for the record: *Batman*, *Tomahawk*, *Frankie Goes to Hollywood*, *Doomsday Blues*, *The Last V8*, *Moon Cresta*, *Way of the Tiger* and a couple others. Against that the competitor's May issue had just two reviews - *2112 AD* and *Forbidden Planet* - which we had missed that month because of our earlier deadlines. ALL their other game reviews were done earlier in Amstrad Action by at least a week. So there.

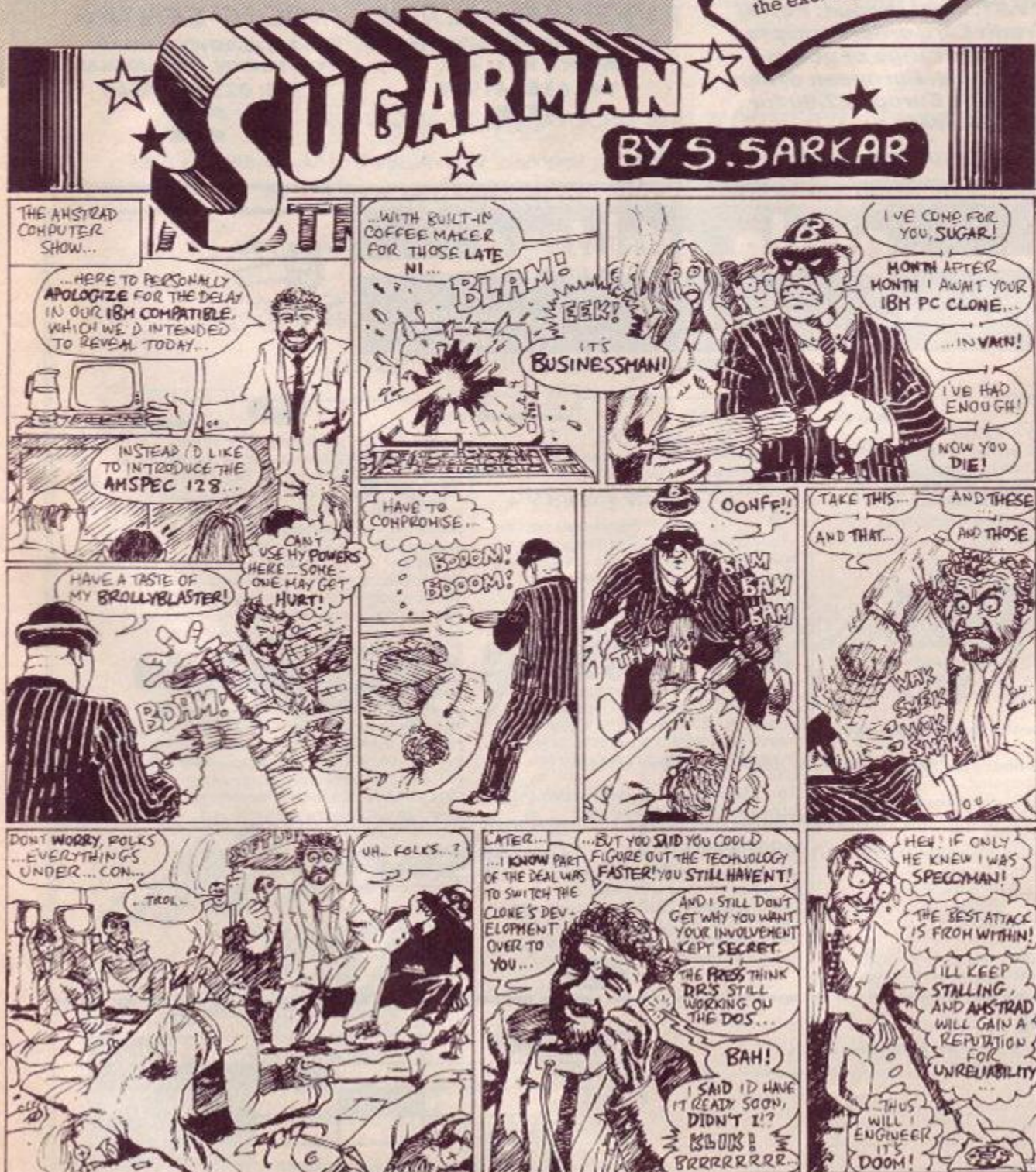
Incidentally, the May issues were by no means out of the ordinary in this respect. A careful check through all the recent issues of various Amstrad magazines should leave you in no doubt as to which one puts most effort into bringing its readers the first reviews.

There, now we feel better.

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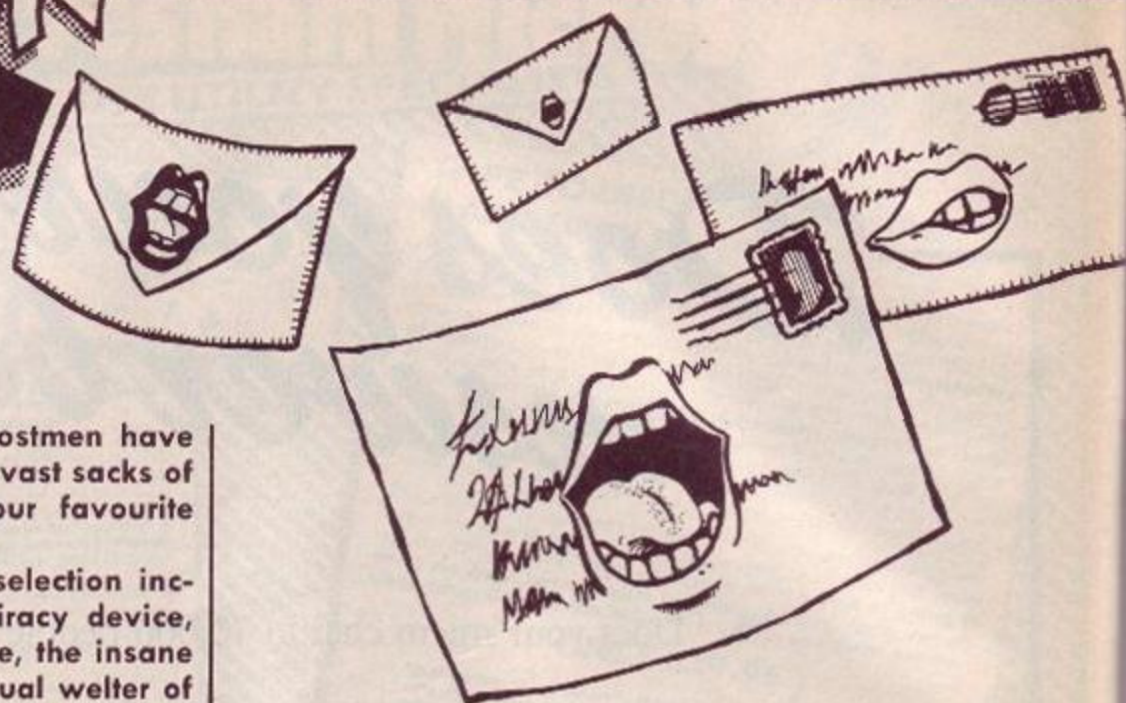
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RE-ACTION



Once again Somerton's long-suffering postmen have been puffing up the stairs and depositing vast sacks of mail on our doorstep, all from you our favourite people.

This month's lovingly checked out selection includes a moan about the Lenslok anti-piracy device, belated praise for an ancient Kuma game, the insane ravings of a Mr Piers Clifton, plus the usual welter of queries, grumbles and grovels. You want to pay particular attention to the bits written in italics after each letter - we did those. Good, aren't they?

Remember, you too can contribute to this column - and if your letter impresses us you could even be awarded a £15 software voucher! Post 'em off to:
ReAction, Amstrad Action, Somerton, Somerset, TA11 5AH.

Lenslok problem

I must write to inform you and your readers of a problem I encountered after buying the helicopter flight simulator *Tomahawk*.

Due, presumably, to copyright laws being frequently ignored, Digital Integration have introduced a security system - Lenslok - to prevent illegal copying. This consists of a rectangular piece of plastic with a transparent window in the centre. The idea being that after the cassette has loaded the letter 'H' appears on the screen. You then place the outstretched lens (It folds: to use later in code-cracking) on the screen and alter the size of the 'H' (using designated keys) to that of the Lenslok lens. When this has been achieved you can then proceed to crack the code.

However, as I found to my annoyance, if you are like me and use a large colour television with a modulator and not a smaller screened colour monitor, the letter 'H' on the TV

screen is much larger than that of the lens, even at the smallest obtainable size. Hence my inability to crack the rest of the code, if you see what I mean?

I can only imagine therefore that Digital Integration either didn't foresee such a problem, or that there's some way unbeknown to me of loading the game without the problem described. If so, I'd be glad to hear from you. Otherwise please inform your readers of this absurdity. By the way, I subscribed to the magazine after reading only one issue.

**G Pennington
Burnley, Lancs**

Though effective, the Lenslok security system is not ideal as you have discovered. But if there were less pirates about Digital Integration would not have had to go to such lengths.

Showered with praise

As I am the proud owner of an Amstrad CPC 464 I thought it would be nice of a kind-hearted person like me to write in and say your mag is ace. The games reviews are well done, the competitions are good (thanks for a copy of *Strangeloop*, it's ace), the Cheat Mode section is a great help, thank God for that *Spindizzy* poke too, you certainly need it.

The Absolute Beginners section is a nice refresher course. It might just get my memory going again. I would add that I haven't had one single problem with my Amstrad (not

like Speccy or Commodore owners). By the way, could you tell me any news about when Ocean are going to release *Knight Rider* for the Amstrad? I have been waiting quite a while and not a whisper of it yet.

**Steven Allan
Edinburgh**

According to Ocean it should be out towards the end of July, but that is not a promise!

Remember the Green Screen!

Hello famous, tremendous, fantastic magazine! (Good eh?) Firstly, a plea to all software houses, how about taking the time and effort to include a green screen option in every one of your games? Thankyou.

Now an exciting fact will be revealed. In my recent survey (*excitement building*) I have found out that the most common letter for software cassette's titles to begin with is - (*wait for it!*) 'S' (as in sausage). I have also found that the most uncommon letter for software to begin with is - (*more excitement*) 'X'. This survey was taken from a total of 868 Amstrad soft-

ware titles.

This is a genuine survey and I hope it has been of some interest.

**Andrew Putt
Ross-shire, Scotland**

Well, it takes all sorts to make a world...

Datex plug

First 3 points I want to make. Firstly, what a great mag, keep all the features in, but more Cheat-Mode and maps!

Secondly, when I was looking through my back issues you stated in issue Six which joysticks were the best to use for games such as *Daley Thompson's Supertest* and *Hypersports* etc. Now, if anybody has £12.95 to spare and wants a good joystick, then pop down to your local computer shop and ask for a 'Datex Micro-Stick'. Not only can it take a good knock, but it is a twelve-way, self-centering, mega fantastic joystick. So don't buy shoddy goods, buy dearer, but get excellence.

**Robin Pullen
Norfolk**

Competition problems

Over the past few months AA has been notorious for duff competitions. First came the infamous 'mach question' and now 'the code with the spelling mistake'. Was it Toot that ran off with the dot that should be in the first letter of the last word in the first line? For those who are confused by this the first line of the code should read as follows:

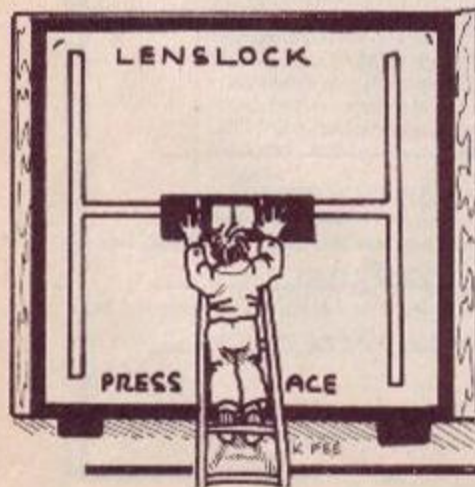
I have rung the guilty letter. I advise you to fire your type checker and employ a new one, perhaps Arnold!

**Christopher Lamb
Stoke Poges, Bucks**

Toot denies all, but I've got my suspicions...



JA [] [] [] CAL @ EA <



A few niggles

For the past two issues I have been reassured of the availability of the best-selling game *Elite* from Firebird. However after phoning up various software distributors I finally discovered that it was not likely to be out for a few months, not as AA said 'by the time this issue is on sale'.

Another fault I have found concerns your software reviewing system. Certainly it is one of the best, but it can be very misleading. For instance, you gave the PSS game *Get Dexter* 94 per cent and made it Master-game! I would have to be in a very good mood to rate it above 65 per cent and I know for sure that others share my opinion.

However, despite this I still vote Amstrad Action one of the best magazines on the market.

Phillip Miller
Kettering, Northants

It appears that your niggle is with our ratings rather than the reviewing system itself - An awful lot of people do rate Get Dexter highly; including, obviously, Bob Wade himself.

Firebird's Elite has been a real problem, which is a shame because it is an excellent game! The original cassette version turned out to contain a bug which, as we were offering it to our readers at a special price, was rather embarrassing for us. Rather than send you the bugged versions we returned them to Firebird to be replaced by working copies. We, and you, waited and waited for the replacement tapes.

Because of the delay, we sent everyone concerned a letter offering a full refund or alternative titles. The situation at the time of writing is that the cassette version is available, but the disc version is still not around.

Man without Amstrad

Dear AA, the best computer mag ever!! I have got every one of your mags and have now subscribed to you, got *Get Dexter* from the special offer, and went out and bought five £9.99 games. 'So What?' I hear you ask. Well I, have not got an Amstrad yet. I hope to get one for Xmas, but at the moment I just make do with my ZX81! yes ZX81. I hope to get a 464 or 664.

Anyway in issue Seven or Eight someone used the word 'Amster'. I thought it was a little funny thing like a mouse until you said 'What is an Amster?' Well I have the answer. Having a spare quid I thought I would

The truth about Amsters

Pathetic mortals. Yet again you have shown your ignorance when you failed to comprehend the meaning of 'Amster' in your May issue. I feel it my duty to enlighten you even though it disgusts me to do so. Nevertheless, this foul deed must be done.

Long, long ago etc. the barbaric race of Sugarines decided to declare war on earth. Earth didn't know this and until now was never to find out. After hundreds of years travelling they reached Earth and landed and waged war with what they thought was the Earth's superior race ... the hamsters. After

go and completely waste it, so I did. I went out and bought a certain other magazine and found this is where 'Amster' comes from, so this is for Paul Smith who used the word: 'don't use an enemy mag word again!' It is meant to mean an 'Amstrad user'.

Two last things, how does *Meltdown* use over 170K memory like it shows in the mag? And where do you send the Pilgrim voting chart, because I have not seen the address printed anywhere?

Dean Williams
Wirral

An Amstrad enthusiast without an Amstrad! That's a new one on me. As to your definition of 'Amsters', I much prefer Piers Clifton's above - it has the ring of truth to it, if you know what I mean.

*As to your last two points, games like *Meltdown* are able to use 170K files of program or data with a 64K machine because they don't load all the data at once. Data is called from the disc into Arnold's memory when required. This is fairly straightforward on a disc-based game, but less convenient on cassette due to the longer loading time.*

Finally, the Pilgrim voting form is in the Pilgrim's pages - if we've occasionally forgotten to put it there, we apologise profusely!

Terrible moan

I'm afraid I've got a terrible moan to let off. How come you print the same letters more than once? Take Stephen Jones of Boston Lincs' letter. Apart from the last 21 words the beginning is exactly the same as the one you printed in the May edition. It was printed in the June issue as well.

hundreds of years, when neither side had won, they made peace and settled together. Soon hybrids of the two developed. (Ha! mortals now you know what hamsters do in their paper filled plastic kennels every night!). The result was the Amster. However an evil knight learned of this rising and the Sinclair anti-Amster massacre took place.

However, a few amsters survived. They are now contacting each other with pen-pal adverts and the like, and there are rumours of a plan to take over the world. Be warned AA, do not print any more of these evil scriptures.

To be serious though, the mag's great (grovel, grovel) the

Apart from that keep up the good work. I have to admit I actually do find your reviews of games and the layout of your magazine great.

Your 'Covenant' game was great and well worth the extra 50p.

Mr G Veazey
Peacehaven, E Sussex

If we could think of an excuse you would believe, we would print it. Perhaps we should just blame it on Toot.

Pause for thought

I've always bought another mag, then I saw yours. What a difference, 100 per cent better. I even get it delivered.

Now the main point. I went to Boots, birthday money in

Arnold is great and this letter is great (*Elite* would do nicely thanks).

Piers Clifton
East Horsley, Surrey

We stand duly warned!



hand, to get some new games. I came out with *Batman*, *Get Dexter* and *Sir Fred*. At home I slotted *Batman* into the tape recorder. The tape just would not start going round! Oh no! I tried everything I knew of, but no joy. I sat down and wept as I looked for a repair service in the mag. I found one and went to pack up the computer. I head-butted the wall, kicked myself - how could I have missed it, so stupid? The pause button was pressed down. I unpressed it and now all the games work perfectly. What a clot I am. Keep up the good work and witty humour.

Johnathan Maney
Mirfield, W Yorks

Well done! We've all done it some time in our past

Sam Foxed

So returneth the pen-pal seeker. Some moans, groans, cheers and even yelps of excitement since I wrote last.

First, the bad news!
Page 64. Sam Fox Poker.

I saw in an issue of another magazine, (before I saw the light of Amstrad Action) a review of *Animated Strip Poker*. This I thought about, then thought 'no, they wouldn't bring out another one'. It is an insult to mankind, let alone womankind, to bring out, not one, but two such games. Urrgh! Moan! Groan! It should be rated as follows:

Sexist Tendency: 100%
Game Rating: 00%

Enough! Let other people moan too! The only thing which should be said is BAD NEWS! But back to Amstrad. I now hereby join the 664 Moaner Basher club. BASH!! 'Nuff said.

But on the whole, I think AA is one great mag, and I turn on

my fellow Irishman who smote AA. Bash! Juvenile Rubbish eh? We'll see about that!

By the way how 'bout a page each issue for 7-11 year olds, starring say Toot or Roland Rat with an Amstrad in his sewer. (I like R.R.) Sugarman is great! By the way, Pilg, keep up the good work. Even though I own no adventures, reading his reviews passes the time well. Oh yes, this is directed at James Harrison. Bash! What an insulting juvenile letter. Sob! By the way, what's *Roland goes Caterwauling?* See Hi-score challenge an issue or two back.

Mark Dowling
Mitchelstown, Co Cork

While we agree with you about sexist games, we think you're a little hard on 664 Moaners, your fellow Irishman, and James Harrison.

On your last point, you didn't notice that it was the April issue?

PROBLEM ATTIC

Sad question

As you know more about Amstrads than anyone I know, I was wondering if you would listen to my story and help me out:

Before Christmas all my friends were getting Commodore 64's, but I stuck out and bought an Amstrad with colour monitor.

Amstrad Action was and is the only computer mag I have bought, and like it as much then as now. One sad question which has always troubled me is that the Commodore 64 has exactly the same 64K memory, but the C64 games are out quicker and seem to be better. Why? Why? Why?

Ahmet Ismael
Dagenham, Essex

The C64 has been around for a lot longer than the Amstrad, so software houses have more experience in writing games for it. It is also far more of a games machine - after all, it doesn't come with a monitor and built-in cassette deck or disc drive, does it? Another factor that favours the Commodore is that it is a very big seller in the States, and a lot of good games have come across the water for the C64 that have to be converted before Arnold can run them.

However, we would disagree with you on the quality comparison. The Commodore 64 does have the advantage of having hardware sprites and scrolling, but look at Batman or Spindizzy for quality on the Amstrad!

Computer club

I am writing on behalf of the Brighton, Hove and District Computer Club. We are an established club which tries to provide a helpful and stimulating atmosphere for computer users. We always have a talk or demonstration on some aspect of computing at our fortnightly meetings, and our current membership includes novices and experts, amateurs and professionals. We are interested in both software and hardware of all types.

Prospective members are welcome to come along for a couple of meetings to 'test the water', and should write for more information to:

George Secars
Brighton, Hove and District
Computer Club
19 Beach Green
Shoreham-by-Sea
Sussex
BN4 5YG
Telephone: (0273) 463111

Software publishing

My reason for writing is to enquire about copyrights and patenting. At the moment I am writing a business package for use on the Amstrad PCW 8512, and although I do not have any intentions of publishing it, I would be grateful if you could supply me with some information on the aforementioned topic.

In addition I have searched through the two manuals supplied with the machine and cannot establish how to disable keys on the keyboard.

Sean O'Reilly
Co. Tyrone

With regards to the extensive topic of copyright and patents, I can only refer you to The Software Author's Yearbook 1985-1986 published by MacMillan in their PaperMac range. This should contain all you need to know, or tell you where you can find out more.

As regards your second question, we cannot work out why you would want to disable the keyboard. If you only want your program to respond to certain key strokes, then you can simply use the INKEY\$ function to test the keyboard, linked to IF...THEN statements to respond to the required keys. These are detailed in your Basic manual.

Short on memory

Noticing in this month's edition (June '86) that you have now assigned a whole double spread to the niggling problems incurred by 'Amsters' (a most convenient word used in the May edition by Paul Smith), I was obliged to write for HELP!

Having obtained Protect on Rom for the serious application of my CPC6128, I let myself go by purchasing *Cyrus 2 Chess* on disc; only to find that, when I got home, inserted the disc and tried to run the program, I was given the blunt message 'not enough memory' (this was with my Protect Rom card plugged in at the back). However when I eventually thought of removing the Rom, *Cyrus* had enough memory and functioned normally.

Please can you brainy, enlightened ones at AA pass some light on to me, and tell me whether anything can be done to resolve the problem?

Paul Webb
Ashburton, Devon

When you turn your Arnold on, he looks around the memory map to see what Roms are plugged in, and makes notes in a little corner of his memory. Most programs don't use this

little corner of memory, and so run fine regardless of Rom boards. Unfortunately some programs need all the memory they can get, and so give problems when they discover Arnold's little notebook. I'm afraid there is not much you can do about it - except switch off, unplug the Rom board, and reload.

Firstly, thanks for a brill mag and keep up the good work!

Now down to serious business. Last issue (June) you printed a letter from Lyn Murnaghan from Kent, in the 'Problem Attic'. She wrote to you about the Spellbound poke and why she could not run it.

Your reply to the letter, I'm afraid to say, was wrong. I too had the same problem, but all you have to do is to find the second title called Spellbound (after Scode) on the tape, then type in the poke and run it. To do this you first type in RUN. This brings up the statement 'memory full'. Once that is done all you do is press play on the datacorder and type in 'Run 50'. The poke then loads and works perfectly.

I have also found the First mission on Elite. It is in Galaxy 7 on planet Esarxeve. I leave you with a clue for this mission. Buy something, but not fuel.

Jerome Chui
Caerphilly

Thanks for your help in clarifying this problem, but our original poke in Issue Seven did say find the SPELLBOUND program after the SCODE block. Perhaps we weren't clear enough.

Double spaced

I wonder if you can help me with a small problem I am having interfacing my CPC 6128 to a Citizen 120D printer. The printer works well with the Newword wordprocessing software, except that everything appears double spaced. Double spacing also occurs in basic print statements when printed by this printer. I have altered the appropriate dip switch (no. 2) to no avail. A new interface cartridge has also not produced any change.

I note that one of your reviewers also uses a 120D, I would be interested to know if he has had a similar problem, before I send the printer back (expensively) to the mail order

house I purchased it from.

T A Gray
Birmingham

We have spoken to Citizen about this problem, and they inform us that it is Pin 14 of the Centronics cable connecting the printer to the Amstrad that causes this problem. Their solution is to disable this pin on the lead, either by disconnecting it or breaking it off.

If this sounds a bit drastic there is a software solution. Basically it involves changing the line spacing incrementally using the appropriate Escape sequences, or by using the .lh dot command from Newword to change the line spacing in increments of 1/48ths of an inch.



Protect me

I have had my CPC 464 for about a year now, and require help on two points which I think you could help me with.

First, I received a copy of *The Devil's Crown* as a Christmas present. I have played it lots of times since and can't get past collecting the blue sapphire. Can you or your readers help? I have no trouble finding the sapphire, but I can't pick it up, as I can the other objects.

Secondly, I have had trouble with some of my friends (they aren't friends any more) who keep trying to hack into the programs I write and save on tape. At school I have heard that the Amstrad has a firmware routine somewhere in its memory for creating headerless files. I am sure these couldn't be hacked into, as they can't be recalled using LOAD'' or RUN''. If such a routine exists, could you tell me its address and how to operate the routine? Could you also tell me the routine (there must be one) which loads these files into memory? My friends wouldn't find out, they're pretty thick and don't read your mag, but they have

Your loftier questions answered

PROBLEM ATTIC

got a tape-to-tape utility, so SAVE"prog".p doesn't stop them.

I'd be grateful for these bits of info. Great mag by the way.

**John Nelson
Luton**

On your first point, I am afraid we cannot give such hints on individual game problems, as we just do not have the space! Keep an eye on our Cheat Mode pages though, you might get a hint sometime. Indeed we gave a tip for The Devil's Crown in our July issue, so there you go.

Your second point is far more complicated. Basically there are two routines; CAS WRITE and CAS READ, at locations &BC9E and &BCA1 respectively, that do what you require. Both require the address of the start of the program block in the HL register, and the length in the DE register. The content of register A is not important, but must be the same in both cases. We would suggest &16 as a suitable value.

However, these routines will not work with programs written from Basic without considerable jiggery pokery. If you want to look into this further, we suggest you buy a copy of the CPC464 Firmware manual, Amsoft code number SOFT 158. This should be available from good computer shops, and costs £20.

Screen Wobble solution

Let's get the creeping bit over with: your mag is great, it beats all the others!

The main reason that I have written is because of a letter labelled SCREEN WOBBLE. Being a bit electronically minded I took interest in what you said about fluctuations in the main supply. I have never had this problem with my green monitor, and I think I know why. On my 464 I have got an 'Anti-Surge Plug'. This, as the name suggests, stops surges from the mains. In some areas the power supply fluctuates frequently and causes interference such as screen wobble. This could also be why some people's computers go wrong electronically. Fluorescent lights used to cause me a lot of trouble before I got the plug. When I switched on the light it used to crash the computer or make it reset!

My answer to anyone experiencing these problems is to get themselves an Anti-Surge

Poke perplexion

Good evening. Much-o thanks-o for the brill mag, etc., but I'm afraid that I've a few gripes to get off my chest.

First, the great game that some considerate soul stuck to the front of May's AA. The infinite energy poke listed in another issue (can't remember which - can't be bothered getting up to see) doesn't work. I can't even find a file under the monnicker of COVENANT.BIN when cataloguing; and being such a lousy programmer, I can't muck around with aforementioned cheat to get said immunity. Please help before I either go spare or visit your humble abode and remove your brains, Rambo style.

Talking of pokes, are you sure that the Sabre Wulf and Highway Encounter pokes also listed in May's issue work? I've tried them both twice; Highway Encounter reaches the 'LOADING:Please Wait' stage and then locks up, while Sabre Wulf just locks up with nowt on the screen. Damned annoying if yer ask me, I thought that I'd finally have H.E. sussed.

Last gripe (as I'm typing this, I might think of something else though) is how long is the Arnold going to be fobbed off with 'orrible software? I recently had the pleasure (!) of using a Commodore 64. The

only two games worth bothering about were Rambo and Commando. Commando went down well, a good, enjoyable game which my own Arnold might soon see, but I nearly kicked the computer in when I saw Rambo. OK, so it's a lousy game, but why does the Commi use a full screen and Arnold get fobbed off with a poxy little window in the corner? Surely Ocean could have done better considering the Amstrad's larger memory etc. My command of the English language would have turned the air surrounding the computer a nice shade of electric blue had my mate not been next to me with his mother and father within earshot.

Right, that's it. Get on with the great mag. Don't go bankrupt giving away too many freebies will you?

**Smiff
Dewsbury, W Yorks**

What a lot of questions! OK, let's start with Covenant. The first poke that we printed was for the original PSS version of the game, and not that stuck to our cover. See this issue for a poke that does work with our version.

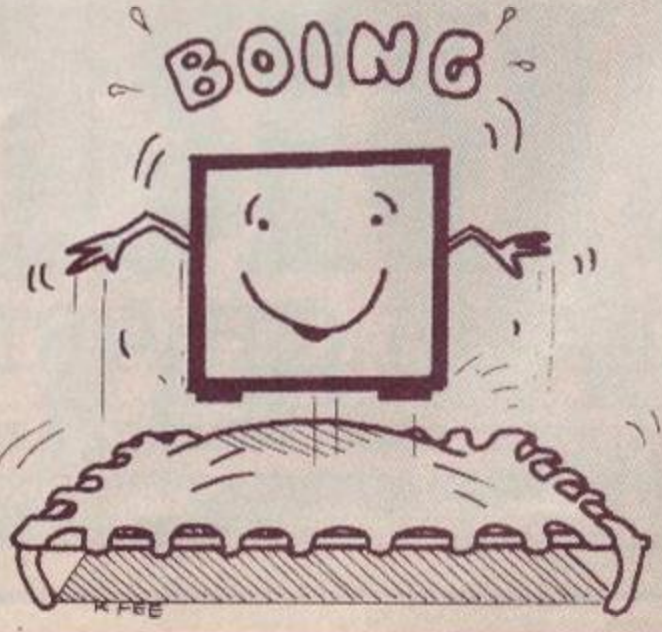
There was indeed a problem with the poke printed for Highway Encounter, but see the July issue, page 87, for a correct version.

The Sabre Wulf poke works, but only on the They Sold a Million version of the game, not the Ultimate version. It does not work with disc version either.

As to your last points, Commando is now available for Arnold, see our review in the June issue. Why Rambo is confined to a small screen on Arnold I really don't know - if they'd used the whole screen they could have made use of the Amstrad's 'hardware scroll', a very nice feature every bit as good as the Commodore's.

Plug. It might solve your problems. They cost about £10.00. I don't know if this will work for everyone, but it certainly works for me.

**Nigel Webber
Braunton, N Devon**



The joys of discs

The letter in the June issue of AA from P G Newman has prompted me to write in defense of the Amstrad CPC 6128. I used to have a 464 but upgraded to my present machine with its built-in disc drive. Not only is a disc drive faster and more reliable than a tape recorder - e.g no problems with tapes not loading due to cassette motor wear or 'stiff' tapes or wrong Azimuth setting - but, if I do need to use a tape, I can use ANY tape recorder. With the 464 you are stuck with the one supplied.

As time has passed it seems that the data recorder is the 464's Achilles heel, if it does go wrong you can't use another one.

**Mick Ellick
Bristol**

Good point, but the 6128 is £100 more expensive.

Murphy's Law

Earlier this week, on 28 May to be precise, I wrote to you regretting the non-arrival of The HitchHiker's Guide to the Galaxy, which I had ordered some two months previously. I despatched that letter, trying to whip up a faint whiff of feeling hard-done-by, without much success.

In the first post of the following day a parcel arrived with a note from you (from the responsible minion, that is) offering apologies for the delay and enclosing the game thingies.

All of which I take to be an example of Murphy's Law rather than Sod's. (Sod's being as crude as its nomenclature suggests, states: 'if something can go wrong, it will.' Which verges on the banal. Murphy's Law, being Irish and fey and all that stuff, states: 'if nothing can go wrong, something will.')

So Murphy's Law it was that had me write to grumble at you, at the precise time that you were busy proving yourself to be blameless.

Hence, my apology. Now, if I can only get this damned fish into my ear...

**T Lynch
Ruislip**

Good luck with the fish.

Clunbury Road mystery

I doubt if you would regard this letter as being suitable for publication in view of its content, but I would be most grateful if you can throw some light on

what I could describe as the Clunbury Road Mystery.

In your March edition you published a letter from a K Clarke, of 21 Clunbury Road, Wellington, Telford, Salop TF1 3PA. In the letter he requested pen-pals for the Wrekin Computer Club of which he is the secretary. There was a further letter published from him regarding an extension to the Club's activities which had been created in order to answer queries from Amstrad owners. This extension was to be called AMPLUG.

clubs and I am considering going to the expense of hauling Master Clarke before the justices.

Any hope of one of your sleuths unravelling the mystery?

Robert Lamb
Cottingham, E Yorks

If you were to take Mr. Clarke before the courts you might be in some trouble yourself. Swapping software is not the same as swapping books, because you can always make a copy for yourself - and that's



I wrote to K Clarke in accordance with his request, and we have had a brief correspondence. The last letter from him expressed an interest in *Combat Lynx*, and the arrangement was that he would send me *Air Traffic Controller* in exchange, or on a return basis. I sent him the cassette in March and so far have had no acknowledgement from him. I wrote again about a fortnight ago requesting the return of the cassette, or that he sends me the exchange cassette as promised. I also enclosed more than sufficient postage.

There may be a good reason for the silence but I'm damned if I can think of one that is satisfactory. This will be the third time that I have been 'conned' by so-called pen-friend

piracy. While swapping public-domain software, or programs you've written yourself, is quite acceptable; swapping commercial software is a practice best avoided.

The best game ever

What's the best game around for the Amstrad? *Batman*? *Get Dexter*? *Spindizzy*? *Roland goes under a bus*? No way!!

The game I have in mind is neither original nor mind-stretching. It contains the sum total of zero objects to collect and it is not a 3D arcade adventure!! Yes, such a game does exist. It was created long ago in Arnold's dim and distant past (well about 17 months ago actually). This masterpiece was duly reviewed in a monthly maga-

zine who said that: 'use of colour and graphics is excellent, with some stunning multi-coloured characters.' So a week later I was seven quid poorer and one game richer.

17 months have passed, nine Mastergames have come and gone, and I continue to play the game. Yet still you choose to ignore the most under-rated games ever written. I doubt whether Bob 'I've played every game there is on the Amstrad' Wade has even heard of it.

I just want you to know that *Star Avenger* by Kuma could have become a classic. Instead it was sentenced to bargain binland while garbage like *Movie* and *Nightshade* is hyped-up and spewed out for a tenner.

Ultimate have lived off *Filmation* for years and it saddens me to see you describe *Get Dexter*, a game with that same old formula, as 'magnifique' and 'a superb piece of work'.

Star Avenger does not pretend to be new or innovative. It isn't. Instead it is an escape from the current 3D arcade adventure trend which has lasted over two years so far and shows no signs of dying.

Star Avenger is FUN! Long may I continue to fly down those tunnels and caves, obliterate enemy fighters, bomb cities and destroy reactors.

This is what real computer games are all about.

David Rice
Glasgow

*This is indeed a game that slipped through the AA net, as it wasn't sent to us for *Amsyclopedia* in Issue One, and some of the best games are the old ones - but you can't be serious about *Get Dexter*!*

*By the way, if you're so hot on *Star Avenger*, why don't you appear in our *Hi-Score* table? Several other gamers do!*

World Cup shock

I am writing to complain about some software I have recently purchased. A few months ago I purchased a copy of *World Cup* by Artic Computing and I was satisfied with the program. Recently I have purchased a copy of *World Cup Carnival* from U S Gold Software.

I promptly loaded the game and to my amazement it was the same as the one from Artic Computing. Even the music was the same.

Please tell me what I can do about this.

J Haworth
Scunthorpe

*Unfortunately the 'enhanced' *World Cup Carnival* was produced with the full cooperation of Artic Computing, so they are unlikely to be upset by the*

similarity of U S Gold's product. There is not a lot you can do about it, unless you want to write to the Advertising Standards Authority, the Trading Standards Authority, and every computer magazine under the sun. Many thanks for pointing this out for the benefit of other AA readers, and read our review in this issue.



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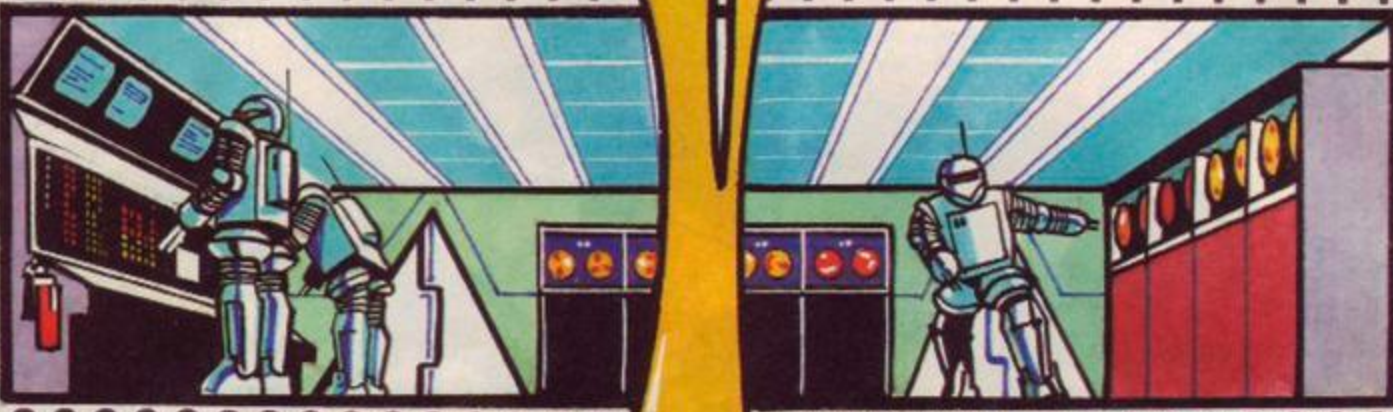
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AMSCENE

Fattening

If you're one of those PCW 8256 gnashing your teeth at being unable to track down an official Amstrad upgrade to the 8512, a new D-I-Y kit could interest you.

Citadel's Products' kit includes a full-spec 1 mega-byte drive and all the extra RAM chips you need. They claim that all you need to do the job are screwdrivers, a hacksaw blade, 20 minutes, and 'skills similar to replacing a fuse'.

Unfortunately the price is £189.95 only slightly less than that of the official upgrade.

up Joyce



Making magazines

Even before the release of their Pagemaker program Advanced Memory Systems have announced a package which will go one stage further.

Magazine Maker is a combination of Pagemaker with a video digitiser which converts the signal from a video camera so that the graphic image can appear on an Amstrad screen. In other words you can have pictures included in your pages

and have fun editing them, adding moustaches, etc.

Unfortunately the relatively low resolution means your pictures won't look too professional when printed out, but it could be great fun for a simple newsletter, say.

The package will cost £129.95.

● Creating a font in Pagemaker.



Fixing Amstrads

Dictaphone are beginning to enjoy their role of official Amstrad maintainers. If you use a PCW for work, a maintenance contract could be vital, and Amstrad won't give you one. Instead you'll have to pay Dictaphone, who say they already have 4000 contracts.

The cost is £36 for the first year and £48 for subsequent

years for the 8256 and £45 for the first year, £60 thereafter for the 8512.

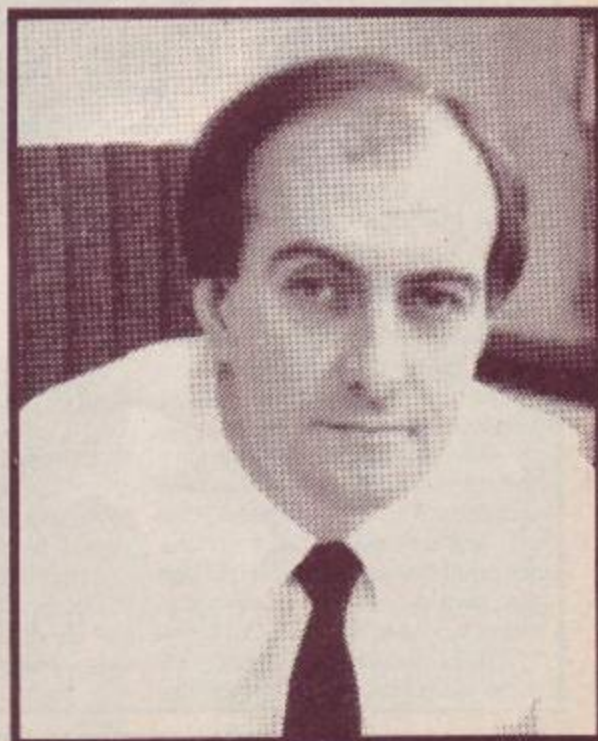
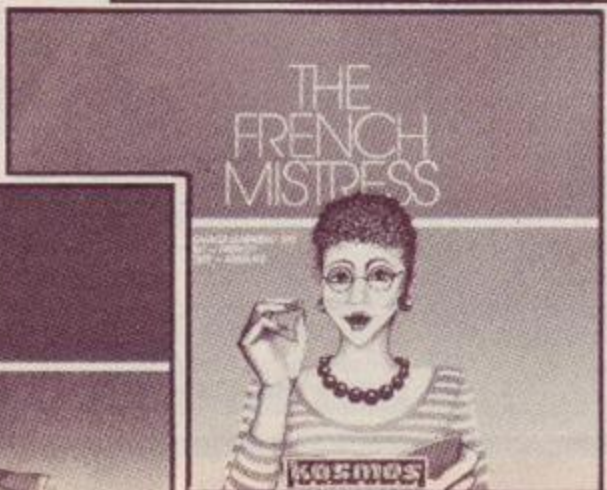
Dictaphone were apparently worried about taking on the role at first, but are now actively gunning for new contracts. Something to do with the £150,000 plus in extra turnover, perhaps.

You can ring them on 01-836 2205.

● "I'll fix your Joyce." Dictaphone's Bob Duncan.

PCW languages

Not Pascal and Cobol, but French, German and Spanish. Kosmos Software (Tel: 05255-3942) have transferred three educational titles on to the 8256 and 8512: *The French Mistress*, *The German Master* and *The Spanish Tutor*. They cost £19.95 each, and it has to be said that the CPC versions did not win rave reviews in this publication.



The show that almost made it

But didn't. Our report on what was missing when several hundred Amstrad owners turned up at London's Novotel for the latest exhibition organised by Database.

This was the show that promised much but didn't really deliver it. Take *New Star*. Before the show they issued a press release promising a PCW lookalike costing 'considerably less' than the 8256. 5000 units were available for immediate delivery.

The new product turned out to be a sheet of card that you cut up and stuck together to make a little cardboard model looking vaguely like a PCW. Very funny, boys. Would have been even better if you'd had some exciting new goodies on your stand to interest the people attracted by the gimmickry.

Another example was the new TV adaptor from **DK'Tronics**, surely the whackiest plug-in on display. For £59.95 it'll turn a CPC colour monitor into a full-function colour TV. But could you actually buy one? You could not. 'They'll be available in a few weeks time,' we were told.

More conventionally, **Electric Studio's** new PCW lightpens were selling like hot cakes, well, warm cakes anyway. While they're certainly a good product, the interest generated possibly had more to do with the drabness of the PCW business software on display.

Comms specialists **Pace** were displaying familiar interfaces and modems for Arnolds and Joyces alike, but most of the

attention went to their new **Series Four**. This upmarket modem range has just about everything you could ever want from a comms set-up: automatic baud-rate detection, autodial/answer with a 64-number memory, Hayes compatibility, the works. Pace call the **Series Four** 'the last word in micro-communications'. Unfortunately they cost upwards of £300. For people on tighter budgets, the newly Amstrad-adopted **Nightingale** probably looked more realistic.

Timatic Systems were also grabbing their fair share of attention with their range of hardware goodies. Their new **CPC/PCW** second disk drives take cheap, freely available five-and-a-quarter inch disks rather than the Amstrad standard three-inchers. Not content with saving you money that way, the CPC drive crams 800K onto each disk.

And if 3" drives are more your cup of tea, **Magnetic Memory Systems** were flogging their own **Second Disc Drive** (made by Hitachi) for just £75!

For disk storage of a slightly different kind, **Mirage** had their new **Imager** on display. This slightly dubious gadget purports to store the entire contents of memory to disk in one go - giving you instant, foolproof tape-to-disk transfer.

It also allows you to save a game halfway through, even if the game itself doesn't have a 'save game' option. So why wouldn't they let us have a sample for review?

Also of interest to games players at the show was the new auto-fire joystick adaptor from **Brittania**. Normal auto-fire sticks can't cope with Arnold's joystick port, but this battery-powered adaptor seems to work fine - and with any stick you care to name.

On the software side of things, game players weren't nearly so well catered for. As usual, the large games houses decided they didn't need to take stands at the show. For at least one company, this could have been a bad move. **Ocean's** remarkable PCW version of *Batman* would have caused an enormous stir and, I'd guess, notched up a great deal of advance business. Just another missed opportunity, I suppose.

Even with the enormous floor area and the absence of the big games houses, there were more than enough serious software stands to fill the place up. Encouragingly, there was a lot of activity at the cheaper end of the market.

Tasman had their new *Tasword 8000* Locoscript-substitute on display and on sale, and formerly CPC-specialised

Arnor were selling the first copies of their *Prospell* PCW conversion. More conspicuous, however, were the gaps left where packages hadn't quite been finished in time.

Minerva announced their new *First Database* for the PCW, but won't be ready to start shipping for another month. This simple first-time user package looks very promising, but is currently the subject of a legal wrangle between **Minerva** and **Gemini** - so its future isn't entirely certain.

Mouse experts **AMS** couldn't quite get *Pagemaker* ready for the show, and **Mirrorsoft** were still at an early stage with the rival *Fleet Street Editor*. In both cases, showgoers had to make do with demos of individual program modules. Also unfinished was **Arnor's** *PCW Protext*, a program which was much further from completion than rumours had suggested.

Finally anyone who turned up looking for IBM-compatibility will have been disappointed. Despite (or because of?) stories in *Popular Computing Weekly* saying that Amstrad's new PC would be launched, it wasn't. And the long promised upgrade from *Vortex* claiming to bring IBM-compatibility to a CPC micro again didn't make it - for the third show running. 1987, perhaps.



