WACCI

YET ANOTHER
PURR-FECT WACCI

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THE BENEFITS OF WACCI MEMBERSHIP

* The best magazine for serious CPC users.
* An INDEX of the above from issue 1 - 104.
* Telephone HELPLINE (indispensable).
* Bargain buys/wanted lists from the MARKET STALL.
* Discount off goods from advertisers.
* List of PD discs, tapes, library books, services.
* Above all the advice, assistance and friendship
  from other WACCI members.

BENEFIT list by Ernie (Wish List) Ruddick

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PRODUCTION METHOD

WACCI is created using Protext, Promerge, Prospell
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graphics. That's a lot of programs to learn....

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WACCI is distributed by the Dwerryhouse family who
did their normal magic again this month.....

WACCI: The club for Amstrad CPC computer owners.

FRONT COVER: *<<It was actually Paul -Philip>>*

THE TELEPHONE HELP-LINE

BOB MOFFATT, 01454 329875, Weekends only please.
Masterfile III, Mastercal, Qualitas and Protext.

FRANK FRONT, 01983 882197, Isle of Wight, 4pm-10pm
VDE, CP/M, Protext and WACCI Services. .

JONTY JONES, 01670 850254, 5pm-8pm, SATURDAY ONLY
MicroDesign, OCP Art Studio and Powerpage.
<<Complain to him about WACCI graphics -Philip>>

MALCOLM BRABBIN, 01502 716344, Suffolk
8pm to 11pm but not Saturdays. Basic programming.

IAN NEILL, 01926 337708, 6pm to 10pm, Warwickshire
Eprom blowing, Hardware, Electronics and more.

MARK STEWART, 01773 822599, Belper, 8pm to 10pm,
PAW Adventure Creator, Basic and general help.

NIGEL MELLS, 01784 211734, Ashford, tape to disc
problems, Basic programming and a general natter.

MIKE LYONS, 01942 259942, Wigan, Basic, Stop Press
Dk'tronics Speech Synth.

STUART GASCOIGNE, 0272 831361, Bristol, Basic,
Machine code, PD Discs 19 to 36.

JOHN HUDSON, 01484 423252, Huddersfield. MOII,
CP/M, Wordstar/Newword, dBASE, CP/M PD, CPC-PCW-PC

JOHN BOWLEY, 01733 702158, Peterborough.
PD/Book Libraries and WACCI OMBUDSMAN.

CLIVE JACKSON, Cobol, Basic, Bankman, Sorting,
File Handling and Applications programming.
37 Essex Road, Stamford, Lincs, PE9 1LG

RICHARD AVERY, Tasword 464, GPaint, Another World.
35 Marlborough View, Cove, Farnborough, GU14 9YA

NIC RAYNER, 0850 992747 (mobile) Manchester
CPC Emulators on the PC.

PHILIP DiRICHLEAU, 01522 511608, Lincoln
MicroDesign, Protext, Printers, Word Processing,
BASIC and anything to do with Editing a magazine.
All day until 9pm (*Notice new hours please*)

ARTHUR/ANGELA COOK, 01903 206739, Sussex
Tape Library, Repairs, General CPC and Natter
All day till 10pm

NB:
*This help-line is provided on a voluntary basis by
club members to assist other members. Please call
between 7pm and 9pm (unless stated otherwise.)*

THANX & STUFF

The Bad Editor

1996 has faded away into nothingness and 1997 has reared it's head to say hello. Snow has fallen (heating costs have risen because of it) and I'm finding more and more bizarre ways of starting Thanx and Stuff than ever before. So, without any more preamble, lets launch into the first issue of 1997 and hope that the years get better.

IT WASN'T MY FAULT

Well you are a patient lot aren't you? You may have noticed that WACCI is late. This time, it isn't my fault, it isn't the fault of anyone within WACCI. It's the fault of the Royal Mail, those wonderful people who managed to loose Fair Comment somewhere between deepest Rutland and the glorious city of Lincoln.

For those of you who have been less than patient, think of how I've been feeling. I've been in a state of mad panic, wondering what on Saturn (sorry, wrong planet) I was going to do about it. Thankfully, Richard sent me a duplicate copy of Fair Comment, which the Royal Mail took their time delivering, but at least it got here and about time too.

Incidently, it's now 1:50 am on the 5th of January and you could well get your WACCI by the 11th (but I wouldn't count on it).

IT'S THOSE HEADERS AGAIN

No problems really, but I wonder how many of you will notice that they've been done on a PC for this month. That's because I asked the wonderful Mr Dwerryhouse (that's Paul to the rest of us) to give me a quick had and deal with them for a change. At least I got a bit of a rest from them.

ARTICLES ARE NEEDED

Yup, I need them again. I can't sit here and write this magazine on my own you know, I do have other matters to attend to, like a girlfriend, two children and a rat (no, I don't mean the ex-wife, I mean a rat, a real one, with four legs and a long tail).

Where was I? Oh yes, articles. I need them, I need lots of them, I need lots and lots and lots and lots of them. Why is this? I shall explain.

It's not been to hectic in the last couple of month, because I had a good backlog of articles that were already laid out, so all I needed to do each month was lay out Fair Comment and write Thanx and Stuff. This meant that I had more time to do the finer points to the magazine and create better headers. If I run out of time (like I've done this month), then the quality level drops and the whole affair becomes a little stilted.

So, write me a few articles will you, it can be about any part of the CPC world. Even if it's been covered before, how about covering it again from a different angle, it all makes for some very good reading.

I'm that low on articles, once more, that I haven't even got a quarter of an Issues worth for next month, and I usually have at least half.

SO WHAT'S MISSING AND WHY

The Competition Spot is missing this month. Not because John and Carol didn't send it to me, because they did, but I have no idea where it is now, I can't even find a copy, so it's not here. Sorry John, Sorry Carol. My only explanation is, perhaps, that the Rat ate it (now there's an excuse that WACCI has never had before).

MY FILING SYSTEM

Those of you in the know are aware that I use a tame black hole as a filing system. Well, the black hole recently collapsed and I lost an awful lot of stuff and I have no idea where it's gone, none what so ever. All I do know, is that I can no longer find it.

There is a reason for telling you this. That reasons stems from that fact that my tame black hole (now no longer is use) was also used to store quite a few WACCI storage discs, with a couple or few articles stored on it. Those articles have now been lost and I need new copies of them. So, if you sent me an articles (or two) and they haven't been published (without explanation), then can you send them to me again.

As soon as I've finished this issue I'm going to check every disc I have in the place in an attempt to find some of them, but since I have almost 200 3" discs (all full) and nearly 2000 3.5" discs, that's going to take quite some time as you can imagine. Just in case, send me a back up copy, please, petty please. Sorry.....

A SYSTEME MAP

RoutePlanner, the almost legendary program from Richard Fairhurst (I know that name) have been updated and speeded up somewhat. I'll have a full review done as soon as possible, but if you haven't got a copy, then I would seriously suggest you get one. This is one of the best Routeplanners around. I know it's the only one for the CPC, that's not what I mean. It really is one of the best around. When I challenged it against AutoRoute Express (that's the BIG PC route planning program) it actually came up with a far more logical and time save route. So, I really do mean, it's one of the best route planners around.

Alright Richard, bring your ego down to size or you won't fit out of the door. Just remember Worktop. On second thoughts don't.

A VERY NASTY IDEA THAT I'VE JUST HAD

Has anyone got a copy of Worktop, the rather interesting program written by one Richard Fairhurst. Some of you must recall it. Well, I would like a review of it, an honest review, a very honest review. That should bring the Bunnys ego down to size once more (either that or he's going to come hunting after me with a very large chainsaw in his mits).

I'd like it for next month if I can, I really would. What about it? Anyone tempted, I sure someone must be, anyone. Please.

THE CONVENTION

What about this years convention? We really would like your ideas on the matter you know. The convention takes quite a while to organise and set up and the work has to begin soon.

Please, drop a line to Angie and let her know what you think. Are you happy with the location, do you think it would be better earlier in the year, what sort of displays would you like to see? Unless we know, we can't deliver the goods.

MORE MISSING STUFF

Tappers is absent this month. This is a one month absence only and it will be back next month in all it's glory. I just haven't been able to find a decent enough program to publish to make the whole thing interesting.

Tappers will be back as will a Basic Tutorial, a very good one, which I lost, found, and now I've managed to loose once more. Oh well, such is life. Can I have another copy of it please, whoever it was who sent them to me, I really do want them you know.

RETURNING OF DISCS

Yes, I know I'm terrible at returning discs to their rightful owners. They do get their eventually, but they can take their time. It's a one man operation at my end, I don't even have Clares help anymore now that exams are rapidly bearing down on us. Please, be patient, they will come home.

WACCI, THE SPECIAL EDITION

I had a very good response to the Art and Design Special a couple of months ago, so much so, that I'm planning another. Now, the question that I had to ask myself, was this, what part of the CPC Scene should I cover. After long and thoughtful deliberation, I decided upon, wait for it, Games.

All the serious CPC Users will now be having heart attacks, the WACCI purists will be having fits and a more than few will be shaking their head in bewilderment wonder just what Philip is playing at now.

Well, this is what I'm playing at. I'm answering the demands of my readership. Whenever anyone has commented about the Art and Design Special and I asked them for an idea for what the next one should be about, over half have suggested Games. So, Games software it is, for one issue only. Yup, WACCI is actually going to cover games. So, if you have a favourite game, send in a review ready for Games Special. It'll arrive just as soon as I have the pages filled.

THE ODD THOUGHT FOR THE MONTH

I have been told that rats never stop growing. Well, a rats tail is always the same length as its body and my rats tail had grown half an inch in the last week. That means that, by this time next year, it should be five feet long. I think I'd better lock up rather small children......

FAIR COMMENT

Richard "Bunny" Fairhurst
Frank Neatherway
3 Glebe Close, Rayleigh, Essex SS6 9HL
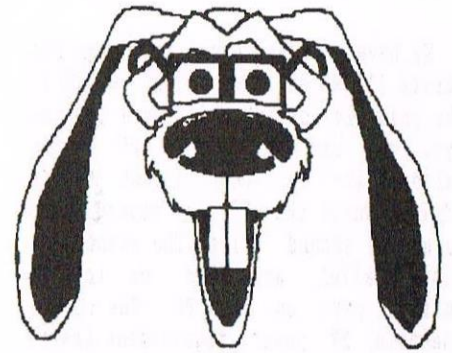
MASTERS OF SPACED

Can anyone help me with a working disc for Printmaster Disc 81, 83, 84? I have tried but cannot get it to work anyway.

I sent to Amstrad for CP/M Disc 3.1. They sent me CP/M Plus at £15 which I had already got. Why don't the library keep a copy? I would be very pleased if I could get one.

John Muller
Telford

<<The reason Amstrad sent you CP/M Plus is because Plus and 3.1 are one and the same thing. The reason that the library don't keep a copy is that CP/M Plus (aka 3.1) is copyrighted. Eagle-eyed readers will have spotted Philip's comment in a recent Thanx & Stuff that the new owner of the Digital Research copyrights has released CP/M as PD. Well yes, this is true, but it still doesn't mean that anyone can distribute system-format discs or CP/M boot discs: part of the copyright here lies with Amstrad and Locomotive, who were the ones who wrote the necessary code to make the operating system work on a CPC.

Could you be a bit more specific about your Printmaster problems, please? What exactly doesn't work?
- Richard>>

LOST CAT

I read Philip's article on 'The 8-Bit Printer Port' in issue 107 with great interest, and immediately set to work. At this point I must mention that I have two keyboards <<all very well, but how many CPCs do you have? - Richard>>.

On opening the first, I found that the PIO chip did not have the same number that was mentioned in the instructions - the number being D8255AC-5. Very near, I agree, but not having any expertise in these matters I thought I had better try my other keyboard. All tallied there, sure enough, so out came the soldering iron and so to work. No problems - all looked neat and tidy, reassembled, keyed in the patch program, then run it.

Now, I thought to myself, let's print out all those characters from 128 and above on my DMP2000 which I hadn't been able to access before. I keyed in

FOR a=32 TO 255:
PRINT#8,CHR$(a);:
NEXT

and all I got was characters 32 to 127. The modification does not seem to have affected any of the computers normal functions: I have rechecked the wiring, the patch program and all seems well. So, I ask myself, where have I gone wrong? Have I misunderstood something, or does the program need more help?

I have included my copy of the patch program on this disc. If you have the 8-bit modification as devised by Philip, would you be kind enough to try it for me?

Jack Butler
Grays

<<If the chip contains 8255 somewhere in the number, it's the right one. Such circuits are often produced by several manufacturers, who number them in their own particular ways: the CRTC chip, for example, is a UM6845 if it was made by NEC, an MC6845P if it came from Motorola, or an HD6845SP if it's a Hitachi. There's usually little functional difference.

Although I don't have an 8-bit port of any description, I couldn't find anything wrong with your typing. One possibility is that your DMP2000 isn't set up for 8-bit operation: many printers have a control code or DIP switch setting which tells them to ignore the highest bit of each character, thus restricting you to those in the range between 32-127. Alternatively, you might have selected a "second character set" (i.e. those from 128 to 255) identical to the normal characters.

When you say that all you get is characters 32-127, do you mean that the normal set appears once only (as per usual) or twice? It's possible, you see, that characters 128-159 are mapped onto 0-31 - control codes, which are quite capable of messing up "normal" printout. Try just printing characters 160 to 255 and see what you get.

