

WACCI

THE WORLDS BEST CPC MAGAZINE
AND PREMIER CPC USER GROUP

ISSUE 110
MARCH

£2.00
1997



**NEWS SCOOP: DiRtortoise beats
the WACCI publication deadline!**

CONTENTS

3	THANK AND STUFF	.....	Only one page again ...
4	COMPO-SPOT	.....	If I haven't lost it ...
5	FAIR COMMENT	.....	Bouncing Bunnies ...
13	EMBARASSING BUNNY	....	Reviews of Worktop ...
14	BASIC TUTORIAL	.....	The Phillip's Brothers ...
16	RAMBASE 4 REPAIRED....		Peters little tricks ...
18	TAPPERS	.....	Back again ...
20	EMULATORS.....		Listed by Jonty ...
21	MARKET STALL	.....	Roll up, Roll up ...
22	BEGINNERS HARDWARE	...	Ben shows us a little ...
24	BASIC COMPILERS	.....	James 2nd (3rd+4th) bit .
26	WACCI LAYOUTS	.....	How to do it ...
28	THE ITGA INTERVIEW....		With me (again) ...
31	WHO'S WHO	.....	The WACCI Whodunnit ...
99	FRANK NEATHERWAY	.....	The walking spellmaster .

THE BENEFITS OF WACCI MEMBERSHIP

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

BENEFIT list by Ernie (Wish List) Ruddick

COPYRIGHT: WACCI 1997

Material may not be reproduced either in whole or in part without the prior consent of the copyright holders. WACCI club members may freely reproduce material for their own use. No payment can be made for any material selected for publication.

PRODUCTION METHOD

WACCI is created using Prottext, Promerge, Prospell and MicroDesign Plus on a CPC 6128 and printed by an Epson Stylus 800 and an Epson LQ300 for all the graphics. That's a lot of programs to learn....

WACCI is printed and collated by: ProntaPrint!
134 Foregate Street, Chester CH1 1HB 01244 313222

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

WACCI: The club for Amstrad CPC computer owners.

FRONT COVER: <<It was me this time -Philip>>

THE TELEPHONE HELP-LINE

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

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

Vacant Helpline Position : Anyone interested?

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

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

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

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

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

STUART GASCOIGNE, 0117 9831361, Bristol, Basic,
Machine code, PD Discs 19 to 36.

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

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

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

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

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

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

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

NB :

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

W A C C I

Editor : Philip DiRichleau
Owned by : The Club Members
Chairman : John Bowley

Conceived and Founded by
Jeff Walker in October 1986

Developed and Expanded by
Steve Williams
Clive Bellaby
Paul Dwerryhouse

Telephone 01522 511608

Copydate : 23 March 1996



The sun sets upon a grey world as the wind, blowing from the east, brought with it the cold, almost arctic temperature that was more in keeping with the time of year, than the mellow, gentle weather of recent weeks.

FEBRUARY

The first few days of February has passed by without incident. There had been little to interesting Lord Philip in that time and he was getting increasingly bored. He sat, quietly in front of the computer, wondering if anything was going to happen. He doubted it, but then, as he well knew, things could change at a moment notice.

The telephone rang and he ignored it. It wasn't difficult to do. It continued to ring. Recently, taking the advice of several friends, he had changed the device to one of the more up-market affairs which announced, in large bold lettering, who it was who was trying to contact him.

"Dwerryhouse." he muttered under his breath, reading the Hawarden number and shaking his head.

He had little interest in even talking to that person, even since the aforementioned had made some sweeping comments a month before. Lord Philip guessed that it was just sour grapes since the Duke Dwerryhouse had been replaced in a recently reshuffle and he had got the Dukes job.

It hadn't even been Lord Philips choice. The job, a difficult one at best, had been almost forced upon him by a giant of the industry; the dominating presence of Chairman Bowley made even Lord Philip tingle.

THE CHAIRMAN

The chairman was a terrifying man. Whenever he entered a room he seemed to fill it with with massive, 16 stone bulk. Lord Philip was tall, but at almost seven feet, Chairman Bowley towered even over him. It couldn't be said that Lord Philip held any form of fear for the Chairman, such an emotion would have been alien to him, but he was cautious whenever the Chairman came around. Everyone still remembered what had happened to Sire Moffatt. One moment he had been living in Pendine, happy as can be, the next, almost at the Chairmans whim, he had been transferred to the centre of a blazing metropolis, forever lost within the tall buildings and deep sewers.

The Chairman was not a man to cross, yet, Lord Philip was knew of a way to remove him. The difficulty would be the replacement. It would have to be a puppet that he could control. He didn't want the job himself, he wasn't quite that foolish, but he knew of at least a few who might get interested.

THE FIRST OPTION

His first consideration was Ray Powell, the chief speech writing. Lord Philip had considered the man for a scant few seconds before dismissing him. Reading some of Mr Powells speeches, it was obvious that the man was quite insane.

He second option had rested on the Chef. The Cook couldn't, so to speak, cook that was. How she had even got the position as chief caterer, Lord Philip would never know. He suspect that she was very good at interviews but, since he'd only had to interview her on a couple of occasions, this was a theory that he wasn't going to risk his life on. The Cook could do the job, he was sure, but could she be controlled. The only uncontrollable people on the planet were the extra intelligent, or the real dumb. The Cook belong to one of those two and Lord Philip suspected that it wasn't about to be Mensa.

THE LAST OPTION

There was a final option that he had worked through. Replacing the Chairman with an automotive. It wouldn't be hard to create such a machine. All that was required was to have some very unusual looks, a lack of intelligence and a habit of smoking extra large havana cigars. No, such a construct would be too hard to manage at all.

THE POPE : NO NEWS

Lord Philip looked up from the computer and smiled, the manic type of smile that usually belongs to an axe murderer being offered a lumberjack position.

"Yes!" he suddenly laughed, a maniacal sound that echoed off the wall. It was time, he knew, time to start the plan, time to do the job.

COP-LOST-MOP

THE BOWLEYS BRAINSTORMER

As promised last month its back to business, so we start the year (alright I know its March) with three compos. Sit back and have some fun, after all thats what its all about. Sharpen those pencils and off you go. Good luck! <<Carol & John>>

Issue 107 - Gubbys Poser

The answers and winners of this quiz will appear in next months fabulous issue of WACCI.

Now on to this months competition. The following is a series of assorted questions.

Don't worry if you are unable to answer them all because it is possible that no-one will get them all correct so why not take a chance!

QUIZ ONE - DON'T BE AFRAID

Identify these phobias:

1. Claustrophobia
2. Astraphobia
3. Xenophobia
4. Bibliophobia
5. Hydrophobia
6. Ergophobia
7. Pyrophobia
8. Triskaidekaphobia
9. Arachnophobia
10. Gamophobia
11. Philipophobia

QUIZ TWO - THINKING CAPS ON

1. What is the last letter of the Greek alphabet?
2. Who was the first British television newsreader to be seen on our screens on Sept 4th 1955?
3. For which of the visual arts is Donatello best known?
4. What is distinctive about the Manx cat?
5. Who invented the safety razor?

6. What are the two main components of air?
7. From which plant is agar obtained?
8. What is the value of the brown ball in snooker?
9. Name the cat of Postman Pat?
10. Who painted The Laughing Cavalier?
11. The samba is associated with which S.American country?
12. Which USA state is Death Valley?

QUIZ THREE - HALLS HALL OF FAME

This was set by our very own David (the rombox winner) Hall. (Ta David)

Complete the following Amstrad game titles:

1. _____ Islands
2. Chuckie _____
3. Dizzy, Prince of the _____
4. Turbo the _____
5. Ghosts 'n' _____
6. _____ Axe
7. _____ of Persia
8. Hudson _____
9. The _____ Plague
10. Wild West _____
11. The Blues _____
12. _____ Bobble
13. The _____ Family
14. _____ HQ
15. Escape from the Planet of the Robot _____

Oh well, they weren't too bad were they. Now get those little grey cells working and send me some answers.

** <<Closing date end of March.>> **

NEW CONCEPT

From now on what we are going to do in the line of prizes is to send you a Wacci voucher which can exchanged for anything you want from the Wacci supplement that you all should have.

This is the values of the vouchers:

1st place is £10.00

2nd place is £8.00

3rd place is £6.00

I will from time to time offer you a alternative 1st place prize.

MISSING DISC SYNDROME

Over the last couple of months my CPC's packed up for some strange reason, the dreaded disc missing saga hit the Bowley household.

I changed the drive belts, but this still did not cure the problem and to make matters worse I was getting further behind in my Wacci work.

Anyway I've now fixed them and they seem to be in working order (touch wood). If you are still waiting for PD or anything else for that matter please except my sincere apologies, I'll deal with it as soon as possible.

Now before I leave you once more, I have a commendation to make. This is to DAVID HALL (again!) for his excellent competition entry for issue 104. David submitted his entry on a disc and it was presented in such a way that it ran like a game itself.

Well you have to see it to appreciate it. Anyway David Well Done.

We will be sending you a disc back and we would like to keep yours if thats OK and also a prize voucher.

Entries to: Carol Bowley

97 Turrington, Bretton, Peterborough PE3 9XT. <<Bye for now>>

FAIR COMMENT

Richard 'Bunny' Fairhurst
Frank Neatherway
3 Glebe Close
Rayleigh
Essex
SS6 9HL

SHIP TO PORT

Hi Richard, a belated congratulations and welcome to Fair Comment, where you are doing a twiffic job <<Ta chuck - Richard>>. Especially if you can enlighten me on the following!

Philip has kindly indicated how to modify a CPC for eight-bit printing. (Just as I had bought a port. See Jinxed article in 108!) However, I believe that for the Plus there is a short program to achieve the same thing. Is this so, and what is it?

When printing out from Page Publisher I get about 30% elongation in the vertical plane when using a 24-pin printer, (Citizen 124D) and about 50% when using a 9-pin printer (DMP 3160). No great worry with text maybe, but "graphics" takes on a whole new meaning with egg shaped circles etc. This happens in both A4 and A5 format. Is there any way to correct this other than drawing an ellipse in the first place?

Is Robot PD still alive? If not, where can I get a copy of the GPaint 2 that you wrote of and a copy of Powerpage 128 that works? My copy seems to have parts missing and resembles that in the current article not at all.

Finally, does anyone know how to remove disc labels cleanly?

Ray Powell
Kings Lynn

<<Hi Ray. The Plus does indeed have built-in support for an 8-bit printer port - as Merline-Serve found after the disappointing take-up of their Plus-compatible hardware port - but, bizarrely, it's mapped onto bit 3 of CRPC register 12. This patch enables the firmware routines to use the eighth bit and should quite happily work with BASIC, Protext and the like: I've not tested it on a Plus, but it made all the right noises on my 664. Let me know if you have any problems.

```
1 'CPC Plus 8-bit printing
2 '(c) Systeme D 1997
3 :
100 MEMORY &9FFF
110 FOR n=&A000 TO &A06F
120 READ a$: POKE n,VAL("&" + a$)
130 NEXT: CALL &A000
140 DATA 21,6E,A0,CD,58,BD,21,2B
150 DATA BD,11,2A,A0,01,2D,A0,CD
160 DATA 5B,A0,21,31,BD,11,30,A0
170 DATA 01,33,A0,CD,5B,A0,21,F1
180 DATA BD,11,36,A0,01,39,A0,C3
190 DATA 5B,A0,CD,3C,A0,00,00,00
200 DATA CD,3C,A0,00,00,00,CD,3C
210 DATA A0,00,00,00,F5,C5,01,0C
220 DATA BC,ED,49,4F,06,BF,ED,78
230 DATA E6,F7,CB,79,28,02,F6,08
240 DATA 01,0C,BC,ED,49,04,ED,79
250 DATA C1,F1,C9,7E,02,03,23,7E
260 DATA 02,03,23,7E,02,2B,2B,36
270 DATA C3,23,73,23,72,C9,00,00
```

You can get "label remover" spray from office superstores such as Staples and Office World, which should clean your discs up. I've always relied on Domesdos Multi-Surface Doodah, but this doubtless erodes the plastic and corrupts your data, or something.

<<Clean Art or Lighter Fluid is highly effective -Philip>>

Robot PD is long since departed, but you should be able to get hold of GPaint 2 and PowerPage 128 from Penguin Software. Alternatively, both programs will be on offer at the STS stand at this year's WACCI Convention - and there might even be a new version of PowerPage, too.

The problem with elliptical printing comes from the fact that screen pixels and printer "pixels" are different shapes - one's wider than the other. There is a way around it, but you'll have to delve into your printer manual to find out if yours supports it. In

brief, you need to reconfigure the escape code for graphics printing used by Page Publisher - probably ESC L - to the plotter code, which preserves a more realistic "aspect ratio".

On an Epson LX800, this would be carried out by ESC ? L 5. I'd expect the code to be the same on the DMP3160, but since Citizen printers have a reputation for being not-quite-100% Epson compatible, you might be out of luck with the 124D. See what you can find out from the manual

- Richard>>

CRICKET INSTRUMENT

Hello Richard. I am sending you this letter (to be lost in the great mind of Mother)!

I am thinking on these lines - can any of us trust Philip DiRichleau to look after the needs and wants of WACCI?

I can see far into the distance, all the WACCI subscribers, all nodding their heads in unison. "NO NO NO" and yet more "no no no". <<So why are they nodding their heads? - Richard>>

Question. Has my letter about the great elastic band been lost? If so, then I am not going to send you any more letters. Come back, Paul Dwerryhouse, all is forgiven.

Seriously though, Richard, you'll have to do better than this if you really want to keep your subscribers happy.

On reading Angela Cook's article I come to the conclusion that hardly anyone went to the Convention. She wrote: "there weren't as many people there as tickets sold but that is normal in any situation you come across. I shall try a few names of people that were there and apologise in advance for missing out the blindingly obvious".

Was the blindingly obvious one the one that did not go? I counted only 11 persons and they were mostly trades

persons, and the photos that were in WACCI did not show all that many folk there.

Nora Lees
Birmingham

P.S. I did not go either: mind you, I didn't pay to go.

<<Nora, Nora, dear Nora. Where would we be without you? I'd love to answer all your queries, but I'm not sure I can. First of all, Angela didn't write this year's Convention report: Paul did.

Hang on (flicks through several back issues)... ah, I get you. You're referring to the article in January's issue. This wasn't about the WACCI Convention, but rather, that of user group CPC South West. Which is why it says "CPC South West Convention" in big letters at the top of the page.

Secondly, there's always going to be some delay between sending in a letter and seeing it published - especially if, as in the case of this letter, you send it straight to Philip rather than to the address at the top of Fair Comment. It has to be typed up by Frank, posted on to me, answered, posted on to Philip, edited, and only then can it be printed ready for despatch by the Derryhouses' tribe of merry little elf helpers. The elastic band letter, in fact, appeared in last month's WACCI.

Keeping subscribers happy might be a concern of Philip's and Paul's, but not of mine. As it happens, I think Philip's doing an excellent job as editor - Richard>>

BA BA BLACK SHEEP

In response to Richard's request (issue 108) to know what software can utilise memory above 128k, the Graduate CP/M ROMs can (so I have an unused Silicon DOS ROM).

John R Hudson
Huddersfield

<<Thanks John - Richard>>

THE NEW NUMBER ONES

I feel moved to make a few comments that spring to mind after reading issue 108. I'll try not to present you with a numbered list, because AA readers used to do that and it annoyed me no end.

Right, then. There's been a great deal of debate on 8-bit printer ports of late: James Coupe's contribution is the latest, and interesting it is too. But if, as he suggests, the main purpose for most people's requirements for an 8-bit port is to incorporate boxes into Protext, then why doesn't he (and anyone else in need of such facilities) send for PD Disc 74, which includes a program called Epic (reviewed in issue 100 by Ian Parker)? As a reminder, Epic enables us to draw boxes and use a huge number of accented characters through the ROM version of Protext, all without the need for an 8-bit printer port. The boxes that come with Epic are the single line variety, but it's a mere few minutes work modifying the printer driver to include two-lined boxes. I have the program recorded on both sides of a disc, one side providing single-line boxes and the other the double-lined variety. And, of course, there's all those gorgeous accented characters.

Secondly (oh dear... getting a tad too close to numbered lists for my own liking) I got to thinking, when WACCI was clearly going to be late, that to expect a small team of volunteers to produce a magazine of this quality over the hectic Christmas and New Year period is a bit much, and wouldn't it be a kindness to reduce their work to the point of producing ten issues a year rather than twelve - sort of go temporarily decimal? Miss out August and January and let the team have a couple of breaks a year? It'll cause immense suffering for the rest of us, having to go without our monthly fix from time to time, but I doubt if any of us want to be recorded in St Peter's Big Book as sadistic slave drivers. <<I can name a few people who are already listed in that book but I shalln't name them -Philip>>

Finally, Richard, with RoutePlanner and PowerPage amongst many others to your credit, both clearly so excellent and mind-bogglingly wonderful and widely admired throughout the CPC community to the point that everyone has surely heard of you and worships at your feet <<Yeah, right - Richard>>, is it necessary for you to point out your own qualities quite so much? I know the trumpet deserves the blowing, and I'll willingly become a

member of the bunny-trumpet-blowing team, no pressure, but first of all you'll have to pass the instrument over....

Oh. And North and South still doesn't work on my CPC6128.

Peter Rogerson
Robin Hood Country

<<Really? Even after the issue 108 patch, or the BTL one? I've tested the latter on someone's 6128 and it worked perfectly, and although I've not tried the 108 "condensed" version, it was taken straight from the BTL program. Show me at the Convention and I'll see what can be done. (I don't have a 6128 here, you see - ghastly things, won't let them in the house...) Quick thought: you did turn your ROMs off when patching the file, didn't you?