Aaggh! That *Bored of the Rings Delta 4* lot have done it again, this time with a wicked parody of guess-what.

Bimbo Faggins sets off on a quest (divided, as in *Sherlock and Bored*, into three parts) that will lay the foundations for the action of *Bored of the Rings*. You can switch off the pretty pictures, do RAM SAVES, and even TALK TO other characters - all done (miraculously) using the

good old *Quill* - *Illustrator*.

Those who like a good laugh will already have singled out *Delta 4* and their publishers **CRL** as a much-needed bit of light relief from serious troll-bashing. The Pilg will be taking us all for a walk up the Molehills of Berkwood and into the Necromancers Mental Hospital as soon as an Amstrad version falls into his sweaty little palms.

Shuper game from Arrigata

Fresh from their tasteful reactor simulation *Meltdown*, Sheffield software house **Alligata** are about to release a compendium of pub games called, surprisingly enough, *Pub Games*. It features all the games you're ever likely to see down your local: bar billiards, dominoes, darts, table football, poker, pontoon and bar skittles.

Alligata's press release suggests that reviewers should consume large amounts of alcohol while testing the program. Clearly an attempt to ensure that any faults are accidentally slurred over!

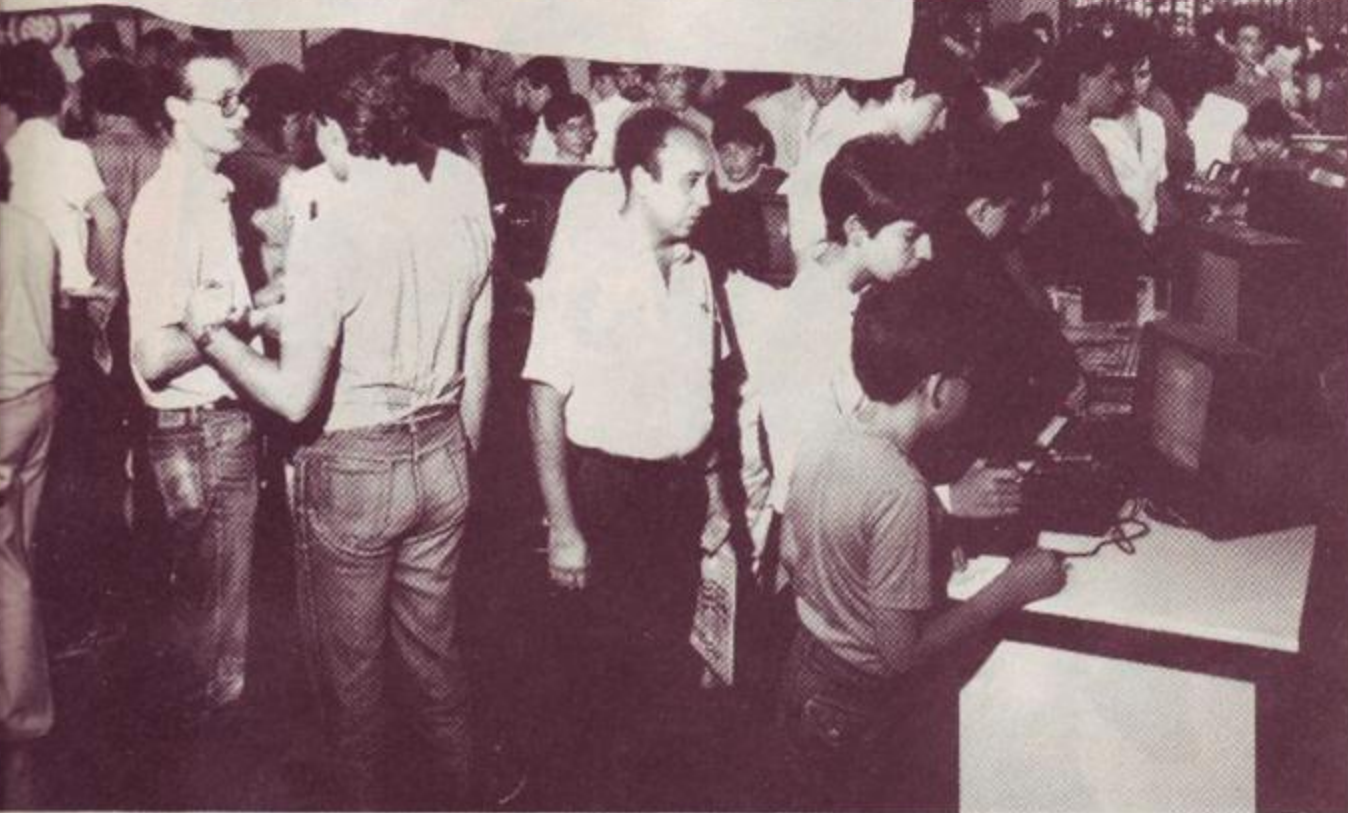
The compendium is for the CPC micros and costs £9.95 on cassette, £14.95 on disc.



The other show

If you thought the London show was crowded, you should have been in Madrid. More than 15,000 people are reported to have attended the first ever 'Amstrad fair' held there!

Some 200,000 Amstrads are claimed to have been sold in Spain - a massive 77% share of the market. It's one of several European countries which Amstrad have taken by storm.



OTHER NEW PRODUCTS

► For the 6128, a mouse from Kempston (Tel: 0234-327544) at £69.95. It'll be compatible with Mirrorsoft's *Fleet Street Editor*.

► From Melbourne House a machine code monitor for the CPC 464/664/6128 called *Breakpoint*. £14.95 on cassette. Claimed to be 'the most flexible and powerful system for testing and debugging machine code programs on the Amstrad computers.'

► *Money Manager*, from Advance Software Promotions (Tel: 0279-726585). 'An extremely powerful, and flexible small business and personal accounting package.' For PCWs and CPCs, £29.95 on disc.

► *Oxford Pascal* for the 6128 and PCWs. Runs under CP/M and claims to be 'the fully extended implementation of Pascal'. £24.95 on disc.

► Supersoft's database *Instant Recall*. 'Easy to use', it says here. £17.95 on cass or £24.95 on disc.

Anti-disc-chaos-widget launched

A little filing cabinet which will hold ten 3" discs are being distributed by Micro Interface (Tel 01-340 0310).

When you open the draw a level mechanism fans out the discs. Better, we suppose, than having them fanned out all over the desk as is our wont.

French soccer

Platini may not have been able to take France through to the final of the World Cup, but French software house Loriciel are hoping to have found a win-

ner with their latest program *Soccer 86*, being distributed over here by Activision.

It features arcade action on a scrolling pitch, plus the facility

to organise your own team. Let's hope it's better than *World Cup Carnival* - review next time.



Profiting from PCWs

Gem Distribution are the latest company hoping to earn a penny or two out of the seemingly insatiable hunger of PCW owners for accounting packages.

Gem have got the distribution rights for *Compact Accounts*, a range of software available in separate modules or as a complete package costing £200.

For more information ring 0279-444615.

Masterfile III arrives

Campbell Systems have released a new version of their popular database *Masterfile*. New features include field-to-field calculation capability, enhanced customising and the ability to update directly from reports.

Another important improvement claimed is in speed - file Save/Load operations are said to be three times faster.

Masterfile III is aimed at CPC 6128 owners and costs £39.95 on disc.

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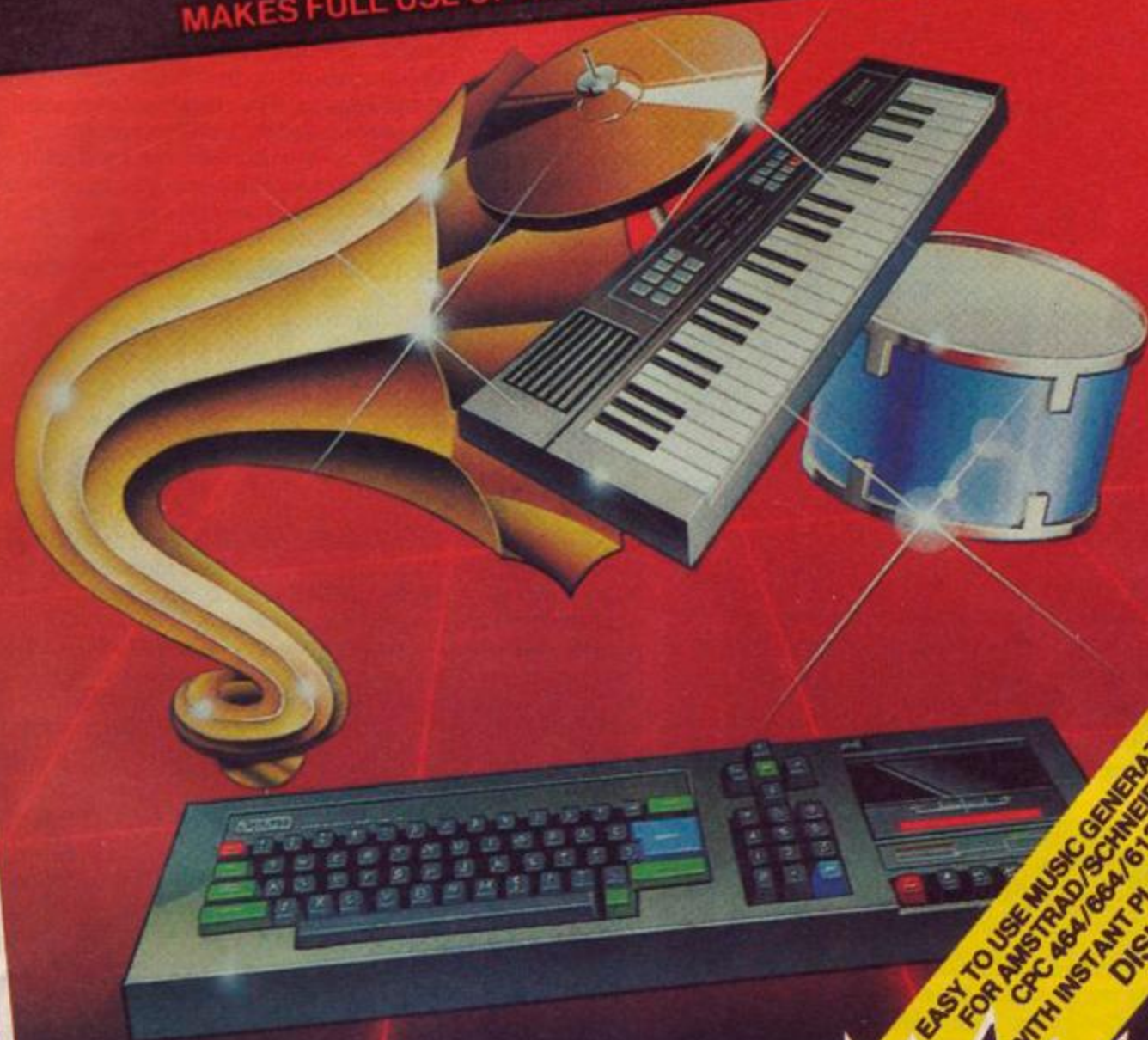
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BOOTING



If you read the first part of this series, in the July issue, you should be familiar with the concept of an operating system, of files and file names, and how to list a directory using the DIR command. If you are not then you'd better go back and read it now! In this, the second part, we will look more closely at file types and the DIR command, and introduce some further ideas.

So, straight down to work. turn your Arnold or PCW on and load up CP/M as described in Part One. On the A-prompt (the A> symbol) type **DIR** and hit Return. Once again you will be presented with the directory listing, but let's look at it more closely.

Notice that most of the files listed end with the extension (another name for file type) **.COM**. This indicates that the files concerned are program files, summoned by issuing the **COM** command that is the first part of the filename. For example, if you have a CPC machine and are running CP/M PLUS, try entering **DATE** at the prompt. A date and time will be displayed on the screen, followed by the good old A-prompt. What you have done is run the program file called **DATE.COM**. The time and date are probably totally wrong, but don't worry about that at this stage.

If you have a PCW you probably won't have the file **DATE.COM** on your directory. However you will have **BASIC.COM**, so try typing **BASIC** instead. A message will come up showing you are in Mallard Basic, followed by the Basic prompt 'Ok'. You could now start writing Basic programs if you felt like it, as what you have done is run the program **BASIC.COM**, which is the programming language Mallard Basic. Instead enter **System** which takes you out of Basic and back into CP/M PLUS.

Finally to those of you with CP/M 2.2, who might be feeling left out in the cold by now as neither of the above files are on your system disc - try entering **LOGO2**. This will load up the Logo programming language, stored in the file labelled **LOGO2.COM**, and you will be presented with the Logo prompt '?'. To exit back to CP/M 2.2, simply type **bye** and the A-prompt reappears.

COM files are probably the most important that you will find on commercial software discs, but there are other file types that are generally reserved for particular types of files, and

best avoided when naming your own efforts. These are listed in a panel on these pages, together with other types that are in common usage. Another file type that might be important is **.BAS**, used for Basic programs. Programs written under Basic are saved with this extension, but these do not operate in the same way as **COM** files - they cannot be run by simply typing the first part of the program name. Instead you must load Basic and summon the program from there.

MORE ON DIRECTORIES

The basic directory listing, obtained using the straight **DIR** command, is of limited use. It tells you what files are on the disc in question, but it does not tell you anything about them. In particular it does not tell you how long they are, or how much room you have left on the disc - both important information for housekeeping.

As usual, CP/M PLUS and 2.2 handle this in very different ways. If you are using CP/M PLUS you will notice a file listed on the directory called **DIR.COM**. As you know this is a program file, summoned by the command **DIR**. It contains extensions to the basic **DIR** command, which are listed in the panel on these pages, and increase the power of **DIR** listing. Try entering this after the A-prompt:

```
A>dir (size)
Scanning Directory...
Sorting Directory...
Directory For Drive A: User 0

A: BASIC COM 28k : DIR COM 15k : DISCKIT COM 7k
A: ED COM 10k : ERASE COM 4k : J11CPM3 EMS 40k
A: KEYS WP 1k : LANGUAGE COM 1k : PALETTE COM 1k
A: PAPER COM 2k : PIP COM 9k : PROFILE ENG 1k
A: RENAME COM 3k : RPED BAS 7k : RPED SUB 1k
A: SET COM 11k : SET24X80 COM 1k : SETDEF COM 4k
A: SETKEYS COM 2k : SETLST COM 2k : SETSIO COM 2k
A: SHOW COM 9k : SUBMIT COM 6k : TYPE COM 3k

Total Bytes = 170k Total Records = 1305 Files Found = 24
Total 1k Blocks = 170 Used/Max Dir Entries For Drive A: 27/ 64
```

Now you can see how long those files are in kilobytes. At the bottom left of the screen you can also see that they take a total of 170K of the disc space. Amstrad discs can hold upto 178K of data, so simple arithmetic tells you that you have approximately 8K of empty disc capacity left.

If you want to know all the facts about the files on a disc, try the following command after the A-prompt:

```
A>dir (full)
Scanning Directory...
Sorting Directory...
Directory For Drive A: User 0

Name Bytes Recs Attributes Name Bytes Recs Attributes
-----
BASIC COM 28k 224 Dir RW DIR COM 15k 114 Dir RW
DISCKIT COM 7k 56 Dir RW ED COM 10k 73 Dir RW
ERASE COM 4k 29 Dir RW J11CPM3 EMS 40k 320 Dir RW
KEYS WP 1k 7 Dir RW LANGUAGE COM 1k 8 Dir RW
PALETTE COM 1k 5 Dir RW PAPER COM 2k 16 Dir RW
PIP COM 9k 68 Dir RW PROFILE ENG 1k 2 Dir RW
RENAME COM 3k 23 Dir RW RPED BAS 7k 55 Dir RW
RPED SUB 1k 1 Dir RW SET COM 11k 81 Dir RW
SET24X80 COM 1k 8 Dir RW SETDEF COM 4k 52 Dir RW
SETKEYS COM 2k 16 Dir RW SETLST COM 2k 16 Dir RW
SETSIO COM 2k 16 Dir RW SHOW COM 9k 66 Dir RW
SUBMIT COM 6k 42 Dir RW TYPE COM 3k 24 Dir RW

Total Bytes = 170k Total Records = 1305 Files Found = 24
Total 1k Blocks = 170 Used/Max Dir Entries For Drive A: 27/ 64
```


UP CP/M

As you can see, in addition to the size in kilobytes a number of other parameters are listed as well. Next comes 'Records', which is a more accurate measure of file size. One Record is 128 bytes of data. If you look at the above directory listing you will see six files listed as 1K long, but containing anything from one to eight 128-byte records. The total number of records on the disc is recorded as 1305, which seems to indicate that only 163K of the available space is occupied, and not the 170K listed. Unfortunately CP/M takes the latter figure and not the former, so the extra 7K is effectively unavailable.

The last two parameters are under the heading of 'Attributes'. Files can either be 'Directory' or 'System', which are hidden from DIRectory listings. Files can also be 'Read/Write', which means they can be changed or deleted by the user as well as read, or 'Read Only' files, that you can run or look at but cannot change or delete. Setting files to 'RO' is a useful way of preventing unfortunate accidents - fear not, we will be covering attributes later.

BACK TO CP/M 2.2

Unfortunately none of these work with CP/M 2.2. Instead you have to use a new command, STAT, which gives you control over the STATUS of your system. This program is contained in the file STAT.COM which you can see on the directory listing, and is a powerful command in its own right which we will examine more fully next month; but for now let's use STAT to examine the contents of the disc. First of all, try entering STAT by itself:

```
A)stat
A: R/W, Space: 7k
```

This does at least tell you how much space you have left on the disc, but does not give a complete file list. STAT operates in much the same way as DIR, using wildcards as was described in Part One of this series. So to get a full file listing, try entering STAT *.* after the A-prompt:

```
A)stat *.*
  Recs  Bytes  Ext  Acc
    8    1k    1 R/W A:AMSDOS.COM
   10    2k    1 R/W A:BOOTGEN.COM
   15    2k    1 R/W A:CLOAD.COM
   14    2k    1 R/W A:CSAVE.COM
   38    5k    1 R/W A:DDT.COM
  168   21k    2 R/W A:DISC.BAS
   49    6k    1 R/W A:DISKIT2.COM
    2    1k    1 R/W A:DRLKEYS.COM
    4    1k    1 R/W A:DUMP.COM
   52    7k    1 R/W A:ED.COM
   22    3k    1 R/W A:FILECOPY.COM
    1    1k    1 R/W A:FWRESET.COM
   14    2k    1 R/W A:LOAD.COM
  256   32k    2 R/W A:LOGO2.COM
    1    1k    1 R/W A:LOGO2.SUB
   76   10k    1 R/W A:MOVCPM.COM
   58    8k    1 R/W A:FIP.COM
   89   12k    1 R/W A:RITDEMO.BIN
  208   26k    2 R/W A:ROINTIME.DEM
   61    8k    1 R/W A:SETUP.COM
   41    6k    1 R/W A:STAT.COM
   18    2k    1 R/W A:SUBMIT.COM
   12    2k    1 R/W A:SYSGEN.COM
    6    1k    1 R/W A:XSUB.COM
Bytes Remaining On A: 7k
```

Although organised differently, this gives much the same information as the CP/M PLUS command DIR [FULL]. The STATUS command has many uses, and will be covered more fully in next month's episode of this Series. See you then. ■

DIRECTORY OPTIONS

CP/M 2.2 users are stuck with the simple command DIR, but CP/M 3.1, otherwise known as CP/M PLUS, allows several options that extend the power of DIR. With the exception of DIRS, which is a command in its own right, these are enclosed by square brackets after a space - for example DIR [FULL]. In practice you need only type the first square bracket and the first two letters of the extension, so DIR [FU would have the same effect:

DIRS This is the flipside of the conventional DIR command, displaying only the SYSTEM files that are hidden from DIR.

[FULL] Shows the full details of the directory, including size in kilobytes and all attributes. The list is sorted by filename and type.

[SIZE] Displays the files with their size in kilobytes.

[DATE] Displays the date and time stamps of the files.

[ATT] Displays the attributes of the files, such as R/O for Read Only files, R/W for files that can be written to as well, and SYS if this option is used.

[DRIVE=ALL] Displays the files on all the disc drives in use.

[DRIVE=A] Displays the files on the disc in drive A. [DRIVE=B] would display those on drive B.

[EXCLUDE] Excludes files with the specification following the command from the directory listing, so DIR [EX] *.COM would show all except the Command files.

[NOSORT] Displays the file names in the order that they are found on the disc, rather than sorted by file name and type. This option requires at least the first three letters [NOS to run properly.

[RO] Only shows files with the R/O attribute.

[RW] Only shows R/W files.

[SYS] Only shows SYS files - rather like DIRS.

[USER=1] Only shows files for User One (or whatever number is used).

[USER=ALL] Displays all files, regardless of user.

With the exception of DIRS, all the options listed above are 'transient', and require the presence of the file DIR.COM on the logged drive. This file is on your CP/M PLUS system disc, side one.

FILE TYPES

These are the most common filetypes or 'extensions' that you are likely to find on a program disc, and are generally best avoided in your file names:

COM A 'Command' file, indicating an executable program.

BAS A Basic program. If you save a program written from Basic it will automatically be saved with the BAS extension, unless you specify otherwise.

BIN A Binary file. Programs written in machine code will usually be saved with this extension.

BAK A Backup file. When you save a text file from Wordstar, or some other word processors, the previously saved file is given this extension. If you need to edit the Backup file it has to be renamed as most word processors won't edit files with this extension.

OVR An Overlay file. These are special program files which act

as extensions to the main program. An Overlay is called into memory by the main program when it is needed.

SUB A Submit file. We will be looking at how you create these later on in this series.

\$\$\$ A Temporary file. These are sometimes created by programs for their own purposes.

There are other file types which have become accepted for certain types of file. Whether you use them or not is up to you, but it is generally a good idea if your discs are likely to be used by anyone else:

DAT A Data file, for data that might be needed by a program.

DOC A Document file. Usually a text file containing information about a program on the disc, or just some erudite prose.

TXT A Text file. Usually created by a word processor, and much the same as a DOC file.

Absolute Beginners

Loops and variables and lots of pictures feature in Andrew Wilton's continuing series

The story so far: a *program* is a series of commands and compound commands, each with its own number at the start. The commands are called *lines*, and the numbers are their *line numbers*. The lines are stored away as they are typed in. Arnold doesn't obey the commands until you tell him to, using the command RUN.

On receiving the RUN command, Arnold runs through the lines in numerical order, starting with the lowest line number and working through to the highest. When he's finished the last command in the highest-numbered line, he puts up the message 'Ready' and waits for your next instruction. Now read on...

Before we start on the serious business of program editing and variables, here's a little program for you to type in and run:

```
10 FOR c = 1 TO 100
20 PRINT "This is just one of a hundred identical
messages"
30 NEXT c
```

It isn't very useful, but it does illustrate an important idea. If you had to type in a hundred lines all reading 'PRINT...' you'd wear your fingers out and probably go bonkers in the bargain. Using the commands FOR and NEXT, however, you need only have one copy of the instruction. Arnold can then perform the task over and over again - a process called *looping*. I'm not going to tell you how to use FOR and NEXT just yet. If you really want to learn a new command right this minute, you can try the command NEW. This wipes out the current program, so that you can start from scratch. Use it now, and you'll have a nice blank Arnold ready for the next bit.

EDITING A PROGRAM

Take a look at this program:

```
10 CLS:MOVE 300,180
20 DRAW 340,180,1
30 DRAW 340,220,1
40 DRAW 300,220,1
50 DRAW 300,180,1
```

You may be able to work out what it does just from the listing. If you can't, type it in and RUN it to find out.

Done that? Now, you should have a small square drawn in the middle of the screen, and the 'Ready' message up in the corner to let you know Arnold's finished running the program. Line 10 clears the screen and MOVES the graphics pen into position, and the other lines each draw one of the sides of the square.

If you wanted, you could add lines to the program simply by typing them in. As we saw last time, the line number of your

new line determines where it goes in the program. A new line with the number 35, for example, will go in between line 30 and line 40. What we didn't cover was how you could alter, replace or get rid of program lines.

Let's start by learning how to replace program lines. Suppose you want our program to draw a house-shape rather than a square. To do this, we have to get rid of the command which DRAWS the top line of the square. In its place we'll need two commands, one for each slope of the roof.

The line we're interested in is line 40. This moves the graphics pen from the top right to the top left corner, drawing a line as it does so. Now, if we can replace this with a new roof-drawing line, we'll be in business. Type...

```
40 DRAW 320,240,1:DRAW 300,220,1
```

...and you'll find the program now draws a house when you RUN it. Type LIST to take another look at the program, and you'll see what's happened.

Whenever you type in a program line Arnold checks to see if there's an existing line with the same number. If there is, he replaces the old line with the new one. Thus, the new roof-drawing line 40 takes the place of the original 'DRAW 300,220,1' line 40.

If you only want to make a small change to a line, you can use the EDIT command. Suppose you want to DRAW the first line in a different colour, for example. To do this, you just need to change the last DRAW operand - the number 1 - in line 20. It would be a lot of effort to retype the line just for this, but fortunately you don't have to. Type...

```
EDIT 20
```

...and Arnold will put line 20 up on the screen, complete with a cursor to edit it with.

You can alter the line in the usual way using left and right arrow keys to move the cursor, to get rid of unwanted letters, and simply typing letters or numbers you want to insert. In this case you move the cursor to the end of the line, erase the final '1' with the key and then type a '2' to replace it. When you've finished editing the line, just hit <return> (or <enter> on the older machines) and Arnold will store it away in place of the old, un-edited version.

Finally, you can wipe out unwanted lines altogether. If you type a number on its own and then hit <return>, Arnold takes this as meaning 'Find the line with this number, and throw it away'. You can get rid of the house's left-hand side in this way. The line that draws that section is line 50, so delete it by typing the number 50 and hitting <return>. Try LISTing and RUNning the program, just to check it's worked okay. You can also try deleting a line that the program doesn't actually have - line 60, for example.

As an exercise, get the program back to its original state using these editing techniques. Once you've done that, and RUN it to make sure it draws a square again, you can move on to the next section.

THE WONDER OF VARIABLES

Okay, so you've got a program which draws a square in the middle of the screen. Now suppose you want to draw that same square somewhere else on the screen - at the left-hand side, for example. The question is, how are we going to modify the program to do this?

The obvious way is just to use EDIT on each of the program's lines in turn, modifying all the 'distance from the left-hand side of the screen' coordinates - the first operands of MOVE and DRAW, in other words. This is going to take you quite a while, and it's pretty boring stuff. If you feel you need the editing practice, go ahead - but there's a much better way.

With our program as it stands, we have to alter every line of it just to change where it draws the square. Later on we're going to want to change the square's position over and over again, so we'll need to do something to make life easier. Alter the program using EDIT so that it looks like this:

```
10 CLS:MOVE a,180
20 DRAW b,180,1
30 DRAW b,220,1
40 DRAW a,220,1
50 DRAW a,180,1
```

...and then add a new line 5, which should read...

```
5 a = 300:b = 340
```

When you've done all that, RUN the program. You should get a square drawn in the middle of the screen, just like before. So why go to all that effort editing the program? To find out, type in this replacement line 5...

```
5 a = 0:b = 40
```

...and RUN the program again. You should now have a square drawn on the left-hand side of the screen - and you only had to change one line to get it there. Change line 5 to...

```
5 a = 599:b = 639
```

...and the program draws the square over on the right. Again, you only have to change one line. As you can see, that editing you did has made things a lot easier. Now, how does the modified program work? In particular, what does line 5 do, and how can changing it alter the whole of the rest of the program?

Let's look at the first version of line 5 - 'a = 300:b = 340'. The colon tells us that we're looking at two separate commands. The first is 'a = 300', and the second is 'b = 340'. The command 'a = 300' tells Arnold that from now on whenever you use the letter 'a' by itself, you mean the number 300.

This means that the command 'MOVE a,180,1' means the same thing to Arnold as 'MOVE 300,180,1'. Likewise, 'DRAW b,220,1' has the same effect as 'DRAW 340,220,1', because 'b = 340' tells Arnold that you're using 'b' to mean the number 340.

Of course 'DRAW b,220,1' only means 'DRAW 340,220,1' because line 5 says 'b = 340'. As we've already seen, if you change line 5 to read '5 a = 0:b = 40' then Arnold will treat 'DRAW b,220,1' as being equal to 'DRAW 40,220,1'. In other words, you can change the meaning of all the commands which use 'a' or 'b' as operands, simply by altering line 5.

This saves a lot of effort, but it's not the end of the story. Make sure line 5 is the original '5 a = 300:b = 340' and then type in a new line 45 to read...

```
45 a = 260
```

Now run the program and see what happens. You should find that the left-hand side of the square doesn't join up, but goes off at an angle instead. This left-hand side is drawn by line 50. List the program, and you'll see that line 50 reads '50 DRAW a,180,1'. If you run the program without line 45, Arnold reads this as '50 DRAW 300,180,1' because of the 'a = 300' in line 5. With line 45 in the program, however, this changes.

Line 45 tells Arnold that from now on 'a' means the number 260. The next time he comes across 'a', he treats it as the number 260. Thus, he reads line 50 as if it actually said '50 DRAW 260,180,1'. You could do the same for 'b' inbetween lines 20 and 30, if you liked.

As you can see, 'a' and 'b' can change in value during the course of the program. Because of this, we call them *variables*. Commands which change the values of variables, like the ones in lines 5 and 45, are called *assignments* - because they *assign* new values to the variables.

On their own, variables aren't very powerful. The most important thing about them is the way they can make the same command mean different things. If you've got the command 'DRAW a,b,c' this obviously draws a line; but where to, and what colour? It all depends on the values of the variables a, b and c. By changing the values of the variables, you can make the command draw a line wherever you want, in whatever colour you want - without having to rewrite the line itself. But what good is all this? Well, remember the silly little program right at the start, that printed the same message a hundred times? The program only had one PRINT command, but the FOR and NEXT commands told Arnold to perform the PRINT a hundred times.

The 'hundred messages' program wasn't very exciting, because it did the same thing over and over again. If we used FOR and NEXT in the same way with our square-drawing program, we'd just keep drawing the same square in the same place over and over again - and that would be very boring indeed. With variables, however, we've seen that you can make the same command do different things. Instead of drawing the square in the same place over and over, you could move it a little bit each time. Alter your program to read thus...

```
5 FOR a = 0 TO 599
10 CLS:MOVE a,180
20 DRAW a + 40,180,1
30 DRAW a + 40,220,1
40 DRAW a,220,1
50 DRAW a,180,1
60 NEXT
```

...and RUN it. We'll go through how it works next time, when we round off loops and variables. For now, let's have a quick summary of variables. ■

VARIABLES

Anywhere you can use a number as an operand - the '2' in 'MODE 2', for example - you can use a *variable* instead.

A variable is a letter or word which represents a number. You set the value of a variable - the number which it represents, in other words - with an *assignment* command. For example, 'a = 2' assigns the value 2 to the variable 'a'. From then on, you can use the letter 'a' to mean the number 2. Thus 'a = 2:MODE a' tells Arnold to change to mode 2.

You can change the meaning of a command by altering

the value of a variable. If you type 'a = 1:MODE a:a = 2:MODE a', those two 'MODE a' commands do different things. The first means 'MODE 1' because 'a' has a value of 1, and the second means 'MODE 2' because 'a' now has a value of 2.

Using *loops*, you can perform the same command several times. Using loops and variables together you can make the same command do several different things, one after the other. For details on how to do this, you'll have to read next month's *Absolute Beginners*.

GAMBLING ON AMSTRADS

Caxton Software had to slash their prices to enter the Amstrad CP/M software market, but the risk paid off with a string of favourable reviews and high sales. PETER TURPIN visited their underground HQ.

It used to be that when you heard the word 'Caxton' you immediately thought – if you thought of anything at all – of massive Bibles created on the presses of England's first and still most famous printer. Now, as befits these days of VDUs and interfaces, it has another connotation: some of the best and most competitively priced CP/M software to be found for the Amstrad computers – the database *Cardbox*, the bigger database *Condor 1*, the powerful spreadsheet *Scratchpad Plus* and the 'ideas processor' *Brainstorm*.

Caxton's one of those companies who seem to have been just playing it cool until the right computer came along to stimulate them. That machine, of course, was the PCW 8256 – although it's only been around since August of 1985, over 60% of Caxton's business is now in PCW software. And they weren't doing too badly before.

They've done it, of course, by pricing their products sensibly. Unlike many other software houses with well-known CP/M programs, Caxton never made the mistake of thinking that they could charge the prices that the corporate buyer with a tower-block of IBM PCs could pay. They realised that what you're prepared to pay for the software bears a pretty close relation to what you were prepared to pay for the computer in the first place. You're unlikely to ever to see a Caxton program costing more than £100.

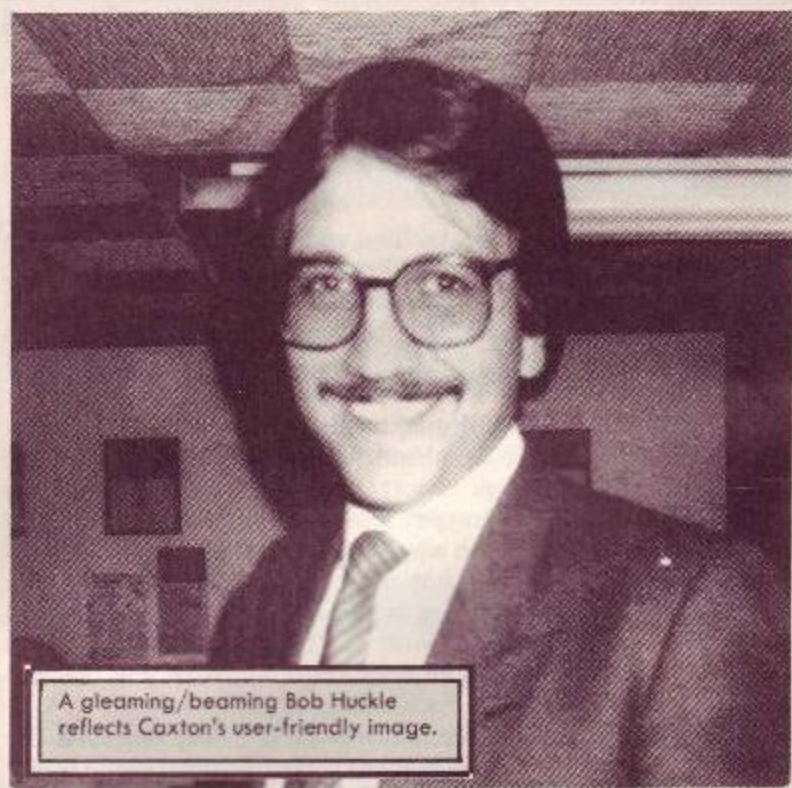
As if reflecting their bargain-basement prices Caxton Software are to be found in – a basement. No ordinary basement, mind you. No, this one is in the heart of London's fashionable Covent Garden and supports, on the building's other floors, the large offices of Digitus, a computer company with close links to Caxton.

Running the show down below is Caxton's managing director Bob Huckle, lately ennobled from the position of sales director. He it was who explained to your correspondent the history of the company.

Caxton was established back in 1980 by Bill Barrow and David Tebbut. The two wanted to run a software house in the same manner as a book-publishing venture: finding talented authors, 'printing' and marketing their work.

The first product they found was *Cardbox*, written by one Martin Kuchanski. David Tebbut tells an amusing tale of his first sight of the program: after he and Bill Barrow had nodded sagely throughout the author's presentation he turned to his colleague and said 'Do you know what all that was about?' to

which Bill Barrow replied 'No, I was rather hoping you did.' They obviously found out pretty quickly, because *Cardbox*



A gleaming/beaming Bob Huckle reflects Caxton's user-friendly image.

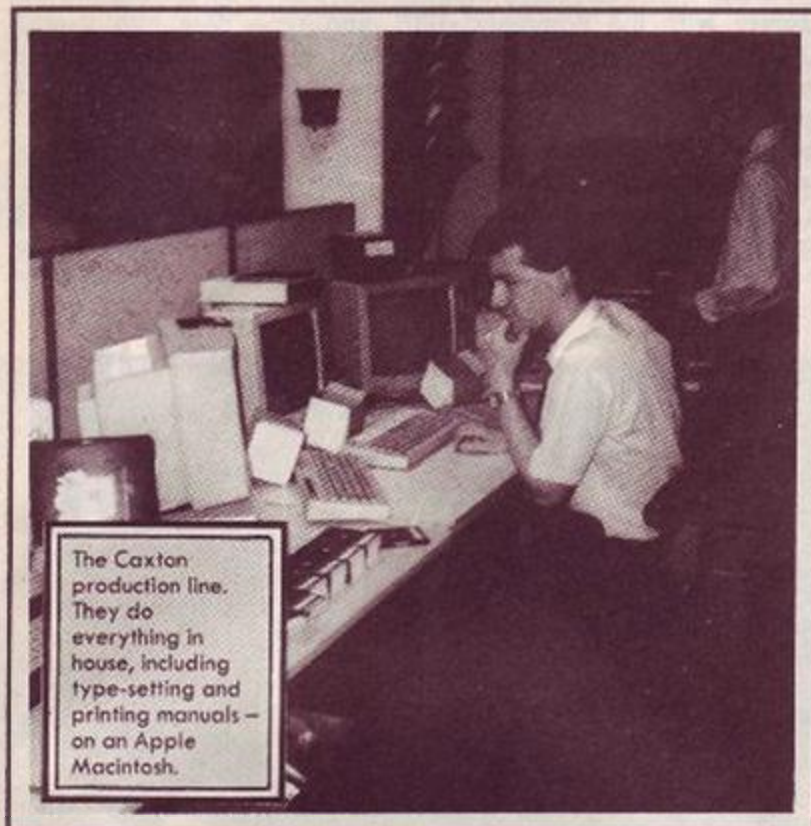
soon became Caxton's major product. In those days it was for machines that have now been almost forgotten – the Superbrain, the North Star, the Osborne 1. But *Cardbox* has been given a new lease of life by Amstrad and it's still selling well.

CP/M as an operating system seemed to be doomed when, in 1982, PC DOS hit Britain. In those days a 'cheap' computer meant something around the £1800 mark; the only machines that could run serious software were in offices. Caxton went with the market and their next few programs appeared on that system. One of them – *Brainstorm* – was a real original (see box). Things progressed as normal for a medium-sized software house until the arrival, in summer of 1985, of...the PCW 8256!

And that was when Caxton made a name for themselves. As Bob Huckle explains: 'We knew something was going on in the

summer of 1985. And we can move very quickly.' Move quickly they did. 'We were inundated with requests in the first week of October. Within another week our products were out for the PCW.'

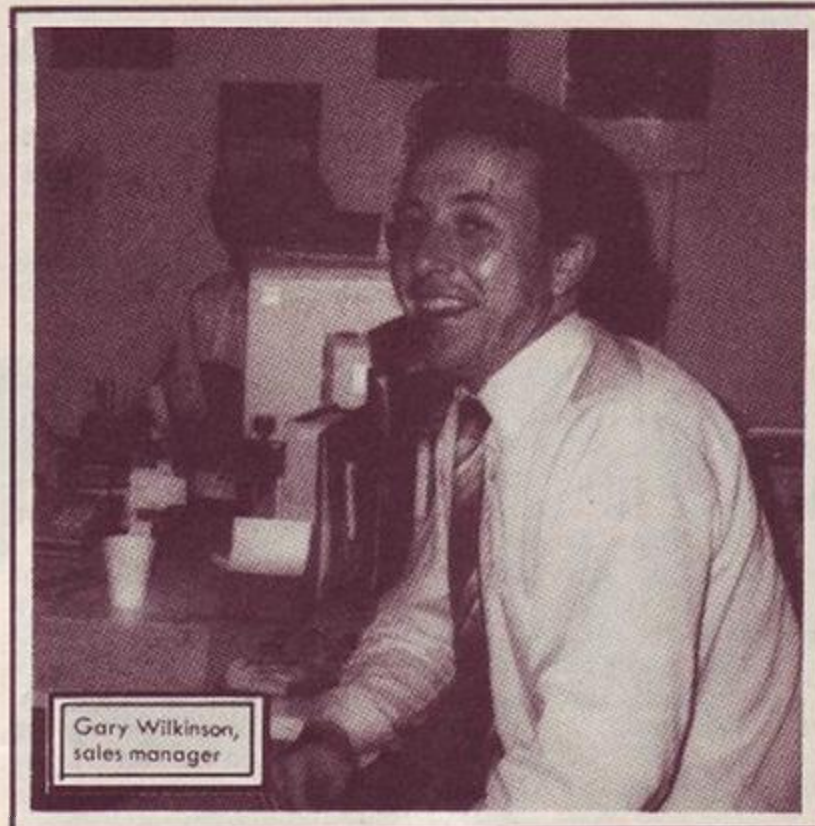
As befits someone who's seen his business increase dramatically because of it, Bob Huckle has some nice things to say about the PCW: 'I think it's a marvellous machine. What you get for the price you pay is terrific. We've been using them ourselves since last October.'



The Caxton production line. They do everything in house, including type-setting and printing manuals - on an Apple Macintosh.

do little programming themselves. Nearly all their programs are Stateside products which they licence in the UK. But they do produce the manuals themselves. Not only that, but they copy and pack all Caxton programs in that basement in Covent Garden - with a workforce of only eight.

Like everybody else in the Amstrad CP/M market Caxton are thinking hard about the imminent arrival of Amstrad's IBM PC-compatible. 'It's a critical time for the software market', says Bob Huckle, 'because Amstrad and the mainstream are two



Gary Wilkinson, sales manager

As far as software is concerned Bob Huckle will tell you that 'pricing is one of the most difficult decisions to make'. Just think about it for a moment: it takes a certain amount of courage to reduce the price of a program, as Caxton did with all of theirs, from around £200-300 to just £49.99 or £99.99. It had to be a gamble, but for Caxton - and the Amstrad user - it paid off handsomely.

If you've written an ace program for the serious user, Caxton will certainly give it the once over. But these days they

completely different markets. But if the price is right...we think we're better positioned than any of the big boys to take advantage.'

Otherwise, Bob Huckle has some interesting, if cryptic, prophecies for Caxton: 'We have some very exciting plans for the next six months with regard to the way in which we are selling our software. The way in which we are perceived by the outside world may change.' Make of that what you will, but it certainly suggests to me that Caxton will be around for a long time to come.

Inducing a Brainstorm

Spreadsheets, word processors, databases - you know all about that lot. But 'ideas processors'? Not till Caxton brought out *Brainstorm* on the Amstrad did you have a clue what one of those was.

Brainstorm was the brainchild of David Tebbut, one of Caxton's founders. Not surprisingly, he's a great enthusiast for the program: 'I use it day in day out. It's a great way of sub-contracting your thinking.' He likes to describe it as a way of 'freezing my ideas at the end of the thinking period.'

It's one of those original ideas which almost - but not quite - came to light on the back of a packet of fags. In fact, it grew out of David Tebbut's

experience as a project manager for ICL way back in the 1970s. Using the technique of 'mind-mapping' - drawing ideas in chart form - Tebbut found he was running out of wall space for the ramifications of his thinking. Hence *Brainstorm*, with more room for duplication, connection and movement.

Once Tebbut had thought it through, the program was refined by his colleague Mike Liardet. It appeared first on PC DOS but was very quickly converted for the PCW. As David Tebbut says: 'The Amstrad had been marvellous for *Brainstorm*.'

Brainstorm seems to have been good for lots of other people as well - the list of corporate customers is impress-

ively long, from the Cabinet Office to the DHSS. So, whether you're on the front bench or on the dole, *Brainstorm* could be influencing your life.



SERIOUS SOFTWARE

AA offices 2am. Andrew Wilton completes an exhausting look at a massive program, now released on the PCW at one third its normal price. This review was fuelled by seven mugs of strong black coffee.

Last issue we reviewed *Condor I*, the imported database management system from Caxton. This month it's the turn of Ashton-Tate's *dBASE II*, now available in a cut-price version from First Software.

It would be fair to say that *dBASE II* is a classic. It is to database management what *Wordstar* is to word-processing. That's not to say that it's the best of its kind by any means; but it is certainly the best known. It's been available on the PCW for some time, but the £395 price tag made it only slightly cheaper than the hardware needed to run it.

Clearly the price needed to come down, and that's just what's happened. In a bid for the mass market, Ashton-Tate have licensed this £119.95 version from First. That still leaves it costing £20 more than *Condor I* - so is it worth the extra?

For your money you get a smart ring binder containing the loose-leaf manual, the program disk and a '£5 off' voucher for the book 'dBASE II Tricks and Tips'. If you find the presence of this last item ominous, your mind obviously works the same way mine does.

The loading instructions are the only Amstrad-specific information in the whole package. As usual, the start-up process involves transferring program files to the M: drive. Unfortunately there is no .SUB file to do this for you, so you'll have to either write your own or do the transfer by hand every time.

Once you've PIPped the files across, you run the main program DBASE.COM. After a date prompt and a lengthy copyright message, you're offered a command prompt. This takes the form of a dot, and gives no indication of the logged drive. Above it is a message advising you to type 'DO MENU' unless you are a programmer. At this stage you're definitely not a programmer so the chances are you're going to do just that.

TYPES OF FILE

MENU is intended as a sort of 'dBASE II without tears'. It allows you to create and manipulate files by choosing options from different menus. It has comprehensive onscreen help throughout, and is really very easy to use.

The first thing MENU does is to request your initials. Using these it can tell if you've already created files in a previous session, and respond accordingly. If you haven't you'll get a lot more explanation than normal, and fewer options. To start with there are only three options, in fact - to create a file, call up onscreen help or quit. If you choose the file creation option you'll have to give the new file a name and define its record structure.

