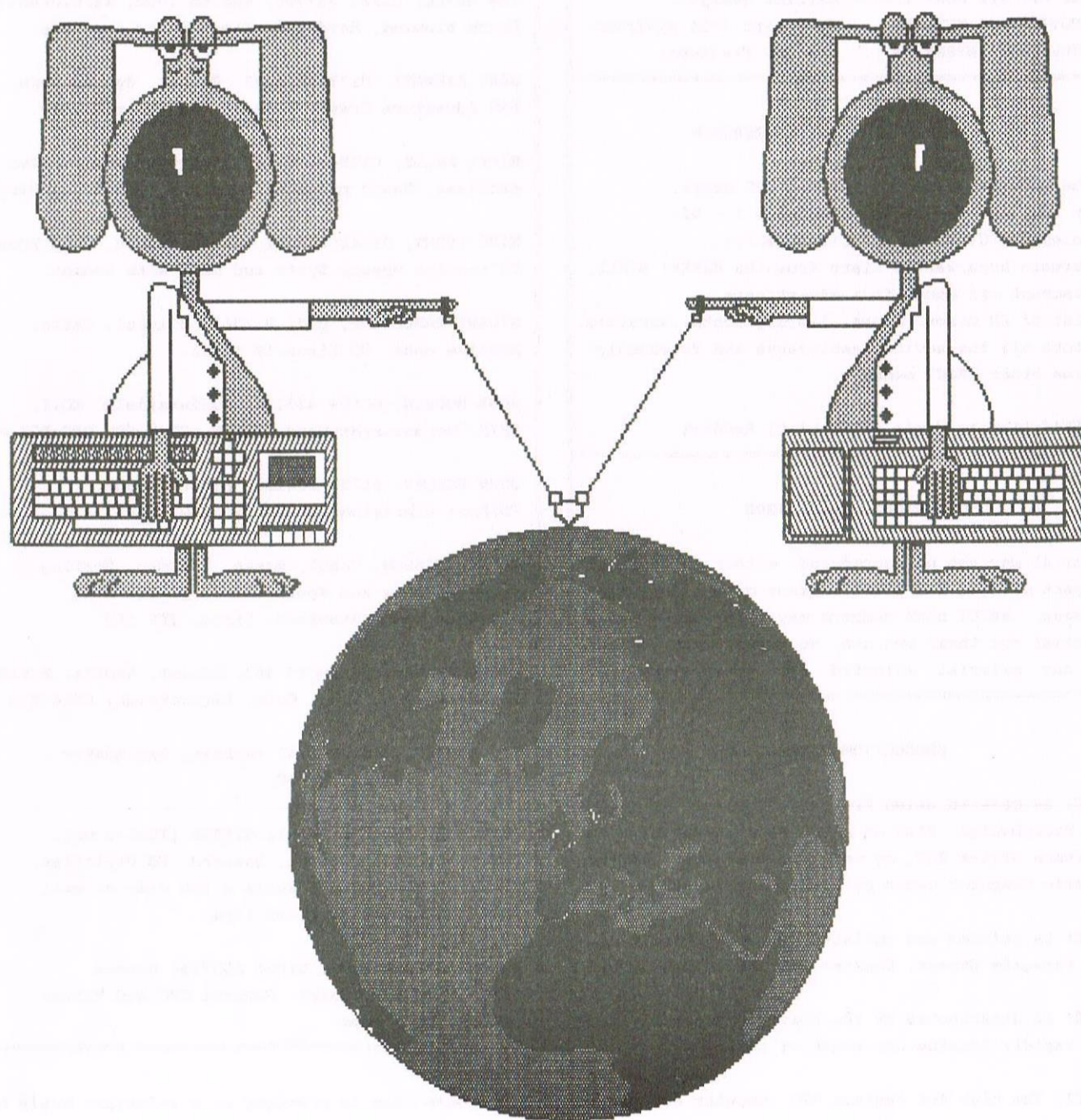


# WACCI

THE WORLDS BEST CPC MAGAZINE  
AND PREMIER CPC USER GROUP

ISSUE 103  
AUGUST

£2.00  
1996



## CONTENTS

3	THANX AND STUFF	.....	<i>Tigger has a Panic...</i>
4	THE DIRECTORY	.....	<i>No John this month...</i>
5	FAIR COMMENT	.....	<i>Me and Him this time...</i>
10	BASIC ACTION	.....	<i>Drawing with BASIC...</i>
12	PRINTER PORT	.....	<i>A Portable Guide...</i>
13	GHOST WRITER	.....	<i>Christine Reviews...</i>
14	PD EXTRA	.....	<i>Mr CPC Southwest...</i>
16	EPROMS	.....	<i>The last from Ian...</i>
18	FACTS AND FIGURES	.....	<i>From the Ex-Ed...</i>
19	MARKET STALL	.....	<i>Angelic Angie...</i>
20	TIMES CROSSWORD	.....	<i>1A - Look Backwards...</i>
21	READ ME NOW	.....	<i>From the Editor...</i>
22	UNDERSTANDING THE CPC	.....	<i>First in a Series...</i>
24	32 BIT I/O PORT	.....	<i>Martins design...</i>
26	BUYING AND SELLING	.....	<i>Sams with ITGA syndrome.</i>
28	THE COOK INTERVIEW	.....	<i>The OMG Treatment</i>

### THE BENEFITS OF WACCI MEMBERSHIP

- \* The best magazine for serious CPC users.
- \* An INDEX of the above from issue 1 - 96.
- \* Telephone HELPLINE (indispensable).
- \* Bargain buys/wanted lists from the MARKET STALL.
- \* Discount off goods from advertisers.
- \* List of PD discs, tapes, library books, services.
- \* Above all the advice, assistance and friendship from other WACCI members.

BENEFIT list by Ernie (Wish List) Ruddick

### COPYRIGHT: WACCI 1996

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, my very old Star LC10 and the Plastic Computer owned by Paul Dwerryhouse.

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

WACCI is distributed by the Dwerryhouse family who are rapidly losing any sense of sanity.

WACCI: The club for Amstrad CPC computer owners.

FRONT COVER: <<I still admit nothing -Philip>>

## THE TELEPHONE HELP-LINE



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

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

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

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

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

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

**MIKE LYONS**, 01942 259942, Wigan, Basic, Stop Press  
Dk'tronics Speech Synth and help with Sunset.

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

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

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

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

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

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