Hope some of this helps - Richard>>

<<Philip here! The problem stems from the printer. I've just been looking at my DMP2000 manual, and it would appear that it doesn't actually have the box character set built into it. Since it doesn't have it, you won't get it. You may find that printing out characters 160 to 255 will print out the italic version of the normal character set. Leave it with me, I'll see what I can come up with, I've got an idea which might just work -Philip>>

ABRACADABRA

After successfully replacing the Amsdos 40015 chip with ParaDOS, I can now use my 3.5" B drive with programs such as Advanced Art Studio, Stop Press etc, and they recognise discs formatted up to 720k. However, I have encountered some problems with DES. When I enter the ROMs command, the computer sometimes hangs up and I have to turn the computer off at the back. Sometimes though, it works (about once in every 30 attempts). Why is this and how can I stop this from happening?

Can you get some sort of lead that lets you connect two B drives together, and interchange between them using an ABBA switch (have the 3.5" drive as drive A and the 5.25" drive as drive B?).

We have just purchased an Iomega Zip drive (100Mb on each disk). Would it be possible to link this to a CPC, as you can use it on a PC as an alternative to the 1.44mb floppy drive? Would the CPC just regard it as a normal second drive? The connection is parallel, and fits on to the printer port on the PC. The drive needs a 5V power requirement (maybe you could link it to the 5V power supply on the monitor).

Please call me stupid, but when I dialled the WACCI web site (on my PC) it rang, but a person picked up the phone. What am I doing wrong? Should I be dialling from my CPC? What sort of stuff is on the web page?

One last question. Is there an emulator for PCs that can cope with overscan games? I have heard of such a version, but the one currently in Public Domain does not have this feature. I was hoping to copy Megablasters all onto one 3.5" disc, and then use it on my PC, but I just got a funny picture, just like if you pressed the stop button on the Multiface when trying to save screens.

By the way Bunny, Rutland is part of Leicestershire isn't it? It is on my map!

Simon Lucas
Hampton Court

<<In which case, stupid (sorry. But you did ask), you should get yourself a better map. I won't bore you to tears with the usual lecture on how twiffic those nice AA ones you can pick up for £2.99 in any Booksale store are, but suffice it to say that they place Oakham, Uppingham, and the like in their rightful home of Rutland rather than any Leicester-based aberration. Ok, ok, this is only because they're 1997 maps and Rutland in fact regains its independence come 1 April this year. No, really, it does.

As far as I know, neither Marco Vieth's CPCEMU or Richard Wilson's emulator for the PC support overscan screens, nor much of the other hardware trickery employed by Megablasters. You could always try CPE, Bernd Schmidt's program: PC PD libraries might have a copy, but you're more likely to find it on an Internet ftp site such as nvg (back to the BTL 3 'net guide, chaps).

Ah yes, the Internet. What number are you dialling? The WACCI web site doesn't have a telephone number - nor, indeed, do any web sites. If you found it in an old issue and it begins with 01252, it's the WACCI BBS - a completely unrelated text-only service run by Chris Smith which is no more. Tell you what, why not dial the number with a voice 'phone and ask?

To get onto the Internet and look at web sites such as WoWWW (WACCI on World-Wide Web) or, dare I say it, BTL Online, you'll need an account with an Internet service provider such as Demon or Pipex - flick through a magazine like Internet Today or .net for their details. Once you've paid them £10 (or so) for the first month's access, they'll give you a local 'phone number to call with your PC. Using Netscape or another web browser, you can then type in any URLs you've acquired (you know, those things that begin with http://) and watch the page appear as if by magic.

Although this seems more complicated than just dialling up an individual site, remember, the vast majority of Internet resources are based Stateside - except when it comes to CPC stuff, which is usually in France or Norway. Would you want to spend 30 minutes on the 'phone to Norway acquiring the latest demos? Thought not.

Please, please, before I die of a premature something, everybody note the following: You Cannot Use 1.44Mb Drives On A CPC Without Extensive Hardware Modifications. Are you listening, Mr DiRichleau? You see, harking back to issue 106 (page 11), I don't actually recall anyone vaguely clued-up claiming in the last ten years that you couldn't hook 3.5" drives up to a CPC or read more than 178k per side. It's always been blatantly obvious to anyone with a copy of SOFT 968 that you can (check out the XPB specs and the Shugart-standard disc interface).

The crucial limiting factor here is the FDC (Floppy Disc Controller) 765 used by the CPC to organise data on disc. 1.44Mb discs, as I'm sure you all know, are also known as High Density discs - in other words, twice as much data is recorded on the same physical area of the disc. So you're either going to have to send data from

the CPC (via the FDC) to the disc drive twice as quickly, or slow the drive down by a factor of two.

The latter is clearly a non-starter given the mechanism of 1.44Mb PC drives, so it'll have to be the high-speed data option. And therein lies the problem. The 765 isn't capable of shipping data around at such speeds - heavens, it's barely capable of writing to 80-track discs. (True: the recalibrate command will only move a maximum of 77 tracks. Locomotive's Richard Clayton claimed to me that the reason they didn't include support within AMSDOS for 720k formats is that they weren't deemed "reliable" enough to be given the official stamp of approval, although I'm not sure that I believe him here.)

Anyway, all of that was a bit of a side issue, if a rather lengthy one. Ah yes, Zip drives. Believe it or not, you might have more success here - the parallel port is capable of fairly fast operation (up to 150,000 characters per second, I reckon). However, remember that communication needs to be two-way, and the CPC's printer port is little more than an output device. In addition, you'd have your work cut out rewriting AMSDOS (or ParaDOS) to use the printer port whenever you selected drive B. Not really worth the effort. Sorry. I'm going to make a name for myself as the advice columnist who always says "No, don't bother" at this rate - d'you reckon Just Seventeen would take to that?

Your DES bug is bizarre. After extensive scientific tests in Charley's laboratory (pressing R and C a lot of times), I've managed to replicate this a few times - but by contrast, mine (v1.1b) works 29 times out of 30, crashing only very often. The Unhelpful Advice Columnist says "Why do you want to use DES for executing ¦ commands anyway?", but what does he know? For starters, if your version number is earlier than 1.1b, I'd recommend you ask Mr Campbell nicely for a newer one.

The ingenious ABBA switch for external drives is certainly possible - Quantum Computing marketed one many years ago, known as the "Abracadabra" switch. However, no-one currently makes the things: and short of a clever hardware bod writing in with the circuitry, ICs and all, I don't think they're going to.

I'd give up on this Bunny bloke if I were you. He's vastly unhelpful and obviously doesn't have a clue about anything...   - Richard>>

CHANGE OF ADDRESS
I hope to meet the deadline of 23rd! <<I wouldn't worry, I didn't - Richard>> Congratulations on your appointment as Fair Comment editor. <<Thank you!>>

This is going to be brief. Following the Tappers' Type-In Address Book program in issue 106, I thought there might be some members less competent at programming than me (if that's possible) who would like the program to print out onto paper. Therefore, I have incorporated the following modifications and they appear to work.

Firstly, change line 300 by adding ,1420 to the end of it. Then change line 310 so that the 5 after the word DATA becomes 6, and add ,"Print Address" to the end of it. Finally, add the following lines to the end of the program:

```
1420 GOSUB 480
1430 PRINT#8,name$(file)
1440 PRINT#8,addr1$(file)
1450 PRINT#8,addr2$(file)
1460 PRINT#8,addr3$(file)
1470 PRINT#8,addr4$(file)
1480 PRINT#8,post$(file)
1490 RETURN
```

The program should now print the selected address onto paper, which may or may not be useful.

Peter Rogerson
Mansfield

<<Hi Peter, Philip cutting in here. It's very satisfying when someone writes in an modifies a problem (and makes it better) that I wrote some time ago. I've now added your change to my original copy -Philip>>

WHO ATE ALL THE PIOS?
With reference to Alan Corcoran's letter (November) about an alternative to the Z80A PIO chip, I've checked out the alternative Z80B PIO and there should be no problem using this as it's just a faster version. The original Z80A PIO can be obtained from CPC for 44p plus VAT, but 'phone for current prices as my copy of the catalogue is a rather old one. Contact CPC on 01772 654455.

Now, if anyone can help me with a little problem: I've got two dk'Tronics 256k RAM-packs, but I can't get them to work together as a 512k device. They work fine on their own as 256k units, but when plugged-in together they still only operate as 256k.

The manual says that they can be used as 512k if the option links are correctly set, but then it omits to say where the links are or how they should be set. I think I've found the links (a few pads with their tracks cut) but I'd rather see if anyone else knows about these things before I resort to guesswork.

Martin Bela
Alvaston

<<Thanks for the PIO info. As you say, one of the RAM-packs needs to be configured as a silicon disc (banks &E4-&FF) to avoid conflict with the standard RAM-pack configuration, &C4-&DF. It's a long time since my silicon disc came in for the same treatment (thank you, as ever, Mr Scott), but if I remember rightly, the relevant link is on the right-hand side of the RAM-pack PCB, in the middle of a track extending most of the way up the board. I could very well be wrong, but if (unlike me) you haven't given your collection of AA back issues to Brian Watson, there's an article by our bestest chum Phil Craven on this very subject.

I'd be interested to know, actually, how many pieces of software can utilise memory above 128k. Several file and disc copiers will: Xexor, Discology, Punishment, ParaDOS, and the 256k variants of JL-Copy. Any other suggestions?   - Richard>>

OH, F IT
My 3.5" disc drive is beginning to play up. It keeps thinking that it is not drive B but drive F. I can be using it quite normally and then up comes the dreaded Drive F: Read Fail sign. The only thing that puts it back

into action is if I format a disc in the drive - then everything starts working again. I did read in one of the back issues of Wacci that to press I for Ignore instead of R for Retry may help, but this doesn't seem to work for me.

Secondly, I use Brunword except when writing to WACCI, when I use Protext (so quaint). I wish to configure three of the keys in Brunword to print extra box characters. On the example disc that comes with the Brunword ROM is a program to define keys for whatever purpose you require. I have managed to define the screen character but am unable to define the printer character, or at least to print it out. I cannot show in this letter what I want as I only have the disc version of Protext and it is impossible to print box characters out in Protext without buying extra programs - and even then they do not show on the screen, unlike Brunword where it's made so easy. *<<Evidently - Richard>>* If anyone can help with this I would be most grateful. *<<Read last months WACCI, the answer is there, free of charge as well -Philip>>*

I also have several enlarged and edited pieces of clip art for use with Brunword, and a number of enlarged fonts: the Amstrad font, Shadow font and Old English font. Most of the enlarged fonts will load into the Advanced Art Studio, to build up headlines, letterheads etc.

For anyone who may be interested: if you send me a 3.5" (RAM/ROMDOS please) or 3" disc and return postage, and let me know whether you use Brunword, or have Stop Press and/or Advanced Art Studio, I will put as many of the above items onto the disc as I can with a few examples of Brunword graphics for users of this wondrous program.

Ray Neal
56 Houldsworth Crescent
Coventry CV6 4HJ
01203 362063

<<Your drive F problem sounds much more like a ROM clash - or some other software problem causing AMSDOS's workspace to be overwritten - than a physical fault with the disc drive to me. Does it only occur when you're using a particular piece of software (e.g. Brunword)? Have you tried switching ROMs off? Try playing around with CP/M Plus and see if the error replicates itself then - CP/M largely ignores ROMs and AMSDOS disc routines, so it's a good way of determining whether a fault lies in hardware or not.

Your other query I'll leave to the Brunword Appreciation Society, as (contrary what you may have read) Brunword isn't my choice of word-processor. Nor do I use Protext for such purposes (other than Fair Comment). Sure, it's a lovely text editor and integrates beautifully with Maxam 1.5, but its ease-of-use and output quality are as nothing next to MacWrite Pro...   - Richard>>

<<The Brunword Appreciation Society? Oh, them? Urm, ah, yes. Urm, Brunword is a wonderfully amazing program and beats anything else in the known universe. In fact, it better than eating, sleeping, urm, anything at all in fact. Can I have my legs back now chaps, I find it difficult to walk without them -Philip>>

CALM, CALM, CALM...

<<In a rather radical departure from WACCI house style - well, what are new columnists for? - I've interspersed my reply throughout the following letter from Cornwall's Peter Curgenven, rather than putting it in one great chunk at the end. It seemed easier to follow that way. The letter was addressed to both Philip and me, so no doubt there'll be a few extra comments in there. And have you noticed how PdR is more likely to insert extra comments in a letter if it's placed towards the end of Fair Comment?

Complaints about either the layout or the content in time for Fair Comment 109, please - Richard>>

The arrival of December's WACCI, and there's nothing you can say in your reply to my letter WATT'S UP DOC to upset me. Yes, I've got a full set of WACCIs issues 1-107 (issues 1-3 not being reprints) thanks to Market Stall and Keith Jones, ex-WACCI and CPC user.

<<Sorry, what's that got to do with anything? I'm not trying to upset you, Peter, honest - I just thought certain things needed saying.>>

Richard and Philip, your reply of criticism and sarcasm not only to my letter but others must stop. I can take it but others can't: I will explain. You haven't let Mr Watt reply for himself.

<<Yes I have, his letter is in this issue.>>

You have spoilt it by saying you don't have to be a mastermind to make up extension leads. True, but there is a certain percentage of CPCers out there who can't. Your attitude is deriding and putting those few people down.

<<No, it isn't. It doesn't take a mastermind to work out how to change the spark plugs on a car, either. However, some people neither have the time or the inclination to acquire the necessary knowledge base that will let them do this confidently. So either they try to learn - perhaps with the help of a magazine article - or they farm the job out to a garage. And that's fine with me... I wouldn't go anywhere near a car engine!

The point is that, since anyone with a modicum of hardware knowledge can figure out how to create such extension leads (even me, and I'm worse than clueless when it comes to electronics - I blew up my NC100 the other week), your article is hardly a masterpiece of original thought. Therefore, you can't go around declaring that Ben Watt has copied it just because he's written about the same topic - it's more likely that he worked it out himself.

