

The Thirty-third

WAGGI

July 1989

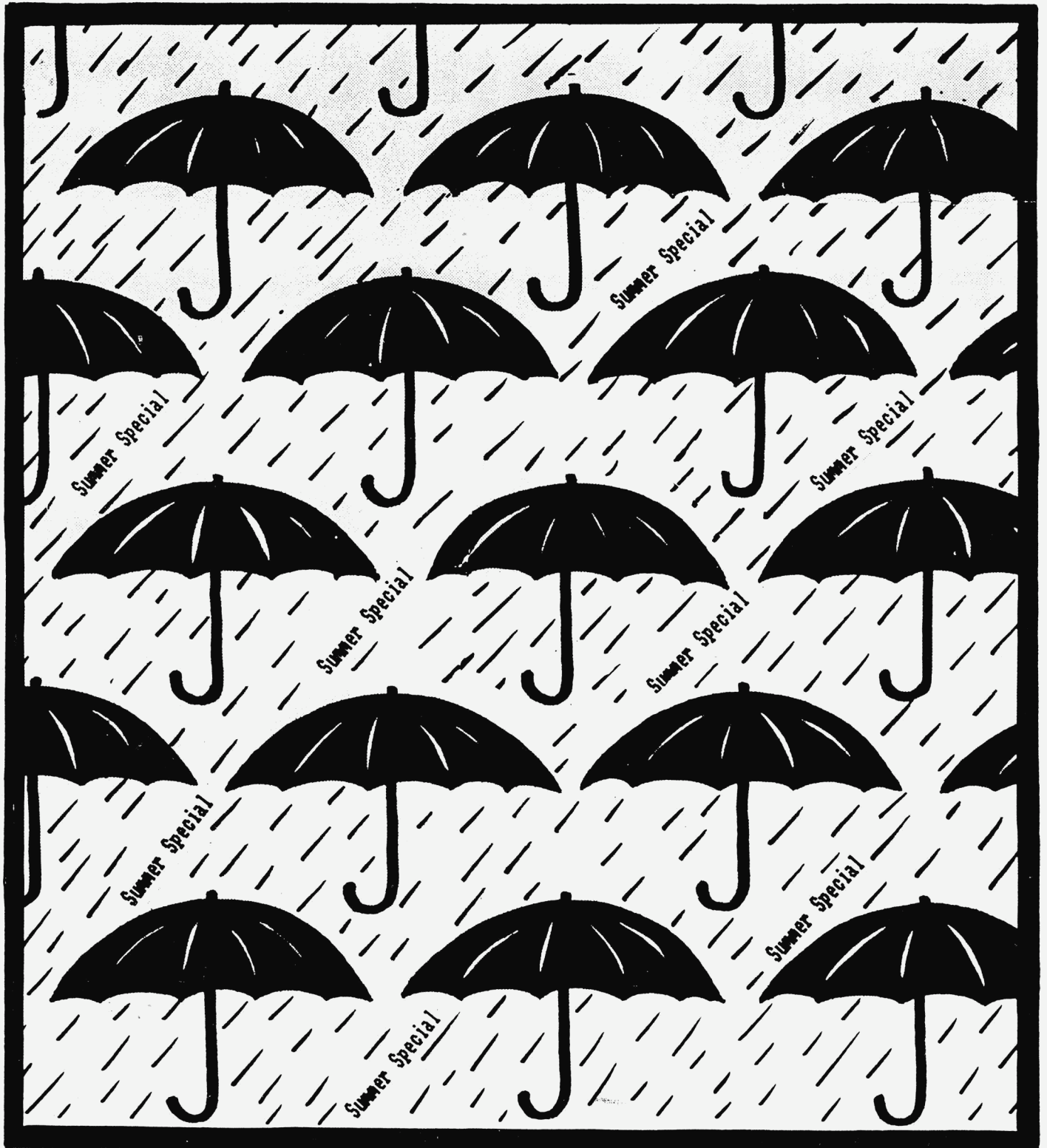
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Hi gang, WACCI's back and as you may have all ready twigged, unfortunately we had to lose the June 89 issue. Before you panic, about paying for an issue you haven't received, everyone's subscriptions have had an extra month added to them. So if you've paid for twelve copies then it's twelve copies you are going to get.

WHAT HAPPENED?

The loss of the issue was mainly due to the fact that, in May, the photocopier broke down. It took ten days to get it up and running again. This was why the May issue didn't go out until the 22nd of May.

If you recall the photocopier broke down in November last year as well. That time it took another ten days to fix. In reality, the length of time that the machine is out of action effects the publication date. Once that date gets set back it's just not possible to claw those vital days back, WACCI is all ready working at full stretch as it is.

When we came back from sending out the May issue I sat down and had a long hard think.

I realised that if there was going to be a June issue, at all, I would have to start it straight away and

finish it off in under a week, that's just about feasible but it involves parking yourself at the keyboard on Monday morning and staying there until Saturday evening. Not something I willingly subject myself to.

It would also have involved leaving the pile of outstanding loose software orders to carry on growing for another week. Some of the orders had already been waiting for quite a while and believe it or not I don't like to have to apologise about delays in orders.

With a great deal of reluctance I had to admit to myself that the opportunity to produce the June issue had long since passed me by.

It was not an easy decision to take and I really disliked the idea of breaking WACCI's unbroken run. I even toyed with the idea of cramming as much as possible into this issue and labelling it as the June/July "Summer Special" but decided that that was a really a bit of a cheap con. Boosting the number of pages just for the sake of it is not WACCI's style (although certain other mags seem to think they can get away with it.) I know that you're more interested in the quality of the content, not the quantity.

So that's the story behind our absence. It's ironic that in May I was

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*If I get reports of this
helpline being abused by
software pirates I will
scrap it without any further
discussion - Ed*

talking about the three options I had in order to have a break away from producing the mag.

Two months later fate's stepped in and decided the matter for us, we're one issue down and I still didn't get a break. Ahh well not to worry there's always next year, maybe.

SOME LIKE IT HOT

Right. That's enough of the doom and gloom stuff. Let's have bit of a chat before we get on to the news.

Is it warm enough for you? Summer's here and it's great isn't it? Well at least it's great now since I've gotten my act together and bought an electric fan. I've got it sitting on the top of my monitor blowing a breeze over my perfectly formed body. I've also gone and dug out some ace togs from my fabulous wardrobe. Now, while it's sweltering outside yours truly remains really cool inside.

So here I am sitting at the keyboard dressed only in my funky Bermuda shorts, shades and wristwatch, looking totally wicked, a real computer heart-throb. The only minor problem is that, due to the sunglasses, I have to turn the VDU brightness control turned up pretty high to see anything at all. I suppose that's a small price to pay for being a leader of fashion.

Now I wouldn't say that I'm good looking. You know me. I'm too modest to make that sort of statement but let me put it this way, it's amazing how often people get me confused with Don Johnson from Miami Vice. Honestly, it's true. Every time I walk down the street young ladies run after me shouting Don, Don. That's awesome huh? It has been warm though hasn't it.

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It's been a time of droughts, all the plants withering, sharks sighted off the West coast, hosepipe restrictions, sunstroke and poisonous jellyfish in the south-coast sea

Never mind it's Wimbledon week next week so it's bound to chuck it down for the fortnight.

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THANK

A big thank goes out to the following people. If I've left anyone out I apologise.

To Frank Frost for sweating over VDE265 configuring it for the 6128 and sending it in to The FSW Library.

To Derek Edwards for helping out the club by providing WACCI with this month's inserts and order forms.

To Steve Lee for keeping his eyes open on my behalf.

To Auntie John for a brave attempt at porting some software from my CPC onto another machine.

To Glyn Williams for helping collate the magazine each and every month.

To all those kind people who wrote in and said that I should make time to take a holiday.

To all those people who sent in their unused disc cases for the club to sell.

To Peter Ceresole for writing yet another Playing With Protext (I didn't even say please.)

To Joolz, as always.

DISC BOXES

There is a new product on the Subs and Offers form this month. I thought I'd better mention it here in case you don't spot it later. We have some disc boxes in the office here at WACCI HQ. They are the hard plastic, clear hinged lid variety with section dividers. They can hold up to thirty three inch discs at a time. Ideal for keeping your discs in some semblance of order. WACCI is selling at £4.99 each which is a bargain.

The boxes are a one-off batch and once they are gone I might not be able to get hold of any more. So, if you fancy the idea of owning one, bung an order in pretty quick because they might not be there next month.

MEMORY LANE

Let me take you back in time for a moment. It's the summer of '79 and it's a hot one. Mrs Thatcher has just been elected the country's first woman Prime Minister.

A pint of beer costs 82p, a packet of twenty cigarettes costs 54p and the rate of inflation is running at 15%.

Cliff Richard is celebrating 21 years in show business and is in the charts at number one with "We don't talk any more." Other songs in the charts include "I don't like Mondays" by the Boom Town Rats "Message in a bottle" by the Police, "Video killed the radio star" by Buggles and Rod Stewart's "Do ya think I'm sexy?"

Auntie John is only ten years old and has not yet laid his hands



upon a computer keyboard, a Pink Floyd Album or even Fiona.

Clubs, pubs and amusement arcades all over the country have one thing in common. They all have at least one Space Invaders machine sitting in a corner somewhere. Remember it now? Yes it's the Golden Era of the Space Invaders. What were you up to then?

Well thank to Auntie John and his new Space Invaders program (see the FSW library) you can now re-live that age. Yes all you ageing hippies can dig out your flares and zap the mothership once more.

BYE BYE

Once again, like Daphne Clark, we are at the parting of the ways? Speaking about that, as we were... Have you seen Neighbours lately? How long do you reckon it'll be before they let her pass over peacefully? Did you know that the UK storyline is two years behind the Australian one? Common all you Aussie WACCI'ites, at least one of you must watch it. Why not write in and tell us what's going to happen over the next two years? Then we can get back to doing more useful things, like playing Space Invaders. Tarra.



THE ADVERT

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FAIR COMMENT

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COMPUTING SEXISM?

Dear Joolz, I think it's about time we had more female computer enthusiasts (like you) writing articles in computer magazines. It would put pay to the myth that modern technology is purely a male past-time.

Through personal experience I know this to be a lie because my wife works in the London Borough of Hammersmith's Information Technology Department and I cannot understand some of the things she tries to tell me about the workings of their ICL VME mainframes.

If it's true that the editor of WACCI is such a miserable person (as you say he is) why do you bother to continue to work for him? With your talent, I'm sure that you could easily get a well paid job with a computer magazine of your choosing.

Do the sensible thing Joolz and write a letter to Amstrad Action or even Amiga Computing. I'm sure that either magazine would love to take you on board as an agony aunt.

Keith Pope
Chiswick

<<Thank you for the lovely compliment Keith but I'm sure that Derek Meakin (the head-honcho of Database) and the other guy (head of the Future thingy) don't actually know me from Adam (or should that be Eve?) Anyway, the point is that until I get some "serious" type of recognition I will be stuck here with Old Misery Guts (OMG) for quite a while. Do you realise what I have to put up with?

For the past few days he has been turning up at the office, trying to pose, wearing a pair of his old school P.E. shorts, mirror sunglasses, a tie-dyed T-shirt, fluorescent socks and a pair of Doc Martin's on his feet. The tragic point is that he actually thinks he looks "cool." Keith Do you want to tell him the reality, because I certainly don't fancy being the one to have to -Joolz.>>

FOOTSY-WOOTSY

Dear Joolz, I loved the photograph but couldn't understand why you chose that particular pose. Are we supposed to find some deep meaning in your raised foot?

I tried to follow OMG's advice and read the belated May WACCI slowly, until I realised that if I did not speed up, then the June WacCI will arrive whilst I was still only half-way through this one, unless it's late as well. There were rumblings around the country that the May WacCI may not appear at all but thank heavens, they were wrong.

Which brings me quite nicely on to the subject of Ed. and his summer holidays. A month without WACCI would be unthinkable so please do not consider idea's 1 & 2 any further. Sending out two issues together has some merit but also a few pit-falls. How will you produce Fair Comment for the second month? Do you want us to write double the amount of letters, one for July and one for August? If you do, then how can we write the second one when we don't know what was in the July issue to complain about? All the news items will be out of date too, still I suppose that would allow ACU time to catch up a little.

There is a fourth possibility. Why not ask Jeff Walker to sit in for one month? Surely he still remembers us?

Quite a few things caught my eye in Fair Comment last month apart from the sole of your shoe. The six-eight special was definitely too subtle for me. Pete Murray and the six-FIVE special Ok, but six-EIGHT?

Included on this disc is the file for converting Spectrum Binary to Amstrad that R A Bowler was after. I hope he doesn't think that this will allow him to play complete Speccie games on his CPC because it won't. Still, why would he want to anyway? By the way, he will need to get hold of a copy of the July 1986 CWTA for

information about how to use the files. I can't help here, I'm afraid.

I read a few comments from readers that they are glad that WACCI does not include Games reviews which as you know is a view I share myself. I felt though that May's Propergander was nearly exactly that. Enough, we cry.

RYFM Joolz, or read the instructions for Classic Adventure. Classic is one of those funny games called a TEXT adventure where you have to tell the computer in which direction you wish to travel or what action you want to take. None of these could possibly be a numerical input. However, just for a laugh I loaded up Classic and entered some numbers, including number 7. All I got in reply each time was, "I Don't Understand". Perhaps you've got a duff copy? If you wish to continue crashing your version, then use Bonzo to transfer it to disc and then it'll load in five seconds.

Re: Mr A Buncher who is having trouble with Match Day II. If he would like this game on tape then ask him to drop me a line and I will send it to him as I don't want it. (It loads perfectly.)

Well time to go now. There's lots to do in the garden now that the sun is finally shining. Bedding plants to prick out and the fence needs creosoting. So much to do, so little time and on top of that I've got to learn all about Modems. Will it ever end? I sincerely hope not.

Bob Adams
Welwyn Garden City

<<I'm Glad you liked the photo Bob. The reason my foot was raised in that fashion was because, at the time, I was aiming a swift kick in the general direction of OMG's soft sectors.

He had just cracked a joke with lewd innuendoes about the birds nesting in the back garden and certain parts of my anatomy. Alex Aird just happened to be clicking away with a

camera at the right moment.

Ah, the holidays... as you may already read in Thanx 'n' Stuff, the photocopier seems to have decided the matter for us. Still you didn't have to wait all that long for your next issue of WACCI did you?

Jeff Walker? Who's he? Hang on, I think I have met him once. Do you mean that little hippy in a old Burton's suit who keeps trying to persuade OMG to buy an Amiga calculator? No, somehow I don't think he'd be capable of putting an issue of WACCI together.

Sorry about the Six-Five special slip, you are indeed correct. My only defence is that I never used to watch much television at that stage of my life, I was heavily into the Brownies instead. To this day though I can still remember the theme tune:-

*The Six-Five Special's
Coming down the line.
The Six-Five Special's
Right on time.*

The Six-Eight Special must have been a little bit late due to a strike.

Thanks for the ZX Loader program Bob (and also John Hilton for the same reason, see his letter) if Mr Bowler wants to send me a blank disc I can now return him a copy of the program.

Yes, I agree with you about last months Propergander and I've already had a word with Old Misery Chops.

RYFM? Aha now hold your horses Bob before you pass that particular honour onto me. I don't have a flimsy manual to read in the first place (RYFM does stand for Read Your Flimsy Manual, doesn't it? That's what OMG tells me it stands for but he always laughs when I ask. Why is that?)

Anyway, getting back to the point, it seems to be you who hasn't read the documentation properly. Look again Bobsy, Dave Stubb's letter in May's Fair Comment was asking about re-loading a saved game from "the Adventure program on the CP/M Disc 4."

Ouch! am I right or am I right? Yes I knew you'd agree. You are probably talking about Level Nine's pale imitation of the original proggy.

The CP/M+ Adventure is the nearest

version I've seen to the one I used to play (many years ago when I should have been concentrating on my degree) on the Essex University mainframe.

OK I confess, I exaggerated by a factor of five when I referred to Advent's loading time. It takes one minute for it to boot up from disc and 32 seconds to boot up once you've dumped it into the silicon disc. You must admit though, that's still a long time to wait without a pretty loading screen to look at.

Pricking out your plants eh Bob? Just remember to pull them out, securely but gently, by the cotyledons (and you must remember to only select the firm upright stems.)

Use a very small dibber to prepare your new bedding and try to harden out the stiff ones before you re-plant them -Joolz.>>

DEAR WHO??

Dear Steve, I phoned you up on Tuesday, only to find that you had gone skiing or sunning yourself at some Trade Fair, at least that was what I was told by a lady with a wonderful silky, smooth, sexy voice (or was that you in disguise). Why can't you put her voice on to that infernal answering machine you use?