Consider Epic duly plugged. I'd have thought there were many better things to do with an 8-bit printer port than draw boxes in Protext, but each to their own.

WACCI 108's spectacularly late arrival was the fault of the Post Office, rather than any tardiness on the part of contributors, editors or magic elf helpers. I'm quite happy writing 11 issues per year, but it's up to those with the heavy workload - Philip and Paul, really. Can we have a nice editorial comment here please, Mr DiRichleau?

<<The main pressure on WACCI, the one that can make us late, is when I have to write articles because they're just aren't enough to fill the magazine. I do grab the odd month off, usually by doing what I'm doing right now. Today is Thursday 6 February and I'm just about the finish this issue - That gives me a months break -Philip>>

I'll resist the temptation to make any rude quips about trumpet-blowing, but I'm suitably chastened - sort of. In fact, I can't actually find any reference to my alleged qualities in Fair Comment 108: apart from one comment that this Bunny bloke is "vastly unhelpful and obviously doesn't have a clue about anything", and another that "I'm worse than clueless when it comes to electronics". Sure, there's all the Peter Curgenven stuff, but how else is one meant to refute allegations of

technical snobbery, feuds with other fanzines, and intentionally ripping off AA readers? By sitting here and saying "Yeah, you're quite right, I'm crap"? It won't happen again. I hope.

Thought for the day: you know you've been spending too much time with the CPC when you think "St Peter's Big Book" refers to ComSoft's customer records...
- Richard>>

MINI OFFICE COLD TURKEY

Merry Xmas and a Guid New Year to all the gang at WACCI. I hope all the turkey and pudding and liquid chasers went down well and you are feeling "nearly normal" by this time: I am almost recovered myself, hence the following enquiry.

As usual I enjoyed my December issue of WACCI, especially the Protext Box and the 8-bit Printer Port program. I have duly copied it onto tape and tried it out but no luck. I use Mini Office II for my word processing but it just crashes the program completely when I ask it to print out. When tried in BASIC the same result happens.

In the article I noted that the 464 Plus was not mentioned, and perhaps this is not meant to be run on my machine. I am using the whole program, which may also be a mistake. Ever since starting with my Plus, I have tried to print out boxes for my letter headings and such, but I cannot print a line down the edge of the page, even referring to the manual for my printer (a Citizen 120D+), and the Amstrad instruction manual.

So it is a cry for HELP from the experts. Your article seems to be ideal for my needs but I am not that good at this technical stuff. I did look inside Arnold but my printer port does not seem to be anything like the one mentioned in WACCI. I look forward to my next issue and hope you can solve my problem. Keep up the good work!

Jeff Morton
Cairndow

<<You wait three hours for a bus and then two come along at once... As you probably read a page or two ago, Jeff, the Plus machines are already wired up with an 8-bit printer port. It just needs to be activated by a little listing: check out Ray Powell's letter in this very issue.

However, Mini Office II is notoriously intolerant of "patches" and the like, and although you'll be able to print box graphics and other characters above 128 from BASIC, it won't do a lot for your word-processing. The best advice I can give is that you splash out on a ROM-box and buy a copy of Protext to fit in it: then you'll have a wonderfully powerful text processor and the capability to produce as many boxes as you like.

I saw a jumbo-size Christmas pudding reduced to £3.99 in Safeway the other day, and I have to admit, I was almost tempted: Christmas pud has replaced double chocolate fudge cake in my affections of late. So if you start finding grammatical howlers and slurred spelling in Fair Comment from now on, blame it on the brandy butter and the nice "liquid chasers"...

- Richard>>

FULL EMOTION VIDEO

I read with interest Bill Ford's letter in Fair Comment 105 regarding VCRs and computer connections. One of my main interests is home video, and I use my 6128 for simple captions. I have tried several ways, but the best results have been obtained with Campursoft's Videomaster. When I bought it, they gave me a copy of VT which Bill Ford mentioned.

My set up uses a CPC6128 powered by an MP-2F, which takes up less room than the CTM644 (you get no picture on the CTM644 when using the Videomaster, but if you have no alternative you have to find room for a blank monitor). The video output from the Videomaster is connected to the source VCR input: I find that the computer signal is cleaner for recording this way. I also use a video processor between the source VCR and the recording VCR, which enables me to fade in or out or reduce the brightness. There is no doubt that bright colours do not record well, and if soft colours are used the result is better.

The VT program is quite good, but has its limitations. My experience of the CPC is that there is no composite video signal: the nearest I got to it was a lead supplied by WAVE (when they were in being) which is inserted into the 7 pin line and has a lead wired in

to plug into a VCR. However, this only gives you a black and white signal. It originated from an article in AA by Steve Harris with a listing for a program for video titles and a wiring diagram to make this lead, but I don't know what issue it was. No VCR I know of has RGB input, even if it does have a SCART socket.

This leaves me to produce video titles with the Videomaster, which does a fair job. But I look forward with interest to see if anyone out there has any more ideas.

Cliff Britten
Radstock

I WISH I WERE A LITTLE WORM

I may be opening a can of worms with this letter but I think it's getting near to the time when we will have to be taking serious decisions about our club.

Over the years we have seen our membership slowly dying away - and let's face it, most of the members we have lost have upgraded to PCs (now then calm down, I know it's a dreaded word). I for one don't want to lose contact with these (ex-)members: they have a wealth of knowledge in regard to our beloved CPCs, and it's dreadful to lose that.

Perhaps we should take a good look at ourselves. Maybe we could have a page for ex-members: they could pass on the hints and tips they gained over the years, and tell us about their experiences in upgrading and the problems and joys they experienced. We will most probably go that way ourselves: I know that I shall. I have a teenage daughter who constantly goes on about having a PC, and I am in the process of saving for it. Hopefully, I shall make a purchase for her birthday in October or for Christmas.

That doesn't mean that I'll abandon my beloved CPC; after all, I would not even be able to use a computer without it. I shall continue to support WACCI in whatever way possible, for as long as it carries on.

Another point I want to make is about the use of PCs to produce the magazine. Ok, I know there are some purists that want the mag produced solely by the CPC, but if the PC can produce a magazine for us that has good clear type and good graphics where needed, I for one am quite

happy. After all, we do know that the CPC is quite capable of doing it: we have seen good examples over the years. But if using a PC makes the job easier for our hardworking editor, then I don't have any objections at all. In fact I am in favour of it.

Well, there you have it my thoughts, such as they are - over to you.

Angie Hardwick
Bloxwich

<<Well said, Angie. I couldn't have put the PC production issue better myself. It's all very well people pontificating about "CPC purism" and such like, but said people don't have to produce a 32-page magazine, month in, month out, and simultaneously attempt to hold down job, social life and the like. Mind you, going by the sounds of riotous orgies which always seem to accompany a 'phone call from Mr DiRichleau, I don't think he has any problems on the social side of things...

The upgrading question is an interesting one. As you say, all but the most diehard CPC users (and the more impecunious ones) will probably buy a PC at some point - or a Mac, he said hopefully. WACCI's always been about helping fellow members: it would be sad if this area were omitted for purely dogmatic reasons. Not that WACCI should become a PC magazine - perish the thought! - but there are plenty of matters relevant to one-time CPC users which are barely covered elsewhere.

Examples? Well, there's the old chestnut about converting data from one format to another. There are the many delights of CPC emulators, and all the CPC-related treasures to be found on the Internet. There's the issue of which operating system is most welcoming to someone brought up on AMSDOS and CP/M... and then there's Protex PC.

Would anybody seriously object if a PC-purchasing member submitted an article on one of these topics, and it were to be printed? Would anyone, in fact, like to write one? Meanwhile, thank you for an interesting and thought-provoking letter - Richard>>

<<In this Issue of WACCI we're carrying an article of emulators for loads of different computers. WACCI

does have PC Coverage, on occasion, usually when it something to do with Emulators or using the CPC along with a PC. I have no problem with these types of articles.

However, I will baulk at reviews of PC Software and the likes. That's not WACCI at all (at least not yet). Now the idea of a 'WACCI PC' magazine does have certain attractions -Philip>>

ELECTRONIC FOR THE PEOPLE

This is a revision of a letter I posted off to Philip in September, as it disappeared into his black hole along with a couple of articles. Some of the original bits I have left in, corrected in square brackets. I thought it would probably be safer to e-mail it to you. I am sending it as a uuencoded Protex file. Let me know if it would be better as plain ASCII in future. <<Either way's fine: I found a uudecoder for the Mac - Richard>>

It will be [was] good to see folks at the convention again. Last year my parents had just brought the CPC down from Beeston to where I now live in Oxford, so I had high hopes of doing lots of programming. Sadly, apart from AMSPlay, I have not been very successful. Still, some people will be glad to hear that I have started work on the next version of Family Tree, and I have identified why it will not work on the Plus machines at present.

Thanks to Bill Gifkins in New Zealand, and Paul Hollinshead, I now have examples of software written for other MIDI interfaces, so with a little work on that, it may be possible to put together some documentation on how to program them.

The answer to the question about DOS discs on page 6 of the September issue is that there are eighty tracks with nine 512-byte sectors (which makes 360k), but remember that there are two heads reading the top and the bottom of the disc, so that doubles it to 720k. I have no experience of AA Toolkit, but unless it has been designed with 3.5" drives in mind, it will not be able to read the other side of the disc. Nor will having a side switch help on this one. The trouble is that the routines in the disc ROM are not capable of reading the second side of a 3.5" disc, so you

have to do it yourself directly. I could write you an article on how the DOS disc is laid out if you like, but it would be of marginal interest, so maybe I should just put together a documentation file on it. Do you think there is a place in the WACCI library for text files with information for programmers? [I see that the new PD disc 125 is called CPC Guide - does it perhaps contain some of the files from Kevin Thacker's WWW site? If so, it's excellent; if not, we ought to download them and put them on another PD disc.]

I got two WACCI's this month [in September], both on the same day. One was the September issue (no. 104), and the other was the March 1989 issue (no. 30), which was sent to me by someone who was selling his CPC. It was the issue before the first WACCI I bought. The biggest difference I noticed was the amount of artwork. In those days there were a lot of pictures throughout the magazine, and also the cartoon strip "SuperPhil". Most of the magazine covers then were hand drawn, or pasted together from cuttings. Although I am very glad that the mag is moving back to being produced on the CPC, it can go a bit too far, and I'd be quite happy to see more artwork that is not computer drawn at all.

It was good to read the interview with Steve Williams. He really had a tough time of it towards the end of his editorship, when you think that he did everything that is now done by ten or eleven people (with help from Joolz and Peter Casserole of course). It was a big shock when he gave up being editor, but also a great relief to all of us that WACCI continued. By the way, if a three inch disc with my name on it turns up in the stuff from WACCI towers, I'd be interested to see it again. It had some software on it that I was sending to the Homegrown library, and I'm not sure I had a copy myself!

Simon Lucas was asking what sort of stuff is on WACCI on WWW. At the moment there is a bit of information about WACCI, like subscription details and the editor's address. There is a list of CPC user groups and companies like ComSoft with brief details of what they sell. Also there is a listing of the WACCI PD library, which

reminds me, I had better ask John Bowley to send me an update, as the discs from about number 100 onwards are not on yet (I can cope with a Protext file on a 3.5 inch data-formatted disc now John, if you're reading this!). There's not really an awful lot that you don't get through the mag really, but I think it's good for WACCI to have a presence on the WWW. The trouble is that if I put in more work on the WWW site, there would be less time for me to write programs for the WACCI library, and I think that that is probably more important in the end.

Well, better get this disc [e-mail] posted off to you. Keep up the excellent work, and don't go mad too quickly...

Matthew Phillips
Oxford

<<Some MIDI documentation would be great. Although I'd argue the CPC doesn't make a great sequencer, its easily approachable architecture makes it an ideal computer for experiments in computer-generated/modified music. A friend, for example, is currently experimenting with a technique called "mirroring", through which tunes can be radically modified but still retain the same harmonic and rhythmic structure: the PC and Mac utilities to do this took quite a lot of development, but a CPC version would have been a couple of hours' coding at most. Let us know how you get on!

The AA Toolkit just calls the AMSDOS read/write sector RSXs, so you're right, it won't access PC discs. I'd imagine there are .DOC files on the PC disc format in the public domain already, though: try a web search for FAT or something, and hope that you don't accidentally bring up the Jo Brand Fan Page. And the CPC Guide is indeed Kevin Thacker's creation, though in its original, pre-HTML incarnation (I think).

The old WACCI cartoons were excellent, weren't they? I always used to like OMG's 'Life': but then, OMG was a seriously good editor, even if the business side left a bit to be desired (happens to us all...). Sporadic though they were, the issues immediately prior to the alleged 'crash' were arguably the best in WACCI's history. And those ever so

slightly Pythonesque covers... bliss. Now that PdR has a VIDI Digitiser, perhaps we can expect a revival?

<<Yup, when I've got the software to go with the VIDI -Philip>>

Or given your role as WACCI's very own webmeister, Matthew, perhaps a few scanned-in highlights of the early years would make for interesting browsing: and now that you've got the .DR-to-Arc conversion sussed, they could even be put on a PD disc. No, no, that's silly. Sorry, I just had this vision of an HTML reader for the CPC...

By the way, Matthew's was the first Fair Comment letter ever to arrive by e-mail. If there's anyone else out there with 'net access, you can post them to wacci@btl.confusion.org - if you can stomach thought of addressing anything to wacci@btl - Richard>>

<<I'd like to thank the Richard and the BTL crew for helping WACCI get a 'net address, even is wacci@btl does sound rather contradictory -Philip>>

ZIPPITY DOODAH

I was very interested in Simon Lucas's letter in WACCI 108, because I was thinking about connecting a Zip drive to the CPC as well. Since I have no knowledge of the things, I thought it would just be a matter of plugging it onto the 2nd drive socket and then adjusting the XDPB for the required number of sectors per track and changing the sector gap lengths. Incidentally, what is the difference between the gap length (format) and the gap length (read/write), which it says so little about in SOFT 968? And how do you calculate the things?

Anyway, on reading your response I had a look at the map of the printer port and, surely enough, you were right. So, I thought, what about using the expansion port? All right, so you may need to do a little modification to a cable, but you would just have to swap some of the wires around to get them to the right pins.

About the 1.44Mb disc problem, what about writing to the disc at the same speed as to a DD disc, using the same port, and then do a second pass of the drive head with a slight offset to where the drive head originally

started? This would fill in all the gaps, thereby writing twice as much information onto the same physical space on the disc.

Why can't my CPC 6128 write to an HD disc as if it was a DD disc? I asked Philip this question before, and he said it was the holes in the side of the disc. So I covered them up with a bit of tape and tried formatting it. I had no luck.

The disc was preformatted for the PC, but I don't see how this should affect the drive operation because every position on the disc which the CPC uses to store information on has been formatted.

I tried using the disc in a PC later and it said "Read Fail", or something like that, so I tried formatting it to 720k on the PC. It refused to. I tried all the other discs, which hadn't been formatted before, but none of them would format to 720k. Do you think this may have something to do with them not formatting on a CPC?

I have been trying to construct a simple expansion port splitter for Brunword and my ROM-box because the computer crashes if I try connecting Brunword on to the through-connector on the ROM-box, even without any ROMs in. I found out how to do it from Nigel Calcutt but I still can't find any 50-way edge plugs for the peripherals to plug on to, after numerous visits to electronics shops and looking through catalogues. Has anyone seen any?

Do you know how to do TANGents of an angle without using the firmware? I am writing a program which takes up a lot of memory and overwrites the maths firmware. I tried disassembling the firmware to try and find out how to do it, but gave up in the end because it has so many subroutines in it.

Have any Brunword users out there noticed that when you press SHIFT and 3 you get a pound sign rather than the hash sign that it says on the key? If it gives you the a pound sign when you press the hash key, or the pound sign key, how do you get a hash sign?

Do you know which I/O ports correspond to which pins on the expansion bus? What's the bit significance of the UPD765A Status Register? In SOFT 968 it just has a list of all the expansion bus ports and the port for the Disc Interface

register without saying which bits correspond to what.

And don't you hate it when you get to the bottom of a page and you can't quite fit your name on? <<Yes -PdR>>

James Huskisson
Middlesbrough

<<Fitting text onto pages is Philip's speciality. I believe he has a function key programmed to insert "I hate these blank lines - Philip" into WACCI articles which don't quite make the page. You could always try reducing the font size or line spacing if you need some more space...>>

Anyway... a techie letter! Hoorah. Gap lengths are bizarre things, and most formats I've seen just leave them set to the defaults. According to these FDC specs wot I have here, these are the appropriate gap lengths for different sector sizes: the first number quoted is the suggested value for 3.5" discs, the second for 5.25" discs.

size	sec/trk	R/W gap	format gap
256	15	&0E,&20	&36,&32
512	9	&1B,&2A	&54,&50
1024	5	&35,&90	&74,&F0

As you'll notice, the values used by AMSDOS (&2A and &52) are closer to those suggested for 5.25" drives: the fact that they work quite happily on 3.5" discs surely says something about the relevance of these values. Incidentally, the gap in question is known as "gap 3", and refers to a safety buffer left between the data and ID sections of each sector: its size is defined by the format gap, while the read/write value "determines the number of bytes that VCOs will stay low after two CRC bytes" - in the words of the FDC specs. VCO stands for Voltage Controlled Oscillator, and CRC for Cyclic Redundancy Check, a method of error-checking.