**PHILIP DIRICHLEAU**, 01522 511608 (That's me)  
Powerpage 128, G-Paint, Tasword, PD Utilities,  
Basic Programing and quite a lot else as well.  
Just don't call me after 11pm.

**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

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

Conceived and Founded by  
Jeff Walker in October 1986

Developed and Expanded by  
Steve Willaims  
Clive Bellaby  
Paul Dwerryhouse

Telephone 01522 511608

Copydate : 16 August 1996



*On one of the many occasions that I discussed WACCI with Paul, he mentioned that one of the worst times was when it came down to writing Thanx and Stuff and having nothing at all to write about. Thanks for the warning Paul. I'm now sitting here, a few days shy of the deadline and I'm wondering just what it is that I'm going to write about.*

## A LITTLE LATE

How many of you noticed that we were a little late last month? Quite a few did, I know, because some of you called John in a mad, panic stricken state, demanding to know when your next fix of WACCI was due to arrive. Okay, so I said in the mag it was on time; four days late isn't that bad when you consider that we had a change over of editor, of magazine production and I hadn't actually done it before.

Anyway, as I type this, I'm on schedule once more, after doing doing three days work in an afternoon and everything seems to be going fine.

## FAIR COMMENT

Something for you to notice this month. Fair Comment is a little sparse compared to normal offerings. Now, I know I'm also the Fair Comment Editor, but this really isn't my fault. Where are all my normal, regular letter writers gone to? Why haven't I been getting the usual collection of abuse and commentary that make my daily mailbag worth opening? What have I done wrong? Is it Franks fault? Has the Snail Mail managed to loose at least a dozen letters? Come on dear membership, write a letter, let us know what you like and what you hate or FC will get very short indeed.

## A MANY FACED PROBLEM

More of a Multifaced problem really. My Multiface blew up this month, whilst I was doing the crossword graphic that you can see on page 20 of this issue. I managed to get it across, just about, but had to wave goodbye to the Multiface. It's deader than Amstrad Action.

I didn't have to panic long though. I casually mentioned this to someone (ITGA as it happens) and 48 hours later, one drops through the letterbox (read handed to me by my postman) for my use until mine can either be fixed or I can afford to buy a new one, which ever comes sooner. With the increase in graphics which I hope to put into WACCI over the next few months, the little beastie is going to be somewhat vital. Thanks Angela.