While I was browsing through the March copy of Computer Shopper, I noticed a rave review of Protext V4, for the Amiga. This person?, namely one Phil South who has done this review says that Protext was originally written for PCs and PCWs and machines of CP/M persuasion.

Well, this flabbered my ghost, because everyone knows (don't they?) that the original product was for the humble 464 and it was done under Amsdos, not CP/M. I'm not sure which version came out first, the tape or the ROM in a cartridge, but it was the CPC464. I think some folk don't like to acknowledge the existence of CPCs. I am enclosing the page as proof. (My info on Arnor comes from ACU January 1987. Tell me, who's correct?)

One of the recent letters was from Colin Evans of Monk Bretton, Barnsley. He wants to be very careful with his

MUMPS routines, they can give him permanent problems of a personal nature. He also mentions a 3.5" drive, I don't know if BOTRK will work with a one sided drive, but it certainly won't matter if it is either 5.25" or 3.5". I have a single sided 3.5" drive, but that can only be formatted to just under 400K, I can't see how to get 800K out of only 80 tracks, unless the sectors are double size. I use either RODOS or RAMDOS, but I prefer the latter. I also have ROMDOS the ROM version of RAMDOS, but it is unable to recognise a single sided drive.

In another letter, from David Scott of Balham Hill, London. He mentions the need of software to run the mythical beast known as a Hard Disc Drive for the CPC. Look at RODOS. In the drive allocation numbers, 251 to 254 are reserved for a Hard Disc. If this will run it, I don't know, it is just a suggestion.

I think I must be simple (don't answer that) but I don't get the joke on the front cover of April's front cover (the proper one.)

One of my old mates (the Postman) knocked on my door this morning, and handed me three packets (not mates) Protext, Prospell, Promerge+ and this infernal Seal & Type Keyboard cover. Why did I want it? Will I ever get used to it? Anyway, I wrapped myself around a copper pipe to get rid of any static, donned rubber gloves and then hammered the chips into my Rombo. Horror! No Promerge+ initialisation note on the monitor. Then, after reading the destructions, my panic died down. It doesn't have one. Phew. Thanks for sending them.

Also enclosed is my copy of Info-Script. Do with it what you will. Use it yourself. Donate it to a worthy cause, or use as a booby prize, raffle it and give the money to charity. It is yours to do with as you wish. I have given up on it (I haven't found anyone locally that would like to buy it - or fool enough.) If they had used logical command sequences similar to Protext, it could have been a winner.

This letter is on the enclosed dis(k). I prefer to spell it that way, I can't help it if someone from

Amstrad didn't use a spell checker years ago. Also enclosed is a stamped addressed Jiffy bag - it's the small one. The postage is correct as the weight will be under 60g. Ta Ra

David Roberts
Stoke on Trent

<<Gosh I'm blushing now. That was me on the other end of the telephone Dave. I don't really have a silky, smooth, sexy voice do I?

Yes the first Protexit that ever stalked the face of a VDU, did so on a humble CPC464.

Yes, the April issue's front cover was a teensy-weensy bit obscure so I'll explain it. There is a bridge across a river and sleeping underneath it is a grumpy troll called Ed. His name is carved into the corner post of the bridge. Also carved into the bridge (by the axe) is the number nine (is this starting to sound familiar?) The other two goats have already passed over the bridge without disturbing the Old Miserable Ed. The last goat seems to determined to wake Ed up and annoy him generally. My word, the silly goat seems to have a name written along his back. It says "Morely Gruff." This does sound familiar. Do you get the joke now?

Thank you for the copy of Info-Script, I'm not quite sure what we'll do with it yet either -Joolz.>>

PLAYING WITH PROMERGE

Dear Joolz, please find enclosed the usual order form, cheque and disc. This letter is on the disc. This thirty eight column format sure looks wierd on the screen.

Thanks for pointing me in the right direction as regards the SWAP and OPTION commands. Promerge Plus is fun, I think. Still can't figure out how to use it, but I am getting there, albeit very, very slowly.

On the disc, in addition to the letter, is a programme from the ACU Utilities Disc. This is for transferring Spectrum SCREEN Files to the Amstrad. It works. The article the program is 'attached' to (ACU July

1986) indicated that it could be adapted to read other binary files. Loading Spectrum Programs will be a lot more difficult because the tokens used by the two machines to store basic are completely different.

I am willing to loan R A Bowler the magazine. As far as I know the program was NOT donated to the public domain. Perhaps a word with whoever owns the mag (it doesn't appear to have an editor, probably because there's nothing left to edit) will let you put it into the FSW library.

If Bill Powell was referring to Rainbird's The Music System, then yes I have a copy to sell. It's on disc and it could be his for only £7. If he wants to telephone me (on 0272 696015) it is best to do it after 6pm.

Stop bitching about Amstrad Action. No it doesn't have the same priorities as WACCI. So what? I read both WACCI and AA. I derive about equal pleasure from each. I do not accept that AA is a games magazine. Just look at the new (slim line) Crash or Zzap or any magazine for the other two major eight bit machines and you'll see why Amstrad users are regarded as more serious than say Commodore owners. The C64, for example, is a better games machine, despite its breeze block (sorry, disc drive) but try using it for word processing. I bitch about ACU because I was forced to get it when I joined the User Club, a mistake I won't be making again.

John Hilton
Bristol

<<Thanx for putting your letter on the disc for me John, it really does save me a great deal of time and formatting it into 38 columns helps me even more. You didn't have to print it out in 38 column mode though, it does make it look rather strange.

If you are finding Promerge Plus heavy going perhaps it might be worth your while to invest some money in the Promerge Plus Tutorial disc from Thompson Computers. It has lots of example file that can be pulled off and customised for your own needs. It saves a lot of typing.

Thanks for digging out that article

for Mr Bowler, I'm sure he'll be phoning you shortly after he reads your letter. We couldn't put it into The FSW Library though because that's only supposed to be for original programs, only to be found in WACCI.

OK John, I consider myself well and truly told off now. I promise to stop bitching about AA (even though I can't remember what it was I said that was bitchy.) Do I have to suffer some sort of humiliation like standing in the corner of the room or being forced to edit Amstrad Computer User? -Joolz.>>

A LITTLE NOTE

I've finally managed to get around to putting writing head to floppy disc. Before I start though there is a slightly modified version of my "Printer" prog on this disc as you are compiling a printer codes "thing." I've just added a little bit of colour and my favourite combination of "close spacing + condensed". It saves trees being massacred for paper.

Whilst on the conversation of conservation I have about 18 plastic disc boxes some with card inlays going spare if you can sell them for WACCI funds. I use the folding disc boxes that holds ten at a time in their card boxes or flips ten at a time onto the floor depending upon which way you open them. I get them from KADOR, Unit 4 Pontcymon Industrial Estate, Abercynon, Mid Glamorgan, CF45 4EP. I've found them very helpful and the quality of the boxes superior to ACU's own. I hate to throw things away, which is why I used to have a Yo-Yo. Let me know if you can use them and I'll pop them in the post marked "Please squash and mangle with care."

I'm seriously considering buying a 3.5" disc drive at the moment and would appreciate any comments, experiences with Siren Software's product and the slightly cheaper TEAC offering. I do not use a romboard so I would be using RAMDOS or the CPM 80TRK program. My other choice is a pair of Leitz binoculars for birdwatching (I'm almost afraid to mention it after your April First issue.) Strange choice you may say but I receive an annual

payment for being a First Aid Instructor at work and I like to treat myself (no pun intended.)

I have finally enclosed an order for some more FSW (you get hooked on it don't you?) after spending a busy morning turning the ribbon over on my printer, Taxan Kaga 810. With ribbon turning and "Refresh" these things could go on indefinitely. My fingers are now ethnic minority but the carpet stayed clean which is just as well 'cos before that, I was seconded by Brown Owl to help wrapping up some competition entries. You work in packing department early in your career and suddenly you are an expert packer. Incidentally do you know the definition of EXPERT. Sounds better than it reads but EX as in "used to be" and XPERT(sput) as in "drips under pressure."

Where is all this leading you may ask, read on. Running Brownies calls for some admin hence the accounts, records, letters etc. all go on the old computer. I now have several templates for Masterfile file layouts, also on this disc, called MFFORM1 to MFFORM5, with MFMAST being a compilation, if of any use. I'll enclose sample printouts, names changed of course to cow tow to the Data Protection Act, all kneel. I could never understand why if you print out leaflets containing names, addresses and other personal info and drop them from a plane all you'll be done for is littering the place. But keep them on a, hushed voice, floppy disc locked up in a safe place and you could end up in jail.

I am also working, slowly, on some Micro-Design pictures as I seem to recall somebody suggesting a library of pictures could be useful. This could take sometime though as Lorraine (Brown Owl) is using our computer more and more since she started this MSC at Warwick University on one of their week here week there make it last three years courses.

Ray Barrow
Smethwick

<<Ray could you do me a favour? Could you send me your programs in again

because OMG seems to have gone and lost them. This is the second time he's managed to go and do this, I think he's going senile or something. What happens is that when a letter comes in on a disc he copies it over to my Fair Comment working disc. I think he then gets so excited that he's found some more work for me to do that he promptly forgets to copy the programs onto the FSW masters. He then send the order back complete with the programs for the Library on it. So if you send another disc in address it to me that way it'll get dealt with properly. Crikey, if this keeps up I'll soon have to feed him, wash him and change his nappies.

Enough of my problems here's some answers to the points in your letter.

- 1) Yes please and thank you.
- 2) I can't help you with any info about either of those 3.5" drives because the one in the office is a Panasonic drive.
- 3) Micro-Design art-work? Yes Please.

How many of you out there would be interested if we set up a separate little library section for art-work alone? Write in and tell me what you think and if enough people are interested I'll prod OMG into doing something about it -Joolz.>>

FUNKY MOPED

Hi! Well I made it home. Just about. Half way between Rosslair and Dublin a piece of Green's bike fell off but we managed to piece everything back together using some twigs and sticky-tape until we got home.

On the enclosed disc is the Space Invaders program, type RUN*INVADERS and then use the arrow keys for left and right and CONTROL to fire.

So how are thingies? Hope the latest WACCI is coming along ok... Oh and give my regards to the cats.

Also on the disc is a hyper-advanced PASCAL article. I'm not sure what you might want to do with it, it was originally written for some people I know who were having difficulty with the subject before their exams. (I

think I have passed enough exams to make it to next year, thank goodness.)

By the way, Phil Morely's method of transferring photocopies onto T shirts does NOT work. I know this because I originally saw it being demonstrated a couple of years ago on Blue Peter and tried to do it myself. All I ended up with was an orange tie-dyed (the baking tin I used was rusty) T-shirt that smelt of white spirit.

Gosh they did Daphne away quick enough didn't they?

Auntie John
Norn Iron

<<Hi John, glad to see that your little moped managed to make it back OK. Did you have to pedal it up those steep hills again or did you manage to avoid them this time?

Don't talk to me about the magazine. OMG's been avoiding doing his fair share of it because he keeps playing with your Space Invaders program. He calls it "checking for bugs" I call it "swinging the lead."

Lucy, Angie, Barney, Wrestler and Wobbles send their regards to you as well (they'll be so chuffed to see their names in print.)

His Nibs has put your Pascal thingy onto his disc of "stuff to be published at some future stage." So I'm not sure when it'll see the light of day again.

It's nice to know that I'm not the only Blue Peter fan in WACCI. Grumble Guts says it's a childrens programme but you and I know better than that.

Daffy Clark is still lingering on in our region. She's in a deep coma and the writers are milking the plot for all they are worth. I'm deeply worried for Des though. How will he cope on his own? It's going to be very difficult for him, especially as he only seems to have the IQ of a peanut butter sandwich -Joolz.>>

WUNPER DESK

As a relatively new user I wonder if you give me some help.

I have an ICL set-up known as a "One Per Desk" which is also supplied by British Telecom under the name of "The

Merlin Tonto." The computer seems to be based on the Sinclair QL design although some of the Basic has been removed to allow room for other features.

I wonder if you might know of any members of WACCI or even the Gnome at Home that use the same computer, as I am unable to get software for games and similar programs and would like to know of any sources. Any info on this will be greatly received.

Please can you tell me all about the facilities of The Gnome at Home BB and how much it costs to subscribe. Is there an idiots guide to comms as I am new to all this making computers talk down phones lines.

Ken Slow
Luton

<<Over to Steve the specialist for the answer to this one -Joolz.>>

<<Hi Ken. You are correct about the OPD being based on the QL. It was a joint development between Sinclair Research, British Telecom and ICL. It was the machine that the QL could have been if only Uncle Clive hadn't rushed things along too fast.

The OPD is a quirky little machine designed for office rather than home use. On the plus side of things: It has a built in telephone, modem and comms software. The E-mail and messaging facilities are very comprehensive and the menu driven comms software rarely falls over.

On the minus side, it is a very expensive beast indeed. Unless you fork out some heavy dosh for twin Telelink 3.5" disc drives (the only one's available for it) you are stuck with the built in microdrives (Yeuckk.) While the comms software allows you to upload user defined strings (after a fashion) there is no facility in it to download.

The major drawback of the OPD, at least from your point of view, is that very little software was ever written for the machine and the few titles that were available started at the £100'ish mark each. If you want to play any sort of games you'll have to write the programs yourself. Believe me, programming in ICL Basic is about

as much fun as being a product taster in a yoghurt factory.

The people to be talking to are the lads at the ICL Today magazine on (01) 831 9252. I'm not sure if he still works there but try asking for my old china, Ian Winter, he might be able to help you.

The on-line facilities available from the Gnome at Home (the ultimate Viewdata bb on 01 888 8894 24hrs) are far too numerous to list out here (I kid you not.) The answer is for you to log on and key in *HELP#. This will then take you to the frames that will tell you all you could ever want to know about The Gnome.

The quarterly subscription is £4.50 and is worth every penny. Try keying in *JOIN# the next time you log onto it for more information.

Yes WACCI On-Line (WOLI) will once again be carrying a beginners guide to comms. How long before it will start is not quite sorted out yet but it might be as soon as next month -Ed.>>

PINING FOR THE FJIORDS

I agree with John Ridge (May 1989 Fair Comment) regarding the use of exclamation marks, the trouble is that I also agree with the Editor when he says that the magazine should have an overall style.

Holidays? Well I haven't planned mine but then I have holidays the whole year round. However, the Editor should indeed have a week away from the job. His idea of producing a "Summer Special" is one I support. A 60 page July/August issue would be something I could show my friends who read ACU and think it's a magazine. My advice... bring out a Summer Special. I could always read it five times.

Finally, do you realise that WACCI is not only the best CPC magazine, it's the ONLY one. ACU is now so bad I don't even bother to open the magazine when it arrives every month (I have a subscription but fortunately the July issue is the last one.) I never read AA, so WACCI and the Bonzo Bulletin are all that's left. Colours? Well I can't read the colours can I? I can only read the words. As far as I am

concerned you can keep WACCI in black and white.

Oh and another thing. I liked the "Glenn at Large" series (is it coming back?) and I hope John Ridge has a few more of his "Passing Thoughts." Thanks for a great magazine.

Kjell Robertsen
Norway

<<The issue about the holiday seems to have been taken out of Steve's hands. I think he's given up on the idea of taking a break this year and is trying to work out how he can make some spare time to take one next year.

I've had my orders from John Hilton not to bitch about other CPC magazines so I'd better be careful what I say next. Thank you for those nice words about WACCI and yes I agree entirely with every single thing that you said (note that I didn't say it John, I was only agreeing with Kjell.)

Glenn Carey says he is currently working on some more Glenn At Large articles and as you can see John Ridge has passed another of his thoughts on to us this month -Joolz.>>

HOLIDAY 90

With regard to your problem of getting a break, why not do volume five (1990) as ten issues a year giving you five to six weeks to produce an edition, with subs available at five for £6.25 and ten for £12.50. I think this is the most sensible idea but will the rest of the readers?

Trevor Wells
Nottingham

<<You may have a good idea there Trevor. There may be howls of protest from hardened WACCI addicts but let's see what everyone thinks -Joolz.>>

ON THE ROAD AGAIN

Sorry this letter isn't on disc, I'm having two weeks away in the caravan, after a week near Gloucester we're now in a quiet field near Milford Haven. The view is splendid, fortunately a clump of trees hides the oil refinery.

I've had time to read the May issue

and you *SHOULD* take a break. Give us a bit of warning first. Do eleven issues a year and miss out, say, August. So long as everyone gets the number of issues they've paid for then it doesn't matter. The Caravan Club's magazine is published bi-monthly in winter and monthly in the summer. No-one with any sense complains.