If you were accusing someone of having ripped off an article you'd written about (say) 8k copy mods, a technique which required a great deal of original research and ingenuity to perfect, I'd have more sympathy. But here, I believe, the boot is on the other foot. Why did you offer CPC SouthWest an 8k sector article - and then "postpone" it? Can you honestly say that you developed the technique independently of those who got there first (Richard Wilson and Rob Scott)?>>

I hope you don't have the same attitude when you get phone calls from WACCI and other CPC users for help. If you used that smug superior *<<sic>>*

that anyone can do it *<<No, that's not what I said>>* you will frighten the unsure away from the CPC. I thought the CPC was dying, but within the last six weeks I've had phone calls from new users who have had problems. Easy-peasy to you and me, but if I didn't bother to explain about how to format a disc, load and run games, why you need a DDI-1 interface, we wouldn't have new members: they would just resell their machines. I never refuse a caller help, and if I can't solve their problem I tell them who can. So cut it out thinking everyone in WACCI are electronic geniuses: they aren't.

<<Peter, you are talking to the person who wrote Techy Forum for three years (as well as the occasional "Ask Alex", specifically for beginners), the author of several beginners' tutorials (such as the well-known machine code one) currently circulating in the public domain, and so on. More than average experience of writing for the technologically bewildered, wouldn't you agree?

I'm not trying to be smug just because some people have more of a life than I do and haven't spent endless hours in front of their CPCs figuring out the pointless intricacies of the 6845 chip. On the contrary, they deserve congratulations. I'm just saying that you were out of order accusing Ben of plagiarism without any evidence. Which you were - and since you (wisely) don't attempt to back up the allegation in this letter, I presume you'll be apologising to Ben in the next Fair Comment.

By the way, I don't get 'phone calls from WACCI members asking for CPC help, as my number is neither in the WACCI helpline (pressures of time, I'm afraid) nor published anywhere, even BTL. As you'd have seen if you'd bothered to look.>>

Now, Richard, you must come clean about your attitude to disczines. Just because you and your team have fallen out with other disczines, don't let that creep into your reply. All disczines mean someone has got off their backside to produce it; whether it be good or bad, time and effort has gone into it. I appreciate all disczines and fanzines because the

editor, and perhaps his team have tried. I do agree, some are really atrocious and full of swear words and very libellous: you just have to ignore their juvenile, puerile ways, and admire how they "run", and the artwork if there is any!

<<I don't believe the BTL team has fallen out with any current disc fanzine - look at the lovely things S.E.X. and Disc Mac Challenge ("Mag des Monats... it is great") have been saying about us. Neither do I agree that effort alone merits a place in a PD library (or similar). Would you include a skipful of PD text files about PC hardware in the WACCI library - which could easily be read on a CPC? Someone's put a lot of effort into writing them.

I know, I know, "they have no relevance to WACCI members or the CPC". But this is the point. Neither do several of the disc fanzines around.

Mind you, libellous, juvenile, puerile disc fanzines which are full of swear words are great fun. I should know, I edit BTL.>>

The French had that sort of attitude of not speaking to their inferiors and see what's happened to them! Good job a few realised it wasn't too late to talk and swap and share things with us. The CPC user base is small enough now! Let's not make it smaller by creating an elite group of geniuses.

<<I really don't see what you're getting at here. French CPC users are currently the most active and productive in Europe - check out the stream of demos, games and fanzines currently emanating from across the Channel. So what did happen to them?

Nor do I believe there's ever been a "snobby" attitude on their part. Way back in 1991, I was a fairly clueless programmer, in many ways floundering in the dark. One of the best programmers in France, Serge Querne (aka Longshot of Logon System), helped me enormously with technical info, programming and design tips, and the like - always remaining patient when I asked what must have been (to him) the most idiotic questions.>>

<<I hate these spare lines -Philip>>

Your remark about the disczines getting into the library was unfounded. I hoped the disczine d/b would be kept separate from the library and be a unit/group on its own, and that warnings would be given on the suitability of the disczine - sort of censored before reissue.

<<Redistributing "censored" versions of PD software is against the accepted spirit of the public domain. Unless you're openly invited to modify or configure files (as in many CP/M programs), or you're not altering the content in any way (as in translations from the German or French), copying altered versions is a real no-no. Come on, you were fairly angry this time the other month when you thought someone was distributing an altered version of one of your articles...

Whatever. More relevantly, putting a warning on a disc containing instructions on how to kill people (Bad Mag) doesn't excuse it in the least.

Sorry if I misinterpreted you about the disczines going into the WACCI library. Obviously, the comment "I have got stuff from France and that is now in the library. I would like members who can help me in tracking down and sending me disc fanzines" (my emphasis) was more ambiguous than I thought...>>

<<I'll add a comment here. I'll do anything I can to wipe BAD MAG out of existence, utterly and totally. Whilst I am editor of WACCI, or have anything to do with it, BAD MAG will NEVER appear in the WACCI PD Library.

Rather arrogant of me? No, not really, I just find racism and extreme anti-semitism (of the kind that circulated in germany in the 1930's), rather offensive.

Oh well, better watch my post again, I suspect I'll end up with a few more, shall we say, dodgy discs coming in through the post -Philip>>

Also, please note: nearly all disczines now from France and Germany are also in English, so don't be put off.

<<No. There are no current French disczines with more than trace levels of English. From Germany, Tribal Mag,

Disc Mac Challenge, Digital Press and a couple of others have a minority of English material: and then there's Greece's S.E.X., which is 100% English-language. That's the lot. Sorry Peter, but as possibly one of the two most well-known British CPCers in the European fanzine/demo "scene" (the other being Slice, aka Tom Dean), I do know what I'm talking about. For once.>>

The point of asking for disczines was also that there were/are ways of contacting others who may have something we want or need! Some of the utilities I got from France a couple of months ago have been very gratefully received by my contacts with pleas of "get us some more like that"!

<<Yes, agreed - although I'm not sure why you single out disc fanzines here, when demos are just as common a way of initiating software swaps. And many of us are in contact with overseas programmers already...>>

I won't go on: I think you must have got the message! A swipe at you now. It's a great pity that while you had great wodges of cash while at AA, some of it wasn't spent on getting the actual programs to work. It's a good job your fellow STS friends did! BTL 3: North and South and many other cracks done for you!

<<My fellow STS friend ChaRleyTroniC, you mean? The one who wrote the "AA Covertape Companion" article and the North & South and Desktop Organise programs. Here's a handy hint: ChaRleyTroniC, or CRTC for short, is actually my pseudonym. Well concealed, I know. I mean, the second article in every issue so far has only contained a credit to "Editor: ChaRleyTroniC (Richard Fairhurst)". Jeepers.

North & South, I believe, is adequately chronicled in the BTL article. I messed up. I'm sorry. I believe I did as good a job as possible within the time allowed. If I was just trying to do a minimum amount of work without bothering about compatibility or bugs, I wouldn't have spent time trying to fix the problems and publish the conclusions (for free) in BTL, now would I?

And before you start attacking programmers, ask yourself for a minute - what have you ever done for the CPC? Do I see huge quantities of quality utilities in the PD library marked "by Peter Curgenven"? I don't think so.>>

Please note: don't swear at me by quoting the Internet, I've no desire to buy, use or borrow a PC! I have a supply of CPCs and when they all expire so does my interest in computers, it's the CPC or nothing.

<<Sorry to tell you this, Peter, but I'm a regular Internet user - and I don't own a PC. It's all done on the CPC (running AnsiTerm) and an ancient Amstrad SM2400 modem, using which I dial up an Internet host in Cambridge with e-mail, news, and FTP facilities. (Incidentally, this means that you can now e-mail your Fair Comment letters to wacci@btl.confusion.org .)

Anyway, I'll presume you're currently abstaining from daily newspapers with technology supplements on the basis that they contain far too much bad language.

Sorry if I've sounded rude at any point. But really, Peter, I would prefer it if you engaged your brain before writing such a letter.
                                    - Richard>>

RAPID REBUTTAL UNIT, WALWORTH ROAD
Having just read Peter Curgenven's letter in issue 107 of WACCI, I must say that I was a little shocked at what he said regarding my extender articles. For a start I have never even read a single issue of CPC SouthWest, and I don't claim that my article is mine, I know it is mine. Like you said, Peter hasn't even read my article, and how he could ever possibly think that I have copied his article just from my letter is beyond me. Saying what he did is like writing a review for, say, Protext on one magazine and then complaining when someone else reviews it in another. Ridiculous I know, but so was Peter's letter.

This is the first time I have felt annoyed with any WACCI member (in fact, so far you've all been great), but I think that the fact that he complained about an article that I sent to Philip with the best of intentions seems to be a bit off.

Anyway, maybe if Philip could actually print my article then this would resolve everything once and for all!

Incidentally, I do know that making a joystick extension is pretty easy, but not all of the WACCI members have a huge knowledge of this sort of thing and what I hoped to do in my article was to make doing this much easier and explain it in a simple way that most people can understand. Whether or not I succeeded, I'll leave to you to decide.

Anyway, enough about that, I'd just like to say congratulations on becoming the new Fair Comment editor, but are you going to try starting each reply to your letters with the many different ways of saying `Hello' as did Philip? Hope you all have a Merry Christmas and a happy New Year (although by the time this is printed in WACCI Christmas will have been and gone). Let's hope that 1997 will be a good year for the CPC!

By the way, when are we going to see a solution to the North & South 6128 covertape problem?

Ben Watt
2 Cuiken Bank
Penicuik
Midlothian EH26 0AF

<<Thanks for sorting that out. As I pointed out to the Member for Trevone some minutes earlier, I'm not trying to knock articles on "easy" hardware projects - I refer the Right Honourable Gentleman to WACCI 107, p6, column 3, lines 13-17.

Reprinted from issue 3 of BTL, here's a short one-liner which (when RUN) will configure your North & South disc to be 6128-compatible. Sadly, it means you lose Plus compatibility, but you can reinstate that by replacing the &1C with an &1E and trying again.

```
MEMORY &1FFF: LOAD"ns.m",&2000:
POKE &810E,&1C: |ERA,"ns.m":
SAVE"ns.m",b,&2000,&80F6,&200
```

Yes Mr Curgenven, I did write it.

I'm not sure about starting each reply with a variant on the word "Hello". They'd all probably end up starting and finishing with "All the lads", with the odd "That's the bunny" in between. All the lads!

By the way, Ben just needs a few more articles before CPC Quick 2 is ready - so if there's anything you think the world should know about, drop him a line -Richard>>

CRAWLING CHAOS

...also known as Charley's Cockup Corner. This month's prize bodge-up (or rather, last month's) was my statement that Frank had posted off a copy of Family History 2 to Aubrey Sinden. I wuz wrong, totally and utterly, and in fact Family History 2 is not (as yet) publically available. Sorry for any confusion caused.

By the way, the Crawling Chaos title comes from an early Factory Records band, not a sad sci-fi book. Just thought I'd make that clear. This month's CD recommendations are the first four Durutti Column rereleases - wonderful abstract guitarscapes, or something. Try the "Vini Reilly" album, it's fantastic.

Finally, RoutePlanner users might be interested to know of a new program available soon from Radical Software. Called "Post Office RoutePlanner", it calculates the quickest route for a letter to take between two places (Bisbrooke and Lincoln, say), and then ignores it, loses your letter, and causes WACCI 108 to be several weeks late. Ahem.

<<See, it really wasn't my fault this time -Philip>>

A little addition down here, just to remind people to send me some more articles. I'm getting very low on them once more.

Before you ignore this bit and think that you couldn't possibly write something for WACCI, think again. Everyone can write somethink, it takes a little confidence. Try it will you, or WACCI may must stop arriving purely on the grounds that there arn't any articles to publish, rather than the efforts of the Royal Mail.

Could all the regular writers also fire into high gear as well. Thanks a lot my friends.
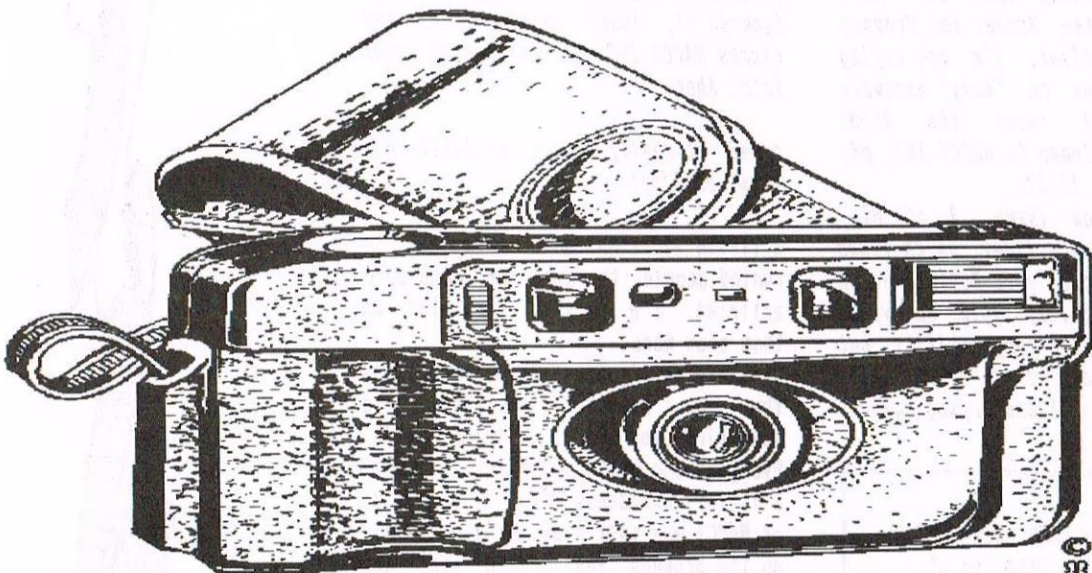
COMPETITION SPOT

With Paul Dwerryhouse
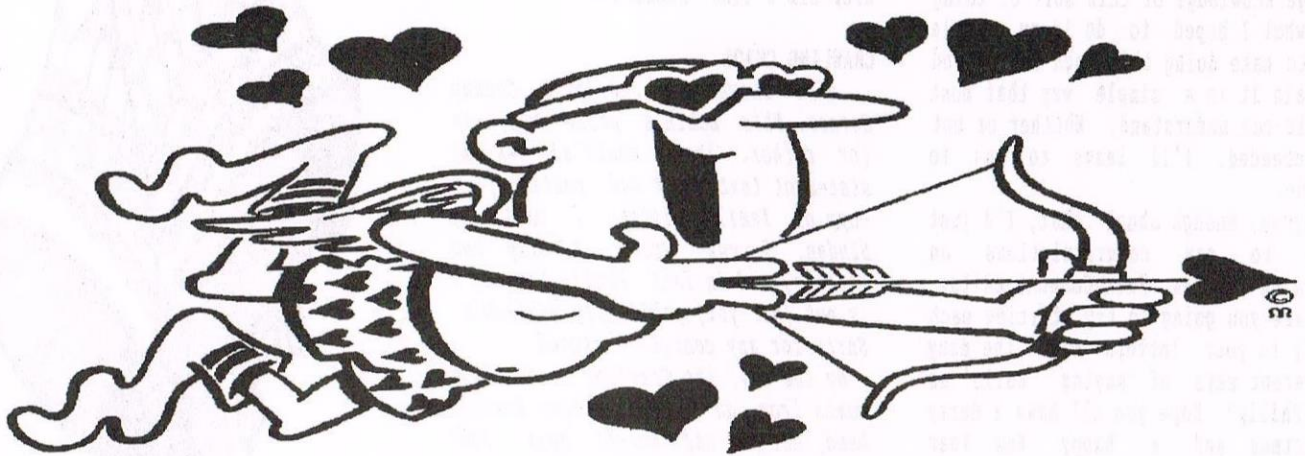
Question One: Who sang "Little Arrows?"