## WHAT'S IN A COVER

Have a quick look at the cover. Go on, right now, have a quick look and then come back here again.....Do you think you can do better?

One of the reasons I now use the main box around the graphical bit, is so that members have got an exact size to work to when it comes to cover designs. So, if you think you can create a cover, get on with it. I look forwards to some cover pictures.

# THANX & STUFF

TIGGER

## ARTICLES WANTED

I know that Wish List Ernie has got quite a few article on the way for me, but I need some more, I need lots more. Don't think for a moment that you couldn't write an article for WACCI when it's quite probable that you can.

I've had a few calls from people asking me if they can write an article and my answer is always the same, yes. The question that always needs to be asked, it what do you write an article about. Well, the answer to that is simple as well. Anything to do with the CPC. It doesn't matter what it is, so long as it's to do with the Amstrad CPC computer. We've had articles about making a computer table for a CPC, buying and selling CPC computers, Basic Programming on a CPC and we've even had articles on how not to use a CPC. Literally anything goes, within reason, so long as it's linked to the CPC computer.

## THAT'S ME FOR ANOTHER MONTH

Not really true. I still have the last few touches to do to the magazine, like spell check all this and then I've got to start working on issue #104, but at least that's me almost finished for this month.

So, I'll finish my Earl Grey tea, smoke me a cigarette and then back to the grindstone again. Fair Comment is two pages short at the moment, so I'm going to spend tonight working out what I can fit on the two spare pages. Seeya next month - Philip

# THE DIRECTORY

*This full directory will be printed periodically in the magazine and also in the Supplement (more work for John). I've done as good a job as I could in the time allowed but if you are mentioned and don't want to be; aren't mentioned and you wish to be; or your listing is wrong, then please let us know and we'll correct it. Don't forget that WACCI has it's own book, software, tape and disc PD libraries, just look under Who's Who. Remember to send an SSAE if you can, it makes peoples jobs easier, and please mention WACCI when making any contact.*

## **'Zines And User Groups**

**UAUG** - Tony Baker, 26 Uplands Crescent, Fareham, Hants, PO16 7SY. Tel 01329 234291. United Amstrad User Group and CPC User magazine. This is the Chairman's address. He supplies information about the club & magazine.

**CPC South West** - Dave Stitson, 4 Connaught Avenue, Mutley, Plymouth, PL4 7BX. Not-just-regionally-based fanzine for general CPC matters. A5 bi-monthly, £1 plus postage.

**Bonzo's Scrapyard** - Dave Caleno, 29 Chapter Road, Strood, Rochester, Kent, ME2 3PX. 01634 724262 (8.30-10.30pm). Approximately bi-monthly publication to compliment Bonzo suite of programs and tape to disc transfers.

**8Bit** - Brian Watson, Harrowden, 39 High Street, Sutton, Ely, Cambs, CB6 2RA. The magazine for all 8-bit computers. For a sample copy send £2 (stamps or cheque to "B. Watson") for the latest issue.

**IEBA** - C/o The Secretary, Harrowden, 39 High Street, Sutton, Ely, Cambs, CB6 2RA. 01353 777006 (7-10pm any evening). The International Eight Bit Association, for users and supporters of ALL 8 bit computers. Send two first class stamps and return self addressed label (no envelope) for more information.

## **Independent (Software) Suppliers And Services**

**ComSoft** - 10 McIntosh Court, Wellpark, Glasgow, G31 2HW, Scotland. Tel/fax 0141 554 4735 (24hr ansaphone). Email: [cam1@cix.compulink.co.uk](mailto:cam1@cix.compulink.co.uk). Sells own

developed plus other hardware and software. Credit cards accepted.

**WACCO** - Harrowden, 39 High Street, Sutton, Ely, Cambs, CB6 2RA. 01353 777006 (7-10pm any evening). Send A4 SAE for current information on Protex, Maxam, Utopia, Office, Model Universe and other new CPC product releases and upgrades.

**WoW Software** - 78 Radipole Lane, Weymouth, Dorset, DT4 9RS. 01305 784155 (1-10pm). Adventure games for both the CPC and PCW.

**Dave's Disk Doctor Service Ltd** - 01892 835974. Disc salvage, data transfer and conversions. All profits from the company are covenanted to charity, sometimes special discounts to disabled users, some charities and church related organisations by negotiation.