Thanks for putting MFile into the library and running my article on PIP.

Regarding copying files between 3.5" discs (R A Bowlers letter.) I imagine that the situation is similar to that of 5.25" discs. I have MFT.COM which is supposed to transfer files between 5.25" discs but I've not been able to work it, possibly I don't know its correct syntax. I use NewSweep and a 3" disc as an intermediary, this is quite speedy and simple to use so I suggest FSW orders continue to be on 3" disc only.

Re: John Boorman's letter about 5.25" drives and 80TRK. I bought my 5.25" from Pace at the Manchester Show a few years ago. 80TRK was included on disc with other PD software. The bundled software included a program to format discs for 798K under CP/M+ or 396K under Amsdos or CP/M 2.2 as well as software which initialises the drive itself. I understand Siren Software have developed a different incompatible system.

I've just been into the local newsagents and glanced at a copy of Amstrad Action. I've not seen it on the newstands around home for ages. It really has gone down the drain. <<Oh no not another one, it's another ten minutes in the corner for me -Joolz.>> I noticed an article in it on PIP similar to my one in the May issue of WACCI but this one failed to mention one of the uses which I mentioned (and the one I personally find most useful) ie cocatenting files.

Must dash, tonight it's my turn to do the dishes...

Gerald England
Here and there

<<Never mind about the letter not being on disc Gerald. I quite understand that you might not be able to manage to take your Arnold along on

the holiday road with you.

The PIP article was smashing, AA can occasionally manage to get it right, although missing out the cocatenting files option was quite an omission on their part. I preferred your rendition personally.

Have you got any similar articles in the pipeline for us? -Joolz.>>

WHOOPS

Concerning your holiday ideas in Thanx and Stuff (issue 32.) I think my order of preference would be three, two and then one. I wouldn't mind having a "Summer Special" though I can see Steve's point about the potential moans and, although it may be a point of honour with you, I don't think much harm would be done by breaking the run. You really ought to give yourselves a break, how else will you be able to conserve the high standard of WACCI otherwise. Take a break and come back re-vitalised, or so the theory goes.

A word to the wise, if needed, regarding WACCI Disc 9. On there is a program called Accounts. This was published in May 1985 in Pop Comp Weekly and was attributed to a S G Shedden of Sudbury. Apart from some renumbering and alterations to the REM statements the program on your disc is the same one (same display, same variables, same everything else.)

I don't know who it's supposed to have come from but I wouldn't like to see WACCI being compromised. Just thought I'd put you in the picture. All the best.

Steve Lee
Huntingdon

<<Thanks for tipping us the wink about Accounts Steve. We received your letter early enough to withdraw the program from The FSW Library before too many people were sent copies. The names of all the people who ordered Accounts and didn't receive it have been scribbled down and if they remind Steve when they next order some loose PD they will be credited with an extra 20K of software.

The program was sent to us in all

innocence but perhaps it's worth asking members to only send in their own programs so that we can keep the FSW Library full of unique programs.

With regards to the holiday, well you've probably read what happened by now. Steve was very disappointed in losing the June issue and what makes it even harder on him is the fact that we didn't really end up with much of a break despite the loss.

I think he's now accepted the fact that we've got to soldier on till the middle of next year and then see what can be done about having some time away from the mag -Joolz.>>

A CLEAR(ED) S'LATE

There was a complaint about Disc Menagerie (v4) stating that the "erase" and "unerase" functions did not work. I have version two of this extremely useful program and I wonder if the problem lies in the user not pressing the F7 key to update the disc with the new changes? If this is not done then the effect of these two functions is lost on leaving the program. This is something that I did not realise at first and I thought that if I could miss it then perhaps others could too.

Please could you or Steve recommend a program that would be useful to the treasurer of a small club for recording monies paid and received etc. in a form that will keep the tax man happy.

I notice you are now selling disc cases. I don't use the things so here's ten unused ones for you.

Paul Pembroke
Manningtree

<<Paul, what a clever bod you are, you deserve a medal or something. You are right and I'd missed it as well but unless you do an F7 Disc menagerie doesn't update the disc catalogue.

I told Steve about your question about keeping the tax-man happy and he got quite serious (for once.)

His advice is that you shouldn't present your accounts to the tax-man in computerised form. It seems the ILR automatically view computerised books

with a hefty suspicion, unless you are a very, very big company.

The best way for a small club to keep track of its money flow is to keep manual records, calculate the balances using a spreadsheet and then present the results via an established accountant (true accountants don't even trust calculators, let alone computers.) The spreadsheet that he recommends for your requirements is the same one that The Old Duffer uses to keep track of WACCI's meagre money flow, MasterCalc.

If you make a mistake in your manual ledger, don't use Tippex, evidently the liberal use of this stuff only generates more suspicion upon the part of the tax inspectors. Cross the entry out with a single line and if needs be put an explanation in the margin.

I hope this has been of some help to you Paul. If you are the treasurer of a "small" club then you shouldn't really need to deal with the dreaded "Tax-man." -Joolz.>>

OFFICE HELP

Could you please give me some details about Protex Filer and Protex Office. I all ready have Protex, Prospell and Promerge Plus. I find these very useful.

The recent Playing with Protex articles were most interesting. I find that I keep referring back to them. Is there any chance that a similar article will be done about Promerge?

I sympathise about the editor's trials and tribulations and although I'd miss a months edition it seems to me that a "summer special" would be fair all round.

K S Jones
Barton-on Humber

<<I seem to remember having answered this one before and as long as Arnor don't mind me quoting from their manual... here we go again. Protex Filer consists of a menu-driven datafile management system and a sophisticated file sorting program. The file sorter can be used from within Protex, or as a stand alone

program. The datafile management

WRITE TO FAIR COMMENT
9, SOUTH CLOSE
TWICKENHAM
MIDDELESEX
TW2 5JE

system uses Protex's mail merge and exec file facilities to provide an easy to use filing system that works from within Protex. Protex Office contains all of the above, plus the invoice generator and associated facilities. Again, this works from within Protex.

The latest of Peter Ceresole's long running series "Playing with Protex III" (The Saga Continues) is in this months issue. I hope it helps, in part, to make up for your missing June issue. Playing with Promerge? I think you'd better read the great man's musings at the end of his article before I make any comments about that possibility -Joolz.>>

TO ADVERTISE IN WACCI
RING (01) 898 1090

HELP HELP HELP

I am writing to ask if anyone at WACCI HQ or any of the WACCI members can help me.

I have purchased a Star LC10 colour printer and desperately need a colour screen dump program for it, preferably on which can print screens saved using my MultiFace II.

Any advice you can offer will be gratefully received.

S Shaw
Halifax

<<Well Mr Shaw your request has certainly drawn a few blank looks from a number of people who have visited the WACCI office in the last month (including some of the companies I've phoned up on your behalf.) I'd love to be able to trot out a trite answer at this stage but I'm going to have to

throw your question out to the members. Can anyone out there make Mr Shaw a happy man? -Joolz.)

IN A JIFFY

Thank you for the rapid turn round on the disc cases I recently ordered. I forgot that something for postage would have been in order. This current order attempts to rectify this with a little something extra. I also enclose a few "Jiffy" bags in penance.

P W Clark
Poole

<<What a nice man you are Mr Clark, it's selfless people like you that make me proud to be a member of the WACCI club. Yes as you all ready guessed these disc cases cost a lot more to post than Steve anticipated (silly old duffer.) Thanks for the Jiffy bags, they really do help keep the club's costs down. Don't worry about doing any form of penance though, I think that I'm the one that's really been told off this month, I'm off to edit ACU -Joolz.>>

WORRIED

I sent a cheque for the renewal of my membership on the 8th of May and duely received the May issue. But it is now nearly the end of June and I have not yet received the June issue. Would you please look into this for me.

I am a pensioner and look forward to my WACCI every month. It is the best CPC magazine on the market bar none.

M J Menzies
Plymouth

<<Oh dear Mr Menzies, you are not alone. The phones have been ringing non-stop here at WACCI HQ with people asking what happened to the June issue. I hope you've gathered what happened by now. Don't worry about your subscription, it has had an extra month added to it so that you will receive the twelve issues that you have just paid for. I hope this sets your mind at rest -Joolz.>>

THE Sun

"I HAD SEX WITH A HALIBUT" SENSATION

EXCLUSIVE



by

June Witfield

EXCLUSIVE
SEE PAGE TWO
(opposite the tits)

ALSO INSIDE:
BUMS, BOOBS, BONKING, BINGO
AND BORT ...um, no, sorry - SPORT

On other pages

Ten things you didn't know about Bonking

...PAGES 5,6,7 & 8

★ **PLUS**
VOTE TORY AND WIN A SUMMER HOLIDAY



PLUS

A WACKY GUIDE TO FILLING IN THOSE BORING INCOME TAX FORMS WITH...



KEN DODD

PLUS
THAT WORLDWIDE FANZINE IN FULL ...whatever that is ...we're only running it coz it's got a centre spread on EPROM BLOWING...

A Passing Thought

LOCK UP YOUR ALGORITHMS, JOHN RIDGE IS ABOUT

Harun-al-Rashid, the Caliph of Baghdad whose name is familiar from Arabian Nights, had classical Hindu works on mathematics translated into Arabic. It is thought that the Hindu system of numbers was first used by the Arabs at about this time. His son, al-Mamun, was the patron of one who rejoiced in the name of abu-Jafr Mohammed ibn-Musa al-Khwarizmi and it was he who, about 825 AD, wrote a book on arithmetic. To cut a long story short, the book was eventually translated into Latin and became known as "liber Algorismi" which means "the book of al-Khwarizmi."

<--++(*)+-->

At first the word "algorism" or, if you have a lithp, "algorithm", was usually applied to working with the the new-fangled "Arabic" numerals as opposed to Greek or Roman numerals. And at this point we are getting close to the modern meaning of algorithm, for the place system with a zero allowed the employment of methods to perform arithmetic, such as carrying numbers to the next column in addition.

<--++(*)+-->

The advantage was not immediately apparent to people who were skilled in the use of the abacus, for Roman numerals were quite adequate for noting results or partial results. Even as late as Queen Elizabeth I's time there were sea captains who still used Roman numerals when working complicated problems in navigation, although by then it was getting to be a little old-fashioned.

Nowadays, an algorithm could be roughly defined as a procedure for performing a complicated operation by a sequence of simpler ones. An example would be the way we multiply two large numbers by single digit multiplication and then adding the partial results. We were taught that and many other algorithms early in our school careers.



We often use a hierarchy of algorithms. If you can recall the method commonly used for calculating square roots on paper, then the method might be called the Square Root Algorithm. But to carry it out, we need subsidiary algorithms such as single digit multiplication. So simpler algorithms can and very often do exist within more complicated ones. An algorithm can also involve

procedures concerned with direction. Directing a stranger to the railway station by telling him to take the second turning left and then the first right after he passes the traffic lights is an example.

<--++(*)+-->

It is obvious why algorithms feature so largely in computing. An algorithm is first broken down into a sequence of simple steps. Each step can be programmed sequentially using a suitable computer code, of which BASIC and Pascal are examples.

Most of us require our computers to generate a circle on the screen from time to time. To do so, we either remember or look up a method. In short, we rely on a "How to draw a circle" algorithm. The algorithm can be used to produce circles of any size in any screen position we choose in any program we write. That is the whole point of algorithms - they concern methods which can be used in many programs, not just one specific program.

<--++(*)+-->

When we steal ideas from other people's programs, it is usually algorithms we are after, that is to say, methods of producing a desired result. Unfortunately, an algorithm may have limitations about which we are unaware, or we may not be clear about how and why it works.

Unless the algorithm is understood it could turn out to be useless, or might produce spurious or inaccurate results.

VERY BASIC

BY
ALAN TILLING

Letters to:-
Very basic Basic
65 Lawrence Road,
Altrincham,
Cheshire.
WA14 4EL.

HAS YOUR NEXT GONE MISSING? FEAR NOT TILLY CAN HELP YOU FIND IT AGAIN

Hello everyone, 'tis moi. Yes your modest little Basic Basic Guru is back once again. What is the topic this month? Make sure that your Granny isn't listening and then we can begin to talk about one of the burning issues of the day - error messages. Whoops! I distinctly saw a collective shudder go round the WACCI membership then. Believe it or believe it not these little beasties are there to be helpful, though it's often quite difficult to believe it.

-(VbbVbb)-

Let's start with the SYNTAX ERROR message. I know that I covered it in detail a few issues back but to recap:- it's your computer's way of saying "I don't understand what this means" and is usually caused by a missing : or a spelling mistake.

DATA EXHAUSTED is an awkward one because Arnold tells you where he was when he discovered the error not where the error actually is. The same applies to NEXT MISSING. Hmm.. I think I'd better explain:-

Imagine you have typed in a program out of a book or magazine and are having difficulty in getting it to run. The following proplet is supposed to be a piece of a larger program where lines 10 to 70 do something and lines 140 to 1050 do something else (techno-speak huh?) Type this piece of

of program in very carefully because it is (purposely) full of mistakes and when it is impossible to sort out if more errors are put in:-

```

1 goto 3
2 save"test":stop
3 rem
80 a$=dog
90 print a$
100 for x=0 to 3
110 read a
120 print a
1050 data 10,20,30

```

Note: In line 1050, for the purposes of this explanation, write the 1 in 10, as a small L. (This is a very common mistake when copying code from a magazine.) When you have typed it all in, type GOTO 2 [RETURN] and the program will be saved with the name "TEST". Ignore the message "broken in" that's caused by the stop command.

-(VbbVbb)-

When a RUN command is issued, Basic goes to the first line it finds (be it 1, 10 or 1000) and starts from there. So Basic duly goes to line 1 and is told to jump (unconditionally) to line 3 (ie skip over line 2) where it finds a REM statement (which means ignore the rest of this line.) Basic will now

go to the next line of the program, be it 10 or 100 or anything greater than (in this case) 3.

I always put these three lines in front of all my proggies so I can save them easily (by typing GOTO 2) as I type in more and more of the program. Now type run [RETURN] Note: From now on I'm not always going to tell you to type RETURN unless it is vital for the explanation. Arnold will respond with Type mismatch in 80 Ready

-(VbbVbb)-

Type list 80 and it will be seen that it says a\$=dog. This means let the variable called a be a string variable (string<\$>= a string of text) and a string must be enclosed in quotes, so edit line 80 and put quotes around the string and try again. Type run and Arnold will respond with NEXT missing in 100. If you list 100 you will find that indeed there is not a NEXT in line 100. Nor should there be, so why has Arnold said that there ought to be one?

-(VbbVbb)-

Remember, when a FOR/TO statement is found the computer automatically looks for the NEXT statement to mark the end of the loop. In this case there isn't one. So where should it go? Well let's assume that the listing that is being

copied is in error and that the line with the NEXT in has been missed by the printers. If you look at the bit of program that we have got you will find that lines 110 and 120 have an extra space at the beginning of each line. This is a common way to mark a loop so at a guess the NEXT should go in line 130.

Try it and see. If the guess was correct then the computer will respond with Syntax error in 1050 and when you list 1050 you will see 1050 DATA 10,20,30. Hmm... it doesn't look bad does it? Remember earlier that typing a small letter L in place of a 1 is a common mistake (so is typing the letter O instead of zero). Edit the 1 to a l and try again. You will get

*Syntax error in 120
120 pront a*

This is a spelling mistake. Notice that the interpreter has not raised the word to upper case because it does not recognise it as a keyword. Edit the line to read print a and then run it. You should get:-

```
dog
10
20
30
DATA exhausted in 110
```

This is where you say "Oh my giddy Auntie, what now?" Well my screen is a mess so let's clear the screen and list the program. type cls:list [RETURN] it should - no it will be:-

```
1 GOTO 3
2 SAVE"test":STOP
3 REM
80 a$="dog"
90 PRINT a$
100 FOR x=0 TO 3
110 READ a
120 PRINT a
130 NEXT
1050 DATA 10,20,30
Ready
```

The error message said "DATA exhausted in 110" but there isn't any data in line 110 - it's a read statement. I think the time has come to analyse this program.

```
80 says (let) a$="dog"
90 PRINT (on the screen) dog
100 FOR x=0 TO 3 (start of loop)

110 READ a (Read from DATA somewhere else in the program and call it variable a. Don't confuse a and a$ - they are different things to the computer.)

120 PRINT (on the screen) the variable called <a>

130 NEXT (End of loop) Note this may also be written as "NEXT a" which may be a little easier to understand, especially if you have several loops using several variables.

140 this

150 that

160 the other

1050 DATA to be read into the variable <a>.
```

The results that come up on the screen ought to be:-

```
dog
10
20
30
something else
```

Have a look at that data again, <a> will equal 10, 1st time round (loop count 0) and 20 the 2nd (loop count 1) and 30 the 3rd (loop count 2) and for the last time (loop count 3) err.. hold on a second, there ain't nowt left, ie the DATA in 110 is exhausted.

