

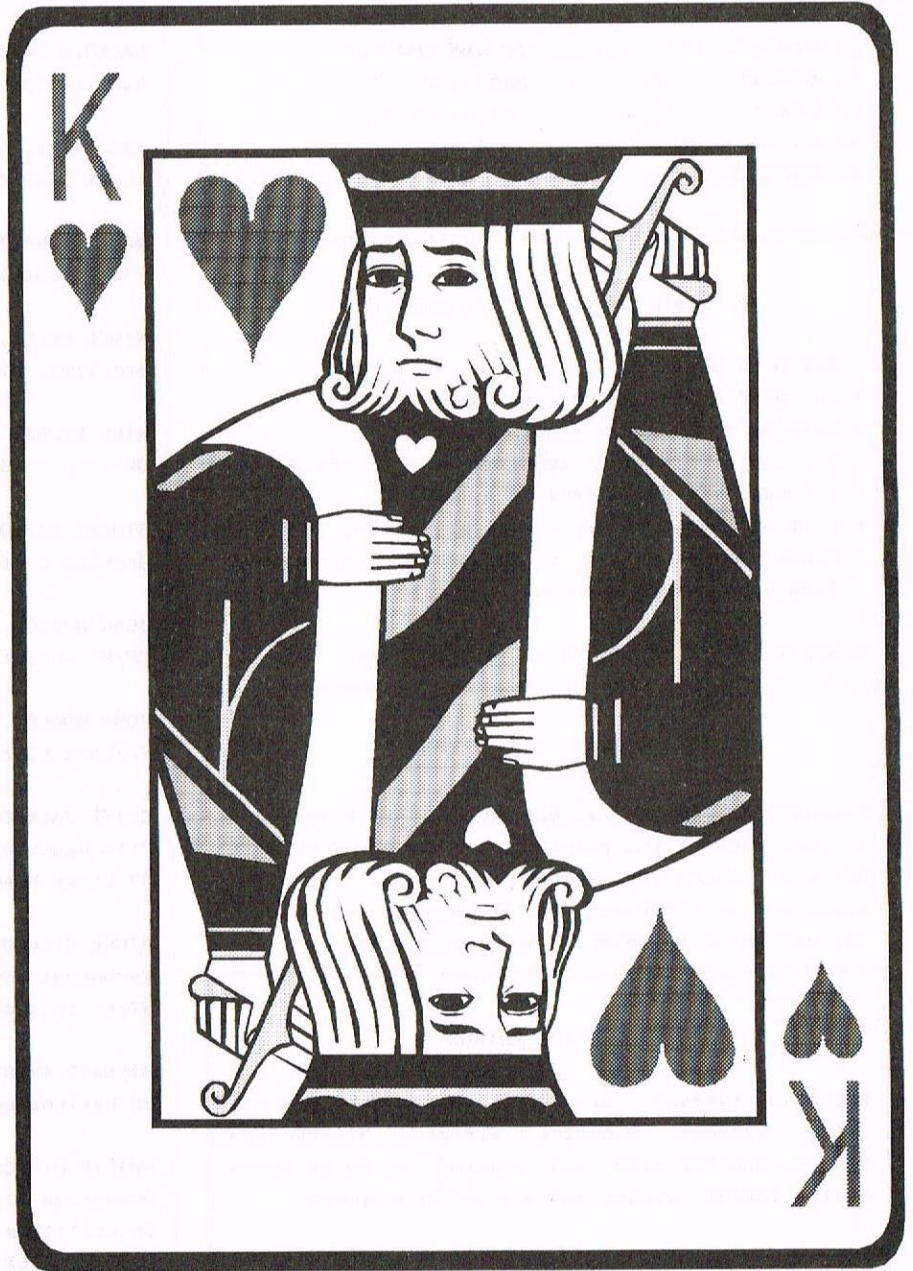
**THE UK'S ONLY SERIOUS CPC MAGAZINE  
AND PREMIER CPC CLUB**

**ISSUE 101**

**£2.00**

**JUNE**

**1996**



***This month we feature a playing  
card on the front cover and lots  
of interesting stuff inside...***

**WARRIOR**

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### THE BENEFITS OF WACCI MEMBERSHIP

- \* The best magazine for serious CPC users.
- \* An INDEX of the above from issue 1 - 96.
- \* 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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WACCI: The club for Amstrad CPC computer owners.

FRONT COVER: The Pack.

## THE TELEPHONE HELP-LINE

**BOB MOFFATT**, 01454 329875  
Weekends only please.  
Masterfile III, Mastercalc  
Qualitas and Protex.

**FRANK FROST**, 01983 882197  
Isle of Wight, 4pm to 10pm  
VDE, CP/M, Protex and  
WACCI Services.

**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 and help with Dawn.

**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

**NIGEL CALLCUTT**, 01664 481705 Melton Mowbray.  
Technical advice, hardware and CPC repairs.  
Nigel is available 7pm to 10pm these days.

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

**PHILIP DIRICHLEAU**, 01522 511608  
Powerpage 128, Gpaint, Tasword, Disc'o'Magic,  
PD Utilities, Basic programming, the Star LC10  
and Epson LX printers. 6pm 'til midnight.

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

### 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.)*



# WACCI

Edited By: Paul Dwerryhouse  
Owned By: The Club Members

Conceived and Founded  
By: Jeff Walker  
In: October 1986

Developed and Expanded  
By: Steve Williams  
And: Clive Bellaby

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# THANK & STUFF

*Hello all and welcome to another action packed and fun filled edition of WACCI. You may remember last month I rambled away about future directions and being stagnant and complacent. Well, I did that for a reason or two... There are some changes being made, so without more ado, here they are.*

## SHUFFLE THE PACK TIME

Greater teamwork is needed to shed work loads. The burden of being Editor is a very heavy one and it does need to be lightened. Since Christmas I've been thinking, but not telling, about changes to the post. After the posting of issue 100, I started talking with various members about how these changes could be made. The bottom line was that I did not wish to remain editor any longer.

My thanks to both John Bowley and Philip DiRichleau for sorting out the work load with me. Yes where there was only me before now there are three. Let me explain.

The hat labelled "I'm in charge" has gone to John Bowley. He will be affectionately known as Chairman John from now on. The hat labelled "Editor" has moved onto the head of Philip DiRichleau. Philip will also still edit PC with the help and assistance of Frank Neatherway. The editor's role has been further cut down to only include laying out the text. I will put a hat labelled "Print Manager" on my head. This means the final production of the magazine, graphics, page headers, front covers, adverts etc., will be done at my end. So I get to keep the stamp licking side of WACCI, something I couldn't live without. I will also keep the role

of Treasurer and look after the subscriptions etc.

## THANK

So I would like to thank you all. I have enjoyed my stay in the hot seat but now it's time to move on. I could never have stayed so long without the help and support I received from so many members. WACCI has changed, I hope for the better, under my leadership and I know Philip and John will continue the good fight. I hope you all support the newly shuffled management team and give them as much help and support as you gave me.

## LAST MONTH...

The advert for the CPC SCI-FI Guides, on page 31, didn't include the address to send off for the software. Whilst I blame David (*only joking*) for not including it in the text, a good editor should have picked it up. Remember that Philip.

Here is the address:

David CROOKES  
37 Triningham Drive  
Bury  
Lancashire BL8 1JW

Sorry David, I hope those that want can now get.

## NEWS FLASH

Gosh loads of news this month isn't there. This next comes from Peter Campbell of Comsoft.

First off is the news that Comsoft are to release Protext Office once more. The price will be £19.99 but remember you get 10% off that for being a WACCI member. I'll repeat for those new to the club (or for the forgetful) that because WACCI played a large part in the rescue of Arnor's CPC products, we get an exclusive discount on Arnor's range of software. You cannot buy cheaper being part of any other club or user group.

Next Peter tells me that Parados will be available on cartridge for the CPC plus machines very soon. He is also looking at putting some extra goodies on the cartridge but more about that when it lands.

Finally, Peter is going to release into the public domain a beta version of MicroDesign Plus v2. Bugs there may be in it but you will be able to see the kind of features that will be available to you when v2 is finished.

## AND FINALLY...

*As I come to the end of my last Thank and Stuff I can only say that I am a little sad. It has been a very rich and rewarding time in the hot seat and I've thoroughly enjoyed it.*

*All good times must come to an end and I'm looking forward to dropping down to being a background bod once again. You will, of course, be hearing from me. That's all folks. -Paul*

# COMPETITION SPOT

With: John and Carol Bowley  
 97 Turrington, Bretton  
 Peterborough PE3 9XT  
 Tel: 01733 702158

Right then me hearties where are your entries!!! There seems to be a tendency by you slow moving lot to want to wait until the last minute to send in your entries. Well you can just pack that in and send me your entry **NOW!!** To those of you who have been good enough to send in your entry I say **THANK YOU** but the rest of you get off to the naughty corner, and you know who you are don't you!!

## APRIL'S RESULTS

Carol would like to humbly apologise to last months winners for the delay in getting their prizes but she has had a lots of other things to do of late and she promises to sort things out within the next few days, so please bear with her. <<Taeverso>>

## WINNERS

Here are those lucky people who are going to receive their PD choices any day now:

1st Dennis Jordan

2nd John Reily

3rd Marcus Ruegg

And the 1st entry in was: Peter Robson.

## PRINT OUTS

If you would like to have a print out of this word search. I would be more than happy to send you a copy, all you need to do is send me a S&B and it will be done. <<John>>

## BUT WHAT'S THE PRIZE THEN?

Well you should already know this by now but for those of you with your head in the sand, then all you have to do is turn to page 12 of Mays 100th WACCI edition to find out then its up to you. <<Have a go>>

P	S	L	W	X	A	T	T	N	I	R	P	O	R	P
A	U	D	E	O	M	P	R	O	P	R	A	X	O	P
L	L	T	S	M	A	D	A	M	A	X	A	D	M	O
L	P	R	S	P	A	I	P	O	T	U	B	B	B	P
E	N	U	O	T	R	P	O	X	E	X	O	R	O	R
B	G	O	D	N	I	M	E	M	O	R	X	O	X	O
P	I	C	A	E	P	T	R	P	M	O	X	L	O	M
M	S	H	R	C	O	M	S	O	F	T	O	L	B	E
A	E	S	A	R	T	E	M	P	E	T	D	E	S	R
C	D	O	P	B	C	R	A	M	A	X	B	P	R	T
R	O	T	L	E	L	M	N	X	A	M	O	S	O	G
E	R	N	S	U	L	P	E	G	R	E	M	O	R	P
T	C	I	N	I	R	C	R	N	I	R	V	R	R	P
E	I	C	N	A	N	A	V	R	I	N	A	P	P	R
P	M	M	I	R	V	A	M	A	X	A	M	X	O	O

## FIRST ENTRY FROM THE BRITISH ISLES

The first entry received was:

\* Dick Hornsby \*

He can choose whether to have two binders or 3 PD Discs. <<Well done>>

## OVERSEAS ENTRY

We are still waiting for a entry from overseas and by now you know what you can win, so get entering. <<Carol>>

## TIE BREAKER

This part of the quiz I would like you to write and tell me in no more than 40 words or less what is the most interesting thing that you've done with your CPC.

## HELPFUL HINTS

To give those of you who are really stumped and need a little help I will give you an idea of the type of word you should be looking for.

On the back page of your WACCI you will find a list of Comsoft products and most of these are hidden in the grid.

Also you will find a Company and an address and a persons name, but this was not needed to win.

These hints may be of help to you. For those who have already entered we would like to thank you for your quick response.

## JUDGING

Since this is a special prize we decided to pass the buck of judging this competition to Peter Campbell and Paul Dwerryhouse.

## ENTRIES

All entries needs to be with Carol by the end of **JUNE**.

## THAT'S ABOUT IT

I'm still reeling after that bottle of Sherry in honour of Wacci's 100th. Starting to get used to the taste of the good life - somethings bound to go horribly wrong soon!!

*I know what that is Carol I've got to part with this superb Rombox sob! sob!*

Carol and I wish you all the very best of luck in this competition and if you have not entered yet, then you better do so soon or you'll lose out. <<JB>>

*-- Cheerio until next month --*

---

# Fair Comment

---

Philip "Tigger" DiRichleau  
and Frank Neatherway  
3 Glebe Close  
Rayleigh  
Essex SS6 9HL

---

## THANKS AND STUFF MK2

Hi all. You should now have read Thanx and Stuff (the MK1 Version on page 3), so you know what's happening next month. For those of you who have no idea what I'm talking about, well, I'm flattered that you read Fair Comment before Thanx and Stuff, but go back to it and then come back here after.

I am in a mad panic. This is not a state of affairs which happens all that often I assure you, but, things are getting slowly back to normal after a couple of weeks of chaos. Thankfully the ever wonderful Mr Editor, Sir Paul of Flintshire, has made sure that I've got almost everything I need to make the switch over of Editorship go as smoothly as possible. The only thing missing is my sanity. Thanks Paul.

There are a couple of changes next month which I'm sure you'll notice. Alright, I'm going to be editing WACCI, that's a major change, but if you look up at the Fair Comment header you'll notice another quick change. I have an assistant.

Ever mindful and having been warned of the dangers, I'm going to follow Paul's lead and shed off as much of the workload as I can. So, although I shall, at least for the moment, continue to do Fair Comment, could you please send ALL letters to Frank at the above address. The ever amazing Assistant Fair Comment Editor will then do all the normal touches to the letters and will put them into a format that makes my life a lot easier. All I have to do is answer the letters themselves.

We've used this system for this month's Fair Comment, as you'll notice from one of the answers (I'm writing this just before I post it all off to Paul), and I'm very pleased to say that it's been the easiest and fastest Fair Comment I've ever done. Indeed, Paul's going to be happy because it's going to land on his doorstep on the 16th, the actual copydate, instead of several (read up to a week) days late. I do have a slight problem to solve.

I normally blame everything on Paul because he's the editor, what am I going to do now. I can't blame myself can I?

Philip DiRichleau  
Fair Comment

P.S. I'm going to blame Paul anyway, after all, he is the treasurer....