**Merline-Serve / Radical Software** - Brympton Cottage, Brunswick Road, Worthing, West Sussex, BN11 3NQ. Tel/fax 01903 206739. Service supplying mainly second hand hardware, software and Wizard 8 Bit Printer Port. 10% discount to members. A5 SSAE for list.

**Trading Post** - Victoria Road, Shifnal, Shropshire, TF11 8AF. Tel/Fax 01952 462135. CPC soft and hardware items. Some Plus/GX4000 items also. Credit cards accepted.

**Capri Marketing, Computer Cavern** - 9 Dean Street, Marlow, Bucks, SL7 3AA. Tel 01628 891101 fax 01628 891022. CPC Soft and hardware items. Credit cards accepted. Send SSAE for list.

**H.E.C. (Amstrad Repairs)** - 47-49 Railway Road, Leigh, Lancashire, WN7 4AA. 01942 261866/672424. Quality repairs with most at standard charges.

Free technical support, advice and information on all repairs carried out. 10% discount to members.

**CrystalX Software** - 11 Vicarage View, Redditch, Worcs, B97 4RF. Stellar Outpost, excellent strategy game. Tape £2.50, disc £3.99 (Cheques payable to A. Swinbourne please).

**Three Inch Drive Belts** - AJ Howard, 65 Altyre Way, Beckenham, Kent, BR3 3ED. Disc drive belts for the CPC and the PCW. Flat fitting, with instructions. Only £2.25 including P&P.

**SD Microsystems** - (Department Z), PO Box 24, Attleborough, Norfolk, NR17 1HL. 01953 483750. CPC, PCW and PC specialists in software, supplies and hardware.

**Tronics North** - PO Box 7149, Garbutt, Queensland, Australia, 4814. Tel/fax 0061 77 253766 (international). Possibly the only Amstrad dealer in Australia supporting the CPC and PCW.

**Officeland** - 10 Sterte Close, Poole, Dorset, BH15 2AT. Tel 01202 666155 fax 01202 677958. We supply all of your computer needs; laser toner and labels, inkjet cartridges, refills, paper, labels, transparencies, printer ribbon Re-Ink, discs including CF2 (Amsoft £3.95 each) and many other items including PCW.

## **Public Domain Libraries**

**King Arthur's Domain** - Brympton Cottage, Brunswick Road, Worthing, West Sussex, BN11 3NQ. Tel/fax 01903 206739. Over 200 selections available. Disc (3"/3.5") and SSAE.

**RSPD** - Robert Sparrow, 40 Dee Court, Hobbayne Road, Hanwell, London, W7 3RQ. 25p per choice, 140 now available

**Presto 2** - Brian Key, 87 Sweetmans Road, Shaftsbury, Dorset, SP7 8EH.

**Prism PD** - Martyn Sherwood, 13 Rodney Close, Rugby, CV22 7HJ. 01788 817473. Disc and tape PD available.

**Ultimate PD** - Paul Edwards, 26 Woodside Road, Irby, Wirral, Merseyside, L61 4UL. PD on 3" discs or tape.

# Fair Comment

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

## THREE CHEERS FOR PAUL

Dear Philip, first of all I would like to thank Paul for all the hard work and no doubt long hours he put in during his time as Editor of the magazine. He took over from the very capable Clive Bellaby and improved WACCI even further. I thoroughly enjoyed working with Paul and the friendship that we built up. I think that Paul deserves three cheers and a pat on the back for all the work that he put in. I cannot wait for his review of Protext Office. I wish you the best of luck with the editorship Philip and I will be only too pleased to help you and John out in any way that I can.

I support the changes that you have made to the front cover and inside the magazine itself. I liked the new logo, but I could not quite get used to it. The reasons for you changing it back to the old logo are very practical and justifiable. The only thing I don't agree with is putting boxes round the page headers. But having said that, it is entirely up to you, as you can do what you want now that you are editor and I am only a contributor (beg, grovel, grovel!). Well, that's enough waffle for now. I look forward to hearing from you soon.