See if you can finish off the proggy to make the last printed number 40 with no error messages.

**SUPPORT
YOUR
CLUB**

**PLEASE
MENTION
WACCI
WHEN
REPLYING
TO
ADVERTS**

I hope I've made it clear that, even though Arnold said the error was in one line, it doesn't necessarily mean that the line reported is at fault but it does mean that the line reported is where Arnold was looking at when the error was discovered.

If the error was a syntax error then the reported line (that Arnold was looking at) will be the same as the faulty line but if the reported error was like a data exhausted then the line numbers will look as if Arnold is wrong (but he won't be). If there is more than one set of DATA statements it may be difficult figuring out where the fault is.

-(VbbVbb)-

Next month we will be taking a trip into the TRONZONE and watching Keith Pomfret feeding at his TROFF. Confused? So am I.

Well at that point, all I can say is "Bye for now." Alan

<<That's a bit of an abrupt ending isn't it Alan? You could at least of said something like "see you next month" as well -Ed.>>

OK then "Bye for now, see you next month as well Ed." Alan

Playing with Protext III



PETER CERESOLE SHOWS YOU HOW TO LOG ON TO DRIVE B??

First, a message. Thanks Bob Moffatt. I should have RMFM but your Mastering Masterfile article in the last WACCI got me going again. And now.....

--{***}--

People seem to enjoy reading about Protext. This is fine: it's certainly more fun than chess or Arkanoids.

Seeing the letters and queries in Fair Comment about PWP and with the Editor's encouragement ringing in my ears ("When's the next one, then?"), I thought I'd have a go at describing the mildly non-standard things about my particular set-up and have a bash at primary printer driving. The simplest place to start seems to be the loader, which is in Basic (what?)

--{***}--

```
10 REM STARTING AT THE END (OR)
20 REM HISTORY IS BUNK
```

(Okay Joolz, I know he didn't say that. But "Protext, as it is described in the manual, is bunk" wouldn't fit on a header. Anyway...)

Sarajevo, 1914. Gavrilo Princip shoots the Archduke Ferdinand and the result is the first world war.

London, 1988. I have a problem with Protext, so I call Arnor and they say "why don't you join WACCI, somebody there is bound to know."

I think that joining WACCI was

definitely nicer than the first world war. Ultimately, it even solved my problem.

--{***}--

```
30 REM Lines 1000 to 1180
```

I have a CPC with two drives and Protext hanging off the back with Promerge, Prospell and Utopia.

I normally keep my Protext loader disc in A. It redefines the function keys (and some others), has a lot of useful formats on it for various letters, scripts and things like that, plus different box drawing programs and on the other side there's the Dictionary. So I keep all my text files in the B drive.

I wanted to fire up (run"disc) from drive A and have Protext log onto B if there was a disc in there, otherwise not. I wanted to do this automatically. A year ago, I thought I'd try to do something about it.

--{***}--

```
40 ON ERROR GOTO 50
50 WACCI HQ
```

So I put ;B into the loader program and "on error goto" a line that said ;A. This didn't work. "On error goto" doesn't catch the "Disc missing"

error. "Retry Ignore or Cancel?" kept on holding up the smooth flow of action. After three years of using Protext, it was a dodge I really wanted to get going.

So I joined WACCI and the STEVOID printed my plaintive letter. In his reply, he also pointed out that all it took was B [RETURN] to log onto the drive but this was UNHELPFUL because although he was right it wasn't FUN. The problem with Steve is that, although he'd deny it, deep down he probably thinks that humans behave rationally. Wrong. Believe me.

You could have heard 24 pins drop but all the pins stayed firmly up. Not a whisper. I tried in ACU too (sob.) I was enjoying WACCI but no solution came out of the aether, or out of the membership either.

--{***}--

Then Steve published the WACCI helpline numbers and I called Stewart Peppiatt. This was, definitely, a Good Move, because Stewart fixed it for me. It so happened that in this case (after a false start) he had the solution in his back pocket. Within a couple of days he'd sent me a bespoke type-in and like all the best ones, it worked first pop.

If there is a disc in drive B the routine returns 1 to &bf32. If the drive is empty, it traps the error message and returns 0. That accounts for line 1180 in the loader: if PEEK(&bf32) is 1 then it is TRUE and

the machine logs onto B. Otherwise it stays logged onto A.

I can't over-emphasise the pleasure that this small and silly fix gives me every time I fire up. It's just that little less faffing about and it's lovely.

--(###)--

60 REM lines 1 to 6

Stewart's other contribution to my serenity is at the top of the program. Lines 1 to 6 are the set-up program for the KDS Mk 2 8-bit printer interface. The KDS port is a wonderful thing. It gives you access to all those great IBM characters on a printer.

Stuff like this.

Useless,
but very, very
nice.

Now I started with the Mk1 KDS interface. It let me reach the parts of the Juki daisy wheel that the CPC can't reach.

The problem with the Mk 1 port is that unless you fire it up, it corrupts the printer output. There are programs that won't run with it, like Advanced Art Studio. So to print from that, I have to take the interface off. Of course, I forget each time. It's a real bore. Save the Rembrandt. Power down. Take the ruddy thing off. Power up. Once more through the Lenslok (a special treat, this one.) And after the session, bung the interface back on. A real drag.

Most especially, the KDS interface won't normally run with Promerge Plus. Arnor rewrote the loader for me, in a few hours, dictated down the phone and it worked perfectly.

Now along comes the Mk 2. Deeply, deeply wonderful. It's invisible to the printer unless it's set up and it's tiny on the back of the CPC. Does

```

1 restore 1:symbol after 256:memory himea-30:m=himea+1      'kds Mk 2 set-up
2 for q=m to m+25:read a:poke q,a:next
3 m=m+4:for i=0 to 2:poke q+i,peek(&bdfl+i):next
4 h=int(m/256):l=m-h*256:poke &bdfl2,l:poke &bdfl3,h
5 data &fe,&0a,&37,&c8,&f5,&07,&30,&11,&06,&ef,&kaf,&ed,&79,&cb,&c7,&ed,
   &79,&cb,&87,&ed,&79,&cb,&c7,&ed,&79,&fl
6 poke &bd31,&c3:poke &bd32,&2b:poke &bd33,&bd:call &bd58
14 :TOKENS, 250                                             'Makes some room for what follows
16 KEY 0, CHR$(24)+"q"                                     'NLQ
18 KEY 1, CHR$(24)+"u"                                     'underline
20 KEY 2, CHR$(24)+"b"                                     'bold
22 KEY 3, CHR$(24)+"s"                                     'subscript
24 KEY 4, CHR$(24)+"e"                                     '12 cpi
26 KEY 5, CHR$(24)+"n"                                     '10 cpi
28 KEY 6, CHR$(24)+"t"                                     'superscript
30 KEY 7, CHR$(24)+"i"                                     'italic
32 KEY 8, CHR$(24)+"c"                                     'condensed
34 KEY 9, CHR$(24)+"l"+chr$(24)+"r"                       'large
36 KEY 10, CHR$(13)+" "                                     'indented paras
38 KEY 141,CHR$(24)+"h"                                    'enhanced
40 KEY 142,CHR$(24)+"o"                                    'Souvenir
42 KEY 143,CHR$(24)+"v"                                    '12 cpi hi-speed
44 KEY 144,CHR$(24)+"k"                                    'Super focus
46 KEY 145,CHR$(24)+"j"                                    'Courier
48 KEY 146,CHR$(24)+"m"                                    'OCR-B
50 KEY 147,CHR$(24)+"w"                                    '15 cpi
52 KEY 148,CHR$(24)+"s"+CHR$(24)+"c"                     'tiny print
53 KEY 156,CHR$(24)+"p"                                    'proportional
54 KEY 158,CHR$(7)+"11"+CHR$(13)+CHR$(228)+CHR$(233)+CHR$(7)+"4"+CHR$(13)
   +CHR$(233)+CHR$(219)+CHR$(25)+CHR$(21)+CHR$(237)+">pl 10"+CHR$(13)+">
   tm 0"+CHR$(13)+">sm 20"+CHR$(25)+CHR$(219)+CHR$(11)+CHR$(25)+CHR$(252)
   'Isolate address for envelope
100 KEY DEF 50,1,&72,&52,149                                'R" key def
102 KEY 149,CHR$(11)+CHR$(0)+"9"+CHR$(27)+CHR$(233)+CHR$(251)+CHR$(233)+CHR$(
   0)+"9"+CHR$(16)+CHR$(234)+CHR$(11)+CHR$(236)          'Retrieve ruler line
104 KEY DEF 15,1,128,151,150                              'f0 key def
106 KEY 151,CHR$(252)+"s"+CHR$(13)+CHR$(13)+CHR$(252)    'Save and continue
108 KEY 150,CHR$(251)+CHR$(233)+CHR$(250)+CHR$(233)+CHR$(0)+"9"+CHR$(27)
   +CHR$(237)+CHR$(234)+CHR$(11)+CHR$(0)+"9"+CHR$(16)
   +CHR$(236)                                              'Store ruler line
110 BORDER 26:INK 0,26:INK 1,0:;P,"pr nec"                'Set the screen,
   'load the printer driver
1000 RESTORE 1000                                         '1000 to 1180 selects drive B if loaded
1010 ii=48896
1030 FOR I=0 TO 49
1040 READ a$:a=VAL(CHR$(38)+a$)
1060 POKE ii+I,a
1080 NEXT
1120 data 21,30,bf,cd,d4,bc,3e,ff,cd,1b
1130 data 00,21,31,bf,cd,d4,bc,c5,e5,3e
1140 data 00,32,32,bf,1e,01,16,01,cd,1b
1150 data 00,e1,c1,d0,1e,01,16,03,cd,1b
1160 data 00,d0,3e,01,32,32,bf,c9,81,87
1180 call &bf00:if peek(&bf32) then 'b
1190 run"a:d2

```

Fig. 1 "Disc"

all it should do, even has a callable patch on the Graduate ROM version of CP/M (*whee!*) BUT it won't work with Promerge Plus either.

This time, with Arnor, it was a very different story. They were very busy making Protex work on the Cray and I never got a fix for the KDS.

So... Sshh children, whisper the name. You creep into a phone box (phone cards only please) and shout *PEPPIATT!* There's thunder in the sky (lines to Chelmsford are quite rough) and a voice comes down from the clouds: *"I do like difficult problems, yes, I'll give it a try."*

Without either the specs of Promerge Plus, or of the KDS interface, Stewart rewrote the KDS loader for the Mk 2 and it works. So far, it has printed everything I have tried, except that it won't work properly with Qualitas. That's presumably because the Qualitas program for running with Promerge Plus uses the standard settings for the KDS, whereas Stewart's prog doesn't. But for me that's far from crucial. For everything I want to do, it works. And if I don't need it, it stays out of the way. It makes the CPC into a fair 8-bit machine and reduces *even more* any wish I might have to change to another machine.

Many thanks Stewart. May the sun shine out of your opcodes.

--{***}--

```
70 REM line 1190
80 REM Jumbo Code (or)
90 REM Elephants In Straw Hats
```

By this time, the start-up program was getting too big. 2.6K in 47 lines of Basic (what?) may not be much but it was a couple of K off the size of both Protex files, as the program stays in the Basic area after Protex is called, which is silly. All it had to do was fire up the KDS port and fix the keys, after which I wanted it to disappear. Again, I'm no programmer, so it took me some thought to remember that running a Basic program clears the previous program out of memory.

So the solution is to have a big program that does most of the work, then runs a minimal program which gets rid of the big program and calls Protex. The second program (D2) has to have the drive specified in line 1190 because in the meantime the CPC may have logged onto B.

```
1 !P,"opt 24":!P
```

Fig 2. The massive "D2"

I put the minimum into "D2". Ideally it should just say "1 !p" but there's a minor problem with external commands to Protex. Some seem to work even though you run another program before !P. Others, not. I haven't done a deep analysis of this but the way it works out here is that I could load the printer driver in line 110 of "disc" but the configuring of Protex with "Opt 24", which suppresses the ruler line and turns off right justify, only works from "D2". Still, I get within 169 bytes of the maximum, which isn't bad. It definitely beats losing 2K.

--{***}--

```
100 REM lines 14 to 108
```

I'm very shy about showing anybody "disc" and "D2". I'm sure that "disc" (Fig 1.) must be a mess, very uneconomical but it does work (he said defensively). The key definitions are useful on my NEC P2200. I've got a bunch of font changes there that suit the NEC. You could put in anything else that you were minded to, provided that you expand the "Tokens" area if you put in any really big definitions.

--{***}--

```
110 REM Now the commercial
```

Get Utopia if you can. "Disc" is much neater because Utopia assigns function

keys simply. Utopia is really something else. You can use it without leaving Protex. Especially, it gives you an instant disc sector editor, which means you can unerase right away after you've been particularly silly. You also get to look at the directory tracks. You can grip the bytes. It's surprising how much friendlier the disc feels after that.

From Utopia I have kept "Cat" and "Era *.bak" because life would be silly without them, "!Tokens" and "!Help" because both are useful at odd moments and "!Protex" because it felt wrong to deny Motherhood... If I was serious and I was into machine code (AAAArgh!) I would of course have kept the call to Maxam. But I'm not and I didn't.

I have printed out my function key definitions and those for Brainstorm keys, on a disc-drive shaped piece of paper and tacked it onto the A:drive, that sits on top of the built-in drive (the A:drive was beautifully short and cheap). It hides the key and colour numbers but you only need those for Basic (what?) programming.

--{***}--

```
120 REM What is to be Done (or)
130 REM Driving a Hard Printer
```

None of this is any use unless you get sweatily involved with your printer driver. After all isn't the whole object of the exercise to get the stuff onto paper.

I'm told that people are put off by printer drivers. Well, okay but in Protex especially they are very simple. In fact, Printer Drivers are Next to Godliness.

The first thing is to decide what you want to do. Printer manuals can be rather terse but if you browse through the manual you're bound to find things you'd like to do. The next step is to do them. The manual may list a Basic (what?) program to drive the printer. Forget it. It's a hundred times easier from Protex.

You can use any letter to send any

set of codes. The choice is arbitrary and it's yours. And you don't have to build it into the function keys. That's just more awkward at this stage. The normal Protex way of Ctrl/x + "letter" is much simpler when you're trying things out.

--{###}--

140 REM For Example

Here's an example; in line 42 of "disc", I've used "v" to set the 12 character per inch high speed mode of the NEC (it's supposed to go at 168 characters per second and it does shift quite fast). As you can see, I've assigned it to Shift/f3, so I don't now have to remember the Protex printer code I've used.

Suppose you wanted to enter this code. You look it up in the printer manual. The characters to send to the printer are: 27 77 28 83 1. In command mode, enter "setprint" or "sp". You go through the option to "Set print options" by entering "n" for "no" and say "y" at "change control codes". Then tell it you want to define "v". You type just those characters, with spaces and finally closed by [RETURN]. When setprint asks you for a code for "off", in this case you enter 28 83 0 [RETURN]. Then save the printer driver. That's all there is to it.

I only chose this example to emphasise that it's possible to enter quite a few characters and have it work. Most printer control codes are in fact simpler and have less numbers in them.

--{###}--

I apologise if this is a bit simple but printer drivers did intimidate me a little to start with and it would have been nice to have avuncular advice at the time. The thing is *not* to try and get it right all at once. Start from the Epson default driver that comes with Protex. Just replace some of the existing codes with your own and save it with a short name you'll remember (how about NEC? Suits

PROTEXT KEYS

Protex	Address	Era *.bak
15 cpi	<small>Tiny print</small>	Large
<i>Italic</i>	condensed	
f7	f8	

Help	Tokens	Proportional
S/focus	Courier	OCR-B
12 cpi	10 cpi	<small>super s</small>
f4	f5	f6

Save/cont	Mode 2	Cat
enhanced	Souvenir	12 cpi/hs
<u>under</u>	bold	<small>s u b s</small>
f1	f2	f3

Store ruler	
Save/cont	
NLQ	Paragraph
f0	f.

C/R- Retrieve ruler

BRAINSTORM KEYS

Get	Jump	Put
f7	f8	f9

Amend	Hunt	Kill
f4	f5	f6

Yes	Title	Home
f1	f2	f3

Promote	Demote
f0	f.

me...) Then load it into Protex by going "pr nec". If you want to find your drivers with CAT, they have the extension ".BIN", as in "nec.bin. It is pretty useful to keep some record of what you've done.