There are actually four FDC (765) status registers, but I presume you're referring to register 3, the drive status line. Bits 0 and 1 reflect the currently selected drive: since AMSDOS only supports two drives, bit 1 is always 0. Bits 2 and 3 refer to disc sides, and once again remain at 0 with AMSDOS. Bit 4 is set when the disc head is at track 0, bit 5 when the drive is ready (in other words,

there's a disc in the drive), and bit 6 when the disc is write-protected. Bit 7 reflects the disc drive's fault line, and should always be 0. (An abridged version of this is present on page 19.12 of SOFT 968.)

Sadly, the expansion port isn't quite as simple as you might expect. Rather than mapping I/O addresses to certain pins, the Z80 places the (16-bit) I/O address on pins 3 to 18, and the data sent to it on pins 19-26. To this end, any Zip drive interface would have to interpret each output address and work out whether the byte was meant for it or another peripheral: not exactly an easy project for the hardware initiate. One side-effect of this method is that all OUT commands, even those meant for the CPC's internal circuitry, are echoed out to the expansion port: this is how the Multiface always knows the current VGA and CRTIC values.

Your 1.44Mb idea has merit, but you'd have to design a whole new FDC to get it working: the 765 isn't built to work in such a way, and I don't think that any other FDCs support such a method. Meanwhile, since HD discs have a different magnetic coating to the standard 720k issue (to cope with the increased density of data), you shouldn't use HD discs in a CPC drive: this could be the cause of your read errors. The fact that it's been preformatted for the PC, as you say, is irrelevant. Of course, it's possible that the disc is an all-round dud...

Trigonometry calculations are a right pain to program, so do what everyone else does: calculate a lookup table (using BASIC) of values, and just refer to that whenever you need to find a tangent.

After all that, I'm going to cop out with reference to Brunword, since there are dozens of WACCI readers who know a lot more about the program than I ever will: more specifically, the Brunword Appreciation Society. Mr Hanlan...? - Richard>>

VICIOUS CIRCLE

Thank you for printing my letter in January's WACCI and for Mr Watts' reply. Ben Watts has to accept that the article I wrote on extension leads was done long before his in CPC Quick <<er... WACCI, shurely? - Richard>>. I

did not accuse Ben Watts of plagiarism: that was your word, Richard, not mine. I may have used the word "mine" incorrectly, and should have used the phrase "that it has already been done". I would dare say that Ben and myself may find that someone else wrote a similar article in an earlier 'zine, so we both may not be the first to write such an article.

To Mr Watts, I would say we would have to agree to differ. I would also suggest he tries an issue of CPCS: he may like it. I am going to give his CPC Quick a try when he cools down or releases it into WACCI, whichever is the sooner.

To your answer, Richard, on the 8k Sector article and why it is on hold. First of all I do not take any credit for this mod as it is solely Rob Scott's. I have said this in my opening sentence. Likewise with anything I write I always acknowledge who gets the credit. This will appear in CPCS after the article has appeared in WACCI!

I was told that Rob (STS) is releasing details of the mod, and it is to appear in WACCI with John Reilly doing the artwork and drawings. On hearing this I got Dave Stitson to hold mine. I don't know who is going to do the write-up for WACCI's version <<Rob is - Richard>> but until it is printed mine will stay on hold. I have done this as I have the greatest respect for Rob Scott who is probably the TOP CPC-related programmer/hardware guy in the UK if not the world: and this is not only my opinion but that of other contacts who have Rob's 6k mod and utilities he has done.

I do not claim to be a top writer or journalist. I have had to be persuaded to write for 'zines such as CPC SouthWest, CPC Contact <<sounds dodgy - Richard>>, CPC Undercover <<is unquestionably dodgy - Richard>>, Alive & Kicking, Scrapyard and a few others. I would dearly love to sit in the background and read other peoples' efforts! But even WACCI is asking for articles. If it was not for the fact that the editors of these 'zines used powerful means to get me to write them I wouldn't have bothered: also the fact that the editors "cleaned up" the article made it worthwhile. And I

would dare say that the articles I have written may be amateurish to your standards. But at least I have given it a go.

To your remark, Richard, about attacking programmers. I have not. It was my reply to you about wedges of cash and the fact that in my opinion AA should have spent that money on making sure programs worked before going on the covertape! I have the greatest respect for any programmer, even you.

I would never knock anyone's effort on PD etc, as with fanzines, disczines and so on. Someone spent time, effort and money to produce it. I would love to have the time to produce or write a program and get it into the public domain, but as I work long hours and shifts it is a luxury to get on the CPC once a week. That does not stop me, though, enjoying the PD programs and utilities I have, and I must say that even PD of 20k or less is just as good or entertaining as PD games of 178k.

I do not want to drag up the foreign disczine/demos debate as we can argue for ever which is best, worst. However, I must condemn Tom Dean (Slice) and that article in Donut 2 on Jonty Jones <<which one? - Richard>>. Tom Dean is very lucky that he is not facing a lawsuit for what was written, or is just plain lucky Jonty didn't pay him a visit instead of going to the WACCI Convention. I can't understand why Tom Dean allowed that to be distributed. <<Because, quite justifiably, he was proud of Donut Mag? - Richard>> After all, when he started Impact he was on the right road to producing a disczine that could have had a bright future.

You claim that you and Tom Dean may possibly be the two best well known British fanzine/demoers. Although I have seen both your pseudonyms, I have to say that Joe Moulding is around too! Not only is he a good PD librarian (I know Sleepwalker is now closed), but he is one of our future and possibly best up and coming programmers. And don't forget your fellow STSers, they too are very prominent on the British-European scene.

To backtrack to issue 107 and the Spectrum emulator, according to my records I sent it to John Bowley quite

some time ago. I will get in contact with John to make sure it's there, so you can try it for us, Richard, and tell us what it does!

Now to give some praise to people who in my opinion are the best, most helpful and produced good things for the CPC (to counteract any impression I'm knocking everyone on the CPC scene).

Rob Scott: for the copy mod, Soft-Lok, Turbo Imager, Soundhacker, and many other progs too numerous to mention.

Richard Wilson: Xexor and ParaDOS (thanks for your Australian address).

Richard Wildey and Peter Campbell: for selling CPC related gear and always being available on the phone to back up your wares.

Angela Cook and Angie Hardwick: for providing a good service and finding those second-hand utilities/hardware.

To past editors of 'zines who tried, and produced 'zines - paper or disc - which have given a few hours of amusement, at a cost to them of many hours at the keyboard.

Ian Neill and Nigel Calcutt: for repairing disc drives, and especially Nigel for making up 3.5" drives, Ian for his work on eprons.

I have to say there are also bad boys, those who do not return discs (yes, I do enclose an SAE always). You know who you are and to the guys who collect money for 'zines and keep it!

Well, there we go, some space used up for you Philip.

We now pass onto the Drive article by Philip Peacock. I read this with interest, as I won a 5.25" drive at the CPCSW Convention. It came without a power supply, and my efforts to get it going will appear in a later issue of CPCSW. I will acknowledge Philip's article as his has been printed before mine. Now to business. I have had some fun with my 5.25" drive and, like Philip, have read up on the problems (past WACCI's, mostly). I would ask about the power supply being 12v + 5v: getting a transformer is not an easy thing to do! I did read that it is NOT satisfactory to connect a 3.5" or 5.25" drive to your CPC as it does not give the required amps to format a disc, with a minimum of 1 Amp required! I have toyed with the idea of getting a broken CPC monitor and using the transformer. Has anyone done

this <<Sort of - my 3.5" drive power comes off the monitor power supply to the 664, thanks once again to Mr Scott - Richard>>, and was the piece I read about not connecting a 3.5" or 5.25" to the CPC right? To solve the problem of getting a power supply for (in my case) a 5.25" drive, I have two options:

1. Buy 2 transformers, one 12v, the other 5v. They don't seem to sell 12v and 5v as one: plenty of other configurations, though.

2. Buy a broken PC and take out the power supply of both options.

I don't know which is cheaper: transformers cost from £4 - £7 each, and a broken PC may cost £5. Does anyone know where there is a supply of disused PCs at a reasonable price?

I read Ray Powell's article on "Am I Jinxed?". Thanks Ray, I was going to buy a spare 464 circuit board - you have saved me some money! I think/know we all have had experiences like yours. I was lucky there was always someone to phone! STS has not completely disappeared: give Richard Wildey a call at Sentinel. You will find him one of the most helpful, patient, nothing-too-much-trouble members of the STS team. I do have the other STS addresses including yours, Richard, but they want privacy so that must be respected. Your address, Richard, is being given out in a zine; I won't name it.

To finish in answer to Angie's request for input for the next Convention, I do hope there will be a '97 Convention. I would like it to remain as it is. It does mean over a 400 mile trip for me and was worth every mile to meet everyone again. Only one point: can the STS team this time not form an enclosed circle! I know you had problems with BTL but there were a few of us who wanted to say "Hello".

Finally, to anyone who feels I've left their name out whether you are a good or bad person, my apologies! To anyone who may think I've offended them, that is unintentional. Sorry, Philip, for taking up much of your space in the letters section! <<He loves it really - Richard>> I'm sure Richard will raise a few more questions, and a reply will come!

Peter Curgenvin
Trevone

P.S. It must bring me luck writing to FC: I got some more 'zines from Market Stall.

<<Hello Peter. I'm sure Ben's not disputing that your article came first, but I know I'm not the only one who took the sentence "I feel he has copied my write-up in CPCSW" to mean that you felt he had copied your write-up in CPC SouthWest. Anyway, good to see that you're now not suggesting anything of the sort.

Similarly, I'm glad the 8k sector stuff is now sorted out. I'd venture to say that, since the operation is copyright Richard and Rob, you should have asked for permission before submitting an article anyway. However, this is perhaps unfair, as any blame surely lies with whoever originally released the design into the public domain without the inventors' consent: and although I know who the offender is, I'll leave any such comments to Rob in BTL 4. He's quite capable of looking after himself (ahem), as well as being - as you say - a great behind the scenes presence. Many of the hardware-related replies in Fair Comment either originate from Rob or are confirmed/corrected by him: for example, although I coded the Plus 8-bit patch above, I couldn't have written the reply without Rob confirming that the bit 7 line is indeed wired up, rather than relying on an option link, as it says in the official Amstrad Plus specs.

Again, I'm not the only one who took the phrase "a swipe at you now" to mean that you were taking a swipe at me, rather than at AA. But, hey. The amount of cash involved is irrelevant: in actual fact, the amount I received for adapting North & South for the covertape works out at a peanuts per hour rate given the amount of time I spent on it. Once again, it wasn't AA's fault (attacking "AA" as an entity is very, very easy, and in most cases, equally wrong). I was messed around by Ocean Software, had to find a game for the tape and adapt it in record time, and as luck would have it, the only one available (N&S) was a pig to get onto tape. In that sort of situation, you have to make a few "educated guesses" - otherwise you'd be there forever - and sadly, one of them backfired (expecting the 6128 ROM

address for MC START PROGRAM to be the same as the one for the Plus). There really isn't anything else to it, and any attempts to attribute blame or demand people's heads for it are mistaken.

I think we'll have to agree to differ about the idea that a program is beyond criticism because it involved effort on the part of the programmer. I'd argue that there's such a thing as misguided effort, and that writing articles on how to kill people counts as such (to put it mildly).

And presumably you'd say the same about the Jonty-Slice fracas. WACCI isn't the place to recount the arguments for and against Tom: Donut Mag, Otto, and BTL are. All I'll say is that Jonty doesn't exactly help his case by describing Donut Mag as a disczine devoted primarily to "wild and lurid sick fantasies" (Otto 4), which it clearly isn't.

Joe Moulding, aka Palm Coding, is indeed an excellent programmer, not to mention a fine musician - which is why he's one-third of the enlightened triumvirate which is Systeme D. On the other hand, he doesn't do any swapping these days, and neither do any of the rest of the STS crew.

The issue of the Spectrum emulator still seems a bit muddled. Is it in fact an emulator, or is it a file conversion utility? If the WACCI PD library is in attendance at the Convention, I'll have a look...

Richard Wildey's 'phone number won't do you a lot of good, since he's away at university most of the time (studying for finals), but he is indeed a helpful chap. As for my address, it is indeed in a fanzine: BTL. I put it there so that people can get in touch. However, as I said, pressures of time dictate that I don't give my 'phone number out - replying to a letter is one thing (and one which you can do when you have the time), constantly manning the 'phone is another. Letters are usually more productive, too. Did you know that the transcript of an entire Six O'Clock News would barely fill up the front page of the Independent?

Finally, I thought we were in a line, or a semi-circle at worst. It looks like there'll be a fully-fledged STS / BTL / Systeme D / Richard Wildey

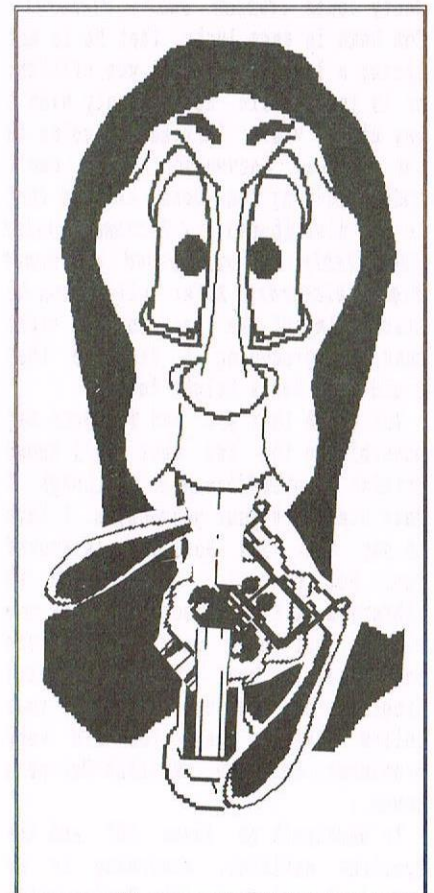
Lechery Enterprises stall at this year's Convention, so you'll be able to come and be rude to us in the flesh. Or polite, even - Richard>>

BONUS BUNNY

By the look of it, Fair Comment has overrun its 7-page allocation this time 'round: which is why I'm creating trouble for Philip by adding some extra comments to the end. Obviously.

If you use Protex, chances are there's something it doesn't do that you'd really like to be built in: and if you're one of the BAS (hang on...), you can doubtless name a thousand things you don't like about the rival program. Ok then: tell us about them. For reasons which will become apparent shortly (at the Convention, probably), I'm compiling a list of possible improvements to Protex.

Evil plan number 73. Reading issue 108's Thanx & Stuff (this is being written before issue 109 has come out), PdR speaks of his fear of 5' rats. Little does he know... a friend is spending the year in Swaziland, and she reports that they do in fact have cat-size rats out there. Now if I can just get one past quarantine...



EMBARRASSING BUNNY WORKTOP RECALLED

This is the start of a short series called Embarrassing Bunny. It aims to be a series of Reviews on the same program, Richard Fairhurst Worktop. There are two reasons for this, firstly, I like the idea of reminding Richard that he actually wrote the program and, secondly, because it serves a purpose for WACCI. With a series of reviews on the same program, we can see how different people write different things about the same subject. A practical demonstration on how to write an article for WACCI.

WORKTOP

Those of us who are getting long in the tooth will remember that glorious day when WORKTOP appeared on an AA cover-tape. <<Is that what you call it then -Philip>> So what was the program, and what did it do?

Well, it was heralded as a breakthrough, providing the CPC with a professional-looking WIMP front end (WIMP = Windows, Icons, Menus and Pointers). So is it that? Or rather, was it?

GETTING TO THE POINT

To begin with I'll state quite clearly that I've hardly ever run the program because I can't actually see much point. Basically, it's only real functions are very much peripheral to my requirements. So let's see just what it does. Maybe I'm peculiar and it's more useful features have evaded me. <<No they haven't -Philip>>

DOESN'T LIKE ROMS? REALLY BUNNY!

Firstly, it doesn't like ROMs, which is a shame. !ROMON7, then run"worktop, and it loads and runs. The left side of the screen shows three icons: two discs representing the two drives and a trash can for erasing files. The main screen is filled with icons describing the files on the disc and indicating their type. These can be high-lighted by placing the cursor on them and tapping COPY. Tap COPY a second time and the program will run. Along the top of the screen are the headings of four pull-down menus: WORKTOP, FILE, VIEW AND TEXT. Let's take them in order.

WORKTOP	
DIRECTORY	--- Catalogues the disc on-screen
ABOUT WORKTOP	--- Copyright notice
CONTROL PANEL	--- Allows you to set colours, select control (joystick mouse or keyboard)
!COMMAND	--- used to call RSXs

The DIRECTORY provides a one-screen catalogue of the contents of the disc in question, which is useful if the disc is filled with short files, which take more than one screen of icon-display. The Control panel enables the user to vary the colour of the display, though I can't imagine anyone having the program on-screen long enough to weary of its appearance. The last feature is useless to me as I would only possibly use it to call Protex, but I had to disable my ROMs, so !P means nothing to Worktop.

FILE	
UNERASE	--- (should) unerase
MOVE DRAWERS	--- Drawers can contain groups of files
RENAME	--- !RENAME....
DISPLAY	--- displays ASCII files on screen.
CREATE DRAWER	--- creates a Drawer for a group of files
TITLE DISC	--- Er ...gives the disc a title.

The Drawer business can be useful, especially if the disc contains a huge number of files. The feature allows you to move files into a "drawer" and the drawer can be opened at will, revealing its treasures for all to see. The DISPLAY feature displays ASCII files on-screen. Useful.

VIEW	
SORT BY NAME	--- Alphabetical order
SORT BY TYPE	--- Collects similar file-types together
SHOW HIDDEN FILES	--- As it says.
SHOW READ-ONLY FILES	

Some users may find these sorting features useful but I deal mainly with text files and don't.