Mark Johnson  
Corringham

*<<Well said indeed Mark. I don't think I could have said it better. Paul was, without a doubt, one of the best editors WACCI ever had. Mind you, he is also one of the more forgetful, he still hasn't returned my left hand from the time he snapped it off when I was handing him my offer to do Fair Comment. Hey, Paul, can I have my hand back now, it quite hard trying to type with one one hand left.*

*I'm glad you like the new cover. It's sort of a mix between the old style of cover (pre issue 40) and the*

*new styles (after issue 50). As for the boxes around the headers, I'm quite please that someone has seen fit to tell me that they don't like one of the changes I've made. It proves there is still life out there. Saying that, I do like the boxes myself so they're staying, HA -Philip>>*

## WELL STRIKE ME DOWN

Dear Philip, I was looking through a few old WACCI's the other day, re-reading a few articles and letters etc (totally forgetting what it was that I was looking for), and happened to read about one member's experiences with power surges and lightning strikes. He suggested using one of those mains surge protector plugs to safeguard your computer from damage due to surges on the mains power lines.

These are certainly very useful devices, but it is a good idea to replace them every few years, as they usually have a component called a Varistor inside, and it gradually deteriorates in use. What happens is that when a transient (a voltage "spike") appears on the mains, the Varistor absorbs the energy in the spike thus preventing it from reaching your computer. The problem is that each time it operates, it "uses-up" some of the capacity of the varistor. It may be completely "used-up" after only one very large transient (perhaps from industrial machinery starting up, lightning strikes, etc) although it's more likely to gradually deteriorate from the smaller transients (of a few hundred or thousand volts) that are frequently present on the mains supply.

Talking (or should that be writing?) of lightning, anyone who lives under overhead power lines should get some protection from having their house struck. The reason being that the earth conductor (that's the one at the

top of the pylon) will offer a 90 degree arc of protection below it. In other words, if you draw a line from the earth conductor down to the ground, then anything within 45 degrees either side of that line shouldn't get struck by lightning. The lightning should instead be attracted to the earth conductor. That's the theory anyway!

.....Bye for now.....

Martin Bela  
Derby

*<<A striking observation, Martin. Almost every bit of electrical equipment here in the WACCI Dungeon has been protected in some manner or another. I didn't know about them wearing out though. I wonder if there might not be a method of testing their protective capacity after they've absorbed a surge? Just a thought.*

*I like the I.O. Port designs that you've sent in. I hope the membership likes them as well, because the series starts on pages 24 + 25 of this very issue -Philip>>*

## DID TIGGER REALLY MISS THAT?

Dear Philip, In issue 98, Paul Hollinshead asked about expansion port splitters. I was surprised that no-one suggested Comsoft as they are selling them for £12.50 for the CPC version and £15.00 for the Plus version.

In issue 100 - what an achievement getting to 100 is - Paul Catherall suggested compiling a list of CPC services and contacts. Well, IEBA, Independent Eight Bit Association, has already compiled a list. The list is for all 8-bits but should be what Paul is looking for. The Secretary is none other than Mr 8-Bit himself, Brian Watson, and can be reached at :

Harrowden, 39 High Street, Sutton, Ely, Cambs. CB6 2RA, Tel-01353 777006. The membership fee is £5.00, but this is a one off payment.

In issue 101, James Hoskisson asked about High Density 3.5 inch discs. I had a similar problem, but in my case I used Parados to format both sides to Data and they worked. Not a very effective way of using high capacity discs I'm sure. I must thank you for the answer you gave him regarding the extra hole in High Density discs, as when I covered this up I was able to format them to a high capacity.

I hope these titbits were helpful to someone. I have also enclosed a cheque for £24.00 for another glorious year of WACCI.

Yours sincerely  
Tyron Davies  
Trinsaran

*<<Hi there Tyron. Do Comsoft do an expansion port splitter? I have to be honest here and say that I've never heard of Peter Campbell doing one of those as yet. Then again, that doesn't mean very much because I've always made up my own little widgets like that - except for the one that I used to adapt the port on my Schneider.*

*The I.E.B.A. is a very worthy organisation as far as I'm concerned and should be given all credit it is due. However, it is for ALL 8 bit computers, whereas our Directory will be CPC specific. In fact, it should be in this issue somewhere (I hope).*

*I'm glad that little tip about the second hole in H.D. Discs came in useful. I usually use data format for all my discs, regardless of physical size. My opinion, for what it's worth, is that High capacity formats are only of use if you have an actual need to use them, rather than purely as a method of cramming mucho-plenty data on a disc.*

*Hope you enjoy another glorious year of WACCI -Philip>>*

#### BTL: BAN THE LOT

Dear Philip, it didn't take me long to get back onto the pages of FC did it?

First of all congratulations are in order for your first ever WACCI as ed, I think you have already stamped yourself all over it.