--{###}--

150 PRINT "Different strokes"

If your printer is very different (like the Juki) then look up the basic things you want to do, like underline and double strike, in the manual and

then put them into a printer driver (under, say "u" and "d") that you update gradually. It doesn't matter if you leave a lot of unwanted codes in the driver. Unless you call them up, they'll not do anything. The only one that gets used every time you print is the "@" code, which resets the printer each time you PRINT from Protex. This makes sure the printer is in a virginal state before you inject your new text. No nasty hold-overs from the previous file, like still being in condensed mode. The Epson reset code is 27 64. If your printer is different, it's a good idea to change that one first.

If you want to try something out, use ">oc" stored commands to send trial codes from a file and observe the result. Sometimes it's much funnier that you thought but mostly it works.... It doesn't matter how many printer drivers you write. They're only small files. And you can have fun putting umlauts on things, or printing Danish "o"s by defining a code to go back and over print the previous character (this backspace is almost always 8). I gave examples of these in PwPI, for printing French accents.

```
160 PRINT "Fun fun fun..."
170 REM (till her Daddy took her
180 REM Protex away)
190 REM <Hi Joolz>
```

After helping to build printer drivers

for other programs, I honestly think that AMSDOS Protex is the easiest program to match to a printer that there is. Its so simple that it makes you understand the process better and removes the fear of flying. Play with it, and enjoy.

--(###)--

```
200 END
```

I think there's a fair number of us bashing away with Protex now. Writing these articles has been a lot of fun and just a bit intimidating. It's not my normal mode of expression. Several people have said they've enjoyed PwPI and 2 and I'm vain enough to believe them. But I don't want to go round in ever diminishing circles till I vanish


up my own Ctrl/Clr.

So could we try an experiment? If there are Protex queries floating out there, write in and ask. It'll give Steve an idea of what you want to talk about and I'll do my best either to think of a solution, or find someone who can. And anybody who has a good idea that I've missed out, write in!

--(###)--

For instance there's Promerge. I've been round the manual and I've done some obvious things for fun but is there a furry Promerge freak out there? Have you written an ambitious Promerge application, a database or an accounts system? I know it's feasible but I'd love to see it done. Write in and tell us all. You have nothing to lose but your discretion.

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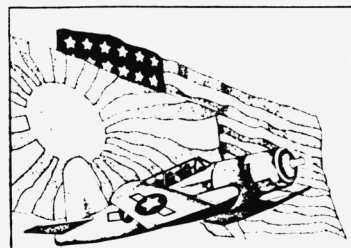
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farewell to arms

Simulations old and new, KEN WALKER reviews them for you. (Wordsworth)



SIMSPOT
55 GREENBANK ROAD
DARLINGTON, DL3 6EN

KEN WALKER TELLS YOU THE BAD NEWS AND THEN SOME GOOD NEWS

Since the last Simspot article there have been a few changes to the strategy scene, which welcomes a new name in wargames but for those who enjoy simulations and railways in particular, the news is not so good.

--<>-0-<>--

Dee Kay Systems (who catered solely for rail buffs) have bitten the dust or, for the more poetic amongst us, come off the rails. It is a bitter blow to lose a company from an already limited market with seemingly no one available to fill the gap. I daresay the reason for their demise has been their reluctance to add graphics and sound and at today's high prices, simply could not compete with the likes of Microprose or Digital Integration.

As a final gesture DK are selling off their existing stock at reduced prices which I consider more realistic when compared to other games. Such a pity they had to wait until the crash. <<Note that, due to WACCI skipped an month, these offers may now be out of date. Still worth a try though -Ed.>>

Gatwick Express at £2.50 and *Deltic/50 Fleet Manager* at £4 each, are the only ones left for sale on the Amstrad. If you are interested in grabbing one before it becomes history like the steam engine, enclose a cheque and write to:- Dee-Kay Systems, 7 Bitton Avenue, Teignmouth, South Devon TQ14 8HD. Now for the good news.

WAR ON THE EASTERN FRONT

So far this year there has not been much action for wargamers, both PSS and Lothlorien have remained silent (possibly from shell-shock) and SSI continue to ignore the Amstrad CPC.

Therefore it comes as a relief to welcome a new name from my neck of the woods which offers two games, one from World War II and the other set in the near future. Strategy Software hail from Seaham in County Durham, renowned for its harbour and polluted beaches (a typical English seaside resort.) Perhaps it may soon boast of another landmark if SS can take on the other software giants.

--<>-0-<>--

Kursk - Clash of Armour is the scenario for the biggest tank battle of the Second World War and often described as the 'Waterloo of Hitler.' The Germans had 900,000 men, 10,000 guns, 2,700 tanks and 2,000 planes matched against 1,300,000 men, 20,000 guns, 3,600 tanks and 2,400 planes on the Russian side. This battle is BIG and should require a high degree of strategy skill to successfully overcome the problems of supply, fuel and division manoeuvres.

--<>-0-<>--

The Final Conflict is all about World War III when NATO and the Warsaw Pact clash in Europe (similar to *Theatre*

Europe from PSS but without the arcade action.) As the battle involves 25 countries and 160 units, you should expect to be occupied for a considerable time.

Both games are reasonably priced at £7 on cassette and £8 on disc. By next month I should be in a position to review at least one of the games but if you can't wait until then, Strategy Software reside at:-

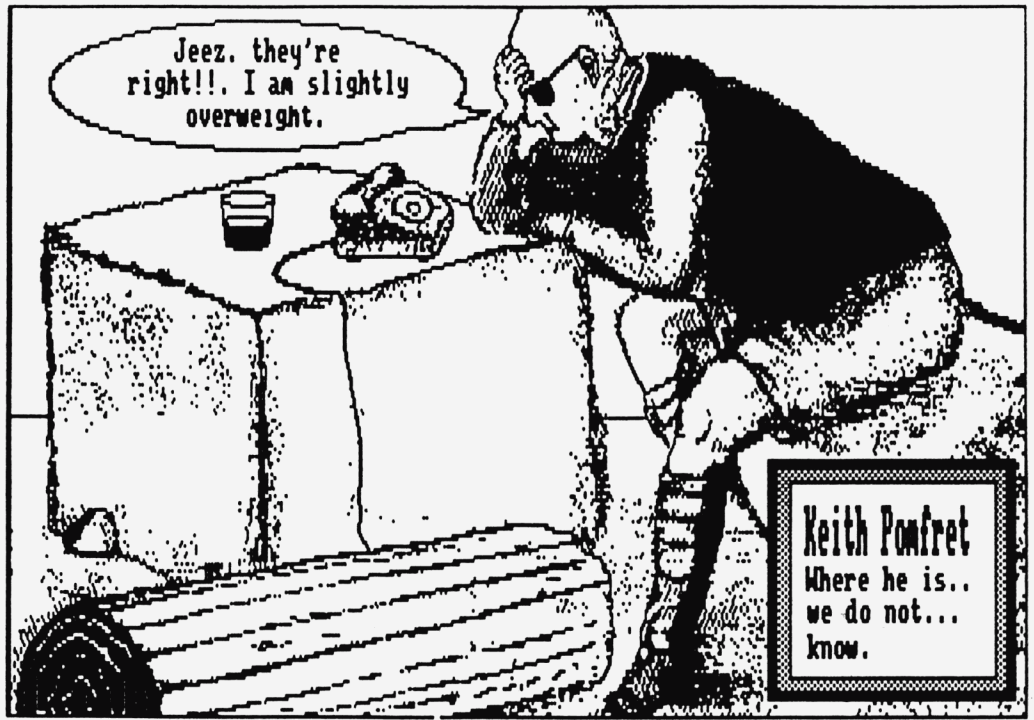
32 Albert Street,
Seaham,
Co Durham,
SR7 7LJ

--<>-0-<>--

DIY BATTLES

Another item of good news is that R T Smith (author of *Arnhem*, *Desert Rats and Vulcan*) has now released *Ancient Battles* from CCS in a planned series of games under the heading of *Encyclopaedia of War*. Not only does it come with five scenarios but has its own construction kit for you to design maps and other battles from ancient history. Having just bought *Wargame Construction Set* for the Commodore, I now have an interest in battles which were previously ignored. This can only help to promote interest in wargaming and encourage software houses to release more games from periods of history where there are no tanks or planes. After all, variety is the spice of life (Who said it was sex?)

REF



They seek him here, they seek him there, they seek the WOLI everywhere. Returning with poetic vengeance, I leap back into the traces with all the verve of that trumpeting elephant who plummeted to an unsightly death on the Blackpool tramlines. I couldn't leave WOLI in the hands of The Cunning Canadian so ol' Terfop's back <<You're not paid to juxtapose your name, get on with it -Ed.>>

---<<woliwoliwoli>>---

"Where have you been you fat bastard?" I hear you cry. No need to get so personal but since you ask... I've been off line for a couple of months and without a modem while I changed jobs, moved house and moved town.

A few well thumbed copies of WACCI were found in a dentists waiting room by the editor of a local newspaper in search of a reporter and quick as a flash, out came the editors teeth.

In a Lignocaine induced stupour that self-same editor spirited away the copies of WACCI and decided that this intrepid fellow writing WOLI was just the chap to fall asleep at council meetings. One month later and after a hefty drop in salary and 100 miles

away in a town I don't know craving interviews from the corporation rat catcher in the hope that no one will recognise me.

---<<woliwoliwoli>>---

LINE CORRUPTION

In a recent Pop Com (*Popular Computing Weekly*,) Malcolm Arnold their resident Comzoman went off to do an interview with Darren Ingram, the Sysop of Corrupt Computing (0203-676831 8nl 24hrs.) This is a BB that has had a somewhat interesting press over the last year.

Let's not all jump on the same hysteria bandwagon and praise or condemn it. What I would suggest is that we firstly dial in and see for ourselves.

---<<woliwoliwoli>>---

I picked up a copy of that once great organ ACU the other day. What a pale imitation of its former self. Remember the days when our erstwhile founder Jeff (Jiffy Bag) Walker was in the hot seat. Not any more. Now on its third editor since FOCUS took over, it has been reduced to printing generic

reviews of printers that cost more than a 6128, DMP2160, and a large meal at an expensive restaurant all put together.

I know it's a lovely idea but does anyone really spend £670 on a printer for an Arnold. For that matter does anyone spend that sort of money on a dot matrix printer. You can buy a reconditioned Laser Printer for that. Come on ACU, lets have a proper magazine like it used to be.

The June issue has only 27 pages out of a total of 78 pages with information on. Before the editor of ACU jumps up and down and says that it's wrong, I suggest that he gets out a ruler and measures it in column centimetres.

Now everyone's been away and measure it, I suppose I ought to apologise. Yup I was being generous, wasn't I. Still, I mustn't be too hard on the editor.

Aint it strange. A monthly mag that changes its editor every three weeks. Must make it easy to blame the last guy for the crap it turned out as. Anyway while we're on the subject of FOCUS magazines who now use ACU as a sort of punishment for their staff. (You know the sort of thing, like a

journalistic equivalent of being told to go and stand in the corner.)

Where was I? Oh yes, *FOCUS*. As it's the time of year when I take a month to be bitter and twisted, I'll carry on with the complaints...

A big round of applause to the guys at Greencoat House <<eg. *FOCUS* -Ed.>> for breaking the number one ethical rule. They gave away my business phone number to a troublesome caller in order to give themselves a quiet life.

Well Messrs Mackenzie, Evans, Baker and all at Greencoat. I hope you're all ex-directory or you're going to get a lot of 3am specials.

Now that I've assured myself of no more work from *FOCUS*, and offended everyone in sight, it's time to look for a legitimate target.

---<<woliwoliwoli>>---

Aha, here's an MP leaving herself open to some flak. That gorgeous creature, Emma Nicholson, MP for somewhere no-ones ever heard of is parading her sylph-like self in the popular computer press with a crusade (backed by the smiling but stern photo of herself.)

She's after the hackers with vengeance, poor dear. Isn't it a pity that such a divine little back bencher has to get involved in such a silly crusade.

If I could afford the litigation I might suggest, as other more well heeled hacks have done, that cute little Emma is trying to find a nice safe crusade where she can get lots of Media coverage. As most of the people liable to be affected by her cavortings are simple modem users, she's picked an easy target with no teeth. Or so she thinks.

The popular press and media seem to have cottoned on to her as a computer expert but as far as I can see it's only due to some links with ICL. I bet she's got a *One per Desk*.

As a SysOp and comms user I am bloody angry that someone who has stood for election to represent her constituents is wasting the votes that were cast for her by this charade of publicity.

Come on Emma, there are people in your constituency who would like MPs surgeries and your time in parliament taken up with their problems, not some Curryesque publicity stunt.

If Ms Nicholson really wants to take up arms in the hacking/comms/piracy debate, I suggest that she uses some of HER time, not her constituent's time to learn a bit about it.

---<<woliwoliwoli>>---

AT LAST

Well, here we are about 1275 words into this months column <<Oh no you're not, I cut some of the libelous bits out -Ed.>> and I haven't mentioned comms properly yet.

That's because with all the moving, I haven't done any. Thank to those people still on line who have kept me up to date with the news (Ta CC.)

COMMS MAGAZINE

Aha, now here's something new. Heavy rumour has it that Malcolm Arnold, the afore-mentioned Pop Comp Weekly Comms columnist, may be launching a new comms specialist magazine called COMMS+, which might be bi-monthly. More details as we get hold of them.

And yet more gossip. Colin Harris tells me that his company, Nemesis of Bonzo Super Meddler/Blitz and Doodah fame, has now got a section on The Cynotel BB (01 346 2186 8.n.1.) At the moment it is small area but it will soon cover all the updates of BSM/Hackpack.

TELECONNED AGAIN

My poor little linnet is languishing in my briefcase and I've even been foiled from plugging in at work because of one of Telecom's sillier games. At work we have the British Telecom Merlin Octara multiline system. Everyone has an outside line and the phones appear to have standard Telecom plugs on them. Hehe, that is until you try to plug anything with a normal plug in.

The Octara plug is very slightly different so only the phones supplied will work. I rang Telecom and explained the problem. "No problem,

we'll fit a parallel socket" they said, a trifle too eagerly.

"How much?" I asked. "Only £84 plus VAT" they said, hoping that I was rich. "Nearly £100 to attach a kit that I can buy from a DIY emporium for a fiver?" I asked. "Ah yes but you can't attach that to the Octara without opening the sockets up and you aren't allowed to do that" they said.

Beware the profiteering privatised Telecom PLC. To do the job I wanted would take about a foot of four core telephone wire an insertion tool, ten minutes and a socket. Cost £4.34

A guy I know (a journalist) recently had fun getting Telecom to switch on his line. He'd moved to a place where there was a line already installed but it wasn't connected to the exchange.

A month's wait was quoted. He demanded a connection within seven days. After seven days he rang back and asked where the line was. A month's wait they said. He said, "Fine, if it isn't connected tomorrow cancel the line. While I'm on, give me the phone number of the Telecom press office and enjoy reading about it."

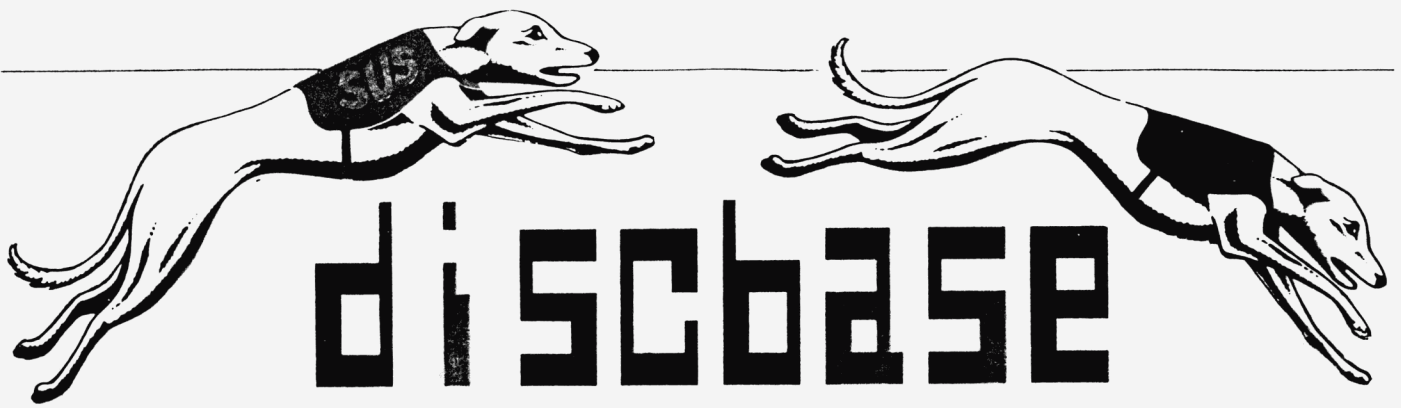
At 9am the following day, the phone rang. It was a telephone engineer checking that the line was OK. Oh the power of the press...