OVERVIEW

Worktop offers a range of features that are available in Basic, but in a more friendly way. I find, though, that the unerase function rarely works, even when I have "trashed" a file mere moments earlier. The most useful feature is the display, especially when a program is accompanied by instructions in the form of a text file. Load up Worktop, examine the instructions, then load the main program, all through Worktop.

Finally, then, Worktop attempts to replicate the front-end of more sophisticated computers but because it's on disc doesn't do it very well. Apart from a few minor advantages, the whole idea of typing 'RUN"WORKTOP' and then jiggling around with a pointer and collection of icons is a darned sight more time-consuming than typing 'RUN"DISC' or whatever the piece of software requires. And the business of not liking ROMs is a real black mark. Sorry, Bunny, but I give it five out of ten because I'm in a good mood.

THE PROGRAMMERS PATCH

MATTHEW + STEPHEN PHILLIPS

Well, this month we move from the starter to a lightly grilled and carefully stuffed portion of program, delicately seasoned with tarragon and chives, and served with a generous helping of verbiage.

```
40 WHILE INKEY(47)+INKEY(18)+INKEY(9)=-3:b=x:c=y:x=MAX(0,MIN(632,x+3*((INKEY(
8)>-1)-(INKEY(1)>-1))*(4+3*(INKEY(21)=-1)))):y=MAX(15,MIN(399,y+3*((INKEY(
2)>-1)-(INKEY(0)>-1))*((INKEY(21)=-1)+2)):MOVE b,c:PRINT CHR$(215);:MOVE
x,y:PRINT CHR$(215);:WEND
```

SWIMMING LESSON

It's about time for an explanation of how some of the program works in detail, so let's dive in and tackle the longest line of all.

Line 40 has some very horrible looking bits, as it is doing a lot of things at once. To get an idea of just how much is squashed in there, take a look at Figure 1.61. This lists a subroutine that does exactly the same as line 40, but in a more conventional way. If you want to try it out, you could type it in and replace line 40 with "GOSUB 110". It is much slower.

Looking at the subroutine to start with, we test the keys by using the INKEY function. The number in brackets is a code for the key we want to check. If the key is not pressed, then INKEY gives the value -1, otherwise, it returns a number greater than -1. Have a look in your manual to find out more. In line 110 we are checking that the SPACE, ENTER and COPY keys are not being pressed.

The position of the pointer is held in the variables x and y. Lines 140-190 check the cursor keys, and adjust two variables, xadd and yadd, which are then added to x and y in line 200. Lines 170 and 210 multiply addx and addy by 3 to make the pointer move at a reasonable speed. We use INKEY(21) to test the SHIFT key, and if it is down the values of xadd and yadd are multiplied to make the movement even faster.

The other important bit to mention is the printing of the pointer on the screen. We are using character 215, which is a suitably pointy shape. To allow the pointer to move smoothly across the screen, we are printing it at the graphics cursor position. This feature is turned on with "TAG" in line 30. We are also using the XOR graphics mode. This is turned on in line 20 by printing CHR\$(23) followed by CHR\$(1). In XOR mode, when you print a character to the screen it can be removed by printing it again at the same position, leaving what was underneath intact. Thus, in line 250 we remove the pointer from its old position, and in line 260 print it at the new position. Line 40 uses b and c instead of oldx and oldy to make it shorter.

TRUTH OR DARE

Let's see how we can alter that subroutine to make it more like line 40. Figure 1.618 has exactly the same structure as Figure 1.61 but uses the same techniques as line 40.

To test the three selection keys, we can add the INKEY values together. If none of the three keys is being pressed, the sum will be -3. We do not have to test that each of the INKEY values is -1 individually. Doing this gives us line 310 in figure 1.618.

How do we go about transforming lines 140-190 into 340-390? Time for a practical lesson in True and False.

Turn your computer on (at last I hear you call) and type in the following commands:

```
PRINT 5>2
PRINT 3=3
PRINT 12<66
```

In each case "-1" is printed on the screen. Try these commands:

```
PRINT 2>5
PRINT 3<>3
PRINT 12>66
```

This time "0" is printed all three times. The reason we get "-1" or "0" printed is that the statements after the PRINT commands are logical expressions. BASIC works out whether a logical expression is true or false. If it is true, it evaluates to -1, and if it is false, we get 0. The expression "5>2" is true so "-1" is printed but the expression "12>66" is false (because 12 is not larger than 66) and so "0" is printed.

We usually meet logical expressions as part of an IF statement:

```
IF <logical expr.> THEN <command>
```

for example:

```
IF a>b THEN PRINT"a is bigger!"
```

BASIC works out the value of the logical expression, and unless it is false (zero), the command following THEN is executed. Try this:

```
IF -1 THEN PRINT"Minus one is true"
```

The usefulness of True and False having numerical values is that we can use the -1 and 0 in arithmetic expressions, for instance:

```
a=(5>2)
PRINT a*3
```

You should get -3 appearing. Five is bigger than two, so "5>2" is true, so a is set to -1. Printing three times a gives -3.

How does this help us with line 40, then? Well, line 340 is:

```
340 addx=(INKEY(8)>-1)
```

it has exactly the same effect as line 140, but gets rid of the "IF". If the left cursor key is pressed, then INKEY(8) will be greater than -1, so "(INKEY(8)>-1)" is true and addx is set to -1. If it is not pressed, addx will be set to zero, as the logical expression "(INKEY(8)>-1)" is false.

In lines 350 and 390 we subtract the INKEY return value from addx and addy. If the key is being pressed INKEY returns -1 so subtracting it means we subtract -1 or, in other words, add 1.

Lines 160 and 200 are a bit more tricky to alter. Taking line 160 as an example, if SHIFT is being pressed we want to multiply by 4, otherwise we want to do nothing. An equivalent to doing nothing is multiplying by 1. If we choose the logical expression "INKEY(21)=-1" then we get 0 when the key is down and -1 when it is up. Our target multipliers are 4 and 1 though so some manipulation is needed to map the pair 0,-1 to 4,1.

If we multiply by 3 then we get from 0,-1 to 0,-3. The gap between the pair is now the same as between 4 and 1 so all we have to do is add 4 and we are there.

SHIFT key position	up	down
INKEY(22)	-1	> -1
(INKEY(22)=-1)	-1	0
3*(INKEY(22)=-1)	-3	0
4+3*(INKEY(22)=-1)	1	4

Line 160 can therefore be changed to:

```
360 addx=addx*(4+3*(INKEY(21)=-1))
```

Line 400, which is equivalent to line 200 is formed in a similar way.

MAX PACKS

Lines 230-260 are transformed into 430-460 using the MAXimum and MINimum functions. MAX is passed several numbers and returns the largest, MIN returns the smallest.

Look at line 440: <<Up there-PdR>>

```
440 x=MAX(0,x)
```

If x>0 then MAX(0,x) will return x so we are effectively saying "x=x". However, if x<0, MAX(0,x) will return 0 and we are saying "x=0", so the effect is exactly the same as the IF statement in line 240.

ORANGE SQUASH

Look at line 370. What is the value of addx on the right hand side? We have just defined it in line 360. The right hand side of line 360 can be inserted into line 370 and line 360 removed:

```
370 addx=3*addx*(4+3*(INKEY(21)=-1))
```

We can then remove line 350 and insert it into line 370:

```
370 addx=3*(addx-(INKEY(1)>-1))
*(4+3*(INKEY(21)=-1))
```

Similarly, line 340 can be removed:

```
370 addx=3*((INKEY(8)>-1)-(INKEY(1)
>-1))*(4+3*(INKEY(21)=-1))
```

Exactly the same procedure can be followed to squash lines 370-400 into line 410.

Now that all those lines have been squashed into just two we don't need addx and addy anymore. Lines 370, 410 and 420 can be combined into one and line 330 deleted.

Once lines 430 and 440 are combined into

```
440 x=MAX(0,MIN(632,x))
```

and lines 450 and 460 into

```
460 y=MAX(15,MIN(399,y))
```

we just have to combine the key-checking and range-checking parts to get the expressions in line 40.

PHEW!!

We hope you can understand the complicated expressions in line 40 now. They really are about as bad as things get!

In the next article we will probably take a good look at the machine code, and also examine a few issues of compatibility. Then again, we might not.

100 REM An inefficient subroutine to replace line 40.

```
110 WHILE INKEY(47)=-1 AND
INKEY(18)=-1 AND INKEY(9)=-1
120 oldx=x:oldy=y
130 addx=0:addy=0
135 REM Check keys
140 IF INKEY(8)>-1 THEN addx=-1
150 IF INKEY(1)>-1 THEN addx=addx+1
160 IF INKEY(21)>-1 THEN addx=addx*4
170 addx=3*addx
180 IF INKEY(2)>-1 THEN addy=-1
190 IF INKEY(0)>-1 THEN addy=addy+1
200 IF INKEY(21)>-1 THEN addy=addx*2
210 addy=3*addy
220 x=x+addx:y=y+addy
225 REM Check x & y are on screen
230 IF x>632 THEN x=632
240 IF x<0 THEN x=0
250 IF y>399 THEN y=399
260 IF y<15 THEN y=15
265 REM Remove pointer and redisplay
270 MOVE oldx,oldy:PRINT CHR$(215);
280 MOVE x,y:PRINT CHR$(215);
290 WEND:RETURN
```

FIGURE 1.61

300 REM A slightly better subroutine to replace line 40.

```
310 WHILE INKEY(47)+INKEY(18)+
INKEY(9)=-3
320 oldx=x:oldy=y
330 addx=0:addy=0
335 REM Check keys
340 addx=(INKEY(8)>-1)
350 addx=addx-(INKEY(1)>-1)
360 addx=addx*(4+3*(INKEY(21)=-1))
370 addx=3*addx
380 addy=(INKEY(2)>-1)
390 addy=addy-(INKEY(0)>-1)
400 addy=addy*((INKEY(21)=-1)+2)
410 addy=3*addy
420 x=x+addx:y=y+addy
425 REM Check x & y are on screen
430 x=MIN(632,x)
440 x=MAX(0,x)
450 y=MIN(399,y)
460 y=MAX(15,y)
465 REM Remove pointer and redisplay
470 MOVE oldx,oldy:PRINT CHR$(215);
480 MOVE x,y:PRINT CHR$(215);
490 WEND:RETURN
```

FIGURE 1.618

RAMBASE 4 REPAIRED

PETER
ROBSON

Following Philip's pleading for articles in WACCI 108, I decided to have a go (I hate to see grown men cry). So what to write about? Well, for the last nine months, off and on, I have been dismantling RAMBASE - 4 line by line to see what made it tick in order to progress my understanding of BASIC programming. I am about two thirds of the way through but feel able to manage a follow on to Bob Miller's excellent review (WACCI 91) and to try and resolve the problems noted by Bob and also in Terry Ward's letter (WACCI 94) along with a few minor glitches that became evident during my studies of this really very good database.

NOTES ON HOW IT WORKS

The program as distributed on PD Disc 101 (available from Doug Webb) consists of five files :-

RB.BAS : Sets variables, contains the loader for the BANKMANAGER Program RB.BIN and chains RBCODE.BAS
RB.BIN : The bankmanager program. Same as BANKMAN.BIN
RBCODE.BAS : The main program
RB.DOC : The information file
RBXMP.LDBF : An example database file for experimenting with.

My knowledge of 464s with memory expansions is virtually zero, so I can only quote from the information file ("If you have an expanded 464 or 664, do NOT use the bank switching software as well as BANKMAN. Use one or the other.") and refer you to Tony Powell's letter with Philip's solution to the problem (WACCI 94 Page 13). I assume that if you wish to use other than the supplied bankmanager, the loader for it will have to be incorporated within RB.BAS (lines 126 to 156 contain the loader for RB.BIN)

On standard 6128s and 6128 PLUSs typing RUN"RB gets it all going, the variables are set up, the bankmanager program is loaded and the main program is CHAINED. After this has happened all you have to do is follow the on-screen prompts and away you go. But before you get carried away you may like to incorporate the cures listed and explained below.

There doesn't appear, in the program or in the .DOC file, any copyright message restricting alteration, indeed if I may quote the following sentence from the .DOC file introduction, it seems to encourage amendments.

"Version 4 adapted from Version 3 by Barrie Snell in 1993 to add extra features, error-trapping, and memory saving to allow more features to be programmed at a future date by any other programmers."

If I am wrong Philip will no doubt clarify the situation. At least I hope he will. <<Go for it -Philip>>

FAULTS AND REMEDIES

Lines 318, 346, 352, 356, 398, 430, 436 470, 614 & 718 of RBCODE.BAS cause a number of problems described below together with my solutions. I have tried as far as possible to keep to the original programmer's method of doing things. The main thing is that they work.

Bob's first complaint was that if you made an error when entering a file name, it was sometimes required to ESC and type GOTO 10 to get back to the main menu. There are six occasions that require an input of a file name. Line 718 is a sub-routine called by five of them to enter filenames during the Load File, Save File, Merge File, Tabulate Records (Discfile option) and the Label Printer (Discfile option). The additions make the line too long so I split it, creating line 719 for the overflow.

MORE CORRECTIONS

The remaining occasion is in the Disc Utilities sub option "Erase a Specific File". Line 470 is the operating line in this instance.

Changing lines 470 and 718 using existing variables and subroutines the program now asks if the file name you have typed is " - OK? (Y/N)" [yn\$], the sub-routine 668 checks your reply [ok=1 restricts the answer to Y or N upper or lower case] and returns the result as v=1 Yes or 2 No. If v=2 [No] c\$ clears the line and GOTO 718 or 470 allows another chance to get it right. Otherwise if v=1 [Yes] then the ELSE command continues with the original line.

BOBS SECOND

I can't find a reason for Bob's second complaint (Program crashes with the message file already open in 208). Line 208 is the Load File routine so perhaps there may have been a small disc error preventing the program from reaching the CLOSEIN instruction. I have been unable to reproduce the fault with my copy.

Bob's third complaint reported clashes with some ROMs. As I am ROM free I can't help with this problem. I can only say that on my 6128 PLUS without ROMs or second drives the program has never given me any problem after the corrections were incorporated.

BOB'S FINAL

On to Bob's fourth and final complaint. The discfile option during "Tabulate" doesn't seem to work. The correction recommended by Terry Ward (WACCI 94 : Page 6.) is the right one to adopt for this. Line 430 is the culprit on this occasion as the instruction "IF a<>8 THEN 438" bypasses the CLOSEOUT instruction in 436. So change the first 438 to 436 and it works as intended.

TERRY'S OBSERVATIONS

Now for Terry Ward's observations (WACCI 94 Page 6.) about the file name being blanked out of the status line whenever the discfile option in the Label Printer or Tabulate routines is selected. This is due to the filename extension being changed to .LBL or .TAB by these options and the status line update routine will only accept a filename of <NO FILE> or a filename with the extension .DBF. The changes to lines 346, 356, 398 and 436 will restore the original filename extension (.DBF) prior to leaving the sub-routines.

Terry also pointed out a problem with the "Label Printer" routine and again his solution is the correct one. If the discfile option is chosen, it saves a file to disc but the file is blank, or only contains the field names if they were selected, because fo\$ is nil unless you use the "Tabulate" routine first. It also causes the fields to return empty in the browse routine. Again going to "Tabulate" restores things. Better to change line 352 with a\$=SPACE\$(fone) which gives the correct number of spaces required by the field contents

MORE LITTLE GLITCHES

There are a few other minor glitches that I have noticed, such as during the "Label Print" option if disc file is chosen, the abort instruction "Enter X to Abort" does not completely overwrite the previous instructions on line 24. Amending line 346 with the instruction PRINT al\$(clears line 24) immediately before the gosub 718 command cures this. A similar problem exists in line 318 if the records contain only one field. Replacing the LOCATE 18,24 command with PRINT al\$TAB(18) cures it.

Line 614 causes problems if you use the "Set Up Printer" after having loaded or created a file. Even if you abort without entering any codes you will find, on browsing the records, that all but the first two characters have gone and the print routine, in the tabulate option, gives odd results. This is due to a\$ being reduced to two characters. The change to line 614 restores the length of a\$ to that required to accommodate the field length [SPACE\$(fone)] before returning to the main menu.

So to get the program running smoothly simply replace the lines in RBCODE.BAS with those listed and everything should be hunky dory.

ANY OTHER BUSINESS

If you have a non-Epson compatible printer the following lines in RB.BAS will require alteration to the codes to suit your printer :-98, 102 to 118 And in RBCODE.BAS the applicable lines are :-344, 402, 404, 406, 426 and 428.

According to the .DOC file the Label Print discfile option is readable by PROMERGE. As I do not have PROTEXT or PROMERGE I cannot comment. Perhaps PROTEXT's number one fan would care to try it out.

Some care is needed when creating entries to ensure compatibility with the sort option, especially when entering numbers. Dates should be in the year, month, day format and any other numbers need the decimal point in the same position.

I found the Label print option extremely time saving, addressing all those Xmas cards.

Well thats about it for now. I hope this article has been of use to all RAMBASE fans out there and maybe converted some who were put off by the reported errors. Also I hope, has contributed to Philip's peace of mind. <<You have -Philip>>

Peter Robson

<<One point that Peter brought up during his articles. Most of the programmers that I know have NO problem with someone updating their programs so long as the original Author is still credited as the main Programmer and that they're sent a copy (if you can find their address) before you let it go.

However, if someone modifies a program and tries to pass it off as all their own work or, worst still, tries to make money from it, then they will find themselves in a lot of very unsympathetic hot water.

So, basically, the ruling is, Upgrade if you wish (some Authors actually encourage such work) but be nice about it. Just follow the above guidelines and you shouldn't go that far wrong.