This months competion is very simple indeed. Some interesting prize will go to the member who comes up with most interesting place that this months Competition Spot ended up in, because I still can't find it.

- Philip DiRichleau

Question Two: With reference to the above item, what did Joseph-Nicephore Niepce produce?

All answers to J & C Bowley as usual - taeverso.

DRIVE By Philip Peacock

I have been trying for a while now to get a 3.5inch drive to work somehow without any interface, but it dosen't seem possible without the location hole sensor. With the 5 1/4 inch drives they usually just require a few of the jumpers on the circuit board to be moved around to get them to work, below is a list of requirements (as I have found):

THE REQUIREMENTS LIST

a) It does not matter if the drive has 1 or 2 heads as the jumpers will be used to select only 1 of them anyway.

b) It will mean less messing around with things if the drive you choose has a built-in power supply, otherwise you will have to connect it to the inside of your 6128 which, with most people, runs the risk of accidentally damaging you computer when connecting the power leads.

c) When the drive is connected properly, the read/write LED on the B: drive should always be the opposite to the one on the built-in drive E.G. When drive A: is reading or writing and the light is on, the light on the other drive should be OFF and visa-versa.

d) With the cable connecting drive B: to the back of the computer, if you attach the cable upside-down, it CAN'T do any harm. All that will happen is that drive B: will spin continiously and not be able to access any discs inserted.

e) If you want to use an 80 track drive, you will have to buy one which is switchable from 40 to 80. Drives used on the BBC computers are often like this BUT I have never been able to configure one of these types to work properly, although many other types of 40/80 track are fine. Always try to set one up as a 40 track to begin with incase it can do 40 track and not 80 (avoides confusion). I prefer just using a 40 track one anyway.

f) A permanent 80 track drive may be used if you are going to have something like RODOS on ROM permanently installed as this has the ability to use 80 tracks anyway.

g)When using 5.25 inch discs, it is no more possible to have more room on the disc than it is to put a bigger egg in a bigger basket!

h) On all of the drives I have checked, the following is the layout on the power cables from the power supply in drive B: (5.25 inch).

RED LEAD = 12V
BLACK LEADS = GROUND CONNECTION
COLOUR WHICH IS NONE OF THE ABOVE = 5V

Where possible, use a multi-meter to check the cables, but it should be the same on everything.

i) Another point of interest (connected with 3 inch drives instead) is that there are a few types which also require jumpers to be changed to get them to work. These tend to be the full-height versions found on computers like the EINSTEIN. These can't fit in place of the usual drives due to their size, but obviously act perfectly as drive B:.

The jumpers are the small, plastic, removable connectors found on the circuit board in the drive. There aren't usually any on the proper 3inch drives, but 9 out of 10 5.25 inch drives have them, which allows selection of the drives as A: or B:, single or double sided and other things which I have never found any use for.

Below are the two most common configurations of the jumpers for 5.25 and 3 inch drives (full height type).

5.25 inch	3 inch
IU - OFF	USI - OFF
DS3 - OFF	MI - ON
DS2 - OFF	ML - OFF
HM - OFF	DS3 - OFF
DS1 - ON	DS2 - OFF
DS0 - OFF	DS1 - ON
HS - ON	DS0 - OFF

These will make the drive work as drive B:, but if you disconnect the cable going to the drive in the computer (it doesn't matter about the power cable) then you can have drive B: act as drive A: although I have found that it occasionally gets a bit stuck and the computer and drive need to be switched OFF then ON again to get it to work properly.

To select as drive A:, on 5.25 inch change DS1 to HM and on the 3 inch drive change DS1 to one of the other letter settings (USI or ML) and that should work it all perfectly.

GETTING A LITTLE POWER CRAZED

One important point to note is that the power cables on 5.25 and 3 inch drives are different. On checking my drives I found that on the 5.25 inch the RED is 12 volts and the other is 5 volts. On the 3 inch drive they're the other way around. DON'T FORGET as that will definitely cause some damage.

COVER ME

That really does cover it all. I can't think of any other important bits of information about the subject as the main point is the jumpers. Note that they all seem to need two jumpers on them. I would be interested to hear of any other types or configurations.

PATCHING PROTEXT

By David O'Shea

Hi there! Have you ever wanted to add a feature or command to Protext, but have no idea how to go about it? You could add an RSX, but what if some fool later used it outside of Protext? (ie yourself later when you've forgotten what it does). Well, there is a way! And the good news is that it's dead easy, assuming you know a bit of assembler.

WHERE DO I START

Well, first of all, I should say that all of this has only actually been tested on Protext v1.22 on ROM, but as far as I know, it should work just as well on other versions, ROM and softloaded types. If anyone finds out otherwise, perhaps they could let me know?

OK, Protext has vectors that you can patch, and RSXs that you can call. Some of these RSXs are easy to crash, but a little care is all that is needed. The first thing your program has to do is make sure Protext is connected/loaded and find out where its workspace, etc. is. To do this, you can call the first RSX.

```
------------------------------------
RSX:        &10,&80
Entry:      None
Exit:       B=&AC,
            DE=workspace address
            CHL=version number
------------------------------------
```

To call it, use something like:

```
.init  ld hl,RSX   ;Point HL to RSX
       call &bcd4   ;Try to find it
       jp nc,error  ;Tell if not found
       call &1b     ;Execute RSX

....now DE=workspace addr, CHL=version

ret                 ;Done!
.error             ld hl,erness
.print               ld a,(hl)
                     or a
                     ret z
                     inc hl
                     call &bb5a
                     jr print
```

```
.erness text 7,"Error -
            Protext not found!",13,10,0
.RSX                     byte &10,&80
```

You can do whatever you want with the workspace addr and version number where the '....' is in the program. As you can see, most of the code is error handling, implying that the RSXs are easy to use, which most of them are. Does anyone know what the value of &AC returned in B means? Is it the same in other versions? So far, I haven't found a use for it.

A VECTOR APPROACH

Now that you have the workspace address, you can use this as a base to find some of the useful vectors that you can patch to make Protext do your bidding. Take a look at the following mouth watering list:

```
------------------------------------
base+&005 RET - called before printing
base+&008 RET - called after printing
base+&00B JP &F2BB - called to print
                     one character
base+&00E JP &C730/&C8CE - called to
                     process COPY key
base+&011 RET - called by CLI before
                     processing command
base+&014 JP &E496 - called to process
                     keypresses
base+&017 JP &E655 - command line
                     interpreter
base+&01A RET - check unrecognised
                     stored commands
base+&01D RET - process unrecognised
                     stored commands
------------------------------------
```

(The addresses &F2BB,&C730,etc. are for v1.22 ROM and may differ)

A quick glance shows that you can modify the printing routine, add commands to the Protext command line (CLI), add new functions to keypresses, modify the CLI, and add stored commands. Not bad for 9 vectors!

Right, so say you wanted to claim the process keypress vector. The first thing to do is add &14 to the workspace address. Then store the three bytes already held there somewhere else, so you can call them if the keypress doesn't concern you, and then patch it to call your own routine. You'd add something like this to the routine above (where the dots are):

```
ld ix,&14           ;Offset of vector
add ix,de           ;Add workspace address
ld hl,oldvec ;Place to stor old vector
ld a,(ix)           ;Copy first byte
ld (hl),a
inc hl
ld a,(ix+1)         ;Copy second byte
ld (hl),a
inc hl
ld a,(ix+2)         ;Copy third byte
ld (hl),a
ld a,&c3            ;Byte for 'JP'
ld hl,patch ;Address of patch routine
ld (ix),a           ;Patch vector
ld (ix+1),l
ld (ix+2),h
```

And at the end, reserve some space for 'oldvec':

```
.oldvec                     rmem 3
```

Now all you need to know are the entry/exit conditions for the vector:

```
------------------------------------
base+&014   Vector (JP &E496 - called
                    to process keypresses)

Entry: A contains key code (see
            PROTEXT manual for codes)
```

Action: Processes keypresses. You can patch this to add keypresses within EDIT mode. If you don't want to process the key, pass it on to the original routine.

I must confess to not knowing with 100% certainty which registers are corruptable, so I usually PUSH them all at the start and POP 'em off before I RETurn.

NOW WHAT?

Armed with the knowledge given above, you should be able to add new keypress functions to Protext, even if you only have limited knowledge of assembler. After all, all that I've left you to do is write the actual routine that you want to add - adding it to Protext itself is easy.

BUT I WANT TO ADD MORE

Well, you asked for it - here comes a description of the rest of the vectors, with the original vector (v1.22) in brackets:

----

base+&005 Vector (RET - called before printing)

Action: Use this vector to do something just before printing starts.

----

base+&008 Vector (RET - called after printing)

Action: Use this vector to do something after printing finishes.

----

base+&00B Vector (JP &F2BB - called to print one character)

Entry: If bit 2 of D is set, output is to the screen. If bit 1 of D is set, output is to a file. Otherwise output is to the printer.
A contains the character to print. HL contains the current text address.

Action: Print the character to the required output stream.

Exit: Carry set if OK. No Carry if it didn't go as planned. Reset Zero flag to try again straight away.

----

base+&00E Vector (JP &C730/&C8CE - called to process COPY key)

Action: You can use this vector to make the COPY key continue on an interrupted task. Note however, that it may be altered.

Notes: If you use FIND or REPLACE, this vector is changed so that the COPY key will continue on with the previous task. It is patched to jump to &C730 for a FIND operation and &C8CE for a REPLACE operation. When PROTEXT first loaded, it contains a RET command (i.e. COPY does nothing).

----

base+&011 Vector (RET - called by CLI before processing command)

Entry: HL points to the command

Action: This vector if called by the CLI before executing any command (be it a PROTEXT command or an RSX). I suppose you could use it to add commands without adding RSXs. Check both upper and lowercase commands.

Exit: Clear the Carry flag to go into EDIT mode or set it to stay with the CLI. Set the Zero flag if your routine processed the command, or reset it if you want PROTEXT to process the command. If the Carry flag is clear, EDIT mode will be entered straight away, without processing the command.

Notes: If you don't process the command, restore the flags and HL to what they were when the routine was entered, or the ESC key may not work or PROTEXT might not process the command.

----

base+&014 Vector (JP &E496 - called to process keypresses)

Entry:A contains key code (see PROTEXT manual for codes)

Action: Processes keypresses. You can patch this to add keypresses within EDIT mode. If you don't want to process the key, pass it on to the original routine.

----

base+&017 Vector (JP &E655 - command line entry)

Entry:HL points to entry buffer, B=&10

----

base+&01A Vector (RET - check unrecognised stored commands)

Entry: HL points to command+3?

Action: Make sure you check upper and lower case!

Exit:Set carry if command is recognised/reset if unrecognised. Set HL to next character if recognised.

----

base+&01D Vector (RET - process unrecognised stored commands)

Entry: HL points to command+3?

Action: User defined

Exit: Point HL to the first character that's not part of the command.

Next issue, (if they let me), I'll attempt to describe the rest of the RSXs. I can talk you through a patch I wrote myself which I find quite useful, if anyone is interested. If you want to contact me, you can email me at

koshea@indigo.ie
or
95059695@csnovell.ucc.ie

(after October 7th - back to college!) or you can write to me:
David O'Shea
23 Hillcrest
Carrigaline
Co. Cork
Ireland

THE CPC CLOCK

By John Hudson

Like all computers, the CPC maintains an internal clock which can be accessed for various purposes. It starts counting from the time it's switched on and BASIC commands, such as TIME, use it as an approximate measure of time elapsed. I say 'approximate' because it 'runs fast' to compensate for the fact that updating does not occur when interrupts are suspended, for example, during disc writes. If you use the disc drive for a hypothetical 'average' amount, the clock will stay roughly in time; but if you check the clock after you have backed up several discs, you will find it is slow even if it was 'right' when you started.

SHORT OF TIME

Though Amstrad BASIC does not support dates, it is fairly simple to set up the date as variables and maintain a clock on the screen. My brother wrote a program containing the algorithm for calculating days of the week, months and years which saves the current date to disc and, when you next run the program, offers you the next ten dates to select from so that a single keypress initialises the date for use in the program and saves it to disc for future use.