TERMINAL TERMINATION

That's all for this month. Next month there's going to be one of two things happening with Wacci On Line...

THE FIRST SCENARIO Is that I'll avoid talking about comms by boring you to death with the full story of my move. You'll thrill to the exploits of the gigantic van trailer as it snakes its path down the A6 behind Keith's Chevrolet Caprice. You'll scream at the sound of the brakes at Broughton traffic lights. You'll fall asleep by the second paragraph which will make it much shorter to write.

THE SECOND SCENARIO Is that I will sign the medical release papers and allow *The Cunning Canadian* to write a Beginners Diatribe about modems, Pratsell, baud rates etc. Would you really want me to do that to you? K.P.



WOULD YOU LET A GREYHOUND TAKE CARE OF YOUR CATS? PETER CERESOLE INVESTIGATES

Discs are friendly little things. Smiling, black. Plastic. Full of nice stuff but somehow anonymous. They're all smiling and black. They don't spontaneously talk to you. If you're looking for "ZAPPEROO.COM", as you flap through your wad of fifty (this is a post-famine review) nothing squeaks "Oi, here, here I am. Zapperoo.com. Zap.sub's on the third disc along, with Zap.keys. Oi." You have to slot them in one by one. Ctrl-F3. CAT. It's like trying to get out of the car park at London Airport with one of those exit tickets. Put it in. Take it out.

<<<***>>>

If that's the shape of things, then Discbase, from Greyhound Software, is a good notion. It describes itself as a fast disc-file organiser for the CPC and that sums it up quite well.

Running is really simple, *except...* You just run "disc. However, it uses a lot of memory, for good reasons, so you have to switch off any dingles, dongles, bells or whistles that you might have hanging off the back of your machine.

If you really want to run Discbase with a lowered HiMem, then Greyhound say they will customise a version for you. Discbase needs the space because it's entirely memory based and that makes it beautifully fast.

IN USE

After loading, a menu offers you a series of options. The most basic is to ADD a disc. If this is the first of a new database, it asks you for a

name. A database file can contain 1200 filenames (I'm taking the manual on trust, I don't have that many files thank heaven.) There are three characters available- say "ARC" for archive (this can be limiting.)

It prompts you for the number of the disc (you choose the number) and which side you're CATaloguing. It asks you if you want to save an identifying file to the disc and prompts you for a descriptive tag, that can be up to 20 characters long. This is a useful length.

And that's it! The screen displays the disc CAT and it's in the database straight away. You're prompted for the next disc, or a return to the Menu.

Each side is catalogued separately, unless you specify both sides.

You can change user numbers. User numbers are nicely handled, which is a good thing as each user area on a disc must be saved separately.

The prompts are clear. You can work back through your choices by using "ESC". All programs should do this but many don't. If you try to ADD a disc with the same number as one that's already in the datafile, the program tells you. If you want to update the disc after adding or erasing files, you have the option to UPDATE. That, too, is pretty well instant.

<<<***>>>

Once you have built the database, you can save it. It will be a fixed length 15K file called "DATAFILE.ARC" if it's the ARC file. You can load it back in at any time but I have a feeling that 15K is a damn great file on a 3" disc

and that although three characters, including numerals, gives you 46656 combinations, very few of them make sense. Another little niggle is that, when you load a database, you are led by the hand through a longish process of identifying the disc with the datafile on it and although it's fine the first time it would be *really good* to have a short cut available. I repeat, these are *small* niggles.

EXAMPLES

You can view your database. This is very nicely implemented. The first format is a straight list of the files in disc order. A typical chunk would look like the one in Fig. 1 (and so on into the sunset.)

This shows: file number, file name, size, database name, disc number and side, user, space left and description of the disc. Useful information as you browse up and down. Cursor keys go up and down, shift/up or down a page, Ctrl/up or down to the top or the bottom of the list.

You can move to another format by going "left" or "right" with the cursor keys. To the left is the display by user area, as in Fig. 2.

To the right Discbase lists the discs in the fashion of Fig. 3.

You can select file names- this is the result of a search for "SCRIPT" (Fig. 4.)

You can do AND, OR or simple searches.

You can even carry out simple house keeping from inside Discbase, for instance erasing or renaming files.

Finally, you can print the result of your searches. There's no way to control the printer from Discbase,

1:	ETVCO'FD.LQ1	2K	ARC	1.0A	user	0	25K	panorama 87	<i>Fig. 1</i>
2:	ETVIBBO .1Q	2K	ARC	1.0A	user	0	25K	panorama 87	
3:	RADSHO .QQQ	2K	ARC	1.0A	user	0	25K	panorama .87	
4:	GRAFSEQ .QQQ	2K	ARC	1.0A	user	2	25K	nukes	The whole CAT and nothing but the CAT.
5:	GRAFSEQ .TQM	3K	ARC	1.0A	user	2	25K	nukes	
6:	GRAFBITS.	1K	ARC	1.0B	user	0	42K	smart weapons	A CAT by any other name would smell as sweet.
7:	GRAFTRT .QQQ	2K	ARC	1.0B	user	0	42K	smart weapons	
8:	BRAD .LQ	2K	ARC	2.0A	user	1	20K	canny apes	
9:	CANGRAF .QQQ	2K	ARC	2.0A	user	1	20K	canny apes	

Fig. 2

A user area CAT (a moggly that does it in its own backyard?)

GRAFSEQ .QQQ	2K	JANAMEM .SQN	2K	SCRIPT1 .QQQ	6K
GRAFSEQ .TQM	3K	N-SCHEME.QQQ	2K	SCRIPT2 .QQQ	6K
JANA .NQV	3K	OTLN .QQQ	3K	SHOTLIST.	1K
25K free					

1:	ARC	1.0A	user	0	25K	Files:43	Selected:43	panorama 87	<i>Fig. 3</i>
2:	ARC	1.0A	user	1	25K	Files: 3	Selected: 3	smart weapons	
3:	ARC	1.0A	user	2	25K	Files:10	Selected:10	nukes	
4:	ARC	1.0B	user	0	42K	Files:51	Selected:51	smart weapons	
5:	ARC	1.0B	user	1	42K	Files:13	Selected:13	bbc general	
6:	ARC	2.0A	user	0	20K	Files:47	Selected:47	greenhouse effect	
7:	ARC	2.0A	user	1	20K	Files:16	Selected:16	canny apes	
8:	ARC	2.0B	user	0	38K	Files:63	Selected:63	personal 87/88	
3:	ARC	1.0A	user	2	25K	Files:10	Selected:10	nukes	

How many more CAT (or very young CAT based jokes) can we get away with without us seeming to become smutty? Gosh, I am not going to bother any more....

Fig. 4

Okay, I'll give up on this one. Fill in your own punch-line.

1:	SCRIPT1 .QQQ	6K	ARC	1.0A	user	2	25K	nukes
2:	SCRIPT2 .QQQ	6K	ARC	1.0A	user	2	25K	nukes
3:	SCRIPT5 .QQQ	15K	ARC	1.0B	user	0	42K	smart weapons
4:	SCRIPT .	1K	ARC	2.0A	user	0	20K	greenhouse effect

though, so you're stuck with whatever style your printer will give you from the front panel, unless you set the printer from Basic (from what?) reset and run Discbase. Life's too short for that kind of thing. Also, there's no paging control for long lists. I tried loading the datafile into Protex just in case... *No way, Jose.*

BIG DISCS

Greyhound tell me that Discbase will work with large capacity discs under ROMDOS. I haven't been able to check this. However, there is still a limit of 64 files per user number, which does make the idea a little academic. They also say that if the program won't run with your DOS, they'll take back the program with a full refund.

CONCLUSIONS

Now for the \$64,000 question, would I go out and buy it? Probably not. That's not a reflection on the quality of the program, I simply don't have enough files, so I keep track of them in batches by scrawling on the disc labels, or by doing little CAT lists as described in this month's "Playing with Protex, the Encyclopaedia."

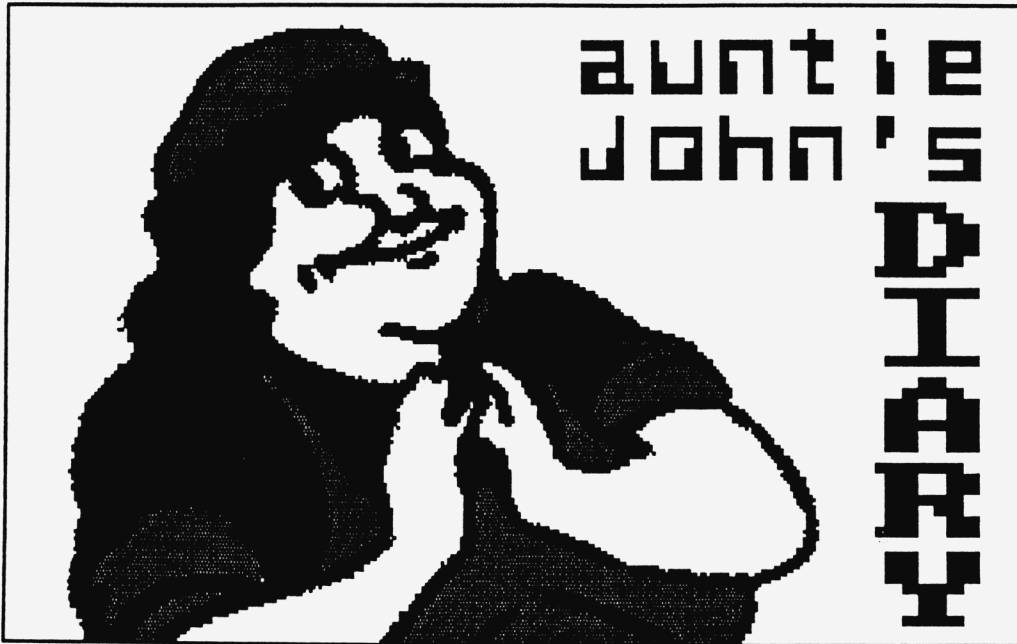
If you have a fair number of files, for instance for a small business, then I could see a lot of use for this program. And although Discbase only runs under AMSDOS it'll catalogue CP/M discs too.

I asked Greyhound Software if they'd considered doing a CP/M version that could catalogue megadiscs. It seems that the AMSDOS version has been such

a monster to write that they'd rather not think about that right now.

THE VERDICT

Looking for rational reasons to buy software is a losing game. If you are heavily into CATs (the type that don't rub around your ankles) then this program is for you. Greyhound have a very nice support philosophy. The manual says "If you get into trouble, first read the relevant instructions carefully" (okay, so they're hopeless idealists) but then goes on "If you are still stuck, then ask a friend to read it with you." As a last resort they encourage you to ring up but "never on a Sunday, please." Anybody that nice and that sane might well be worth buying a program from.



THIS MONTH: AJ ZOOMS ACROSS THE COUNTRYSIDE ON HIS TURBO-CHARGED MOPED

Hello and welcome back to all you frog throttling enthusiasts, train spotters and electric lawn-mower lovers. Your favourite Auntie has returned.

---00X00---

This month's Diary is actually being written right from the very dark, hot and steaming bowels of WACCI HQ in Twickenham. Yes, I am making my annual pilgrimage across the Irish Sea for a holiday (ie cadging somewhere to stay in as many places as possible.)

The good news is that Joolz has offered me a (free) room for a couple of days and the bad news is that Steve (OMG according to Joolz) has chained me to a CPC and ordered me to write an article, or else... I may have to stay here forever!

---00X00---

APOLOGIES

For this reason, further details on PASCAL programming will be missing for a month. It should return soon, maybe even with the long awaited colour and graphics routines as I have discovered a very interesting book here in WACCI

HQ. It's the official Digital Research and Amstrad CP/M (yawn) hand book and it is mega-essential reading for all series programmers and also those poor sods with problems getting to sleep.

---00X00---

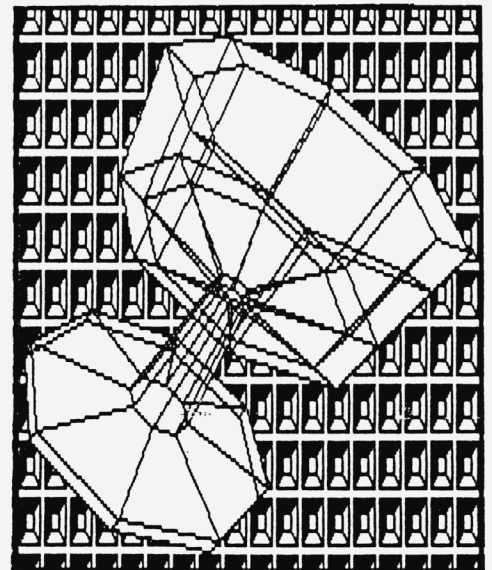
NEWS

Earlier this month I visited the Commodore show (where I managed to get an official name-tag and posed around the place) and the editorial offices of Amiga Computing where Jeff Walker (WACCI's erstwhile editor) is being held prisoner. Ahem, but enough of my problems, let us get back to the exciting world of CPC programming...

FIRMWARE FROM BASIC

Paul Dwerryhouse has written and asked me to list all the firmware calls that can be used directly from BASIC.

The firmware is the underlying operating system of the CPC. It provides all the features such as sound, graphics and text handling in a form that makes things nice and easy to control by the machine code programmer. Normally you must supply some parameters in the Z80 registers



but if no parameters are required we can make the calls directly from Basic. Now doing this is very, very bad programming practice.

Firstly, an error in one of the addresses will crash the system.

Secondly, your program becomes completely non-portable (no-one will be able to convert to another system.)

Thirdly, having nasty big hex addresses stuck in your program will make de-bugging a chore as you try to remember what the calls do.

But what the hell... I'm a nice kinda guy, so I'll give you some of the firmware calls anyway (see Fig. 1.) These can be used from CPC Basic using simple calls. For example:-

```
10 PRINT "PRESS A KEY"
20 CALL &BB06
30 PRINT "THANK YOU. I FEEL MUCH
   BETTER NOW."
```

PORTING

Computers are very good at storing and processing large amounts of data. We are lucky in that a standard for information format (the BYTES and BITS) has arisen that allows relatively easy transfer from one machine to another.

---00X00---

Moving data from one machine to another may seem a needless waste of time until you upgrade your system. Suddenly all your software is useless. By porting across between the two systems you will at least save all the data you have collected over the years. You know the sort of stuff; names and addresses, details of your record collection and anything else that would make you cringe at the thought of re-typing it.

But be careful. Computer Scientists (that's you and me folks) are renowned for being able to make things difficult for themselves (witness Peter Ceresole and his success in making Prottext log onto drive B in his "special" this month.) They may spend several hours writing special software, building hardware interfaces and soldering cables to send a quantity of data that would have taken five (albeit boring) minutes to enter into the machine by hand.

ANY PORT IN A STORM

Porting has become a lot easier in the last few years

The calls are laid out as below:-

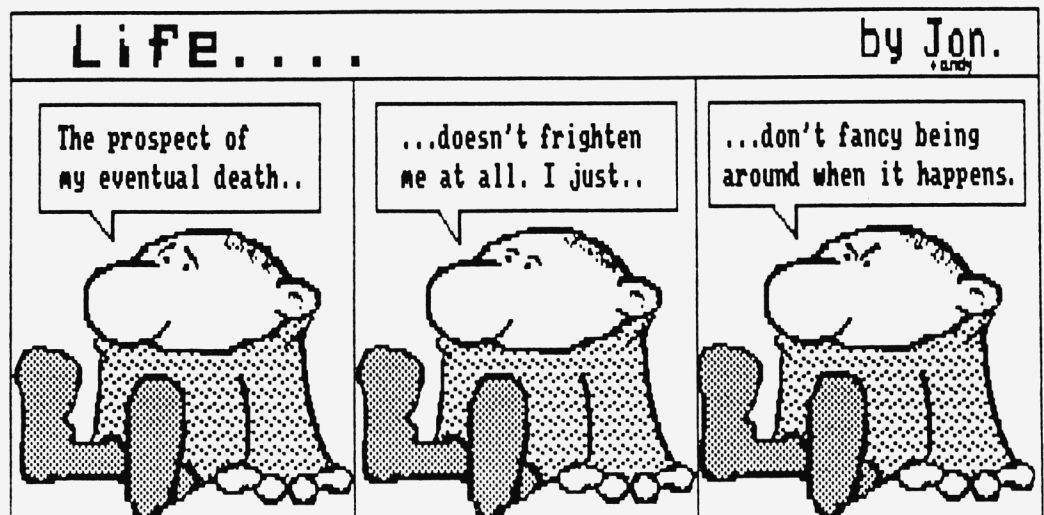
HEX ADDRESS	FIRMWARE NAME	ACTION
BB06	WAIT CHAR	Pause the computer until a key is pressed.
BB4E	TEXT RESET	Move text cursor to top of screen and reset all pens, papers and inks.
BB6C	CLEAR WINDOW	Wipes the currently defined graphics window.
BC02	SCR RESET	Similar to TEXT RESET but flashing rates etc reset.
BC6E	START MOTOR	Switch the cassette relay on (make it go click).
BC71	STOP MOTOR	Switch cassette relay off (make it go clunk).
BCA7	SOUND RESET	Shut the sound-chip up and clear envelopes etc.
BCB6	SOUND HOLD	Pause whatever the sound chip is doing.
BCB9	SOUND CONTINUE	Restart the sound chip.
BCCB	ROM WALK	Crash horribly.