*<<Hi Philip, did you think you would get away without me butting in on the last occasion I lay FC out?*

*With regard to your missing sanity, have you looked inside your mind? It's amazing what is tucked away in there isn't it. I found my sanity in there, all I had to do was quit as editor! Best of luck with the job. -Paul>>*

## ONE WAY TICKET TO DEVILS ISLAND

Dear Philip, mon brave, how are you? I've been awful! I went and killed my little mate Arnold by messing around with his fingies whilst they were still plugged in and he was switched on. The end result was a tartan screen and absolutely nothing happening when any keypresses were used.

After some dark, depressing moments I thought, "aha! there was a man at the convention with some Plus circuit boards for sale." I promptly rang our Angie to ask his name, just after I called Jonathan Castleton to order the circuit board that he was selling. Angie, of course came up trumps immediately, saying it was John from the Trading Post at Shifnal. I rang him and he said that technically he was closed for stock-taking but if I could come along he'd be able to fix me up with a brand new 464 Plus for 25 jingly brass coloured things.

I didn't know if my old machine crashing so permanently had damaged the upgrade components but having ProteXt on ROM meant that I could survive (just) by using tape loading if I had to, so I galloped off to Shifnal to "suss it out". Trading Post is like an Aladdin's Cave, full of our kind of computers (and not a few "not our computers" too) and I spent quite

some time browsing and came away with my new Baby and, at last, a colour monitor and an ARNOLD 5 diagnostic cartridge to tell me (if I do any thing as stupid again) exactly what's awry.

I put a new memory (128k) into the new Arnie and the circuit board that Jonathan sent me but I could not make him see a disc in the drives when I installed the drive interface upgrades. As you may imagine, this did somewhat worry me, so I performed the upgrade on Jonathan's old board, tried it out and although the drives whirled into life, they wouldn't allow me to load CPM or Microdesign+. This was obviously a memory problem as these programs use the second bank of memory to operate and the diagnoser agreed.

I decided to discuss the problem with an expert (point of the letter coming up!) and phoned Nigel Callcutt who spent ages discussing possible causes of the problems with me, giving me the confidence to carry on and eventually solve the "Disc Missing" problem. Nigel, you can relax now, mate, I've solved the biggest problem, I can now use the disc drives again and I'm thoroughly ashamed that, like the first problem, it was entirely self-inflicted. When I installed the sockets for mounting the Drive chips I had only soldered the pins on the corners to the board for the SED chip. All the others were sitting in space not connecting anything.

Someone may know what the diagnostic cart is on about when it says RAM ERROR, Wave Down, Block C0, failing bit 07. I know it refers to the second block of RAM because the first block and the screen memory check out as OK, Help, anyone?

On a more sombre note, with reference to the sad passing of Dennis Anthes, I expect that many of us followed with interest those letters from Dennis over the years as he sought help with certain aspects of the Convoy Warfare programs he was writing, I know I did. The point I'd like to raise is would Paul consider

asking Dennis' family if we could try them out and put them into the WACCI library either as PD or shareware so that his family could benefit from them and we would have something tangible to remember him by.

I realise this may not be feasible but it could be worthwhile for the club to consider.

Well, I must away or they'll go and shut the pub before I get there, I'll keep in touch and see you all at Bescot. That'll be me in the corner with the red face and the dunce's cap on... Thanks to all who've helped me.

Bill Mohan  
Steeley

<<Hi Bill. Take your letter in totally random order, when using OUT &7f00,n to switch banks, &CO indicated the desire to return to the normal bank of memory and not any of the 8 subsequent banks which can be fitted to a CPC. A quick aside, it's quite possible to have 576k onboard. I don't know if that might indicate what the &CO in the message means, but since it's memory we're talking about in the first place, I think it might well be.

As always, Nigel is proving how valuable he is to WACCI. The work he does for us is amazing and I know he ends up out of pocket on a lot of things that he 'Techies' for members. Some computer repairs can be expensive and Nigel, when he charges at all, only does so at damn near cost price. So, all WACCIites, don't abuse him, it's not fair.

Now, Bill, let me get this right. You killed a CPC and freely admit to it. Right, expect the boys to be around very soon with a one way ticket to Devils Island, where life revolves around a ZX Spectrum and 35 ex Amstrad Action Editors.

What to say about Dennis? He was a long standing WACCI member who gave the Fair Comment editor before me a wonderful time with the Convoy Program. If we could get hold of it and place it into WACCI PD, then it would be a fitting tribute I feel. The question is, how to go about such a matter without offending a family who will still be grieving? Not an easy matter -Philip>>

<<Hello Bill, I remember helping Denis debug the code to his program in the

early days and I bet many more helped him. It was John Bowley who wrote to his family on behalf of the club, so perhaps he could best ask the question, what do you think about it John? -Paul>>

#### NORMAL SERVICE HAS BEEN RESUMED

Dear Philip, Due to a family problem I have been away from home some nine weeks since the end of February. Obviously on the occasions when I did manage to get back home every couple of weeks or so I found a mountain of mail by the front door, much of it requests from club members for PD discs. (We will not mention the bills). Anyway I would like to say sorry to those members that had to wait for their discs to arrive. Things are back to normal now, although one's thoughts do dwell upon holidays around this time of the year.

I have just received my ticket for the 1996 WACCI Convention from Paul, so I look forward to meeting you and many other members there.

Regards  
Doug Webb  
Chorley

<<Dear Doug, hope everything is going fine now and that there weren't too many bills to pay. See you at the Convention -Philip>>

#### QUITE AN 8-BIT OF A LETTER

Dear Philip, Having been following the Protexit versus Brunword debate for a few WACCI issues, I thought it about time to put my hat in the ring (or is it head in the noose?)

A couple of years ago I had the privilege of seeing that great MB (Master of Brunword), the late Mike Catton, putting his pet program through its paces at a UAUG get-together where I was persuaded to talk about Protexit as a user. I think it fair to say each learnt a lot about the benefits and limitations of the other's preferred program and we agreed that it wasn't worth someone leaving either for the other. Both programs are very good; just different, that's all. Though you may use Protexit, I know you have a soft spot for Brunword too, ya big pixie.

Now to address some recent Protexit comments and queries from the letters column:

I feel Protexit's keystrokes and commands would probably seem more logical to a newcomer to both as they are quite intuitive and use English words, but if you have learned Brunword's system don't change unless you feel that a change would be beneficial to you.

Spell-checking: as someone who earns a significant part of my income from professional writing (scripts, non-fiction, magazine articles, etc) I need a spelling checker to pick up my typing errors, despite having received a good education, and a context-checker would be helpful too. I require a fast, efficient, checker which will skip the most commonly used words of my vocabulary. For this, a small user-defined dictionary is what works for me and I use version 2.23 of CP/M Protexit with just an 89k dedicated dictionary on every drive B, D20-format disc I use. This leaves about 700k per disc for text files. In dictionaries, small is not just beautiful, it's faster too.

Incidentally, the most pedantic correspondents about grammar to my magazine 8BIT seem to be the ones who consistently make the most clumsy spelling and grammatical 'mistakes' themselves, according to such rules of modern English usage as there are.

As to the comment by Hugh Keir in issue 98 about how Protexit's slowness may have been one reason for Arnor's demise; no, it was being tied in to a main road property agreement in a declining market and trying to keep their staff employed when strict 'good' business practice suggested they should have 'laid them off' that put them under. God bless the 80's, eh? And I'm not surprised if almost any PC word processor checks spelling faster than CPC's Protexit and does practically everything else better too, but they do take longer to load... Let's stay in a CPC context, shall we?

I have a silicon disc attached to my CPC, to which the CP/M Protexit dictionary can be copied using Newsweep at the start of a session if required, but it's fiddly and one would have to go through the same business of copying it back to disc with additions at the end of each session and life's too short for that. For such speed as I do need I have

patched CP/M to recognise the sili-disc as drive C and dump all Protexit's temporary files there. That's quick enough for me.

As far as I and Bunny Fairhurst (tech wizard par excellence) know, copying from funny formats, as used for Amsdos Protexit's dictionary, to a silicon disc and accessing it from there is a non-starter as each stores its information in a curiously distinctive way which cannot be used from within Protexit. It is a serious rewrite job, in other words. For serious writers I think CP/M Protexit is the best version, and if you really want to you can put its dictionary over to the sili-disc as part of the start-up routine, but again this will be a matter of user's opinion. Drop me a line for details as to how if you are that much of a masochist.

On Hugh's point about font changing, Protexit's open system of printer driver accessibility means one can easily call up all a printer's in-built fonts, and there are several add-on programs to broaden Protexit's range with additional fonts. I would happily concede that Brunword does it better from within the program and handles graphics much better and easier. For anyone who wants a word processor which is also nearly a DTP program, Brunword is it.

As to jumping out of the word processor into a database and back again, why would anyone want to? All versions of Promerge (integral to the CP/M version of Protexit, available as an extra for the others) regard ordinary text files as potential databases. The advantage is that the usual strict field length requirements of dedicated databases can pretty well be ignored. Lest anyone should doubt their full value as databases, I have used Protexit files for my business's customer records (including for selective mailshots) and the storage of several club membership details for eight years without feeling tempted to 'upgrade' to a commercial database.

The only area where a Protexit database could have used some support to be just like a dedicated database is in a sorting function. I use some home-created template routines to do this but, on 1st May, Protexit Office will be reissued which (among many other features) includes a 'proper'

sorting routine called FSORT. It works with all versions of Protexit, but according to the manual it can sometimes be temperamental with disc and rom Promerge, which has to be switched off if memory restrictions prove a problem. I suspect that there may also be clashes problems if a lot of roms are in place at the same time, but I will check this by experimentation and welcome users' reports. Please remember this is only a relatively small computer memory we are asking to do the job. Such clashes will not occur with C/PM Protexit and Office.

As to Brunning not advertising in WACCI, this is always a problem for producers. Will an advert more than cover its costs by the resulting profits from sales? How many potential sales are there for CPC word processors now or, to look at it another way, how many software sales (of all sorts) of over £20 each are there from the CPC-owning community this year? I'm glad I'm also in the PCW market!

Lastly, Hugh asks if the rescuers of Protexit would have gone to the same trouble for Brunword or Tasword. No to both, but only because I knew a lot about Protexit from personal experience including the fact that CP/M Protexit also has the potential of the PCW market whereas the others do not (or I presume it would have been done). The new PcW 16 has come as an unexpected bonus market and we might adapt it for other 8-bit computers too. I would have gone for Mini-Office 2 if it had come up then, but not now that WACCO has Protexit with Office etc. Mind you, someone else could probably do a good job with it. Replicating the Mini-Office mini-manual would be the biggest problem to overcome in terms of cost.

Personally Eric, tape storage for anything makes me nervous. I would go through the following steps myself: (1) buy a 3" disc drive with the relevant interface to use as a 1st drive on the 464 and a few 3" discs, ideally all second hand, (2) don't bother with the 64k memory pack, (3) load the tape files into Protexit and save them back to disc. (4) Then see how you like using this setup. If you do decide this is not good enough for you and you want to transfer all the

files to a PC readable format on 3.5" disc (5) ring me and I'll do it for nothing.

In WACCI 99, AF Sims enquires how to access his Protexit (etc) roms. Read the manuals, it's all in there, near the front. No manuals? Hmm, I wonder if they are originals from Arnor or WACCO? Again, ring me if you're having problems.

There; not so much a letter, more an article.

Regards  
Brian Watson  
(partner in WACCO)  
"Harrowden"  
39, High Street  
Sutton-in-the-Isle  
ELY  
Cambridgeshire  
CB6 2RA

Tel: 01353 777006 Fax: 01353 777471  
E-mail: wacco@spheroid.demon.co.uk

*<<Good Day to you Mr 8-Bit Editor Sir. That's one serious address line you have, probably the biggest I've ever had to do. Where do I begin to answer such a letter? At the beginning I expect. How predictable of me.*

*'Brunword! Bah! Humbug!'*

*As I stated a few letters ago, I'm going to consider getting CP/M Protexit when funds permit, if only to see what the slight differences between the three versions are. Also, if I can speed up the process of Spell-Checking a little more (I have a wonderful Spell Checking Program that Paul let me have a copy of, it's called Frank Neatherway and I use it as often as I can) it will make my life a lot easier. If it turns out the CP/M Protexit is the best for my purpose then it'll be CP/M protexit that I'll start using.*

*I'd like to add my voice in support of Arnor's reputation. They were a truly excellent company, who spent time helping WACCI with several knotty little problems, including a few which were not directly related to the ARNOR programs. Their loss was tragic for us, for their Staff and for the owners. It really couldn't have happened to a better company.*

*I don't think there's much more I can say, except to apologise for*

*trimming your letter down a bit (seems to be a bit of a habit at the moment), but between it and my answer, we'd have filled this entire issue.*

*Oh yes. Bunny Fairhurst? Bunny? Bunny! Curious -Philip>>*

*<<Confession time. These first four letters belong to a group of seven which, when I came to the disc two hours ago, was totally corrupt. I've managed to rescue these four off it, but if you've sent me a letter and it's not here, sorry, your letter might have been one of those hit by the demon corrupter -Philip>>*

*<<Aye-up Brian@spheriod.matey, two things for you. Firstly, Peter Brunning was offered free advertising in WACCI so long as he discounted his products in some way or other. The same is true for all that advertise since issue 50 and the re-birth of WACCI. Peter took up this offer and a free of charge copy of the magazine was sent to him so that he knew we were keeping our word. He didn't like a Protext biased reply in FC from Mike Lyons and he withdrew discounts for WACCI members and we withdrew his advertising. You can make your own mind up about that but I feel he said my ball and you are not playing with it. Still, WACCI gave him exactly the same chance as other CPC suppliers.*

*Secondly, I'll be reviewing Protext Office for WACCI. It's a long time since I've done a review for the club and I'm looking forward to it. Office never seemed to take off like the other Arnor programmes, so I'll be very interested to see what it's all about. -Paul>>*

#### **NO MORE DIGITAL AEROBICS (FOR NOW)**

Hi Philip, hope you're keeping well. I felt that I must write and explain to the members why the Exercise Your Fingers column has now ended. <<It has? When? -Philip>> Unfortunately, there wasn't enough response to my plea for unpublished programs. Many many members wrote in with programs that had already been published in other magazines. Although some of them were brilliant, I felt that it wouldn't be a good idea to re-print them on the pages of WACCI so, thanks go to all the members who took the time to write letters of support to me

but, I'm afraid that's it, the column has to go, sorry.