Now to the point of the letter. Whilst I enjoyed seeing Richard Fairhurst back in the pages of WACCI, I can't say I agree with much he said. BTL's output half that of WACCI's, utterly wrong - they are lucky match

one tenth of WACCI' content. More tightly edited of the two - rubbish. Judging from some of the dreadful material published in BTL, I'd say they have no editor. WACCI slip behind BTL - who does he think he is?

It's because we hold the number one spot that makes Richard take pop shots at us thinly disguised as constructive criticism. Frankly you won't find many WACCI readers reading BTL 4 as most of us are fed up of the childish content of the disczine. Here is my rating of their poor effort:

Articles: 10%  
Presentation: 5%  
PFD rating: 0%

No, I don't think 'Richard and the bunny men' has any relevance to the CPC scene today.

Oh by the way, as Richard is no longer a WACCI member, how come he gets to read WACCI? <<Dunno -Philip>>

Now to the real world. I really enjoyed the Milky Ones interview. I too remember Al Cooper with affection and how those bog rolls didn't clog up his print head I'll never know.

Seeya all,  
Paul Dwerryhouse  
Deepest Flintshire

*<<Ah, Mr Ex-Editor Sir, how art thou today. I'm glad you liked my first issue, but I can't recall leaving muddy footprints all over the master copy I sent down (you must have been very busy with the tip-ex.*

*I also enjoyed the Mike Lyons interview (I got to read it before anyone else did). I never had any contact with Al Cooper, except through the pages of Mikes Fair Comment. They don't make characters like him any more, do they?*

*The BTL Invasion? I don't think I need to make any comments about it since I made a couple of dry mutterings in the article itself. I do enjoy the BTL disczine myself (as a dose of humour), but I seriously believe that it doesn't even come close to matching the style and professionalism that WACCI displays. The whole point about publishing the article, however, was to get some responses from members. Unfortunately, as I type this, no one else seems to have taken up the challenge -Philip>>*

#### PROBLEMS 'AT' PRINTING

Dear Philip. Congratulations on taking over the editorship. Hope it's not too much of a bed of nails. Ditto for the new front cover. It's back to the future with an all CPC production. Good Show.

Now for a couple of silly questions. When trying to set out an invoice and using the symbol @, I find that if I also use the £ sign, the @ turns into the french a (grave accent). I am using Protext and KDS 8 bit port which I need for Mike Lyons' boxes. Is there a glitch in Protext or is it the KDS 8 bit port and how can I get over it?

Secondly, back to Parados. (Not again, I hear you cry). I know it won't work in slot 7 <<I think you might be meaning that it will work it slot 7 -Philip>> but can I use slot 7 for any other ROM or must it stay empty? And would Parados work in slot 7 if I switched it over to the second bank so that 7 became 14? I tried ProSpell in slot 7 and it didn't like it.

Best wishes  
Ron Hobday  
Bedford

*<<You're right there, Ron, WACCI will soon be a fully CPC production once more (except for adverts for a while longer yet). From the feedback I've been getting, it would seem to be a popular decision. As for the WACCI editorship being a bed a of nails; no worries, I just wear armour plating most of the time.*

*On a machine with a disc-drive fitted, ROM slot 7 must be used for the AMSDOS or PARADOS roms only. Other roms will works there, but it's not advisable to do so.*

*On a 464 without a disc drive, there's no reason why a different ROM shouldn't be in slot seven, but I can imagine that many tape only machines with a rom box added to the back. I unsuspect I'll now get at least one letter informing me otherwise.*

*As for moving the disc ROM to a different slot? That's a very good question. Put PARADOS above SLOT 7 and it probably won't work if the AMSDOS rom is in place, because it can't intercept any of the DISC commands. As for moving the disc rom higher than slot 7, well, it might work, but I'm loath to try it.*

On the whole, I think it's best to leave SLOT 7 of the Rombox free for the DISC rom and use the other slots instead, remembering to avoid SLOT 0 as well -Philip>>

# 8BIT

## THE MAGAZINE FOR ALL 8BIT COMPUTER USERS

Yes, if you've got  
a CPC  
or a SAM,  
a C64 or a PCW,  
a Spectrum,  
or whatever...  
if it is an 8-bit at  
heart,  
8BIT is for you

File-swapping,  
E-mail, DTP,  
Best Buys,  
Sources of  
Software and  
Hardware,  
Repairers, Club  
News etc.