Fig 1. The Firmware Calls

because of a thing called an RS232. This is a protocol for serial data transfer, or in English, it allows lots of computers to be connected to lots of other peripherals (MODEMS, printers etc) and even other computers. The standard connector is a

25 way IDC plug and socket arrangement but only three (or sometimes 5) wires are needed to swap data using a null modem cable.

NULL MODEM CABLES
Well OK then, since you ask, I will



BELFAST SAYS NO!

(What was the question again?)

now explain... A 'Null MODEM' cable allows two devices using RS232 to talk to one another (See Fig. 2.) Three wires must be connected, or sometimes five depending on the software used. Bah! Enough of this pedestrian stuff, let's look at some specific examples of porting data between two computers.

---00X00---

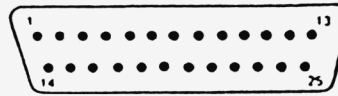
Case 1: *Swapping data between two CPC computers.*

Both computers are fitted by external RS232 interfaces. From within the CP/M (yawn) operating system the RS232 channels can be declared as external devices (usually TTY) and data may be re-directed from one micro to another, by using a program such as PIP. Alternatively try using some COMMS software to swap the data. However, the point of such effort escapes me since data may be passed between both computers simply by swapping discs. Machines that share a common disc size, such as the Amiga and Atari ST or CPC and PCW, can sometimes read each other's discs with only a little software to help.

Case 2: *Swapping data between a CPC and some other computer.*

If the other computer has an RS232 interface then things won't be too difficult. If it also runs CP/M things should be as easy as for the CPC to CPC case above. The benefits of such a set-up include transferring data from non 3 inch discs to the CPC. If the computer does not run CP/M there must still be some method of accessing the

RS232 INTERFACE CONNECTIONS



The twenty-five way D-type numbering (RS232 interface connector)

1 GND ----- 1 GND
2 TxD ----- 3 Rxd
NB: These lines are crossed over (2 to 3 and 3 to 2)
3 TxD ----- 2 Rxd

And sometimes needed:-

4 RTS ----- 5 CTS
NB: This lines are crossed over as well
5 CTS ----- 4 RTS

- PIN 1. GND - *Protective ground.* The common voltage level to which everything else is referenced.
PIN 2. TxD - *Transmitted Data.* The serial data is sent along this line.
PIN 3. Rxd - *Received Data.*
PIN 4. RTS - *Request to send.* A control signal, asking permission to send information.
PIN 5. CTS - *Clear to send.* Another hand-shaking signal. This one indicates that everything is hunky-dory and data can be sent.

Fig. 2

serial (RS232) port from within a computer language such as BASIC. A program can then be written to send or receive data character by character and store it in a file. After trying to port data between a Sirius machine and a CPC, Steve and I have found that having full documentation for both machines is *essential*.

Case 3: *Avoiding RS232 altogether.*

It is perfectly possible to transfer data between machines without RS232 and I have spent sometime experimenting with several machines to achieve just that. My earliest recorded attempt involved sending data

from a Jupiter Ace to a CPC464. (*Why? Good question.*)

---00X00---

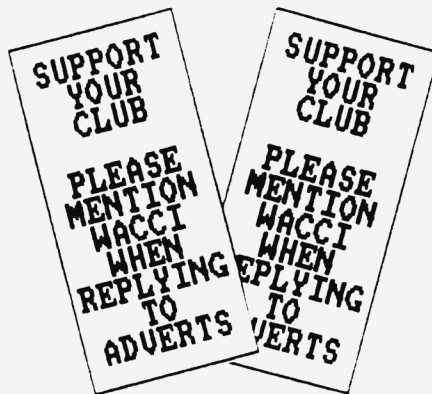
My first solution was to construct an I/O port for the ACE and wire up four relays under software control. Thus sending data to a specific location in the ACE caused a nibble of it to be represented by the switching relays. I then connected the switching relays to the joystick port of the 464. This worked well (if slowly) but the noise of the clicking relays drove me mad and I dreamt up a better way.

I used the ACE to print a pattern of light and dark spots on the screen depending on the Byte of data to send across. I connected the composite

video output of the ACE to a video-recorder and took the video signal into my VID1 frame grabber on a CPC6128. A program on the 6128 looked at the pattern of light and dark splodges and re-created the original number. It was totally silent, quite fast, very elegant and a complete waste of time. I had fallen into the trap of making things over-complicated for the sake of it. But it was very interesting and quite FUN.

--=00X00=--

My latest porting exercise requires the transfer of ASCII files from PROTEXT on the CPC to that cream coloured Amiga thing. The Amiga has a nice RS232 connector at the back, so everything looked rosie. Except that I didn't have a RS232 interface for the



CPC. What I did have though was a MIDI interface for both computers, one home-made, one bought. MIDI is also a serial data standard, usually used to connect synthesisers and drum machine together. However it is a perfectly usable data channel and a small Basic program on both machines allows text files to be swapped in minutes.

BYE BYE

That is about all for now. It seems I've written enough interesting stuff for this months column. The Editor is currently unlocking the chains around my ankles so it looks as though I'm going to make it back out to freedom after all. By the time you read this I'll be safely back in Bangor, so you know where to find me.

Next months Diary may contain some interesting facts you never new about life at WACCI HQ and the things they'd rather you didn't know about.

Take care on the streets and I'll see you, once more, in August.

Your Auntie

John

32 Bayview Road
Bangor
Co. Down.
Norn Ireland.

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Good Vibrations

FED UP OF ENDLESS REPEATS ON THE TELLY? THOMAS HARMAN BRINGS THEM INTO WACCI AS WELL

Well after a fair few months of waiting in the wings (since *January*) here is part seven of *Good Vibrations*. Never mind, it's here now and what would you do without it?

--#-b-#-b-#--

To start this months line up look at any piece of music. The chances are you will see a sign at the end of a line like the one in Figure 1. Two vertical lines with two or four dots before them.



Fig. 1

This sign is a repeat sign and guess what it tells you to do. Did you get it? Yes it tells you to repeat a section of music. To make your CPC repeat a section of music or repeat a whole tune you can do one of two things:-

- 1) The hard, long, boring and slow way which is to type all the DATA lines out again for the music you wish to play again.
- 2) The easy, quick and interesting way (well maybe not interesting but easy and quick). Which is to add a few extra lines to your program.

Guess which way I like best... No solution 1. but solution 2. Now take a look at Figure 2. type it into your CPC if you like.

As you can see the start of the listing is the same as normal, except for the addition of two extra lines, lines 10 and 60. Line 10 tells your computer to repeat the tune 2 times, the two at the end of the line tells

```

10 FOR repeat =1 TO 2
20 FOR tune=1 TO 8
30 READ r,t,d,v
40 SOUND r,t,d,v
50 NEXT tune
60 RESTORE:NEXT repeat
70 DATA 1,239,50,15,1,213,50,15,1,
190,50,15,1,179,50,15,1,159,50,
15,1,142,50,15,1,127,50,15,1,
119,50,15
    
```

Fig. 2

your CPC to repeat the tune twice. This of course can be changed if you want the tune to run through more than twice. Try deleting the 2 and putting a 5 in its place, now run the program the music should run through 5 times.

If you now take a look at line 60 you will notice that it is split into two different parts by a colon. The first command is RESTORE this tells the computer to start reading the DATA lines from the beginning again and the second command the NEXT command tells the computer to repeat the tune as many times as stated in line 10.

So you now have the set of commands which make a whole piece of music play through more than once.

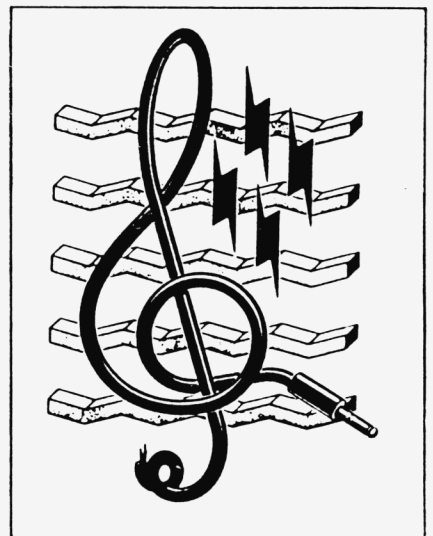
What happens when you only want a section of the piece of music you are programming to play through twice or

more? Well that's just as easy. If you take a look at Figure 3. you will see how its done.

```

10 FOR first=1 TO 4
20 READ r,t,d,v
30 SOUND r,t,d,v
40 NEXT first
50 DATA 1,239,50,15,1,213,50,15,
1,190,50,15,1,179,50,15
60 FOR repeat=1 TO 2
70 FOR second=1 TO 4
80 READ r,t,d,v
90 SOUND r,t,d,v
100 NEXT second
110 RESTORE 120:NEXT repeat
120 DATA 1,159,50,15,1,142,50,15,
1,127,50,15,1,119,50,15
    
```

Fig. 3



As you should have seen Figure 3. is split into two halves and there are two data lines but not together as in

the other programs we have written so far but separated by a few command lines. Up to and including line 50 the programming looks like you would expect it to.

These first five lines make the first half of the tune play through once imagine that up to line 50 is one program making a tune play through once and after line 50 there is a separate program making the second half of the tune play through twice.

--f-b-f-b-f--

Notice that the only difference between the program after line 50 and the program in Figure 2. is line 110. You should have noticed that after the RESTORE command there is a number, in this case the number number 120. This 120 120 refers to line 120 of the program. After the tune has played through once the RESTORE 120 command tells your CPC to move its DATA pointer



To finish off this section about

--f-b-f-b-f--

--f-b-f-b-f--

anyway? I will now try to answer that very question for you.

SOUND makes a program seem more attractive and I believe it also helps you to concentrate more on what you are doing.

Load a computer game something with good sound and fast scrolling like Space Harrier, now turn the volume on your computer down so you can't hear the music now play the game. Once you have lost your last life take a note of your score.

Now turn the volume control on the back of the computer to a maximum and play another game take a note of your score. I bet you, one chocolate digestive, its gone up. If you have some stereo equipment fix it up and turn the volume of the equipment to as loud as you can bear. Now play another game and at the end of it take a note of your score and, this time, I'll bet you, two chocolate digestives, that its gone up yet again.

Mine did before I purchased some stereo equipment I was getting around 2 million points on Space Harrier. Now when I switch the stereo on I get between 3.5 and 4.5 million points.

--f-b-f-b-f--

```

10 FOR first=1 TO 4
20 READ r,t,d,v
30 SOUND r,t,d,v
40 NEXT first
50 DATA 1,239,50,15,1,213,50,15,
  1,190,50,15,1,179,50,15
60 FOR repeat=1 TO 2
70 FOR second=1 TO 4
80 READ r,t,d,v
90 SOUND r,t,d,v
100 NEXT second
110 RESTORE 120:NEXT repeat
120 DATA 1,159,50,15,1,142,50,15,
  1,127,50,15,1,119,50,15
130 RESTORE 50
140 FOR third=1 TO 4
150 READ r,t,d,v
160 SOUND r,t,d,v
170 NEXT third
  
```

Fig. 4

programming repeats, take a look at Figure 4. next door. This program plays a tune through once then plays the second half again and finally plays the first half again then stops. The program is the same up to line 130. Line 130 tells the computer to move the DATA pointer back to line 50 and the following commands in lines 140, 150, 160 and 170 tell the computer to play the first 4 notes of the tune again.

If you study Figures 2, 3 and 4 you should soon get the hang of programming repeats. If you don't try experimenting with your own programs.

--f-b-f-b-f--

SOUNDS NICE

At this stage you may be thinking, What good is sound on my computer

So if you want better scores when playing computer games I would advise you to get some stereo equipment.

Not only does sound help you concentrate but one of the most satisfying aspects of computer programming is typing a listing for a tune in that you have programmed and then typing RUN and just sitting back and listening to your computer play the tune.

--f-b-f-b-f--

TARRA TIME

That's about it for another month from me. I do hope that you enjoy using the programs I have included and have a go at programming some of your own tunes. So until we do it again, bye. TH.

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CPM-002: COMPARE	10K - Compares two files for differences.	CPM-040: ADVENT	101K - Big text-only adventure.
CPM-003: LOOK	12K - Views and Edits ascii and binary files.	CPM-041: TEAM-GEN	22K - Scoresheet generator.
CPM-004: NDDT	11K - Improved version of DDT.	CPM-042: USERFUNC	12K - A small library of Basic DEF FNs.
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CPM-006: QK20	10K - Assigns character strings to keys.	CPM-044: CAL	6K - Calendar generator.
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CPM-010: ZMAC+ZLINK ...	40K - Z80 assembler and linker.	CPM-048: NEWPUZ	25K - Wordsearch generator.
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CPM-016: ZDEBUG	31K - Non-symbolic Z80 debugging tool.	CPM-054: SCRIVENER ...	194K - Spreadsheet cum database cum invoicer...
CPM-017: SMALL-C	157K - Floating-point version of the language.	CPM-055: JRT PASCAL ..	208K - Floating-point, standard version.
CPM-018: SCI	59K - Small-C-Interpreter.	CPM-056: JRT MANUAL ..	200K - Manual on disc for the above language.
CPM-019: EBASIC	84K - Compiles a subset of Basic to m/code.	CPM-057: COBOL	97K - NPS Micro-Cobol v2.1.
CPM-020: LISP	81K - The essence of a Lisp interpreter.	CPM-058: FORTH	54K - 16K version, can be enlarged easily.
CPM-021: EPRO	37K - A version of the Prolog language.	CPM-059: STOIC	62K - A version of the language.
CPM-022: CHEK	5K - Checks disc quality.	CPM-060: EXPERT86	52K - A very good expert system.
CPM-023: D	4K - Directory utility.	CPM-061: MEX	141K - Modem Executive comms utility.
CPM-024: DISKDOC	11K - Disc doctor (not sure how it works).	CPM-062: KERMIT	28K - Comms utility for little green frogs
CPM-025: DISPLAY	5K - Displays text files f/wards or b/wards.	CPM-063: LUCKY13	11K - Lottery number generator and checker
CPM-026: ED.DOC	22K - Instruction file for ED.COM	CPM-064: LOGAN	15K - LOGic Analyser and frequency counter
CPM-027: FORM3	3K - Allows CP/M+ owners to read PCW discs.	CPM-065: WSCLEAN	4K - Clears the high bits from text files
CPM-028: GREP	13K - Emulates the UNIX grep command.	CPM-066: OPT	21K - A Three Pass Optimiser for Small C
CPM-029: LOOKAT	3K - Dumps files in ascii format.	CPM-067: STARTREK	11K - Scotty's in there again.
CPM-030: RPIP	8K - Improved version of PIP.	CPM-068: HEXTO ..	17K - Make DATA loaders from HEX files
CPM-031: SD	4K - Directory utility.	CPM-069: MAXELCAT	57K - Print out a catalogue of all your files
CPM-032: SETCOLOUR	12K - CP/M 2.2 easy colour-change command.	CPM-070: MAKEASH	17K - Converts ZNAC files to source for JRTASM
CPM-033: SORT	4K - Sorts the contents of text files.	CPM-071: 80TRK	59K - Stick a 5.25" drive on your CPC
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|--|---|
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| CPM-078: SIDEWAYS 34K - Prints spreadsheets sideways. | CPM-089: PCW 3K - Read AND write to PCW formatted discs. |
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| CPM-083: SCRAMBLE 2K - Similar to PASSWORD but trickier. | CPM-094: RESCUE 6K - rescues corrupted discs |
| CPM-084: DISPLAY 5K - A smart text reader. | CPM-095: CRCBUILD 3K - Catalogue your discs. (CP/M 2.2) |
| CPM-085: FILECHOP 6K - Breaks down AMY program. | CPM-096: MCAT 23K - Catalogue your discs. (CP/M +). |
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-