CP/M Plus uses the internal clock to maintain its own clock which is held at bytes 64500 to 64504. The first two bytes hold the day number in normal Intel fashion (that is, the low byte before the high byte) and the remainder hold the hours, minutes and seconds respectively in 8-bit packed BCD. You can find the day number by adding the value at 64500 to 256 x the value at 64501.

With both AMSDOS and CP/M Plus, you have to enter the date and time each time the machine is switched on as there is no way for the CPC to maintain the date or time when the machine is off. Devices like the Real Time Clock maintain their own clock which is powered by rechargeable batteries and provide software which enables you to copy the date and time held by their clock into BASIC or bytes 64500 to 64504 under CP/M Plus. This copying is only done when the clock reading program is run, usually immediately after the machine is switched on, and the Real Time Clock

takes no further part in maintaining any clock functions under BASIC or CP/M Plus unless you run the program again.

THE DAWN OF TIME

CP/M Plus regards Sunday, 1st January 1978 as the start of time - the date 15th December 1982 which often appears when people test for the date in CP/M Plus is the value which the version that Amstrad bought happens to place in locations 64500 and 64501 when it is loaded.

Using Sunday, 1st January 1978 is not quite as barmy as it might seem; by dividing the day number by 7 you can find out the day of the week from the remainder - 1 is Sunday, 2 is Monday and so on to Saturday when it is 0. <<What? -Philip>>

Since the date is a two-byte number and CP/M Plus began counting on day 1, it can count up to 65,535 days - or well into the 22nd century (there being 36524 days in a normal century). The problems only arise if you want to use this number.

WHEN TOMMORROW COMES

Digital Research supplied a program (DATE.COM) which allows you to put the correct date and time into locations 64500 to 64504 but it uses the US MM/DD/YY convention and will not work beyond the end of this century. John Elliott had a patch published in the October 1993 edition of PCW Plus which enables DATE.COM to use the UK DD/MM/YY convention and to work until 31 December 2077 (obviously by telling

it to regard year numbers 00-77 as preceded by 20).

Incidentally, pressing a key to set the time after entering the date and time with DATE.COM is intended to enable you to enter the exact time by entering a time ahead and then pressing a key when it is reached. Because of the way the CPC clock is updated, this precision is of no real use.

CP/M Plus comes with BIOS calls to GET/SET the date and time and these are available in some versions of the C programming language. If you are writing in assembler, you can use these calls or go through the System Control Block - the offsets are 58h to 5Ch.

BASICALLY, WHAT'S THE TIME?

Any programming language which, like Mallard BASIC under CP/M, contains a function to PEEK a location in RAM can also read the values at 64500 to 64504 and use them. So, for example, dBASE II has a PEEK function and it is fairly easy to write a dBASE program to work out the date from the CP/M day number.

Supercalc2 was unfortunately written in CP/M 2.2 days and expects to find the date in US format in locations 10h, 11h and 12h which is why Supercalc2 comes with a program called DATTIM.COM which puts the date in these locations.

I wrote SC2DATE.COM, which is on PD Disc 82, when DATTIM ceased to work properly. It takes the CP/M Plus day number from locations 64500 & 64501, converts it into US date format and places the result in locations 10h - 12h. So you need to use DATE.COM first to get it to work properly.

I thought when I wrote SC2DATE.COM that I might develop it further, for example, to allow a manual entry alternative for CP/M 2.2 users. So I tried to keep the code open enough to

add functions and to extend its coverage further into the 21st century.

Unfortunately, though the current version of SC2DATE.COM carries on working until 2027, the TODAY function in Supercalc2 only works in this century. You can 'fix' it manually by adding 36525 to TODAY (36525 since 2000 is a leap year). Hopefully, someone will come up with a patch to enable TODAY to work properly in the next century. I will in any case extend the coverage of SC2DATE.COM further into the 21st century before it becomes vital for anyone's business.

MORE ON THE MILLENIUM

It is probably important in thinking about the next century to distinguish dates where the century is important from those where it is not. For example, when I record the date I paid a cheque into the bank, I am not going to confuse 11th February 2001 with 11th February 1901. However, if I want the computer to calculate credit or a person's membership of a club for instance, I don't want to give credit that extends from 1999 to 1900 or find that a person has been in membership for -97 years!

The simplest workaround is to convert all dates to 8 or 10 digit dates. In RAMBASE you need to use YYYYMMDD to get the correct sort order. In Supercalc2, you need to get used to entering dates in MM,DD,YYYY format. If you leave the century off, Supercalc assumes '19' but if you enter the '20' it stores it as '20' even though, if the column width is less than 10, it only shows the date in MM/DD/YY format. If you want to see the century in Supercalc, make sure any field that holds dates is at least 10 columns wide.

LESS THAN PERFECT? (HOW SURPRISING)

As so often with CP/M, though the implementation by others has not always been perfect, the concept was right. The built-in date and time function is perfectly accessible and it does not conflict with any add-ons such as the Real Time Clock which does keep pretty good time and which you can use for fairly accurate timing within programs if you want its greater accuracy.

Anyone who has a problem with CP/M dates at the turn of the century will do so because their software is not up to it and not because CP/M is not up to it.

<<Thanks a lot John. Can I ask you a favour? You may have noticed that I've published a lot of your articles in recent issues and I'm running out of them. Any chance of some more? They make my life a lot easier -Philip>>

CPC SOUTH WEST CONVENTION

By Angela Cook

At the end of October people travelled from near and far to attend the CPC SW get together. Dad and I loaded up the van once more and prepared ourselves for another long journey and the shock that CPC users can all too often inflict.

AN ENLIGHTENING IDEA

Sadly, Dad and I were not able to attend last year's meeting, which is something we now regret. We went this year with all the enthusiasm a new experience offers and we weren't to be disappointed. After trawling up to Birmingham, spending a day with a load of wacky people <<*Knowing Angela, that pun was definitely intended- P*>> and coming back again, Dad and I decided that spending the night in Plymouth would be an extremely good idea.

We had planned to meet Dave Muggeridge and Dave Caleno at the hotel, have a drink and chat all evening without having to worry about the other half, parents or phone bill; we couldn't decide which was the greater evil. As it turned out, Dad and I didn't arrive until half past eleven that evening which killed off the chat and drink idea. Still, we got up nice and early the next day, fresh with the Plymouth air ready for the CPC South West convention.

WHERE'S ROUTEPLANNER GONE?

We found the place and only went around Plymouth a few times. That's no detriment to Dave Stitson's map and instructions, just my map reading and Dad's sense of direction. The hall the meeting was being held in was great. It was built some time ago and didn't look like it had been bombed as much of Plymouth had been during the war.

The hall was large enough easily to seat 180 people. With a high ceiling and good lighting it was a lovely place to be in. The doors were left open to allow air to circulate and let the smokers out when they could no longer resist the urge.

THE 39 STEPS

To my great pleasure there were only three steps to contemplate when unloading our Merline-Serve stuff, which was the biggest bone of contention I had with Bescot Football Stadium. Dave Stitson had indeed picked a great spot.

There were at least three Daves in attendance on the day, which did make things a little confusing. I called across the room "Dave!". Dave Muggeridge turned his head, Dave Caleno leaned forward and Dave Stitson turned around. They then all said "What?" in unison. Well it made me laugh.

There weren't as many people there as tickets sold, but that is normal in any situation you come across. I shall try a few names of people that were there and apologise in advance for missing out the blindly obvious.

Firstly there was Dave Caleno, of Bonzo Scrapyard fame, who put out some Scrapyard newsletters for people to look at. Dave Muggeridge was giggling all day like a young boy given a big bag of sweets. He was also winding up the likes of John Reilly, also known as The Artful Doodler. John's art work is truly stunning. He and Simon Crump (Frequency to those into pseudonyms) have produced a demo between them, imaginatively entitled "The Demo". From what I have seen it is an excellent piece of work and I am just waiting for a few bugs to be ironed out. Another gentlemen also came along with Simon Crump but his name now escapes me.

Frank Frost, who handles our WACCI services, attended and left fully laden. It was also nice to meet his wife again. Peter Curgenven and his wife Anne were there, who was roped into washing up the cups and saucers.

Who could forget the deeply sublime Brian Watson? A table at one end of the hall with all ComSoft products, latest copies of the magazine 8Bit and information about Protext and the IEBA. I always enjoy meeting Brian, a truly lovely gentleman who has so much energy he makes Philip look like he's on valium.

A DMP1? HONESTLY ANGELA...

There were other members who came in and out during the day but the person who must really take the biscuit that day was Dave Stitson himself. For a start he had chosen an excellent location (only three steps, I was so happy), but he also sold me his Amstrad DMP1 printer. What, you may well ask, would I want with a DMP1 printer? Well, to be honest it was for Philip. You see I got him one a while back but the ribbon was so old it fell to pieces, although with Philip it probably did have some gentle encouragement.

I spotted this one, fully working and intact, and grabbed it for His Editorship. Which reminds me that I must tell him about it some time <<*That would be nice -P*>>.

AND THE VERDICT IS

Dad and I really did enjoy ourselves that day. It was especially nice as we rounded it off with a meal at the Little Chef with Dave Muggeridge and Dave Caleno, to make up for the evening we were late.

Dad and I actually got to speak to people at length which made all the difference to the day. So, many thanks to Dave Stitson for a great time, we will be looking forward to attending next year's get together.

The Market Stall

with Angie

Happy New Year everyone!!!
January 1997, the years seem to fly
by. This is a special year for me as I
shall be 50 (no rude comments please)
all I need to do now is to save enough
money for a party! Talking about
parties, at the Convention 96, Carol
Bowley took lots of photo's. If anyone
would like copies would they please
let Carol and John know, in writing,
which ones they want and how many. I
haven't many adds again this month so
I thought I would ask you some
questions regarding next years
convention.

1. Would you prefer a date in June.

2. Are you happy with Bescot Stadium
   as the venue.

3. Would you like an evenings get
   together arranged on the night
   before the convention.

4. Does anyone want to arrange a get
   together up north or down south.

5. Is there anything else you want me
   to change or arrange.

Telephone answers or letters please.

I hope you all had a terrific
Christmas and a Happy New Year to you
all.

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Hunter Killer; Ice Station Zero; Milk
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3" Discs at 80p each plus post and
packing. PLEASE CONTACT: Isobel Swade,
41 Whitecross Road, Warrington,
Cheshire WA5 1LR TEL: 01925-658724.

FOR SALE:
Nigel Mells has load and loads of
items for sale including hardware,
software, games and books if your
looking for anything give him a try,
hopefully next month we will have a
complete list. PLEASE CONTACT Nigel
Mells on 01784-211734 evenings.

WANTED

Julian Eyears wants : Software Manual
No 967 or 968 for CPC 6128 also a
Hardware Program to calculate
scientific numerals if such a thing
exits.

PLEASE CONTACT: Julian at Flat 3, 112B
Brixton Road, London SW2 1AH TEL:
0181-674-1485 evenings.

PHILIP DiRICHLEAU WANTS ...
...Some well defined sanity.
...A way of filling up these little
bits at the bottom of a page when he
runs out of ways of managing it.
...A filing system for WACCI work
discs that actually works.
...Someone to pay his £120 Telephone
bill.
...Locking up.
...Someone to protect him from the
wrath of Angie when she reads this
little bit at the bottom of her page.
...Shooting.
...some more articles to put into the
pages of WACCI.
...to go to bed and sleep through the
winter and wake up when it gets a lot
warming that it is now.

Software 8'Bit Printer Port

By James Coupe

You want an 8 bit printer port, you've decided that. However, all you want it for is to do some spangly box graphics, in Protext, like you see round the headers in Wacci. "Surely," thinks you, "I don't have to spend all that money on one of Angela Cook's wonderful 8 bit ports. Can't I do it any more easily?" As a matter of fact, you can.

LEGAL STUFF

Philip tells me that it is legal to use the assembly listing in this article because it is from ACU (July 1991) and a court ruling in 1989 says its PD. However, if, in the coming months, you see "ACU sues WACCI" splashed over the headlines of The Sun then you'll know who to blame.

SO HOW DOES IT WORK THEN?

Basically, without getting into all the technicalities a printer has got codes which tell it to set the Most Significant Bit. This basically adds 128 to all the numbers you send so instead of getting CHR$(32) you get CHR$(160). What this program does is intercepts the printer routine, checks to see if the number is above 128 and, if so, sends the necessary codes to turn it on and off.

One problem of this method is that you have to use IBM Character Set #2. Select this with >OC 27 116 49 27 55. Should work, but check your manual if it doesn't.

SO WHAT DO WE HAVE TO DO?

Assemble the machine code and save it to disc. Then type in the BASIC loader which sets up the function pad as follows:

```
f7   f8   f9        ╠    ╦    ╗
f4   f5   f6        ╠    ╬    ╣
f1   f2   f3        ╚    ╩    ╝
f0   .              ║    ═
```

Every time you run Protext, use the BASIC loader. Also, you'll have to load a different printer driver. Unfortunately, ASCII characters above 128 aren't standardised so use the translation table below.

```
╠ 204    ╚ 200    ╩ 202    ╦ 203
╝ 188    ║ 186    ╗ 187    ╬ 206
═ 205    ╔ 201    ╣ 185
```

You'll have to have run the BASIC program first so that you have the box characters available on the keys for the Redefine Characters section of Protext.

WHAT NOW?

Well, that should be it. If you haven't got an assembler, consider buying the wonderful Maxam or Maxam 1.5 from Wacco or Comsoft (that's all the Comsoft products free, eh Brian?). Alternatively, there have been assemblers on AA covertapes and there is one in the Homegrown Library (Proto). To be honest, though, you're better off with Maxam.