Right, I look forward to publishing some program updates now -Philip>>

- - THE CHANGES - -

```
318 GOSUB 292:IF nf=1 THEN PRINT al$
TAB(18):PRINT"Enter 1 ";ELSE LOCATE
3,24:PRINT en$ " 1 to"nf;

346 IF d1=9 THEN fe$=".LBL":PRINT al$:
GOSUB 718:IF f9 THEN fe$=".DBF":
RETURN ELSE LOCATE 31,20:PRINT"Sav
ing ... "f$:OPENOUT f$

352 PRINT#d1,a$:IF d1=9 THEN a$=SPACE$
(fone)

356 IF d1=0 THEN PRINT:PRINT:LOCATE 25
,23:PRINT v$" Press a Key for the
Menu "v$:CALL &BB18 ELSE IF d1=8
THEN PRINT#8,typ$(t1+5); ELSE IF
d1=9 THEN CLOSEOUT:fe$=".DBF"

398 IF vv=2 THEN a=9:PRINT al$:fe$=".T
AB":GOSUB 718:IF f9 THEN fe$=".DBF
":RETURN ELSE LOCATE 32,20:PRINT"S
aving ... "f$:OPENOUT f$

430 IF a>8 THEN 436 ELSE CLS:LOCATE
24,11:PRINT"Want another hard-cop
y printout?":LOCATE 30,13:PRINT"E
nter <Y>es or <N>o.":ok=1:GOSUB 66
8:IF i$="N" THEN 438

436 IF a=9 THEN CLOSEOUT:x3=0:fe$=
".DBF"

470 LOCATE 1,2:CAT:LOCATE 4,24:INPUT"E
nter Name of File to Erase <CR> to
Abort ";d$:IF d$="" THEN 460 ELSE
LOCATE 60,24:PRINT yn$:ok=1:GOSUB
668:IF v=2 THEN LOCATE 1,24:PRINT
c$:GOTO 470 ELSE {ERA,d$:GOTO 460

614 z1=36:z2=23:z3=19:ok=21:nw=0:GOSUB
680:GOSUB 698:IF f9 THEN 614 ELSE
a$=n$:GOSUB 714:IF a$="99" THEN a$
=SPACE$(fone):RETURN ELSE n$=a$+" "

718 LOCATE 32,22:PRINT"Enter filename
:
"fe$:LOCATE 32,24:PRINT"E
nter X To Abort":z1=8:z2=47:z3=22:
ok=19:GOSUB 680:f$=n$+SPACE$(8-LEN
(n$))+fe$

719 LOCATE 60,22:PRINT yn$:ok=1:GOSUB
668:IF v=2 THEN LOCATE 1,22:PRINT
c$:GOTO 718 ELSE GOSUB 40:MODE 2:
f9=(f$="X "+fe$):RETURN
```

TAPPERS

BASIC PROGRAMS FOR KEYBOARD TAPPERS

Welcome to another episode of Tappers, the WACCI series that not only offers you a type-in, but also some interesting programming tricks. Now, I know that you were all told that there would be a diary program this month, but that has proved to be slight more difficult to program than expected, so for this month we have a different offering to, hopefully, interest you.

THE PROGRAM ITSELF

To be honest, many of you will have a program like this already but this one is very simple to use. It also shows some very interesting little touches. Lets start at the beginning shall we.

SECTION ONE

```
10 MODE 2
20 PAPER 1:CLS:PAPER 0
30 WINDOW 2,79,2,24
40 WINDOW #1,2,79,4,20
50 D$="A":|A
60 CLS
```

Run this program as it stands and you'll see what it does. It's just a pretty little touch. Line 40 is used later in the program and it'll be explained a little better there.

Line 50 sets the drive to 'A' and prepares a variable, D\$ to hold which drive is currently being used.

THE INFORMATION

This next bit adds the on-screen information that you need when using the program. It uses the D\$ Variable to tell which drive we're on.

SECTION TWO

```
70 LOCATE 17,2:PRINT"- - - The Tappers
Disc Control System - - -"
80 LOCATE 10,21:PRINT"(D) Drive : (C)
Cat : (E) Erase : (R) Rename : (T) Tex
tfile"
90 LOCATE 28,23:PRINT"- - - DRIVE IS "
;D$;" - - -"
```

The LOCATE command, in use in all three lines, sends the cursor to an area on the screen from which the next PRINT command will start. The first number is the characters across the screen, the second number is the characters down the screen. In Mode 2, which we're using, position 1,1 is the top left hand corner and 80,25 is the bottom right hand corner.

PRESS THOSE KEYS

There are many ways of getting the computer to recognise which keys are being pressed. The one I've used here has always seemed, at least to me, to be the most efficient.

SECTION THREE

```
100 IF INKEY(61)<>-1 AND D$="A" THEN D
$="B":|B:GOTO 60
110 IF INKEY(61)<>-1 AND D$="B" THEN D
$="A":|A:GOTO 60
120 IF INKEY(62)<>-1 THEN CLS #1:LOCAT
E 1,4:CAT
130 IF INKEY(50)<>-1 THEN GOSUB 170
140 IF INKEY(58)<>-1 THEN GOSUB 340
150 IF INKEY(51)<>-1 THEN GOSUB 430
160 GOTO 100
```

Each key on the keyboard has a number assigned to it. These can be found in the back of the CPC Manual. Here, we've got the following keys in use.

D (61), C (62), E (58), R (50), T (51)

Notice in line 120 the CLS #1. This harks back to LINE 40 where we created the window. I told you I would get back to it, didn't I! Oh ye of little

faith. Anyway, there are two ways of using the window command. Both are very similar, but they have one very big difference.

A quick description of a window command. All text, going to that window, must appear within the screen boundaries set. The four numbers (in line 30), set the window to be from character position 2 along to character position 79, and character line 2, down to character line 24. The first two numbers are for the lines across, and the second two are for the lines down. Following me?

The window command in line 30, for want of a better description, can be called a Hard Window. That means that any text using normal print commands will be printed within the defined window. The computer does not need to be told to use the window, it does so automatically.

The second type, lets call it a Soft Window, defines the area but doesn't make any text go to it unless told to do so with a prefix (The #1 in this program).

But notice, I've used CLS #1. That simply means CLear the Screen, but only the window defined as #1. At the back of the CPC manual, you'll find a group of three grids that shows the way the screen is laid out. Examine those and you'll get the picture a little better I think.

BACK TO THE INKEY COMMAND

This doesn't test for letters, it tests for a key being pressed either on its own, with the Shift, or the Control key, or all together. There's a good explanation in the manual.

-1 is the value that the key sends to the computer when it isn't in use. Therefore, '<>-1' means that the command will be obeyed if the key had been pressed. There is a better example in the manual, I assure you. Dig it out, please.

SOME OTHER LINES

Look at lines 100 and 110. They use the D\$ variable along with the INKEY command to see if key 'D' has been pressed. A little better explanation?

Right, in line 100, if Key 'D' is pressed down, and the variable D\$ has been assigned an A, then make D\$ into a 'B'. Now, B sets the Drive to B (I bet you knew that) and the GOTO 60 sends you back to the beginning and rests the screen, including line 90, which prints the new drive in use.

MEADOW

Line 120 clears Window #1, locates the cursor at the beginning of the fourth line down and catalogues the disc. Why the fourth line down? So that it doesn't erase the message at the top of the screen.

The CLS #1, by the way, erases any previous disc catalogue that might have been on the screen. It does make sense when you run the program and see what happens.

RENAMING A FILE

This whole section renames a file on the disc. A simple thing to do, but this is very User friendly.

SECTION FOUR

```
170 WHILE INKEY$<>="" :WEND
180 LOCATE 1,23:PRINT CHR$(18)
190 LOCATE 3,23:INPUT"Filename to Change";B$
200 LOCATE 1,23:PRINT CHR$(18)
210 LOCATE 3,23:INPUT"New Filename";A$
220 A$=UPPER$(A$)
230 B$=UPPER$(B$)
240 LOCATE 1,23:PRINT CHR$(18)
250 LOCATE 3,23:PRINT"Change ";B$;" into ";A$;" : Is this Correct (Y/N)"
260 IF INKEY(43)<>-1 THEN 290
270 IF INKEY(46)<>-1 THEN 300
280 GOTO 260
290 'REN,@A$,@B$
300 LOCATE 1,23:PRINT CHR$(18)
310 LOCATE 28,23:PRINT"- - - DRIVE IS ";D$;" - - -"
320 CLS #1:LOCATE 1,4:CAT
330 RETURN
```

Firstly, look at line 170. I could have used CLEAR INPUT here, but the 464 doesn't have the command. All versions of Amstrad Basic have this.

Basically, what it does is stay at the line until no key is being pressed. It clears the Input Buffer, as it's called. So, if you use this in your programs, instead of CLEAR INPUT, it can be used by 464 users as well.

A QUICK TRICK

Line 180 gets our attention now. We've already covered the LOCATE commands, but look at the CHR\$(18). Every character has a CHR\$ numbers, running from 32 to 255 (no, the 32 isn't an error). The first 31 numbers are called control characters.

CHR\$(18) clears the line from wherever the cursor is (remember, LOCATE set its position), up to the right hand edge of the screen. It just prevents any messy leave behind characters.

Lines 220 and 230 change the variables A\$ and B\$ into their upper case equivalents (just in case you haven't got the caps-lock on) and line 290 does the actual name changing.

ERASE A FILE

This bit uses the same tricks as the Rename routine, except that it erases a file, instead of renaming it.

SECTION FIVE

```
340 WHILE INKEY$<>="" :WEND
350 LOCATE 1,23:PRINT CHR$(18)
360 LOCATE 3,23:INPUT"Filename to Erase";A$
370 A$=UPPER$(A$)
380 LOCATE 1,23:PRINT CHR$(18)
390 LOCATE 3,23:PRINT"Erase ";A$;" : Is this Correct (Y/N)"
400 IF INKEY(43)<>-1 THEN 'ERA,@A$:GOTO 300
410 IF INKEY(46)<>-1 THEN GOTO 300
420 GOTO 400
```

AND THE TEXTFILE

Alright, let's have a look at the first part of the textfile bit.

SECTION SIX

```
430 WHILE INKEY$<>="" :WEND
440 LOCATE 1,23:PRINT CHR$(18)
450 LOCATE 3,23:INPUT"Name of Textfile ";A$
```

```
460 A$=UPPER$(A$)
470 LOCATE 1,23:PRINT CHR$(18)
480 LOCATE 3,23:PRINT"Display ";A$;" : Is this Correct (Y/N)"
490 IF INKEY(43)<>-1 THEN 520
500 IF INKEY(46)<>-1 THEN GOTO 300
510 GOTO 490
520 WHILE INKEY$<>="" :WEND
530 LOCATE 1,23:PRINT CHR$(18)
540 LOCATE 3,23:PRINT"To Screen or Printer (S/P)"
550 IF INKEY(60)<>-1 THEN A=0:GOTO 580
560 IF INKEY(27)<>-1 THEN A=1:GOTO 580
570 GOTO 550
```

Again, this uses the same tricks that we've already used, except, take note of the variable 'A' created in lines 550 and 560

SECTION SEVEN

```
580 MODE 2
590 OPENIN A$
600 WHILE NOT EOF
610 LINE INPUT #9,A$
620 PRINT A$
630 IF A=1 THEN PRINT #8,A$
640 WEND
650 CLOSEIN
660 WHILE INKEY$<>="" :WEND
670 WHILE INKEY$="" :WEND
680 RUN
```

Line 580 is obvious I think, but I should mention that a MODE command resets any Hard Windows, but leave Soft Windows intact.

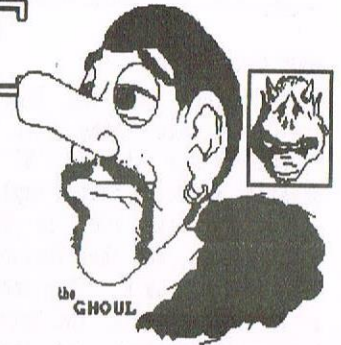
590 opens a text file from disc so that the computer can read from it. Line 600 (with WEND at line 640) creates a loop that ends when the End Of File (EOF) marker is met.

610 inputs a line from the disc and stores it in A\$ while 620 prints the line on the screen. Now, if the variable A has been set to 1, then that same line is now sent to the printer as well (anything with #8 after it goes to the printer).

650 closes the file on the disc then 660 clears any characters left in the memory. 670 waits for a key to be pressed and 680 is pretty obvious.

I've run out of space, haven't I? Oh well, I'll see what I can come up with for next month, hopefully the Diary that I promised last month.

DESK TOP PC/CPC PUBLISHING EMULATORS



BURRRRRPPP!... Well thats Xmas and the new year over with. Hmm Another 2st added to the old figure, any more like that and I'll have to re-design my logo. How was your Xmas and New Year then dear reader? I thought I'd try a little something different in this the first issue of WACCI at the turn of the year. But what to write about, this bugged me for a time then I decided on doing a brief write up on some of the PC-CPC emulators that are flying around.

IS ON THE TOP OF THE DESK ?

Some of you might be thinking what has this to do with DTP?, but as Richard (BUNNY) Fairhurst hinted at an issue or two ago, "Why doesn't someone transfer some PC clip art for the CPC?" Or words to that effect anyway. Well some of us who have a... Cough choke... PC might find this listing a help?.

Some of the emulators listed below are in fact for other systems but I felt it was only fair to include them in the listings as well. I apologise for the BRIEF reviews, but I can only pass on the facts as I receive them, and NOT having a #%!*#@ #*ty PC anyway makes life difficult at best.

SNAP GRAB (PC)

V1.1 by Georg Schwarz is a freeware utility that converts PC screens to a CPC MFII format. Of course you're going to need either an MFII or a good MFII simulator to load and view them. They MAY be convertible via a decent PD conversion utility or with the aid of COLOUR DUMP 3, I'm not sure on that score.

CPC-TIFF (PC)

V1.0 by Micheal Stroucken converts MFII screens to PC graphic TIF format.

CPC FILE SYSTEM

V0.85 by Derik Van Zutphen transfers CPC between DSK files and DOS files.

MACferm

Transfers CPC files over to a MAC with the aid of a parallel cable.

MULTIFACE II to snapshot

V1.1 by James Mckay converts MFII files to 64 Ko and 128 Ko snapshot files.

CPCread (PC)

V2.04 by Uirich Doewich, copies protected files to DSK from CPC format using CPC emulators.

CPCMENU (PC)

CREATED BY: MARCO VIETH Ver 1.1 - 1.4
DETAILS: Requires min 386 SX/DX with a VGA display, runs with MS-DOS & OS/2 2.X DOS bos. 1.4 includes GUS support, French translation, on line help, X2 joy sticks, VESA RESOLUTIONS, NEW SNA2GIF and better FDC routines.

CPE (PC & AMIGA)

CREATED BY: BERND SCHMIDT
DETAILS: Requires min 386 SX/DX or higher with MS-DOS. CPE carries better graphics resolution thought it can't write to DSK files, only it's own. The utility IS GUS soundcard supported.

The Amiga version requires 68000,1 Mo.

A-CPC (PC)

CREATED BY: HERMAN DULLINK (Ver 0.3)
DETAILS: Requires 385 sx min and VGA.

PC-CPC (PC & AMIGA)

CREATED BY: LUDOVIC DEPLANQUE Ver 0.37
DETAILS: handles CPC <> DSK converts

AMIGA-CPC (AMIGA)

CREATED BY: K.E.W THACKER
DETAILS: NONE

EMU-CPC (AMIGA)

CREATED BY: STEPHANE TAVENARD Ver 0.4b
DETAILS: NONE

!CPC (ACORN RISC OS/ARCHIMEDES/RISC PC)

CREATED BY: MARK RISEN
DETAILS: NONE

CPC++ (UNIX)

CREATED BY: UN-KNOWN
DETAILS: Version 1.0 for SunOS ONLY.

SIMPC

CREATED BY: GHE AACHEN
DETAILS: BLACK/WHITE, HANDLES ROMS (UN-KNOWN WHICH).

CPCMENUII (?)

CREATED BY: PACO LOPEZ
DETAILS: STILL UN-AVALAIBLE

MAC

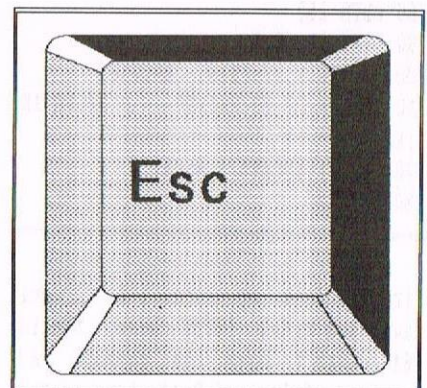
CREATED BY: EX COMSOFT GUY (I FORGET HIS NAME) <<Jess Harpur? -Philip>>
DETAILS: ON HOLD

UNIX/LINUX

CREATED BY: MARK CONNY
DETAILS: SKETCHY AT BEST

LINUX

CREATED BY: NOEL LLOPIS
DETAILS: To be ported to other UNIX





MARKET STALL

You are in the hands of

Angie Hardwick
23 Station Place, Bloxwich
Walsall, West Midlands, WS3 2PH
Telephone : 01922 449730

INFORMATION REGARDING THE CONVENTION

The date is confirmed as SUNDAY 6th JULY 97 at Bescot Football Stadium. Ticket price £4.00. Sorry about the price but the Stadium have put the room prices up again. Hours 10am till 5.00pm. For those people with trade stands the stadium will be open at 9.00am for unloading. You get your tickets from ME and also book your meals if your want one. Please make any cheques payable to WACCI. The hours have been extended to allow those people doing a job, so to speak, more time to chat and I hope to clear the trade tables at 4.00pm and keep the lounge open. I desperately need volunteers to help carry goods up the stairs and would appreciate any members living locally turning up at 9.00am to help. Please contact me if you can help.