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| AMS-001: MASTERS OF MIDWORLD . 29K - Graphical adventure. | AMS-035: PIXELPLOTTER 5K - 6128 Etch-a-Sketch program. |
| AMS-002: MINIMON 4K - Mini machine-code monitor. | AMS-036: STORY 12K - Zany prog that invents stories. |
| AMS-003: CHARDES 3K - Big-character designer. | AMS-037: FUNCTDR 2K - Plots graphs of matha functions. |
| AMS-004: HEADER READER 2K - Colourful tape header reader. | AMS-038: FUNCTSOL 2K - Solves quadratic equations. |
| AMS-005: FRUIT WORM 4K - The old caterpillar/fly type game. | AMS-039: FORMULAE 3K - Mixes chemicals. |
| AMS-006: OTHELLO 6K - Reversi simulation. | AMS-041: CGEN 6K - Icon-driven character generator. |
| AMS-007: FOUR IN A ROW 6K - Version of Connect 4 board game. | AMS-042: EXCAT 5K - Extended cat to screen/printer. |
| AMS-008: THE WORLD 26K - Graphics demo of Earth spinning. | AMS-043: EXPRINT 5K - Prints ascii chars > 127. |
| AMS-009: CHAT 5K - Based on the famous Eliza. | AMS-044: PROFORMA 2K - Cassette filing sheets to a DMP1. |
| AMS-010: JIGSAW-1 34K - Educational jigsaw. | AMS-045: NEATLIST 4K - Emulates the BBC's LISTO command. |
| AMS-011: EDDY 15K - Good text editor for all CPCs. | AMS-046: ROMREAD 3K - Tells you about your roms. |
| AMS-012: IOI 3K - Two player noughts and crosses. | AMS-047: SYMPHONY 4K - Kalaedoscope pattern generator. |
| AMS-013: PONTOON 37K - You against the computer. | AMS-048: AMSIG 173K - Mandelbrot Set Generator. |
| AMS-014: PROGDOC 33K - Programmer's utility. | AMS-049: DRIPZONE 53K - Addictive machine-code game. |
| AMS-015: HELPING HAND 5K - Decision aid. | AMS-050: DISCED 5K - Disc sector editor RSX. |
| AMS-016: BOMBER 4K - Bomb the town & land your plane. | AMS-051: STARFIRE 25K - Machine code zap-em-up game. |
| AMS-017: LIFE 4K - The Game of Life. | AMS-052: SCANNER 2K - Scans lots of ascii files. |
| AMS-018: LOCK'n'KEY 8K - Maze game. | AMS-053: BOUNCER 4K - A version of Breakout. |
| AMS-019: TUNNEL DIVE 4K - Freefall game. | AMS-054: BASIC+ 13K - 45 new commands to Basic. |
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| AMS-032: ENGLEBERT 8K - Bert game. | AMS-067: LOGOPOLIS 15K - Version of Logo. |
| AMS-033: GLOBE 7K - view Earth from space. | AMS-068: MATHS MAGIC 11K - For numerical freaks. |
| AMS-034: MULTIPROG 2K - Holds 4 Basic progs in a 2nd 64K. | AMS-069: BREAKER 3K - Dumps screens to disc. |
-

AMS-070: DISC MENAGERIE	29K	- Good disc utility.	AMS-128: ENVELOPE	8K	- Fiddle with ENT and ENV commands.
AMS-071: MOSEY	4K	- Edit memory and banks, view rows.	AMS-129: POSTER	6K	- For use with Siren's Print Master.
AMS-072: SPRITES	6K	- Mode 0 sprite designer.	AMS-130: CONTOURS	9K	- 16 colour mathematical contour map
AMS-073: SQUEEZER	4K	- Squeezes ascii files.	AMS-131: COMPLEX	9K	- Electrical engineers toolkit.
AMS-074: CAVERNS OF SKELETOR	14K	- Multi-coloured maze game.	AMS-132: DIABOLO	35K	- Multi format Solitaire game.
AMS-075: ZENER CARDS	23K	- ESP test.	AMS-133: ADAM	6K	- Prints out A.D.A.M. text files.
AMS-076: SUM-VADERS	7K	- Educational maths game.	AMS-134: BANNER	4K	- Print 10" high lettered banners.
AMS-077: ASTROSUITE	35K	- Find out about space.	AMS-135: GLOBE II	45K	- Much enhanced of the original.
AMS-078: TEXT & PROGRAM	3K	- Text screens into program lines.	AMS-136: SYNTH2	17K	- Another Synthesiser program.
AMS-079: WORDY	27K	- Advanced text editor.	AMS-137: QUIZ	96K	- Trivia quiz + speech.
AMS-080: TRIVIA QUIZ	72K	- 2 to 4 player quiz.	AMS-138: SDUMP V.3	7K	- Sdump suite+ helpful front-end.
AMS-081: PROTO	16K	- Good Z80 assembler.	AMS-139: STATS	10K	- Statistics program.
AMS-082: CHESS CLOCK	10K	- For chess freaks.	AMS-140: COLPRINT	1K	- Prints out text in columns
AMS-083: DEFFONT	14K	- Excellent character generator.	AMS-141: SPREAD	45K	- A spreadsheet program
AMS-084: CALENDAR	7K	- Calendar generator.	AMS-142: DISC MENAGERIE II ...	28K	- Much enhanced version DM
AMS-085: SNOOKER SCOREBOARD . .	4K	- For snooker freaks.	AMS-144: B10	5K	- Hi-res Biorthym generator.
AMS-086: PATIENCE	9K	- The soitaire card game.	AMS-145: NUMERO	12K	- The Cabbala made easy.
AMS-087: AUTOLINE	3K	- Intelligent graphics demo.	AMS-146: 3D MAZE	7K	- Can you find the exit?
AMS-089: CRUNCH	8K	- Educational Pacman.	AMS-147: PHI	8K	- Answers on a postcard please.
AMS-090: CALCULATOR	21K	- Scientific calculator.	AMS-148: S-LIGHT	3K	- Sound to light generator.
AMS-091: FONT	8K	- 40-column text in Mode 0.	AMS-149: DOMINOES II	10K	- The normal dominoes game.
AMS-092: FIRMWARE EXPLORER ...	5K	- Similar to Regiload.	AMS-150: STRAIGHT	8K	- Generates straight line graphs.
AMS-093: GOMOKU	5K	- Hybrid of Othello & Connect Four.	AMS-151: REGILOAD II	13K	- Regiload re-visited.
AMS-094: MENU	4K	- Intelligent disc menu.	AMS-152: HARDCAT	2K	- Printed disc catalogues.(6128)
AMS-095: OTHELLO	9K	- Another version of Reversi.	AMS-153: PACPLANT	25K	- Auntie John's version of Pacman.
AMS-096: UDGRAB	6K	- Grab user-defined graphics.	AMS-154: SDUMP V.4	29K	- Now with added AGE enhancements.
AMS-097: STYLE	2K	- Analyses documents.	AMS-155: BIOMORPH	9K	- Tinker with genetics (6128).
AMS-098: DISCMAP	3K	- Maps sectors on any format disc.	AMS-156: BANK+	5K	- Manipulates banked memory (6128).
AMS-099: TAPE RSXS	2K	- Quick save and load screens.	AMS-157: DECOMP	7K	- Load compressed Art Studio files.
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AMS-101: GO.....	15K	- Ancient Chinese strategy game.	AMS-159: WACCIWORD v2.0.....	87K	- WACCI's very own word processor.
AMS-102: D1-SYMM	2K	- A colourful pattern generator.	AMS-160: INVGEN	17K	- Send other people an invoice.
AMS-103: AGE	4K	- GEM type windows generator.	AMS-161: KEYBOARD	10K	- A comprehensive sound generator.
AMS-104: SNAKES	5K	- A game (I think).	AMS-162: GRAFPLLOT	4K	- Plots graphs I think?
AMS-105: OZ	4K	- Addictive peg-and-holes game.	AMS-163: DCHEAT	1K	- A cheat loader for DRIPZONE v3
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AMS-107: TEE-OFF	12K	- Golf game.	AMS-165: 3DXIX	7K	- 3D noughts and crosses.
AMS-108: PRIMES.....	2K	- Calculates prime numbers.	AMS-166: LNA	7K	- A Logic Network Analyser from AJ.
AMS-109: SOUNDFX	2K	- Explode, Ping, Bang, Zap RSXs.	AMS-167: PDG	3K	- The Prisoner's Dilemma Game.
AMS-110: PHARAOH	9K	- Maze and beasties game.	AMS-168: AGE128	10K	- GEM type windows generator (6128)
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AMS-124: PRINTER	2K	- Printer setup utility.	AMS-182: TANDY DUMP	8K	- Tandy Printer Dump.
AMS-125: SDM	11K	- O.S. for Bigscreen Programs.	AMS-183: M-FILE II	8K	- More Masterfile examples.
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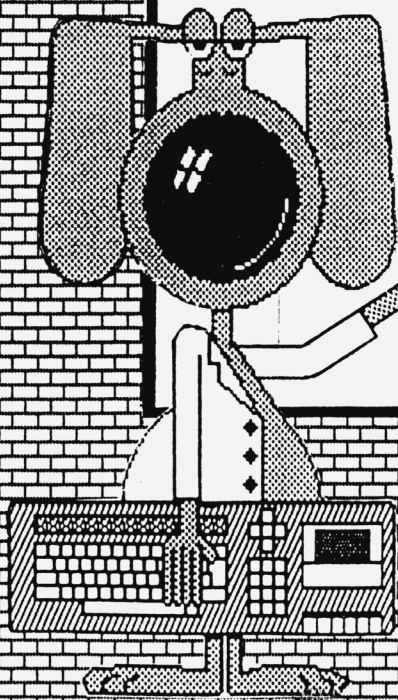
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PROTEXT Grows!

New MAXAM rom

PROTEXT FILER - New Release!

This invaluable program will keep your address lists or other datafiles in good order. Includes: datafile management from within Protex; extremely flexible file sorting program; label printing and mailmerging using the datafiles. Send SAE for full details.

WACCI PRICES: Disc £19.50

PROTEXT OFFICE - New Release!

Invoice printing program as used by Arnor. Easily configurable for your own requirements. Works from within Protex. Produces invoices/credit notes/delivery notes/statements. Includes Protex Filer. Send SAE for full details.

WACCI PRICES: Disc £27.25

PROTEXT

Protex is without doubt the most sophisticated word processor you'll find on any home micro. Its ease of use and advanced range of features are normally only found in business systems costing many times more. Widely praised throughout the Amstrad press, Protex is rightly acclaimed as the No.1 word processor for Amstrad CPC owners.

- * Super fast * Works with any printer * Flexible find and replace *
- * Layout stored with text; normal & decimal tabs, left & right margins *
- * Word count * Variable print options; incl. headers/footers, page nos. *
- "Extremely powerful editing features ... superb search and replace" AA*

WACCI PRICES: Rom £31 Disc £21 Cass £15

PROSPELL

Typing and spelling errors are simple to make and frustrating to miss. But by using Prospell, you can produce documents that are error-free. Prospell is an spelling checker that points out any odd words or dubious spellings.

- * checks Protex text in memory *
- * checks file on disc from Protex/Tasword/Amword/NewWord/WordStar *
- * over 33000 words * room for thousands more of your own *
- * up to 2000 words/min * find words and anagrams - great for crosswords *
- "Fast, efficient, easy to use" YC*

WACCI PRICES: Rom £27.25 Disc £19.50

PROMERGE

More than just simple mail merging for multiple standard letters!

- * integrates perfectly with Protex * read data from keyboard or file *
- * conditional printing so you can create your own personalised letters *
- * use the built in maths functions to produce invoices etc *
- * microspacing - to even out the spaces between words * typewriter mode *
- * link files together at print time * Reformat while printing *

WACCI PRICES: Disc £19.50

PROMERGE PLUS

All the features of Promerge, plus:

- * Edit two separate files in memory at once; copy blocks between them *
- * Background printing - allows you to print and edit at the same time *
- * Box mode - cut and paste any rectangle to create newspaper columns *
- "You'll have a set-up that can thrash any 8-bit word processor for speed...and even some 16-bit programs for power" PCW*

WACCI PRICES: Rom £27.25

ROMBO

All rom software requires a rom expansion system. Its benefits include zero loading time and maximum memory available for text, data, programs etc. Remember; Utopia and the extra commands of Promerge Plus are not available on disc. Fits CPC464/664,6128.

WACCI PRICES: 8 socket rom box £27

MAXAM 1½ - New Release!

At last, due to massive public demand, we have produced an enhanced Maxam ROM especially for Protex users. The editor has been taken out, and you can now assemble your source code simply by typing ASM while it is in Protex's memory. Debugging is now easier with comprehensive diagnostics and the ability to change register contents and resume from breakpoints. Other new features include load/save machine code from Protex/Maxam and extra assembler directives. All the other Maxam features are included.

WACCI PRICES: Rom £23.25

MAXAM

The classic Assembler/Monitor/Editor for developing Z80 machine code.

- * Plain English error messages * Disassembler * Memory editor *
- * Menu driven full screen editor * load/merge/save/print/find/replace *
- * Mix BASIC and machine code * or assemble directly from editor *
- * Use the editor to edit BASIC programs saved in ASCII *

"This piece of software should be held up as an example of what can be done by programmers who care ... buy one now!" E & C

WACCI PRICES: Rom £31 Disc £21 Cass £15

BCPL - new low price!

Flexible, fast, easy to learn programming language. Comprehensive I/O libraries including graphics and sound. Example source files supplied, including a space invaders game, full screen editor and all the libraries. 60 page manual covers the language and gives details of the libraries.

"Designed for humans, not computers" CWTA

WACCI PRICES: Rom £23.25 Disc £19.50

UTOPIA

50 new commands available without having to load a program, including:

- * Text screen dump * Graphics screen dump to Epson compatible printer *
- * disc utilities - disc format, disc copy, copy files, sector editor *
- * useful function keys automatically set up; easily define your own *
- * BASIC programming utilities * ROM management commands *

"UTOPIA is by far the best utilities rom...it's worth buying a rom board just to plug it in" AMSCLUB

"Utopia seems to be in a class of its own" AMTIX

WACCI PRICES: Rom £23.25

C (6128,CP/M+)

Integrated C programming system. Full implementation of K&R standard.

- * Floating point * 32 and 16 bit arithmetic * Optimising compiler *
- * Linker * I/O and maths libraries * Conditional compilation * Macros *
- * Editor is program mode of Protex *

"In typical Arnor fashion, they've taken their time and got it right" AU

WACCI PRICES: Disc £39

MAXAM II (6128,CP/M+)

Enhanced version of Maxam for CP/M+. Extras include:

- * Single stepping * conditional breakpoints * symbolic debugger *
- * Editor is program mode of Protex * Macro assembler *

"Now the best gets even better" CWTA CPC

WACCI PRICES: Disc £39

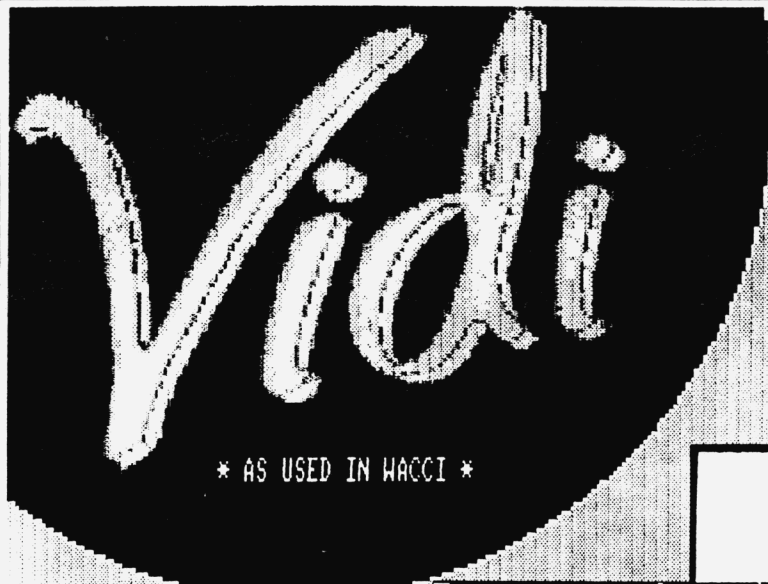
PROTEXT (6128,CP/M+)

Combines all the features of Protex, Promerge Plus and Prospell into one integrated program. German program & dictionary also available (Prowort).

"Protex is just so fast and versatile once you have used it - it is like putting Nigel Mansell against a C5" PYATW

WACCI PRICES: Disc £47

Available from WACCI, 59 The Green, Twickenham, Middlesex, TW2 5TU



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