For each field on the file's record card you have to provide a name, specify its size and the type of data it is to contain. This must be either Numeric, Character or Logical. 'Numeric' speaks for itself, 'Character' here just means alphanumeric but 'Logical' needs some explanation. A logical is the answer to a true/false question. It is always one character in length, and must contain one of the characters 'Y'(yes), 'N'(no), 'T'(true) or 'F'(false). As an example, a person's marital status could be indicated by a logical field. If you give the field the title 'Married' then true/false would tell you what you need to know.

There's no need to DO MENU just to create a file. From the dot command-prompt you could instead type CREATE. This

would create a file and *dBASE II* would then prompt you for its name and the details of its structure.

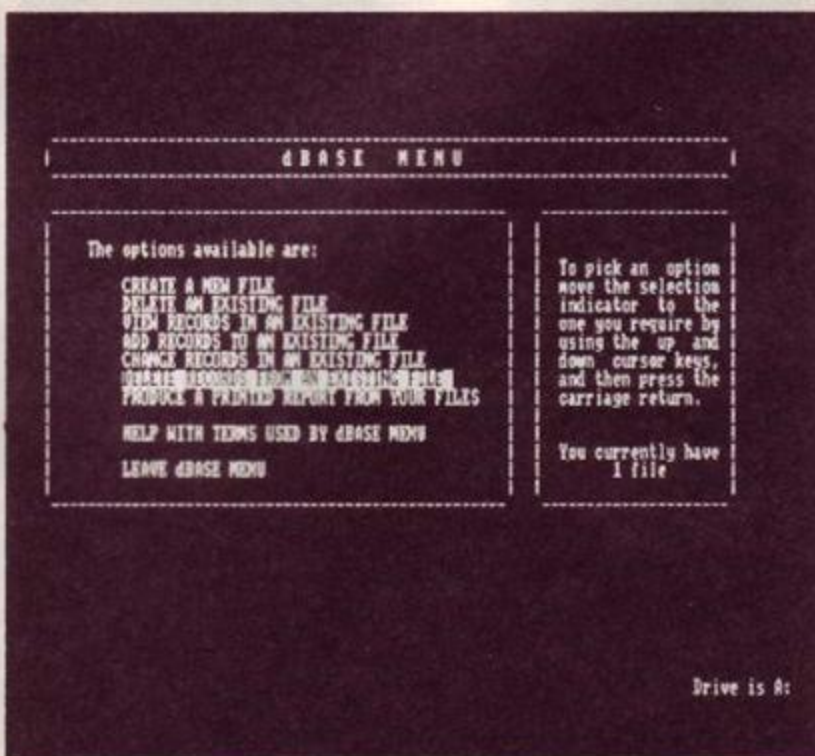
Once you've created the file from within MENU, you're faced with a whole series of new options. You can add or delete records, browse through them or turn them into a printed report. All these MENU options have equivalent commands which you could type in at the dot prompt. Once you're used to the commands you'll find they work much faster than MENU; you'll see why later.

Once a file has been created you can open it from the dot prompt with the command USE, and type data into it with APPEND. This latter is the first you'll see of the record card itself, and it doesn't look very impressive. You have none of the control over its layout that *Condor I* gives you, and there isn't really any way to decorate it at all. You simply have a column of fieldnames each with its respective field.

Entering data is normally just a matter of typing the field contents and hitting return. If an entry overflows, it simply runs into the next field. Mistakes are easily rectified by moving the

dBASE II

First Software, £119.95 disc (Support £40 extra), PCW only



cursor back to the field concerned. The cursor and delete controls are all Wordstar standard, and this certainly made things easier as far as I was concerned.

To get a screen summary of the data entered, you can LIST the records by any combination of fields. Alternatively you can use the REPORT command to produce hard copy.

ORDER OUT OF CHAOS

Once you've entered the data you'll find you want to knock it into some kind of shape. The brute force way of doing this is the SORT command. This simply makes a copy of the currently open file, with all the records sorted into alphabetical or numerical order on a given field.

Thus .SORT ON NAME TO MLIST will create a new data file called MLIST which contains all the entries of the current file, only sorted into name order. You can only specify one field to sort by, and there is very little flexibility to the command. This doesn't really matter however, because of *dBASE II*'s invaluable INDEX command.

typed in as they're needed.

In fact, *dBASE II*'s capable of a lot more than this. Like with *Condor I* you can build up programs out of the individual data manipulation commands. These programs can completely shield the operator from *dBASE II*'s complexities – though bear in mind that someone will have to grapple with these complexities, in order to write the program in the first place.

The programmer is very well catered for in *dBASE II*, at least in terms of commands available. It's definitely a job for the technically minded, however. If you're proficient in machine code there's documentation to help you interface to *dBASE* – MENU is a program written in this way, it may interest you to know – but normal mortals could have a job producing anything at all.

DBASE vs CONDOR

It's all very well my describing program features to you, but if you're thinking of buying a database management system you really need to know which one's best. As it stands, the fight is

```
list name,author,publisher
00001 Fabulous Furry Freak Brothers Shelton, Gilbert Rip Off Press
00002 Zap 0,1 Crumb, Robert Apex
00003 Zap 10 Various Apex
00004 Nexus,B/W Baron & Rude Capital
00005 American Flags! Chaykin, Howard First Comics
00006 Teenage Mutant Ninja Turtles Eastman & Laird
00007 Miraclenan Moore & Beckum Eclipse
00008 Badger Baron & Butler First/Capital
locate for 'Chaykin'$author
Record: 00005
disp title
*** Syntax error ***
disp title
Correct and retry? (y/n)?
Change from: title
Change to: name
disp name
More corrections (y/n)?N
00005 American Flags!
continue
End of file encountered
locate for 'Apex'$publisher
Record: 00002
disp name
00002 Zap 0,1
continue
Record: 00003
disp name,author
```

```
-----
This is
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
-----
Ashton-Tate UK
-----
ain is to help you do useful work with dBASE II without having to
n its more powerful command language. As far as possible dBASE MENU
take you through the actions in easy stages, but you will find there
extra screens of information available to "help" if you get stuck.
-----
continue enter your initials and press Carriage Return. (To leave dBASE
U just press Carriage Return) -> █
-----
```

Drive is A:

INDEX creates a list of all the current file's records in order of some given field, together with a reference to the position of each record. This list is an *index* and, like the index in a book, can be used to find a piece of information much faster than a straightforward search would do.

You can create several indexes for a file, if you think you'll want to order it by different fields on occasion. You might, for instance want to index a catalogue of books by both title and author. The thing to watch under these circumstances is that all a file's indexes get updated every time you alter the file itself – and that can be tricky.

Once you've created an index, subsequent LISTings will automatically be ordered according to it. You can also use the super-fast FIND command to search for a given characteristic in an indexed field. The speed difference between this and the non-indexed LOCATE command can be very marked if you're handling large files.

PROGRAMMING

What we've seen up till now is only a small part of what *dBASE II* really is. Partly this is because of the program's complexity – there just isn't the space to describe each individual *dBASE* command in detail. More importantly however, we've only been seeing the commands used in immediate mode – just

between *dBASE* and *Condor*.

The pay-off is of user-friendliness against power. *Condor I* isn't the easiest or simplest program going, but it makes *dBASE* look positively hostile. *dBASE* commands can't match the natural feel of *Condor*.

On the power side of things, *dBASE II* can offer the determined programmer a full-blown programming language. The indexing can also give it an impressive turn of speed. You've really got to need that power badly though. *Condor* is much simpler to use, is better documented and has telephone support included in the price. *dBASE II* is going to take a great deal more time and, if you shell out for support, a fair bit more money. If you're after the maximum raw power available, however, there's no arguing with it. ■

GOOD NEWS

- ▶ Indexing makes for real speed.
- ▶ Very powerful programming features.
- ▶ MENU makes starting out very simple.
- ▶ Much cheaper than it was.

BAD NEWS

- ▶ Still an awful lot of money.
- ▶ Very complicated to use, let alone program.
- ▶ Documentation isn't even CP/M specific, and can be very unclear.
- ▶ Price doesn't include support.
- ▶ Can't define the layout of the record card.

LOCOSCRIPT BEATER?

We check out Tasword 8000's claim to make life on a PCW less frustrating.

Versions of Tasword for other machines have been around for quite some time, and they still offer a cheap alternative to big name CP/M word-processors. With the release of Tasword 8000, however, Tasman are making a bid for the tougher PCW market. The key question is, what's it got that Locoscript hasn't?

The central idea behind Tasword 8000 was that existing Tasword users who bought PCWs wouldn't feel at home with Locoscript. They would, therefore, be willing to shell out for a program which was more familiar to them. Although it's obviously a program of general interest, let's start off with a look at Tasword 8000's features from the viewpoint of someone who's used a Tasword variant before.

COMPATIBILITY

If you've used Tasword on a CPC machine, Tasword 8000 has a major advantage for you right from the word go - file compatibility. Any disc files from Tasword 6128 or 464-D will load in the normal way so you won't lose, or be forced to retype, vital data.

Tasword fans will also find the behaviour of the program broadly similar. Apart from the difference in display size the editing, help and menu screens are almost identical. Some of the key combinations are different, it should be pointed out, but in general they are more memorable and logical than their CPC counterparts, making use of the extra keys on the PCW keyboard and indeed the <extra> key itself. To toggle auto-insert, for instance, you use <extra>A rather than the CPC version's totally forgettable <Ctrl>O.

Of course, there is a price to be paid here in terms of learning time. If you're used to the old key combinations you'll start off using them on the new program. These differences aren't too serious, though. The tough part of learning a new word-processor is understanding precisely what the cursor controls etc actually do, rather than which keys you have to use to get them - and in this former respect, Tasword 8000 is almost identical to the older versions.

The only really obvious change is the increase in speed. The differences in hardware between Arnold and Joyce mean that Tasword 8000's vertical scrolling is both smooth and fast. The horizontal scroll isn't quite so good, but it's still a big improvement. Sadly the same can't be said of the reformatting function, which seems to take as long as ever - but more of this a little later on.

The other change you may notice is the text space available. On the 8256 there's room for about 100K - as much as most people are going to want, and a big improvement even on the 6128 version - while the 8512 can manage well over 300K. There aren't going to be too many people needing that kind of space, I don't suppose, but it's nice to know it's there.

THE COMPETITION

If you're not a Tasword user of long standing, you're probably wondering how 8000 measures up against Locoscript - the main competition for any PCW word-processor. The comparison is none too easy to make, as the two programs are very different.

In speed terms, Locoscript is slightly faster in scrolling, but Tasword is far more powerful when it comes to jumping around



within a long document - one of Locoscript's worst failings. Tasword 8000 has commands allowing you to move directly (give a second or two) to any page or line-number you specify. You can also move pretty quickly from the start to the bottom of a document and back again. If you're trying to write a book, this feature alone would make Tasword a much better bet.

Printing can also be much more satisfactory in Tasword. For example, there are options to print out any number of copies of your document, and you can print any specified section of it (using pages or line numbers).

But Locoscript wins out in text reformatting - it does it automatically, while in Tasword you have to force it using <alt>J. The program is a little quirky in this regard. For example, if you try inserting text in a paragraph which is wider than the current margins Tasword scrambles the text up in the most alarming way. The only way to avoid this is to do a 'hard' reformat on the paragraph before trying to alter it. This could cause frustrating problems when it comes to editing someone else's text, if it was typed with a different margin setting, although you'll find things 100 times faster if you select the 'Override on-screen justification' option from the comprehensive Customise Program menu.

A further problem on reformatting is that Tasword identifies the start of a new paragraph only by coming across a blank line or an indent. You cannot begin new paragraphs (or, say, tabulated data) flush with the left hand margin without leaving a line's gap, without risking having it reformatted onto



EXTRAS

Once you've got the hang of editing your text, you'll want to actually do something with it. Tasword has a couple of features which you may find useful here.

Firstly there's a handy mail merge and conditional printing facility. With this it's easy to run out, for example, personalised letters to all your customers who have London telephone numbers. You can also set up text-entry points in pieces of text so that the user is prompted for dates etc as the letters are printed out. The conditions available are something of a weak point - you can't search for sub-strings, for example - but the system should still be adequate for most purposes.

- COMPACTA** - bold and heavy, good for emphasis
- DATA-RUN** - A FUTURISTIC SCRIPT
- LECTURA LIGHT** - clean and pleasing to read
- MEDIAN** - a serious business-like script
- PARADE SCRIPT** - a distinctive flowing script
- RANCHERO** - short, sharp, and to the point
- BREAKER** - UNUSUAL AND VERY EFFECTIVE
- OUTLINE** - excellent for letter headings

Tasprint offers eight new fonts. The two included with Tasword 8000 are Lectura Light and Median.

The second and less conventional feature is a utility for printing text in a variety of different fonts. Known as Tasprint, it comes with two built in fonts - you switch between normal PCW printer mode and Tasprint using control characters embedded in a piece of text. This same control character system also allows you to switch between the normal facilities of the PCW printer - italic, condensed, underlined and the like.

The main limitation on the system is that you can't mix normal and Tasprint fonts on the same line. But you can get hold of six extra fonts if those supplied don't satisfy you - Tasman are selling the Tasprint system separately, with the full range of eight fonts, as a stand-alone for £14.95.

If you like the sound of Tasprint but aren't so keen on Tasword, this separate system could be the answer. It can cope with any pure ASCII files, so you can use it with Locoscript if you put in a little effort. If you're buying Tasword anyway, the additional fonts probably aren't worth the extra cash. They're mostly decorative, and not nearly so functional as the two which are bundled.

the end of the previous line next time you press <alt J>.
Tasword is also weak in its Search and Replace function. This works very slowly and you can only search for a whole word. Not a patch on Locoscript here.

HELP!

When it comes to ease of use, Locoscript doesn't compare so favourably. Tasword has a whole screenful of help which you can summon up just by pressing <STOP>. Alternatively you can, while still editing the text, leaf through this information a section at a time in the optional help window. This conventional approach is, for my money, rather easier to learn than Locoscript's pull-downs.

As for documentation, Tasword scores points here too. Its 70 page manual can't rival Locoscript's mighty volume in terms of size but it more than makes up for this with its clear, straightforward style. As well as a comprehensive reference section, there are some useful tutorial sessions complete with worked examples of the program's trickier features. In addition there's a helpful tutorial document for you to practice editing on, containing both instructions and subject matter for a brief guided tour.

VERDICT

If you've used Tasword before and like it, you're probably best sticking to what you know. If you're just disgruntled with Locoscript, that's a different matter. Tasword is a lot faster in handling long documents, but in other respects it can be quirky and slow. And it's not compatible with documents you've already created on Locoscript. On the other hand it is substantially cheaper than the other alternative word-processors such as WordStar and NewWord. ■

GOOD NEWS	BAD NEWS
<ul style="list-style-type: none"> ▶ Much more powerful than Locoscript in handling long documents. ▶ Good documentation, and plenty of onscreen help. ▶ Very useful mailmerge facility. ▶ Comes with Tasprint and two good fonts. 	<ul style="list-style-type: none"> ▶ Reformatting of text can be cumbersome. ▶ Some functions are very slow, including Search and Replace. ▶ You've already got Locoscript free.

'ALLO ADAM

AW manages only a lukewarm welcome for the latest French import

The French influence on the British software market is spreading from games to serious software, it seems. This cross-channel utility is the product of a deal between Audiogenic and French programmers Micro Application. There's something of a glut developing in the assembler market at the moment - an assembler mountain, even - but this one's a bit out of the ordinary.

A conventional package loads in two separate sections, assembler/editor and disassembler/monitor, with only one being in the memory at any one time. This means a loading operation every time you want to switch between writing and debugging. With ADAM, however, the separate components all load in one go. You only have to do one load, at the start of a session - from then on, everything you need is in memory.

This approach is obviously a boon to disk-less 464 owners, but it does have its problems. To put all the components in memory in one go really cuts down the amount of programming space you have available, in this case to about 28K. If that doesn't sound too bad to you, bear this in mind. To squash the whole system into that amount of memory means cutting down on features - and that's hardly encouraging in a high-price product like this.

COMMAND SCREEN

In use, the system is rather quirky. The whole thing is run from a main command screen. Single-key commands call up the various different functions of the package

The editor is adequate, but it's very easy to exit accidentally - a double hit on the return key is enough to do this. Also, I could find no way to insert lines above the current top line. You can't leave it blank either; it's easy to enough to leave it as comment or a dummy label, I suppose, but this doesn't speak

wonders for the thoroughness of the system.

Once you've written a piece of code, you can assemble it by entering the 'a' command on the command screen. Errors are reported as they are found, and will halt assembly immediately. The error messages are helpful, and on entry to the editor you'll find the cursor already on the error line - another useful feature. It would have been nice if the system could automatically enter the editor at this point, but you can't have everything. Indeed with this assembler you can't have macros or conditional assembly, so the error handling is pretty advanced!

The monitor is the most conventional bit of the package, which is to say that it's not very exciting. Its single step routine can rummage through ROMs if you're feeling nosey, and the slow run facility works well enough.

Overall ADAM is pretty disappointing. There's nothing really wrong with it, but it's all been done before, and cheaper at that. If it had come out six months back I'd have suggested buying *Devpac* and saving yourself a bit of money. As it is, I'd strongly suggest you buy *Laser Genius* and save yourself £10 or so. You'll get a much better editor, assembler and compiler - even if they don't all fit in memory at once. ■

GOOD NEWS

- ▶ Everything fits in memory at once.
- ▶ Can single-step through ROMs.

BAD NEWS

- ▶ No macros or conditional assembly.
- ▶ Vastly overpriced.
- ▶ Flimsy documentation.
- ▶ Looks completely obsolete next to *Laser Genius*.

SERIOUS SOFTWARE

SERIOUS SOFTWARE TOP TEN

The chart created by AA readers

This month	Last month	% of votes	Title	Software house
1.	1	24.5%	GRAPHIC ADVENTURE CREATOR	Incentive
2.	2	10.2%	AMX MOUSE	AMS
3.	4	9.4%	MINI OFFICE 2	Database
4.	6	6.5%	TASWORD	Tasman
5.	-	6.3%	LASER BASIC	Ocean
6.	9	5.3%	ELECTRIC STUDIO LIGHTPEN	Electric Studio
7.	7	5.1%	DISCOVERY	Siren
8.	3	4.8%	EASI AMWORD	Amsoft
9.	5	3.4%	MINI OFFICE	Database
10.	8	3.3%	TRANSMAT	Pride Utilities

This month's chart shows G.A.C. continuing its astonishing run at number 1 with a massive share of the massive number of votes cast.

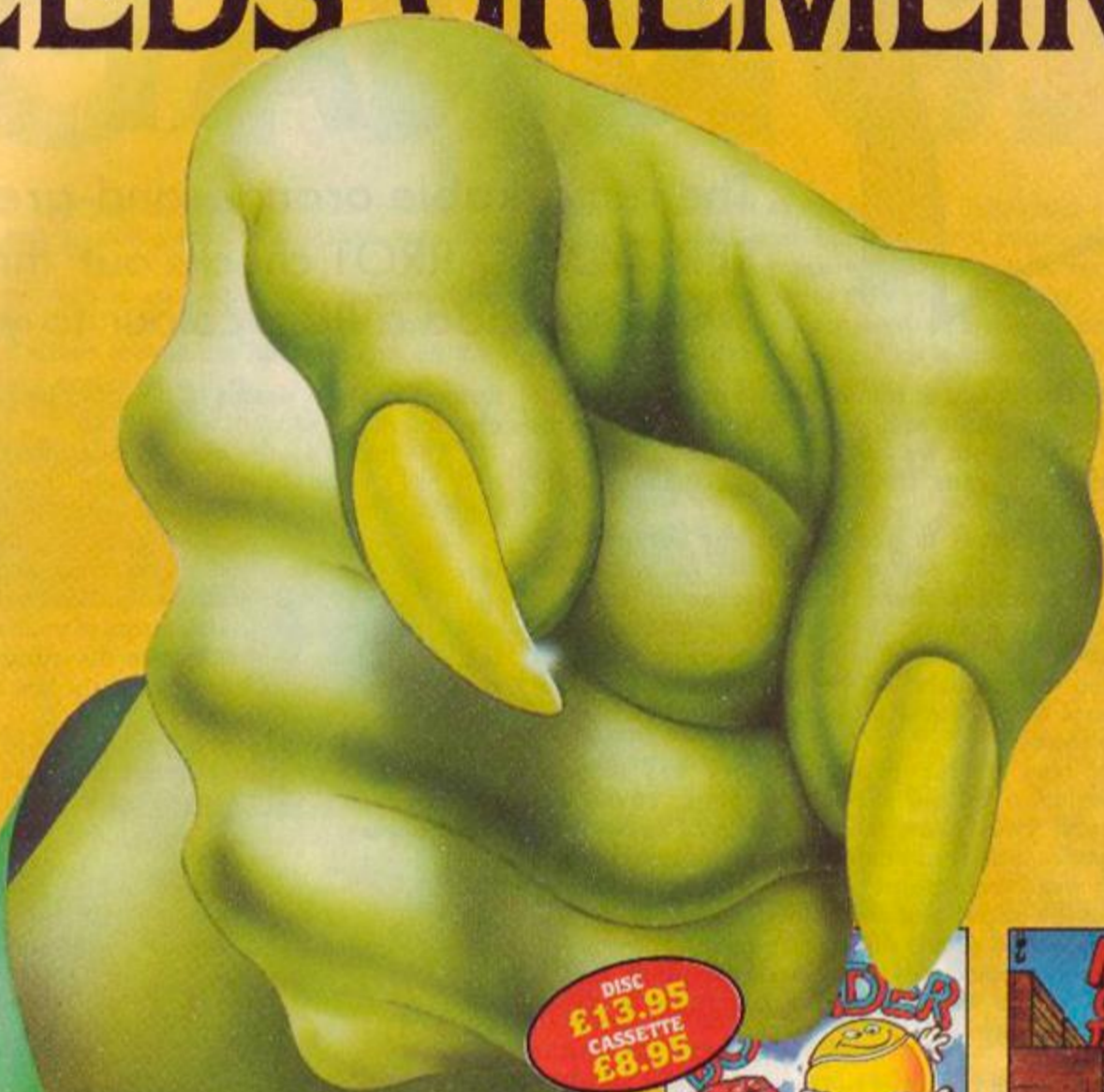
The only new entry is Ocean's powerful Laser Basic - possibly to followed soon by Laser Genius? Harder

to understand is the continued presence of extremely dated software such as Easi Amword. It's horrible!

Remember, you can have a hand in the shape of next month's chart by entering your votes in the all-in-one form on p94.

SERIOUS SOFTWARE

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BOUNDER
"10 levels of fun make this torture excellent value for money. Nova rating. Definitely one of those 'just another go' games. Game of the month February" - Computer Gamer.
"The most compulsive game I've ever played. If you don't buy it you'll never know what you've missed." says Gary Penn, Zzap! 64. Gold Medal Award 97% overall.

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The evil goblin is wreaking havoc on an unsuspecting world, casting spells and banishing its treasures to his underground factory deep in the bowels of the earth. How can he be stopped? What can we do? Who can do it? There's only one saviour - our hero - Thing on a Spring!
Complete the magical jigsaw and break his fiendish spell.



CRAFTY

The remarkable orange-and-green topped BERTRAM CARROT checks out three machines which can add a little colour to your Amstrad

In the June issue we looked at monochrome printers, which can print text and graphics and produce screen dumps in shades of grey. This month we add some colour and look at how you can transfer your CPC's fabled 27 shades onto paper.

Why should you want to produce colour output from your micro, anyway? If you're interested in computer graphics, like to record screens from games or want to produce eye-catching posters, then colour reproduces the screen more accurately and clearly. At work a touch of colour will liven up reports or quotations, and produce graphs and charts which show at a glance the information you're trying to convey.

As well as true colour printers, there are several machines which draw on the paper with pens. These are known as plotters. They can draw true curves as well as numbers and letters, but aren't capable of producing screen dumps. Plotters work from point to point, without having to start at the top of the paper and work down. Most, therefore, have to be programmed rather differently from printers.

This survey includes two dot-matrix printers and a plotter which is free to move around a flat sheet of paper like a small robot, or 'turtle'.

Juki 5520 Dot-Matrix Impact printer
Approx £320. Contact Micro Peripherals 0753-72331

It's easy to print
as you only need t
codes and you can
dumps are not near
as few programs ha
in, and there is n
controls like the
and white printing

This is the most conventional machine reviewed. It uses a nine wire print head and can print in black on white if you use the black ribbon supplied. In this mode, the Juki uses Epson compatible codes. The print quality is reasonable, although a little fuzzy, and it offers a near letter quality print which is well-

formed in three passes of the print head. Draft print is at 180 characters per second, which is fast.

The Juki is a large printer, measuring 18 x 14 x 4 inches, but only has a standard width carriage. It can handle cut sheet and pin-feed paper as standard. All the normal controls are there, and the 'dip' switches used to modify the printer's characteristics are easily accessible under a panel in the top cover.

Colour print is obtained by changing the ribbon for a four colour one, with horizontal strips of yellow, blue, black and red ink. A 'U' shaped arm moves the ribbon up and down with respect to the print head, so that it hits the different coloured bands.

The colours are good, with orange, green and magenta also available by over-printing. They are selected with escape codes, which is very convenient for text, but graphics printing is not so easy.



No software is supplied with the Juki, and there are no Amstrad packages I know of which will dump to it in colour, so if you need to dump a screen, you'll have to write your own routine!

The Juki 5520 is a very versatile printer, and will simulate an IBM graphics printer - handy if you have a PC at the office. It's also cost effective, as you can use it as a normal black and white printer most of the time, and fit the colour ribbon only when you need to do colour work.

Okimate 20 Thermal Transfer Printer
£299. Contact Xdata 0753 72331

This is a dot-matrix printer, but uses a rather unusual technique to print both colour and black on white. The print head doesn't shoot wires out to press against an inked ribbon, but instead heats each wire to melt wax off a special thermal ribbon and

...COLOURF

PLOTTING...

deposit it on the paper. The paper has to be quite smooth to take the wax clearly, and special paper is supplied with the Okimate.

Thermal transfer printers are cheaper and quieter than impact printers, like the Juki, and the main noise from the Okimate is the solenoid which moves the head on and off the paper at the beginning and end of each line.

The printer is very compact, measuring only 12.5 x 7.5 x 2.25 inches, but still handles A4 paper with no trouble. Controls are basic, with a mains switch on the side, an on-line select

button on top and a thumb wheel and lever to wind the paper through and engage the friction feed. There are no line-feed or form-feed switches, although the printer can handle roll and pin-feed paper as well as single sheets. The tractors for pin-feed paper are buried deep inside the printer, and feeding the paper through is a fiddly business.

machines can, such as underlining, italics and correspondence quality print, and uses Epson control codes for compatibility. The correspondence quality characters are very well formed, but even on thermal paper they're a bit patchy.

The Okimate 20 is supplied with two ribbons, the second giving it its colour capability. This is again a transfer ribbon, but is made of clear plastic, coated with alternating strips of red, yellow and blue wax, each about 8" long.

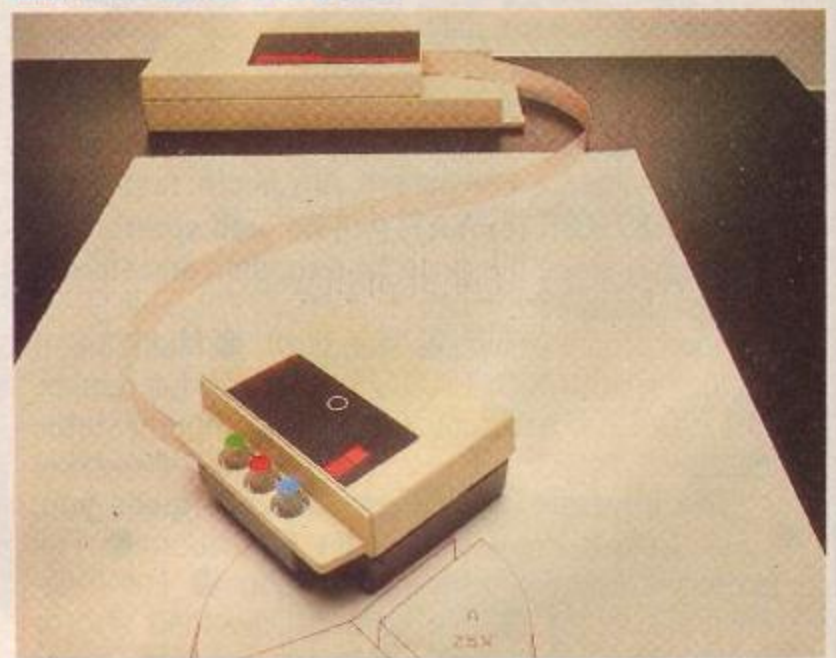
To dump in colour the print head passes across a red strip and transfers all the red that's needed for a line of the printout. It then winds the ribbon through and transfers all the yellow, and then does the same with the blue. Each line of the print-out therefore uses three strips of the ribbon, even if there are no dots of a particular colour in a line of print!

The ribbon is only single pass (you can't re-use it), so print dumps can prove pretty expensive. Against this, though, is the facility to print on clear acetate sheets to produce overhead projector slides. Ribbons are sold in packs of 6 for 34.95, and you can get about eight or ten low-resolution dumps from each. The dumps themselves are small, at about 5.5 by 3.0 inches.

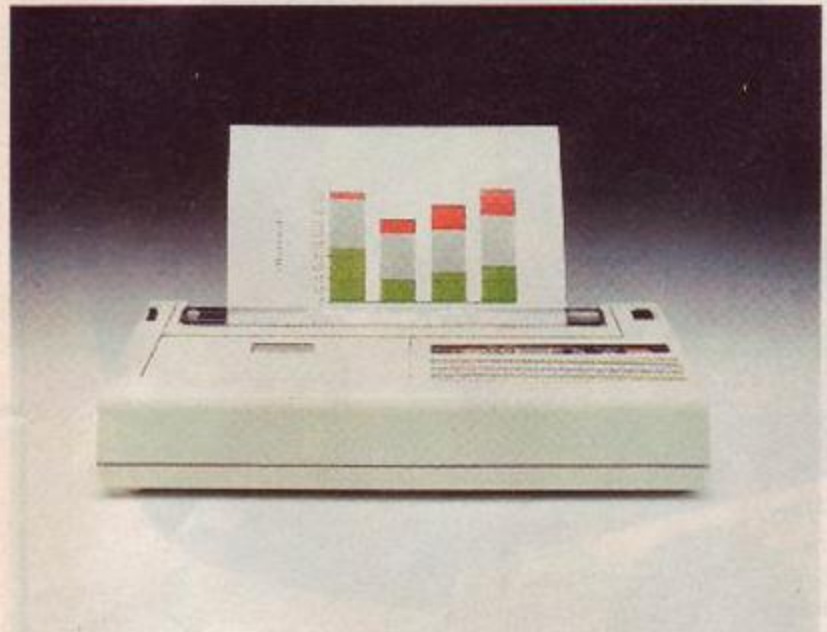
The print dump software supplied with the Okimate 20 comes on cassette, but is unprotected and can easily be transferred to disc. It loads into memory as a machine-code patch which can be called with a special key sequence. Whatever's on the screen is then sent to the printer.

The Okimate is not cheap for a thermal transfer printer. Even with the colour facility, it's only reasonable value. The colour dumps are small and not particularly good, and the technique of transferring wax onto the paper means that you get through a lot of colour ribbons. In its favour, the printer is quiet, produces well-shaped text and has most of the facilities you'd expect from a modern dot-matrix printer.

The Penman Plotter
 £220. More info on 0903 209081



Most plotters use a flat 'bed' to lay the paper on and have an arm which can be driven in two horizontal axes to position a pen (or several pens) at points over the paper. Since the size of



button on top and a thumb wheel and lever to wind the paper through and engage the friction feed. There are no line-feed or form-feed switches, although the printer can handle roll and pin-feed paper as well as single sheets. The tractors for pin-feed paper are buried deep inside the printer, and feeding the paper through is a fiddly business.

The printer can do many of the things that other dot-matrix

VARYING COLOURS ON THE OKIMATE 20



- 1. Low res colour dump in Amstrad default colours.
- 2. Low res colour dump with colours corrected.

PL PRINTING

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paper is governed by the size of the bed and the length of the arm, cheap plotters usually only handle small paper sizes.

The Penman plotter gets around this problem by adopting a radically different approach. The plotter consists of two units, attached by a thin ribbon cable. The larger unit is fixed and contains the circuitry to control the smaller one, which is free to move on two small wheels and a plastic castor.

The wheels are directly connected to stepper motors, which can be rotated by very small pre-defined amounts. This allows the Penman to move or turn accurately as it runs over a sheet of paper laid on a large black perspex baseboard, supplied with the plotter.

Three pens are held in cradles on the front of the Penman and any of them may be selected for drawing. A fourth pen fits through a hole in the centre of the Penman, on the axis of the three wheels. This is particularly useful if you run the plotter from Logo. Penman makes a very good turtle, and there are 'drivers' available to link it to some versions of the language, although not DR Logo as yet.

Connecting Penman to an Amstrad micro (PCW or CPC) requires a serial interface. The Amstrad RS232 interface works well, and all the default communication settings work directly with Penman, so you can 'plug in and go'. You do need something to plug in though, and a lead is not normally supplied. Ask for a 'male to female 25 pin D connector with pins 2 and 3 crossed'!

Once connected up, you slide the Penman from its cradle in the control unit, place it on a piece of paper and can then start giving it instructions. Penman is an intelligent device, and can do many things for itself. For instance, it will count how many complete revolutions it has made while plotting, and unravel its ribbon lead before it gets tied up.

You control Penman using a plotting language built into the control unit, and single letter instructions will get the plotter drawing lines and circles with a minimum of effort. You can send it instructions from BASIC, or, by typing | TERMINAL, you can watch it execute each one in turn.

The plotting language is adequate for simple drawing - the CPC6128 plot was produced with about 30 lines of BASIC - but has a few shortcomings. There are no commands for triangles or rectangles, and several of the other commands require parameters in hexadecimal - not the friendliest of approaches. Penman can supply extra software for technical drawing, but again not for Amstrad micros.

Colour Palette Switcher

If you're using *Melbourne Draw* with a colour printer such as the Okimate 20, you'll need to load your Mel-

bourne pictures separately from the art package itself, and then dump the screen.

If you load the pictures directly, however, you'll find that the colours are likely to be different from those you used when drawing it. This is because *Melbourne Draw* allows you to change the palette colours to pick any 16 of the CPC's 27 shades.

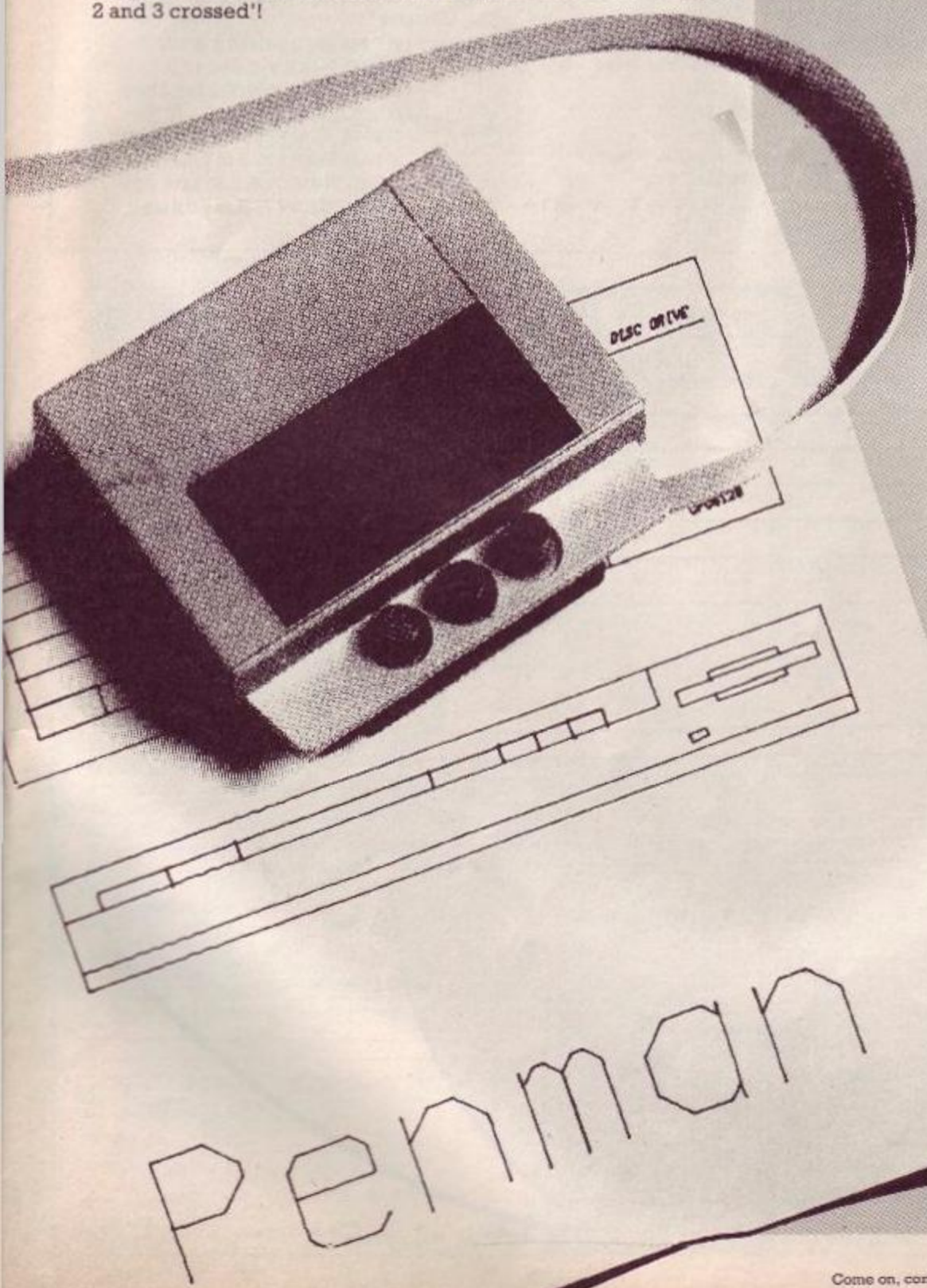
The Okimate software copies the physical colours (the ones which appear on the screen) rather than the logical ones, so you can get a true picture by switching the palette colours back to the ones you used in *Melbourne Draw*. The following BASIC program, allows you to do this by pressing single keys to cycle through the logical colours assigned to each physical one. You can see them change on screen.

Run the Okimate dump patch first (or any other screen dump routine which sits out of the way until called) and then run the program as listed. Type in the name of the picture file you want to print and press any of the following keys to change the corresponding physical colour.

Keys	0	1	2	3	4	5	6
Colours	0	1	2	3	4	5	6
	7	8	9	:	;	<	=
	7	8	9	10	11	12	13
	>	?					
	14	15					

```

10 CLS
20 INPUT "Picture file to print";p$
30 MODE 0
40 LOAD p$
50 DIM c(16)
60 FOR n=1 TO 16
70 c(n)=n
80 NEXT
90 WHILE 1
100 a$=INKEY$
110 IF a$="0" OR a$="?" GOTO 160
120 i=ASC(a$)-47
130 c(i)=c(i)+1
140 IF c(i)>26 THEN c(i)=c(i)-27
150 INK i-1,c(i)
160 WEND
    
```



The plotter works best on heavy (100gsm or more) paper with a good 'grip'. Some is supplied, and Penman will sell you more, but this can be an inconvenience. The small colour pens supplied are also a bit special, but you can use Pentel type refills instead, which are easier to get.

Penman is well designed and produces crisp, four colour plots, up to A3 (twice A4) in size. It's best used on the recommended paper, and even then some straight lines have a waver in them. For the asking price, though, you won't get a more versatile plotter. ■

VERDICT

If you want the minimum of fiddling, the Okimate is the only printer which comes with colour dump software. The Juki 5520 is a robust conventional dot-matrix printer, with colour as a valuable extra. The Penman is a well-designed plotter, for those who want specialist plotting facilities.

How to get colour from a colour printer

The general maxim for colour printing with CPC micros seems to be 'You're on your own'. Unlike black and white printing, there's no accepted standard for printer control codes, and every printer manufacturer tends to do his own thing. To add to these problems, colour printers in general are expensive, so few software packages include colour print dumps. The logic is that somebody paying Amstrad prices won't normally be able to afford to pay the same again for a printer.

Colourful text printing is not really a problem. Most word processors allow you to set up 'user' functions for special printer control sequences. Most colour dot-matrix printers use simple escape sequences to switch between colours, so by setting these into your word processor, you can highlight text with a few special key sequences.

The only problem that may occur is not having enough user functions for the number of colours supported by your printer. You can either choose the colours you value most, or reassign other facilities, such as italics or double-strike, to provide the extra colour controls.

Colour from BASIC is fairly simple as well. Text can be highlighted using commands such as:

```
PRINT#8,CHR$(27);CHR$(N)
```

where N is the escape code number for colour, and may be followed by a further CHR\$ parameter to specify the hue. A short program using this technique with a Juki 5520 printer is shown on this page, together with the print-out which results.

Several printers allow user defined characters to be printed, and these may be set up in much the same way as screen characters are defined. The printer characters can be printed in colour, so you could devise frames and boxes for text, or simple 'block' characters for graphics.

Where the problems really start is with graphics dumps. Few printers are supplied with any software at all, as there's no

telling which micro they'll be used with. (An exception to this is the Okimate 20, which has been customised for use with the Amstrad CPC machines). Colour dumps are not that easy to write, and need to be in machine-code if you don't fancy waiting hours for each printout.

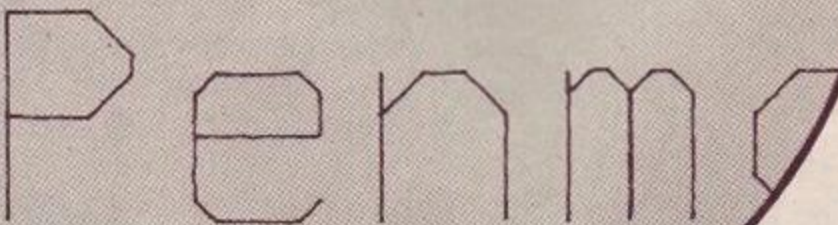
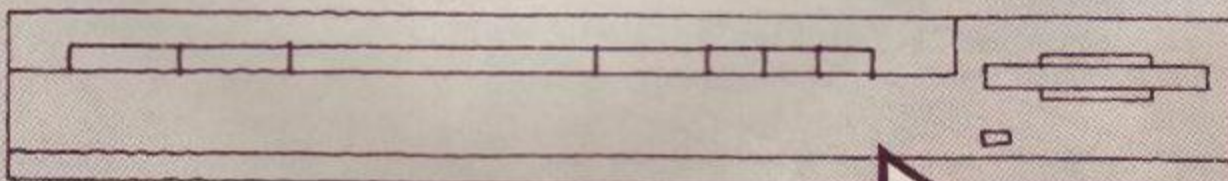
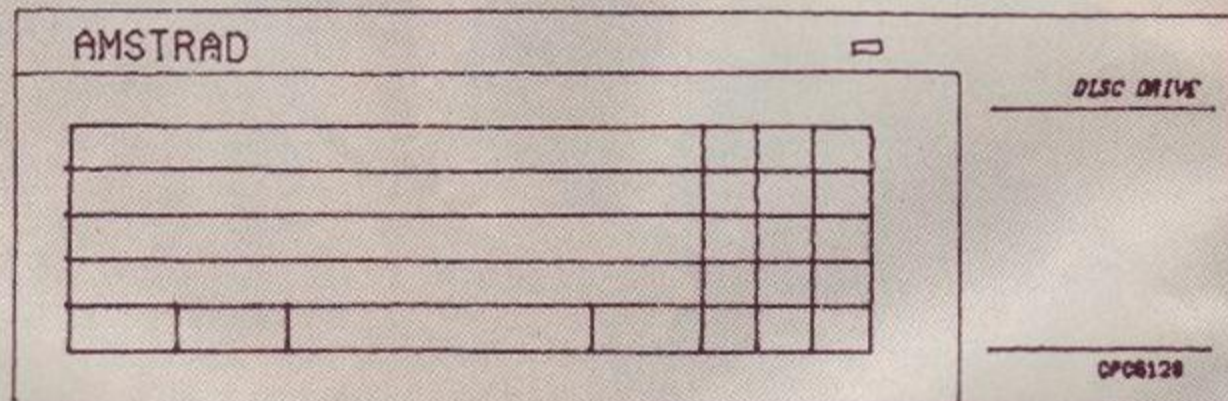
One solution would be for graphics software to include appropriate dumps, but even packages like *Melbourne Draw* and *DR Draw* only have Epson compatible black and white routines. There is really little excuse for colour art packages not to have colour dumps, even if it's only for one colour printer.

Plotters are rather easier to control than printers, and

because they are less popular devices, are often supplied with a 'graphic language' of their own. This can be used directly or from within BASIC. A typical example is the control language for the Penman Plotter, which uses single character commands, with parameters, to move the 'turtle' style plotter, draw lines of different colours and write text in a number of sizes.