The assembly listing is written for Maxam anyway. You might need, with other assemblers, to split the lines with double commands onto separate lines.

THE END

Well, almost. Next time you phone Philip though, ask him about him, Michaela, the fish and the Snickers bar. You probably won't read this though anyway. <<Pardon? -Philip>>

The only problem with this I know of is that it won't work with Promerge Plus. According to Philip Promerge Plus messes up the vectors. If you want Box Mode, do it in Promerge Plus, then turn off Promerge and print it from Protext only. If you want box characters in mail merging then you're stuck.

Anyway, if you need help write to me at: James Coupe, 21 Victoria Road, Sutton Coldfield, West Midlands, B72 1SY or phone (0121) - 355 - 4801 (7 pm till 9pm only please).

```
10 ¦NOKEYS
20 REM Box Character Definer
30 REM For Protext
40 KEY 135,CHR$(150):KEY 136,CHR$(158)
50 KEY 137,CHR$(156):KEY 132,CHR$(151)
60 KEY 133,CHR$(159):KEY 134,CHR$(157)
70 KEY 129,CHR$(147):KEY 130,CHR$(155)
80 KEY 131,CHR$(153):KEY 128,CHR$(149)
90 KEY 138,CHR$(154)
100 MEMORY 39999
110 LOAD"8bitacu.obj",40000
120 POKE &BDF2,&40
130 POKE &BDF3,&9C
140 ¦P
```

```
org 40000
write "8bitacu.obj"
push hl : push de : push bc : push af
sub 128 : jp m,loval
ld a,(pflag) : neg
jp nz,chout : ld a,1
ld (pflag),a : ld a,(escode)
call psend : ld a,(himark)
call psend : jp chout
loval:
ld a,(pflag) : neg
jp z,chout : ld a,0
ld (pflag),a : ld a,(escode)
call psend : ld a,(lomark)
call psend
chout:
pop af : call #0835
pop bc : pop de : pop hl : ret
psend:
push bc : push af
cloop:
call #0835 : jp nc,cloop
pop af : pop bc
ret
pflag ds 1
himark db 62
lomark db 61
escode db 27
```

<<Hey, cool, a blank line.>>

GPAINTS REVENGE

By Richard Fairhurst

BTL has had many wonderful effects on the CPC world. Not only does it make writers for other fanzines feel happy to be as self-referential as they like, it also means that they're increasingly wary about putting their names to articles. Seemingly, the anonymous author of the hatchet-job on GPaint (WACCI 107) is running scared of a BTL savaging (hello, Jonty). Which is fair enough, since - as any fule kno - GPaint is a damn fine program.

KNOW YOUR LIMITATIONS

It was Peter Creosote who coined the phrase 'tectonically slow' when describing program speed. Art Studio is well-programmed and rotates areas in a fraction of a second, just like Stop Press. However, its human interface design is so brain-dead that anything other than the simplest operation requires endless trips to the menu bar, attempt upon attempt to select the right area of the screen because the pointer is less precise than a crosshair.

Sure, it's easier if you have a mouse. A.A.S.: £20. AMX Mouse: £50. Total cost of usable Art Studio: £70. Cost of GPaint: approximately £2. Let's face it, full-blown WIMPs don't work on a CPC (especially not where Worktop's concerned. Ahem).

GPaint is simply less hassle. If you want to save the colours with your Art Studio picture (so Peter Campbell can change them), you have to create a .PAL file. Cleverly, GPaint stores colours in a few unused bytes in screen memory, so, although it doesn't take up any more memory or disc space than a standard 17k file, the information is invisibly preserved for when you next load the program. GPaint's ingenious 'Load section' option also removes the need for .WIN files - and, believe you me, the .WIN file format is deeply perverse.

Moreover, GPaint's text handling is much better than Art Studio's. Instead of just offering standard 8x8 fonts, you can use full-size, proportional efforts - several of which are supplied, as is an easy-to-use font editor. In combination with the C key

shortcut (for changing colour), you can create impressive shadow and outline text effects easily. Key shortcuts are a GPaint strong point: the R key, which 'restarts' the currently selected operation, can speed up painting no end.

To be honest, it's hard to respect a program like AAS whose coder hasn't even figured out how to change the start address in the file header - I lose count of the number of times I've tried to load a screen only to be told 'Memory full', a telltale sign of something saved with Art Studio - or that putting CALL 0 as an intrinsic part of your copy protection without restoring the lower jumpblock makes getting around the password entry rather easy (simply POKE 0,&C9 before running). GPaint isn't perfect either. It doesn't offer all the whizzy features of Art Studio, the pointer is still far too slow and the chunky icons don't do it any favours. But, first and foremost, it's a usable package - and one which doesn't stint on essentials like enlarge/reduce, rotate, undo, and the like.

FIRST BLOOD, PART II

Some people actually like unwieldy feature-bloated software, one of the reasons why Microsoft Office is the world's best-selling application suite. If that sounds like you, you might be placated by GPaint 2 - a half way house between GPaint and A.A.S.

Although its official name is in fact 'G's Malprogramm' Version 2, it was written by the same bloke and possesses many of the same features.

However... it's quicker: the pointer can be accelerated by pressing SHIFT, while the separate icon screen simply requires one keypress to move from option to option. It's more flexible: you can select from seven brush shapes, any number of 'pen patterns', and several line thicknesses. It's more powerful: there's a clever 'filled polygon' option, non-proportional enlarge/reduce, and some really nice skew/curve effects. Even file handling has been beefed up, with built-in screen compression.

What's more, GPaint 2 is still 64k-compatible - although those without the extra memory will find that their disc drive whirrs a bit more frequently as bits of code are swapped in and out of RAM. Fret not, for it's nowhere near as bad as Stop Pres.

Being not quite of sound mind, I actually prefer the original: flipping between an icon page and the picture smacks of Degas (horrible ST art package), and it all feels a bit too bulky for me. For most people, though, GPaint 2 should be a winner. I'll get around to translating it one day...

SOUL OF A ROBOT

Until PowerPage came along, GPaint was Robot PD's biggest seller - it was probably the best-known of the 'Imported and translated by...' programs - and I've used it for MODE 1 artwork ever since. MODE 0 artwork blows chunks and I invariably leave it to someone who can actually draw (hi Ratzy), and as for drawing in MODE 2 - well, you've probably guessed...

THE MORAL

GPaint is better than Advanced Art Studio, PowerPage 128 widdles over Stop Press, a centuries-old folksong is better than the Spice Girls' latest, BTL rules ok, the Public Domain is basically twiffic and anyone knocking GPaint is in trouble.

Chess (Battle of the Masters)
By Peter Rogerson

It's rare for games to be reviewed on these pages, but there's no real harm in it and I've just got my hands on four chess games with orders to evaluate and judge them. <<What an idea. A review of a genre, rather than a specific game. I like that idea -Philip>>

OPENING GAMBIT

First of all, what genre does a chess game fall into? Is it a simulator? Not really - the screen merely substitutes for the board and pieces and the computer for your oponent. The only reason why the programs I'm about to discuss are under the banner of games is because chess is and always was a game, and the fact that it's on a computer doesn't really make a blind bit of difference.

THE PLAYERS

The four games are, in no particular order, Cyrus 11, Colossus 4, Superchess and Masterchess. They're all from the mid-eighties and fall into two distinct categories, though in the end of the day they all replicate a chess board and present the player with pseudo-intelligent opposition.

Superchess and Masterchess are very similar, both using the right half of the screen for a two-dimensional display of the board and pieces, and the rest to record the last dozen moves. If you want an easy-to-see board and aren't bothered about any frills then these programs are both perfectly acceptable. They play the game well (better than me, I'm beginning to believe they cheat) and Superchess offers a choice of levels. Level one beat me and I daren't even look at the rest. It's humiliating enough to be beaten by a silicon chip!

Movement of pieces is via the keyboard, simple and effective as long as you don't make a typing error! There's nothing sophisticated about these programs, but chess is cerebral and any sophistication comes through the intellect of the players.

Colossus 4 and Cyrus 11 are different from the above in that they both have 3-dimensional displays of the chess board together with three-dimensional pieces.

AMSTRAD ACTION TIME AGAIN

Colossus 4's main claim to fame is that it was once on an Amstrad Action covertape, so if the majority of non-chess playing members have seen a chess game the chances are it's this one. Movement is via a cursor or typed instructions, take your pick, and tapping the space-bar reveals a screen displaying recent moves as well as a mind-blowing series of rapidly-changing numbers which is supposed to show Arnold's thinking processes. And that's all. The game and recent moves just like the two 2-dimensional games, but a touch more realistic graphically.

A HORSE OF A DIFFERENT COLOUR

Cyrus 11 is another animal altogether. To start with, it needs any expansion ROMS switching off before it'll load. ¦ROMON7 suffices, thank goodness. Cataloguing the disc reveals a 1k file called disc and a mere 47k free. So it's a hefty program. And loading it shows why. The typical Amsoft screen takes an age to appear even from disc, then the game proper loads. The main screen shows the three-dimensional keyboard and some hefty looking pieces. Pieces are moved via a tiny cursor in the inspired shape of an arrow. But when they move, boy don't they move! Slowly, ponderously, as if they were really heavy. Tapping the space-board reveals a second screen with so many options it's hard to know where to start. There's recent moves,

of course, all neatly displayed at the top of the screen. Then there's an option to choose the level (from quite a few), go back as many moves as you want, invert the board enabling you to look at it from your opponants point of view, hint on suitable moves, even a variety of printing options including continuous printing and a simplified printed diagram of the board. This is an all-singing, all-dancing package if ever I saw one. It'll even play a demonstration game for you, which probably provides it with the only decent opposition it'll find on my machine!

TO PLAYTEST (OR NOT)

I've not play-tested the games particularly thoroughly because my time's precious and anyway there's a limit to the number of times a bloke can let himself be beaten before getting peeved. (All these games are better players than me, be sure of that).

I had planned to play the same dozen or so moves into each of the four programs and see how they turned out, but it didn't work because after three or four moves you've got to respond to what the computer does or be too silly to be true, and that renders the rest of the experiment impossible. I did manage it with six fairly loony moves and they all played pretty well the same as each other, developing their knights. Cyrus 11 managed to Castle it's king within those moves whilst Masterchess managed to sneak one of my pawns, but at the price of developing its more valuable pieces. Here's the chart:

<<As a total aside here, I used Peters moves myself and, oddly enough, Superchess and Masterchess did the same thing, but Colossus and Cyrus both played a different set of moves, which took me a little by suprise. Just thought I'd mention it -Philip>>

ME	COLOS	CYRUS	MASTER	SUPER
A2-A4	E7-E5	E7-E6	E7-E5	B8-C6
B2-B3	D7-D5	F8-B4	D7-D5	G8-56
H2-H4	C8-F5	B8-C6	F8-E7	D7-D5
C1-B2	B8-C6	G8-F6	B6-C6	C8-F5
E2-E3	G8-F6	CASTLE	E7xH4	E7-E6
2-G3	F8-C5	D7-D5	H4-G5	58-E7

A FEW GOOD MARKS

If you're in need of a reasonable chess game then I'll give them some marks as if I was a professional reviewer. Here goes:

SUPERCHESS (Deep Thought)	70%
MASTERCHESS (Amsoft)	75%
COLOSSUS 4 (CDS Software)	75%
CYRUS 11 (Amsoft)	95%

Basically, if you're not that bothered and already have the Amstrad Action tape, Colossus 4's not a bad game, but if you want a package that does that little bit more yet still plays a competent game of chess, then Cyrus 2's the one for you. I hope.

Peter Rogerson
for Wacci November 1996

(It's just crossed my mind that if Amsoft don't give a hoot about what happens with their CPC interests, how about putting Cyrus 11 into the WACCI PD library? It's too good a program to be allowed to just die out.)

PowerPage 128 Explained
Part Two with Malcolm Brabbin

Last month saw the first part of the mammoth PowerPage tutorial which I hope you marked and inwardly digested, and are now eagerly awaiting the second instalment of this learned saga on the joys of DTP. Here then is the rest of it for your continued enjoyment and (hopefully) edification.

IMPORTING SCREENS

Run PowerPage and access the FILE menu as explained earlier, Highlight LOAD and press [COPY] and select the LOAD SCREEN option. Place the disc with your screen in the drive and input the name of the screen. You will find that your screen is imported into the PowerPage working screen. We will now draw a box around the part of the screen which we wish to save as clip art so move the cursor to the bottom left hand corner of the area to be saved. Press [SHIFT-COPY] and with the cursors draw a box around the area to be saved. DO NOT press [SHIFT-COPY] again but use [CONTROL] and cursor keys and access the file menu and press [COPY]. Highlight SAVE and when asked choose the CLIP ART option. Place the disc on which you wish to save your clip art into the drive and input the name you wish to save your clip art under. Remember that if you don't specify an extension it will be given the CUT one. If you are loading a games screen the same rules still apply. I am lucky enough to have a DART SCANNER so most of my clip art is 'nicked' from magazines and newspapers.

GETTING IT ALL TOGETHER

We are now going to put all we have learned into practice and put a page together and print it out.

Using what we have learned put a headline on the top of the page. You should now have a piece of clip art saved onto disc so put that somewhere onto the page. Using the SETTINGS menu set AUTOFLOW to 8 so that the text you put onto the screen will flow around the graphics and then go to the TEXT LAYOUT menu and as before layout your text file into to columns below the headline. Don't forget before doing this to place a line at the bottom of the page to stop the text going too far. All being well you should now have a page with a headline, a piece of clip art and two columns of text. All that remains to do now is to remove the line at the bottom of the page and print the page.

To remove the line place the cursor at the left hand side of the page and just above the line and press [SHIFT and COPY]. Expand the rectangle so that it is on the right hand side of the page and just below the line to be cleared. DO NOT press [CONTROL and COPY] again but using the [CONTROL] and cursor keys, highlight the BLOCK menu and press [COPY]. Access the CLEAR BLOCK option and the line will vanish. We are now ready to print.