As a helpliner I get loads of letters asking for help with general programming problems <<Try saying that quickly -Philip>>. The correspondence that I got through 'EYF' all pointed to the same thing. It was surprising the number of members who wrote saying that they had a limited knowledge of programming and wanted to learn more. Lots of people praised (and quite rightly so) Alan Tillings 'Very basic BASIC', the general census being, 'what do we do now that it's gone?'. This has led to Paul giving me a NEW column aimed at BASIC programming, so look out for details of that in the very near future.

Finally Philip, can you help a helpliner? I need to find a program that will allow me to draw flowcharts on the 6128+, I can't do it using Pagesetter 64 or Powerpage, any ideas?

Best wishes  
Clive Jackson  
Stamford

*<<Hi there Clive. A flowchart? As in a programming Flowchart by any chance, or is there another meaning of the word? Why can't it be done with PowerPage? I use a Word Processor for such, when I do them in the first place, which is rare I admit.*

*It's difficult to have an opinion about Exercise Your Fingers right now, since I believe it was one of the more interesting parts of the magazine. Take a break from it by all means, but I think it might reappear again soon.*

*I look forward to your BASIC series. I was going to do one myself, but with everything that seems to be happening at the moment, I don't think I'm going to have the time anymore. Besides that, with being Editor and Fair Comment Editor at the same time, I think I'm going to have enough pages for my style of ramblings -Philip>>*

#### **WHO DOES PHILIP BLAME NEXT MONTH?**

Dear Philip, did I understand correctly that issue 100 had issue three given free with it (there wasn't with my copy), or do I need to send in a disc for it? <<You should have got it free with issue 100, the issue 3 magazine that is. Why haven't you? I don't know. However, as I'm not Editor yet, I can still blame Paul -Philip>>

Paul also mentioned that Angie wishes to plan some rolling demos during the convention; would this be pastry rolling? I don't mind doing a bit of beer barrel rolling if I can sample the contents (providing it's Tanglefoot, that is!) <<It's going to be about rail carriages -Philip>>

If Phil Peacock is still looking for a way to speed up Stop Press printing, then the only thing I can think of is a program called X-Press by Medway King. This speeds up the printing and (according to a review I read ages ago) slightly improves the quality.

The 80000 word Prospell dictionary I mentioned is certainly well worth getting (from Marcus Ruegg. see issue 100) although I have found one slight snag with it when using the 'anagram' or the 'find word' options. When Prospell gets to the end of the dictionary file it goes back to the beginning and starts again. You can hear the disc drive head as it steps through each track, then when you hear it whirr back to the start of the disc you'll need to press ESC to stop the search.

I found this out when I was using Prospell (on rom) to find an anagram with this new dictionary for the first time. I left it running for a while, not realising that it was just repeatedly going through the dictionary. The disc drive warmed-up quite nicely after half-an-hour!

How are you getting on with Discology then Philip? I've got version 3.3 (the English version from Siren), and I've found a fault with that as well (I don't go deliberately looking for problems, honest!) When you are 'cutting and pasting' sectors you are asked for an address 'from' and an address 'to' (to cut); but it doesn't cut right up to the 'to' address, it cuts to one less. So, for instance, to cut from 000 to 1FF you need to specify 'from' as 000 and 'to' as 200. I don't know if other versions are the same; perhaps someone could let us know what extra features later versions have.

One last thing; does anyone know if there is a font designer available for creating Protype fonts? <<Dunno -P>>

Worried Armadillos Cautiously Consume Insects. Best wishes to all,

Martin Bela  
Derby



*<<Dear Martin, I've also been playing with the Marcus Ruegg Dictionary but I haven't come across that particular effect just yet. I'll have to try it out later and see what happens.*

*Discology is great fun. You use 3.3 do you? Well, I have version 7.3, which is written entirely in French. Regardless of my name (which is French incidently) I can't speak a word of the language, so I keep having to guess what the options are. I don't know if there are that many differences between 3.3 and 7.3, only that the whole lot has been tidied up a bit and made somewhat more efficient at what it does.*

*Sorry about the missing Issue 3. As soon as Paul reads this, I'm sure he'll pop one into the post for you, won't you Paul?*

*For any non-Train buffs out there, another name for 'Railway Carriages', is Rolling Stock -Philip>>*

#### EPIC IN FOR AN EPICURE

Dear Philip, following my recent telephone conversation with you about EPIC (as reviewed by Ian Parker in the 100th issue) in use with the Citizen 120D+ printer, I thought I'd update you as to the progress I've made and put out a general plea to anyone else who might have a similar printer and has got the program working properly. I haven't, quite.

I've changed the printer codes in the STANDARD EPD file so that it functions on the Citizen (27 126 53 1 to get IBM 1st set characters and 27 62 to put the eighth bit on; 27 126 53 0 and 27 35 reverse the process; 27 126 53 1 and 27 109 3 for 2nd set characters, 27 109 0 and 27 126 53 0 to reverse, and I found I had to add 27 126 53 0 to the codes for French and Swedish characters before they worked properly).

The program works: I get IBM 1st and second set graphics and accented characters, but there are five of the IBM first set characters that don't work, and oddly they have consecutive ASCII codes, from 171 - 175 even though they don't appear as a group in the EPIC printer-driver listing. I've struggled and am tempted to conclude that there might be a fault in my printer firmware. I wouldn't ordinarily bother, but the main reason I wanted EPIC was to be able to

produce 1/2 and 1/4 fractions, and they just happen to be amongst the five I can't get. Instead I get a diminutive n and an equally diminutive 2 (squared), and I also get both of those as themselves. The other missing symbols are double brackets (speech marks in some Germanic part of the world) and an upside-down exclamation mark. So if there's someone out there with a Citizen 120D+ and EPIC working perfectly, please tell me where I've gone wrong (if I've gone wrong).

To finish, many thanks to Ian Parker for his review of the EPIC program. Protext is certainly enhanced by EPIC, and that, along with PROCLIP, must surely make it a word processor second to none anywhere in the known sky. I especially appreciate the ability to draw boxes. *<<A man after my own heart I see, but don't say that too close to any Brunword users -Philip>>*

And thanks to you, Philip, for the enthusiasm with which you answer telephone queries *<<You're very welcome>>*. And thanks to everyone else for being wonderful too.

Peter Rogerson  
Mansfield Woodhouse

*<<How do Peter. Perhaps I should explain why you called me. Let's see if I recall correctly. You were able to step up to CHR\$(128) and above on the printer, but you couldn't step down again. This was because the printer was stepping to IBM set #2, which doesn't have the control codes in the first 32 CHR\$(n) codes. Only the first IBM set has these built in and it's that set that has to be accessed by EPIC.*

*Anyway, I'm glad to see that you've got it working some of the way. I can't understand why the 1/2 and 1/4 don't work, but I have a suspicion. On the EPSON STYLUS 800 that I have sitting here, those two codes produce parts of the Russian Alphabet in its present mode. It could be the way the printer is set up, rather than the program or the computer. The STYLUS 800 has more options than I care to try to work through at the moment.*

*If anyone has got a CITIZEN 120D manual they could send down to me for a few weeks (or donate to WACCI), I'll have a look through it and see if I can get EPIC working with this printer as it was meant to -Philip.>>*

#### A CPC-QUICK LETTER AGAIN

Dear Philip, Firstly, may I take this chance to remind you all (after your plea for information on CPC related publications) that the disczine CPC Quick (produced by me), costs only(?) £1.50 and isn't too bad a read even though I say so myself. All cheques or postal orders can be made payable to AD Watt, if you decide that you want to have a copy.

Secondly, I thank you for offering to help out with CPC Quick, but I am not sure what aspect you could cover: if you have any ideas they would be gratefully received. Also, any help with scrolling my disczine up and down smoothly would be great. May I also say thank you for sending me a copy of Anti-Multiface after my last letter? I've used it a lot since then and it has proved to be very useful.

Thirdly (sorry, this letter seems to be getting longer), is there any way to control (using BASIC) when the tape socket of my CPC 6128 goes on or off without using the familiar RUN" to start tape and ESC to stop? This could mean that other things could be turned on or off, for example, at set times. I am interested in Robots, so I thought that maybe, using the expansion port, I could also make the CPC turn things on or off and also receive signals. I know this may seem a strange request, but I recently got hold of an old book 'Usborne Computer -Controlled Robots for C64, VIC 20, Spectrum & BBC' which has a short and snappy title! The problem with it (obviously isn't it?), is that the connections to the CPC are different and I really am not sure about using I/O ports.

From looking at the survey results (sorry I didn't participate), I have to agree with everybody about dropping the stories: they were just space fillers. I also like the idea of the new 'Exercise Your Fingers', and it would be a shame if it ceased so early because of lack of support. I may well send in something in the very near future.

Oh yes, one other thing, do you think I should buy the 'Alternative Firmware Guide'? It seems a good buy for only £5.

If you or anybody else reading this letter can help me I would be very pleased! Sorry about the size of the

letter: I did originally set out to type a short one. Sorry that I didn't include a disc again, my word processor on the CPC has packed it in: I had to do this letter on my wee PC. If this letter is in issue 100 then congratulations for reaching the big 100! But will there be an issue 200 and what will we ever do once we renew our subscriptions (I have yet another 4 issues I think) to WACCI and have to pay an extra 50p per issue?

Oh dear, but if it means keeping the CPC alive I'll put up with it!

Thanks again.

yours sincerely,  
Ben Watts  
2 Cuiken Bank  
Penicuik  
Midlothian  
EH26 0AF

*<<Good day to you Ben. How about sending me down a review copy of CPC Quick so that I can have one of our many helpers give it a write up in WACCI. Just an idea.*

*The problem with helping out on any Disczine, Magazine or Helpline for that matter, is just what to do. The ideas have to come from somewhere and they're the hardest thing to come up with. If I can help, then I will, but I do need something specific I can target myself at.*

*I'm glad you've found a good use for Anti-Multiface. It is an excellent bit of programming and can save a lot of problems. I, for instance, just don't have enough spare power on 'mother' to leave the Multiface II constantly attached to the back of the machine, so the Anti-Multiface Program can be something of a god send.*

*Switching the tape port on the 6128 is simple. CALL &BC6E switches it on and CALL &BC71 switches it off again. The source of this informed is in the Alternative Firmware Guide. If you're interested in programming, then this is a vital addition to your library. It is a wonderful bit of literature and a good bit of Techno-Rat bedtime reading.*

*As you may have already read, Clive has suspended E-Y-F for the moment, but I anticipate its return to a WACCI near you very soon.*

*I put your address under your letter just in case anyone wants to get in contact with you directly -Philip>>*

#### THE GRANDMOTHER TECHNO-RAT

Dear Paul, May I, through the pages of WACCI, thank Bob Moffatt for his lucid explanation in issue 88 "A Hare Raising Experience." Some issues ago, I wrote for assistance about my disc drive and never, in the farthest reaches of my very fertile imagination did I think I'd be able to "do it myself!" But I have and it works. By the way, I'm talking about changing the belt in the disc drive. Chris, from Notts was kind enough to sell me another keyboard at a reasonable price and he even delivered it - aren't WACCI people NICE. Because I had a backup it gave me the courage to do the surgery. My local electronics shop supplied a belt for 75p and by following Bob's clear instructions, I saw the insides of "Fred" for the first time. Quite an experience.

In the past I confess to taking tape recorders and small radios apart to try and learn how they work but I've never dared to do anything to my beloved CPC before.

What's next? Maybe a 3.5 drive perhaps . . .

Thanks to all who make these things possible.

Isobel Swade  
Warrington  
Cheshire

PS My granddaughter Rebecka is doing well Philip, she will be 8 months old on May 8th, is gorgeous of course, and will have a sister or brother around October time.

PPS I do have a grandson, Ryan, he is 18 months old, my son's first child and is equally gorgeous.

*<<Wonderful to hear from you again Isobel. I agree, WACCI people, in my experience, are the oddest bunch of computer mal-contents it's ever been my pleasure to be associated with. I have to ask, though, what chances have your grandchildren got, when their parents mother has a habit of dismantling radios, cassettes and computers to find out how they work. Congratulations, you've just been awarded a Techie Badge.*

*October time, huh? Right. I expect to be informed at the time (and be given the name this time so that I don't have to call you up at a strange time of day). -Philip>>*

#### THANK AND OTHERWISE

Dear WACCI, my thanks go to Nigel Callcutt who advised me how to get my new 3.5 inch drive working and also told me that the disc that I received from the Scouts Chairman was corrupted because it would not work with DOS-COPY.

My apologies go to Philip DiRichleau who is still waiting to see a copy of my Guitar Tutor programme. I'm afraid the PowerPage Tutorial and the Scouts AGM reports rather took over the computer.

My apologies also go to the member who rang me twice to try out a screen routine for a programme he is writing. The first time I was waiting for a PAGEMAKER DELUXE page to print out ... this takes ages ...and the second time I had to keep running from one end of the room where the 'phone is to the other end where the computer is. I hope I didn't run up his 'phone bill too much.

Yours faithfully  
Malcolm Brabbin  
Beccles

*<<Dear Malcolm, I'm sure Nigel would say that you're welcome, I'll say that your forgiven and the other member I can't speak for because I don't know who it is you mean, but he'll probably say something very much like what I just said.*

*I look forward to seeing the Power-Page tutorial you've written. It should arrive with me quite soon, I hope. -Philip>>*

#### A QUESTION OF A QUESTIONNAIRE

Dear Philip, not that I know much about Computers but as it is more of a mechanical problem rather than an Electronic one, I think I can help A F Simms with his problem regarding the sensor buzzing backwards and forwards with nothing happening (Fair Comment Issue 99). I had the same problem with mine. I solved it by lifting the top of the keyboard thus exposing the Disc Drive. At the Motor outlet fitted on the Shaft there is a pointer type lever. When the sensor is buzzing this is going from side to side like mad. It seems that for some reason this loses its proper position. With the drive switched off, just probe it with a ball pen point to the centre. From then on it should work

until the next time it decides to go wrong. I leave the screws of the computer top undone so that I could just lift it when necessary. It has been working OK for some time but I will not dare screw the top on, because as sure as anything it will play up again.