FREE PD (WHAT A NOVEL CONCEPT)

Now this is an offer for FREE PD at the convention and this is how you get it. When you get your ticket you will receive a VOUCHER which will entitle you to one Free PD, what you do is bring this voucher TOGETHER WITH A DISC, SIZE OF YOUR CHOICE to the Convention in an envelope with your name and address on. We will try to copy the disc of your choice over that day if at all possible but if not it will be posted on to you as soon as possible. CLEAR well if it's not then ring me and I'll explain.

By the time you read this letters should have gone out to all the Traders. If you need any further information please feel free to contact me.

Now, if there's enough space, and if our dear editor doesn't veto it, I think if there's anything you want to sell through Market Stall give it a go, no wives, animals or partners accepted. <<Go for it -PDR>>

S A L E S

CPC464 with Green Monitor £ 40.00

CPC6128 with Colour Monitor, external 3.5" disc drive with side switch and ABBA switch fitted, AMX Mouse, 8-slot Rombox (with DES on two Roms, Protext, Rhodos, Romdos and MS800), Multiface II and dust covers. £ 175.00

Amstrad Action Mags as follows:
17,19,22,23,24,25,26,27,28 and 29
30-39 inclusive in Binder

40-49 " " "
50-59 " " "
60-69 " " "
70-79 " " "
80-89 " " "
90-99 " " "

100-108 " (109 missing)
110-117 " (114 missing) Various Prices
Amstrad Action Cover Tapes 1- 50 £20
(only No 8 missing)

Loads of tapes and discs, too numerous to list please ask.

Citizen 120D + Dot Matrix Printer with Amstrad Interface. Includes traction feeder and recent ribbon. £ 50.00
Colour Monitor for spares/repair. Does work but sometimes cuts out when thoroughly warmed up in use. No fault found when inspected by repair firm. Offers invited.

PLEASE CONTACT: Margaret Schofield (Mrs) on 0161-439-7034 (Stockport area) between 7 and 10pm only please.

FOR SALE:

North & South on Disc £ 5.00
Atlast D-base Disc & manual £ 7.00
Qualitas on Disc £ 3.00
Mini Office II Disc & manual £ 5.00
PLEASE CONTACT: Richard Latham on 0121-770-6041 (Birmingham) or will swap for anything interesting.

FOR SALE:

CPC and SPECTRUM Software on Tape and Disc. Lots available Prices from 50p. Send SAE for list to: ALAN CRESSWELL. 18, West Street, Geddington, Northants. NN14 1BD.

W A N T S

Christine Raisen wants Amstrad Action Mags 1 and 2 also, CPC 464 User Iss 2. Oct/Dec 1984 also Wacsi Mags original copies only 1 to 15 and 19 & 22.

Richard Fairhurst wants:

RAM-ROM (The odd thing that Rombo and Avatar used to make) - cheap
PLEASE CONTACT: Richard at Tea Cottage, Bottom Lane, Bisbrooke, Rutland. LE15 9EJ.

HELP!!!!

I need help to collect items donated to the club from Don Salter who lives in Shipton-U-Wychwood. Oxford.

Tel: 01993-830559.

Can anyone help ideally the items would be for the next convention but just collecting them for now would be great. Contact ANGIE if you can help. Thanks.



Beginneers Hardware

by Ben Watt

For a lot of people, having to stay near your CPC when playing games, just because your joystick cable is too short, can be very annoying. Which is why I thought I'd let you know just how to go about making your very own joystick extender which will allow you to choose just how long you want your cable to be! It involves no opening up your CPC and is a pretty simple thing to construct, so don't worry about it!

WHAT DO YOU NEED

First, you will need to have a soldering iron of some sort and some good solder, one D-Range 9 Way Socket (Maplin Code: RK61R), one D-Range 9 Way Plug (Maplin Code: RK60Q), two 9 Way D Hoods (Maplin Code: FP27E) and of course Seven-core Trailer Cable (Maplin Code: XR55K) which is sold by the metre, you can decide how much you want.

Having got these you can now begin to work! First, get your 9 Way Socket and solder a wire (remembering to strip the ends of the wires first!) to pins 1,2,3,4,6,7 & 8. As you can see by Diagram 1, these are the basic pins for left, right, up, down and firing. Once you have done this, take the other end of the cable and by looking at which colour of wire you put on the other side of the cable, solder on the wires to the 9 Way Plug's pins 1,2,3,4,6,7 & 8. For example, if you soldered a red wire to pin 1 on the socket side of the cable you'd now solder the other end of the red wire to pin 1 of the plug and so on!

THE LAST TOUCHES

There now, that wasn't so bad was it? Now all that remains for you to do is screw on the hoods to the plug and socket, to cover up those messy wires and make the whole thing look professional.

Now that you've done that, plug your socket into the joystick port and plug your actual joystick into the plug end. Now turn on your CPC and push your joystick in the different directions and push your fire buttons to check they come up right on the

screen. If you didn't manage to get your joystick working correctly, check to see if you have connected the wires up right.

That's it, you've successfully made your very own joystick extender, which is perhaps cheaper than buying one, but even if it isn't, you get the satisfaction of having made it yourself.

THE KEYBOARD EXTENDER

Making a keyboard extender is a very worthwhile project, as you can often want your keyboard to be further away from your monitor, and with Amstrad only supplying the CPC with short cables, this can prove a little difficult! It doesn't involve opening up your CPC either, so you shouldn't manage to break your CPC in the process (although no guarantees). This keyboard extender works for my 6128 but unfortunately, I don't know what the sockets are like on the Plus machines, 464 and 664, so whether or not this extender will work with them I don't know. Perhaps somebody could lend me any of the manuals for these CPCs so I could perhaps do a follow up article for the other machines. As with all hardware projects, you should read through the whole article before attempting to start constructing your project or it will cause a lot of grief later! Also, it is a good idea to disconnect any ROM boxes, multifaces or whatever else you might have hanging off the back of your CPC, the first time you try turning on, just in case there is something wrong, but thereafter everything should work in harmony!

THE SHOW MUST GO ON

Anyway, on with the show! For this extender you'll need a soldering iron and solder, one 6-pin DIN plug (Maplin Code: HH29G), one 6-pin DIN socket (Maplin Code: HH36P), two Standard 2.1mm Power Plugs (Maplin Code: HH60Q), two 2.1mm Power Plastic Sockets (Maplin Code: FT96E), two lots of low voltage 2-core cable (you decide how many metres you need, remembering to make both lots of cable the same length) and some (preferably screened) 6-core cable (again you decide the length, bearing in mind to keep it the same as the other two cables). If you can't get 6-core cable, then 7-core will do, you can always cut one wire off!

GET THE SOLDERING IRON OUT AGAIN

Once you've got these things you can start to construct your very own keyboard extender! First, get your DIN socket and solder each wire of your 6-core cable onto all 6 pins of it. Now take the other end of the cable and solder on (remembering which colour you used on the other end) the wires to the DIN plug. For example, if you soldered a red wire onto pin 1 of the DIN socket, you'd solder the red wire to pin 1 of the DIN plug. Once you've soldered all 6 wires, put the cable to one side.

Now, take your 2-core cable and solder the 2 wires onto 2 terminals of the power socket. Then take the other end and solder the 2 wires onto the 2 terminals of the power plug. They do have to be a set way round, and if when you switch on your CPC, it doesn't come on, immediately switch off and swap the wires. I am not responsible for whatever damage you have doing this, so don't come to me if everything blows up in your face (which it won't)! Having said that though, I'd be more than willing to help with any other problems you have

with this. Anyway, back to work, you now have to repeat what you should've just done with the remaining cable, plug and socket for the disc drive connection.

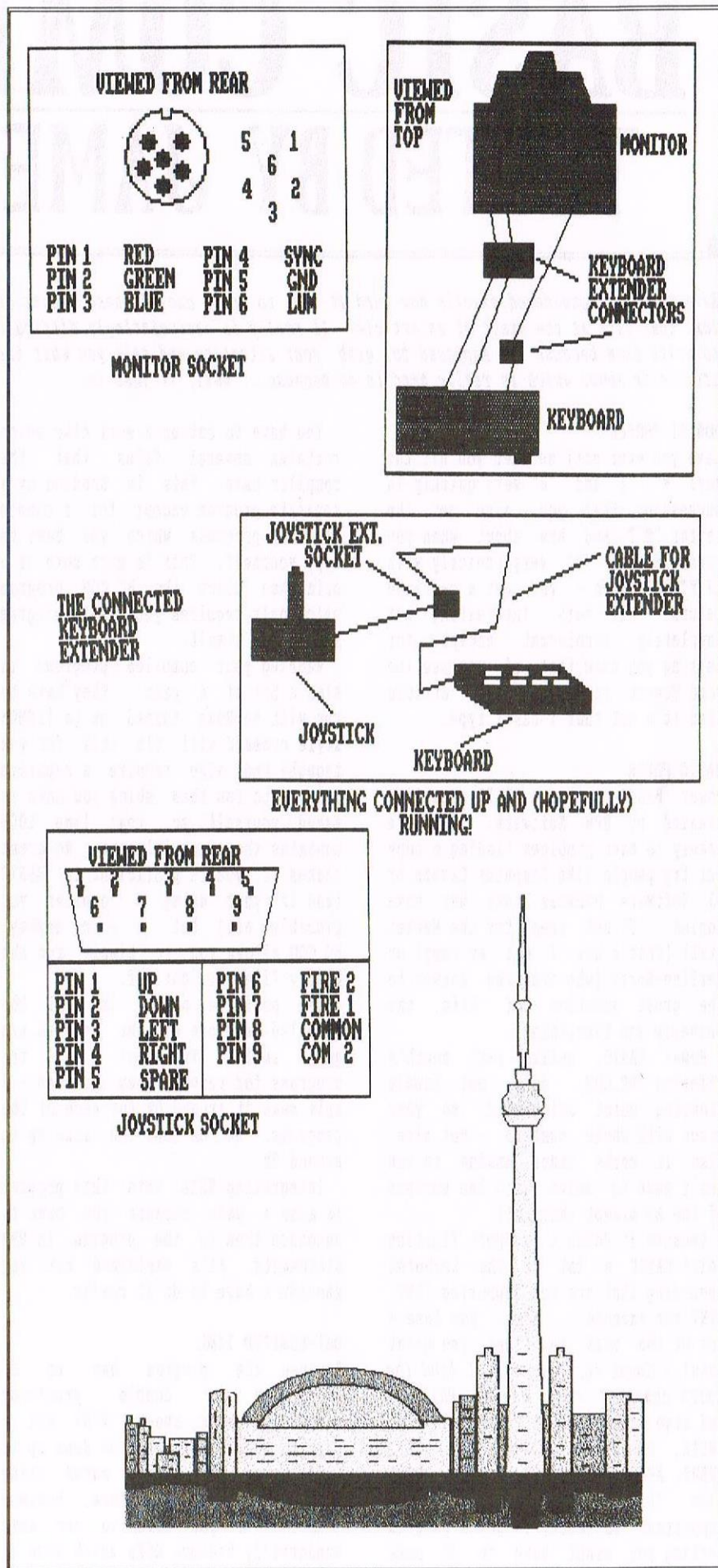
WELL. DOES IT WORK THEN?

Now you should have 3 lots of cables, each with a socket on one end and a plug on the other. You may want to box the untidy sides, but it's not very easy! Switch off your CPC at the plug, monitor and keyboard and then disconnect the cables going from your monitor to the keyboard. Next take your first 6-core cable and plug one end (whichever fits!) in the monitor socket on the back of your keyboard and plug the monitor lead from the monitor into the other end of the 6-core cable. Now get one of the 2-core cables and plug one end of it into your 5V DC socket and get the 5V DC plug from your monitor and plug this into the other end of your 2-core cable. Finally, get your 3rd and last cable (which should be a 2-core one) and plug one end into the 12V DC socket on the monitor and the other end onto the 12V DC lead from the keyboard! Now turn the plug on, switch on the keyboard and monitor and make sure that everything is working correctly. If nothing happens, immediately switch off everything again and try swapping the 2 wires round on the 5V DC plug. If however the screen comes up, but the disc drive fails to function, again immediately switch off everything and swap the 2 wires round on the plug side of the 12V DC lead. Now, as I said earlier, if you're still having problems with this project, then please contact me and I'll see what I can do!

NO EXCUSES NOW

When everything is working you can sit down further away from your monitor and type in an article for WACCI, Philip desperately needs them and it'll mean that you can type in comfort on your faithful CPC!

<<I hope Ben forgives the amount of time it's taken to print this article but it was one of those I managed to loose, find and loose again. Anyway, regardless of the last few months unpleasantness, here it is -Philip>>



BASIC COMPILER

TESTED BY JAMES COUPE

Have you ever considered exactly how hard it is to write one of these blocks of text that sits at the start of an article? It really is excruciatingly difficult to write them because I'm supposed to grab your attention and tell you what the article is about which is really hard to do because... well, it just is.

POWER PEOPLE

Have you ever noticed when you hit the keys "W", "E" and "R" very quickly in succession that you also get the letter "T"? And how about when you press "E" and "D" very quickly with SHIFT held down - you get a carriage return. All very interesting but completely irrelevant except for letting you know that if you see the word Powert appear in this article then it's not that I can't type.

BASIC POWER

Power BASIC is a BASIC compiler created by SPM Software. You are likely to have problems finding a copy but try people like Computer Cavern or OJ Software because they may have copies. If not then try the Market Stall (that's how I got my copy) or Merline-Serve (who are the answer to the great question of Life, the Universe and Everything).

Power BASIC, unlike last month's offering BC.COM, does not handle floating point arithmetic so your stuck with whole numbers - not nice. Also, it works under Amsdos so you don't have to delve into the horrors of the A> prompt (hurrah!).

Because it doesn't support floating point BASIC a lot of the keywords regarding that are not supported (INT, CINT for example). Also, you lose a lot of the 6128 functions (no great loss) <<Speak for yourself, I find the extra commands very useful -Philip>> and also some useful functions like INSTR, ON BREAK GOSUB, ERR, ERL, EVERY, AFTER, TAB etc. Also, RSXs like !DISC and !TAPE are not supported. In short, to get a program working you might have to do some serious re-writes.

You have to set up a work disc which contains several files that the compiler uses. This is handled by a separate program except for a couple of BASIC programs which you have to copy yourself. This is much more of a pain than using the BC.COM program which only requires your BASIC program and BC.COM itself.

Running your compiled programs is also a bit of a pain. They have to run with no Roms turned on (a !ROMON style command will fix this for you though) and also require a separate program to run them which you have to amend yourself so that line 1000 contains the right filename. No great shakes if you're proficient in BASIC (and if your using a compiler you probably are) but a pain anyway. BC.COM allows you to simply run the binary file straight off.

One positive point is that the compiled versions of the program are quite small. In total - all the programs for running them included - I only make it around 6k for each of the programs. BC.COM took the size up to around 9k.

Integrating RSXs into this program is also a pain because you have to announce them to the program in REM statements. It's explained but you shouldn't have to do it really.

UNT-LIMITED TIME

Because the program has to do everything in double precision numbers, numbers above 32787 are a pain to handle and can be done up to 65535 using UNT. This makes using TIME a pain, for instance, because after 65535 you have to use some wonderfully hideous RSXs which give it you in a high byte low byte form. All

well and good, but if the program can't handle numbers properly then you're going to have no chance handling high bytes and low bytes easily.

When I was working out the time taken for the programs I got the program to simply print up the TIME values and worked out the time later.

THE BENCH TEST

On the subject of the programs they have to be quite extensively reworked. Long variable names have to go, all variables have to be suffixed with % to indicate they are numbers (no using DEFINT here) and quite a few of the commands have to be reworked.

After reworking the programs I found that I had the following time differences. The bubble sort when reworked took 46.473 seconds to run uncompiled and 8.093 seconds to run when compiled (about the same as BC.COM). The simple graphics program took 10.14 seconds uncompiled and 8.79 seconds compiled.

KING AGONY

The simple maths program really showed me what a right royal pain Power BASIC was. I cannot get the program to run at all. It compiles fine, no errors, but on running I get some (wrong) numbers thrown up on the screen and a fair bit of garbage (which looks like the problems you sometimes get with a slightly dodgy Multiface) before the machine resets.

The compiling process also seems to be a fair bit slower than BC.COM (a bit of a pain really) because it takes four passes. This really gets on your nerves because each time your program compiles unsuccessfully you get a results file to read and you then have to alter and recompile the program.

Would I use Power BASIC again? No, probably not. Considering that the programs I wrote were very simple I had no end of problems re-writing them

to make them work. Stick with BC.COM if you can get it, well, at least until next month when I'll be taking a look at Laser BASIC. <<This is getting a little confusing. If next month is now then this is Issue 111 and not 110 and I still don't know what I'm talking about -Philip>>

NEXT MONTHS BIT THIS MONTH

Laser BASIC was originally released by Ocean Software but probably isn't very available now. As always, try the big companies (OJ, Computer Cavern and the like), Market Stall and Merline Serve but, if you want to try it out then you can get a copy from our very own John Bowley - details of cost and time are in the Wacchi supplement.

Laser BASIC requires that you save your programs in ASCII format which is a right pain in the bum. I can't tell you how many times I've had to reset the computer, load and then re-save the file because Laser BASIC has told me it's not an ASCII format file (because I'm not very good at this thing called counting - but I digress). Surely it wouldn't have been that hard to program it to take care of normal saved format programs - both the other compilers do.