PRINTING

Access the SETTINGS menu and choose the PRINT QUALITY. You will see a range of numbers. These are from 1 to 8. 1 is draft quality and 8 is the sort of print out that the Times would be happy with. Bare in mind that the higher the quality the longer the print out takes. If you choose 8 you have the chance to nip down to the pub for a couple of pints while it is printing.

Access the page menu and choose either A5 print out or A4 print out and press [COPY]. Using the A5 option it is possible by folding an A4 sheet of paper in half to produce a booklet by printing on alternative sides of the paper. It is advisable to place a blank sheet of paper in between the sheets otherwise the hammering of the pins ends act on the page already printed in the same way that carbon paper does. Use the file menu with the save page option to save the page.

You can of course ignore the above, set the margin, choose text layout and instead of pressing [COPY] a second time just type the text you want directly onto the page. With JUSTIFY and AUTOFLOW set this will also flow text round the graphics. However if your spelling is anything like mine it is far better to save your text as a text file and import it into the page as the text file can be spell checked before you start.

Basically that is it so we will now go through all the menus and key presses one at a time and also explain the utilities that you will find on the disc.

KEY PRESSES

For this section I am going to copy Richard Fairhurst's text from the PP disc as this explains things far better than I can.

CTRL-DEL: is the "Undo" function. This removes any changes made to the page since the last menu selection. Note that the area restored is only that visible on the screen. There is no way of undoing "Undo" itself, so be careful!

CTRL-X: selects the "Text style" feature, which will be explained later.

CTRL-Z: enters zoom mode, where each pixel is displayed greatly enlarged. You can move around, as usual, with cursor keys: COPY inverts the pixel under the cursor. CTRL-COPY exits. You can move off the sides of the screen if you wish to zoom in on a nearby area of the page.

Four keys are available for quick movement around the page. CTRL-U moves up 24 lines (192 pixels), whereas CTRL-D moves down 24 lines. CTRL-T moves to the top of the page, and CTRL-B to the bottom.

CTRL & UP CURSOR brings up the margin facility and when set COPY returns you to the PP work screen.

We will now turn our attention to the various menus. Where Richard explains it better than I can I will use his text file.

SETTINGS

These are:-

TEXT STYLE: already discussed giving you the option of **BOLD**, **THIN**, **ITALIC** and **UNDERLINE**. This option is also accessed by [CONTROL/X]

SPACING: gives you two options. Spacing between lines and spacing between paragraphs. The normal line spacing is '8' but 9 gives impressive results. Normally the width of a text line is left between paragraphs but this can be increased or reduced. I have found that when producing financial reports the normal line spacing does make reading an A5 report very difficult. The answer to this is to produce the document on a word processor and leave a blank line between each line of figures. Import this into PP with a reduced paragraph spacing. PP treats each new line after a blank line as a new paragraph and the results are far more readable.

AUTOFLOW: already discussed, is the amount of space left between text and graphics in **TEXT LAYOUT** mode.

TEXT SIZE: already discussed, is the size of the text on screen.

HEADLINE SIZE: as text size but applies to the headline font.

FLOW CONTROL is the way the text is displayed on the page. One very useful hint concerning the production of posters is to choose **CENTRE**, then choose **HEADLINE LAYOUT** and type your wording straight onto the screen. Everything is centred down the page and gives a really neat looking poster. You can print the poster on an A4 page with a high print quality, take the result to your local copy shop and have it enlarged to A3 size. The results are pretty impressive.

JUSTIFY STYLE: gives you the option of word or letter justify.

FILL PATTERN: choose the pattern for the fill option.

NORMAL/INVERSE: normal or inverse text.

GRAPHICS MODE: This lets you select the current graphics mode from Normal (default), **XOR** (instead of pixels being plotted as usual, the current pixel is inverted), **AND** (fairly useless), and **OR** (which is useful if you do not want text to overwrite graphics currently on the page).

PRINT QUALITY: is the quality of the print out where the higher the value the better the quality of printing.

THE FILE MENU.

Richard explains this far better than I can so these are his words.

As most of these options require you to input a filename, an explanation of how PowerPage 128 file requesters work is probably useful. You will need to type in a filename using normal alphanumeric keys and ENTER/RETURN to end: simply pressing ENTER or RETURN, without typing in a filename, will exit.

If you do not add a file extension yourself, the default one (which varies from option to option) will be added. You are recommended to stick to the default extensions so as to ensure clarity and compatibility with other PowerPage users.

In the case of the file already existing, you will be asked if you wish to overwrite the existing file: confirm with **Y** or abort with **N**. A backup file will still be made (extension .BAK).

SAVE

This brings up a menu asking what you want to be saved: the whole page (default extension .PP), the current screen on display (.SCR), clip art (.CUT), the standard 8x8 font (.CHR), a 16x16 headline font (.FNT), fill patterns (.PAT), or the current settings (.SET).

Having selected an option, a file requester will appear, at which you should type in the filename you want to save the file under.

Note that clip art can only be saved if you have currently selected an area of the screen (as used in the Block menu operations). If no area is selected, the program will "beep" as an error.

It is possible to save fonts and settings to a PowerPage 128 work disc, if you have one, which will be loaded automatically on booting PowerPage 128. These should be named "DEFAULTS.SET", /.CHR, and /.FNT"

LOAD

Again, a sub-menu will appear, which allows you to load a page, screen, clip art, 8x8 font, 16x16 headline font, fill patterns, or settings: the appropriate file requester will be displayed after you have selected an option.

If you want to load a PowerPage 64 (70-line) page, select "PAGE", and add the extension .PP0 - this only applies to those pages using the most recent PowerPage 64 compression method. (Pages not using this method should be loaded into a copy of PowerPage 64, v1.32, and resaved.)

When clip art is loaded, a rectangle will appear on the screen, which indicates the position of the clip art: it can then be moved about until you have selected the correct position, at which point pressing COPY will place it on-screen.

EDIT

A sub-menu will appear, from which you can choose "8x8 FONT", "16x16 FONT" or "PATTERNS". Once one is selected, you can edit the appropriate font or set of fill patterns.

Use the cursor keys to move about the grid, and COPY to change the colour of the element under the cursor. SHIFT with cursor keys will move between characters and fill patterns (or CTRL moves eight at a time). When you have finished editing, press ENTER to exit this mode.

ERASE

This allows you to erase files from the current drive. Wildcards - ? and * - are accepted. You will not be asked for confirmation before files are deleted!

CATALOGUE

This displays a catalogue of the current drive on the screen. PowerPage 64 users will be pleased to know that this now occupies the whole screen, not just the bottom line!

ACCESS

A sub-menu of "DRIVE" and "USER" will appear. Selecting the first one lets you choose the disc drive that file operations will access: A:, B:, C: or D: (for compatibility with RAM-drives and hard discs). As usual, use cursor left and right, with COPY to select.

Selecting "USER" brings up a dialogue box, from which you can select which user area (0-15) on the disc to access.

¦ COMMAND

This option enables you to access any command loaded in a sideways ROM. For example, to access a ¦HELP command, type "HELP" at the ¦ prompt. If the command needs parameters, they need not be comma-separated.

Using this option, you can perform many operations, such as renaming files. If the command generates any output, you should press a key once it has finished to enter another one. When the ¦ prompt appears, you can simply press ENTER to leave ¦ command mode.

I have found that if you try to jump into PARADOS with ¦DRIVE, there is no way to get back into PowerPage.

THE PAGE MENU

Once again explained in Richards words
PAGE MENU: The following options are available:
UP: DOWN: TOP: BOTTOM: These provide quick movement around the page and duplicate the keys CTRL-U, CTRL-D, CTRL-T and CTRL-B.
PREVIEW: This provides a preview of the page in reduced scale (one sixteenth of the usual size), together with a summary of certain important settings.
CLEAR: This option allows you to completely erase the page being worked on. As "UNDO" does not go back from this decision, you will be asked for confirmation before this happens. Select "YES" or "NO" by using cursor left, cursor right and COPY.
A4 PRINT: A5 PRINT: These two options print the page to an Epson-compatible printer. The A4 print option is 125% larger than the standard A5 print-out, which provides much better resolution and is recommended for most instances.

The A4 print is larger than the standard A4 page, so if you intend to use this option, you will need to leave a small amount off the right-hand edge of the page and a couple of lines off the bottom to ensure that everything is printed out.

THE BLOCK MENU

A block must have been defined before this menu is selected. This is done by

using cursor keys and SHIFT+COPY as if you were to draw a rectangle, but instead of fixing it with SHIFT+COPY again, select this menu. The following options are then available:
FLIP: Y-FLIP: These flip the defined area left-to-right and top-to-bottom respectively.
REVERSE: WIPE: FILL: These reverse the inks in the defined area; wipe it clean; and fill it in solid ink respectively.
COPY: When this option has been selected, the block will re-appear on the screen, and can be moved to any part of the page. Press COPY, and the area originally enclosed by the block will be copied to the new position.
A4 PRINT: A5 PRINT: These two options print the block to an Epson-compatible printer. The A4 print option is 125% larger than the standard A5 print-out, which provides much better resolution and is recommended for most instances.

THE TEXT MENU

MARGINS: As we have already covered this option in the main body of the article we'll move on.

TEXT LAYOUT

The following options affect Text layout mode:

```
> Autoflow
> Line spacing
> Paragraph spacing
> Forward spacing
> Flow control/Justify style
> Load 8x8 font
> Set margins
> Text size
> Text style
```

HEADLINE LAYOUT

The following options affect Headline layout mode:

```
> Autoflow
> Paragraph spacing
> Flow control/Justify style
> Headline size
> Load 16x16 font
> Set margins
```

GENERAL LAYOUT MODE

Layout starts at the vertical position of the cursor when the option is selected. Text will be displayed from

the left margin.

To enter text, type it into the line at the foot of the screen (with DEL to delete the last character). It will be laid out on the page when there is enough for a whole line. Press ENTER when you have finished a paragraph (and ENTER again if you want to leave a blank line). Extra spacing will be added if you have selected this in the "PARAGRAPH SPACING" setting.

To exit a layout mode, press TAB. This has the same effect as pressing ENTER, and then quits.

If you over-run the page, or (if autoflow is selected) graphics prevent the text being laid out anywhere, you will be asked to reposition the cursor on the page (using cursor keys as usual).

To import text from an ASCII text file, press COPY and input the filename. You can also import directly from a Protext file, in which case, Protext bold, italic, and underline control codes will be used. PowerPage 128 automatically detects which type of file is being imported.

CTRL-A and CTRL-C, for graphic characters, work as usual. CTRL-X (to select text style) will cause a symbol to appear, after which you should press B, T, I or U to toggle the respective text style. Remember that you may have already selected a text style when you entered layout mode!

Although not the easiest thing to get the hang of, layout mode enables you to produce very professional-looking pages and is recommended for all pages with a large amount of text on them.

AND FINALLY--

Well that is basically it. If you need any more help my phone number is on the help line. Feel free to call me. Perhaps if Philip is happy with this, at some time in the future I will have a go at writing a tutorial for the Graphic Adventure Creator.

Malcolm Brabbin
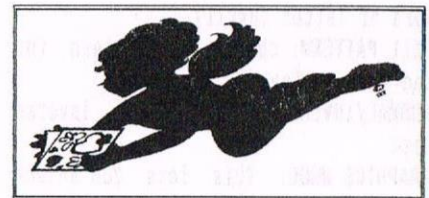
AM I JINXED

By
Ray Powell

Is it normal paranoia, or am I the only one in the universe that these things happen to? Usually nothing serious, but a lot of small annoyingly frequent happenings that make me think that the Great God of the CPC has it in for me. Everything that follows is true.

AND SO IT BEGINS
It started from the the very first. Forced into early retirement, I decided that while my body may be seizing up, there was no need for my brain (?) to do the same. So I bought a very old 464, not knowing a thing about computers, but I was hopeful of learning. After all there was a manual provided. I soon found that I would need more help, so I looked for a supporting magazine.

THINGS START TO THIN DOWN
Quite by accident I discovered Amstrad Action (Issue 100, Probably the last decent issue.) which from then on dwindled away to nothing. (I have been with WACCI for just a year now. Has anyone noticed a thinning of the Mag??) ⟨⟨*Do you mean a thinning of WACCI? Nope, I haven't noticed it. We're still at the happy 32 pages, which we've been at for quite a long time now, ever since issue number 76. WACCI will NEVER, whilst I'm editor, thin down it's page count -Philip*⟩⟩

THE MEMORY'S GOING AS WELL
I also discovered that several of the free tapes would not work on my machine but would on another 464! IT had started. Realizing that mine was an old machine, and seeing an advert for new "Complete" circuit boards for 464s, I sent for one. When it arrived all the memory chips were missing. Par for the course I would say!!

THEN THINGS JUST DON'T WORK
Reading in A.A. about something called a Multiface, without which no CPC was complete, I bought one. Guess what? It didn't work. Romantic Robot were very good about it, and even though they said it worked on the testbench they did send me another. This time it worked. After a while I was learning a little and wanted an upgrade. So I bought a 6128. This turned out to be a Plus, although I had no idea what that meant at the time. I soon found out about compatability. When I decided to get a Multiface for the plus, Romantic Robot informed me that they no longer made them! (Although I think that it's just that they remembered me from the last time!!), so I still do not have one.

IF AT FIRST YOU DON'T SUCSEED
I got a tape port kit from STS, fitted it, and, what do you know, it didn't work! Contacting Rob Scott we sorted it out. While talking to Rob he suggested that he may be able to modify my Multiface to work with the Plus. I shall never know if it is possible because he and STS disappeared almost immediately. Whilst on the subject of STS. I also bought Soft-Lok. I never have got it to transfer a tape to disc.