Now that I have dared to write, I think I will add a couple of more comments.

From the replies to the Questionnaire. What questionnaire? I do not think that I ever received one. If it was in any WACCI Issue I must have missed it then and I did not find it again today.

Well as I was saying I was always under the impression of being your oldest member. At 58 I find that I am amongst very good company from all ages.

I have never used Tasword or Protext but I find Brunword on Rom to be very good indeed. Even more so that I make very good use of its Infocript Data Base keeping Racing Pigeons' Pedigrees and Racing records.

After "AA" demise, WACCI has more than filled the void. The WACCI advert in one of the latest issues couldn't have been more timely. The effort in producing such a marvellous magazine as a hobby must be a great team effort. You all deserve all the encouragement and praise as you continue with the good work.

Yours faithfully  
Charlie Agius  
Malta

<<Good day to you Charlie. There seem to be many different ways of getting these drives working again. I suspect that there are going to be as many as there are different drives. I know of at least four different makes of 3 inch drive which all fitted into the CPC Range of computers.

As to the Questionnaire. Look in WACCI Issue #94 on page 20. That's where it and it just took me 20 minutes to find the bit myself.

I'm not going to comment about Brunword this time. I don't think it will be safe for me to do so.

Producing WACCI is a team effort, more now that it was ever before. Take this month's Fair Comment for instance. Everyone seems to think that I do the hard word, but it's not true. This

month, I've had Frank Weatherway taking so much strain off me, that I have the suspicion that I'm going to finish Fair Comment this evening and I only started it this morning. This is, without doubt, a record for me and it wouldn't be possible without Frank's efforts. Thanks Frank, very much appreciated -Philip>>

#### QUESTIONS AND ANSWERS

Dear Philip, I probably would have got round to writing to you sometime but I am having trouble trying to use Protracker on PD disc 91 so I thought I should write.

I am trying to get a sample of an instrument into memory from tape so that I can actually compose a tune with it. Before you can play anything you have to tell the computer which sample you want to use but I can't get any samples so I am a bit stuck.

I have got a couple of other questions that I may as well ask while I'm on, so here goes.

Does anyone know why Amsdos won't recognise High Density 3.5 inch discs even when they have been formatted as DATA? I am trying to use some discs from my dad's PC because I've run out of Double Density ones.

What exactly is a silicon disc and does anyone know how to make one or from where I can get one?

The Brunword Character Designer on WACCI PD disc 93 is for designing your own headline fonts. If you want to turn off Brunword you would have to output a value to pins 42 and 43 of the expansion port but I don't know how to do so: maybe somebody else can help out?

If you are still wondering what the Foundation Step Time Sequencer is, it is a programme that controls a MIDI port that plugs into the expansion port. It allows you to control all the instruments connected to your CPC via this port and allows you to type in each note one at a time so that you can go back to change one note without having to replay the whole thing.

Hope You Can Help,  
James Hoskisson  
Middlesbrough

<<Aye-Up James. I don't know very much about Protracker, but I know someone who might. This, I believe, is what the Wish-List is for. Right, Wish-

List, I'd like an article on Protracker, PD disc 91, to let us know how to use it. How about it?

About the discs. I use both Double Density and High Density Discs without problem, but then my drives have been modified accordingly. It's not the CPC that has the problem, it's the drive itself. If you look at a HD disc, you'll notice that it has two holes on the top edge and not just one. There's a sensor inside the drive which detects this hole and switches the drive itself over to high density. The sensor in my 3.5, which is an IBM 1.44 Meg version, has been disabled. You can do a similar trick by placing a small sticky label so that it covers the second hole, therefore making it look to the drive as a Double Density disc. Your 3.5 must also be a 1.44 meg version, or you wouldn't be getting this problem.

A Silicon Disc is a whole hunk of memory you plug into the back of the computer, or at least the DK Tronics version is. All Amstrad have 64k of computer, minimum, that 64k being made up of banks 1,2,3 and 4. The silicon disc is, I believe, made up from banks 17 through 32, making 256k. This can be used as extra memory (Parados and Disc 'o' Magic do this) or, using the Silicon Disc Rom, it can be fired up as Drive C, a 256k drive (2k Directory and 254k User Space). It acts just like a drive and even keeps its contents during reset. You loose it all, obviously, if you turn the computer off. I'm using one right now. I store the unanswered letters on the Silicon Disc and after I've answered them, they get stored over to the A Drive. Very useful and very, very fast. I got mine, and the 256k Memory Expansion as well, from Merline Serve. You can't get them new anymore, so it's going to have to be second hand, which means either the Market Stall, in which case write a quick note to Angie Hardwick and she'll keep an eye out for you or it will be Angela (ITGA) Cook and Merline Serve for you.

The best method of turning off Brunword that I know involves a large hammer and a cold chisel, but I don't think anyone will be very interested.

So that's what a Foundation Step Time Sequencer does? I was beginning to think that no one would explain it to me. Thanks -Philip>>

<<Dear James, it I may butt in here about the question of 3.5" HD discs. A wise man (Clive Bellaby) once told me all about 3.5" HD discs and the CPC, so I'll pass that information on here. It is different from the reason Philip has just given and I suppose they could both be correct.

The surface of the HD disc is more superior in its coating (if that's the right word) to the DD disc thus allowing it to be formatted to a higher capacity. The 1.44 drive, as Philip rightly states, uses the second hole to detect a HD or DD disc. How you wire/disable the second sensor to enable a 1.44 drive to be used on a CPC is beyond me but Philip knows about these things.

Even with the drive set up perfectly you can still get problems with 3.5 HD discs but only if they have been formatted to 1.44 meg by a plastic computer and subsequently used. Clive reckoned that as the head stepped across the used, but now data formatted disc, it could land on a sector perviously used by the PC. This leads to the read failure.

Anybody else got any views on the use of HD discs or had problems with them? -Paul>>

#### A.A. CHEAT MODE TAKES OVER WACCI

Dear Philip, I read with interest the letter in your "Fair Comment" pages of WACCI, from A F Simms of Beckton. Unfortunately, I'm unable to offer any assistance to resolve his problems but his daughter may be interested in my letter. My young son had the same problem with the "cheat" published in Amstrad Action magazine.

The version of the game "Fantasy World Dizzy", in which I have found a cheat, was on the A.A. Covertape.

The correct address to poke is 41059 or A063 Hex. Poking this address with zero or 127 (007F Hex) will award infinite lives. However, the gameplay will be interrupted in the normal manner every time Dizzy hits trouble. He has nevertheless, the luxury of getting into trouble as often as he wishes!

Allow me to express my satisfaction with WACCI, which became a reality to me only after A.A. closed down. It is a mystery that the thousands of that magazine's readers did not discover how good WACCI is. Even with the small

price increase, it is excellent value. Yours sincerely

Pol O Griofa  
Dublin

<<Hi Pol. That's it, the pure answer to the Dizzy Cheat. I've tested it on Baby (My very old 464) and it works perfectly. Thank you.

I'm glad you feel that WACCI is excellent value. We do try very hard to make it so and we shall continue to do so for as long as we're wanted. Can't say better than that -Philip>>

#### A MOVING LETTER

Dear Paul, I was just about to start moaning about having to write on the PC (because I still haven't set up Amstrad yet, ROMBO seems to be lurking in a packing box somewhere) and the problems of re-typing your address on a WACCI letter file, when I noticed that you have moved to Flintshire and so I would have to re-type it anyway. I do hope your move was less traumatic than mine!

I had intended to write just to confirm my new address and telephone number and to say that I am happy to re-enter the Help Line if you wish so. The letterhead font is not the happiest choice I have made and so I'll repeat it in English:

{The address}

Tel: 01454 329875 (Bristol)

At present I am working in London and commuting home at weekends - so please don't publish my address yet, my wife would rather not have physical callers. Normal service will be resumed in mid-June.

When I get the CPC up and running I will try to get another Experience running, write to Tigger etc. May I say what a jolly good job you did putting together the 100th Edition (honest) and that I appreciated the WACCI #3.

Must go now. A house to paint and only 30 secs of daylight left.

Regards  
Bob Moffatt  
Bristol

<<Dear Bob, good to hear from you and I hope life settles down for you so that we can have some more wonderful experiences. -Paul>>

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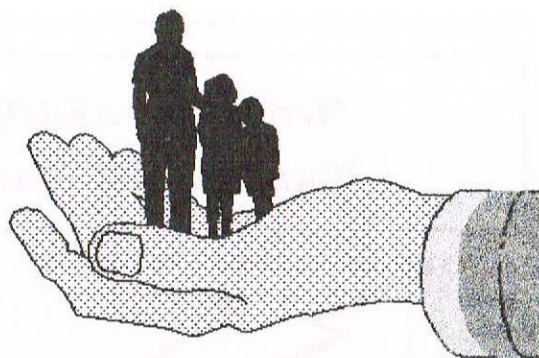
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# THE MARKET STALL



**Your are in the hands of:**  
**Angie Hardwick**  
 23 Station Place, Bloxwich,  
 Walsall, West Midlands WS3 2PH  
 Telephone: 01922 449730

*Another month goes by, the days seem to disappear so quickly I find myself in a panic over the deadline once again. Some good and some bad news this month Paul having resigned his position as Editor and our dear Philip picking up the challenge. A big thank you to Paul for all his hard work his support and good humour have kept me going over some very difficult times I hope he's now going to enjoy a little bit of spare time and relax. Thank you Tigger for taking over, I of all people, appreciate how much hard work goes in to getting the magazine out and I wish you the very best of luck, start taking the tranquilisers now!! <<Paul has sent me a massive supply already. -Philip>>*

## CONVENTION NEWS

Price for lunches are as follows Starters from £1.75 each, Main course £5.95 and sweets at £1.50, please contact me if you want to book. I need some volunteers to do demo's of the following programs on a basic level, Protext, Promerge and Microdesign Help. If there are any programs members want help with please let me know and I'll do my best to arrange something. Thanks, Angie.

**WANTED:** Star LC 24-10 Print Head and Amstrad DMP 3160 Circuit Board.  
 Please Contact: DJ Simpson, 9 Belmont Gardens, London Road, Raunds, Northants NN9 6RN Tel: 01933 622692

**WANTED:** Brunword Elite Rom MKII onwards (with 8Bit Printer Port and examples disc if possible). Please contact: Margaret Schofield, 16 Sunningdale Drive, Bramhall, Stockport, Cheshire. SK7 2LJ  
 Tel: 0161 439 7034 between 7pm & 10pm

**FOR SALE:** Amstrad CPC464 with Colour Monitor having a DKTronics 64k additional memory attached. Amstrad DD1 Disc Drive. 2 off Joysticks Sure Shot & Cruiser. All the above together with manuals, various discs, tapes etc. Price £50.00 P&P extra.

Please contact: D.V.Piears,  
 114 Hampton Dene Road, Hereford HR1 1UJ Tel: 01432 266103.

**FOR SALE:** Amstrad CPC 6128 c/w CP/M plus system discs Amstrad PP8 discs 1,2 & 3 £50.00. Amstrad CTM644 Colour Monitor £50.00. Ocean Top 10 Computer hits (2 discs) £5.00. Die Alien Slime and Feud on tape 50p each.

Magazines as follows:

CWTA May 87, June 87, August 87, Sept 87, Oct 87, Nov 87, Dec 87, Jan 88, Feb 88, March 88, April 88, May 88, June 88, July 88, August 88, Sept 88, all at 50p each.

ACU Feb 87, March 87, April 87 50p ea  
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Please contact: D.J. Simpson,  
 9 Belmont Gardens, London Road, Raunds, Northants. NN9 6RN  
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**FOR SALE:** CPC 6128 & Green Monitor with ext. leads. £45.00. Two Microgenic Systems Rom Boards £10.00 each. Adjustable, 0-7; 8-15 (One of

each already set) £ 17.00 the pair.  
 ROMS: Utopia, Toolkit, Toolbox, Maxam, Maxam 1.5, Promerge and Prospell £5.00 each. FD1 Drive £35.00. 3 1/2" Drive with A B switch £30.00. 5 1/4" Drive £30.00. Discs as follows: £4.00 each Grafman, MS800, Tas-sign, CP/M 2.2 System/util. (two copies) CP/M Plus, Qualitas, Ramdos Disc Drive, Power Basic (two copies), Siren Master Disc.

Brunword, 2IN1 Version 1, Signwriter 3 Discs £9.00 the set.

HISOFT Guide to PASCAL 4T (Simplest of all Pascal Starter Programmes) Manual with three tapes. £5.00. HISOFT PASCAL 80 Manual Plus disc CP/M £8.00. HISOFT "C" Manual & Disc CP/M £8.00. HISOFT MODULA-2 Manual & 2 discs CP/M £10.00. Mix "C" Manual and Disc £8.00. AMX Pagemaker Delux Manual & Disc plus Utilities (no mouse) £10.00. HISOFT Zbasic (A superb basic, similar to Amstrad's but very fast and high precision over 50 decimal places. Very easy to use. Programs may be compiled to disc. £15.00. Azimuth Head Alignment outfit for tape £3.00 Introduction to 'C' By Boris Allan (Collins) £6.00. CPC 464 Firmware (Amstrad) £5.00. DDI-1 Firmware (Amstrad Soft 158A) £3.00. All plus postage & packing.