Here's a simple example, which draws this front view of a CPC 6128.

```
10 | SERIAL
20 IS = ""
30 WHILE IS <> "zzz"
40 READ IS
50 IF LEFT$(IS,1) = "D" THEN IS = "R M
   + IS
60 PRINT IS:PRINT#8,IS;"
70 IF LEFT$(IS,1) = "L" THEN
PRINT#8,CHR$(10);CHR$(13)
80 WEND
90 END
100 REM Front View
110 DATA U,U,U,H,P1,D,0 120,880 0,0 -
120, -880 0,U
120 DATA 0 20,D,880 0,U
130 DATA -200 100,D,0 -40,-680 0,U
140 DATA 700 8,D,160 0,0 -16,-160 0,0
16,U
150 DATA 40 0,D,0 8,80 0,0 -8,U
160 DATA 0 -16,D,0 -8,-80 0,0 8,U
170 DATA -40 -32,P2,D,0 20,0 -8,-20 0,0
8,U
180 DATA -80 40,P3,D,0 20,-580 0,0 -20,U
190 DATA 80 0,D,0 20,U,80 0,D,0 -20,U
200 DATA 220 0,D,0 20,U,80 0,D,0 -20,U
210 DATA 40 0,D,0 20,U,40 0,D,0 -20,U
220 DATA "zzz"
```



PCW Light Pen
Electric Studio, £79.95
PCW 8256/8512 only

THE ARTIST

Alan Sugar might have intended the PCW machines for the world of business, but lightpen specialists Electric Studio have other ideas. This new package of theirs shows just how those special features – the great big screen and the bundled printer in particular – can be used for more than just spreadsheets and Locoscript.

The package consists of the lightpen itself, its interface and a disc carrying the bundled art program. Setting up is a simple procedure – the interface plugs into the expansion port securely, and the pen is already connected to the interface – but there are a few points to note. Firstly, the pen doesn't need any interface other than the one it's supplied with – a major point in its favour, given the PCW's lack of standard ports. Secondly, you'll almost certainly need to turn the brightness control on your PCW up to full. The pen needs a lot of light coming off the screen for it to operate properly, and normal brightness levels just don't provide it.

Once you've got the pen plugged in and the brightness turned up, you simply boot CP/M and run ART.COM. This is the heart of the bundled software. It's a menu-driven drawing/screen dump program, and it's very nice indeed.

THE MENU SYSTEM

The main drawing screen consists of an upper program status/prompt line, a main drawing area and the bottom printer/'Drive is...' status line. Commands are chosen from menus that overlay the drawing area, a system immediately familiar to Locoscript users.

On loading, the drawing area is blank and has a main function menu overlaying it. Moving the light pen down the menu highlights each option in turn. Simply hit the space bar to choose the highlighted option. Appropriate prompts and messages appear on the top line and, where necessary, further menus appear on the drawing area.

Suppose you choose *Disk* from the main menu. A new menu now appears, offering you the various disc operations. From here you can choose to *Save* a screen to disc, for example, in which case the top line prompts you for a filename to save under.

This menu system is in marked contrast to the icon arrangement used on Electric Studio's CPC lightpen software. As well as bearing a useful similarity to Locoscript, this avoids problems with unidentifiable icons. When you're dealing with concepts like clearing the screen or getting a directory of the disc, it's hard to come up with clear, meaningful symbols for them. Despite this, there are places where a pictorial rather than verbal approach would have made things a lot easier.

CREATING YOUR PICTURE

The main commands you'll want to use here are *Draw*, *Fill*, *Lines* and *Shapes*. Between them they offer most of the facilities you could ask for, if not exactly in the form you might want them.

Draw covers a great deal of ground. On choosing it from the main menu you get a sub-menu offering pen (freehand draw), spraycan, point-plotting and brush-painting. All of these work on the same principle – move the cursor with the pen, holding the space-bar down if you want to draw.

If you select spraycan, you're prompted for a nozzle size. Similarly, you have to set brush width before painting. Unfortu-

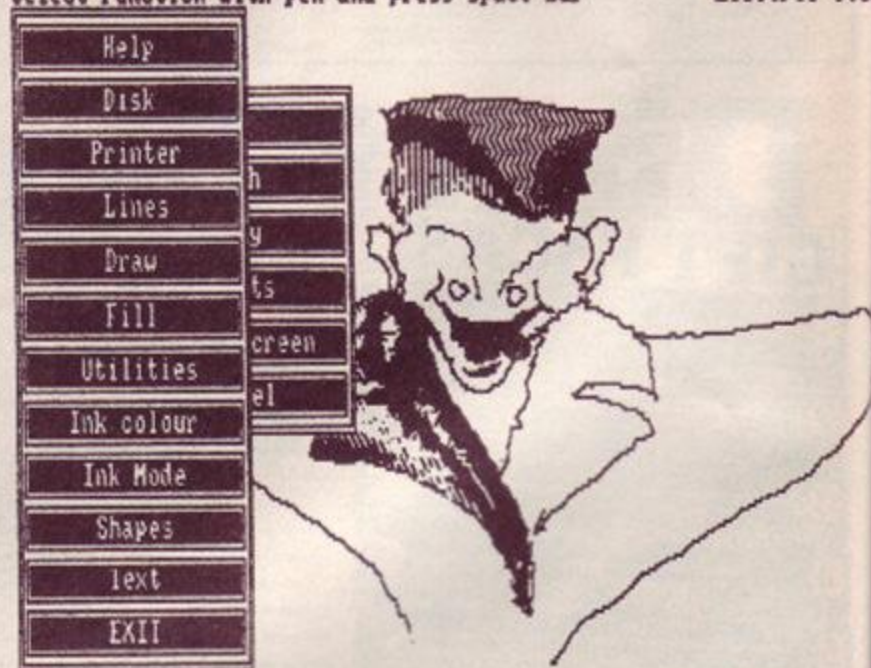
nately, the nozzle sizes and brush widths are just numbers between 1 and 9. There's no on-screen indication of what these actually come out as in terms of spray-pattern or width of brush stroke, so you've just got to guess until you're used to them.

That's not all. For one thing, there's no way of setting up a default brush width or nozzle size. If you have to keep switching between brush and pen, for example, you'll have to set the brush width every time. For another, brush-painting is a very limited function. You might expect to be dealing with an artist's sable, but the program's brush is more the sort of thing you'd use for decorating your living room. The width of the brush is certainly adjustable, but only for up and down strokes – painting from side to side always gives you the same pencil-thin line.

Wide brushes also show another weakness of the program, namely its speed. Move the pen at all rapidly and the cursor lag becomes quite painful. At its worst, the program can take over five seconds to catch up with a single brush stroke. This kind of sluggishness doesn't crop up too often in the package as a whole, but even on medium widths things are slow

Select Function with pen and press space bar

Electric Studio



Functions are selected from the main menu

enough to make the brush feel unresponsive.

On the plus side of brush use, you don't have to paint in solid black the whole time. You can choose a 'texture' to suit your taste – the texture palette has everything from a smooth grey to an extremely loud check, plus stripes, diamonds and herring-bones galore.

You can use these same textures to *Fill* an area, another process which can take time. The area must be closed, and must be either solid white or solid black – continuous texture isn't good enough. The routine can find its way out of almost any gap, but if the texture should escape you can restore your picture to its original state easily enough.

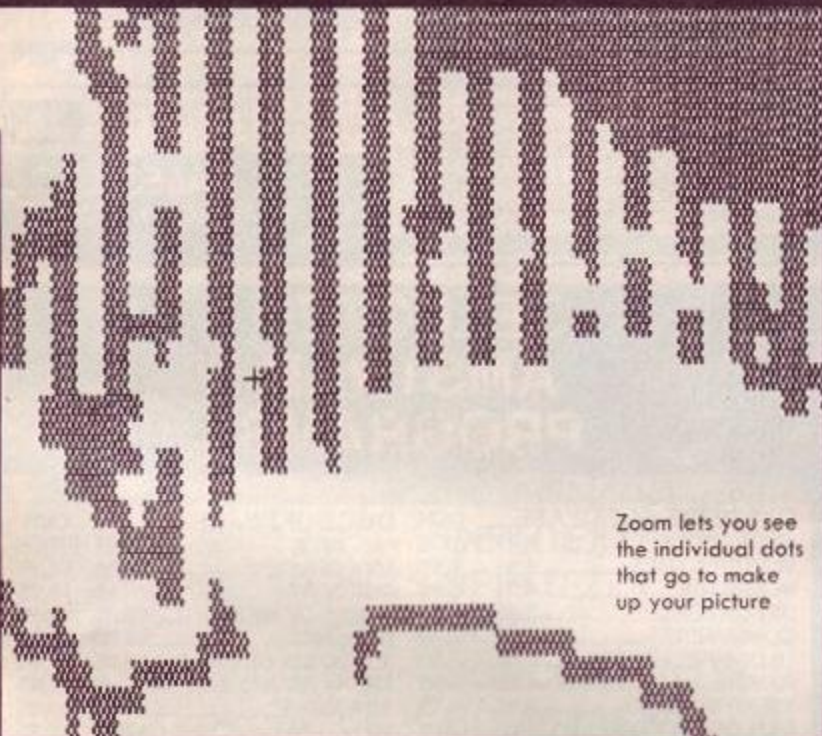
Andrew small-time-cartoonist Wilton has been doodling away

TIN JOYCE

Shapes and *Lines* are straightforward enough, allowing for rubber-banding and a range of polygons, amongst other things. Additional features include *Ink Colour* which allows you to work white on black rather than black on white, and *Ink Mode* which offers AND, OR and XOR plotting – very thorough, but not necessarily very useful. You can add *Text* in a range of sizes, upside down or sideways. Also you can *Copy* or *Move* areas of your drawing around quite freely – though these are both fairly slow.

ZOOMING IN

Of course even the steadiest hand can make the odd slip, so the program offers a *Zoom* feature to let you see and alter tiny details. The area around the cursor is magnified to eight times actual size, so that you can see the individual dots, or *pixels*, that the drawing is made up of. This can be extremely useful for



Zoom lets you see the individual dots that go to make up your picture

finding gaps that a *Fill* has leaked out through, for example. Individual dots can be set to black or white, but the enlarged area can't be moved around and there's no simultaneous view of the area at actual size. These omissions seriously restrict the usefulness of an essential function.

Another thing I found annoying was the way you can't use normal functions like brush or XOR pen while you're in zoom mode. Thus, if you want to add some points and erase others you have to keep switching ink colour. You don't have to return to the main menu to do this – you can set Normal (black on white) with the N key and Reverse with the R key – but it's still restrictive.

The function's redeeming feature is the fact that it can be called up while you're in *Draw* mode – without returning to the main menu, in other words – by pressing Z on the keyboard. You have to be careful if you do this, however. If you call *Zoom* from the menu, you get a message on the top line of the screen reminding you of the various keys that control the mode. If you call it from the keyboard on the other hand, you're left with the *Draw* key message there. This can easily mislead you, until you're used to things.

DOCUMENTATION AND HELP

On page two of the manual, the authors tell you that you should be able to use the program without much difficulty just from the prompt line and the *Help* screen. By and large they're right, but there are a few points it'd take you a long time to work out this way. For example, all the textures on the palette are 'reversed out' – select white dots on a black background, and you'll actually get black dots on a white background. Things really get confusing when you want to select solid black as a texture – something you'll probably want to do pretty early on. To do this, you have to select the blank texture, that is to say the one that has no black on it at all. Clear?

In some respects, however, you really are best off working without the manual; quite simply, it is wrong in places. If you want to clear the screen without going via the menu, the manual tells you to use <alt>, <shift> and <cut> together. This won't work, despite the fact that this reference is itself a correction made after the manual was printed; and neither will <alt>, which the manual claims will restore a picture to its state prior to a fill. In both cases the help screen gets the key combinations right.

OVERALL

It's all very well giving a list of program features, but what really matters is how the package actually performs. The complaints up to now have mostly been minor quibbles or matters of personal taste. One could add to these a list of things you should be able to do and can't – define your own textures, for example, or create mirror images of blocks. The main problems with the package, however are those of any lightpen package.

Aside from the discomfort that comes from holding pen to screen over long periods of time – and this should not be underestimated – there are the ever-present difficulties of placing the cursor on dark areas of the screen. Quite simply, the pen can only 'see' bits of the screen that glow brightly. If you put your pen over a black area, the cursor simply hugs the nearest white dot it can find.

To get into solid black areas, you have to press the B key which produces a 'negative' of the whole screen. Thus the black areas are temporarily white, and the pen can see them. This continual switching from negative to positive and back is very cumbersome, and even then does not help with areas of fine grey tone. These are effectively unchanged by pressing B, and I found that even on maximum brightness the pen just couldn't cope. If you're desperate you can use the cursor keys instead, but that really is laborious. If these problems sound serious to you, I guess you'll just have to wait for a PCW mouse. ■

GOOD NEWS

- ▶ Turns your PCW into a powerful graphics machine.
- ▶ Easy-to-use, versatile software bundled with pen.
- ▶ Needs no extra interface.
- ▶ Pen can drive DR Draw, if you want.
- ▶ A PCW add-on to get excited about!

BAD NEWS

- ▶ Brightness problems can get very annoying.
- ▶ Quite a few minor niggles with the software, and some ropery error handling too.
- ▶ Can be rather slow.

on a package which can take your PCW beyond word-crunching.

MASTERGAME

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ACTION TEST



MAGNIFICENT MASTERTRONIC

This month heralds the first ever budget mastergame in *Knight Tyme*. This instant classic is the follow up to *Spellbound* and at £2.99 is the best offer you've had all month. Just to complete the marvellous budget offerings, there's *Kane* and *Molecule Man*, also from Mastertronic, and yet more proof that it doesn't have to be expensive to be good.

PCW owners should be astounded by the arrival of *Batman* on their machines. There may be no colour, but there's some superb action.

Back on the CPCs you'll have a great time with *Green Beret*, an all-action combat game, and *Cauldron II* which looks like being as bewitching as its predecessor. If you thought the summer was hot already, keep clear of these pages - they're scorching!

COMPATIBILITY

All the games reviewed this month are compatible across the whole CPC range, except *Batman* which is for the PCW 8256/8512 - CPC owners already have their version.

TOP 20 AMSTRAD GAMES

The chart created by AA readers

This month	Last month	% of votes	Title	Software house	
1.	2	12.0%	GET DEXTER	PSS	Well, well. AA Master-game Get Dexter has made it to number 1. It may not have sold as many copies as some of the games below it, but those who have it certainly like it. Another notable event this month is the sharp climb of the two new titles from Elite Systems. Clearly wowing the people. We hope you like our slightly new-look chart, and its new position here at the start of Action Test. Don't forget to enter YOUR votes using the form on p94. You'll be helping create the most representative chart in the land.
2.	3	10.2%	SPIN DIZZY	Electric Dreams	
3.	1	9.4%	ELITE	Firebird	
4.	6	4.3%	SORCERY PLUS	Virgin/Amsoft	
5.	-	4.3%	BOMB JACK	Elite	
6.	4	3.9%	WHO DARES WINS 2	Alligata	
7.	20	3.9%	COMMANDO	Elite	
8.	9	3.1%	BATMAN	Ocean	
9.	5	3.0%	YIE AR KUNG FU	Imagine	
10.	12	2.9%	TAU CETI	CRL	
11.	-	2.6%	BOUNDER	Gremlin	
12.	7	2.3%	SPELLBOUND	Mastertronic	
13.	11	1.7%	RAMBO	Ocean	
14.	-	1.5%	WINTER GAMES	US Gold	
15.	6	1.4%	HIGHWAY ENCOUNTER	Vortex	
16.	-	1.4%	GREEN BERET	Imagine	
17.	13	1.3%	SORCERY	Virgin	
18.	-	1.3%	TURBO ESPRIT	Durell	
19.	-	1.2%	ALIEN HIGHWAY	Vortex	
20.	-	1.2%	FAIRLIGHT	The Edge	

CAULDRON II - THE PUMPKIN STRIKES BACK

Palace, £8.99 cass, £12.99 disc, joystick only

If you've played *Cauldron* you'll know all about the pumpkin because he was the villain of the piece. But before you get the knives out ready to create a halloween mask you should know that you've changed allegiances and are on the pumpkin's side this time. His task is to destroy the power of the witch (your character from the first game) from within her evil and dangerous castle.

The castle is composed of over 100 screens, packed with dangers to a plump young pumpkin. The graphics and atmosphere will be instantly familiar to *Cauldron* players but the task before you and the gameplay are a whole new cauldron of fish. Essentially it's a platform/exploration game but the control over the pumpkin and the layout of the castle provide plenty of new and interesting things to deal with.

SECOND OPINION

Cute, bouncing main characters are certainly in fashion at the moment, but this one's got more than that going for it. A wonderful bouncing action and some infuriatingly tough gaps to hit make for enthralling gameplay, and there's lots to explore too. A real must for all you pumpkin freaks out there.

AW

The pumpkin bounces continuously and can be steered left and right through the air. The height of his bounce can be altered to several different levels and this is controlled using the fire button. This odd control method can make getting around the castle a testing and absorbing task, trying to judge the right jump for each gap in the floor.

The pumpkin stands up to long falls very well, always sporting a cheerful grin. The bouncing animation is fairly simple but very effective, just like a large, well inflated, yellow football, grinning at you maniacally. Getting good control takes a little while as you experiment with the bouncing but there's plenty of opportunity for that as you explore the large castle.

What our rotund hero is in search of are a number of flashing objects that will allow him to destroy the witch's power - all will be needed to complete the game. These are, of course, in some of the most awkward to get at spots requiring a lot of pumpkin perseverance and control.

You start with seven lives, each being preserved by a supply of magic. If this runs out a life is lost. Most of the witch's creatures will merely try to drain this magic by running into you, while others will kill on contact. The dangers come in many forms, from tiny mice and spiders to murderous walking skeletons and deadly gargoyles. Some of them can be shot with magic bolts but again this costs the pumpkin some of his magic supply.

Magic is replenished by picking up a sparking magic point, which also allows you to fire the magic bolts, but these are not replaced as the game goes on. There are a number of surprises in store for the unwary traveller - what else did you expect from a witch? Most of them can be anticipated though, just expect the unexpected.

The atmosphere the game conjours up is superb - beautifully designed graphics, good animation and a fantastic title tune. The gameplay itself is very testing and should keep you plugging away for many a long hour, even if it does tend to get a bit samey just bouncing around the place. The only criticism of the game is that the use of flick screens can be very offputting when unavoidably hopping several times between two screens. A worthy successor to *Cauldron* with a much cuter lead character.

BW



The Six Objects

The six flashing objects found in the castle each have a different use - the hardest part is still getting them all though.

GOBLET: prevents floating hands from reversing the joystick control.

AXE: allows you to batter through closed doors.

SHIELD: this is your only protection against the deadly skeletons.

CROWN: stops the witch's killer-magic from harming you.

SCISSORS: cut a lock of the witch's hair.

BOOK OF SPELLS: last but not least - it's the key to success.



A silly, grinning pumpkin has a very tough task ahead



The witch laughs every time you die

These are the spare pumpkin lives



The grinning pumpkin bounces merrily along

GREEN SCREEN VIEW
Everything's visible, and looks pretty good in fact. The pumpkin's a bit under-ripe, though.
AW

G O O D N E W S

- ▶ Well over 100 screens.
- ▶ Atmospheric graphics and title music.
- ▶ Well designed castle and rooms.
- ▶ Nice animation and control of pumpkin.
- ▶ A tough task to complete.

B A D N E W S

- ▶ The control is awkward at times.
- ▶ Repeated hopping between flick screens is tough on the eyes.

A magic point where you can replenish the magic

One of the flashing objects

GRAPHICS	82%	<div style="width: 82%; background-color: #ff4500;"></div>
SONICS	68%	<div style="width: 68%; background-color: #ff4500;"></div>
GRAB FACTOR	88%	<div style="width: 88%; background-color: #ff4500;"></div>
STAYING POWER	85%	<div style="width: 85%; background-color: #ff4500;"></div>
A A RATING	86%	<div style="width: 86%; background-color: #ff4500;"></div>

KANE

Mastertronic, £1.99 cass, joystick or keys

You play Abel Roznovsky in a desperate battle to outwit William Kane the banker...no, wait a minute, that's the wrong plot. You play the Sheriff who wants to make peace with the Indians and clean up the West in a four stage arcade challenge. Personally I preferred the other scenario - much more interesting.

The four stages are fairly loosely connected but each one presents an enjoyable challenge and has some attractive graphics. You start in a canyon containing an Indian camp. You have to shoot down birds to swap with the Indians for peace tokens. The peace tokens become your lives on the next three stages so it's important that you do well here. The Sheriff runs onto the screen and stands at the bottom right-hand corner holding a bow and arrow. The birds fly on from the left and you control a cursor which determines where the arrow is shot.

The timing of shots isn't too difficult to pick up, and every time you impale a bird through its neck or body it flops to the ground. You only have a limited number of arrows and every time you miss a bird it costs you one arrow. I know it all sound rather tasteless but it's humourously done with tables of 'birdies killed' and 'birdies home' for the ones shot and the ones that got away.

SECOND OPINION

Lovely animation, witty gameplay and great music all give this game real grab. It is very easy to start with, but levels two and three cause you quite a few problems. The practice mode helps you overcome these however, and you might find you can crack the game a bit too easily. Still great fun though - and great value for money.

AW

Having collected as many lives as you can you've got to get the Sheriff to Kane (a town) by riding across the desert. The horse and rider are excellently animated, moving at canter and gallop speeds, and you have to jump them over various bushes, otherwise the Sheriff will be thrown. The distance to the town has to be completed within a time limit, with falls costing a life.

Once in the town you get a view of the main street with the Sheriff at the bottom of the screen. Outlaws come out of the buildings who take a quick shot at you and then disappear. You have to shoot these villains by moving a cursor over them and firing before they disappear. Because the Sheriff's only got a six shooter he has to keep pausing to reload, and he has to keep on the move to avoid the outlaw bullets.

Once you've shot enough bad guys, for some unexplained reason you have to chase a train and stop it. This takes the same form as the ride in to town with obstacles to jump, but is very much tougher. You gallop just a little bit faster than the train but any stops or falls cost you dearly and make life very hard.

If you get through all four stages they are repeated, there being three skill levels; the last stage continuing to be the toughest. The stages aren't stunning when looked at individually but they go together to make a very nice package that is enjoyable to play. The animation on the riding sequences is perhaps the best feature and the whole product has a polished and humorous style to it.

BW

GREEN SCREEN VIEW

Looks fine, if you don't mine riding across a green desert.

AW

GOOD NEWS

- ▶ Four different types of stage.
- ▶ Nice backgrounds and great horse animation.
- ▶ Easy to get into but can get quite tough.
- ▶ Humorous touches work well.

BAD NEWS

- ▶ Some stages are a bit too easy.

GRAPHICS	71%	
SONICS	60%	
GRAB FACTOR	83%	
STAYING POWER	78%	
A A RATING	80%	

The distance left to go and the time it has to be done in

Lives left in the form of peace tokens



The Sheriff atop his trusty steed

One of the bushes that the horse has to jump over

BIGGLES

Mirrorsoft, £9.95 cass, £14.95 disc, joystick or keys

Biggles may not spring to most peoples minds as a good subject for a film or a computer game, but it looks set to do well both at the box office and on the computer shelves. The game stars the intrepid hero and his time twin (don't ask me, see the film) in a mission to locate and destroy an enemy sound weapon.

The game is split into four sections, the first three are on one side of the tape and are arcade games, while the fourth loads separately and is a helicopter simulation/adventure. The three arcade sequences are where you have to locate the sound weapon and prepare for the final part of the mission, where the task is to destroy it. The fourth part can be played without finishing the first three, but completing them gives you a helpful advantage for the final stage.

The first of the three arcade games is a flight in a biplane to locate the sound weapon. It takes the form of a *Scramble*-type game, with the plane flying left to right along a scrolling screen. Enemy attacks take the form of biplanes flying in the other direction which shoot at you, and anti-aircraft guns that throw flak up at you. The planes can be shot down with your own bullets while ground installations can be bombed. When you have flown far enough, or get shot down, you move onto the next stage.

The second section is a bit of trench warfare in *Commando* style, as you try to

reach the sound weapon's test site on foot. It consists of several screens, each split into a trench and overground section with enemy soldiers who try to halt your progress. Some wander around shooting occasionally, while there are also machine gun nests that rattle out fire. You can shoot the soldiers if you get near enough, and there are also grenades to collect that can be used to knock out machine guns and men.

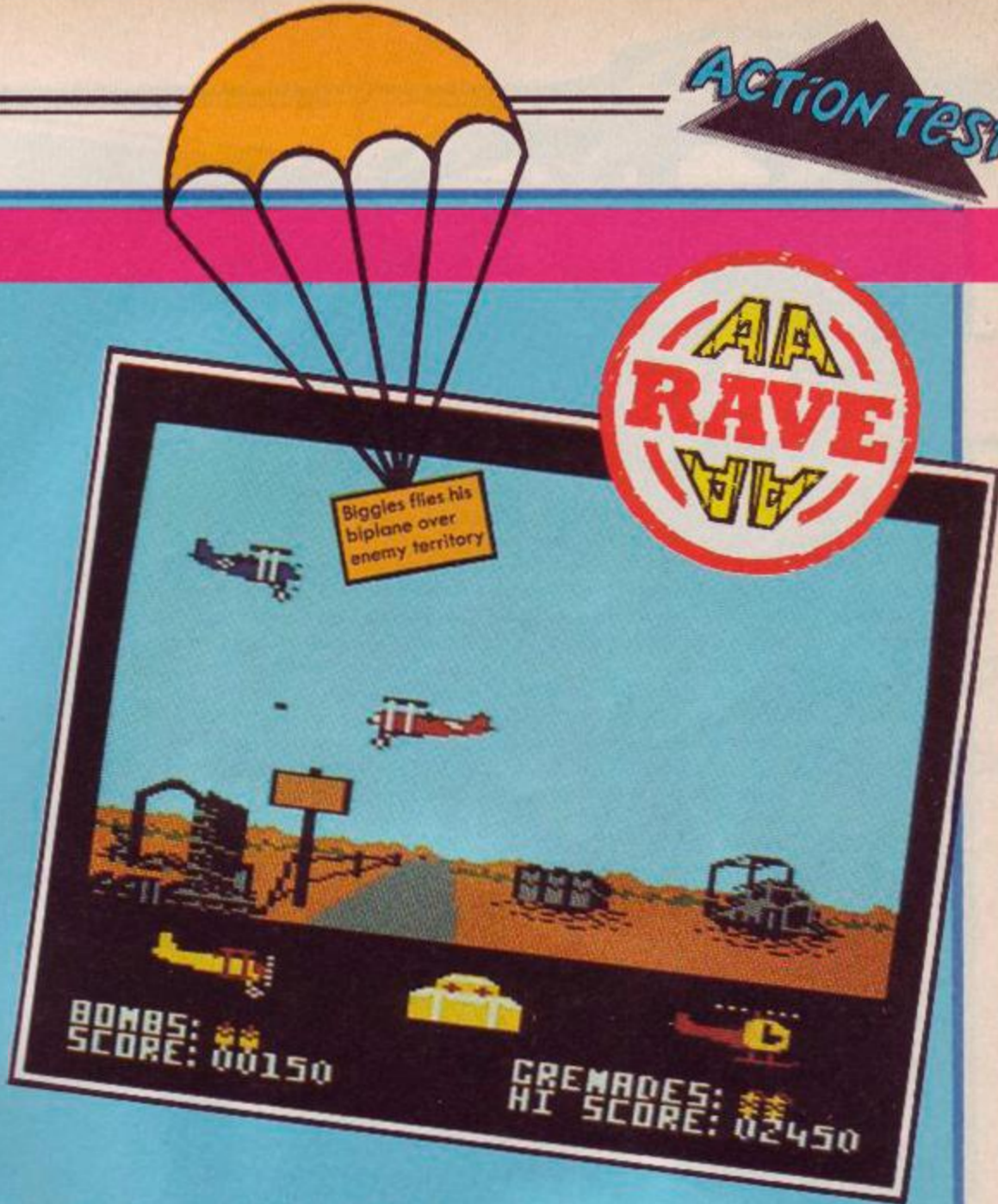
SECOND OPINION

What with the film tie-in and the current fad for chunky graphics, this one would sell pretty well even if it was a complete turkey. In fact, it's not a bad game - though the gameplay is a bit patchy. The arcade games are okay, but a bit lightweight. There's nothing to really get your teeth into until you start the simulator, and that's pretty low on grab factor. Competently written and reasonable value - but nothing very exciting.

AW

The third stage brings you into the present day with Biggles and his Time Twin having to hop across rooftops to get to their helicopter. All the while you have to avoid the clutches and the bullets of the guards that patrol the rooftops. The two men are controlled alternately and have to get a run up to leap between roofs before timing their jump. You've also got to be careful not to miss a roof and go plunging to your death.

The three arcade games are compet-



ently put together and, although none of them are outstanding, they should provide some fun and challenge before moving on to the helicopter section. This provides the really lasting challenge.

The simulation owes a lot graphically to *Strike Force Harrier* since it presents a similar view of the surface features and flying movement. The action takes place on a large map, mostly controlled by enemy forces. You have to complete several tasks before locating the sound weapon test site and destroying it. These include picking up people, fuel, a machine gun and ammunition. Each one serves a purpose that should help you on the mission but it is not always apparent what or when.

There are of course plenty of hazards that have to be overcome. Flying the helicopter isn't always easy and crashes prove fatal. The enemy is present in force, and overflying ground positions can be very bad for the health. If you've got something to shoot them with you can capture positions yourself, but this isn't easy. Most objects are marked on the maps and at first the task looks fairly simple, but you soon discover that it's going to take a lot of work to crack it.

The graphics are quite chunky for all four stages, but are done in very nice shades of colour and actually look quite pleasing. The combination of the three initial games works very well with plenty of variety in the tasks and gameplay to keep you interested. The real challenge comes from the final helicopter stage though, which combines a simulator and adventure

task very well indeed. I don't know what WE Johns would have made of the whole thing but I'm suitably impressed by a very slick product.

BW

GREEN SCREEN VIEW

The map on the simulator section is colour coded, so you miss out on crucial information. As a result it's not really playable in green.

AW

Film fun

The phrase 'the game of the film' is becoming more and more popular as licensing deals predominate in the computer market. In this issue alone we have *Biggles*, *Blade Runner* and the three TV titles *Max Headroom*, *V* and *Dr Who*. Unfortunately these deals don't always produce good games, the classic example being *Ghostbusters* which really was pretty awful on the Amstrad.

Biggles is a pleasant surprise because it isn't too dependant on the film and you won't need to have seen the film, read the books or even heard of him before to enjoy it. Naturally it gains a lot of hype from being associated with the film but for once this is justified. Let's hope licensing deals continue in this sort of vein.

G O O D N E W S

- ▶ Three pleasant arcade games.
- ▶ A testing helicopter/adventure challenge.
- ▶ Good graphics even though they're a bit chunky.
- ▶ Excellent value for the four games together.
- ▶ Stands up as a game in its own right.

B A D N E W S

- ▶ Arcade games aren't too difficult.

GRAPHICS	69%	<div style="width: 69%;"></div>
SONICS	71%	<div style="width: 71%;"></div>
GRAB FACTOR	82%	<div style="width: 82%;"></div>
STAYING POWER	81%	<div style="width: 81%;"></div>
A A RATING	81%	<div style="width: 81%;"></div>



MASTERGAME

KNIGHT-TYME

Mastertronic Added Dimension, £2.99 cass, joystick or keys

Mastertronic's Magic Knight has appeared in two previous games, *Finders Keepers* and *Spellbound*, but this is his crowning glory as he tries to get back to the past from a starship in the 25th century. It features the 'windimation' system from *Spellbound*, but is even more packed with characters, objects, locations and things to do.

Magic Knight's task is to find a Tyme machine that will take him back to his mediaeval existence - after all life in the 25th century isn't easy for a guy in a little tin suit. He appears in a transporter room on board the USS Pisces, his first task to explore the ship and familiarise himself with the characters and objects in it.

SECOND OPINION

This game is just superb. If you want the wit and puzzling of Hitchhikers coupled with cute animation and great music, it delivers - and with change from a measly £3. How Mastertronic manage this kind of quality this cheap, I really don't know. Buy it, play it, marvel at it - it's terrific.

AW

The three most important rooms in the ship are the bridge, transporter room and transputer room. The TRANSPUTER is the ship's computer and at the start of the game it provides a lot of helpful information to get you going. The BRIDGE is where the starship is controlled from, but to do that you'll need the authority and knowledge to get it moving. The TRANSPORTER enables you to

beam down to the planets which the starship orbits, but again you'll need to get it working first.

MK moves left and right on screens and can jump onto things, but the main control is via the 'windimation' system. This is a series of window menus that present a number of commands and options, depending on the location, objects carried and characters present. There's a single main menu that has familiar commands on it for object manipulation: pick up, drop, take and give (from or to another character), examine, wear and unwear(?).

There are other options that need not always appear and these have many different uses. You can command characters, read things, blow things, cast spells, communicate and move the ship. The further you get, the more commands you'll find and each one will have one or more sub menus. For instance if you want to command a character you first have to find who you want to command, then tell them what you want them to do and then watch the response and action that takes place.

Using the system to its fullest will take some time but the general rule is to try doing everything to anything to start with. Performing tasks and solving problems is usually a case of following up on a clue given somewhere or making a logical deduction about what to do with things.

The other characters in the game are

very important and they come in several shapes and sizes. There are droids and computers, humans and aliens, all of whom may carry useful objects or be able to perform tasks for you. Dealing with them isn't always easy because they may not be in a good mood or even able to help. As in *Spellbound* you will have to look after characters' welfare in order to make them cooperative, but you'll have to watch out for your own as well.

GREEN SCREEN VIEW

It plays fine and looks okay too, so you've got absolutely no excuse. Buy it.

AW

Throughout the game there are marvellous touches of detail and humour that reflect the hard work and personality put into it by David Jones the programmer. You'll come across all sorts of smart remarks and great features like the view from the bridge of the ship as it moves between planets. One example of the detail and humour is when MK wears a gas mask - if he then tries commanding the other characters all they hear is 'a muffled voice' and then go about their business.

There are a massive number of problems to crack and things to do. You'll spend the first few hours just working out everything in the starship, never mind exploring the many planets.

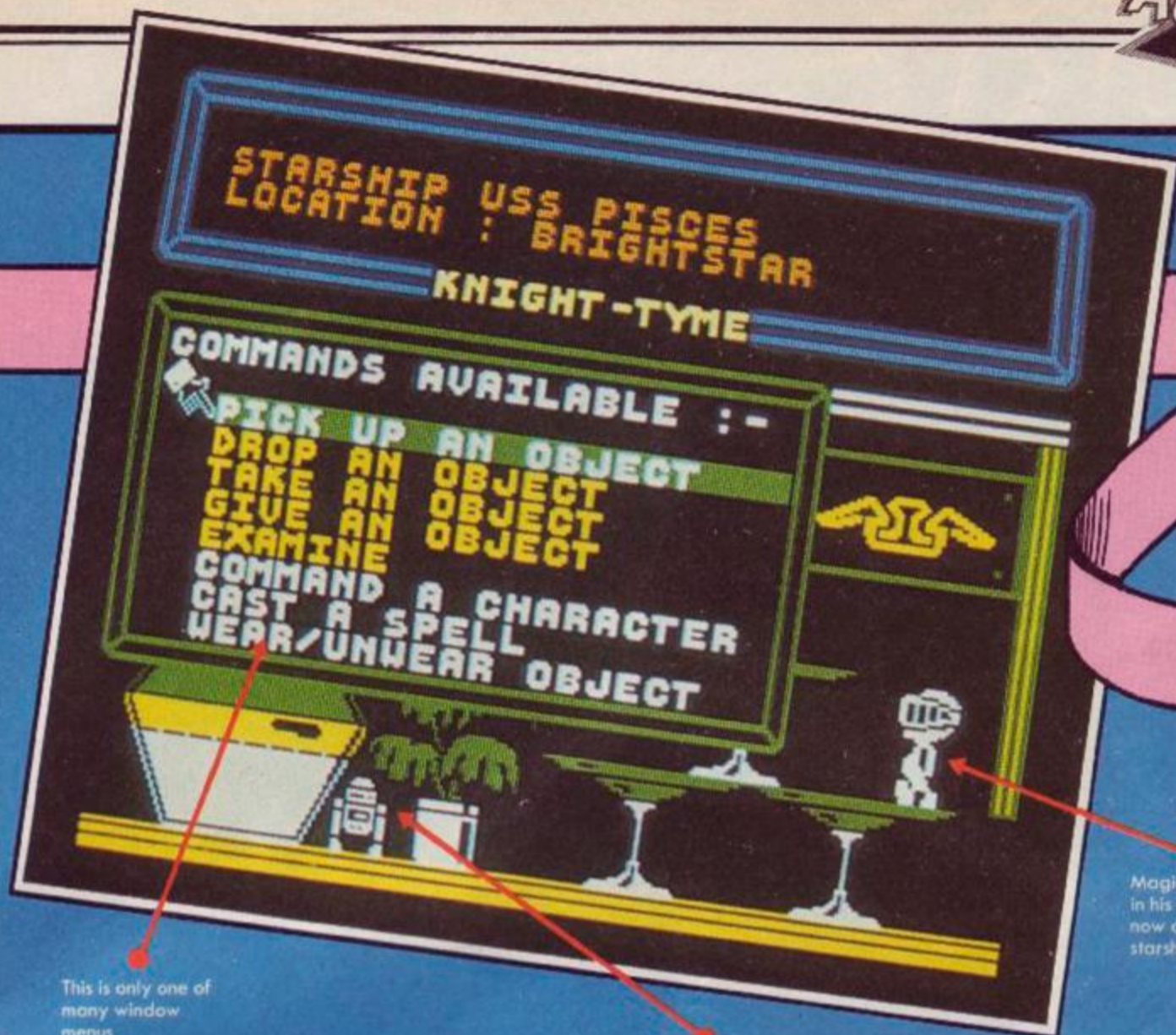
Budget Bonanza

This month sees a special event for AA - our first ever budget Mastergame. It's not just a good budget game but one of the best arcade adventures ever.

The increasing quality of budget games puts increasing pressure on software houses to either drop their prices or reach higher standards. The big names can't get away much longer with producing inferior (if not downright appalling, rip-off) products like *World Cup Carnival* without alienating their public.

This almost certainly isn't the last budget game that will get Mastergame because more and more software houses are entering the budget market. The existing ones also are continuing to improve their games quality. That can only be good news for gamers, whose wallet and computer will both benefit from the experience.





This is only one of many window menus

One of the other characters who move freely around the game

Magic Knight still in his armour but now aboard a starship



Magic Knight's surroundings may not be so colourful but they certainly hold plenty of action and surprises

The graphics are the only disappointing part of the game because they lack colour. The soundtrack plays throughout and is very pleasant. But what really bowls you over is the humour, detail, puzzles, difficulty and size that at a delightful £2.99 blow most full price games out of sight. Budget games of this high quality should shame many full price software houses into getting their act together.

BW

G O O D N E W S

- ▶ 'Windimation' system is a joy to use.
- ▶ Great sense of humour.
- ▶ Lots of intriguing and difficult puzzles.
- ▶ Interaction with other characters to help and hinder.
- ▶ Great features like space flight and teleporter.
- ▶ Good accompanying music.
- ▶ All this for £3 - a remarkable bargain.

B A D N E W S

- ▶ Graphics, screen size and use of colour aren't all they could be on an Amstrad.

GRAPHICS	63%	<div style="width: 63%; background-color: #e67e22;"></div>
SONICS	69%	<div style="width: 69%; background-color: #e67e22;"></div>
GRAB FACTOR	91%	<div style="width: 91%; background-color: #e67e22;"></div>
STAYING POWER	94%	<div style="width: 94%; background-color: #e67e22;"></div>
A A RATING	95%	<div style="width: 95%; background-color: #e67e22;"></div>

PACIFIC

PSS/ERE, £8.95 cass, £14.95 disc, joystick or keys

This latest French import is about as low as you can get - 500 fathoms beneath the Pacific ocean to be precise. It takes place entirely under the waves in a twilight world where many hazards and surprises await. Your quest is to find the lost treasure of Atlantis in a massive undersea exploration.

You start at the surface of the ocean where your character stands waiting in a diving bell. He's clad in a diving suit and one of those large glass and metal helmets seen in many a Hollywood movie. He also totes a gun with a limited supply of ammo to use on the resident aquatic wildlife. On his back is an oxygen cylinder, a close-up view of which is presented in the bottom left of the screen. Once he starts moving he isn't animated much, staying upright and sinking automatically (lead in his boots and not his head presumably).

The diver can travel off the left, right and bottom of the screens but to go back upwards you need to press a key as well as moving the joystick up. A massive number of screens make up the playing area but as

SECOND OPINION

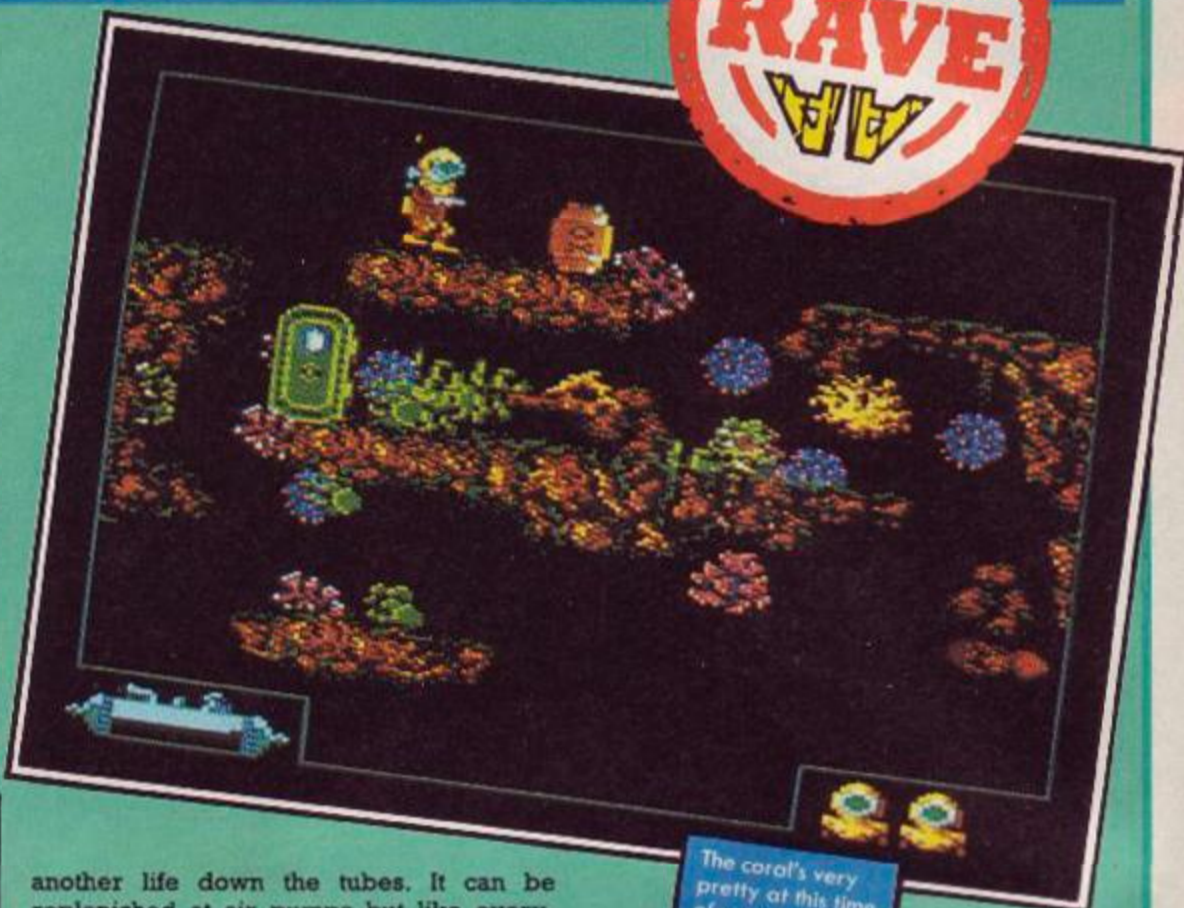
This game does get a bit repetitive, but that's small wonder when you think about its sheer size. When you first find a sextant and see the map of the playing area, you realise why they called the game Pacific. I mean, we are talking vast. Plenty of nice touches and some frantic manoeuvring, but it's the scale that makes your jaw drop open.

AW

you would expect these are limited in their variety. They consist mostly of very colourful corals that can be passed through, and more substantial rock formations that block your progress. Most have routes through them but some are completely impassable and have to be bypassed.

On most screens there are fish, turtles, squid and starfishes that swim around and poison the diver on contact. With only three lives to play with they need to be avoided at all costs. This is usually easy when moving down through screens but if you appear at the bottom of the screen going up it can be a real deathtrap. All the animals can be shot but appear in increasing numbers and speed the deeper you go.

The diver consumes oxygen from his tank the whole time, particularly when exerting himself, and if this runs out it's



The coral's very pretty at this time of year don't you think?

another life down the tubes. It can be replenished at air pumps but like everything else in the game it's a matter of exploring many screens to find one.

There are several other special features in the game that add interest. Sextants allow you to see the map of the ocean and your position, showing just how enormous the playing area is. Doors lead into galleries where extra lives and ammunition for the gun can be collected, but here too danger can lurk. Barrels of explosives can come in handy too for blowing holes in rock, but you need to be careful not to blow yourself up with them. Mines can also bring an explosive end to a life if run into, but shooting them sets them off harmlessly.

The gameplay is repetitive because of

delightful, even if screens do repeat, and you won't tire of swimming around such a picturesque pond. Completing the game is tough and will keep you going for plenty of time. The only problem with that is that having dived deep you can easily hit a run of mishaps that will make you start all over again.

Big, bright and beautiful, with some

nice features thrown in. Those clever French people who bought you *Get Dexter* and *Doomsday Blues* have scored again. Bravo.

BW

game and repeat the sheer size of the nature of the screens but there are enough interesting features and things to do to keep the player going. The graphics are

GOOD NEWS

- ▶ More screens than a Japanese TV factory.
- ▶ Some beautiful undersea graphics.
- ▶ Nice features like air pumps, barrels and galleries.
- ▶ Tough gameplay that keeps you on your toes.

BAD NEWS

- ▶ A trifle too repetitive in places.
- ▶ Frustrating to get a long way down and then die.