AN OCEAN OF CHOICE

Laser BASIC is also usable with various other Ocean programs - the Laser BASIC extension set and the like. This makes sprite based programs (games) easier to do. Integration with the other programs is pretty easy - far easier than including RSXs in Power BASIC though, to be fair, it does give details of using Panda Sprites but who's got that? The manual gives some good advice on how to keep the memory used down as well.

Most commands are possible but, like Power BASIC, it only works in integer mode so no commands relating to fractions are possible. Actually, it will compile FIX, INT and CINT but they have no effect so you don't have to remove them from your programs - a nice touch.

MANUAL COMMAND

The manual is pretty good too. It doesn't give you an exhaustive list of error messages but they are much more self explanatory than Power BASIC's.

It even tells you how to draw circles in an example program! It doesn't require you to suffix variable names with a % and will cope with DEFINT a-z and even DEFSTR.

One very annoying feature of the program is that it always copies over some files onto your working disc every time you compile programs. However, besides that the compilation is pretty quick - about the same as BC.COM and far faster than Power BASIC.

Also, I didn't have to reprogram any of the files unlike with Power BASIC - much, much better. The only slight problem I had was that when the program finishes running a message is printed on the bottom line - overwriting the place I had put my TIMES. This is only a minor niggle though.

MORE TROUBLE WITH TIME

TIME is affected again because the compiler only works with double precision numbers (up to 65535, sort of because of minus numbers). The manual tells you it only works for around 130 seconds before re-setting. There isn't a way of making it work higher, like with Power BASICs horrible RSXs, but I didn't really find that a problem.

You don't have any problems with ROMs in the compiled programs either, and they run straight off from BASIC so you don't have to run a separate program. They're bigger than Power

BASIC's files (7-8k compared to 6k) but they're smaller than BC.COM's (about 9k).

RND is slightly re-worked. Instead of INT(RND*5) to get a number from 0 to 4 you use RND(5).

MORE BENCH TESTING

On the area of increases in speed I found that uncompiled the programs took the same time as BC.COM's. That is, the bubble sort took 63.873 seconds if I let it run in floating point BASIC, 46.703 if I let it run in integer BASIC and only 7.47 seconds when compiled - quite a saving, particularly when bubble sorting bigger arrays.

The graphics program, as always, showed little increase. It takes 10.813 seconds in floating point BASIC, 10.076 seconds in integer BASIC and 8.77 seconds when compiled.

The repetitive maths program actually works in Laser BASIC (unlike in Power BASIC). It takes 3.703 seconds in floating point BASIC, 3.536 seconds running in integer BASIC and 1.99 seconds when compiled - about the same as all the others.

BLAME JAMES, NOT THE EDITOR

Well, that's all for this series, but if you've ever wondered how long it takes people (for people read: me) to get around to these things, this was suggested in the replies to the questionnaire.

James Coupe

SD MICROSYSTEMS
(Dept Z) PO Box 24, Attleborough
Norfolk NR17 1HL. Tel (01953) 483750

The CPC, PCW and PC Specialists.

Software:

Wide range of programs including
Business/Accounts, Payroll, Word
Processing/DTP, Databases, Utilities
plus a budget range from only £5.00,
all available on 3", 3.5" and 5.25" disc.

AUTHORISED LOCOMOTIVE DEALERS AND
TASMAN SOFTWARE RANGE STOCKISTS.

Supplies:

Blank Discs, Lockable Boxes, Printer
Cables and Ribbons, Labels and more.
NEW! 3" DRIVE REVIVER KIT...£10.00
Drive belt, Cleaner, DIY instructions.

Hardware:

3.5" Disc Drive packages from £75.00
24 pin Colour Printers from £199.00
Disk transfer service CPC<PCW<PC
Send a SAE for our current catalogue
stating computer type and disc size.

THE ART OF EDITING WACCI PAGE LAYOUTS

I have been requested to explain how a WACCI page is laid out and describe the method that I use. So, trying to put into words what I do every month (it's not easy) let see what we can come up with.

WHAT YOU NEED

WACCI uses Protext and Promerge Plus to layout pages. This explanation is based on those two programs but, I imagine, other Word Processors will probably be able to do something very similar.

THE BASICS

Study this page and the graphic that should be down there at the bottom right hand edge. The two should match to an extent, at least to give you an idea of how the layout works. Firstly, however, you'll need to know where the different parts are placed on a page.

A WACCI page is 124 characters across and 64 down, cut into five different sections. The header is always 124 characters across, the Standfirst is always 81 characters across and each column is always 38 columns across.

Now, more figures for you to remember (I used to have them written down on a small piece of card). The top corner of the Header Section, the Standfirst and Column one are pretty obvious (always column 1). Column Two always starts on column 44 and Column Three always starts on column 87.

THE FIRST STEPS

There are several ways of laying out a page, but the simplest is the most effective. If you're using Protext and ProMerge you'll have to get used to 2 File Editing.

The first thing you need to do is ignore the header section, that is best done at my end to be honest. It's usually 12 lines long, with a gap of a single line at the bottom. At the base of the page (Line 64) is a double line. That leaves, on a page with a header, 50 lines of text.

plus the first column, combined, equals 50 lines in total. Get your first part of the text fitted into this basic area and you'll be ready for the next section.

THE SECOND COLUMN

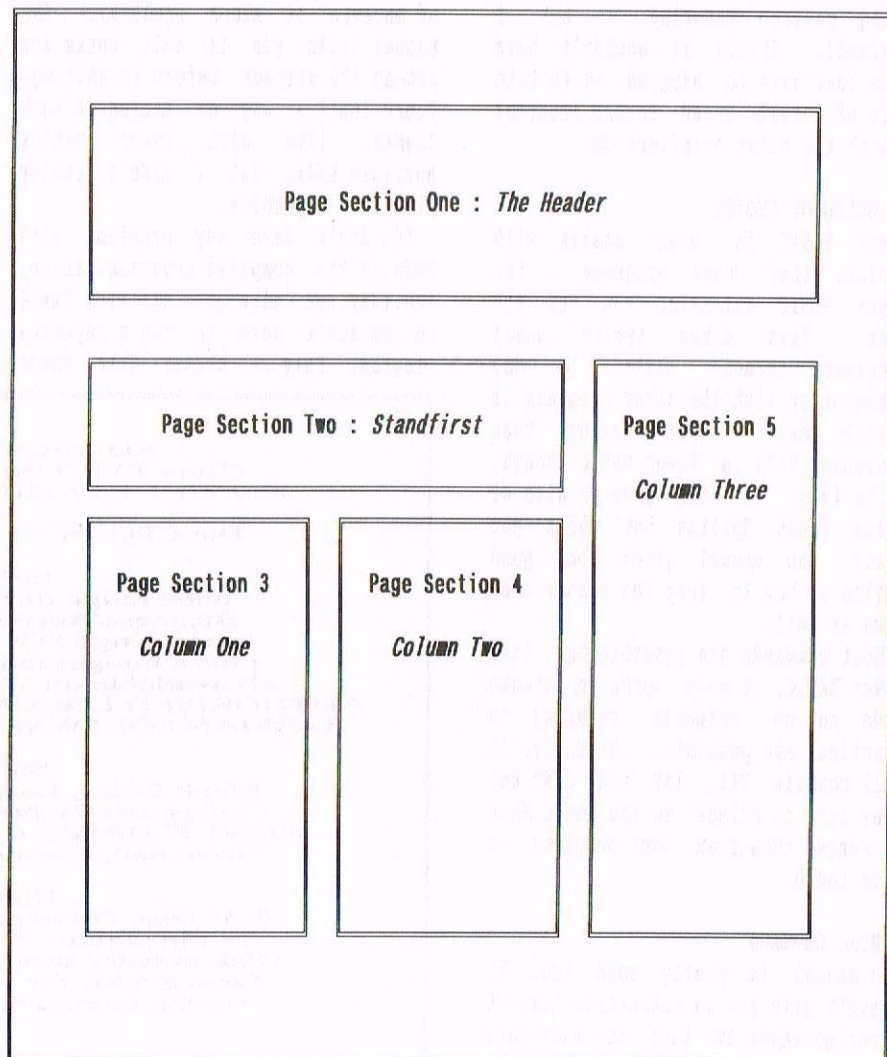
Think about this before you create the column and think about it everytime. I still make the same error when calculating its length.

The second Column of text is, in this format, also dependent on the length of the Standfirst. The calculation is 50 lines minus the number of Standfirst lines minus one.

THE STANDFIRST RULES

A Standfirst, that's the italic bit at that introduces an article, is usually between 3 and 10 lines long. Format your first bit of text to meet that requirement, then leave a blank line beneath it.

Now you need to create Column One. This is, as I've mentioned, 38 characters long, but its length is dependent on the Standfirst. The basic rule to follow is that the Standfirst



Now that may seem confusing to some of you, but if you examine a WACCI page then you'll see what I mean. This one is probably not the best example because it has a large graphic in the middle of it as well which also needs to have its line length taken away from the calculation.

THE THIRD COLUMN

Right, this is more simple. The Third Column is the same length as the first column + the Standfirst. It's usually set to 50 lines to be honest, most WACCI leader pages are, which is why they have a certain degree of uniformity to them.

THE FIRST TRICK OF THE TRADE

When using ProText and Promerge Plus, we have the capacity to do two-file editing. Basically, that means we can have two files in memory at once. Using the First File, create the layout as separate pages, with a four of five line gap between each setup.

The first page should contain the Standfirst with Column One directly between it, equiling 50 lines if you're using the WACCI standard.

The Second page should contain the second column, the length being that of Column One without the Standfirst. The Third Page should be the same length as the first page, 50 lines.

PROTEXT ONLY COMMAND

If you're using ProText and ProMerge Plus for this, this is how you do the layout of the page. If you're not using ProText then I'm not sure which commands you'd use, if you're Word Processor is even capable of the trick in question.

STEP ZERO : Create a Ruler Line that is 124 Characters Across. Place Tab Markers (!) at all of the following positions :- 38, 44, 81 and 87.

STEP ONE : Set a block marker at the beginning of Page One, on the first letter of the Standfirst. Now use CTRL+Y to swap between the two files. Place the cursor where you want the text to appear (Usually on Line 14, Column 1). Press CTRL-U to bring the marked text from the first text file and copy onto the page. Use CTRL-Y to switch back to the first file again.

STEP TWO

Go to the start of the second page of the first text file. Now, press CTRL+B to switch Protext into BOX mode. This means that, in basic terms, whatever gets surrounded in block markers will be shifted across, treating text more like a graphic than a sequence of letters. Press CTRL-K to remove the previous block markers.

Place the cursor at the start of the Second Column and set a block marker one more. Now, cursor down to the bottom of the block of text and move across until you're on column 39 of the last line. Place a second marker in this position. If you've done it right, the two columns of block markers will appear on the screen surrounding the text.

Press CTRL-Y to swap between the two files once more and then place the cursor on the right line (level with the top of Column One (ignoring the Standfirst)). Make sure that you are in column 44 of the text file. That's where the Second Column starts.

Press CTRL-U to bring over the next block and it should appear in the correct place. Use CTRL-Y to swap back to the first file once more.

THE THIRDS COLUMN

Use CTRL-K to remove the markers once more. Now, go the start of the third column and (staying in box mode) put block markers around it in the same way as you did with Column Two.

Now swap back to the Second File, where your WACCI page is now almost finished and place your cursor in Column 87. You should be on the same line as the first line of the Standfirst. Use CTRL-U to bring it over and that's it done.

THE TOUCHES

A couple of months ago WACCI published a method of placing BOX Characters in WACCI. If you wish to add BOX Characters to your text then please use this method. If you use another method then I have to rework the entire article to enable my system here to print it out.

If you are using that style BOX Characters, then feel free to put the header box at the top and the double line at the bottom. This really isn't vital however. Now, for a few little hints you might need.

THE PAGE NUMBER

That's on Line 65 of the page. Ignore it, don't put it in. It's placed there by using a ProText Embedded Command.

SHORT OF LINES

Extend the Header to more than 12 lines, remembering that each time you add a line to the header, to take a line away from EACH column (three lines in total).

TOO MANY LINES

Start learning the art of editing.

THE NEXT PAGE

Simple. Subsequent pages of WACCI, those without a header, have three columns of text, each text column being 61 lines in length. There is a double line graphic at the top, then a blank line, then the text. There are then the double lines at the bottom.

I WANT TO PUT GRAPHICS IN MY TEXT

Print your graphic (don't forget to send it with your article please) and find out how much text space it'll need. Insert a box of slightly larger than that size into your text. I'll glue the picture in later.

HOW DO I SEND IT?

On disc, both the text, the graphics and the original textfile as well. If you can send a printout as well, that would be helpful.

I'm afraid you can't send me a Master Printout with everything in place. When printing WACCI, we need to have a very high standard of quality for the masters to get the best reproduction. Besides that, it only takes a single crease to ruin a Master Sheet, which can easily happen in the post.

DO I NEED TO LAY IT OUT

Not at all, I'll do it quite happily for you, but when you lay out your own articles, you get a little more control over how it looks.

AND VERY IMPORTANTLY

Spelling and Grammer is important. I know that spelling mistakes frequently get into WACCI but you wouldn't believe how many we also manage to stop. If an article had too many errors, then I'd just have to dismantle it and re-lay it anyway.

IT'S THAT GIRL AGAIN VICTIMIZING PHILIP DIRICHLEAU



Since Philip is now the editor, it has been decided that he should be re-interviewed, except this time taking an active role in the process. Philip asked me to give him a good grilling so, always willing to oblige, I turned the heat up - I like my editors well done. <<I suppose I asked for it, didn't I -Philip>>

ONWARDS WACCI OFFICER

Philip has been the editor for eight months now. In that short time his own ideas and personality has been firmly imprinted upon the magazine and made an impression with everybody that, well, is out of this world.

Anybody with any comments on the issues raised by the questions and answers in this interview (or any previous) are welcome to put thier thoughts in writing to Fair Comment for Chippy Fairhurst <<and who's that then? Bunny? -Philip>> <<ask Brian Watson -Angela>> to ponder over.

WACCI) Why did you take on the editorship of WACCI, and did you feel you were adequately experienced especially as you had only been a member for a year and a half?

PdR) When Paul decided to retire as Editor of WACCI, we had a choice of throwing the job open to offers or choosing a new editor very quickly. Since I offered, John and Paul decided to let me try my hand at the task and see what I came up with.

In retrospect, I don't think anyone can be adequately experienced to edit WACCI. The most vital requirements are an ability to act in a totally erratic and unpredictable manner.

WACCI) Why was it decided that WACCI should now have a chairman and what is John's role within the club?

PdR) Before now, the editor made the vast majority of the decisions within the structure of the club, whatever

that decision was about, be it the Magazine or the club in general. I didn't have the experience within WACCI to do so, nor, to be totally honest, the desire.

Basically, the magazine and anything to do with it, is my responsibility, whereas everything else is turned over to John. I suppose it also means that if I were to step too far out of line, both John and Paul have the powers to either prevent me from publishing something or, in an extreme situation, assign a new editor.

There have also been some comments made about the non-elected status of the Chairman and Treasurer of WACCI. If WACCI were a huge organisation, then I suppose it would be necessary, but in a club like WACCI, it's the experince that is vital and, let be honest, John and, especially Paul, have a huge amount of experience. It also helps that I trust and respect both of them.

WACCI) How has the introduction of a Chairman altered that of the editor's and is everything working to plan?

PdR) Changed? I don't know really, since I've not edited without a Chairman to fall back on. However, everything is working perfectly to plan, though we did have a few teething troubles to start with.

WACCI) Around 1993 Uncle Clive told me that he was looking five years into WACCI's future. How do you see the other two years coming along?

PdR) Very well. The magazine is going excellently, though even I do seem to have some bad months now and then. I

believe that we will still be around in two years, maybe not with the present editorial team, but WACCI itself will survive.

WACCI) Richard Fairhurst, along with the rest of the BTL team, has been attacking WACCI somewhat in BTL. So why did you decide to hand Fair Comment over to him? Was the job too much for you once you also became editor?

PdR) I think BTL is an excellent counter to WACCI. We're serious (at least we're supposed to be) and BTL most certainly isn't. As to handing Fair Comment over to Richard? That was decided for me, in the end, by a rapid turn of events. Firstly, being the editor was taking a lot of my time; I didn't think that having both posts in the hand of one person was such a good idea and several members suggested that I should let it go to someone else. Richard called me up one night, I can't recall what it was about, and I offered him the post. He took it and the rest is history.

WACCI) Now Richard Fairhurst is Fair Comment editor, you generally seem to be in favour of the controversial and libellous disczine. Perhaps this "relationship" is not a healthy one for WACCI in general. How do you justify your actions?

PdR) WACCI must change, it must evolve or it won't survive. I'm the fifth editor we've had and the fifth style of magazine. The differences between the Steve Williams version of WACCI and the Uncle Clive version were massive to say the least and Paul changed it further when he took over. I don't think it's possible to edit a magazine like WACCI without putting something (or even quite a lot for that matter) of yourself into it.

WACCI) What steps are you taking to promote WACCI in the UK and overseas, changing the "old" and "staid" image that WACCI seems to have been stereotyped with? Has it been successful so far?

PdR) I regularly send sample issues over to France and Germany, though I'm not sure of the response as yet. I'd like to see a lot of new European members, that's where the strength of the CPC really lies these days. As to the "old" and "staid" image, one of the ways I'm trying to counter it is the new Fair Comment editor, um, oh, what's his name. Oh yes, Richard.

WACCI) Adverts have found themselves into the magazine. Are these organisations contributing to WACCI funds or is all this just a good-will gesture?