Please contact: Eric Priestley,  
 1 The Chase, Honiton, Devon, EX14 8QB  
 Tel: 01404 44154

**FOR SALE:** Citizen 120D+ Dot Matrix Printer inc Traction Feeder £80.00 ono  
 Please contact: Margaret Schofield, 16 Sunningdale Drive, Bramhall, Stockport, Cheshire SK7 2LJ  
 Tel: 0161 439 7034 between 7pm & 10pm

# BASIC.OR.NOT.BASIC

## Clive Jackson asks questions...

### OPENOUT offer

Hi everyone, you've probably noticed by now that the EYP column is missing. I must say sorry to those who will miss it but the support wasn't forthcoming. Many of you write to me both through EYP and the Helpline asking for programming help, so Paul's asked me do a regular BASIC programming column.

### WHILE undecided

Alan Tilling put you through your paces with an excellent column called 'Very basic BASIC'. It ran for some time and took you through the simple concepts of programming but what if you're one of the many new members who missed the column and want to learn? Do we begin the new column from scratch or do we continue from where Alan left off? The choice must be yours.

### FOR now-you TO do.survey

To be fair to all members both new and seasoned, I think it would be best to do a small survey ('another one?' I hear you ask). I need this for two reasons. Firstly to find out if there is enough interest and secondly to find out how much you know and have learnt through Alans column. This of course will give me an indication as to where we start.

### NEXT now

Write your answers on a piece of paper, don't worry if you don't understand some of the questions, if you're not sure, put 'No', they're designed to find out if you've understood certain commands such as DIM, WHILE/WEND, loops and the like.

[1] SEX. Male/Female/Yes Please?

That's got that one out of the way!

[2] Have you read Alan Tillings Column 'Very basic BASIC' right through? Y/N

[3] IF yes THEN do you fully understand all of the commands he covered? Y/N

[4] Do you want the column to start teaching programming from scratch. Y/N

[5] Write yes to the bits you can do but using what you've learnt, do you feel confident enough to write a short program that will:-

a) Clear the screen. Y/N

b) Obtain user's name from the keyboard and store it. Y/N

c) Obtain user's age from the keyboard and store it. Y/N

d) Double their age, subtract 10 from it and store it. (equations?) Y/N

e) Wait for a specified key press. Y/N

f) Respond by printing their name, the result of the equation followed by some kind of wise crack. Y/N

[6] Could you do it 15 times for 15 different people. Y/N

[7] As 6 above but could you do it using the DIM command. Y/N

[8] Same again but could you do it without using GOTO command. Y/N

[9] Would you be able to store all of the answers on disc or tape. Y/N

[10] Do you like the new orange flavour Kit-Kat. Y/N

[11] Would you be able to retrieve all of the answers from the disc or tape. Y/N

[12] Do you know what flowcharting is. Y/N

[13] Do you want to learn about flowcharting as well as programming. Y/N

[14] In general, what elements of programming confuse you? If any:-

[15] Have you any suggestions or ideas for the new column:-

### WEND

Send your answers to me at my new address: 22 Cornwall Road, Stamford, Lincs PE9 1LQ and I'll get cracking on the results. You have plenty of time to get your surveys in. If we say by the end of July, that gives our overseas members the chance to have a say as well. If you don't send in your replies, simple... NO NEW COLUMN!

### CLOSEOUT Jacko

### INPUT Editor

Please let Clive know your needs so he can help you get the most out of your CPC.

### WHILE NOT asleep

Get your answers to Clive asap - taeverso - Paul.

# PROTEXT vs PD SPELL CHECKERS

With Peter Rogerson

*There are two reasons for wanting to use a spell-checker. Firstly to intercept genuine typing errors before going public: makes you seem illiterate. Secondly to put right any mistakes you might make out of pure unadulterated ignorance, the public display of which has the same result as accidental blunders.*

## INTRO

A careful examination of your text can usually sort out the first kind but look as hard as you can the chances are you won't spot the second kind because you've written something you believe to be perfectly correct even though it isn't. It comes as a shock to realise that you're less perfect than you thought you were, but that shock is soothed somewhat if the software that does the telling is nice to you.

## THE CONTENDERS

Prospell is the most popular commercial program, so how does it compare with the best the Public Domain has to offer? There are Ispell (courtesy of Paul) and Richard Fairhurst's Powerspell.

## PUBLIC DOMAIN STUFF

Firstly for the PD programs. They have smaller dictionaries (Powerspell can manage 9-10,000 words with a full user-defined dictionary according to my calculations) and Ispell comes in with nearly 14,000.

The dictionaries are held in memory, which restricts them somewhat. After all, there's a limit to what can be squeezed into even 128k of RAM. Ispell has two dictionaries, one for words up to 8 letters in length and the other for larger words of up to 12 letters, which means the program requires to do two passes over the document. It also requires ASCII text files, which means you'll probably need to save an extra copy in raw ASCII as well as an ordinary copy in the particular format favoured by your WP.

## ARNOR SC

Prospell, on the other hand, keeps its dictionary on a disc which it

constantly accesses whilst checking. This allows a dictionary of up to about 40,000 words, obviously much larger than the PD programs. Indeed, the space for user-words (additional to the original 33000 words) is almost as large as Powerspell offers in total. There is still a limitation, though, this time the formatted 178k of user-space on an Amsdos disc.

The Prospell process is different from the others, which check the text in sequence. It sorts the words into an alphabetical list (off-screen) and then checks it, which allows a complete check in one pass with no disc-changes. With the text disc in drive A and the dictionary disc in drive B (or vice-versa) it is hugely userfriendly.

## IS SIZE IMPORTANT

Do we need big dictionaries on spell-checkers? Well, not really, if we're prepared to be patient and tell our CPCs to ignore a huge number of words it thinks are wrong because it's never been taught them. Even the most humble spell checker will trap most typing mistakes. The trouble is the human beast can easily become lazy and not notice these mistakes if they're lost in a great number of correctly spelled words that the program simply doesn't know. So it's clear that the fewer words the spell-checker stops at the better.

## SHIFTY OR WHAT

Prospell comes close to knowing enough words. But it has its failings. I would have liked it to recognise numbers as mistakes if they're in a string of letters. A little quirk of my own is to be inadequate with the shift key and speech marks frequently appear as *Zs* whilst apostrophes put in

appearances as *7s*. So I might inadvertently type *they7ve* and Prospell splits it up into *they* and *ve* and tells me the latter part is wrong. Fair enough, but it's already passed the *they* as being correct and my only option so far as putting things right is to (i)gnore the *ve* and go back to the relevant part of the text once the spell-checking is over and done with and sort it out by hand.

Then the advantage of the alphabetical sorting becomes a disadvantage as I have no way of knowing exactly where in the text the *they7ve* is, especially in a long document.

## SLOW SLOW DISC DISC SLOW

Because of Prospell's disc-based dictionary it's horribly slow when you ask it to (L)ook for the correct spelling of a word. I find it easier to have one of those papery-dictionary-things and check in that when the program pauses with an unknown word. Nine times out of ten I've written the word correctly but it simply isn't amongst the 34,000-odd that I have at the moment on my dictionary disc.

The fact is, and I hate saying this, the CPC as it stands can't cope with huge lists of words in memory so they must be on disc which are formatted to a measly 178k, and anyway constant disc-accessing is bound to be slow.

Powerspell's (C)onsult [similar to Prospell's (L)ook] is virtually instantaneous but Ispell doesn't have any consultative feature. In a test with two words from this article, Prospell because it's a proper noun and papery, because it's not a real word, Powerspell's (C)onsult took a second or so to show me there was no near match for the first and Prospell took 34 seconds! But the down-side of Powerspell's (C)onsult is you start looking at the place in the dictionary where the unknown word should be if your spelling is correct, and you



search manually from there, going either to the (n)ext word or the (p)revious one. Prospell doesn't assume that you've started with the right letter, but looks through its entire 30000+ words for a near-match.

With papery, Prospell took 8 seconds to offer paper and papers, Powerspell had the same and paperwork in addition and (Paul - this is a great sadness) Ispell didn't recognize a mistake because papery is part of three hyphenated words which the program treats as one, and it's longer than the maximum twelve letters.

Another quirk of Prospell's is its scanning and sorting routine which it does before it actually starts checking. If you're in a hurry it can be a nuisance, especially with lengthy documents of above 20k. On the other hand the PD checkers both leap into action at the word go.

But taken as a whole and bearing in mind limitations of equipment Prospell is a pretty good compromise. And if you're both an adequate speller and an accurate typist it can be very fast indeed. Added to that is the fact that it runs within Protext whilst the PD programs don't (though if you are limited to disc based software you're

left with only about 10k for documents if you choose to have both programs in memory simultaneously). The ideal set-up is the ROM versions of both Protext and Prospell together with a spoonful of patience and a cupful of love. Or something like that.

#### MARK MY WORDS

Now for the marks, as percentages:

**Ispell - 65%** I would like to have given it 100% or even more, but it required the text as an ASCII file and took the longest of the three when checking this article. In addition, most people struggle more with long words than short ones, and Ispell appears to limit its files to 12 letters. Sorry, Paul. <<Boo, hiss -P>>

**Powerspell - 75%** A few disc utilities, like the ability to CATalogue and ERASE files would have pushed the mark up a bit. This comes close to the high-powered PC programs in appearance and it would be nice to see how it performed with a bigger dictionary on a Brunword-sized rom.

**Prospell - 85%** Very user friendly, loads of features, but the [L]ook

command is just too slow. However, if you like finding anagrams you might like to add a couple more marks - though that option's slow, too. It's quirky, antiquated, but it works. If it had been at PD prices I might have added another 10 to the mark.

When I put an early version of this article through the three spell-checkers (Powerspell & Prospell with additional user-vocabulary, and Ispell as it comes) the results were as follows:

Prospell	- 17 different words unrecognized in 1.28 mins
Powerspell	- 45 different words unrecognized in 4.05 mins
Ispell	- 52 different words unrecognized in 5.19 mins

I didn't use (L)ook but chose to (I)gnore all occurrences of every unknown word. Had I needed to do a bit of consulting dictionaries the above timings might have been a lot different, with maybe Prospell ending up slowest and Ispell (by default) fastest.

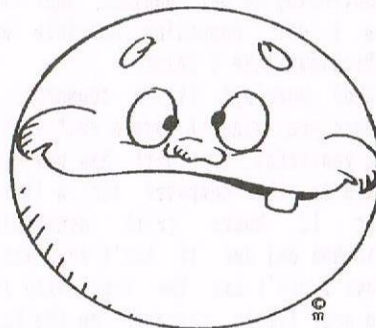
Peter Rogerson.

# The one and only Second Great WACCI Convention

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*To simply book your ticket for a great day out, send £2.00 to WACCI and avoid any last minute panic, as there are only a limited number of tickets available.*

# THE WIZZARD PRINTER PORT



By

Philip "Tiger" DiRichleau



*One of the pleasures in being a fully qualified Techno-Rat is the occasional hardware review that I get asked to write. This is mainly because I get to take apart that which someone else has carefully put together. Take last month. I got to look at the new ComSoft Rombox (and dismantle it a little), before the majority of WACCI members even knew of its existence. Now take this month, I get to rip apart (read dismantle gently) the new Wizard 8 Bit Printer Port. Boy, I'm really getting to love this lark...*

## SO WHAT DOES IT DO

Amstrad, in their wisdom, created the CPC with a 7-bit Printer Port, which, basically, means that we can't print out any characters with an ASCII value higher than 127. Goodbye to all those wonderful boxing characters, the Greek alphabet, and other assorted goodies, many of which grace the pages of WACCI each month. Say hello to the 'Wizard'. It changes the 7-bit port into an 8-bit port, with the help of a bit of circuit board, a few components and a short patch program.

## THE PROGRAM

Interesting bit of programming this, even if it is only a few lines. It patches the part of the computer's Firmware which sends the character to the printer and directs it, instead, to a little program very high in memory, outside the normal user range, which then does something to the coding which eventually sends an 8-bit signal to the printer. This means that it won't get overwritten by that many programs. It works with Protex, with Tasword and with quite a few PD Programs as well. To be honest, I don't think it's going to work with CP/M though but that's not a great loss. I'm going to have to disassemble the code soon and have a good poke around with it, see what else I can make it do.

## THE INTERESTING BIT

This is the hardware side of things. The 'Wizard' consists of a long length of printer cable that looks a few months pregnant. There's a bump in the

middle of it, which is covered in a sheath of plastic (I had another smile there, but decided not to use it). One has to wonder what's beneath this. Where's my scalpel and I'll tell you. Nurse, hand me the gloves.

What a very strange looking circuit board. To start with, it's bright red in colour and I mean bright, with seven components on it with the cable clipped in the middle. The soldering is very neat and the whole thing looks very durable. It'll need to be. Time to give this beast a good testing, the sort of testing that only a Techno-Rat can devise for a poor peripheral.

## THE TEST

It works and it works fine, even without the covering, though I suspect it would probably be better with it left on. Ooppps, I appear to have given it a sudden shock by placing a whole load of discs on top of the poor thing. Yup, it still appears to be functioning as per design. What else can I do? Something horrible and DiRichleau-like I think.

Good morning! It is tomorrow, I assure you, since I wrote that little lot yesterday. The port has now been fixed to the computer for a little over 13 hours (with everything switched on) and it isn't even warm. Shame I can't say the same thing for the poor little rampacks on the back of her. Time for a cool down I think.

## THE SERIOUS REVIEW BIT

Time to be a little more serious now. One of the main complaints I have about bits you hang off the back of

the computer, is the way they seem totally incapable of withstanding even the slightest bit of abuse. Give them a little flick and they blow themselves apart at the seams. I'm pleased to say that the 'Wizard' does not feature on this list. I've spilt tea on it, dropped discs on it, given a couple of really good impacts (the sort of stuff that any computer equipment may have to face) and it's still working fine.

I don't suggest for a moment that anyone actually gives equipment the sort of test that I gave to the 'Wizard', it's not at all sensible (No-one in their right mind would accuse me of being sensible). Merline Serve (ITGA) let WACCI have one for review purpose and let me have one for the real serious bench testing. The fact that it still functions is quite remarkable.