GREEN SCREEN VIEW

You can see the fish, you can see the coral, you can see everything - except, that is, the stunning colour scheme. Ah zut.

AW

GRAPHICS	85%	<div style="width: 85%;"></div>
SONICS	66%	<div style="width: 66%;"></div>
GRAB FACTOR	82%	<div style="width: 82%;"></div>
STAYING POWER	77%	<div style="width: 77%;"></div>
A A RATING	80%	<div style="width: 80%;"></div>

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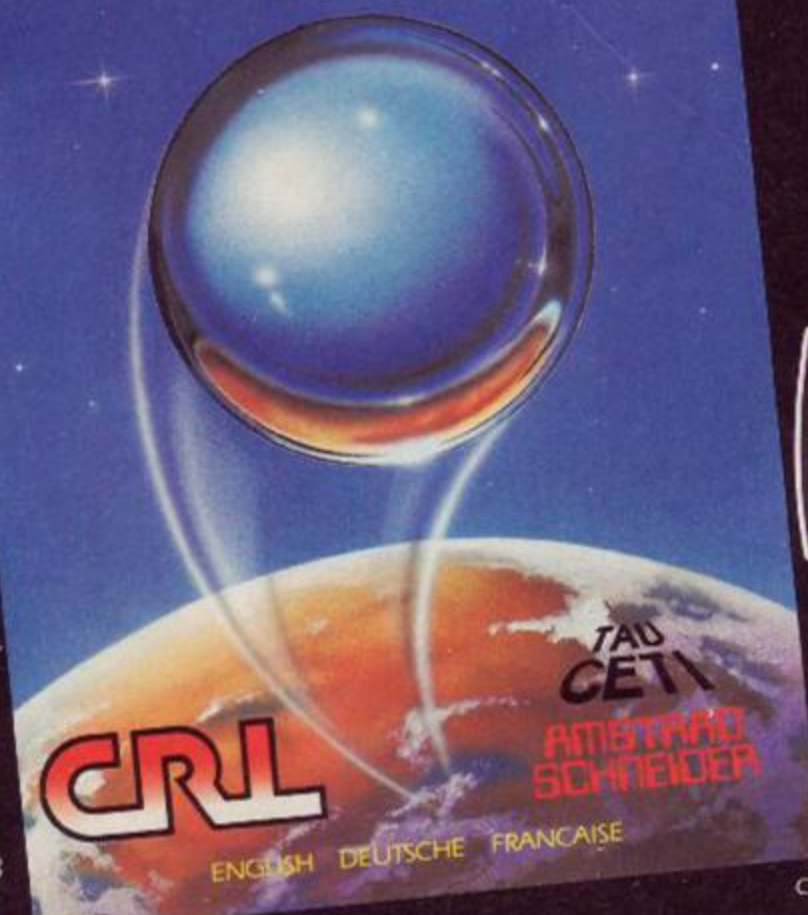
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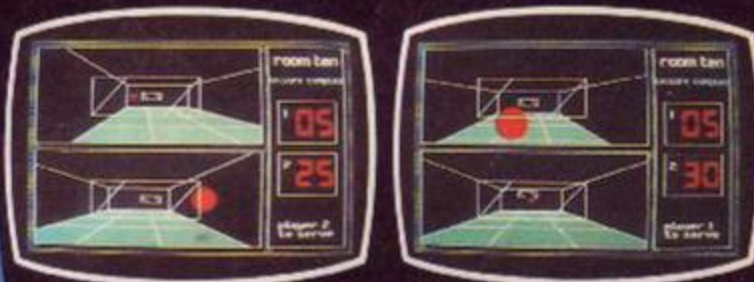


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GREEN BERET

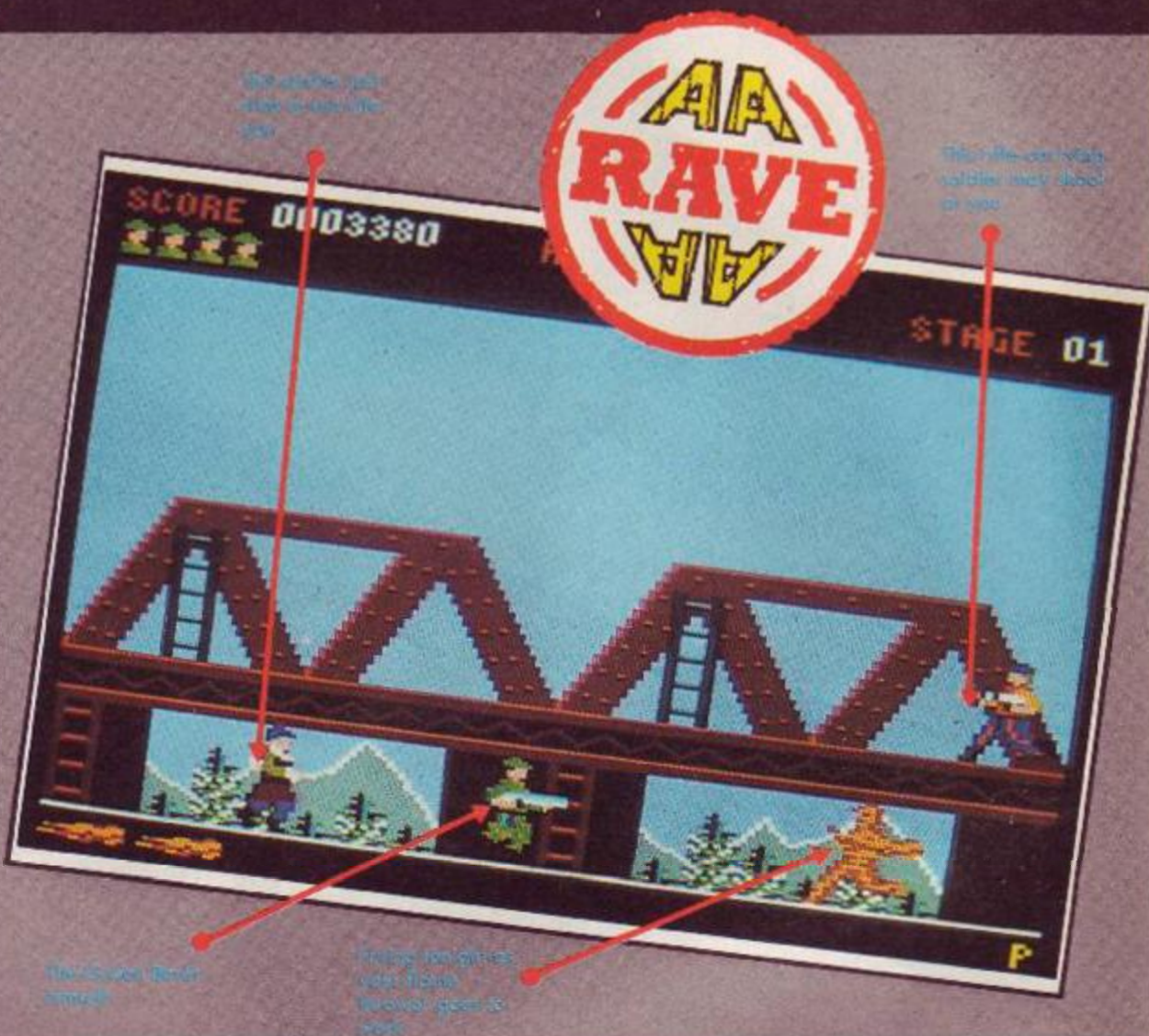
Imagine. £8.95 cass, £14.95 disc, joystick or keys.

A Commando by any other name but fortunately not the same type of game. It's all about mindless killing again but on a horizontally scrolling background rather than a vertical one. The aim is the familiar one of rescuing captives from a heavily defended enemy installation.

There are four stages in the game that have to be completed in sequence - each one getting progressively harder, although the first is tough enough. You start at the missile base and move on to the harbour, bridge and prison camp. Each stage has different and detailed backgrounds, most with features that can be climbed over. Screens have up to three levels that are connected by ladders and drops, but problems are encountered wherever you go.

The idea is to get your man to the end of a stage, where he has to fight a pitched battle before moving to the next one. Each stage is broken up into several sections, so that if your man is killed you restart at a set point just before the spot where he died. As you move left to right across the screens they scroll to reveal the ground ahead, and while this is happening the action is paused momentarily. The scrolling is jerky but the pauses are welcome respites as they give you time to think.

Along the route you face four types of enemy soldier. The simplest just tries to run into you, while others aim flying kicks at your skull. Even more dangerous are the ones with guns because they try to follow you, and occasionally shoot bullets that have to be ducked or grenades that have to



KUNG-FU MASTER

US Gold. £9.95 cass, £14.95 disc, joystick or keys.

Yet another conversion of a popular arcade game featuring martial arts - this one being less concerned with presenting a wide range of manoeuvres against highly individual opponents, and more interested in killing as many things as fast as possible. Such violence has to be in a good cause of course, and in this case it's rescuing a damsel in distress at the top of a five storey building.

SECOND OPINION

The graphics are a bit crude and the small action window scrolls badly, but these aren't too worrying. The real disappointment comes with the gameplay, which gets very frustrating very quickly. There does seem to be an unhealthy element of chance to things, and all that wagging soon gets on your nerves.

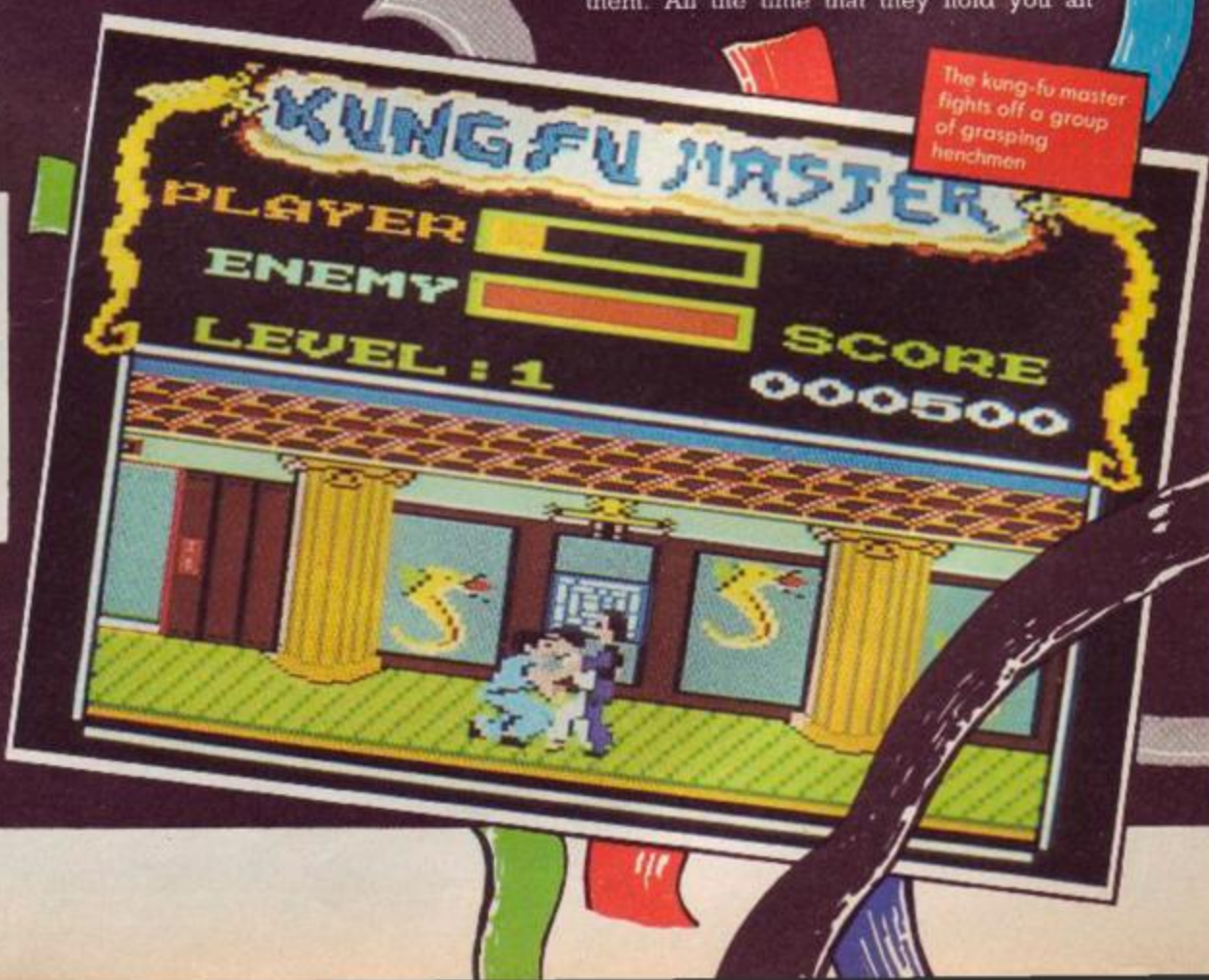
AW

You enter each of the five levels from an incongruously hi-tech lift taking you into a scrolling corridor. You have to make your way along to another lift which takes you up to the next floor. Needless to say, all sorts of nasty things trying to stop you, some of which can be dispatched with punches and kicks while others can only be avoided.

On level one the opposition is fairly

straightforward, consisting of 'henchmen' and a guardian at the second lift. The henchmen run towards your white clad

character and try to grab you. They can be punched or kicked out of the way, but once they've got you in their evil embrace you have to waggle the joystick to get rid of them. All the time that they hold you an



be jumped. There are also Commandants who behave like simple soldiers - but when killed provide you with an extra weapon.

On the first stage this is a flame thrower, which is best saved for the end of the stage since it only fires three times. The only other way to kill soldiers is at close quarters with a knife - which takes good timing on the fire button. You can avoid the enemy either by climbing ladders or by jumping, but this is even more hazardous. Sometimes you may end up with three men chasing you, but this isn't necessarily a bad thing because riflemen won't shoot you if you're close enough. They move at the same speed as you and, because only three soldiers are allowed on screen at once, it reduces the chance of unpleasant surprises.

SECOND OPINION

If you only buy one gung-ho game, make it this one. It's got real two-fisted arcade action that you just can't tear yourself away from. Great graphics, tough timing and a load of nice touches all add to the addictiveness, and the weapons give the gameplay a tactical angle too. Green, gruesome, great stuff!

AW

Other hazards include mines, which have to be jumped over, and mortars. On later stages your weaponry changes as

well, with Commandants providing grenades and rocket launchers instead of the flame thrower. You'll love the graphic effect of the flame thrower - very bloodthirsty.

The gameplay is extremely tough with enemy forces constantly coming at you - but it's also very addictive as you struggle to get a bit further through the game and to outwit the enemy soldiers. Despite the jerky scrolling the graphics are good, particularly when you use the flame thrower, and the sound accompanies the action with a compulsive rhythm. You do get into 'impossible' situations where death is inevitable, and this is frustrating, but not often enough to spoil the addictiveness. Mindless and violent, but great fun to play.

BW

GOOD NEWS

- ▶ Four very difficult stages.
- ▶ Compulsive, addictive gameplay.
- ▶ Well drawn and varied graphic backgrounds.
- ▶ Variety of features that need good reactions and tactics.
- ▶ Sound accompanies the action well.

BAD NEWS

- ▶ Scrolling is jerky.
- ▶ Mindless, violent games may not be your cup of blood.

energy gauge is running down, and if it runs out you are returned to the lift to try all over again.

If you get to the second lift you are confronted by the guardian, who you have to hit until his energy gauge reaches zero, allowing you to pass into the lift. These guys are pretty tough and you'll need most, if not all, of your energy to deal with them.

On the second level things are much tougher because there are a whole host of new enemies. First of all come jars, balls and globes that fall from the ceiling. The jars and balls change into snakes and fire-breathing dragons when they hit the floor, while the globes pulsate and then explode into instantly lethal fragments. The snakes scurry along the floor and have to be jumped, while the dragons can be killed for a big bonus, but have nasty fire to threaten you with.

If you can get past them you're faced with more henchmen, plus knife throwers and dwarfs. These appear in large numbers and in extremely difficult combinations that make life very tough indeed. The dwarfs can be done in with squat kicks, or jumped over, while the

knife thrower

has to be hit twice. His knives can be ducked or jumped but sap a lot of energy if they hit you. It's very tough to pass this lot because they clamber all over you, and even if you do there's a nasty guardian for whom you'll need plenty of energy.

The gameplay is frustrating not just because it's difficult but also because it involves a lot of luck and 'impossible' situations. There are ways of dealing with everything, but I think many people just won't receive enough encouragement to keep plugging away. The variety of opponents provides plenty to do if you do get stuck in, and with enough practice it is possible to overcome the odds. The graphics are okay, although the scrolling window in which the action takes place is only half the screen size. The sound effects are reasonable but there isn't any music. Certainly a challenge but the repetitive and daunting action may be too much for some.

BW

GOOD NEWS

- ▶ Five very tough levels to complete.
- ▶ Variety of enemies to battle.
- ▶ Colourful graphics and decent scrolling.
- ▶ Different types of punch and kick moves.

GREEN SCREEN VIEW

Everything's visible, but the flamethrower effect loses a lot. That beret looks just fine though.

AW

GRAPHICS	81%	
SONICS	70%	
GRAB FACTOR	85%	
STAYING POWER	84%	
A A RATING	83%	



Beret vs black belt

On the surface *Green Beret* and *Kung Fu Master* have very similar gameplay, but one is highly addictive and gets a RAVE while the other is more frustrating and doesn't. The main difference between the two lies in the difficulty level which has been 'tweaked' just right for *GB* but not for *KFM*.

Both games feature the same timing problem when knifing or kicking an opponent at close quarters, but on *GB* you just die and restart, whereas on *KFM* there is the frustration of having to waggle the joystick to get free. On *KFM* you don't have flame throwers or rocket launchers to spice things up.

KFM doesn't use the screen to fit in as much action either as it uses a smaller window, while *GB* allows you to climb ladders, jump gaps and fall down. But the main problem on *KFM* is simply the sheer weight of the opposition and their random behaviour, which make it horribly difficult to progress and a little dependant on luck. *GB* requires more skill against a tough opposition that keeps you coming back for more.

BAD NEWS

- ▶ Difficult and frustrating by the second level.
- ▶ Fighting doesn't have as much variety as the opponents.

GREEN SCREEN VIEW

You can see everything, but it's all a lot less gaudy.

AW

GRAPHICS	72%	
SONICS	47%	
GRAB FACTOR	68%	
STAYING POWER	77%	
A A RATING	72%	

GRAHAM GOOCH'S TEST CRICKET

Audiogenic, £9.95 cass, £14.95 disc, joystick only

This review is being written just after England managed to get all out for 102 in the second test against India. If things are still that bad (or worse) then this game will come as a great relief to anyone who's convinced they can pick a better team and play better. Initially the game is set up for play between England and Australia, but more even contests like England versus Japan or Greenland can be arranged.

There are two squads of 20 players who can be altered to any you choose and saved for later use. The batting and bowling average as well as bowling speed is entered for each man and will be reflected by his performance in a match. There are four types of match that can be played, three one day games over 40, 55 or 60 overs, and a full test match. These can be played by one or two players, and in 'simulation' or 'arcade' modes.

SECOND OPINION

Not much here in the way of gameplay, but the graphics are really very nice. Don't bother with the arcade option - just sit back and watch. Very relaxing.

AW

Having made all those choices, picked your eleven players, allocated a skill level in arcade mode, picked a wicket-keeper and slip fielder, and tossed the coin for who bats first - you can get on with the game itself. The nature of the game depends very much on whether you pick arcade or simulation mode.

The screen views are exactly the same in either mode: the bowler coming up from the bottom of the screen to bowl at the batsman at the top, and outfield screens appearing whenever the ball is hit on the offside or legside. In simulation mode you merely decide whether the batsman plays aggressively, normally or defensively, and whether you have an off or leg side attack when bowling.

Arcade mode has a lot more action with you having to time each batting stroke and waggle the joystick for bowling to get the bowler to give maximum effort. These two modes should suit most players because you can either just sit and watch the effect of your choices or really get involved in the thick of things.

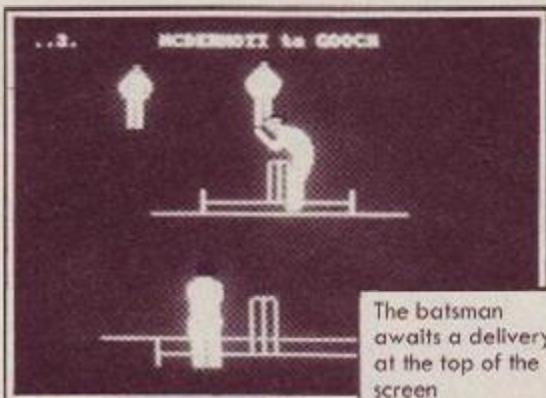
The animation for the main and outfield screens is good, but you can't actually do anything on the outfield ones. The number of options means you can tailor the game to suit yourself and provide a challenging game at whatever your skill level. Cricket fans should love it but others may find the lack of variety in the gameplay rather boring. That's cricket for you.

BW

GREEN SCREEN VIEW

Looks fine - but then it would, wouldn't it.

AW



The batsman awaits a delivery at the top of the screen

G O O D N E W S

- ▶ Choose your own teams.
- ▶ Simulation and arcade modes available.
- ▶ Plenty of options to suit the player.
- ▶ Nice graphics for the playing screens.

B A D N E W S

- ▶ Gameplay is very repetitive with little skill involved.
- ▶ Probably only of interest to cricket fans.

GRAPHICS	61%	
SONICS	25%	
GRAB FACTOR	72%	
STAYING POWER	68%	
A A RATING	70%	

WORLD CUP CARNIVAL

US Gold, £9.95 cass, £14.95 disc, joystick or keys

Firstly we must apologise for the fact that this review appears after the World Cup finals are dead and gone and too late to warn many of you of the extraordinary furore surrounding this game. This is because we didn't receive our production review copy until after last issue's deadlines. Not being a cynical person, I'm sure it's purely accidental that US Gold didn't manage to put out early review copies - it wasn't the fact that nobody wanted us to tell you the truth about this product.

SECOND OPINION

A real professional foul by US Gold. I mean, I feel completely outraged by their behaviour and I didn't even buy the miserable game. Maradona is Mr Honest in comparison.

AW

The truth is that it is little more than a re-issue of Artic's ageing *World Cup* game, very slightly enhanced, but packaged lavishly to make it sell. It comes with posters, a badge and a special competition. The only problem is that the competition is already over, most of the packaging is now useless, the original game cost only £7.95 a year ago and is available at knock down prices today. And it was never much good in the first place.

The game itself allows up to eight players to play in a knockout competition

either against each other or the computer. This takes place on a horizontally scrolling pitch where you control the player nearest the ball. The scrolling and player animation is jerky while the gameplay lacks depth with little possibility for passing manoeuvres or skill. The 'enhancements' are three practice screens that load separately. They are for ball control, penalty taking and penalty saving. They aren't very well done graphically, are very short on gameplay and have absolutely nothing to do with the main game at all.

My advice is this: if you've got *World Cup* from Artic don't buy this game. If you haven't got it and really want it then try to find the original being sold off cheap, and if you can't do that then buy *Match Day* instead because it's a better game. The most annoying thing about the whole episode is that US Gold didn't make clear to the public that this was an 'enhanced' version of Artic's game, and that's unforgivable. Our ratings are from the point of view of someone who already owns *World Cup*.

BW

G O O D N E W S

- ▶ As a two player game it has some merit. But only if you don't have the original.
- ▶ After the violent response to this game I shouldn't think anyone will make this sort of mistake again.

EYE SPY

Americana, £1.99 cass, joystick or keys

Americana is the new budget label of US Gold but is rather inaptly named in this case because the game was written by English Software. It's similar in many ways to *Thing on a Spring* but has a sting in its tail where you have to solve a riddle to complete the game.

The main character is a bug eyed being (surely the most unlikely looking detective) who is given the task of finding which of seven men is a murderer. To find the guilty man he first has to gather eight clues from a complex of rooms. These are joined by corridors and shafts which Eye Spy navigates in a shuffling walk or by jumping over steps and obstacles. The rooms take the form of platform screens which ES has to get around to collect the safes that hold clues.

SECOND OPINION

Great music, fun gameplay, but the graphics are unwatchable. 'Flickery' is putting it mildly - some screens judder so much you can hardly look at them. Shame, 'cos it's a nice game otherwise.

AW

Not all the safes contain a clue and the ones that do change for each game, so most of them will usually have to be visited. Guarding the safes are various monsters in each room which sap ES's energy when they touch him. They move in patterns and can therefore be avoided with a little practice. However one room allows you to replenish energy and the time limit that runs

B A D N E W S

- ▶ Basically a direct copy of Artic's *World Cup*, a fact which isn't made clear on the packaging.
- ▶ The enhancements are very weak indeed.
- ▶ The scrolling is jerky and the animation poor.
- ▶ The gameplay is frustrating and repetitive.
- ▶ The presentation was only of interest before the *World Cup*.
- ▶ The game costs £2 more now than it did a year ago. A shameful ripoff.

GREEN SCREEN VIEW

I can only see red over this one.

AW



It isn't just hooligans that give football a bad name

GRAPHICS	48%	
SONICS	26%	
GRAB FACTOR	5%	
STAYING POWER	5%	
A A RATING	0%	

SNODGITS

Sparklers, £1.99 cass, joystick or keys

It's a little unfortunate that the instructions for the game are much more complicated than they need be and will probably confuse you no end before playing. Once you have played the game you'll realise how simple in fact it is.

SECOND OPINION

The graphics really take chunkiness too far and the colour scheme's revolting, but the gameplay is certainly original and entertaining. Ugly, but fun.

AW

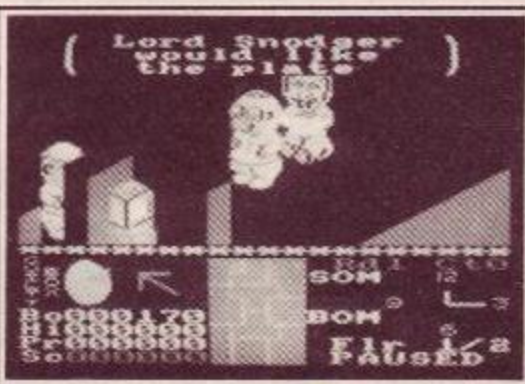
It takes place in one of five different mansions recorded separately on the tape. These all start off with two floors and a number of rooms shown on screen in very big 3D graphics. It's often difficult to tell exactly what's going on and to control your character Benton the butler accurately but

this isn't much of a drawback.

As the butler you have two tasks: to serve the Snodger family who live there, and to discover the culprits who have been stealing things from the house. A member of the family will ask for an object which you have to find and take to them. When you do this you get a chance to solve a clue and identify a thief. Catching a snodgit will give you another crack at it if you got it wrong.

Once three thieves have been caught you move into a bigger mansion in which to solve the crimes. The graphics are certainly big and bright, but don't really look very good. The game is quite intriguing to start with but once you've worked out what you're supposed to be doing there are a number of lingering frustrations that cause problems.

BW



GREEN SCREEN VIEW

A considerable improvement, as far as I'm concerned.

AW

down. There are also a couple of instantly-deadly rooms from which there is no escape if you get caught by fire or water.

When all the clues are obtained you can get a riddle, the answer to which reveals the murderer's identity, leaving you to return to the courtroom to complete the game. It won't take long to explore all the rooms but some of them are quite difficult and will keep you going for a while. The graphics are very flickery but the boogie-woogie music ('Johnny be Good') is excellent and plays throughout the game. May not take too long to crack but the murderer and riddle change each time so it's a lot of fun for only a little money.

BW

GREEN SCREEN VIEW

None of those garish colours, but the flicker's still just as bad.

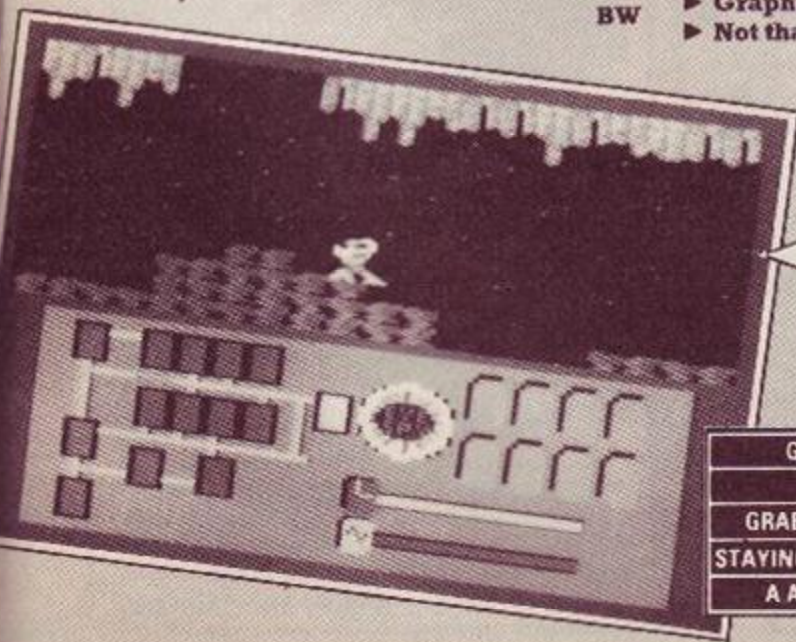
AW

G O O D N E W S

- ▶ Excellent boogie-woogie music.
- ▶ Very easy to control and cute main character.
- ▶ Some tough screens on which to get safes.
- ▶ A tricky riddle at the end of things.

B A D N E W S

- ▶ Graphics are very flickery.
- ▶ Not that many screens.



Bug-eyed spy with the game map at bottom left and the clues just above the energy and time gauges

GRAPHICS	41%	
SONICS	80%	
GRAB FACTOR	78%	
STAYING POWER	67%	
A A RATING	76%	

G O O D N E W S

- ▶ Different houses that get bigger for new games.
- ▶ An intriguingly different game task.
- ▶ Variety of arcade action and puzzling.

B A D N E W S

- ▶ Unnecessarily confusing instructions.
- ▶ The game could be simplified slightly to its own advantage.
- ▶ Graphics don't help the gameplay.

GRAPHICS	42%	
SONICS	48%	
GRAB FACTOR	54%	
STAYING POWER	52%	
A A RATING	56%	

BUSTER BLOCK

Kuma, £6.95 cass, joystick or keys

Remember an old arcade game called *Pengo* where you had to push blocks of ice around to kill creatures. Well this is a derivative that has far more complexity to it and a whacking 400 rooms to explore. The rooms are arranged as a large maze which you have to explore and complete 25 levels of.

Each room is constructed much like a screen from *Pacman* with corridors made up of blocks and inhabited by various

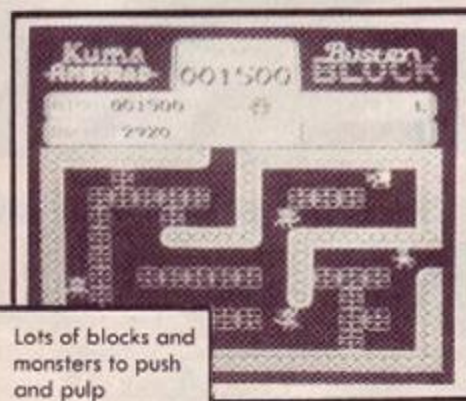
monsters. There are exits from each screen that lead to another and when you find the right one it will take you through to another level of the game. However there are plenty of obstacles to overcome on the way because most screens are very cluttered.

SECOND OPINION

A really fun game, with a surprising amount of depth to it. The graphics may be weak, but the different kinds of block and monster make for good compulsive gameplay.

AW

There are 16 types of block and 8 types of monster that appear in different sections. The blocks vary in their behaviour, which you'll need to recognise to survive long. Most of them can be pushed by your little bird-like character but behave differently afterwards. They travel at different speeds, bounce, crumble on impact with something, and keep moving round corners. There's even a block that will teleport you to another part of the game.



Lots of blocks and monsters to push and pulp

The monsters also have different characteristics of speed and movement, and some can push blocks which you can't. All of them can be flattened by a well timed push of a block but if you run into them it costs energy. Energy also slips away with time or by running into a block coming towards you but is replenished at the end of each level.

The graphics are adequate with each level having a different colourful surround and the sound effects are in a similar and pleasing vein to the author's previous game *Fruity Frank*. It's not as addictive as its predecessor but there's certainly a lot of screens to get round and things to deal with. Fairly mindless but fun to race around for a while.

BW

GREEN SCREEN VIEW

Perfectly playable.

AW

G O O D N E W S

- ▶ 400 screens to get through.
- ▶ Plenty of variety in the blocks and monsters.
- ▶ Most screens are packed with action.
- ▶ Quite addictive and mindless gameplay.

B A D N E W S

- ▶ Screens become rather samey after a while.
- ▶ Not clear when or why one level ends and another begins.

GRAPHICS	49%	
SONICS	59%	
GRAB FACTOR	64%	
STAYING POWER	62%	
A A RATING	62%	

CONTAMINATION

PSS/ERE, £9.95 cass, £14.95 disc, joystick or keys

Interesting scenario, this. Set in the future, the world is being swept by disease epidemics. You are in charge of eliminating the threat to mankind by controlling the contamination and developing anti-viruses.

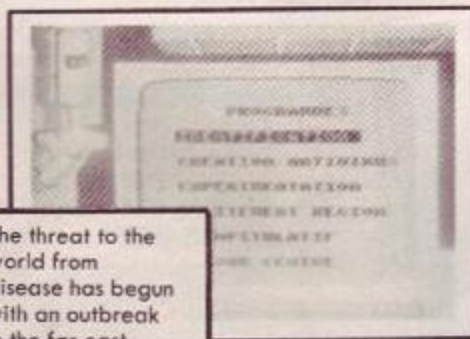
The action occurs in two basic settings, a map of the world where you can examine the situation and decide on a course of action, and a laboratory where you can work on developing anti-viruses to deal with epidemics. The game begins with a single outbreak of disease somewhere in the world, but from there on you'll be fighting a battle against ever increasing odds.

SECOND OPINION

Ten out of ten for originality, but minus several million for gameplay. Aside from the standard 'assemble things in the correct order' puzzles, you just have to do the same things over and over again. Mechanical and boring.

AW

There are several ways of dealing with the initial outbreaks to try to buy time in which to develop the anti-virus. The two most suitable are a sanitised cordon or a 'terre brulee' (scorched earth policy) which will restrict the disease for a short time. Neither are popular with the local people but they're preferable to using the nuclear bomb option, which certainly wipes out the disease but takes the people and your job with it.



The threat to the world from disease has begun with an outbreak in the far east

Once you've got an area temporarily under control you can take a sample back to the laboratory to work on it. You're presented with a view of the computer in the lab with a menu of six options on it. The

BATMAN

Ocean, £14.95 disc, PCW 8256/8512

It's hard to believe I know but this classic game has been converted for the PCW machines. It's the first real arcade game to make the transition but others look set to follow the same path, and they'll have a lot to live up to.

The game is exactly the same as on the CPC machines, but naturally there are two big features about the machine that affect play. The first is the current lack of a joystick interface, although this may soon be remedied, and the second is that it has to be played on a green screen. Fortunately neither of these should detract much from the game because the fantastic puzzles and addictive action are still there. It's a

SECOND OPINION

Amazing stuff - one of Arnold's greatest games, now showing on a Joyce near you. Hear that sound, look at those graphics, marvel at the achievement.

AW

shame to miss all those lovely colours but the screen design is still very attractive.

For those of you who don't already know about the game it's a 150 screen arcade adventure in 'isometric' 3D. It stars just one of the dynamic duo as he searches the bat cave for four pieces of equipment and the seven parts of the batmobile. A full review appeared in our May issue (No.8) and suffice it to say the game has lost none of its appeal. Please note that the ratings we've given here reflect on the capabilities

first one you'll need to use is the one that identifies the virus. This shows the elements in the virus (a chain of symbols), its virulence, whether an anti-virus exists and allows you to name it.

The battle against the epidemics is very much an uphill one, which to start with is very intriguing because of its original concept. However as you start being overwhelmed by disease and the map goes black with epidemic symbols the process of analysing and creating becomes repetitive and wearing, depressing even. There's a tough challenge there, but the game needs more variety.

BW

GREEN SCREEN VIEW

Readable, playable and pretty forgettable.

AW

G O O D N E W S

- ▶ Highly original game concept.
- ▶ Creating and testing anti-viruses is absorbing.
- ▶ A tough one to do well at.

B A D N E W S

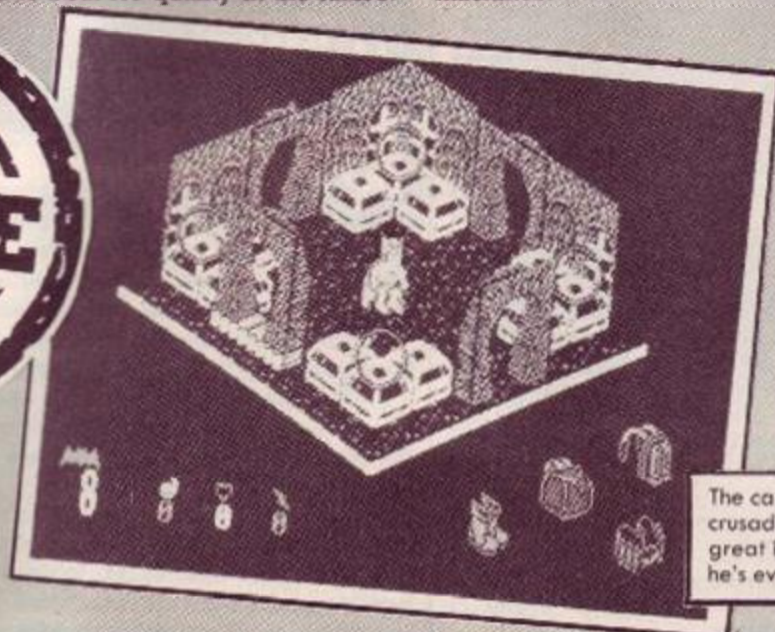
- ▶ Quickly becomes repetitive coping with epidemics in the same fashion.
- ▶ There's little reward when you do get

of the PCW's and therefore the sound rating is more for effort than quality and the lack of colour graphics does not detract from the rating.

This may be the first arcade game for the PCW machines but it's certainly going to be hard to beat for quality in the future.

Indeed PCW owners will have to be careful that they don't get too hooked and forget what the machine was originally intended for. Far from being the 'business-only' machine in Amstrad's range the PCW's could join the CPC range as being 'family' machines.

BW



The caped crusader is as great in green as he's ever been

GOOD NEWS

- ▶ Over 150 locations.
- ▶ Beautifully designed screens with lots of variety.
- ▶ Really wicked puzzles to solve.
- ▶ Nice touches of humour.
- ▶ The first arcade game for the PCW's.

BAD NEWS

- ▶ It's a real shame it's only in green.

GRAPHICS	94%	
SONICS	73%	
GRAB FACTOR	92%	
STAYING POWER	95%	
A A RATING	94%	

things right.

- ▶ Lacks variety and depth to the action

GRAPHICS	48%	
SONICS	38%	
GRAB FACTOR	67%	
STAYING POWER	58%	
A A RATING	63%	

MELTDOWN

Alligata, £8.95 cass, £14.95 disc for 6128, joystick or keys

A game about a nuclear plant approaching a meltdown is rather badly timed in the wake of the Chernobyl disaster - a little too close for comfort. However that's just unlucky (or perhaps lucky?) timing for Alligata, who have tried to do something different by having a special disc version of the game for the 6128 that sports digitised speech.

Your job is to stop the reactor melting down by getting through the three levels of the plant. Each level is composed of 64 rooms in which you have to find six computer terminals and play simple, but frustrating, 'mini-games' to achieve code words that take you to the next level. Between levels 1 and 2, 2 and 3, and at the

end of 3 are further intermediate games.

The 64 rooms on each level are shown in 'isometric' 3D and are connected by sliding doors that open automatically when your character walks into them. Most rooms are full of hi-tech machines and furniture, but they don't look as good as the rooms in *Get Dexter*. The character you control walks by sliding his feet unnaturally along the floor and jumps by performing a very strangely animated somersault.

SECOND OPINION

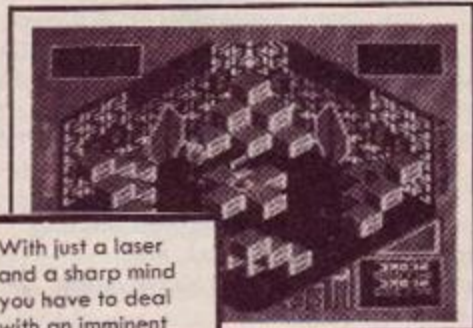
The main game is graphically very disappointing and the sub-games are just appalling. The only thing that keeps you going is the incredible frustration of losing passwords, landing on robots' heads and the like. Do you really need this kind of aggravation?

AW

In many rooms there are defence systems that have to be dealt with or avoided: white suited men who will fire streams of bullets at you, hovering spaceships that do the same and mobile dustbins. They can be shot with your laser but are capable of reducing your shield to nothing themselves.

Should you succeed in finding all your codes you can take a lift to the first inter-

mediate game called 'The President's Brain is Missing', where you collect bits of the brain from platform screens to allow access to the next level. When you look at the package as a whole it's got some impressive qualifications: 192 rooms, 18 mini



With just a laser and a sharp mind you have to deal with an imminent meltdown

games, 3 intermediate games, good speech (6128 only), reasonable multi-colour graphics and many other puzzles within the game itself. Yet with all this it's still hard to work up much enthusiasm. The problem lies in the gameplay: the man is awkward to control at times, death can come far too easily and ruin much hard work, and mini games can be frustrating and obscure. Most importantly of all is the fact that it may look an impressive package but when each part of it is examined separately they look very ordinary indeed.

BW

GREEN SCREEN VIEW

Some of the sub-games are unplayable in green. But then some of them are unplayable in colour!

AW

GOOD NEWS

- ▶ 192 rooms on three levels.
- ▶ The intermediate games are a nice addition.
- ▶ Good speech for the 6128 version.
- ▶ Plenty of depth and things to do.

BAD NEWS

- ▶ To get to many of its features you'll have to play for hours/days.
- ▶ Frustrating and difficult to start with.
- ▶ A good package but the individual elements lack polish.

GRAPHICS	60%	
SONICS	64%	
GRAB FACTOR	69%	
STAYING POWER	65%	
A A RATING	67%	

BLADERUNNER

CRL, £8.95 cass, joystick or keys

The film of the same name became something of a cult, but the game has come too late to benefit much from that. It puts you in Harrison Ford's role of the bounty hunter trying to 'retire' 24 replidroids from a maze of city streets.

The game is composed of two basic sections: an overhead view of the maze of city streets where you locate the replidroids, and a close up street scene where you try to retire them by shooting them. On the map you just have to move your cursor through the streets and place it over a replidroid. This reveals what type it is, one being the easiest and six the toughest to deal with. Pressing fire will take you to the second section.

SECOND OPINION

The music's great, but then it has to be. The gameplay's mindless and the graphics are pretty weak, so the soundtrack's just about all the game has going for it.

AW

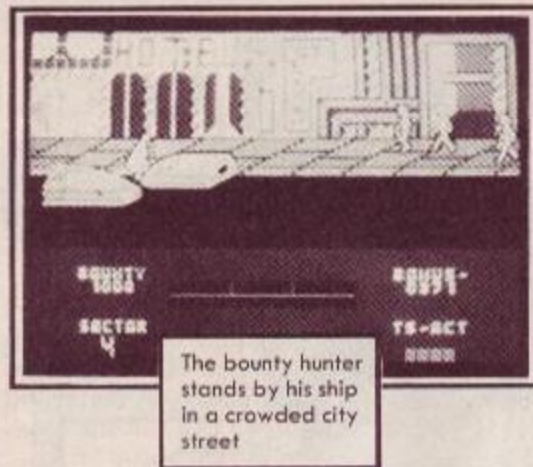
Here you see a ship descend on the left of the screen and man wearing a long mac appears. The view is a side on one of a street with a roadway in the foreground and a pavement above it and shopfronts above that. You can run left to right along the street which scrolls to keep you on the left of the screen. A scanner shows the droid ahead of you and you should eventually catch him so that he appears ahead of you, also running.

Coming in the other direction are pedestrians and cars, these knock you down if run into but one only loses you time while the other is fatal. The bounty hunter can be

moved up and down the street as he runs and when level with the droid can shoot him. However the droid may shoot back depending on its type and you risk hitting bystanders instead.

The scrolling is nicely done and combined with the excellent soundtrack make quite compulsive action. The only problem is that it's all rather repetitive and simple. Fun for a while but probably won't keep you hooked for long.

BW



G O O D N E W S

- ▶ Excellent soundtrack plays throughout the game.
- ▶ Nice street scrolling (even though its quite jerky) and animation.
- ▶ Higher stage droids are quite tough.

B A D N E W S

- ▶ Action is repetitive and simple.
- ▶ The map screens are pointless.

GRAPHICS	64%	
SONICS	81%	
GRAB FACTOR	63%	
STAYING POWER	58%	
A A RATING	60%	

TOBRUK 1942

PSS, £9.95 cass, £14.95 disc, joystick or keys

The masters of Amstrad wargaming are on the offensive again, this time with a recreation of the battle in North Africa in 1942. It takes the same form as their previous wargames in that it includes optional arcade sequences for those that prefer them to straightforward strategy.

The map on which the battle takes place is only one screen in size and shows the axis and allied units, allied occupied cities, minefields and terrain. In a one player game you control the axis forces, while in a two player game each player controls one of the sides. Incidentally, the program can be run using two Amstrads linked via the joystick ports using a special cable which PSS can supply - this means you can't see what your opponent is up to!

Each day of the conflict is split into two

BATTLEFIELD GERMANY

Cybercom Enterprises, £8.95 cass, £13.95 disc.