A REAL SUCKER FOR PUNISHMENT
I now also have an ordinary 6128. Even so it is surprising the number of programs that crash, lock up, are so unfriendly that I give up on them, or just don't work for me. These include Powerpage 128, G.A.C. Printmaster, B.T.L., Pagemake, C.P.M., etc.Then there are the questions to which there seem to be no answers. For instance, how do you get a stand alone screen from Smartplus? Why do machine code tutorials assume that you know it all before you start? Why are Amstrad manuals so vague? How did Philip talk Richard into doing Fair Comment?

SLIPPED DISCS AS WELL
The thing that got me started on this tale of woe are the latest in a long line of mini dramas. Getting the dreaded "Disc missing" message, I changed the drive belt on my 6128. I'm now getting "Disc write protected" messages. Something else to sort out! Then after reading Philips glowing review of a certain desirable item, I decided to get one. Yes, that's right, it didn't work.

Ray Powell

Multiface Magic
By David O'Shea

So, now that you've recovered from pushing Protext around, you want to get the most out of your Multiface? Well, no problem! Installing programs into it, so that they run when you push the 'Red button' is both useful and easy to do!

ALL YOU NEED TO DO?

Basically, all you need to do is to put the exec address of your routine at &2000 (in the MF ram), a suitable value for screen mode/ROM setting at &2002, ram bank number (&C0-&C7, etc) in &2003 and the word "RUN" in &2005-7. You can do this by hand, using the Multiface itself, but this is a bit awkward if you want to put the actual routine in the Multiface as well, to avoid it being overwritten by other programs. So what you need to know is how to map in and out the Multiface RAM so that you can write a program to put data into it automatically.

The excuse for a manual for the MF2 tells you that you need to do a quick:

```
LD BC,&FEE8:OUT (C),C
```

to map in the RAM. You try it and it doesn't do much! Well, what they fail to tell you is that this OUT will only replace the lower rom with the Multiface ROM and RAM (8k of each). So what you need to do then is to turn on the lower rom. Since the Multiface ROM is now at &0000-&2000, you need to turn off interrupts, so that the machine doesn't crash! You'd think they'd tell you these things, wouldn't you? But then, I suppose a well written manual is too much to expect....

When that's done, you will have the ROM at &0000-&1FFF and the RAM at &2000-&3FFF. You can use about the first 5K or so of the RAM, as the rest gets filled with ink values, system variables, CRTC registers, etc.

What I have done is written a program, which, when called by a very quick

```
a$="FILENAME.EXT":call &4000,@a$
```

will load "FILENAME.EXT" into the Multiface RAM, if it is visible, and will poke the execute address and other required bytes into the start of the RAM for an automatic jump when you press that red button! It just couldn't be easier!

```
;;------------------------------------
;; Multiface Install
;; By David O'Shea of The Firm
;;
;; To use as is, assemble and then:
;;
;; MEMORY &3FFF:LOAD"INSTALL.BIN",&4000
;; F$="filename.ext":CALL &4000,@F$
;;
;;------------------------------------

        org &4000
        write"install.bin"
        nolist

.install
        cp 1            ;Test for one param
        ret nz          ;Return if error
        ld l,(ix)       ;Get string pointer
        ld h,(ix+1)
        ld b,(hl)               ;Get length
        inc hl
        ld e,(hl)               ;and address
        inc hl
        ld d,(hl)
        ex de,hl
        ld de,buffer
        call &bc77      ;Open file
        jp nc,error             ;Error?
        ld (start),de   ;Store start address
        ld hl,&4000 ;Max len = (&4000-start)
        or a
        sbc hl,de
        ld (length),hl          ;Store it
        ld hl,buffer
        call &bc83              ;Load file
        jp nc,error             ;Error?
        call &bc7a              ;Close file
        jp nc,error             ;Error?
        di              ;Prevent crash
        ld a,(&0000)    ;Get contents of &0000
        ld l,a
        ld bc,&7f89             ;Map in Multiface
        out (c),c
        ld bc,&fee8
        out (c),c
        ld a,(&0000)    ;new contents of &0000
        ld bc,&feea     ;Map out Multiface
        out (c),c
        ld bc,&7f8d
        out (c),c
        cp l    ;Compare two contents of &0000
        jp z,invis      ;If same,M.F not present
        ld hl,text              ;Otherwise,
                        ;tell user code will be
                                ;installed
        call print
        ld bc,&7f89             ;Map in Multiface
        out (c),c
        ld bc,&fee8
        out (c),c
        ld hl,(start)   ;Get start address
        ld (&2000),hl           ;Store in MF as
                        ;  Jump address
        ld a,%10001101  ;Upper ROM off,
                        ;Lower ROM off, MODE 1
        ld (&2002),a
        ld a,&C0        ;RAM bank of routine
                        ;(change if desired)
        ld (&2003),a
        ld a,"R"        ;Auto-run routine when
                        ;RED button is pressed
        ld (&2005),a
        ld a,"U"
        ld (&2006),a
        ld a,"N"
        ld (&2007),a
        ld hl,buffer    ;Copy routine into
                        ;MF RAM
        ld de,(start)
        ld bc,(length)
        ldir
        ld bc,&feea             ;Map out MF
        out (c),c
        ld bc,&7f8d
        out (c),c
```

```
ei              ;Interrupts on again
ret                        ;Done!

.invis              ld hl,oops
               ;Tell user MF not found
call print
ei
ret

.error              ld hl,filer
                        ;File error

.print              ld a,(hl)
               ;Standard print routine
or a
ret z
inc hl
call &bb5a
jr print

.text    text "Multiface present,
         installing code..",13,10,0
.oops    text "Multiface not found.
              If it is connected, "
text "please make sure it is visible"
                             ,13,10,0
.filer    text "File error!",13,10,0

.start                    word 0
.length                   word 0

.buffer                   equ $
```

That was a fair chunk of assembler, but it will certainly be worth your while, as it is easy to use, and can show you how to do it yourself. Feel free to modify the code, as that's what this article is about!

Now, say you want to install a routine which copies the standard 64K into the extra 64K. Well, the best place to put your code is probably &2008, just after the jump data, as this gives the most space to play with. (A good idea is to save all source with .ASM extension and the generated code with .MF extension. You can then have a program which loads the install code and does a !DIR,"*.MF" and installs the program selected.)

```
;;------------------------------------
;; Program : BACKCOPY.MF
;; Purpose : Copy first 64K RAM
;;    contents to second 64K RAM bank
;; Use    : Install into Multiface RAM
;;        and use to grab games etc.
;;------------------------------------

org &2008
write"backcopy.mf"
nolist

ld bc,&7fc6:out (c),c ;Select bank 3
ld hl,&8000:ld de,&4000  ;Copy &8000
                    ; -> &4000
ld bc,&4000:ldir
ld bc,&7fc7:out (c),c ;Select bank 4
ld hl,&c000:ld de,&4000  ;Copy &C000
                    ; -> &4000
ld bc,&4000:ldir
ld bc,&7fc0:out (c),c ;Select bank 0
ld hl,&4000:ld de,&c000  ;Copy &4000
                    ; -> &C000
ld bc,&4000:ldir
ld bc,&7fc5:out (c),c ;Select bank 2
ld hl,&c000:ld de,&4000  ;Copy &C000
                    ; -> &4000
ld bc,&4000:ldir
ld bc,&7fc4:out (c),c ;Select bank 1
ld hl,prog:ld de,&8000 ;Copy rest of
                    ;      program
ld bc,fin-prog:ldir      ;to &8000
jp &8000

.prog       ld bc,&feea:out (c),c
                    ;Multiface off
         ld bc,&7f8d:out (c),c
                    ;Lower ROM off
         ld hl,&0000:ld de,&4000
         ;Copy &0000 -> &4000
         ld bc,&4000:ldir
         ld bc,&7fc0:out (c),c
```
```
                    ;Select bank 0
         ld bc,&7f89:out (c),c
                    ;Lower ROM on
                            rst 0
                           ;Reset

.fin                        equ $
```

Since this routine messes up the memory, it can't return and has to reset instead. This means that the Multiface is inactive and will not respond to a press of the button until it is reset either by turning of the CPC or by pressing the Multiface RESET button. If your routine doesn't corrupt anything, you can return to the original program with a simple RET and the Multiface will work again without a reset.

To regain the normal Multiface menu, hold any key when pressing the red button.

One thing to remember when writing routines is that to use and system calls, etc., you need to map out the Multiface - just remember not to have your program running in it at the time! What you can do is copy a bit of CPC RAM into the Multiface RAM, copy your routine to CPC RAM, run it and fix things back up as they were before returning. Or you could put the main part of your routine in extra RAM and just put a short routine to call it in the Multiface RAM.

Well, that's about all you need to know. If you have any questions, you can email me at koshea@indigo.ie or 95059695@csnovell.ucc.ie or you can write to me:

David O'Shea,
23 Hillcrest,
Carrigaline,
Co. Cork,
Ireland.
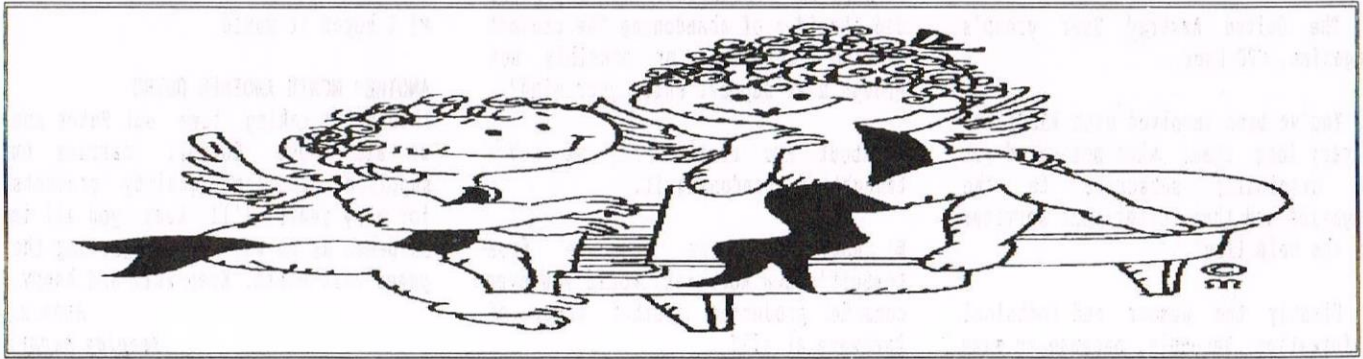
The ITGA Interview

This month it's Peter Campbell

Peter Campbell is a very well-known man. He is no stranger to members as he has been in and around WACCI for a long time. Many members have had the pleasure of meeting Peter, probably at the conventions. They will know that he is witty, knowledgeable, frank and can be almost as chatty as me <<Not possible- Philip>>.

COMSOFT CORNER

Peter is a great supporter of the CPC. A lot of his backing is channelled through Comsoft, Peter's own company.

Some of the more recent ComSoft releases include the revolutionary Mark II Rombox, reviewed in issue 100, and many of the Arnor and Goldmark products that have become available once more. The surprises never seem to stop because by the time you read this, Protext PC should again be available. This will hopefully forge the way forward for more advancements in the future.

WACCI) How do you cope with women fainting at your feet, with reference to your "lovely accent"?

Peter) I pick them up and then offer them a 10% discount on ComSoft products.

W) Do you have another job or does ComSoft take up enough of your time?

P) I'm a Customer Services Officer with Glasgow City Council.

W) Do you subscribe to any other CPC magazines?

P) The United Amstrad User group's magazine, CPC User.

W) You've been involved with WACCI for a very long time, what motivated you to originally subscribe to the magazine and then offer your services on the help line?

P) Firstly the humour and technical information. Secondly, because so many people had helped me that I wanted to contribute something back.

W) How long has ComSoft been established and why did you originally attempt this successful venture?

P) ComSoft has been established for four years and originally started because of my dissatisfaction with the original MicroDesign. I contacted Jess Harpur and MicroDesign Plus was born. It was our first commercial product.

W) Why did you change the name of CampurSoft to ComSoft?

P) Ask my accountant.

W) WACCO is a partnership comprising Brian Watson and yourself which owns the copyrights of all the 8 bit computer versions of the programs formerly sold by Arnor. How has working with WACCO benefited both the CPC and ComSoft?

P) (A) The continued availability of quality Arnor products. (B) Dosh.

W) How long did it take to produce the Mark II Rombox, from design stage through to production? At any point did the idea of abandoning the project as too expensive or possibly not enough user support enter your mind?

P) About two months. No, we never thought of abandoning it.

W) Judging on the response from ComSoft's own Romboxes, would you ever consider producing another piece of hardware at all?

P) Yes, if it was something cheap enough for us to produce.

W) Are there any other products set for future release through ComSoft that you can reveal here and now?

P) Possibly DesText on ROM.

W) The question on everybody's lips, do you envisage ComSoft ever producing a hard drive for the CPC?

P) Not now.

W) Do you program at all, or are you simply the business brain behind the technical brawn?

P) It's more complex than that. No, I don't program, but I know a good program when I see one. I'm familiar with Amiga's, PC's and IBM Mainframes. Development is a three way process between the original programmer, Jess and myself.

W) What would be your ultimate CPC set up in terms of both hard and software?

P) A 6128 Plus, 3.5" drive and ComSoft MKII Rombox. I have two of these systems.

W) In those early days, did you ever possibly imagine that WACCI would see issue 100?

P) I hoped it would.

ANOTHER MONTH ANOTHER OUTRO

Thanks for taking time out Peter and we all hope ComSoft carries on supplying excellent quality products for many years. I'll keep you all in suspense as to who will be gracing the pages next month. Keep well and happy.

Angela,
Keeping happy.

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Once more unto the breach dear friends, once more.....   **The end is near**