## THE PENNIES

The Wizard 8 Bit Printer Port is available from Merline Serve at the normal Merline Serve Address, which is plastered all over the place in WACCI (Like anywhere the name Angela or Arthur Cook is mentioned), and costs £15 each which isn't too bad at all. WACCI members, as with all Merline Serve stuff, get a 10% discount off that and, lo, for this issue only, you can grab one for a mere £12 instead.

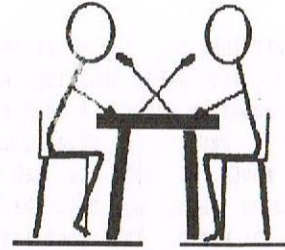
## AND FINALLY...

This is a serious bit of kit. It's durable, it does an excellent job and it remains invisible when not actually in use. Now, the only question I have to ask is this, are they going to want this one back, because I don't think they're going to like me when they see it...

*Philip.*

*<<I use one of the little rascals at the back of my CPC. -Paul>>*

# THE ANGELA COOK INTERVIEW



## THIS MONTH IT'S PAUL DWERRYHOUSE

*Dare I ask Paul to write the introduction to his very own interview? No, best not. I don't think we ever coined a name for Paul either. Something with Valium in it might not go amiss. I think I had better start looking out for things flying my way from the Wales area.*

### INTRO

Paul has been a wonderful long standing member and Editor of WACCI. I'm sure he has all of our warmest thanks. Only the Editor knows how much work is put into WACCI, but unearthed here are some of the goings on behind the scenes of WACCI and what makes Paul tick (it's not clockwork).

**WACCI)** How long have you been Editing the magazine and how much does it feel like it was since the beginning of time?

**Paul)** Funny you should ask that question Angela. You will have heard by now that I decided to step down as editor last Christmas but I would to continue until at least issue 100. I wanted to see that one published in my time as editor.

I started with issue 81 in August 1994 and to be truthful I never wanted to be editor of the club magazine. Clive Bellaby stopped editing and left the club, very hastily. I really didn't want WACCI to fold so I took on the job. I was very lucky with the club members that actively supported the running of the club as they helped me greatly. Without them I never could have done it.

That first edition was a real nightmare as I became editor in the first week of August and it was the August edition I was trying to get together! It went in the post at the end of the month and I must confess it was hectic. From a cold start to getting the magazine out in three weeks was horrendous but I learnt so much. And then Prontaprint brought the

next headache. The quality of that magazine was poor because their A3 copier couldn't cope and kept jamming the paper. To get over this they used heavier weight paper. Fine but if you have 300 envelopes stamped up to 100 gram weight and find you need to increase the postage by 7p then that is a lot of stamps. Can you buy 7p stamps, no, 5p and 2p are needed. Oh boy, 600 more stamps to lick.

Life got better after that and I started to enjoy my new role.

**W)** What is the motivation behind all the hard work of WACCI?

**P)** Hard question or what? Actually it is very easy to answer. The very first issue of WACCI I received was number 28. It landed on my doormat on a Saturday morning, sometime back in 1988, and I took back to bed to read - gosh did I enjoy it. I've been hooked ever since. Of course, the club is really about its members and the fact that they are a real good bunch aids considering the daily slog.

**W)** What was the most satisfying part of editing WACCI?

**P)** Oh that's easy - the finished product. I have enjoyed laying out and upping the quality of the look for the magazine. Presentation is my thing.

**W)** What really makes you want to put WACCI through a shredder?

**P)** Errrrmm... I think you are after my pet hates on this one. Well, I shall have to tread carefully here. Certain

members have driven me up the wall with their personal needs but I don't blame them - after all they are only using the club to sort their problems out. If I have one BIG pet hate it's those members who thought they could ring me whenever they felt it suited them. I thought I'd sorted that problem out but there is always one....

**W)** Is there any rhyme or reason as to the order that articles get printed?

**P)** Oh yes there is believe it or not. Date order is the first but whether I can remember what has been sent in and where the disc is seems to dictate generally. So many things to do and so little time. Who needs a filing system anyway? <<What is a filing system anyway? -Angela>>

**W)** Are there any chances of depriving we addicts of our monthly WACCI fix by going on holiday again this year?

**P)** Ask Philip. <<No, certainly not. -Philip>>

**W)** What is generally involved in the production of WACCI - can you describe the stages of a typical WACCI month (is there such a thing)?

**P)** I'm afraid that each month is very much the same but that doesn't mean boring. Each day brings the postlady to our door and I mean each day. In the four and a half years I've been connected with WACCI only one or two days have been mail free. I like Sundays though <<I don't, it means no post and I've got to do the Hoovering -Angela>>.

So there is a daily input of membership updates, new members and enquiries. I do this every day, it

doesn't take long but leave it for a week and it gets a bit daunting. Next comes the magazine pages. A good rule is a page a day - 32 pages almost equals a month. I like to get the feature pages under my belt by the middle of the month. That just leaves the regular input from Angie, Philip, John etc., and that means I don't need to panic as the month end approaches. But I panic anyway. A little known fact is that Frank Neatherway proof-reads the feature pages most months to ensure my rotten appreciation of the English language doesn't spoil your read.

I normally spend two to three hours per evening on WACCI matters but that can grow to four to five hours during intensive periods. At posting time the whole family join in with the putting, licking and sticking process. The last issue, a double one with a flyer, took James and myself six hours to do.

Then there are the mundane bits. I purchase the stationary from Office World in Chester as they are on my way home as well as being the only decent bulk supplier in the area. Yes, I'm afraid that the glamorous job as editor involves buying C4 envelopes, 500 at a time, on my way home.

W) What are your plans for the future of WACCI? Television adverts? Cover disc? Increased overseas membership? Getting through this interview without being bruised?

P) The future of WACCI is in the hands of its members. I'm sure that John Bowley and Philip DiRichleau (with a little bit of me) will look after the needs of members. The single two most important factors is the numbers game when it comes to the membership and the strength of the contributing members. WACCI is, indeed, rich at present.

W) It has been suggested that perhaps WACCI should branch out to other formats of computer. Not necessarily PC's (although we all know you use one Paul), but perhaps Spectrum's, PCW's or other 8 Bit machines. Where does WACCI stand on this matter?

P) Good question. Can I ask who suggested that WACCI should branch out? I feel that Brian Watson and 8BIT

are filling that niche and the strength of WACCI is that it only concentrates on the CPC. I don't think that we should change but I'm not in charge now!

W) It was a friend of mine, Andy. No, he's not a member, although he does use my CPC and tickle me a lot. How much heat is taken off of you by people such as Ron Izett and Frank Neatherway?

P) Ron has been extremely helpful to me, as have Frank Neatherway and Philip. The newly appointed Wish List Manager, Wishful Ernie, takes a load off my shoulders as do the regular contributors including you Angela. WACCI is now about team work and this will be increasing as the new management takes over from me.

W) Do you use your CPC for anything other than producing WACCI? Are you really a closet games player?

P) No. Boring aren't I.

W) What are your plans for this year's Convention, karaoke maybe?

P) I really don't have much input into the Convention believe it or not. Angie does the lion's share, I just produce the tickets and pay the bills. What is fair to say is that we all learnt a lot from last year and this

year's should be so much better. At least most of us know what we look like and we won't get a shock realising whom we are standing next to.

W) Mmmm, maybe Paul gyrating to a Gary Glitter hit might not be such a good idea after all. Apart from WACCI and computing in general, do you have any other hobbies or interests - don't fill up the magazine with cricket though, or gardening for that matter either.

P) What's a hobby? <<It's something you're supposed to do in your spare time but then generally takes over your life -Angela>> I haven't had time for one of them for ages. I have to admit to liking a pint with my mates and you are so right about the cricket. I've got Sky and they beam loads of cricket from around the world, mainly at unearthly hours of the day.

AND FINALLY...

There'll be another grilling next month, I just haven't asked anyone yet. One day I might get ahead of myself and know who it's going to be. That would involve being organised though. These last little pieces of the interviews always seem to be the same, so there may not be one next time.

Angela.

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first loaded into Protex. Type DOC and resave, and then future loads are in DOC mode. I find it useful to have a CTRLX-e code (for Elite) at the very beginning - I prefer it to Pica, my printer's alternative - and my address at the end, with the cursor placed where I will first need it, where I will type the date.

#### LINE UP

One other thing. Proclip resets the line-spacing in order, I suppose, to make up for the room taken by the artwork (being >oc commands my badge

doesn't count as even one line). Rather than use Richard's spacing I prefer the normal default and change the penultimate line of the listing provided by Proclip to >oc 27 65 12. The program states how many print lines the drawing takes in a >co statement at the beginning (second line) and I reduce the first page by that number and insert a >PA page throw at that point. It looks neater, and takes very little extra time.

#### AND FINALLY...

In conclusion Proclip fills a gap in

CPC software. I can think of no reason why CPC users need feel like poor relations in the computing world: Protex is an excellent WP package and with Proclip it becomes that little bit more sophisticated. It is extended without moving in the direction of DTP, and provides us with a means of being as egotistical as our grandest dreams allow as we sit huddled in front of our machines and set about crafting letterheads more complex than any found in the history of heraldry, and on our humble CPCs!

Peter Rogerson



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# The ABC of PD

## THIS MONTH SOME NEW PD

*For a change this month, I will be reviewing a new PD disc which has just been added to the PD Library - PD Disc 118 - Games Disc 7, while trying to eat an Easter Egg at the same time. Is this a world first? Read on to find out!*

### AMSTROID

This is a shoot'em up game. It is based on the same principal as The Galactic Plague (one of the games given free with the 464 at one time), except that there is one major difference - you can actually move your spaceship around the screen. Whereas with the Galactic Plague you can only stay on the bottom of the screen and move from side to side.

A nice touch to this game is that if you are a Thunderbirds fan, you get to hear some of the theme music from the show. This comes at the start with a countdown and also at the end, when you have lost all of your lives. A brilliant game which I would thoroughly recommend. It is worth getting the PD Disc just for this game alone. 10/10

### FLIPFLOP

This is a puzzle game which is played against the computer. You play on a 3x3 grid, which contains nine squares - either green or black. The object of the game is to be the one to "flip" over the last black square. At the beginning you have the option of starting first or the computer can start first. However, I found that it did not matter who went first, the computer always won. A good game even though it was a little bit on the hard side. 6/10

### GALAXIAN

Another shoot'em up game. Again, this bears an uncanny resemblance to The Galactic Plague - even more so than Amstroid does. The difference being that the aliens can shoot back at you. At the start of the game you get three lives. This is increased for every four quadrants that you complete. A

point worth noting is that this is a joystick only game. Not a bad game despite the fact that it is very similar to The Galactic Plague. 6/10

### HANGMAN

This is one of my all time favourite games. Based on the classic game, except that this is a three-dimensional version of it. This feature enhances the game further and makes you want to play it again and again! There is only one word for this game and that is brilliant. 9/10

### KARL

Karl is a platform game. The object of the game is to collect a key from each of the 40 different rooms. Once these keys have been collected, you leave by the exit and open the treasure chest.

I found that this was a very hard game indeed. I could not even get past the first room! This was because I could not kill any of the nasty creatures that got in my way. This spoils the enjoyment of the game. Very disappointing. 3/10

### PUZZNIX

Another puzzle game. The aim of the game is to make all of the blocks disappear. As soon as at least two blocks are next to each other or above each other they disappear. To get an odd number of blocks to disappear you must get at least three blocks next to each other. You can move the blocks using a joystick or the keyboard. This is quite an enjoyable game, although I found it a little on the hard side.

7/10

### RUBICK'S

Yes, you have guessed it. The famous coloured cube is back - only this time as a game on your favourite computer. The aim is of course the same as the real thing. However, if you currently own a green screen like myself (this will soon be changing to a colour one), this is rather difficult as it is hard to see the colours. A good game none the less and will keep you going for hours. 7/10

### WORDSPAS

A bit like Hangman this one, only it is even more fun. The idea of the game is to guess a word chosen by the computer from its list and save a man from drowning in a beaker of water. Every letter that is not in the word pushes the man one step closer to disaster. Great fun. 10/10

### WRITE IT

This is an educational game. It tests the player on homonyms and other commonly confused words e.g. quite and quiet. The computer generates a sentence and you fill in the missing word from the two given. 9/10

### AXYS

The aim of the game is to shoot at the enemy and get to the end of the level. Overall 4 out of 10

### SPOTS

Turn the tiles over. The player who turns over the last one wins. 5/10

### LES MINGS

This is a PD version of Lemmings and great fun it is too. 8/10

### AND FINALLY...

You will all be pleased to know that I managed not to get any chocolate onto my fingers and the keyboard. Keep up the good work everybody. <<Mark>>

explain how an EPROM is programmed....

Look at the 27128 EPROM pin-out shown in figure 1 below:

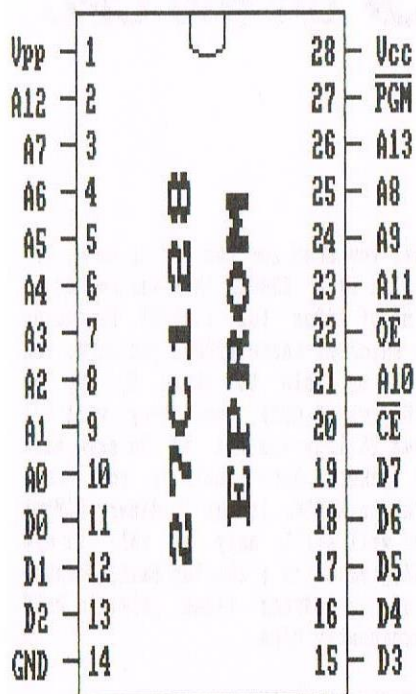


Figure 1

- A0 - A13 : The address lines (16384 bytes -  $2^{14}$ ).
- D0 - D7 : The data lines.
- Vcc : The 5V supply line.
- GND : The Ground supply line.
- /CE : Chip Enable (active low "0" means enabled).
- /OE : Output Enable (active low "0" means enabled).
- Vpp : The Programming Voltage supply line.
- /PGM : The Programming Pulse line.