Dedicated wargamers have had a fairly lean time on the Amstrad, with few good titles available except the PSS programs that make compromises to arcade games in order to attract a wider market. However this simulation of a NATO-Warsaw Pact conflict in Europe is likely to appeal to out and out strategists and people looking for a little more complexity than in the PSS games.

SECOND OPINION

All too often, computer wargames are poorly implemented and weak on strategy. This game is neither - it's well presented, has real depth and can really get quite addictive.

AW

The battle takes place on a map of Europe split up into hexagons and stretching from the east of France to the west of Poland. The Nato and Pact forces initially face each other across the East-West German border where the fighting begins. The screen can only show part of the whole map at once, but a miniaturised one in the top right of the screen shows the general distribution of forces.

The player can control either the Nato or Pact forces against the computer or another player, but a nuclear option is only available in the two player game. Each player has three phases to a turn: supply phase - to units within supply lines, nuclear

phase - where dangerous escalation can take place, and action phase - where units are moved and conventional attacks take place.

Units have a number of factors affecting their ability including supply level, combat strength, efficiency and fatigue. These need to be studied before attacking. Air support is also available but you need to allocate it carefully. The terrain affects movement and combat as well so that a lot of skill, organisation and strategic sense is needed to do well.

The game takes place over 6 or 12 turns and takes a fair while to complete but can be saved. Victory is achieved through capturing enemy cities and towns to get victory points. The computer plays a good game as either Nato or Pact but as ever a human opponent will provide more surprises and unpredictability. An excellent game for those who want some depth, strategy and tactics in a game.

Please note that currently the game is only available direct from the author at Cybercom Enterprises, 16 Egdon Drive, Merley, Wimborne, Dorset BH21 1TY. Let's hope a distribution deal is soon tied up as it's a good product.

BW



Central Europe is faced with the clash of the titans

so that units can move and attack twice during the 24 hours. After that they can be resupplied and extra commands given. Each unit has ratings for infantry, artillery, armoured fighting vehicles, supply and mobility. These show its fighting power and distance it can travel. Units can be resupplied with infantry, AFV's and supply when they are within supply lines but these usually aren't given in abundance.

SECOND OPINION

Quite a nice little wargame. I can't help feeling that those arcade sequences are a bit out of place, but then they are optional.

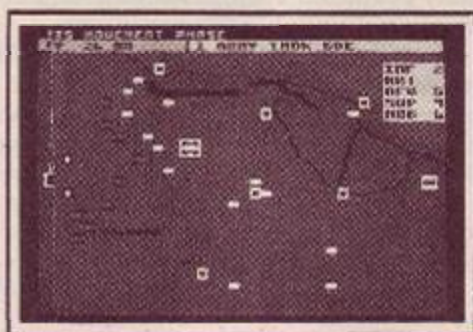
AW

A unit can attack any adjacent enemy unit and once it does you can choose to take part in the arcade screen. The arcade sequence consists of driving a tank to destroy enemy machine guns, tanks and oases bases. You control the turret gun, machine gun and driving but also come under attack from the enemy forces. Your performance determines how well all the battles go.

This is very much in the mould of PSS's previous wargames and has similar attraction. The combination of strategy and arcade sequences works well, but leaves it short on depth for true strategists. The presentation is up to their high standards and the graphics and sound also round the

game off nicely. You may find it a little too similar to their previous war games but with the new setting and good arcade sequence it's still good value.

BW



G O O D N E W S

- ▶ Good mix of arcade game and wargame.
- ▶ The arcade sequence is well done.
- ▶ The game can be played on two connected Amstrads for full two player effect.
- ▶ Intelligent computer opponent.

B A D N E W S

- ▶ Not quite enough depth in the strategy.
- ▶ Can't play the allied side against the computer.

GREEN SCREEN VIEW

No problems at all with this one - it's got a green-screen option.

AW

GRAPHICS	56%	
SONICS	55%	
GRAB FACTOR	76%	
STAYING POWER	68%	
A A RATING	71%	

V

Ocean, £8.95 cass, joystick or keys

The science fiction TV series about reptiles invading the Earth in rubber suits that make them look human and severely impair their acting ability has appeared in computer form. The game takes place on the alien mothership where Donovan, the hero of the TV series who has the smouldering, passionate intensity of a dead fish, has to plant explosive charges to destroy the ship.

SECOND OPINION

Running around and solving puny puzzles may appeal to you, but it really leaves me cold. The robots are pretty harmless and those nasty hamster-eating lizards don't even make an appearance. Very dull.

AW

The ship is composed of five 'planes', each one being split into 25 levels, and each level is split into sectors. On each plane there is a vital location, such as a nuclear reactor or computer, where Donovan has to plant a bomb. There are also laboratories where he can collect parts of the 'red dust' formula, which kills the

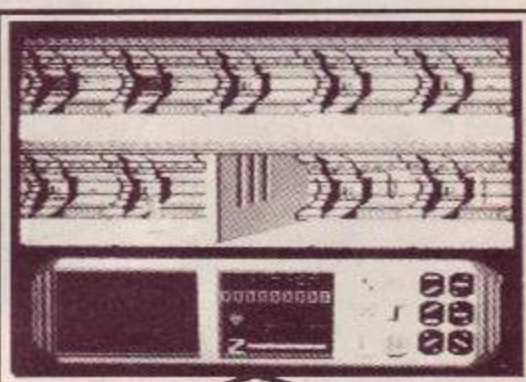
aliens.

Donovan moves around the ship by running along seemingly endless, uniform corridors, and by using beamer pads to move between floors. Everywhere there are alien robots of three varieties that try to stop Donovan. Surveillance robots report his position to the central computer, while maintenance and security robots are more dangerous because they can be run into. This gives Donovan an electric shock, too many of which and his heart will fail. However the robots can be shot or jumped over.

A 'communiputer' can be used to overcome many of the problems. It will give information on the location of the various rooms, allow the planting of explosives, store the red dust formula and break the codes on security doors.

The ship graphics are nicely done but the robots lack variety and Donovan is disappointingly animated when he jumps. The gameplay is unimpressive, just consisting of a lot of running around with a very occasional pause to do something. The game really needs more puzzles and adventure elements to get you hooked.

BW



Go take a running jump in the mothership's corridors

GREEN SCREEN VIEW

Everything's visible, but still no lizards I'm afraid.

AW

G O O D N E W S

- ▶ A tough exploration task in a large ship.
- ▶ Interesting use of 'lizardise' language on communiputer.

B A D N E W S

- ▶ Very repetitive action just running around the ship.
- ▶ Not much variety or polish to the graphics and animation.
- ▶ Very little to do with the TV series.
- ▶ Not very rewarding even when you do get something right.

GRAPHICS	51%	
SONICS	27%	
GRAB FACTOR	46%	
STAYING POWER	39%	
A A RATING	43%	

GREEN SCREEN VIEW

The overall map's very difficult to use without colour. I'm afraid.

AW

G O O D N E W S

- ▶ Good map layouts and use of colour.
- ▶ Always plenty of things to do and decisions to make.
- ▶ A good strategic and tactical mind is needed.
- ▶ Well thought out implementation that makes good use of the computer.

B A D N E W S

- ▶ War games never do appeal to a mass market.
- ▶ You may think the subject matter unsuitable for a game.

GRAPHICS	50%	
SONICS	22%	
GRAB FACTOR	71%	
STAYING POWER	82%	
A A RATING	78%	

SAI COMBAT

Mirrorsoft, £8.95 cass, £13.95 disc, joystick or keys

I bet you all thought you'd seen the back of combat games and badly bruised joystick hands, but creeping up on you from behind to deliver the latest deadly oriental blow is yet another one. It's a familiar story of two players viewed side on and in 2D, trying to beat the hell out of each other.

The game set up and moves are extremely reminiscent of *Way of the Exploding Fist*, the major difference being in the use of colour, animation and variety of backgrounds. The two protagonists are armed with more than just their fists, each clutching a deadly pole, and certainly aren't interested in shaking hands before or after a fight.

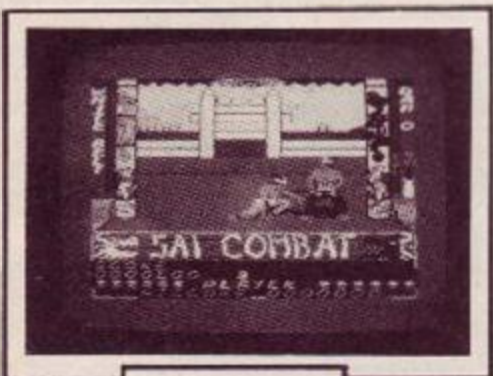
SECOND OPINION

These games are all the same - work out one set of moves, and it'll get you through practically the whole way. That's a shame because this one's well animated, colourful, and very good of its kind. Just not a very good kind.

AW

There are ten basic attacking moves using the pole and the feet and a further six moves for avoiding attacks or just getting around. The use of them is almost exactly the same as for *Fist*, so that players of that game should have no trouble settling down with this one. What is different are the number and sequence of opponents that you face.

There are 16 levels to get through, eight belts from white to black and then eight dans from one to eight. On each level you have to knock down three opponents before moving onto the next level where the fighters are more skilled. You start each game with six lives, but after achieving a certain standard you can restart at that point with only three lives.



The bow-legged, pole-fisted, body-busting fighters

During the fights a hit is indicated with a noise and a graphic symbol, each strike reducing the fighter's energy. This is indicated by the colouring on a dragon's head and the fighter will go down when this runs out. Some moves are more effective than others - the energy level drops accordingly as does the score awarded. Fighters will also react and fall differently in response to moves but the important thing

is that they go down and not you.

There's a two player mode for those who enjoy clubbing a friend. The computer will provide stiff opposition for quite some time but like all combat games he is ultimately predictable and once you've got his pattern worked out he's a goner.

On balance it's a better game than *Fist*, but it's also a year after that daddy of combat games. The changing backgrounds, improved animation, sound and colour are all nice to have but can't disguise the almost identical gameplay to *Fist*. If you're new to combat games then take a look but otherwise forget it.

BW

GREEN SCREEN VIEW

You can see to fight, but the scenery isn't so pretty - always assuming you've got the time to admire it anyway.

AW

G O O D N E W S

- ▶ Nice animation and detail on the fighters.
- ▶ 16 levels of difficulty.
- ▶ Changing backgrounds, making a nice view.

B A D N E W S

- ▶ Very old, unoriginal gameplay.
- ▶ Only worth getting if you haven't got *Fist*, *Way of the Tiger* etc.

GRAPHICS	77%	
SONICS	52%	
GRAB FACTOR	69%	
STAYING POWER	61%	
A A RATING	64%	

DISC 50

Cascade Games, £14.95 disc

This is the disc version of Cascade's *Cassette 50*, which costs £9.95, and contains 50 different games. As you might expect they don't come up to much when looked at individually but, considering each one on the disc costs only 30 pence, that need not be too much of a drawback.

There are 25 games on each side of the disc which can be loaded from a starting menu. This is where the disc product really score over the cassette version because you don't have to fuss around trying to find a particular game, and it will load in no time at all.

Choosing which games to look at isn't easy but if you just work through them you're bound to come across a few that you'll like. Many of the names are more attractive than the games themselves, but it won't take you long to find out which ones.

Obviously we can't tell you about all 50 games but there are several that deserve note. There's a game of *Backgammon* that can be played against the computer or

another player, and a version of *Othello* called *Nemesis IV*. Both computer opponents play reasonably well but don't expect them to hold you up for long.

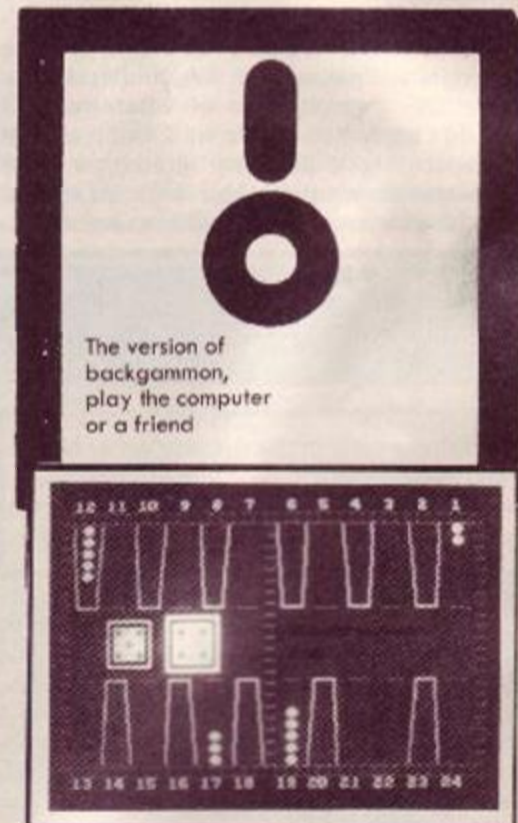
Another game worth picking out is *Dragona Maze* which is a very large maze game which you can explore. One which

SECOND OPINION

These games may sound like good value, but at 30p a time a lot of them are seriously overpriced - even the very best would only make mediocre budget titles. Rummaging through the titles in search of something playable can be a lot of fun, but don't expect to find anything amazing.

AW

caught my eye was *Trucking*, a trading game which had a nice line in hitchhikers. There are all sorts of other games from the simple arcade variety to adventure games and strategy - some are even educational.



The version of backgammon, play the computer or a friend

Some of the games are diabolical but with 50 to choose from you're bound to find some you'll like. It's only really worth buying for a new computer owner who wants to see a lot of games for little money, because you won't want to play most of the games more than once. Reasonable value but not likely to get anyone raving.

BW

G O O D N E W S

- ▶ 50 games at 30p each.
- ▶ Good games like *Backgammon*, *Othello* and *Dragona Maze*.
- ▶ Very easy loading.

B A D N E W S

- ▶ Some really diabolical games.
- ▶ Only really suitable for a computer novice.

MOLECULE MAN

Mastertronic, £1.99 cass, joystick or keys

Mastertronic's third big game of the month makes it a hat-trick for them - two raves and a Mastergame. This one's reminiscent of *Cyru* but has a very special feature allowing you to redesign the whole layout of the game. It's an 'isometric' 3D game (pause while bores the length and breadth of the country scream 'Knight Lore copy'), where a bubble headed character has to collect objects from a 256 screen maze.

The maze is a 16x16 grid of screens and hidden within it are 16 circuits that Molecule Man - that's you - has to find in order to escape in a teleporter. The twin problems you face are, that the maze is impassable in some places and has to be blown up, and that you need a continual supply of anti-radiation pills to prevent your death.

SECOND OPINION

I thought Cyru was cheap, but this is only half the price. It's not quite as pretty, I'll admit, and the gameplay isn't quite as varied either. On the other hand, the screen size is larger and the game designer is a marvellous addition. Another Mastertronic Rave, and a well-deserved one.

AW

Right from the start of the game the radiation is eating away at MM and to get those life saving pills you have to buy them from a dispenser. Coins found lying around the maze allow you to use a dispenser, but you'll need to be quick about finding them as the pills run out quite quickly.

There are also dispensers that swap a coin for a bomb and these are also essential for completing the game. They allow you to blow holes in certain sections of the maze in order to get at a trapped circuit or coin, or just to take a shortcut. The agonising decision is whether to buy a bomb and complete a bit more of the game or to buy more pills to live a little longer and explore a bit more.

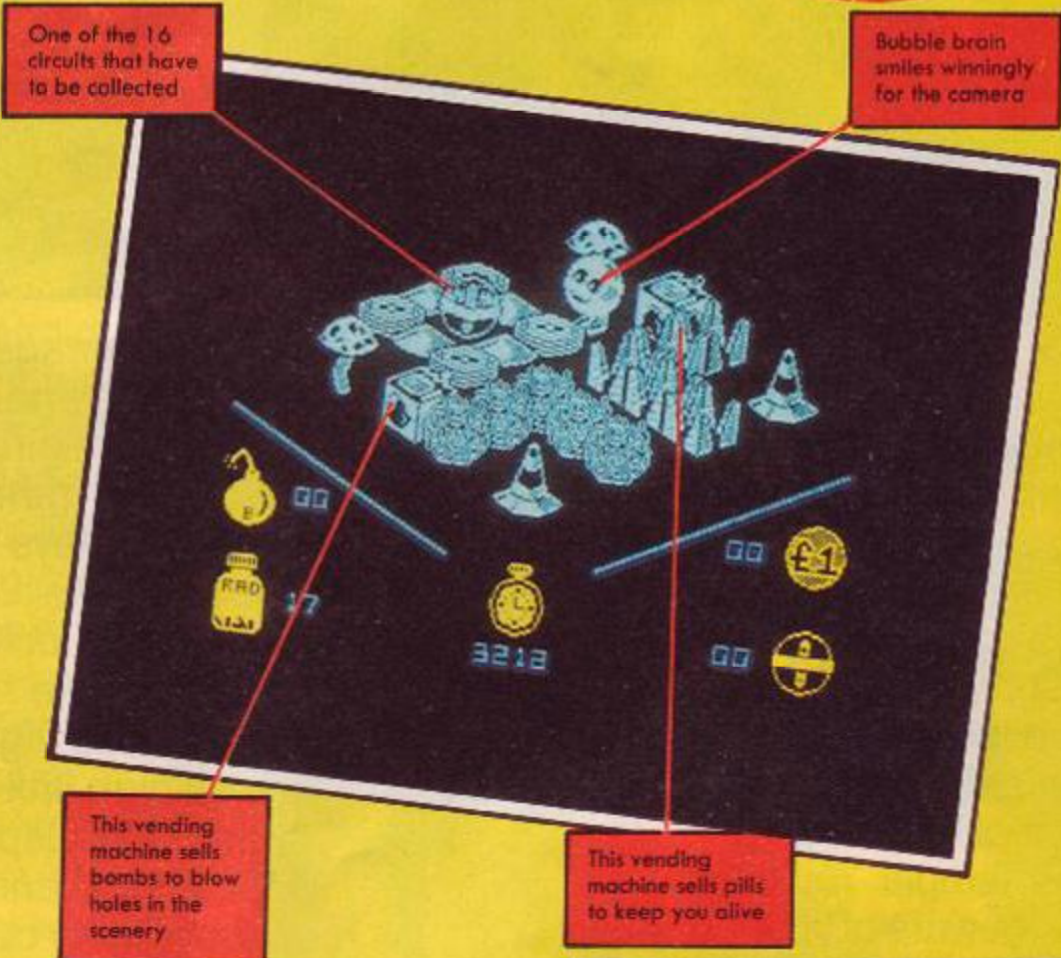
Some sections of the scenery can't be blown up, the distinction between types of scenery only being discovered by trial and error. The need for economy and speed in everything makes the game tough in its original form which needs mapping if you're going to get far. However you can find an easier way out by using the handy screen design facility that comes as a separate program on the tape.

This program allows you either to edit the existing game screens or create 256 new ones of your own. You can use any of 42 different objects in the construction, but the game will always be completed by collecting 16 circuits and getting to the transporter pad. The designer program is very easy to use and of course allows you

to save your creations. It adds that something extra that will keep you with the game for longer than usual.

The graphics are disappointing because each screen is only one colour, but the objects are quite well designed. Despite not looking that hot, the testing gameplay of the original layout and the ability to design your own screens make this a really worthwhile buy at only £1.99.

BW



One of the 16 circuits that have to be collected

Bubble brain smiles winningly for the camera

This vending machine sells bombs to blow holes in the scenery

This vending machine sells pills to keep you alive



GREEN SCREEN VIEW
Some screens can be a bit murky, but nothing serious. Otherwise, there isn't a whole lot of difference.

AW

G O O D N E W S

- ▶ 256 screens is a lot.
- ▶ The original layout is good and provides a tough game.
- ▶ Exploration and panic gameplay are addictive.
- ▶ Maze design adds a lot to the life of the game.
- ▶ The price!

B A D N E W S

- ▶ All screens are a single colour.
- ▶ Rather unoriginal game concept.

GRAPHICS	53%	<div style="width: 53%; height: 10px; background-color: red;"></div>
SONICS	58%	<div style="width: 58%; height: 10px; background-color: red;"></div>
GRAB FACTOR	73%	<div style="width: 73%; height: 10px; background-color: red;"></div>
STAYING POWER	84%	<div style="width: 84%; height: 10px; background-color: red;"></div>
A A RATING	82%	<div style="width: 82%; height: 10px; background-color: red;"></div>

LOAD-UP THE H

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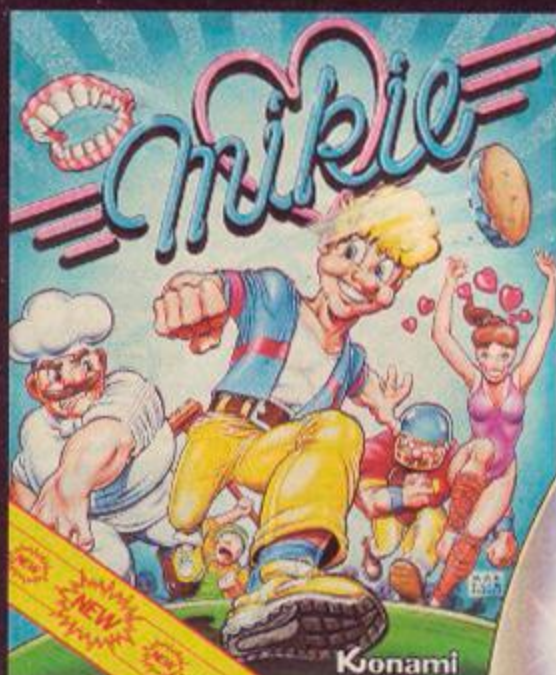
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If you think you can talk your way out of trouble, beware you may be talking your way into it. Interactive bubble speech adds a further dimension to the superb 3D graphics of this arcade style thriller adventure. Gangsters of the underworld are sizing you up for 'hit'. There is one who can help if you can find her!

SPECTRUM

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AMSTRAD



FIRE YOUR

The name of the game

Imagine Software (1984) Limited
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HOT SHOTS AND



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SPEECH! has a built-in parser which translates English words into "phonemes", or speech particles. There are 49 phonemes and 8 different pitch settings which can be used directly by the *SPEAK command (eg. *SPEAK/HEH4LOW4) so stress or intonation can easily be added wherever desired. You can change the overall pitch with the *PITCH command.

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MAX HEADROOM

Quicksilver/Argus Press, £9.95 cass, joystick or keys

TV's stuttering megastar is ideally suited to appear in a computer game - well he is computer generated after all. But he doesn't actually crop up though until the end of this one because your task as Edison Carter the TV reporter is to rescue him from the clutches of Network 23. The game is based on the original TV play, in which Max is created, and draws heavily on the scenes involving the lifts in the Network 23 building.

SECOND OPINION

Really very dull indeed. The puzzling is trivial, the graphics are weak and all the floors are the same. Why do all the great licensing deals produce lousy games?

AW

The screen is split into three areas: the sides are occupied by eight icon menus, the bottom third of the screen is an update panel and the main central part of the screen is where the action is. This is where the building, rooms and puzzles are shown as you move through the game. The first task is to get into the top 11 'executive' levels of the building by forming the letter E on a digital display. One mistake on this screen and the lift can be sent out of control to any of the 211 floors.

Once on the executive level you have to find the four codes that will get you into the president's level and then the code to the lab where Max is being kept. Each floor is accessed by the digital readout screen and once there, a number of icons can be used. Using these you can access the lifts, gain control of the doors on a floor, check the floor using security cameras, restore your energy and search rooms.

Once you've gained control of a level the offices on it can be searched for codes but you'll be constantly harassed by security robots and the even more deadly Breugel and Mahler. These sap energy if they touch or shoot you and cannot be disposed of, just avoided.

The graphics for the floors are very simple and the main stick figure does not look very impressive, but the sound effects and tunes throughout the game are very effective. The game is basically just a matter of running around searching rooms and trying to stay alive. This doesn't make for particularly thrilling action but may still present a tough challenge.

BW

GREEN SCREEN VIEW

Everything's visible - if you can keep your eyes open, that is.

AW

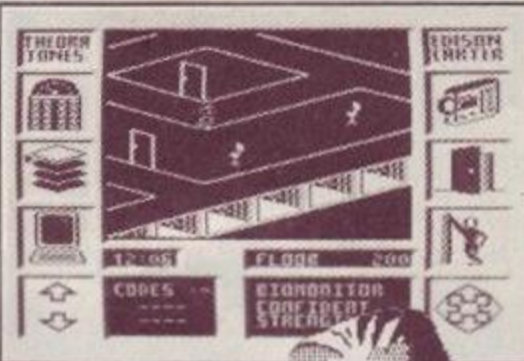
G O O D N E W S

- ▶ Good sound throughout the game.
- ▶ Nice use of icons for control.
- ▶ The action is always demanding.

B A D N E W S

- ▶ Not very impressive graphically.
- ▶ Gameplay is mostly just running around searching aimlessly.
- ▶ Max and the M-m-m-max-type speech promised on the packaging, don't appear unless you can complete the game.

GRAPHICS	43%
SONICS	72%
GRAB FACTOR	67%
STAYING POWER	59%
A A RATING	63%



Edison Carter steps out of a lift and surveys one of the floors of the Network 23 building



DOCTOR WHO AND THE MINES OF TERROR

Micro Power, £11.95 cass, keys only

The classic BBC TV program that first appeared over 23 years ago has made it onto the Amstrad after several months wait. The Doctor has to prevent the mining of heatonite on a moon, recover plans for a Time Instant Replay Unit and stop a TIRU being used.

SECOND OPINION

Graphically dismal, expensive and fairly limited in gameplay terms. Another great merchandising idea goes down the tubes.

AW

The game has plenty of background information in the scenario that may help you in the game and makes entertaining reading anyway. The game itself starts with the Doctor in the middle of a very garish cave complex, standing next to the Tardis with the 'splinx' next to him. The splinx looks just like a cat but is a handy mechanical helper, just like K9 was on TV.

The Doctor can carry objects around which he can use - one early one is a pickaxe for breaking through a rock wall. If he isn't going to use them they can be stored away in one of his pockets. The splinx can also be used to pick things up and carry them, and this can often be of

considerable advantage because it is unaffected by some things that are deadly to the Doctor.

The splinx has a list of commands like 'follow' and 'return' that will get him to the Doctor, but you've got to conserve its energy and recharge it occasionally. The only problem with the splinx is that it won't go up or down ladders or fall off platform edges so that you'll have to carry it around to some places.

The mines are inhabited by some nasty creatures which kill the Doctor on contact, using up one of his regenerations. The nastiest of these are the robot guards who get a lot of characteristics from Daleks.

The graphics leave a lot to be desired with the Doctor flickering very badly, and the cave and other graphics being very garish. The tasks the Doc has to complete can be quite complicated, especially when involving the splinx, so it will give you plenty to puzzle over and explore if you can put up with the nasty display.

BW

GREEN SCREEN VIEW

Garish no, flickery yes.

AW

G O O D N E W S

- ▶ Nice use of splinx to do jobs for you.
- ▶ Doc's tasks are quite complicated and will need some puzzling.
- ▶ Nicely presented with interesting instructions.
- ▶ Quite a large and varied playing area.

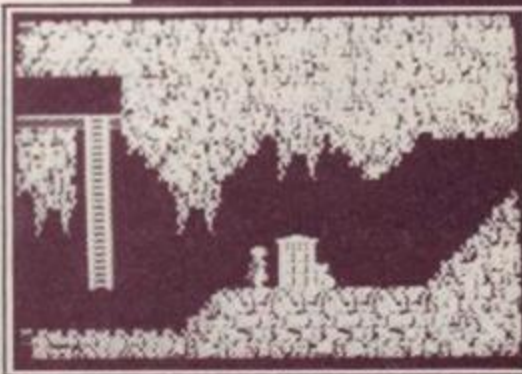
B A D N E W S

- ▶ Very flickery and garish graphics.
- ▶ May take a deal of effort and time to get far with the game.
- ▶ Overpriced.

GRAPHICS	39%
SONICS	44%
GRAB FACTOR	67%
STAYING POWER	59%
A A RATING	57%

POLICE PHONE BOX

The Doctor, his splinx, and something that looks like a police phone box.



ADVENTURE

This month the Pilg goes Spy-Trekking, courtesy of US Gold's Americana label, dies in MUD, dabbles in Murdac, and is astonished to see a finished version of Old Scores. Yes, fellow Pilgs, it's been all go for this issue, so grab a sandwich and settle down while the Cowled Crusader checks out the latest releases...



MONSTERS OF MURDAC

Global Software, £7.95 cass, CPC 464/664/6128

Global Software seem to have had more than their fair share of notice in this column recently, but the fact is that they are committed to releasing adventures on a regular basis and already have the Fourmost collection, *Beerhunter*, and *Old Scores* to their credit. *Murdac* was originally to be released by Amsoft but somehow it never saw the light of day. At first glance, it's not hard to see why - this is a text-only game of a rather old-fashioned nature where you trundle around underground solving puzzles and collecting valuable items.

In addition to the treasure-gathering routine, you'll also be posed a rather tricky challenge by one of the characters you meet, who seems to have mislaid his daughter. Finding her isn't *Murdac* doesn't impress much at first play, but it grew on me. The parser isn't up to much and tends to object to anything other than two-word input. What's more (horror horror) it doesn't understand EXAMINE, so object descriptions are somewhat limited. Most of the challenge in the game is therefore concerned not with finding objects but with matching the right object with the right puzzle.

After I'd been playing for a couple of hours, however, the crude parser ceased to trouble me overmuch. The game is nicely put together, the location descriptions are evocative and original, and the puzzles range satisfyingly from the easy (and therefore encouraging) to the difficult (and therefore compelling).

The only thing I'm not sure about is value for money - it costs the same as *Old Scores* - reviewed below and definitely a game in a different class altogether. I certainly enjoyed my struggle with the *Monsters of Murdac*, but I didn't finish the game and am unsure how many secrets there were still to be uncovered - Global didn't know either. So there is just the teensiest question mark here - the Pilg is inclined to think that £7.95 is a bit on the steep side these days for a traditional treasure-collecting romp like this one.

OLD SCORES

Global Software, £7.95 cass, CPC 464/664/6128

This game must take the prize for being the 'most previewed adventure of 1986' - at least as far as this column is concerned. When I first saw a pre-prod version I was immensely impressed



and have anxiously awaited its release ever since.

Old Scores is set on London's South Bank, home of the National Theatre, the Queen Elizabeth Hall, the National Film Theatre and other culture-vulture retreats. As an out-of-work private eye in the company of your friend Miles Archer you endeavour to solve a series of mysterious crimes involving the theft of various *objets d'art*.

The title of the game is related to one of the crimes, which involves the disappearance of an original Mozart manuscript, and the game also features some very attractive music by the aforementioned composer. If all this makes you think that the game must be ridiculously high-brow and arty then don't despair - the program also has a healthy sense of humour and beneath the veneer of culture lie the bones of an excellent adventure.

The game is very hard to map because it follows closely the layout of the real South Bank, which as any visitor will know is hideously complex, riddled with walkways, staircases, footbridges, and service roads. The action therefore takes place on several different physical levels and almost all locations present a baffling choice of exits that, while true to life, can be a bit daunting for someone intent on mapping the game.

This has an important effect on the feel of the adventure, and for a while you'll find yourself struggling to find your way around. However the Pilg began (for once) to actually ENJOY

the feeling of being lost and then, once I settled down, the sense of achievement at getting my bearings was all the greater.

The game is extremely well-presented on-screen. There is an attractive graphic representation of the nearest land-mark at the top right of the display with the its name on the left and, on the bottom half of the screen, an area for scrolling location descriptions and messages.

Typing MODE flips the bottom half between 40 and 80 column displays – a real boon for all users since 80 columns is far easier on the eye if you have a green-screen monitor, and of course 40 are best for colour screens. Why can't all adventures give us this option?

Other good points about the game are numbered SAVES, so that you can have up to nine positions to LOAD from, and an excellent real-time element. Every so often the message 'Time Passes' flashes up on the screen, but for once this isn't mere window-dressing. For example, at one stage of the game you need to steal something, and unless you flee the scene of the crime as quickly as possible, rushing through the adjacent locations without stopping, the police will catch you and the game ends. I don't believe I've ever seen time used in quite that fashion before in a game, and it adds to the realism of the adventure quite substantially.

VILLIERS ST, CHARING
CROSS STATION, AND
EMBANKMENT



Foot of the steps up to Charing Cross Station, the old man selling the Evening Standard shouts "Paper late!" There are exits up, south-east, and south-west. You can see nothing else of interest.

Miles says "OK, what now?"

Time passes...
Time passes...
Time passes...
Time passes...
Time passes...

The realism of the game also shows up in the detail of the plot and the logic behind it. For example, there's a photo-booth near the start which only takes 50p bits. You have eight pounds but no change, but if you do something like buy a paper you will receive the correct change for the machine. All the objects and disguises you require to solve the game are quite down-to-earth – though finding them may be difficult.

In fact the game does require considerable commitment from its player. Numerous SAVES are necessary because it is possible to ruin your chances at various points by either doing things the wrong way or doing them in the wrong order. For the most part, however, when you land in the soup it's because you've done something which, if you were on the real South Bank, would have had the same effect. The adventure demands that you place yourself as far as is possible in the real-world. I'm tempted to think that this is a very good thing, but the fact is that

some adventurers prefer to dabble in un-real worlds – if you're one of them then *Old Scores* might not be entirely to your taste.

My only disappointment with regard to *Old Scores* was the parser. It's perfectly adequate and can cope with some quite complex inputs, but it isn't very tolerant of synonyms. So if you're beside a man selling the Evening Standard, BUY PAPER will not succeed – you have to BUY STANDARD and there are numerous other examples. I don't think it's that the parser is particularly poor, just that the game is otherwise of such a high standard that it leads you to expect miracles every time you press the ENTER key.

Old Scores is well-thought out, lovely to look at (and listen to), and very absorbing to play. It certainly earns an entry in the Pilg's Personal Top Ten, and at £7.95 belongs in the collection of all discerning adventurers.

Getting Stuck into MUD...

MUD hasn't received much attention from the Pilgrim until now. The reason is quite simple – I've never been able to afford to play it! Now BT have finally allowed me ten hours on the system so that I can report to you all on my findings and (they hope) encourage you to enter the world of on-line games.

Since I've been so quiet on the subject in the past, perhaps it's as well just to recap quickly what MUD is. The Multi-User Dungeon is a program, written in about 60000 lines of Pascal source code, that runs on a suitable (VAX or DEC) minicomputer. Since these items weigh in at about £50,000 second-hand, you're unlikely to find many people setting up MUD games in their living room. What's needed – and what's happened – is that a number of larger corporations have licensed the software, purchased the hardware, and now charge people like you and me on a per-hour basis for hooking up to it.

This hooking-up bit is the biggest barrier to playing MUD. You'll need a 'phone and a modem plus suitable software (see box). To play properly you'll also need a user ID and a password which you only get by taking out a subscription with BT. However they do have a special system that enables non-subscribers to try out the system free of charge for ten minutes at a time (see box for details).

All this costs money (let's get the bad news out of the way first) and I'm afraid we are talking rather large sums here. BT's charging system is based on tokens and each token will give you six minutes of playing time.

The more tokens you buy at once the cheaper they get, but the bottom line is that if you buy the minimum quantity (50) it'll cost you £10.00, which works out at a charge for playing of exactly £2.00 per hour.

On the other hand, if you're ambitious and wealthy, you could go to the other extreme and splash out on 1500 tokens, costing you £150.00, which halves the price to £1.00 per hour.

That, however, is only the connection charge. To that you have to add your 'phone bill, which on a local call is going to work out at about 40p per hour – and a lot more if you're calling from further afield.

So what do you get for your money? Well, you get a vast adventure, constantly changing as the authors add new bits and remove the less popular ones. There are currently about 750 locations (not including mazes) to explore and the BT hardware setup allows up to fifty people to play simultaneously – though while I was playing there were rarely more than ten others on-line at once.

The aim of the game is to amass as many points as possible and thereby to improve your social standing with other players. The bottom rank (from nought to 200 points) carries the title of Novice, the top (204,800 points and above) the honorific Wizard. Wizards have almost limitless power in the game. They can wield over 60 spells, zoom around the countryside doing practically anything they take a fancy to, and generally lord it over everyone else.

Points are gained in three ways – they may come as re-

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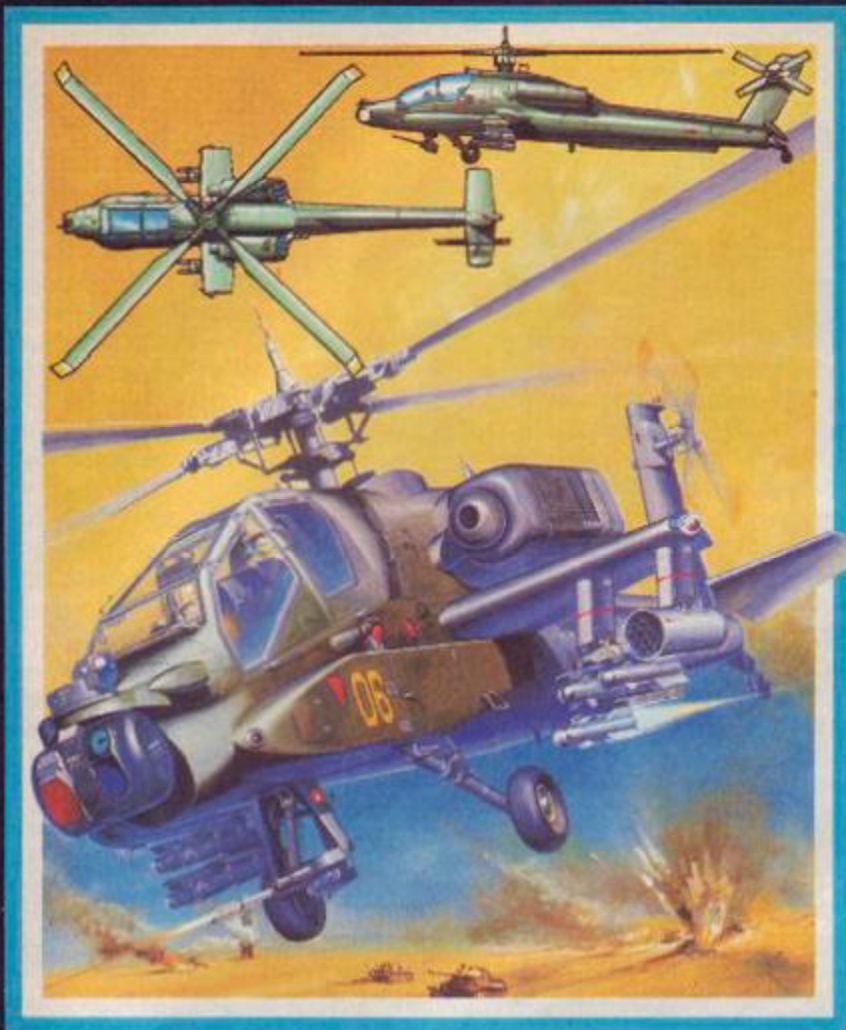
Mike Singleton

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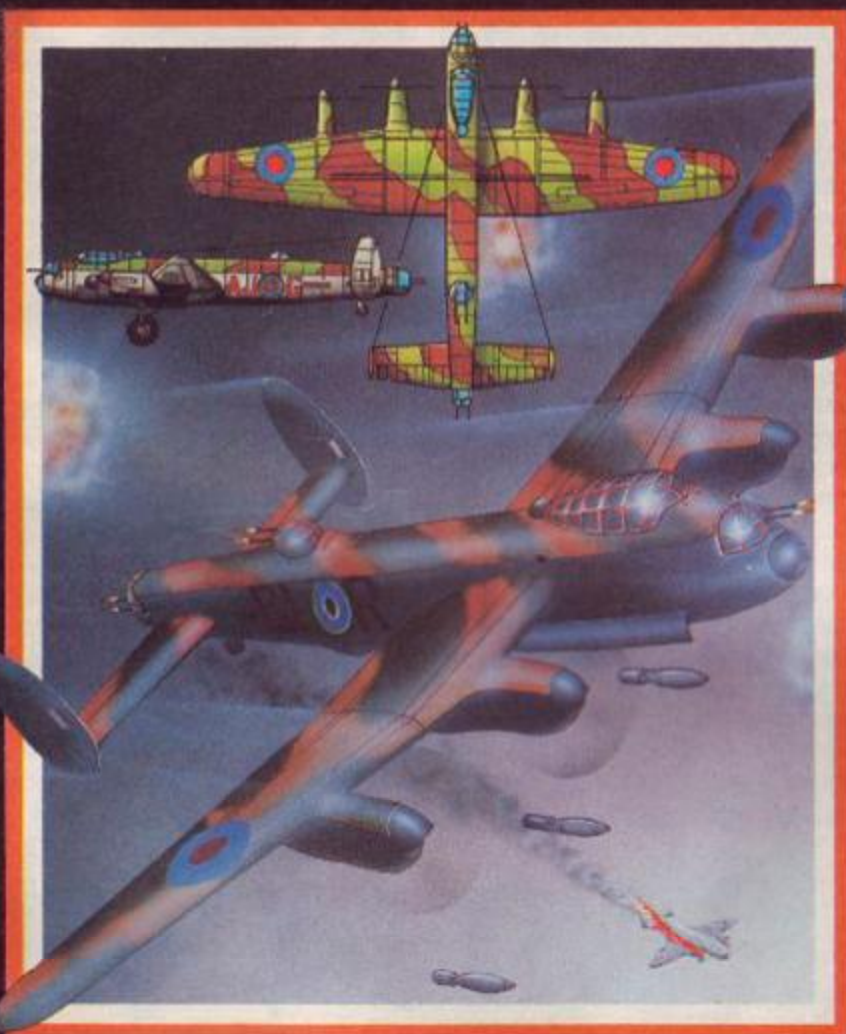
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BY R.J. SWIFT
ADAPTED BY TIM MOORE
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wards for certain actions (solving puzzles or perhaps helping other players), or as a result of finding treasure, or from success in fighting.

It's this last bit that really gives MUD its flavour. Imagine wandering around in an adventure game when every so often up crops another character, controlled by another player on the end of another phone, who sees you as yet another possibility for earning more points. Usually, he (or she) will decide to give you a good thrashing. Players in MUD are generally suspicious of each other and sometimes downright hostile – though you'll find the wizards tend to be a friendly lot (after all, they've nothing to lose since there's not much you can do against them!).

Again – just to put things in perspective – it's generally reckoned that to become a Wizard you'll have to put in about 120 hours of "intelligent, dedicated, and intensive" playing. That's going to cost you a fair whack, though BT argue (reasonably enough, I suppose) that as an interactive pastime the game compares very favourably with cinema or theatre.

The number of commands available to you in MUD is fairly limited when compared to, say, a Level 9 game. However the list is added to and amended frequently and you'll find that the commands that are available are more than sufficient to allow you full scope for self-expression. My favourite is the SHOUT command which broadcasts your message to everyone in the game – but anonymously. So while you're playing messages will occasionally flash up on the screen saying "A female voice in the distance shouts 'What do I do with the small purple worm'", which may or may not elicit answering 'shouts' from other players.

One problem with public access games like this one is that of bad behaviour. It may seem very clever to shout rude words all the time, but in MUD it will almost certainly get you into deep trouble. Quite apart from there being laws (real laws, I mean – not ones in the game) about being rude or offensive on-line, there are also Arch-Wizards who are much more effective. The Arch-Wizards are a band of very powerful beings who get their MUD accounts paid for and

can wield some very impressive spells indeed. They'll often help you if you're in trouble, but they'll also give you hell if you step out of line – even to the point of cancelling your subscription. Thou hast been warned.

It's very difficult to convey on paper the feeling of playing MUD. It really is extremely exciting, though somewhat intimidating at first, to communicate (in real time) and to engage in combat with one's fellow men and women. You can make some friends for life in MUD – though life, let's face it, may not last very

long. The only real drawback with the system at present (apart from cost) is the response time. Sometimes you can spend an awful lot of money just waiting for your input to be processed by the computer and for your next prompt to appear. BT are working on this one, however, and the situation does seem to be improving.

Next month the Cowled Crusader will give you an insight into the way Magic works in MUD, and an introduction to some of the people who wield it. We'll also be printing an actual sequence from the game so you can really get the feel for it. See you then – if we haven't met in MUD in the meantime!

SPY TREK

Americana, £1.99 cass, CPC 464/664/6128

This is the first game I've seen on the new budget label from US Gold and it's certainly worth £1.99. I was a bit shocked when I loaded it up, however. No way is this game American – it was (unless I'm a very stupid Pilg – okay, okay I heard that) written using GAC and must therefore be the first example I've seen of a major software house using a utility like that for a budget label. I'm surprised people don't do it more often.

Spy Trek isn't too bad a game. The graphics are fine and make good use of GAC's powerful drawing features. The vocab isn't enormous but the authors have sensibly highlighted important phrases in object descriptions by using capital letters. So as a basic rule, if it's in capitals you can do something with it.

The puzzles range from the ludicrously easy to the infuriatingly difficult as you attempt to rescue some plans from their European hiding place. All pretty conventional spy stuff here and few surprises, though one or two of the locations are quite original and there is a light-hearted vein of humour throughout the program.

My only grouse is that in using GAC the authors didn't pay enough attention to overcoming that annoying feature whereby valuable text is sometimes scrolled off the screen before you can read it. I also failed to note any mention of GAC on the package. I can't help feeling that the label Americana is a bit misleading – this game seems as English as they come. Anyway, at £1.99 who cares about nationality? This game isn't going to rock the earth, nor is it going to keep you up for night after night, but it should give most Pilgs a good trek for their hard-earned nickels.