PdR) Neither. The advertisers send out our advertisement flyers in return for our advertising them. Since they send out to non-WACCI members, it seems a good trade. We are still gaining new members in response so they're a good idea I feel.

WACCI members also get a 10% discount from those advertising in the magazine, so there's that point as well. I suppose if the flyers were no longer working, I might reconsider the adverts themselves but I feel, on that score, that the Goodwill gesture would probably win.

WACCI) What other changes are you planning for the magazine, in terms of appearance, content, production method or any other factors (obtaining a PC/Mac perhaps and getting the magazine back on time and looking better than it does)?

PdR) Appearance? It should remain much the same as it is at the moment, unless someone comes up with a great idea. Content? Ask the membership, they're the ones who send in the articles. Production method? I'd love a PC or a MAC to do the graphics and headers on but I can't afford either and I don't know if the WACCI membership would accept it anyway.

As for getting the magazine looking better than it is! Any ideas anyone? I'm always open to suggestions.

WACCI) Does it worry you that there may be a steady decline in the number of new members from now on, basically because many people are abandoning their CPCs?

PdR) Membership had declined slightly, what to you expect, but the drop off has been very minimal at the moment. Thanks to the efforts of a few members, WACCI is advertised over a large area in Free Adds, which gains us regular additions to the membership figures. The more advertisement WACCI gets, the better.

WACCI) The membership figures have been removed from the Thanx And Stuff header. Is this so that we won't see the dropping of membership figures and panic into a WACCI Street Crash (or just another "Bumpy Landing Story")?

PdR) There will NOT be a WACCI crash. The membership figures were a recent addition to the Thanx and Stuff header anyway, and they were removed simply for reasons of space. Incidentally, there is a WACCI cut off point. When the membership drops to a certain figure, the plug will be pulled. WACCI won't fade away like some magazines have, we won't cut down on page counts and another price rise just isn't possible. We'll stop while we're still just about viable (right on the edge in fact) and we will have a big, final issue. Don't panic though, we're a long way from that point at the moment.

WACCI) If the reason is because there isn't enough room, why can't you put it somewhere else, perhaps in the body text of Thanx & Stuff and you can comment on it then too.

PdR) Why? Sounds very dull to me.

WACCI) What is the membership figure?

PdR) Steady around the 300 mark.

WACCI) WACCI seems to be getting later and later at the moment. Why?

PdR) Illness, Royal Mail and assorted difficulties. Last month we were spot on time. But we haven't dropped any issues, even if they aren't coming on the same date of every month.

Maybe I should explain that a bit better. In a normal month, I have to layout almost every page of the magazine, create the headers, do the first step of spell and grammar checking (the wonderful Frank Neatherway does the second step), make sure everything flows correctly and then print out the masters for Paul to create the magazine from. If that doesn't sound like very much, I'd invite anyone to try it for size. It can, sometimes, take an entire night just to layout a single page (and it has happened).

WACCI) It has been suggested that WACCI should update itself somewhat - not necessarily to BTL's standards - but certainly to encourage more reading of the pages that may break the build-up of alleged blood in some members' valium streams, or is this too radical a change?

PdR) WACCI updated to BTL standards? That does sound like a slight contradiction in terms. Does this mean that you prefer the BTL standard to WACCI's? I don't mind radical change, I'm all for it, but I can't write the entire magazine can I?

As for a little bit of controversy. I'm all for it, but, to be honest, I don't think the membership would overly like it. Besides, I'm not really into backstabbing, rumours and innuendo, at least not on the pages of WACCI anyway.

WACCI) The "old" WACCI, from Jiffy through to OMG could take itself seriously when needed but was also a light-hearted magazine that was a pleasure to read; Auntie John's articles on Chocolate Digestives, Shopping Trolleys and his version of Sinatra's "My Way" all great examples.

WACCI isn't like this any more. Some people suggest that the magazine is too stagnant and more fun should be put into it in this mould once more. What do you think of this proposal, and if you are intending to implement it in any form, how and when?

PdR) Whenever someone sends in an article that's not to do with the CPC specifically, I think long and hard about it. If it's worth publishing in WACCI then I shall do so, especially

if it's funny, topical or just plain interesting. I'm not fixed where WACCI is concerned and I will flex all over the place to make a good read.

WACCI) What infuriates you the most about any aspect of WACCI, now that you're editor?

PdR) Three things. Firstly when people really start having a go at me, about what I'm doing, in an unproductive manner. I don't get paid for this (some people still think I do), it takes about 40 hours a month, often more, to produce a single issue of WACCI and I do it purely for the love of it. It's a good job I've got some serious masochistic tendencies.

Secondly, when people rip apart WACCI, going on about it being so staid and boring and then do nothing about it (Angela is quite the opposite to that). It's great to criticise WACCI, but try doing something about it. People like this should try editing this creature once a month, they'd change their tune pretty quickly. I know I did when I took over.

And thirdly, when members complain to other members about that blasted Editor who never seems to get anything right, but never seem to contact me directly. I'm not exactly the most unapproachable person on the planet. I do listen to what people have to say, rarely, if ever, loose my temper and I'm always willing to swing to a different point of view (at least where WACCI is concerned). To prove my point, look at the past debate about the headers. It was far easier for me to create all of the headers using the 'unreadable' font, but no one liked them, so I changed accordingly, added more to my workload and didn't complain about it.

To counter that, the one thing I really like about WACCI is the way people call me up at times, just to let me know what a great magazine I've produced, or even, as has happened, when some call me up to tell me that they've been really impressed by the layout of a single page within the mag. Doing WACCI is, to quote Dickens and Steve Williams, 'the best of times and the worst of times'.

THE FINAL OUTRO (FOR NOW)

This marks the end of the ITGA Interview series, thank you so much for the new name Philip <<And who coined the name Tigger for me might I ask? Revenge is sweet -Philip>>. There will still be interviews every now and again and I'm working on a somewhat different one for a few months time so you can look forward to (or dread) that in the future.

Thank you to all those people who have been interviewed over the last 14 months and those who had to suffer me before that <<and those, no doubt, going to suffer afterwards -Philip>>.

<<I would like to thank Angela for a most excellent series of articles which have, I hope, been interesting to WACCI members.

I'd also like to thank her for taking me literally about giving the WACCI editor a grilling. I enjoy answering these sort of questions far better than carefully worded, politically correct wish-wash -PdR>>

<<I still hate these spare lines>>

AMSTRAD 464/6128

Amstrad GT65 Green Screen Monitors.....	£35.00
Amstrad 464 Tape Head Alignment Kits.....	£9.99
Amstrad Tape Head Demagnetizer.....	£9.99
Amstrad 464/6128 Joystick JY2.....	£9.99
Amstrad 464 New Circuit Boards Complete. Part No.Z.70375.....	£14.99
Amstrad 464 Phazer Gun With 5 Games on Cassette.....	£9.99
Amstrad 6128 Phazer Gun with 5 Games on 3" Disk.....	£9.99
Action Cheat Mode Book (Cover Issues 17-50).....	£4.99
Amstrad Printer Leads 464/6128 (34 way edge connector to centronics plug).....	£9.99
Amstrad LPI Light Pen for the 464 and Cassette Software.....	£14.99
464 Cassette Mechanisms with Tape Head and Motor.....	£9.99
Amstrad 464 "Teach Yourself Basic" Tutorial Guide with 2 Cassettes Part 1.....	£9.99
Part 2.....	£9.99
Amstrad 464 Dust Cover-Mono.....	£6.99
Amstrad 464 Dust Cover-Colour.....	£6.99
Amstrad 6128 Dust Cover- Colour.....	£6.99
Amstrad 6128 Dust Cover-Mono.....	£6.99
Amstrad Action Magazine Binders (Holds 12 copies A.A.).....	£4.99
Amstrad-The Advanced OCP Art Studio-6128.....	£12.99
Amstrad 3" Ex. Software Disks -Pack of 10.....	£15.00
Three inch Head Cleaning kits.....	£4.99
Three inch reconditioned disc drives (30 days warranty).....	£32.50

AMSTRAD 464+/6128+/GX4000

Amstrad 464+/6128+ manual.....	£14.99
Amstrad 6128+/464+ Keyboard Membranes.....	£12.99
Amstrad Paddle Controllers (Fits all 8 Bit Computers excluding Spectrums).....	£5.00
Amstrad MM12 Stereo Mono Monitors (464+/6128+).....	£30.00
Amstrad 464+ Computer with Stereo Mono Monitor.....	£65.99
Amstrad 464+/6228+ Printer leads.....	£9.99
Amstrad 3" Ex. Software Disks...(Pack of 10).....	£10.00
Amstrad LocoBasic/Burnin'Rubber Cartridge.....	£15.00

AMSTRAD GAMES CARTS FOR THE 6128+/464+/GX4000

No Exit.....	£7.99
Operation Thunderbolt.....	£7.99
Switch Blade.....	£7.99
Batman The Movie.....	£7.99
Pro Tennis Tour.....	£7.99
Navy Seals.....	£7.99
Barbarian II.....	£7.99
Robocop II.....	£7.99
Klax.....	£7.99
Pang.....	£7.99

Above Cartridges are unboxed without instructions

PRICES INCLUDE POSTAGE, PACKING ETC.
ALL ORDERS SENT BY RETURN: CHEQUES/VISA/ACCESS/PO'S

TRADING POST, VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF



TEL/FAX (01952) 462135



WHO'S WHO

EDITOR: PHILIP DIRICHLEAU

GROUND FLOOR FLAT, 121 RIPON STREET, LINCOLN, LN5 7NG

Telephone 01522 511608 (But not after 9pm unless it's VERY important)

MARKET STALL

Angie Hardwick (01922) 449730
23 Station Place, Bloxwich
Walsall, West Midlands WS3 2PH

WISH LIST MANAGER

Ernie Ruddick
26 Spitalfields, Yarn
Cleveland, TS15 9HJ

WACCI HOMEGROWN DISC LIBRARY

Dave Stitson
4 Connaught Avenue, Nutley,
Plymouth, PL4 7BX

THE ITGA INTERVIEW

Angela Cook (01903) 206739
Brympton Cottage, Brunswick Road
Worthing, West Sussex BN11 3NQ

ACCOMPLICE TO THE EDITOR

Ron Izett (He's back)
c/o WACCI HQ
address as above

PD LIBRARY - DISCS 1 TO 18

Dave Stitson
4 Connaught Avenue, Nutley,
Plymouth, PL4 7BX

FAIR COMMENT

Richard Fairhurst and Frank Weatherway
3 Glebe Close, Rayleigh
Essex, SS6 9HL

BOOK LIBRARY & COMPO-SLOT

John Bowley (01733) 702158
97 Tirrington, Bretton
Peterborough, PE3 9XT

PD LIBRARY - DISCS 19 TO 54

Stuart Gascoigne
24 Ketch Road, Lower Knowle
Bristol, BS3 5DQ

REAL STRANGE CHILDREN

Jayne and Nicola
(Editors daughters)
c/o WACCI Dungeon

TAPE LIBRARY

Arthur Cook (01903) 206739
Brympton Cottage, Brunswick Road
Worthing, Sussex BN11 3NQ

PD LIBRARY - DISCS 55 TO 84

Ian Parker,
24 Oxford Drive, West Meads,
Bognor Regis, West Sussex, PO21 5QU

DISTRIBUTION AND SUBSCRIPTIONS

Paul Dwerryhouse
7 Brunwood Green, Hawarden
Flintshire CH5 3JA

WACCI ON THE WORLD WIDE WEB

The URL is :
<http://users.ox.ac.uk/~chri0264/wowww.html>

PD LIBRARY - DISCS 85 onwards

Doug Webb (01257) 411421
4 Lindsay Drive, Chorley,
Lancs, PR7 2QL

<p>WACCI SERVICES Frank Frost 4 Rectory Close Wootton, Ryde Isle of Wight PO33 4QB Phone (01983) 882197</p>	<p>Ex-software house discs ready formatted and labelled. £1.50 each for 3" and £0.35 for 3.5" Min order TWO discs. The Alternative Firmware Guide and disc only £3.99</p>	<p>PAST WACCI'S Frank Weatherway 3 Glebe Close Rayleigh Essex SS6 9HL Phone (01268) 784742</p>	<p>01-03,20 50p inc p&p 40-42,44,46-49 50p inc p&p 52-62,65-69 50p inc p&p 70,72-73,75-79 £1 inc p&p 80,83,88-98 £1.50 ditto 99-108 £2.00 ditto Go on, grab a back issue.</p>
--	--	---	---

SUBSCRIPTION FORM (110)

NB: Subscription includes club membership.

UK _____ ISSUES @ £2.00 EACH = £ _____
12 Issues for £22.00

EUROPE _____ ISSUES @ £2.50 EACH = £ _____
12 Issues for £27.50

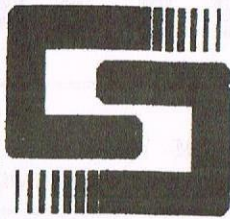
OVERSEAS _____ ISSUES @ £3.00 EACH = £ _____
12 Issues for £33.00

NAME _____ PHONE _____

ADDRESS _____

_____ POSTCODE _____

From:	To:
<p>Please send your cheque or Postal Order to:</p> <p>WACCI 7 Brunwood Green HAWARDEN Flintshire CH5 3JA</p> <p>Cheques payable to WACCI please.</p> <p>SAE needed for receipt.</p>	



ComSoft

10 McIntosh Crt., Wellpark, Glasgow, G31 2HW. Scotland. U.K.

SOFTWARE · HARDWARE · DESIGN

Telephone/Fax: 0141 554 4735

Email: cam1@cix.compulink.co.uk

NIRVANA - ROM based file and disc management suite. Features include: Disc copy, disc format, file copy, unerase, change file attributes, automatic catalogue of drive A and easy to use menu system. Suitable for two drive machines. Please note that Nirvana will only recognise data and system format discs in drive B. £15.00

MicroDesign Plus - Menu driven DTP page processing package. Two discs and two manuals. High quality print output. For all Amstrad CPC disc machines with 128k. £29.99

MicroDesign Extra - Disc of clip-art for use with MicroDesign Plus. Consists of large headline fonts, musical notation symbols, flowchart symbols etc. ROMDOS D20 format £13.99 or 3" disc £14.99

The Maps Libraries For MicroDesign Plus:

a) **Maps Of The British Isles** - Sixteen Hi-Res (256k strip format) maps of the coastline, motorways, counties and towns of the UK. ROMDOS D20 format - £12.99 or 3" format (2 discs) - £14.99

b) **World Maps** - Fifteen Hi-Res maps of America, Europe, Asia etc. ROMDOS D20 format - £12.99 or 3" format - £13.99

Page Printer - 24 pin and ink jet printer driver for MicroDesign Plus. Easy to use - good quality print outs. £9.99

DES - The Desktop Environment System - Sophisticated CPC graphical user interface, based on an Apple MacIntosh style WIMP environment. For all CPC disc machines. Disc - £14.99 ROMS (2) - £24.99

Zin1 - PC to CPC transfer program, runs under CPM. Allows the user to swap between a PC and the CPC using an interchangeable disc format. For all Amstrad CPC disc machines with 128k running under CPM3. £19.99

ParaDos - Superb Disc Operating System for use with large format 3.5" B drives. Compatible with and superior to ROMDOS. This is the only DOS ROM which should be inserted in ROM slot seven thereby freeing an extra slot for more software. £14.99

The Basic Idea - Quality Basic tutorial aimed at the competent Basic programmer. Consists of a 42 page manual and disc of example programs. £14.99

Xexor - Sophisticated disc backup utility, capable of backing up almost all protected CPC discs. £14.99

Soft-Lok V2.3 - Comprehensive tape to disc utility, designed to transfer speedlock protected games to disc. £14.99

ComSoft Rombox - Cased 8 socket Rombox expandable to 16 sockets, ideal for DES, ParaDos, Protex etc. £35 + £2 postage.

THE PROTEXT SUITE The most sophisticated word processing system ever developed for the Amstrad CPC computer range. Rivals 16 bit word processors in ease of use and range of features.

PROTEXT - The number one word processor for Amstrad CPC computers. Features include: Fast text editing, insert/overwrite modes, full text formatting, block functions, on screen help and printer control menu. DISC - £15.99 ROM - £22.00

PROSPELL - Advanced spell checker for PROTEXT. Features include: Massive 32,000 word dictionary, can check up to 2000 words per minute, build/edit/list dictionary, unlimited dictionary size and word search/anagram feature. Will also check files from other word processors. DISC - £14.99 ROM - £21.00

PROMERGE PLUS - The complete mail merge and utility program for PROTEXT. Features include: Comprehensive mail merge function, auto reformatting of text & selective printing. ROM version also allows for two file editing & background printing as well as column work. DISC - £14.99 ROM - £21.00

PROPRINT - PROTEXT print enhancement program. Features include: Multiple fonts within one document, import of fonts from other CPC programs, 9 and 24 pin printer drivers and an integral font designer for creation of new fonts/editing of imported fonts. DISC - £14.99 ROM - £21.00

DESTEXT - Powerful DES utility enabling owners of DES and PROTEXT on ROM to use the DES graphical interface within Protex. Features include: Unique WYSIWYG screen printing option, screen saver & multiple text options. DISC - £9.99

**PLEASE ADD £1.00 TO ALL DISC AND ROM ORDERS FOR 1ST CLASS POSTAGE IN THE UNITED KINGDOM.
AIR MAIL FOR INTERNATIONAL CUSTOMERS - ADD £2.00 PER ORDER.
CUSTOMERS WISHING TO ORDER BY CREDIT CARD PLEASE CALL 0141 554 4735 (24 HR ANSAPHONE)**