To program this chip an algorithm like this would be used:

- a) Set up chip supplies Vcc and GND - see note 1.
- b) Set up Programming Voltage Vpp - see note 2.
- c) Enable chip - /CE set low.
- d) Disable chip Output - /OE set high
- e) Set up address to be programmed on A0 - A13.
- f) Set up value to be programmed on D0 - D7 - see note 3.
- g) Apply programming Pulse to /PGM - see note 4.
- h) Go back to step e for every byte to be programmed.

**NOTES:**

- 1) Normally the supply is 5V, but during programming some chips like to have 6V.
- 2) Very chip dependant! Can be 12.5V, 21/25V. Generally only older chips use the higher voltage, and of those only the 2716 needs 25V. If you do not know what the programming voltage is, try the low one first!
- 3) An unprogrammed byte has a value of &FF. It is only possible to program a bit to go from "1" to "0". Once a bit is "0" it must be erased back to "1".
- 4) The duration and polarity of the pulse is important. Usually they are negative going, except for the 2716 when they must be positive going. The duration can be either 1ms or 40ms. Newer chips tend to use the short pulse, which means you can program a new 27C128 in under 20 seconds. An older 27C128, that needs a 40ms pulse, would take over 10 minutes to program. Some chips also require an additional programming pulse (usually of short

duration) some time after the main pulse. If you do not know what pulse duration to use try the short one first.

The main complication of EPROM programmers is that they have to handle EPROMs that do not have the same number of legs, therefore, it has to have some sort of signal routing logic to ensure that the right signal arrives at the correct leg.

Modern EPROM programmers are usually micro-computers in their own right, and have software that can cope with all the different types of EPROM. They will automatically select the correct programming voltage and program pulse duration etc., assuming that they have been correctly told the type of EPROM they have to program! Some really clever EPROM programmers can even automatically identify the type of EPROM they have by reading the manufacturer's own pre-programmed identification value.

**HOW ARE EPROMS ERASED**

Ultra-violet light! This is the stuff that causes sunburn and skin-cancer etc. But to erase an EPROM you need more than what even the Sun provides on a good day. That doesn't mean that

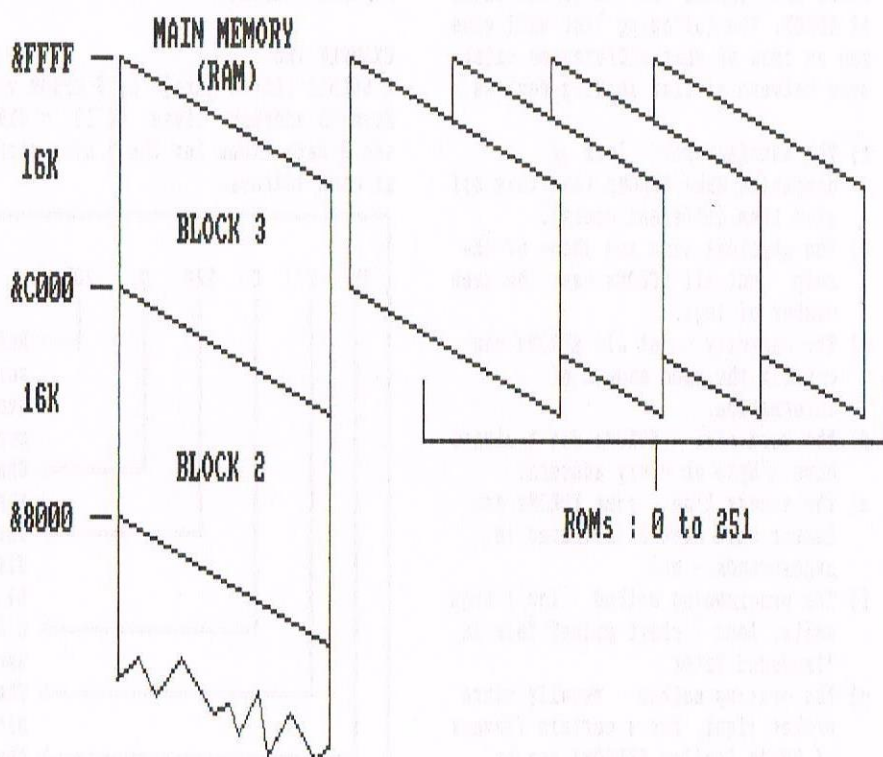
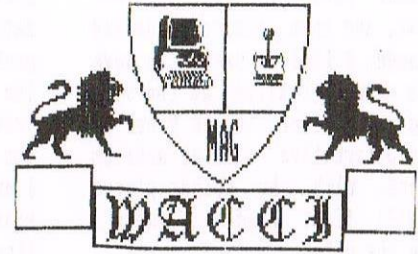


Figure 2 - THE CPC MEMORY DIAGRAM

# THE PROCLIP REVIEW

By

Peter Rogerson



*When Richard Narain modestly announced Proclip in Fair Comment recently I felt I ought to enquire a bit further. The idea that any kind of artwork could be ported into Protex was more than interesting. I had always believed that even a simple line was an impossibility.*

## INTRO

I received the disc containing more than just the program (he even sent me the PD art package GPaint in case I hadn't got it) by return of post and within an hour was convinced that Proclip would have made Richard quite a few pennies if he'd released it in the CPCs' heyday. As he didn't then the best he can hope for is the praise and respect of fellow CPCers, which isn't fair, really, but that's the way of the world.

Proclip does what it sets out to do. It reduces a piece of clip art or a logo to a form that Protex can digest and reproduce. And that's it, really. Rather than an on-screen image there are screens of output commands that combine to make a picture, and it's those codes that Proclip produces. It might be a tad off-putting seeing row after row of >oc commands, but it isn't important. The original was produced on an art-package or similar and was converted because it was satisfactory. Little more need be said, I suppose. So let's get practical and create a simple letterhead using whatever software might be necessary.

## FIRST STEP

When I produced the offering here I used MicroDesign (not plus, unfortunately), Powerpage 128 and GPaint as well as Proclip, but it wasn't really as complicated as that shopping-list might seem to indicate. Maybe there's a single piece of software somewhere that does everything I wanted to do, but I haven't got it and as my need for art and DTP packages isn't that great I've

never been prepared to pay for more than I've already got, though I'll really have to get MicroDesign's plus enhancer one day.

## THE ARTY BIT

My WACCI shield required a font from MicroDesign's icon sets, clip art that I already had in .CUT files and GPaint's ability to reduce the size of images.

Firstly I drew a rough sketch of what I wanted the finished product to look like. It didn't have to be particularly meaningful and I could cheat by using existing clip-art. Once I was satisfied I loaded MicroDesign and drew the shield (arcs of circles), the box and the word WACCI. This I saved to disc and then loaded Powerpage into which I imported the clipart (computer, joystick and lion - frivolous, I know, but it's only an example) which I saved out as a .SCR file for GPaint. Using Gpaint I reduced the three images and resaved in a .SCR format.

Back in Powerpage I copied the lion and flipped one of the big cats on its X axis. Then I imported the shield directly into Powerpage in .DR format. It works this way round, importing .DR files into Powerpage, though not, it seems, the other way round (Powerpage to MicroDesign). The shield was a bit on the big side, and Powerpage likes to split larger .DR files into two and display the two halves the wrong way round. Simply mark one half and using the Block command copy it exactly next to the other. Note: it'll have to be shifted slightly down the screen to match perfectly. MicroDesign has a CONVERT program, but Powerpage

doesn't, so we have to make do with this.

Then the rest of the clip art was copied into the relevant parts of the badge (they needed tidying up a bit - the reducing process destroys some of the detail - use CNTR-Z for Powerpage's zoom mode.)

## PROCLIP TIME FOLKS

Finally, the whole lot was saved as a .SCR file and Proclip booted up. It's a matter of a couple of seconds work to mark the clip-art with Proclip's expandable rectangle and setting the program in motion. One thing, though: you are asked to provide a figure for the side margin. I've used 20, but fear not if you get it wrong: it can easily be amended directly in Protex itself after trial-and-error gives you the most satisfactory positioning. Merely amend the second >oc line. The program takes a few minutes to complete the file for use in Protex, time for a cup of coffee.

The above might seem complex, but it isn't, and maybe you've got a single program that reduces images, flips on the X axis and so on, in which case it's easy. My effort took about 45 minutes, though I popped to the shops while Proclip did its sums!

## NEVER MIND THE SIZE...

The printed image, from Protex, is identical to the one prepared on the mix of other software, the print quality good on my Citizen 120D+. One thing, though: it uses a huge amount of memory. My WACCI effort is 16k in Protex, leaving disc users with only 7k for letters. That's a long letter, though, much longer than most you'll need to write.

## PICA vs ELITE

One thing you'll have noticed is that Proclip files are in PROG mode when



# TROPICAL is BEAUTIFUL

## A trip down Greenhouse Lane

Hello all and welcome to a new regular series in WACCI. This one has been written by Lesley and myself and it basically chats about the tropical greenhouse we have at the bottom of our garden. Since most people who visit are quite taken aback by it we felt we should share it with WACCI readers.

### INTRO

This month we are going to look at one of our favourite Orchids, the *Aerangis* (*Orchidaceae*). If only we could put a colour photograph in so you could see its breath taking beauty.

### WHAT IS IT

It is a genus of 70 species of tropical, perennial, evergreen, epiphytic orchids from Africa and Madagascar. They have erect stems which occasionally produce one or more basal shoots. These plants require a warm greenhouse.

The following three species have sometimes been listed in the genus *Angraecum*. They usually have thick, strap-shaped, blue-green leaves unequally bi-lobed at the tips and arranged on a short stem. The long-spurred flowers, which are borne on spikes, are basically white or cream, shaded with green or salmon.

### SPECIES ONE

*A. biloba*. Tropical Africa. The flowers, 1.5 - 2 inches across, which are carried on pendulous stems, 6-12 inches long, are fragrant at night. They are white, occasionally flushed with pink and with salmon-orange spurs; they appear from October to December.

### SPECIES TWO

*A. kotschyana*. Tropical Africa. This species often sold under the erroneous name of *A. kotschyi*. It has pendulous flower stems up to 18 inches long,

each carrying up to 15 fragrant flowers. They appear from July to September and are 1-1.5 inches wide, pure white with 6-9 inches long spirally-twisted salmon-pink spurs.



*Aerangis kotschyana*

### SPECIES TWO AGAIN

*A. kotschyi*: see *A. kotschyana*.

### SPECIES THREE

*A. rhodosticta*. Tropical Africa. A popular species, bearing up to 12 cream-white flowers with orange-red

central columns on each 9 inches long stem. The 1 inch wide flowers have green-tinged spurs; they appear from April to August.

### CULTIVATION

Grow *aerangis* in a compost made up of equal parts (by volume) bark or peat Sphagnum moss, and in perforated pans or baskets, 5 to 6 inches across.

These plants thrive in some shade, but full winter light, in a warm greenhouse. A humid atmosphere should be maintained by frequent damping down. Give an occasional liquid feed from May to September and ventilate the greenhouse daily between April and October. Between October and April open the ventilators only on mild days. Maintain a minimum winter temperature of 16°C (61°F). During the growing season, water copiously but decrease the quantity in winter during the period of minimum growth.

### PROPAGATION

The lower part of each stem usually produces basal shoots which may be used as cuttings when they reach a length of 3 to 4 inches, usually in April or May.

Insert the cuttings in 2 inch pots of the growing compost and place in a propagating case at a temperature of 18-21°C (64-70°F). When rooted, pot on the cuttings as necessary.

### PESTS AND DISEASES

Generally trouble-free.

### AND FINALLY...

Next month (Philip willing) we will be looking at the Marsh Orchid, a plant that loves the calcareous environment. Take care all. *Lesley and Paul.*

# A Guide to EPROMs on the CPC

With Ian Neill

*In this article I will cover (briefly) the different sorts of EPROMs you can get, and what sorts can be used with the CPC. I will also explain the mechanism behind how they are actually programmed, and then, in as much detail as I can, how they are interfaced to the CPC.*

## INTRO

Hopefully you are now fully armed with what I suggested in Part One.

## WHAT'S AN EPROM

EPROM stands for Erasable Programmable Read Only Memory. It is like a ROM because it retains its contents even when it has no power supply. Unlike a ROM, it is possible to change an EPROM's contents, but don't compare this ability to that of RAM, as the method of programming is completely different!

## WHAT TYPE IS IT

There are dozens of different kinds of EPROM. The following list will give you an idea of what differences exist, even between similar looking devices:

- The manufacturer - lots of companies make EPROMs (and they all give them different codes).
- The physical size and shape of the chip - not all EPROMs have the same number of legs.
- The capacity - not all EPROMs can contain the same amount of information.
- The word size - EPROMs don't always have a byte at every address.
- The access time - some EPROMs are faster than others (measured in nanoseconds - ns).
- The programming method - low / high volts, long / short pulse? This is discussed later.
- The erasing method - usually ultra violet light, but a certain flavour of EPROM (called EEPROM) can be erased electrically!

*Pick an EPROM, but not any EPROM!*

## FAQ

Considering the above list, it is not surprising that one of the most common questions I get is simply "What type of EPROM do I need?". This is often followed by "If I send you the money, can you get it for me?".

The capacity and word size decide how many address lines and data lines the EPROM has. Here are some examples to explain:

### EXAMPLE ONE

A 64Kbit (65536 bits) by 1 EPROM will have 16 address lines ( $2^{16} = 65536$ ) and 1 data line for the 1 bit stored at each address.

### EXAMPLE TWO

A 64Kbit (65536 bits) by 8 EPROM will have 13 address lines ( $2^{13} = 8192$ ) and 8 data lines for the 8 bits stored at each address.

What you need for the CPC is an 8, 16, or 32K by 8 EPROM that has an access time of 250ns (or faster). Depending on which of these EPROMs you have, you will be able to store 8, 16, or 32Kbytes of data, but they will all have 28 legs and fit in the same size of socket. Note that if you use a 32Kbyte EPROM in an ordinary ROMBOX you will still only be able to use 16Kbytes of it (the top half) because 1 of the address lines (A14) is held permanently high.