MUD Hook-Up Details

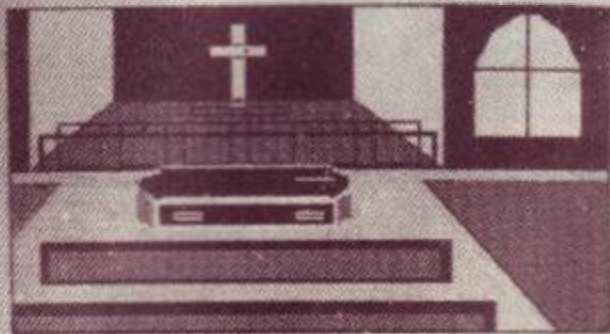
You'll need a 1200/75 or 300/300 baud modem and software to give you 8-bit, no parity, one stop-bit. Almost all the modem/comms packages available for the Amstrad will fit the bill, but if you're uncertain check with the suppliers.

BT MUD is accessed on 01 998 8899 (1200/75) or 01 997 9433 (300/300). Even if you don't have an account you can log on for ten minutes as guest to get a feel of the thing, and then if you're impressed you can send off for a full subscription.

To log on as a guest, enter MUDGUEST when asked for a username and enter PROSPECT when asked for a password. You will be automatically logged out after ten minutes.

Here the commands at your disposal.

go (direction)
DRop (object)
GIve (object) (creature)
Help
Inventory
Inventory (player) – lists another players possessions.
Kill (creature) (object)
LEVELS – lists player levels
Look
Look (container) – describes container as if you were inside it
Look (creature)
Look (room) (creature) (quoted string)
Jez "Who are you" – sends message in quotes to Jez
PUT (object) (container)
REMove (object) (container)
SCore
SHout (quoted string) – message sent to all (anonymously)
STeal (object) (player)(quoted string) – message sent to all in same room
USE (object) – select weapon for current fights
WHO – names all current players



You can't see that.

The driver of the passing car turns his head towards you. His face turns white. He swerves in front of your car! CRASH! HALLOP! It's CURTAINS for you! You're in a coffin. PERMANENTLY! Press a key for another game. ■

	Atmosphere Interaction Challenge AA-Rating			
Monsters of Murdac	72%	65%	77%	75%
Old Scores	90%	80%	89%	89%
Spy Trek	65%	58%	65%	69%
MUD	96%	95%	98%	Pricey!



ADVENTURE

Heroes of Karn

Guards can be bribed, otherwise quit.
Plants normally need two to three waterings.

Forest at Worlds End

You don't need the coin in the Woodman's hut.

PEEKs + POKES

The Pilg recently promised another routine for transferring *Red Moon* to disc, since our earlier routine gave problems because of typesetting errors. Here's another, shorter, routine to transfer the game from Mr D.V. Grief of Plymouth. First key in Listing 1. When RUN with *Red Moon* loaded into the cassette it will transfer the three sections of code to disc.

Second, key in Listing 2 and save it to the same disc as your data files. You can call it what you like - although of course it mustn't have the same name of any of the files transferred above - and after saving it you can run *Red Moon* from disc by loading and running Listing 2.

Don't worry about the funny bits on the screen - 'advent' is loaded into screen memory first before being relocated. Note that in the game itself SAVE/RESTORE commands remain cassette-based.

LISTING 1

```
10 |TAPE.IN:MEMORY &JFFF
20 LOAD "advent",&4000
30 SAVE "advent",b,&4000,&1200
40 LOAD "bit1",&4000
50 SAVE "bit1",b,&4000,&1500
60 LOAD "bit2",&4000
70 SAVE "bit2",b,&4000,&32FF
80 END
```

LISTING 2

```
1 CLS:MEMORY &14FF
2 FOR A = &1500 TO &150D
3 READ D:PG..
4 NEXT
5 DATA
&21,&00,&D0,&11,&00,&9A,&01,&0
0,&12,&ED,&B0,&C3,&00,&8D
6 LOAD "bit1",&1600
7 LOAD "bit2",&6700
8 LOAD "advent",&D000
9 |TAPE
10 CALL &1500
```

CLUE-SNIFFING

If you don't want any help with your adventuring avert your eyes and plug your nose!

Price of Magik

BOM requires the trumpet, DON swings the pendulum, and SEE helps you go through the study wall.
(thanks to Wayne Grover, Chingford)

Lord of the Rings Part 1

Leave the ring in the house, you can collect it later.
When only carrying one green jewel, Elbereth!
Avoid the East road.
The Swords in the Barrow-Wights cave can kill wraiths.
The Barrow-Wight can't stand jewellery.

Red Moon

Right at the start, DIG!
Bury all dead opponents.
Avoid the rat!
Remember Alice to get the chainmail and gasmask.
Insulation is a good electrical insurance!

Return to Eden

Don't waste time at the start, wear the suit and grab the geiger counter.
Follow a mole and sleep in a comfortable cave.

Dungeon Adventure

The poppy will help you pass some singing.
Feeling sleepy. The Mirror will spell it out!
The driftwood can be lit somewhere as a temporary light.
The Corpse in the tunnels holds a few magnetic attractions.

(all the above thanks to Julian Page, Shrewsbury)

Fourth Protocol

For telephone numbers, access the file TELEPHONE
After you have talked to Harcourt Smith, you can leave Gordons in search of your new base, Sentinel House.

PILGRIM'S POST

More Stamina for Magik...

"I have found out how you can get 250 stamina points in *The Price of Magik*.

What you have to do first of all is to type Restore when you have just been killed. This will take you to the Lenslok. Then instead of putting the first two letters in correctly on the code, deliberately type two entirely different letters, three times. The program will say you have to restore the game again, but instead of doing that carry on playing and you will find you have 250 stamina points! If not, try again!"

OK Wayne Grover (for it is he who writes), I tried and I tried but the Pilg still couldn't get Lenslok, let alone 250 stamina points. I think my version must be a bit odd - but perhaps other Pilgs will be able to try this for themselves. Any other stamina tips, readers?

Hobbit-friends Unite!

This month sees Melbourne House launch their 'Tolkien Blockbuster Month' in which all matters Hobbity are given the full-blown, hurricane-force publicity treatment.

"*The Hobbit is a very good, hard to crack adventure...To put things briefly, this game is fantastic, great, fabulous, exciting, and very hard to crack.*"

Etc...Etc...Etc...Except that that little gem didn't come from Melbourne House, it came from Darren Wallace. Goodness gracious, Darren, how much did they pay you?

Of Lords and Ladies...

"We have read *Adventure* sections in various magazines and picked up copies of all the pure *Adventure* magazines we could find. But...they just don't contain what we specifically want - so we've written our own..." - Pat Winstanley & Sandra Sharkey

Help! If I'm not giving you what you want, please tell me! The Pilg is nought but the humble servant of his readers, and if you think I'm not doing a good job then write and let me know. This goes for all my fellow Pilgs, so if you've got a suggestion about the column then drop me a line.

As it is, Mss Winstanley and Sharkey have come up with a littlenumber called *Adventure Probe*. I have to say that I felt it was a little overpriced at £1.00 a throw, but the authors do protest that "we're not out to make a fortune, just pursue an enthralling hobby and give adventurers the chance to contact other enthusiasts and obtain speedy help in stuck situations..." Well, at the risk of being biased, I do hope that that is what readers can get here by either entering the Lords of *Adventure* column or else contacting those already in it. Are you doing your job properly, Lords?

However, if you want to get in touch with Pat and Sandra, their address is 13 Hollington Way, Wigan, WN3 6LS. Whatever the Pilg's competitive instincts, it's good to see a couple of adventurers reaching out to others.

Mention of the Lords leads me to mention the numerous letters I've had recently from women who wish the section to be renamed Lords and Ladies of *Adventure*. Consider it done, friends, and my apologies for any apparent discrimination which was very much more in the title than in the spirit of the section. Anyone who has read the *Red Sonja* comics will know that women adventurers are more than a match for most men!

Something nasty up your sleeve?

Rick Robinson of Plasma Touch writes in about his game *Treasure Tunnels* (which the Pilg reviewed a while back):

"We think yours was a balanced and fair opinion, but you



forgot to mention the free program 'The Experience'. Was this an oversight? (It was - Pilg) Okay, it's a bit unusual but a prize will be going to the person who submits the best interpretation of what it all 'means' (assuming they have completed it).

"We would be grateful if you could inform your readers that we are on the look out for adventures with a horror theme, which we intend to release as a compilation together with a couple of our in-house adventures. The games can be about anything: explicit gore, atmosphere and suspense, science fiction, or modern day scenarios. Just so long as they're scary!"

So, my adventurous friends, if you've got something nasty up your sleeve (or anywhere else) then send it to Rick at 143 Oakfield Road, Whickham, Newcastle-upon-Tyne, NE16 SRZ. I have a feeling Mr Robinson may get more than he bargained for!

WRITE TO THE PILG!

The Cowled Crusader is able to receive deliveries of mail direct from readers, wherever he may be on his Pilgrimage. All you have to do is write in to Amstrad Action, addressing your letter to:

The Pilgrim, c/o Amstrad Action, The Old Barn, Brunel Shopping Precinct, Somerton, Somerset, TA11 1PS.

A special flock of highly-trained budgerigars will then take your letters direct to the Pilg for inclusion (space permitting) in the next issue. The Man With The Red And Staff welcomes correspondence on all subjects adventorial and looks forward very much to hearing from you.

Alternatively, if you're suitably equipped, you can get me on Telecom Gold, number 83.JNL251, or on Prestel 918994654. Please note, by the way, that I am NOT a 'helpline' service. If you're stuck on a game, try the Lords and Ladies!

clature to include the stronger sex.

Don't forget that to write in offering your services to other less-fortunate adventurers is a great way to make friends around the world. These pages are read by Pilgrims scattered far and wide and are just a small part of that network of comradeship that has grown up amongst the followers of the Adventurous Path. So if you want to reach out a helping hand, write in today with details of the games you have finished and can offer help on.

If you wish to contact a Lord or Lady, do include a self-addressed envelope and if you telephone to make your calls at reasonable hours.

Heroes of Karn, Message from Andromeda, Forest at Worlds End, Mindshadow

Wendy Davis, Rowsley, Richmond Road, Ramsey, Isle of Man

Jewels of Babylon, Forest at Worlds End, Heroes of Karn

James Lushey, 9 Harefield, Long Melford, Sudbury, Suffolk

Snowball, Return to Eden, Hobbit, Ring of Darkness, Marsport, Dun Darach, Lords of Midnight

St. John Bird, 74 West Stret, North Creake, Fakenham, Norfolk, NR21 9LQ. Tel: (0328) 738709

Subsunk, Heroes of Karn, Voodoo Castle, Terrormolinos, Jewels of Babylon, Mordons Quest, Empire of Karn, Crystals of Carus, Neverending Story, Mindshadow, Valhalla, Urban Upstart, Robin of Sherwood, Hampstead, Wizard of Akyrz, Hobbit, The Time Machine, Circus, Arrow of Death Part 2, Emerald Isle, Gremlins, Lords of Time, Sorcerer of Claymorgue Castle, Red Moon, Ten Little Indians, Perseus and Andromeda, Worm in Paradise, ZZZZZ, Feasibility Experiment, Valkyrie 17, Bored of the Rings, Pirate Adventure, Colossal Adventure, Snowball, Twin Kingdom Valley

Adventurescue, 32 Merrivale Road, Rising Brook, Stafford, Staffs, ST17 9EB

Return to Eden, Emerald Isle

Andrew Duff, 37 St Andrews Road, Tain, Ross-shire, IV19 1EY

Heroes of Karn, Jewels of Babylon, Forest at Worlds End, Gremlins, Neverending Story, Hobbit, Lord of the Rings, Three Weeks in Paradise

Peter Grimshaw, 33 Lower Parrock Road, Carr Hill, Barrowford, Lincs

Emerald Isle, Forest at the Worlds End

Paul Nicholls, 23 Stockfield Avenue, Hoddesdon, Herts, EN11 9JE

Mindshadow, Message from Andromeda, Forest at the Worlds End, Warlord

Len James, 37 Northway, Lymm, Cheshire, WA13 9AT

Lords AND LADIES of Adventure...

Red Sonjas unite! It's becoming increasingly obvious that there are more and more women playing computer games these days, and especially adventures. The Pilg shamefully acknowledges the discrimination of our previous column header 'Lords of Adventures' and is delighted to extend its nomen-

Red Hot Charts...

The votes are still flooding in to nominate your favourite games. This month's results go a long way towards showing just how long-lived adventures can be. *The Hobbit* (released in 1983) is STILL in the Top Ten. There's even a chance that after

Melbourne House's relaunching of it next month that it will achieve even vaster sales.

The old *Interceptor* games are still in there, including the venerable *Heroes Of Karn* at number five. The success of this game on the Amstrad has always given the Pilg mixed feelings since the conversion from the Commodore 64 (which had fantastic music and some really excellent graphics) wasn't one of the best. Still, it remains one of the most popular games around.

Don't forget that if you send in your voting form you are eligible for a free draw in which one Lucky Pilg gets the game of his or her choice. The Cowled Crusader would also like to apologise profusely to a couple of Lucky Pilgs whose prizes were delayed, but from now on it's straight out of the hat and a program straight into the mailbox - so get voting!

- 1 Red Moon (Level 9)
- 2 Lord of the Rings (Melbourne House)
- 3 The Hobbit (Melbourne House)
- 4 Never Ending Story (Ocean)
- 5 Heroes of Karn (Interceptor)
- 6 Forest at the Worlds End (Interceptor)
- 7 Return to Eden (Level 9)
- 8 Mindshadow (Activision)
- 9 Return to Eden (Level 9)
- 10 Jewels of Babylon (Interceptor)

AND - this month's LUCKY PILG is Len James of Lymm in Cheshire who dances all the way to his Arnold with a free copy of *Seas of Blood*. Shiver me timbers, Len, oi trust ye'll splice the mainbrace for the ol' Pilg as you sit down to play...

To The Pilgrim.

My favourite three adventures are

1. Game: _____

Company: _____

2. Game: _____

Company: _____

3. Game: _____

Company: _____

The reasons for my first choice above are:

The free game I would like is

My address is (BLOCK CAPITALS ONLY)



The Database Manager and Reporter.

You know that Caxton only publish superior software products. Cardbox is the world's best-selling simple electronic card index. BrainStorm is the world's first ideas processor. ScratchPad plus is the only enhanced Virtual Memory Spreadsheet available for your Amstrad. And Touch 'n' Go is the UK's most highly respected disk-based typing Tutor.

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The Condor 1 Commands – They couldn't be simpler!

Database Creation and Maintenance

DEFINE	Create, redefine or describe a database
DESTROY	Eliminate a database or file
FORMAT	Create or revise a form or HELP screen
REORG	Reorganize the structure of a database; add or delete items

Information Input and Update

APPEND	Attach records of one database to another
EMPTY	Eliminate all data in a database
ENTER	Insert new data into a database
POST	Update entries in one database with those from another
UPDATE	Change entries in a database meeting specified conditions

Information Processing and Report Writing

COMPARE	Compare entries in two databases for (not) matching conditions and create a RESULT database
COMPUTE	Compute entries in a database
LIST	Display database records in sequential order
PRINT	Print database records in sequential order
PRINTER	Printer output control and redirection
SELECT	Select database records meeting specified conditions, creating a RESULT database
SORT	Sort database records by entries
STAX	View or print statistics of entries
TABULATE	Summarize specified entries. Print or save the result
TITLE	Print report headings

Operation Aids

HELP	Assist operator in selecting procedures
INSTALL	Saves SET and PRINTER options
RESTART	Continue processing interrupted commands
RUN	Process and execute a command procedure with options for command modification

Interfaces

READ	Transfer records from an ASCII file to an existing database
WRITE	Transfer records from a database to an ASCII sequential file

Utilities

COPY	Copy a database or file
DATE	View or enter date
DIC	View entries in the data dictionary
DIR	View the list of files in the disk directory
LOGDISK	Log a new disk in the computer
RENAME	Change the name of a database or file
SAVE	Save a RESULT database
SET	Set operating parameters
SYSTEM	Exit from Condor 1 back to operating system
TERM	Defines the computer (not needed on Amstrad)

TYPE-INS

If you thought last month's amazing *Blitter* was a bit short on gameplay, try *Bouncers*. It's a version of the classic 'Breakout', sent in by Justin Hedden of Andover. The idea, for anyone who missed the dawn of the computer age, is to break through the wall at the top of the screen by bouncing a ball against it. You can move your bat left or right to hit the ball, but if you miss it you lose a life. You can define your own keys, and there's a high-score table. Bob Wade's tip: wait until the ball is level with the centre of the bat, and then start moving the bat to keep pace with it. Persevere and you'll soon get the congratulatory tune, and the next level. Be warned - it's very addictive indeed!

BOUNCERS!

OOPS!

In last month's *Type-ins* I said there were two versions of *Cat8*, one for the 464 and one for the 664/6128. As disc-owning 464 users will already be aware, we only printed the 664/6128 version. This wasn't part of the international anti-464 conspiracy - we just forgot! Anyway, we're printing the 464 version here. Sorry you had to wait a month.

While we're at it, there are a few more mistakes and misunderstandings to be cleared up. For starters, we had a few queries about *Rotating Sphere* in our May issue. Because it started at line 320, some people assumed that we had carelessly missed out lines 10-310. We hadn't - indeed, there weren't any lines 10-310 for us to miss out. There's no particular reason for a program to start at line 10 rather than any other number. Rest assured, *Rotating Sphere* was complete in every respect - and the same goes for *Bouncers* this month.

Next, we have a genuine foul-up. In the June issue there was a mistake in line 10 of *Unerase*. The '1=430' bit of it should have read '1=450'. This means that the 'Checksum error in line...' message would have been two lines out if you made a mistake in one of the data statements. If you typed the whole program in exactly as it

was written, however, it worked fine.

Lastly, a rich source of type-in problems - printers. Not printers as in the people who print AA, God bless 'em, but printers as in mechanical devices for producing hard copy. Sometimes they refuse to print symbols as they would appear on screen. In particular, they tend to maul the 'hash' sign (shift and 3) and the 'up-arrow' sign (on the same key as the pound sign). Hash often comes out as a pound sign, and up-arrow prints out without its stem - like a

circumflex, or the roof of a house.

We try to catch these signs and correct them, but sometimes they do slip through. A case in point is *Music Composer*, from way back in issue 5. Lines 1310 and 1330 both have mauled up-arrows in them, just after ':du=2'. To confuse matters still further, this listing also has several 'tilde' signs in line 1670. These printed fine, but a lot of people didn't know how to type them in. The answer is to hold down the control key and type the number 2 - not at all obvious, I'm sure you'll agree.

```
5 REM *****
6 REM CAT#8 by J.N.Macklin
7 REM *****
8 REM 464 version
10 h=HIMEM:MEMORY &A673:z=3:p#="":MODE 2:CAT
20 POKE &A674,&CD:POKE &A675,&60:POKE &A676,&BB:POKE &A677,
&32
30 POKE &A678,&7B:POKE &A679,&A6:POKE &A67A,&C9
40 WHILE p#(">" *):z=z+1:LOCATE 1,z:GOSUB 150:WEND
50 FOR x=1 TO 16:LOCATE x,2:GOSUB 150:t#="t#"+p#:NEXT
60 FOR x=1 TO 9:LOCATE x,z+1:GOSUB 150:u#="u#"+p#:NEXT
70 GOSUB 200:PRINT#8," CATALOGUE"(TAB(33):t#;TAB(78):u#;GOS
UB 200
80 FOR y=4 TO z-1:FOR x=1 TO 80
90 LOCATE x,y:GOSUB 150:v#="v#"+p#:NEXT
100 PRINT#8,v#;v#="":NEXT
110 GOSUB 200:MEMORY h:MODE 1:END
150 CALL &A674:p#="CHR$(PEEK(&A67B)):RETURN
200 PRINT#8,STRING$(80,"-"):RETURN
```

BON = 50 (NVS)
 S = SCORE
 LEV = LEVEL

```

100 ON BREAK GOSUB 790
110 GOSUB 800:REM initialise
120 GOSUB 550:REM key selection
130 REM set up screen starts here
140 CLS:MODE 1:INK 1,14:PEN 1:BORDER 0:INK 0,0:SPEED KEY 1
,1
150 FOR i=0 TO 5:b*(i)="[[[[]]]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]]"
NEXT i
160 MODE 1
170 b=10;x=17:y=22;dx=-1;bon=0;dy=INT(RND*3)-1
180 CLS:INK 1,26:PEN 1:PRINT CHR$(128);STRING$(38,CHR$(128));CHR$(128);:INK 2,3
190 FOR i=0 TO 5:PRINT CHR$(133);:PEN 2:PRINT b*(i);:PEN 1:PRINT CHR$(138);:NEXT i
200 FOR i=1 TO 16:PRINT CHR$(128);SPACE$(38);CHR$(128);:NEXT i
210 PRINT CHR$(140);STRING$(38,CHR$(140));CHR$(140);:LOCATE 2,25:PEN 3:PRINT "SCORE:";s:LOCATE 16,25:PEN 3:PRINT "LEVEL:";lev:LOCATE 30,25:PEN 3:PRINT "LIVES:";1
220 IF lev=0 OR lev=1 OR lev=2 OR lev=3 OR lev=4 THEN bat$=STRING$(4,CHR$(140)) ELSE IF lev=5 OR lev=6 OR lev=7 OR lev=8 OR lev=9 THEN bat$=STRING$(3,CHR$(248)) ELSE 230
230 IF lev=10 OR lev=11 OR lev=12 OR lev=13 OR lev=14 THEN bat$=STRING$(3,CHR$(249)) ELSE IF lev=15 OR lev=16 OR lev=17 OR lev=18 OR lev=19 OR lev=20 THEN bat$=STRING$(2,CHR$(250)) ELSE IF lev=25 THEN bat$=STRING$(1,CHR$(251))
240 PEN 1:PLOT 3,287:DRAW 636,287:PLOT 3,385:DRAW 636,385
250 REM **** ALL ANIMATION IS HANDLED IN THIS' NEXT ROUTINE ****
260 LOCATE INT(b),23:IF b=1.5 THEN LOCATE 2,23:GOTO 270 ELSE PRINT " ";
270 PEN 1:PRINT bat$;:IF b<33 THEN PRINT " "; ELSE IF b<34 THEN PRINT " ";
280 IF b=5 THEN LOCATE 2,23:PRINT " "; ELSE IF b=1.5 THEN PRINT " ";
290 CALL &BD19:LOCATE y,x:PRINT " :x=x+dx:y=y+dy:IF y<=1 OR y>=40 THEN dy=-dy:y=y+dy:SOUND 3,78,8,15,1,1
300 IF x=23 AND dx=1 THEN SOUND 3,78,8,15,1,1:GOTO 370
310 CALL &BD19:IF x<23 THEN LOCATE y,x:PRINT "\"
320 butt%=INKEY$
330 IF butt%=1$ THEN b=b-1:IF b<1.5 THEN b=1.5
340 IF butt%=r$ AND b<34 THEN b=b+1:IF b>34 THEN b=34
350 IF x=1 THEN 510 ELSE IF x<8 THEN 490
360 IF 1=0 THEN 430 ELSE GOTO 260:REM **** ROUTINE IS COMPLETED AND BEGINS TO BRANCH BACK ****
370 IF y<INT (b+2) OR y>INT (b+5) THEN GOTO 390
380 dy=INT(RND*3)-1;dx=-1;x=x-1;y=y+dy:GOTO 310
390 IF b=1.5 THEN IF y<4.5 THEN 380
400 FOR a=0 TO 250 STEP 8:SOUND 6,a,5,15,1,2:LOCATE y,x:PEN 3:PRINT CHR$(225);:NEXT 1:1=1:s=s-100:LOCATE 30,25:PEN 3:PRINT "LIVES:";1:IF 1=0 THEN 430
410 IF s<0 THEN s=0
420 FOR i=1 TO 1000:NEXT i:GOTO 150
430 FOR a=0 TO 25:CALL &BC4D:SOUND 3,a+100*4,5,15:NEXT a:IF s<0 THEN s=0:REM **** GAME OVER ROUTINE ****
440 LOCATE 12,12:PEN 3:PRINT "GAME OVER"
450 PEN 1:LOCATE 12,25:PRINT "PRESS THE SPACE":LOCATE 15,18:PRINT "SCORE=";s:LOCATE 21,18:PEN 3:PRINT "s=1=3
460 IF INKEY(47)=0 THEN GOTO 1260
470 GOTO 460
480 REM completion screen
490 IF MID$(b*(x-2),y,1)>" " THEN ENV 1,1,14,1,7,-2,4:SOUND 3,0,-1,5,1,0,6;dx=1;s=s+10:LOCATE 2,25:PEN 3:PRINT "SCORE:";s:b*(x-2)=LEFT$(b*(x-2),y-1)+" "+RIGHT$(b*(x-2),y+1) ELSE SOUND 2,134,2,0,0,15
500 PEN 1:GOTO 260
510 RESTORE 540:LOCATE y,x:PRINT CHR$(224);:lev=lev+1:bon=0:IF lev=5 OR lev=10 OR lev=15 OR lev=20 THEN 1=1+1 ELSE bon=bon+lev+s;s=s+bon:LOCATE 17,12:PEN 1:PRINT "BONUS=";bon:LOCATE 2,25:PEN 3:PRINT "SCORE:";s:bon=0
520 READ note:IF note=9999 THEN 530 ELSE SOUND 7,note,20,1,5:GOTO 520
530 FOR i=1 TO 2000:NEXT i:GOTO 150
540 DATA 60,53,47,45,60,0,45,47,45,40,53,0,53,47,45,36,40,40,45,45,47,53,47,60,9999
550 REM key selection
560 lev=0;s=0;bon=0:CLS:MODE 2:PAPER 0:INK 0,0:PEN 1:INK 1,24:BORDER 0:SPEED KEY 30,2
710 LOCATE 10,20:PRINT "[[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]]"
720 INPUT " KEY for left ";l$:
SOUND 7,200,5,5
730 INPUT " KEY for right ";r$:
SOUND 7,200,5,5
740 LOCATE 10,23:PRINT "[[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]][[]]"
750 LOCATE 28,25:PRINT "PRESS ANY KEY TO START"

```

```

760 IF INKEY$="" THEN 760
770 IF INKEY$="" THEN SPEED KEY 1,1:1=3:s=0:SOUND 1,499,5
00:SOUND 2,500,500:FOR j=1 TO 16:INK 1,j:FOR r=1 TO 99:NEXT:RETURN ELSE GOTO 770
780 SPEED KEY 10,2:PAPER 0:BORDER 0:INK 1,26:PEN 1:INK 0,0:MODE 2
790 STOP
800 REM **** INITIALISATION ****
810 ENV 1,1,18,0,11,0,10:ENT 1,10,2,2
820 ENV 3,1,0,16,5,-3,2
830 ENV 2,5,3,3,1,-21,22,9,-3,2:ENT -2,10,2,2,5,-7,1,2,11,3,2,-4,8
840 SYMBOL AFTER 91:FOR i%=1 TO 10:hsc%(i%)=i%*500:hna%(i%)="B O U N C E R S":NEXT bon=0:l=3:lev=0:s=0:DIM b$(5)
850 SYMBOL 91,&X11101111,&X11101111,&X11101111,0,&X1111101,&X1111101,&X1111101,0
860 SYMBOL 92,0,&X1111100,&X1111110,&X1111110,&X1111110,&X1111110,0,0
870 SYMBOL 93,&X10111101,&X10111101,&X10111101,0,&X11111011,1,&X11110111,&X11111011,0
880 SYMBOL 224,&E9,&A9,&AA,&AC,&AC,&AA,&A9,&E9
890 SYMBOL 225,&18,&7E,&7E,&10,&18,&7E,&FF
900 SYMBOL 248,&0,&0,&0,&0,&0,&0,&01,&FF,&76
910 SYMBOL 249,&0,&0,&0,&0,&0,&0,&0,&7E,&FF
920 SYMBOL 250,&0,&0,&0,&0,&0,&0,&01,&7E,&FF
930 SYMBOL 251,&0,&0,&0,&0,&0,&0,&99,&7E
940 RETURN
950 REM **** BOUNCERS HALL OF FAME ****
960 MODE 1:INK 1,0:INK 0,26:PAPER 0:PEN 1:BORDER 26:SPEED KEY 30,2
970 PEN 1:LOCATE 9,1:PRINT "THE BOUNCERS HALL OF FAME"
980 LOCATE 2,2:PEN 2:PRINT STRING$(38,208)
990 LOCATE 5,3:PRINT "PLACE NAME SCORE"
1000 FOR i%=10 TO 1 STEP -1
1010 LOCATE 6,25-i%*2:PEN 2:PRINT USING "##";11-i%
1020 IF a=hsc%(i%) THEN GOSUB 1090
1030 LOCATE 13,25-i%*2:PEN 3:PRINT hna%(i%)
1040 LOCATE 30,25-i%*2:PEN 2:PRINT hsc%(i%)
1050 NEXT
1060 LOCATE 13,25:PEN 1:PRINT "PRESS THE SPACE"
1070 WHILE INKEY(47)=-1:WEND:GOTO 120
1090 FOR j%=1 TO i%-1
1100 hsc%(j%)=hsc%(j%+1):hna%(j%)=hna%(j%+1)
1110 NEXT
1120 WHILE INKEY$="" :WEND
1130 LOCATE 13,25-i%*2
1140 hna%(i%)=""
1150 WHILE in$(CHR$(13))
1160 in%=UPPER$(INKEY$)
1170 IF in%=CHR$(127) AND LEN(hna%(i%))>0 THEN PRINT CHR$(8)+" "+CHR$(0);:hna%(i%)=LEFT$(hna%(i%),LEN(hna%(i%))-1):GOTO 1160 ELSE IF in%=CHR$(13) THEN SOUND 1,200:GOTO 1160
1180 IF in%=CHR$(13) THEN 1230
1190 IF in%="" THEN 1160
1200 IF LEN(hna%(i%))=15 THEN SOUND 1,200:GOTO 1230
1210 PRINT in$;
1220 hna%(i%)=hna%(i%)+in$
1230 WEND
1240 hsc%(i%)=s
1250 s=0:RETURN
1260 GOTO 950

```



Heavy on the Magic

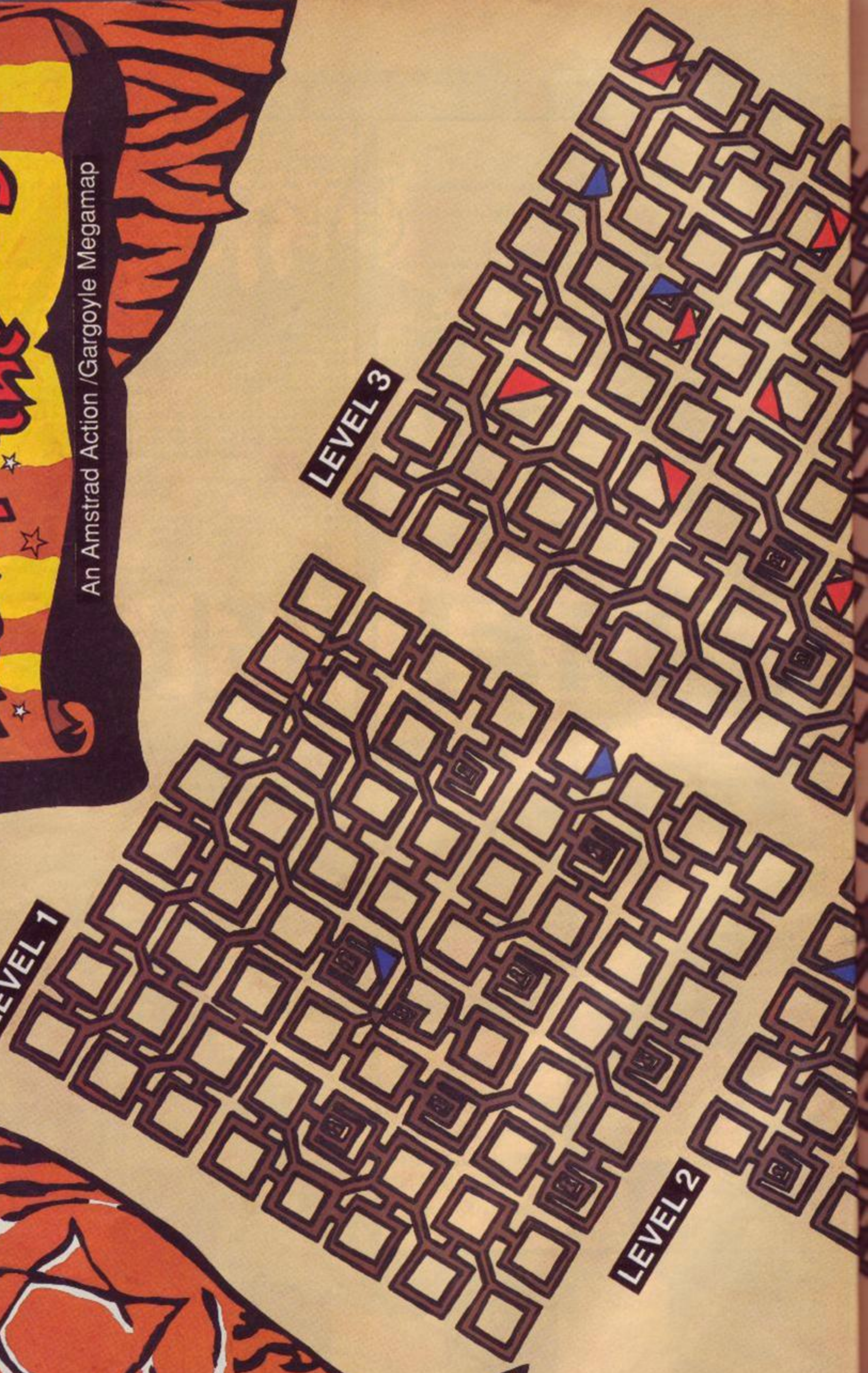
An Amstrad Action / Gargoyle Megamap



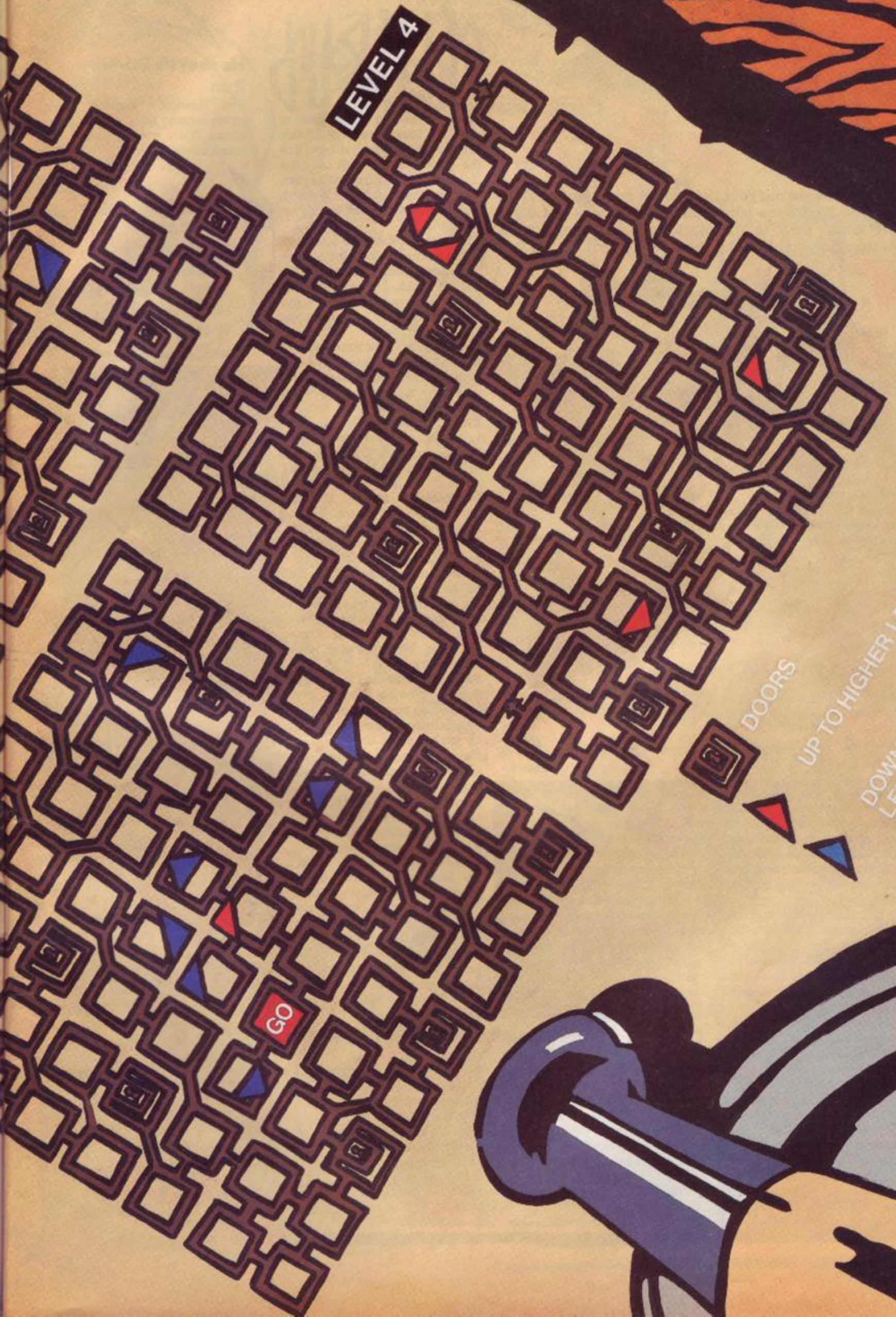
LEVEL 1

LEVEL 3

LEVEL 2



LEVEL 4



DOORS

UP TO HIGHER LEVEL

DOWN TO LOWER LEVEL

GO

CHEAT MODE

Bob Wade checks out your tips, pokes and game-busting ploys. The best ones win a tenner – so why not send YOUR latest gem to: Cheat Mode, Amstrad Action, Somerton, Somerset TA11 5AH

BAT MAN

Phil Howard from Mapperley has done the business for us again with infinite lives on the Ocean classic. It's entered using Method 1.

```
10 DATA 21,90,1c,36,00,c3,00
,01,21,2d,22
20 DATA 36,d3,21,40,20,11,40
,00,01,f2,01
30 DATA ed,b0,21,40,00,e5,21
,00,bb,e5,21
```

```
40 DATA f2,01,e5,21,07,b8,e5
,21,bb,02,e5
50 DATA f1,21,ea,b1,11,d9,b1
,f3,c9
60 MEMORY &2000
70 FOR x=&BE00 TO &BE34
80 READ a$
90 POKE x,VAL("&" + a$)
100 NEXT
110 LOAD""
120 CALL &3A6A
130 LOAD"!",&2040
140 CALL &BE08
```

ELITE

JA Thewlis from Lancaster has a tip for Firebird's epic space game that will increase your ship's cargo potential. All you have to do is follow his instructions, although he warns that it's not for the faint hearted.

1. Find a cluster of two to three systems no more than 2.5 light years apart.
2. Sell all cargo. If possible arm yourself to the hilt with a mining laser, cloaking device and energy bomb.
3. Enter witch space by choosing a hyperspace system, launching, pausing the game, press the F key, restarting and then hyperspacing. Switch on the cloaking device just before you hyperspace and then destroy all but one Thargon.
4. Switch off cloaking device and wait until Tharglets appear. Destroy Thargon and collect Tharglets.
5. Repeat this until you feel

you've got enough alien items, or are in danger of getting killed.

6. Enter normal system and abandon ship using escape pod. When you get your new ship you'll have a 35 ton cargo bay plus the alien items. Sell these and you can use the extra cargo space. This will disappear if you have to use the escape pod again and aren't carrying alien items, but you can always repeat the process.

Fairlight

As well as sending us their maps of this tough arcade adventure Tim Walsha from Henley on Thames and Dargagh Ward of Dublin also sent in solution and playing tips. So here are a few hints to help you on your way around the castle.

1. After killing a guard, pick up his helmet and drop it near a whirlwind to stop him

SPELLBIND

We've received mountains of tips on Mastertronic's classic arcade adventure, but here are the pick of the bunch gleaned from Scott Miller from Glasgow, Matthew Barnes from Welwyn and Leighton Derrick from Port Talbot.

Florin the Dwarf: Give him the bottle of liquid and take it back to restore energy. Give him the bar of gold, broken talisman and tube of glue, then command him to help and he will fix the talisman.

Lady Rosmar: Summon her to the wall on the ground floor and give her the pocket laser. Command her to help and she blows a hole in the wall.

Elrand Halfelven: Summon him to the wall on level two and give him the trumpet. Command him to help and he blows the wall down.

Samsun the Strong: Summon him to the pit on the ground floor and give him the javelin. Command him to help and he builds a bridge across the pit.

Thor: Summon him to the wall on the fourth floor and give him the miolnir. Command him to help and he loosens the wall with a bolt of lightning. Elrand can then blow the wall down with the trumpet.

Banshee: Released by dropping the glowing bottle – gives clues when commanded to help.

Candelium Illuminatus: Pick up the laser and shield and take them to the room containing the four leaf clover, then cast spell to light candle.

Project Physical Body: Can be cast if you have the crystal ball and talisman, and allows you to transport to other people.

Armouris Photonicus: Stand in the pool of liquid on ground floor and cast spell. You no longer need the glowing bottle to pass through the dark room on the third floor.

Fumaticus Protecticum: Cast using the white herring and power pong plant – protects you against the gas room on the first floor.

- reappearing.
2. After killing an ogre, put a barrel on the spot to stop him reappearing.
3. Place a barrel over the spot where a bubble appears to stop it reappearing when you enter the room again.
4. Guards only attack if you get close – except materialising guards which attack immediately.

Herbert's Dummy Run

Phil Howard's second poke gives infinite lives on the third of the Wally games, and is entered using Method 1.

```
10 CLS:RESTORE 100
20 READ s,c
30 FOR p=5 TO s+c-1
40 READ a$
50 POKE p,VAL("&" + a$)
60 NEXT p
70 CALL 42544
```

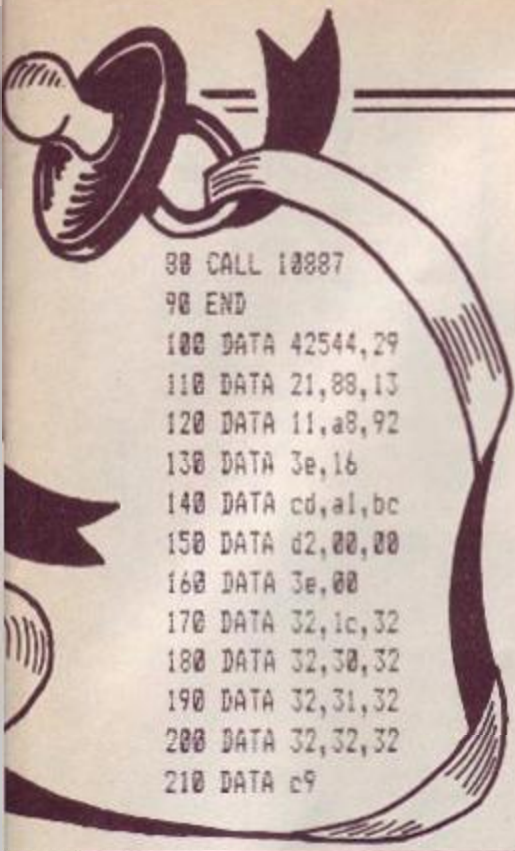


This infinite lives poke comes from A Hacker of Belfast (is that a real name I wonder?) and is entered using Method 2 to skip the first nine blocks, comprising BOMB (block 1) and BJSscreen.BIN (blocks 1 to 8).

```
10 MEMORY 5999
20 LOAD"!",&6000
30 POKE &19FD,0
40 DATA 23279,65,23280,32,23
281,82,23282,65,23283,86,232
84,69,23285,32
50 FOR k=1 TO 7
60 READ po,n
70 POKE po,n
80 NEXT:MODE
0:CALL 6000
```



5. Dropping gold lures the guards, so if you push it under something where it can't be reached you can move around without being attacked.
6. Watch out for flowers on stalks – if you get too close they reach out and rapidly sap your energy.
7. Don't fall in the well – it's fatal.
8. Keep food for as long as possible, and eat the smaller food first because food is useful for standing on to reach things.
9. Fire depletes Isvar's energy.
10. There are three teleports: two of them link towers and the third links the tomb with the north side of the chasm.
11. The loading screen is a view from the wizard's chamber, and the bird points to the start.
12. Falling long distances depletes energy.

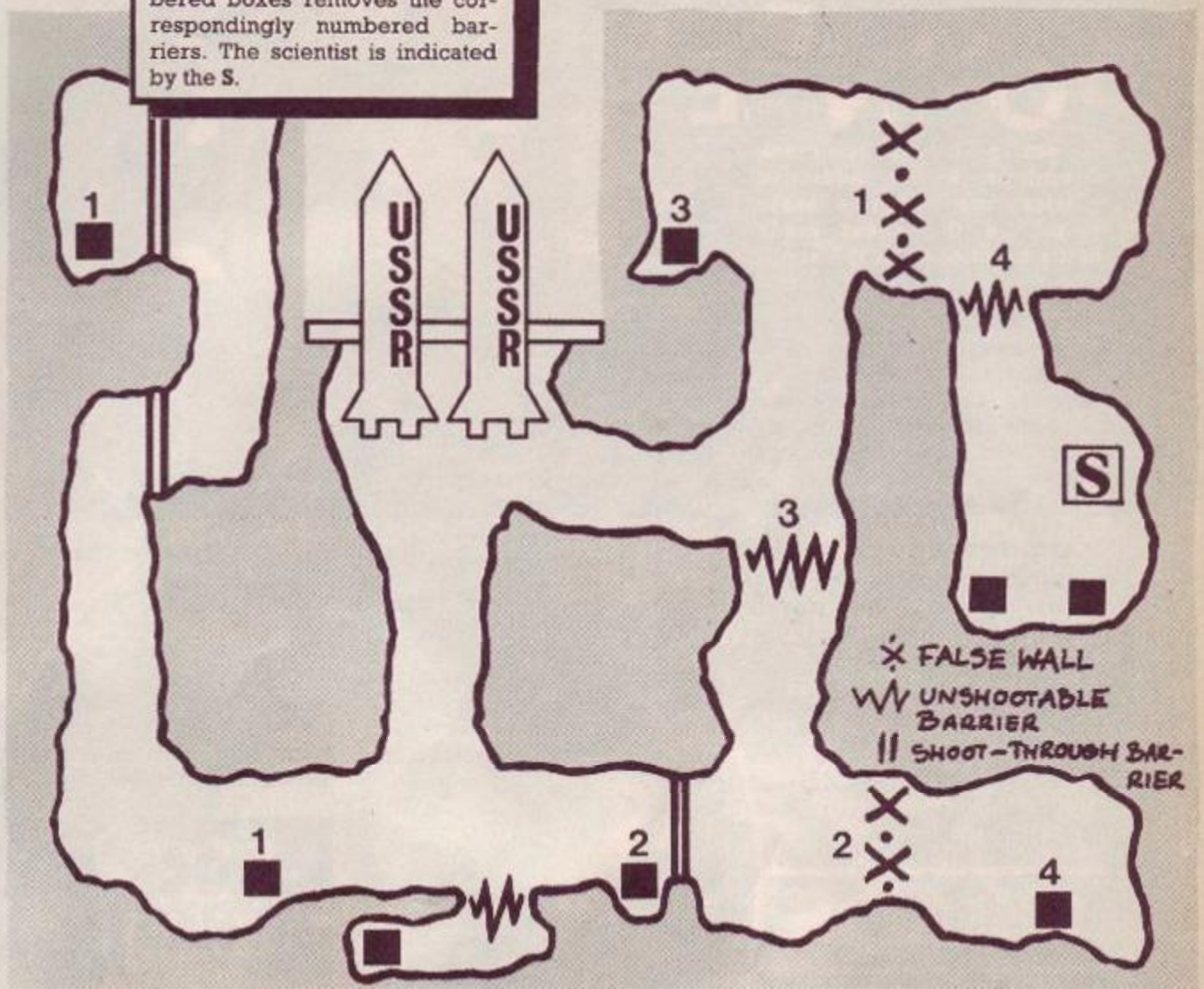


```

80 CALL 10887
90 END
100 DATA 42544,29
110 DATA 21,88,13
120 DATA 11,a8,92
130 DATA 3e,16
140 DATA cd,a1,bc
150 DATA d2,00,00
160 DATA 3e,00
170 DATA 32,1c,32
180 DATA 32,30,32
190 DATA 32,31,32
200 DATA 32,32,32
210 DATA c9
  
```

Airwolf

This old game still causes people a lot of problems, so Richard Devlin from Derry has come to your aid with a map that shows how everything should be done. Shooting the numbered boxes removes the correspondingly numbered barriers. The scientist is indicated by the S.



SM Clarke of Llanfyllin has solved the problem for anybody still struggling with our cover cassette game. It's entered using Method 2 to skip the first block and works only on the version of the game given away with our May issue. It gives immunity to animals, flames, acid drops and negative energy points, but firing and being hit by anaesthetics still drains energy.

```

10 CLS:RESTORE 100
20 READ s,c
30 FOR p=s TO s+c-1
40 READ a$
50 POKE p,VAL("&" + a$)
60 NEXT p
70 CALL 42544
80 CALL 10887
90 END
100 DATA 42544,29
110 DATA 21,88,13
120 DATA 11,a8,92
130 DATA 3e,16
140 DATA cd,a1,bc
150 DATA d2,00,00
160 DATA 3e,00
170 DATA 32,1c,32
180 DATA 32,30,32
190 DATA 32,31,32
200 DATA 32,32,32
210 DATA c9
  
```

TAU_CET_i

This poke for the cassette version of the game comes from Tony Hoyle of Blackpool. It's entered using Method 1 and gives infinite flares, AMMs, missiles, shields, fuel and also stops the laser heating up.

```

10 MODE 1:BORDER 0:INK 0,0:I
NK 1,11:INK 2,26:INK 3,24:PA
PER 0
20 OPENOUT"d":MEMORY 1529:CL
  
```

```

USEDUT:WINDOW 4,36,21,24:PEN
1
30 LOAD"!title":CALL 2000:LO
AD"!part1":LOAD"!part2":INK
1,20
40 POKE &4FF2,0
50 POKE &5025,0
60 POKE &4FC0,0
70 POKE &5264,0:POKE &5265,0
:POKE &5266,24
80 POKE &4E93,0:POKE &4E94,0
90 POKE &4F5F,0
100 CALL &88BB
  
```

Poke methods

This is the section where we explain how to input the majority of the pokes using two types of method.

Method 1: Type in the listing. Rewind the game tape. Type RUN followed by pressing enter. Follow on screen prompts to load the game.

Method 2: The tape header/loader/title screen, comprising usually of one or two data blocks has to be skipped. Rewind the game tape. Type in CAT followed by enter and play the tape. Watch the screen and a message will come up.

Found FILENAME block 1 OK where FILENAME will be replaced by the name of the loading section. The next message that appears will be the main program appearing in the same style.

Found MAINFILE block 1 OK where the MAINFILE will be different for each game. Note the point on the tape counter at which this second file appears. Stop the tape and rewind to just before that point. Type in the program and RUN it. Then press play on the tape deck.

BOUNTY BOB SINKS BACK!

In response to a plea in the May issue, SA Hulley from Hemel Hempstead has come up with an infinite lives poke. It's entered using Method 1.

```

10 MEMORY &3900:CLS
20 LOAD"":LOAD"!",&4040
30 a=&8900
40 FOR n=0 TO 51
50 READ d$:POKE a+n,VAL("&" +
d$)
60 NEXT n
70 CLS:PRINT "Please wait"
80 CALL &8916
90 DATA 21,6e,06,36,18,2c,36
,05,c3,40,00,21,34,bd,36,00,
2c,36,89,c3,04,bd
100 DATA f3,11,40,00,21,00,b
b,01,37,02,d5,e5,c5,78,21,4b
,40,36,72,2e,4e,36
110 DATA 92,6c,ed,b0,37,c3,2
c,b8
  
```



CHEAT MODE

BOUNDER

If you're trying to crack Gremlin's wildly addictive Mastergame - here's some help. It's the cheat mode that's mentioned in the scrolling message display, and comes courtesy of Gremlin themselves.

All you have to do is type in this line, press ENTER, and then load the game without resetting the machine. When it has finished loading wait for the scrolling message to tell you that the



have infinite lives and be able to see the whole game.

POKE 800,201

cheat mode is operative, and then start the game. You will

Commando

This poke from SR Taplin of Worle gives 255 lives on the Elite shoot-em-up and is entered using Method 1.

```
10 MEMORY &5BFF:LOAD"command
a",&5C00
20 FOR a=&9000 TO &9012:READ
b:POKE a,b:NEXT
30 POKE &5C33,&03:POKE &5C34
,&0:POKE &5C35,&90
40 CALL &5C00
50 DATA 205,122,188,175,50,1
5,78,6,6,33,59,7,119,35,16,2
52,195,54,92
```

Beach-Head

Paul Harrop from Barnsley advises anyone having trouble with the bug that pressing the TAB key will take you back to the start of the game. You'll still have to start all over but at least you won't have to reload the game.



works helps to fill the ravine that cries out for HELP.

6. Be careful when experiencing 'The Ultimate Experience'. Care is needed going from screen to screen.

Monty on the Run

Simon O'Connell and Emmet Masterson from Sidcup have some tips on the Gremlin game.

1. When the top of the teleporter column is green you can walk through without being teleported.
2. The correct freedom kit consists of the jet pack, rope, passport, gas mask and bottle of rum.
3. Don't pick up the dynamite or the teddy.
4. Don't take the lift up.
5. A joystick in the sewage

Laserwarp

This poke for invulnerability comes from S Sandles of New Tredegar. It's entered using Method 2 to skip the first two blocks of the program.

```
10 MEMORY &3FFF:LOAD"LASERWA
RP"
20 POKE 27388,255
30 CALL &4000
```

Death Wake

Jeffrey Hewitt from Castleford suggests that you type in 'It's my

birthday' on the high score table. You'll be wished a happy birthday and made invulnerable for subsequent games.

Daley Thompson's Decathlon

Lots of keyboard-bashing players have told us the keyboard alternative to breaking up your joystick on this game. R for left, T for right and G to jump. Now you can smash up the keyboard instead.



Simon O'Connell and Emmet Masterson also have a neat way of beating the wrestlers with no trouble at all.

This game can be made very easy by softening up each opponent. If you don't your opponent simply throws you off when you try to hold him down. To beat each one get behind him and start kicking. When he starts spinning, move up and kick again. Once all his energy is gone perform a simple move (aeroplane spin, for example) and pin him down.



Courtesy of Simon Cuddeford from Kenilworth comes the names of the 15 teleport terminals. The most important is QUORE which is the nearest to the planet centre where the pieces of core have to be deposited.

TALIS	KRYZL
QUORE	RALIQ
ANGLE	INDOL
UPAZZ	DULON
SNODY	OPTIK
ZODIA	
ELIXA	
VOREX	
ASCIO	
AMBOR	

How to win an ENTIRE ISSUE's Rave software!

The standard of pokes, maps and playing tips you've been sending us has been so high that we've decided to up the stakes! From now on we'll be setting you challenges each month to produce a particular poke, map or set of playing tips. All you have to do is find the solution and let us know about it within a month of the issue being published.

The best solution to one of the problems will win a stunning prize - a copy of every single Rave and the Mastergame from the issue in which the solution is printed. The number of these games will vary of course but in past issues there have been six Raves or more so that's over £50 worth of software and some months it will be over £100! The prizes will normally be supplied on cassette - but if you prefer you may ask to have disc software of equivalent value.

We'll also be giving out up to five runners-up prizes every month of one of the Raves/Mastergame in that issue. You don't necessarily have to solve one of the problems we set to win a prize - if you come up with something even better that'll suit us fine.

To get the ball rolling here are some real testers for you - we're confident that someone out there can come up with the goods.

- 1.A Poke to produce invulnerability to water on *Sorcery Plus*.
- 2.A Poke for infinite flame throwers on *Green Beret*.
- 3.A map and/or solution to *Knight Tyme*.
- 4.A map of *Into Oblivion*.
- 5.A playing guide to *Tau Ceti: The Special Edition* (that's the disc version).

Meanwhile the worthy winners of £10 vouchers under our earlier system are S M Clarke from Llanfyllin for the *Covenant* poke, and Tim Walsh from Henley on Thames and Daragh Ward from Dublin who get a tenner each for their *Fairlight* maps (see last issue) and tips.



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LEADER

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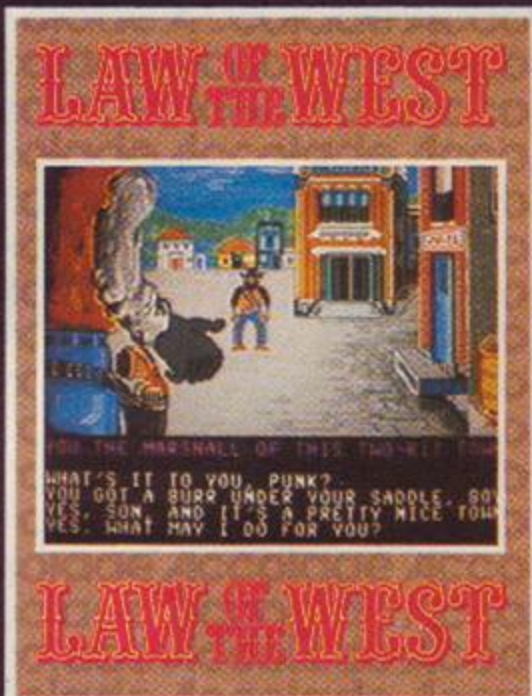
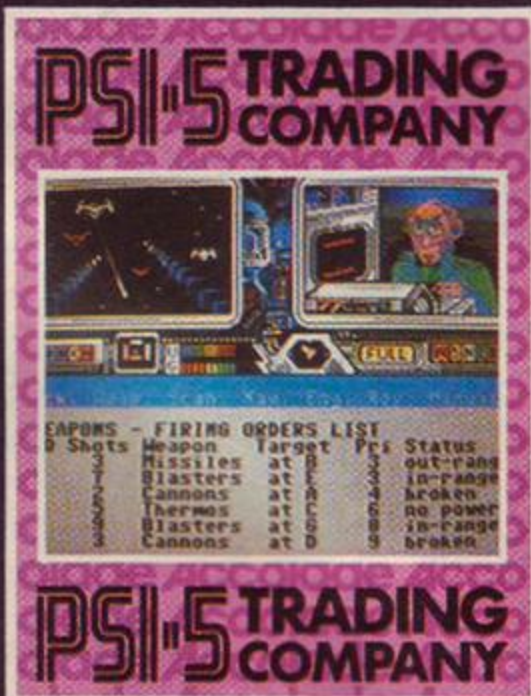
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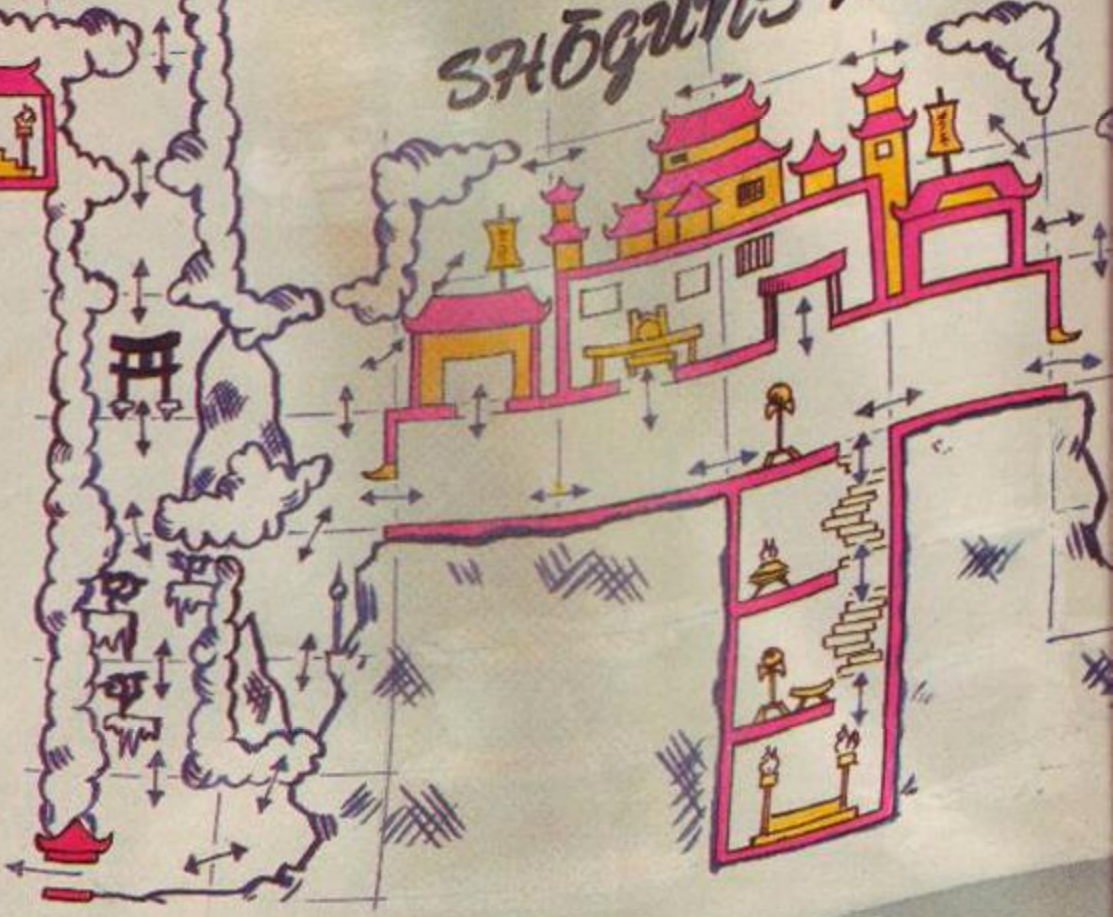
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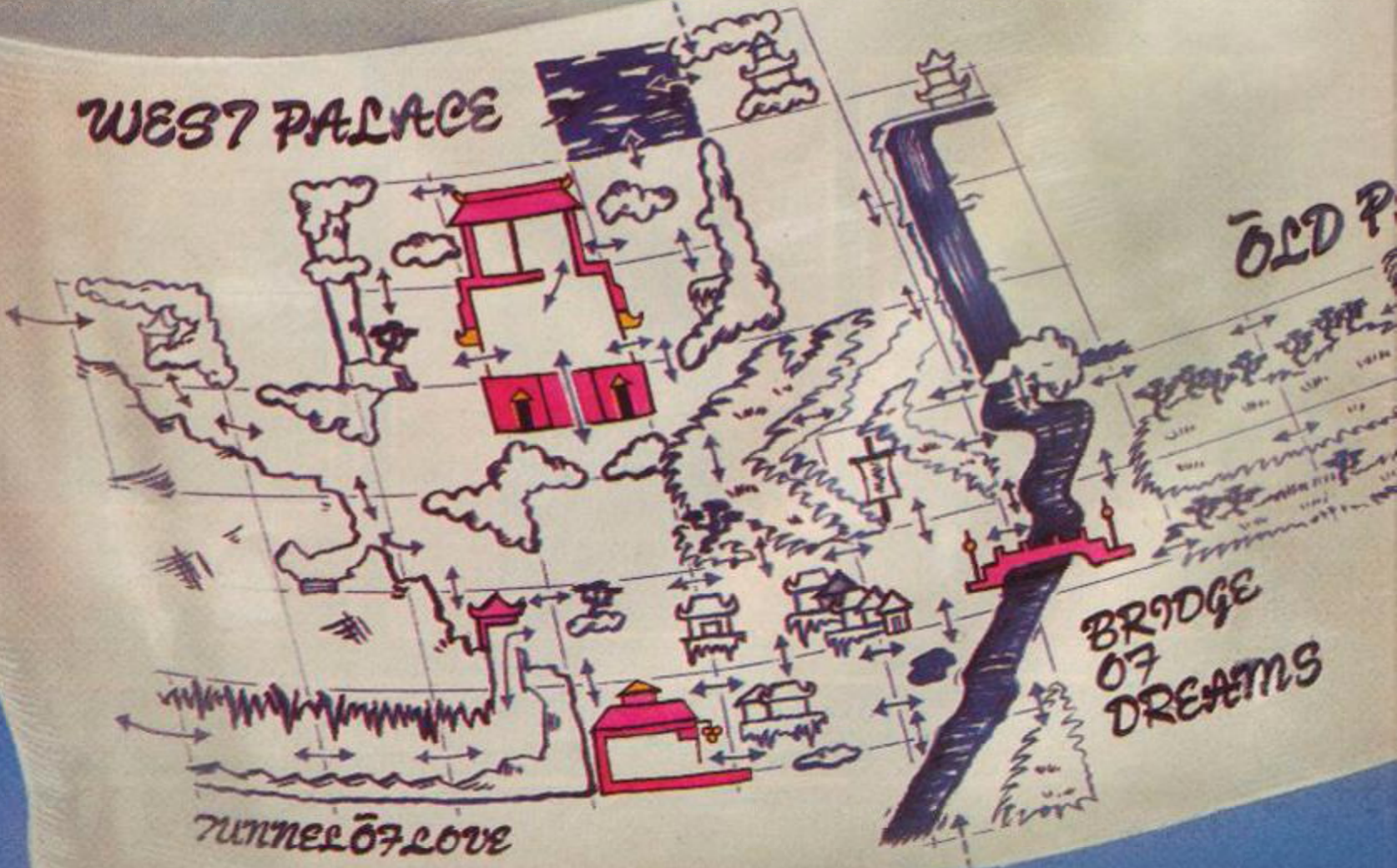
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Run for it, Robin!

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This program from Qualsoft, which has only ever been available on mail order, has attracted something of a cult following as the thinking person's football management simulation.

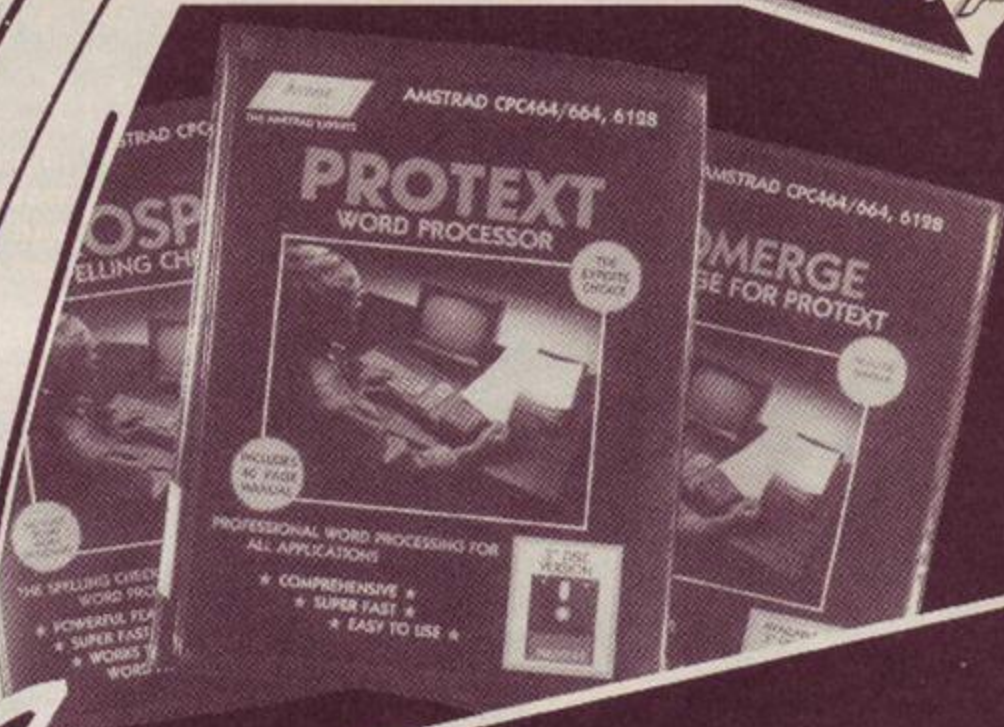
It places you in Bobby Robson's shoes as you try to lead the England team from the pre-qualification stage right through to victory in Mexico. You have numerous decisions to take including team selection, tactics planning and substitution timing.

The package, which includes a 20-page booklet, normally costs £9.95.

What better way of celebrating the World Cup summer than indulging in a little trial of strength of your own?

(Please note, this product has no association with FIFA nor with the US Gold title *World Cup Carnival*).

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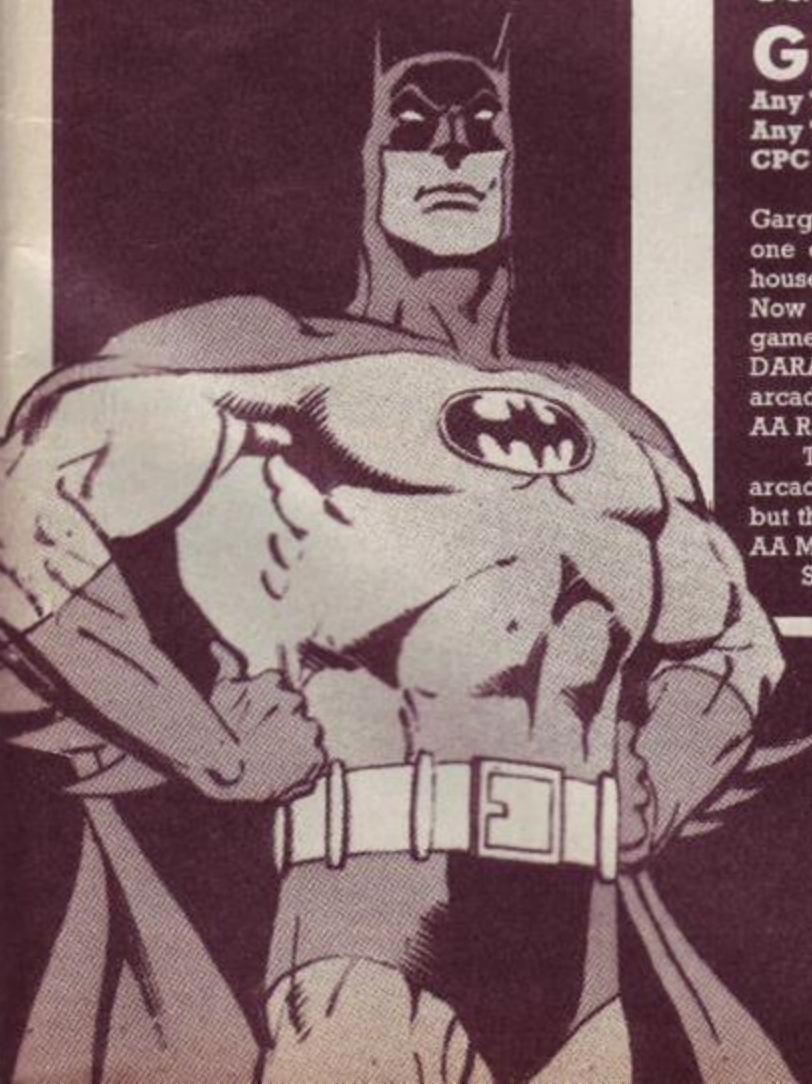
Then came MARSPORT, another big arcade-adventure with stunning animation but this time a futuristic location. It won the AA Mastergame slot.

SWEVEO'S WORLD featured Ultimate-

style 3D graphics, wacky puzzles and entertaining animation. Another AA Rave.

Finally there was the innovative text-input adventure HEAVY ON THE MAGICK, a second stunning Mastergame.

Three of the games normally cost £9.95 on cassette and £13.95 on disc, the odd one out being Sweevo's World which is £6.95 cass, £12.95 disc. But whichever two you order, this offer provides you a superbly economic way of checking out this company's challenging, state-of-the-art software.



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The cartoon should be submitted in black ink on white paper. No colour, please.

There is no restriction on number of entries.

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Send your entries to: *Rainbird Competition, Amstrad Action, Somerton, Somerset, TA11 5AH.*

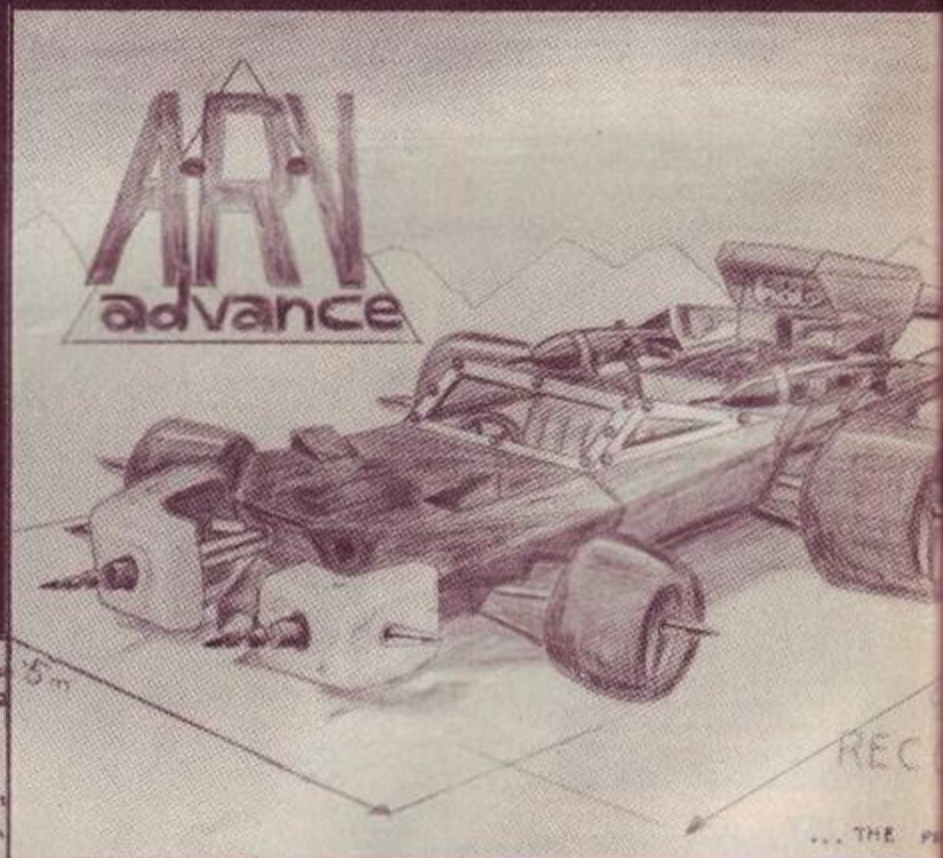
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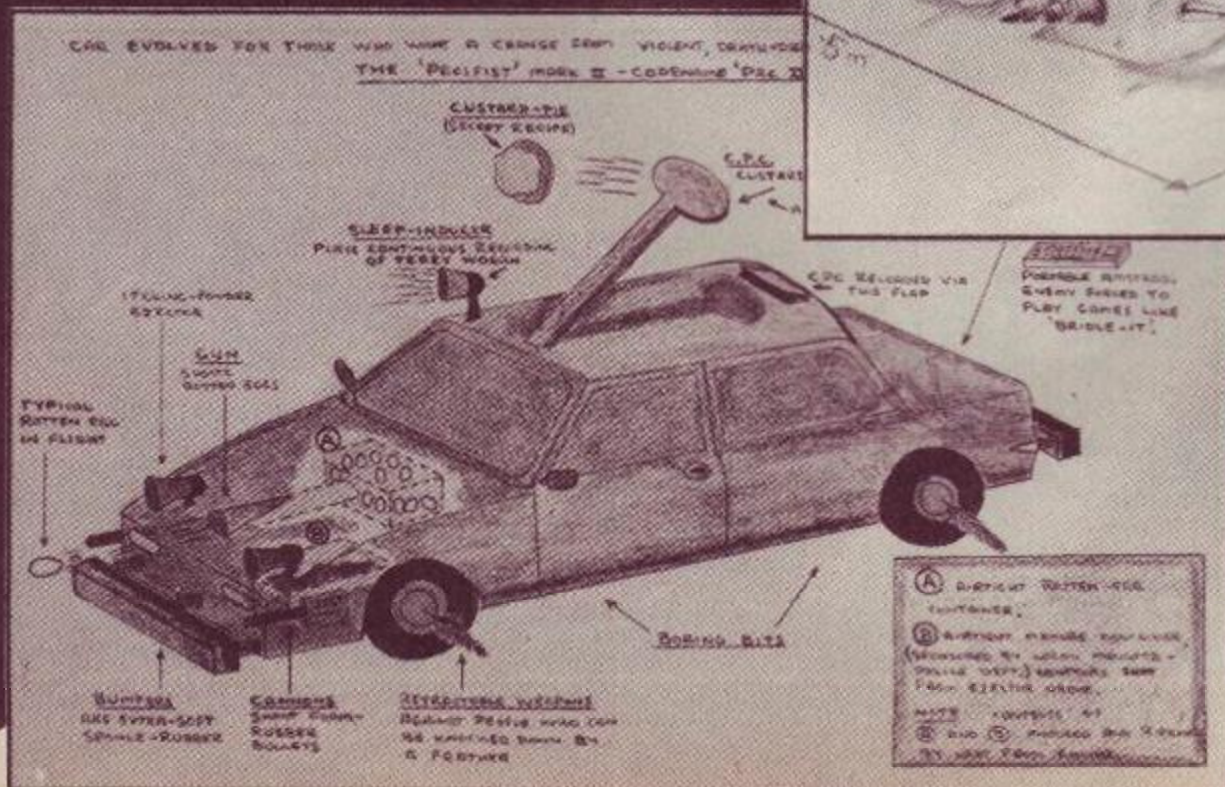
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• Paul Robson's entry

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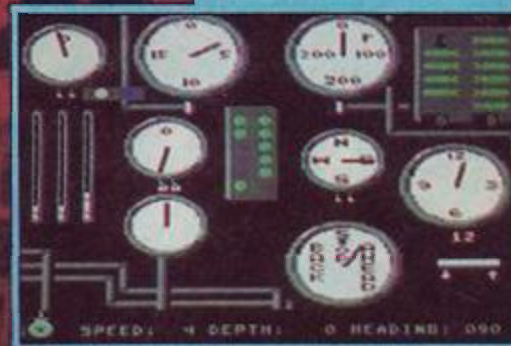
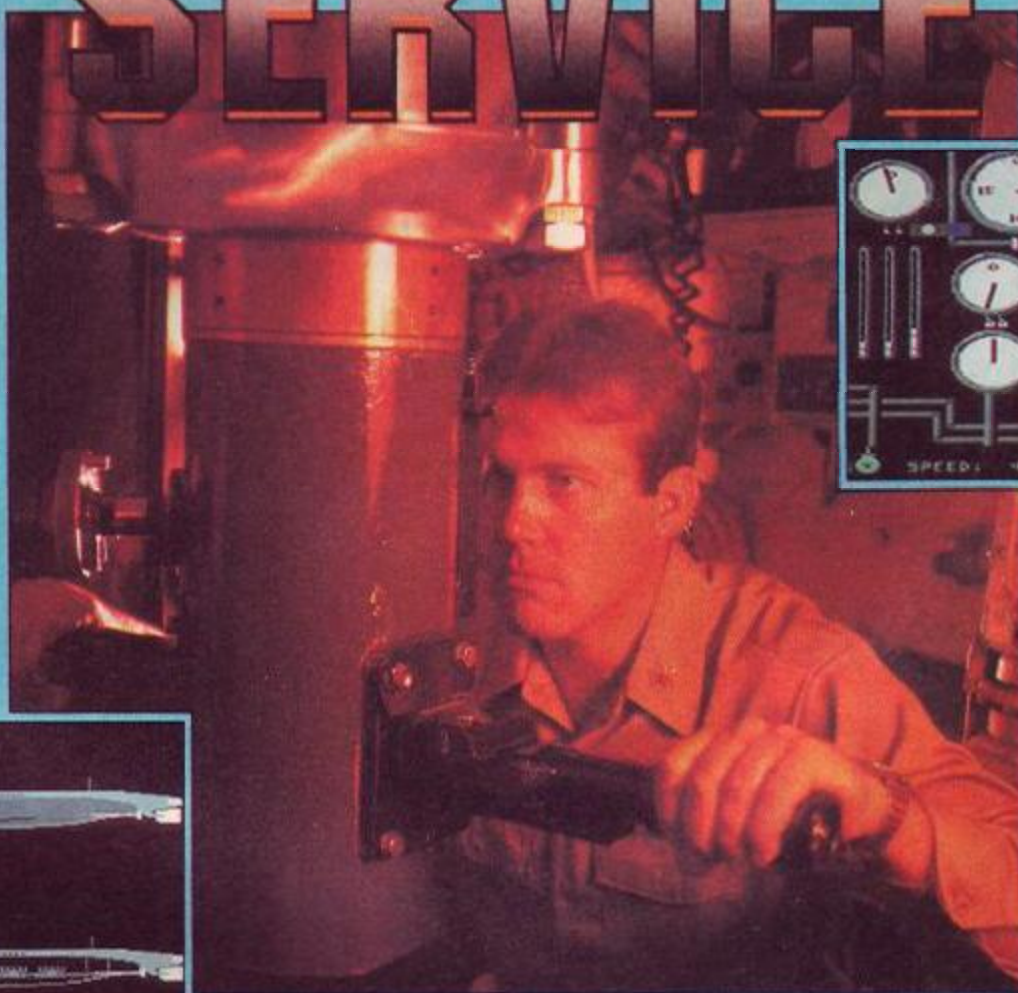
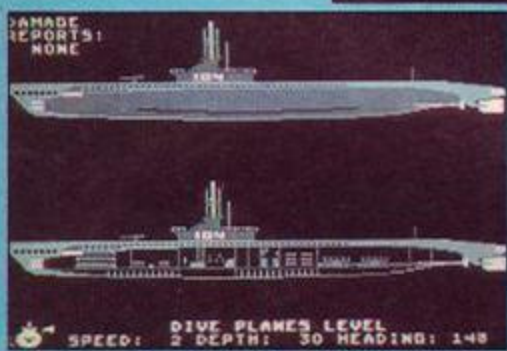
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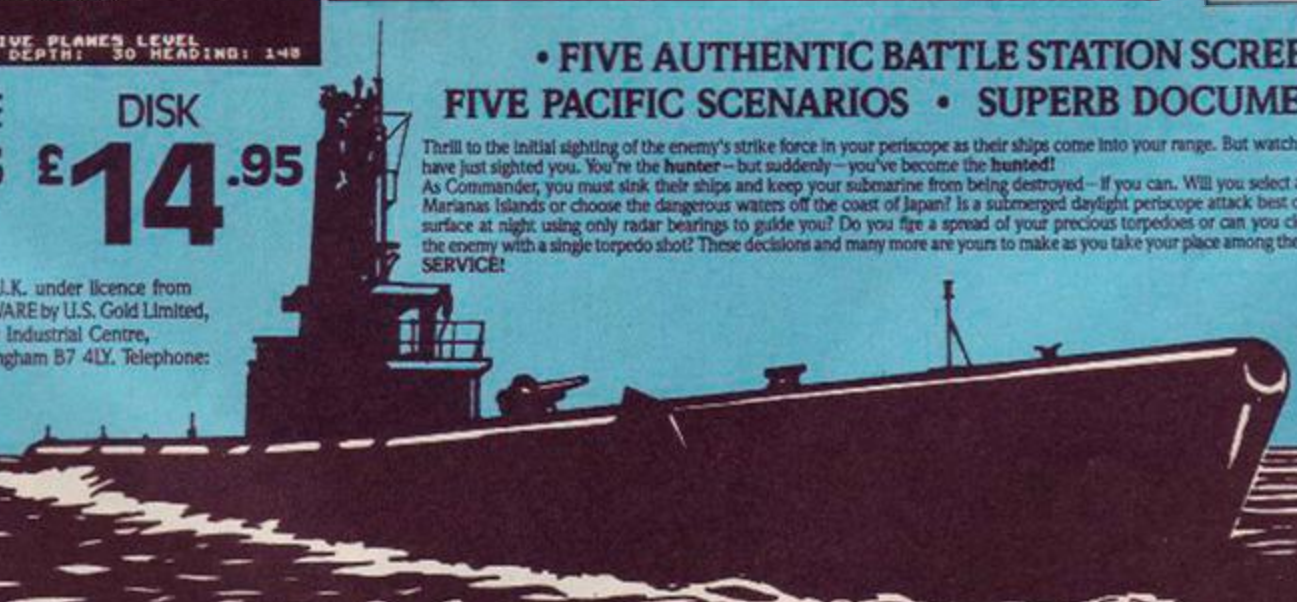
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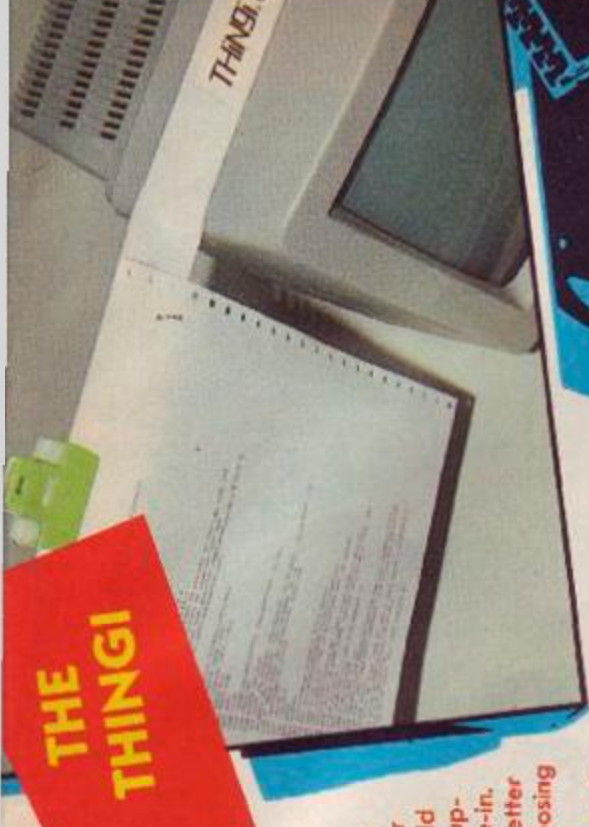
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This is the Thingi that sold like hot cakes on its launch at this year's computer show in Manchester. Like most brilliant ideas, it's stunningly simple, yet remarkably useful.

The Thingi is a carefully-shaped plastic holder which allows you to dangle a sheet of paper right next to your monitor screen at just the right angle for you to read from it. This is ideal for anyone who needs to refer to other documents while typing. For example you could use it to hold your copy of Amstrad Action up-right while you type in a type-in. Or you could dangle a letter there while you're composing your reply.

The Thingi is fastened to the top of your monitor using a Velcro strip which means you can remove it very easily when you don't want to use it.

Normally the Thingi costs £6.99, but not when you join forces with AA. It's yours for the asking.

might be a little large for young children - however there is a left-handed version if you prefer to hold the base of the joystick in your right hand and control the stick with your left.

The Speedking is built solidly and should stand up to months of heavy use. It normally sells at the bargain price of £12.99. Coming free with your subscription, it's a steal.

the Konix more than any other joystick, wrote: "The grip is very comfortable and should enable long hours of play... The internal contacts are micro-switches which give a positive clicking action. This makes it ideal for platform and wagging games, but it is also suitable for many others."

Bob added that the joystick

This is the stick that won enthusiastic praise in our April issue. Unlike most joysticks which work best standing on a table-top, this one is cleverly designed to fit neatly in your hand.

Chief Amstrad Action game-tester Bob Wade, who now uses

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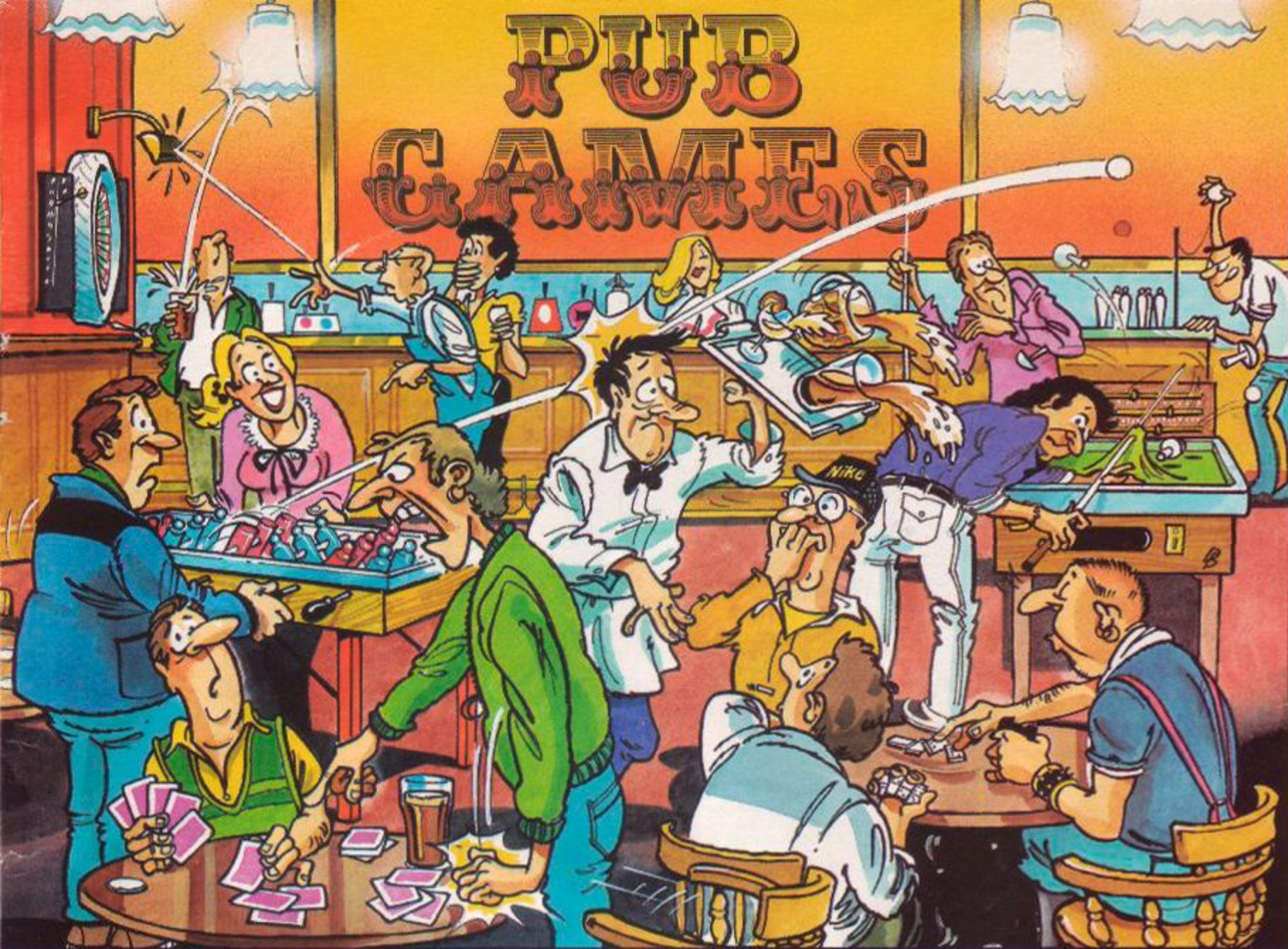
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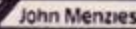



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