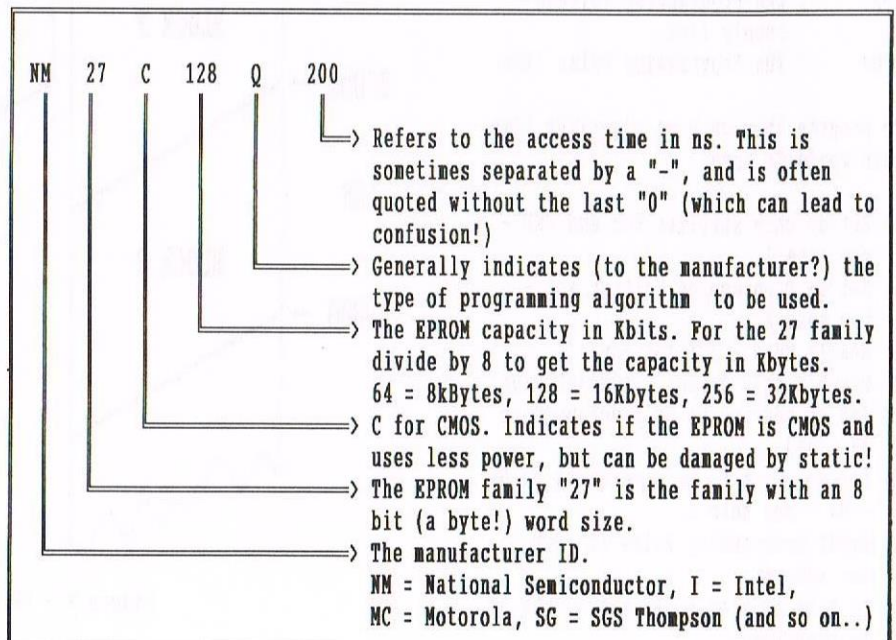
## A TABLE IS NEEDED

Unfortunately the markings on an EPROM can appear cryptic so the table below shows how to decode them.

Sometimes the EPROM will have "12.5V" or "21V" printed on it. This indicates the programming voltage that should be used when programming the EPROM.

## HOW EPROMS ARE PROGRAMMED

With an EPROM programmer of course! This is a device that is over complicated for no reason - I will



the Sun can't erase EPROMs - given enough time it will!

An EPROM eraser is simply an ultra-violet light source operated via a timer switch. They usually have a tray which you put EPROMs onto and then slide under the UV light. Most will have a micro-switch that de-powers the UV light when the tray is out.

The UV light enters the EPROM via the little glass window on the top. Covering this, with a label for example, will prevent the EPROM being erased (assuming the the label is not transparent to UV light!)

In a typical EPROM eraser, an EPROM will be completely erased in about 15 to 20 minutes. However I have found that most EPROMs are wiped clean in about 12 minutes. What affects the time is how close the EPROM is to the UV light, and how clean its window is (beware of the sticky stuff from an old label!)

#### INTERFACING EPROMS TO THE CPC

As can be seen in Figure 2, EPROMs are "paged" in over the last 16K (address range &C000 to &FFFF) of the CPC's main memory. The BASIC ROM also sits here. EPROMs in this region (where the screen memory usually lives) are called "UPPER ROMs", as opposed to "LOWER ROMs" (eg. the FIRMWARE ROM) which are "paged" in over the first 16K (address range &0000 to &3fff) of the CPC main memory. When a ROM is paged in (either upper or lower), all subsequent memory reads will read the contents of the ROM, but all memory writes will still go to the RAM that is "under" the ROM.

Note that ROM "bank switching" is totally separate from RAM "bank switching", which, incidentally, usually occurs in the second 16K (address range &4000 to &7FFF) of the CPC's main memory.

#### ACCESS TIME

The CPC can access up to 252 Expansion EPROMs, but in practice about 16 (positions 0 to 15) is the limit. This is because ROM boxes usually only allow a maximum of 8 EPROMs, and more than two boxes places a strain on the CPC power supply. This 16 maximum is further restricted to 14, because BASIC must live in position 0 (so that the machine will power up into BASIC), and AMSDOS lives at position 7. Also,

having two ROMs responding to the same position number, at the same time, usually results in a crash!

Accessing expansion EPROMs is not difficult. The desired ROM position number is sent to the ROM board on I/O address &DFXX (this is any I/O address in the range &DF00 to &DFFF). Until a different number is sent, the selected EPROM will respond to all subsequent expansion ROM reads. What actually happens is that the ROM board "latches" the number written to port &DFXX, then when the /ROMEN signal from the CPC (the ROM read request line) goes low, the ROM board will enable the correct EPROM, which will output its data to the CPC. At the same time the ROM board generates a ROMDIS signal which goes back to the CPC to disable the internal (BASIC) ROM. If ROMDIS is not activated, the internal (BASIC) ROM will respond to every expansion ROM read. This would obviously cause problems (data bus clashes) if an external EPROM were to be responding also.

#### ROUND THE CIRCUIT

Figure 3 shows a simple circuit diagram of a ROM board. Notice that because of the way that the CPC uses

the I/O space (this is partial address decoding), it is only necessary to detect address line A13 going low to know that the address is &DF00. This circuit then uses the /ROMEN signal and address line A15 to detect an upper ROM read, before enabling the correct EPROM and activating the ROMDIS signal. The diode in the ROMDIS signal path is very important as it allows the ROMDIS line to be controlled by other devices when the ROM board is not using it. Also included in this circuit is an optional inverter for data line D3. This is how it is possible to make the ROM box configurable between ROM positions 0 - 7 and 8 - 15.

#### AND FINALLY... MAYBE...

One last thing. The I/O address range, where &DFXX lives, is separate from the main memory address range - essentially it gives the Z80 processor access to another 64K addresses, allowing for interfacing to peripherals and a full 64K of RAM too!

#### THE END IS NEAR

Now for the bit I "cut & pasted" from last issue and you can find it over the page...

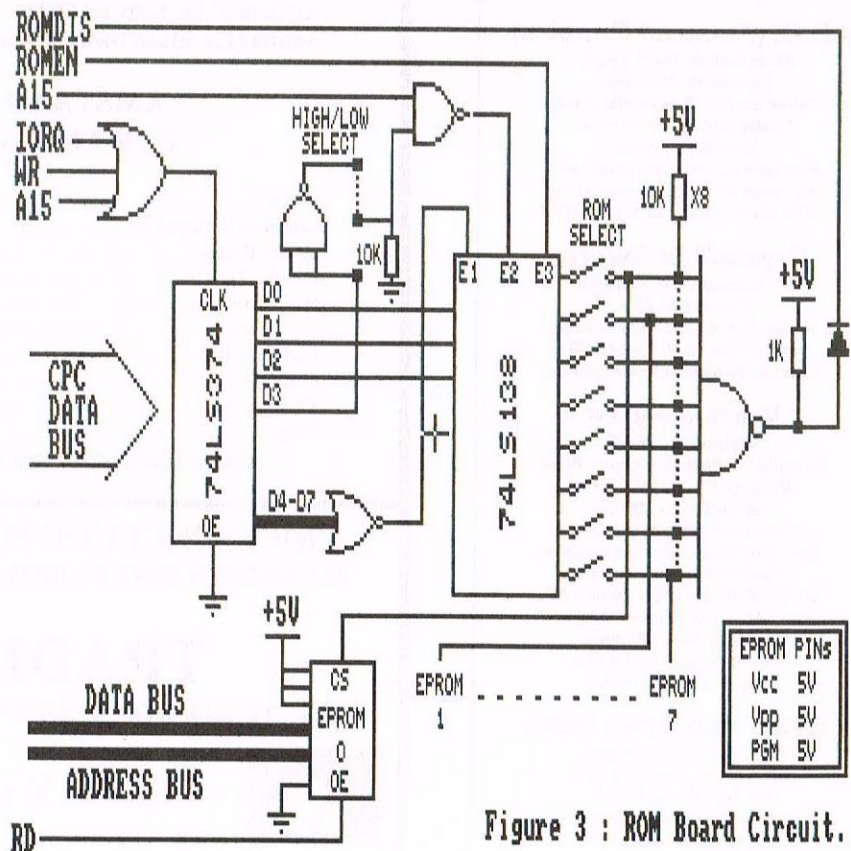


Figure 3 : ROM Board Circuit.

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#### WHAT'S NEXT

Next issue I will discuss the software aspects of EPROMs. I will talk about, and have examples of, the software needed to access them. I will also talk about the software that actually goes in an EPROM.

An example program, with full listings, that can copy EPROM images onto disc, will be discussed, and I will explain how I put the DOSCOPY program onto EPROM.

Ian

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# STREET WARRIORS

Reviewed  
by  
Angela  
Cook

*Was Street Warriors written in the light of US Gold no longer releasing a CPC version of Street Fighter II, Lethal Moves being dropped by Radical Software or because the programmer had finished his 5000 piece Baked Bean jigsaw? Whatever the reason, it's here now, and the general consensus is that it's not bad. I donned my num chucks and regulation baseball cap to find out.*

## INTRO

Street Warriors is a PD release, which means it should be in any decent PD library. It is a fighting game, as the name suggests, takes up both sides of a disc and is written by a bloke called Marcus Kasumba.

## GRAPHICS

The graphics are very good, there is no denying that the pictures and backgrounds are of a superb quality. The in-game graphics are not all that bad, flame throwing, green spiny things on feet and such are well drawn.

## DO THE WALK OF LIFE

The characters seem to walk funny, and they don't turn around. In saying that though, if you cross over, the game will automatically put you facing each other again, a nice touch.

There is no time limit, which is a good thing, especially when you are new to the characters and trying to find out their moves. Each character has his or her moves assigned to them (yes, there are two females in the game; whether that's for female equality or male ogleity is another matter).

## SLOW, SLOW, QUICK, QUICK, JERK

The animation of the characters and their "special moves" is a little jerky, and the game is a bit on the slow side, well, a lot on the slow side. If you can compile a program, then compile this and it runs much faster. Comparing this to other fighting games such as Darkman, Wrestlemania, Sai Combat and all the

other mutations of Kung Fu fighting, it comes up tops.

My brother (a MegaDrive and Snes owner) and I were playing Street Warriors, with him thrashing me as usual. His friend walked in and said "Is it like Street Fighter II but crapper?" To which my brother replied, "Well, it's Street Fighter II, but on the CPC." I still don't know whether that was a compliment or not.



## FLIPPING DISCS

There is a lot of disc flipping, which is a little annoying, but that is due to the size and detail of the game. At the introduction there is digitized music, there are backgrounds to each of the seven characters, a map and area to choose your players, various options of playing. Once in the game, not only are there well drawn backgrounds, but also a lot of moves that the characters can do, energy bars, and at the end of each match,

pictures of the winner and loser, with a tip or note and some more music. Yes, there is a lot to this game.

## THE CHAR CHAR

There are various modes to play in, arcade or practice mode, which speak for themselves, and reality or "char vs char" mode. Reality is where two players cannot be the same character, the other mode allowing two people to be the same person, have the same moves and really see who is best (my brother won, incidentally).

## GRUNT THEN FLASH

You can either play against the computer or an intelligent opponent (my brother stood in when an intelligent opponent could not be found). You can also turn off the "Digi fx", a series of grunts and sounds supposedly coming from the players. It's quite funny actually watching and listening to them do this; the Swedish player (Flash) stops and crowd pleases every now and again, just as do the Gladiators, whilst you sneak up and thrash the hell out of him. I like this game.

## CONCLUSION...

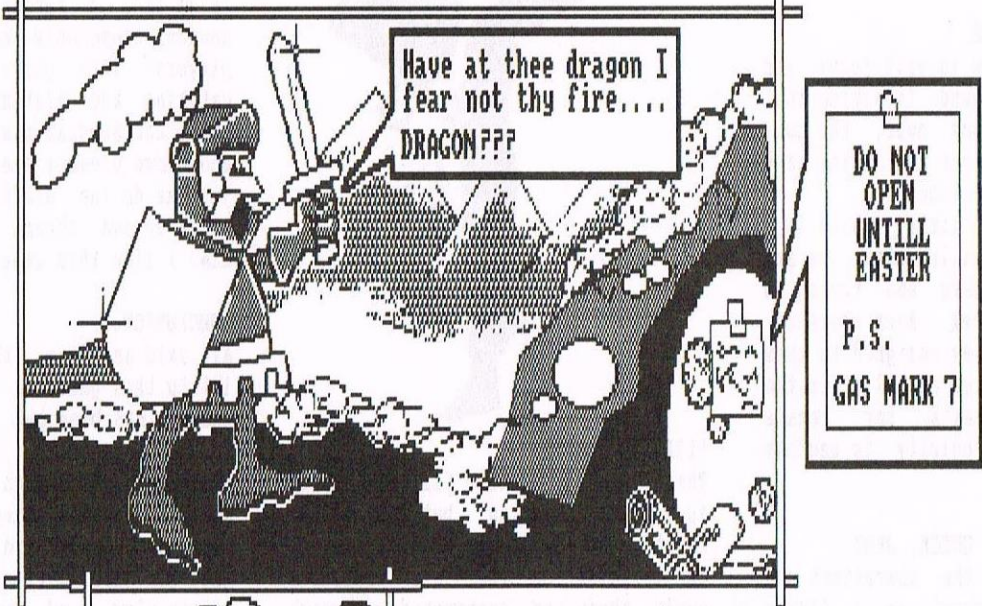
All said and done, there is an awful lot to this game. A lot of time and thought has been put into it, and as far as I can see, it has been well programmed (although not compiled, which makes it slower). I like the game, my brother and I had quite a good few hours playing on it. It is a little slow, and sometimes a little awkward, but if you're not addicted to 16 bit consoles (as my brother is), it will be wonderful. Oh yeah, watch out for head-butting the side of the screen, that's funny.

Angela Cook.

# COMIC CUTS



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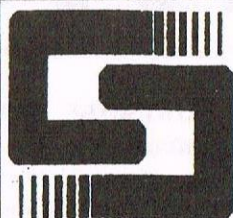
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