Only £2.00  
per issue  
Bi-monthly

From:  
Brian Watson  
Harrowden,  
39 High Street,  
Sutton,  
ELY,  
Cams  
CB6 2RA

Tel: 01353  
777006

Fax: 01353  
778865

E-Mail:  
Brian@spheroid.  
demon.co.uk

### 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 LP1 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

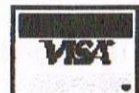
PRICES INCLUDE POSTAGE, PACKING ETC.  
ALL ORDERS SENT BY RETURN: CHEQUES/VISA/ACCESS/PO'S

## TRADING POST

VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF



TEL/FAX (01952) 462135



## AREN'T WE HAVING A GOOD SPELL

Dear Philip, when I sent a couple of discs to Marcus Ruegg for a copy of his extended Prospell dictionary I also sent a copy of my Prospell disc to which has been added the dictionaries of Crossword Compiler and he has suggested you may be interested in this for the WACCI library.

Enclosed is a 3.5" disc with the Prospell dictionary which includes the Crossword Compiler dictionaries on side A, on side B is XWD.DIC, POPMUSIC.DIC, TOWNS.DIC and NAMES.DIC which are the ones taken from the Crossword Compiler programme.

The XWD.DIC added about 200 words to the original Prospell dictionary. I have enclosed also a printout of the other three so you can judge for yourself if they are worth adding.

Myself, I think that TOWNS and NAMES are worth adding but not a lot of use for POPMUSIC.

Hope you find these of interest, no need to return the disc.

Yours sincerely  
Don Porteous  
Chester

*<<Thanks Don. I've added the words to the ProSpell Dictionary (that was until I started getting a dictionary full error) and the coverage of new words was quite surprising. I didn't realise just how many of the common words ProSpell missed. I didn't add the POP MUSIC file though, didn't seem to have much of a use for it.*

*I've sent a copy of the disc down to Master Bowley for inclusion in the library. Once again, thanks -Philip>>*

## BTL - NOT BETTER THAN WACCI THOUGH

Dear Philip, I thought that I'd set ribbon to paper and make a few points subsequent to my reading of issue 102.

Firstly, Richard Fairhursts opinions regarding matters CPC must be listened to because he's proved himself a better than competent programmer over the years, with Powerpage and Routeplanner to name but two of his masterpieces. But I feel that some of his comments regarding the presentation of WACCI miss the point. WACCI is, basically, a fanzine and part of its charm is the fact that it's largely produced on the machine its membership collectively - er - worships. There may be alternatives,

the sophisticated DTP facilities made available by PC software, for instance, but the words, the sentences, the meat of the publication, would be just the same, so why "junk" the CPC's role in production? And why brag so obviously about Powerpage (we know it's good) when Microdesign Plus does a perfectly acceptable job and manages to print out in A4 infinitely better?

Secondly, regarding the future of deleted commercial software, might it be not worth approaching the production houses individually? I'll do it if someone can provide the addresses and give me the authority to speak for WACCI. I can't help thinking that they would actually benefit from handing the whole lot over to non-profit-making public domain libraries because the whole issue of CPC software piracy (which still exists while they retain copyright) would cease to trouble them and they could concentrate on problems involving currently marketed software for other computers. And if any of them should give permission, there may be some deleted titles on their books where copyright doesn't actually belong to the publishing house but is retained by the author, and we should be warned before taking on a list en-masse.

Thirdly, the possibility of Protex upgrades: this could well become a Fair Comment debate of the highest order. Personally, I'd like to see a patch which enabled the second 64k of 128k machines used for text files, an examination of the possibility of using ROM (Brunword-sized) for Prospell dictionary files if that would speed things up and maybe the inclusion of all alphanumeric symbols so that the thing will tell me when I've accidentally slipped a number into a word, like I do. And the padding-out of lines using spaces when it right-justifies - what about adding spaces from the right of one line then the left of the next, and so on, to avoid the occasional appearance of "bulging" down the middle of the page? I do appreciate, though, that there is no possibility of any reasonable profit being made by the authors of the programme from any work they do and would understand if they thought I was talking out of the top of my head making suggestions like the above. But

I am convinced that my CPC+ Protex is as good a word-processing set-up as anyone uses anywhere because it's not so complicated I have to refer to the handbook or help screens and it does its job. I've learned it and that's always a good thing to be able to say. I write reams on it, hundreds of thousands of words over the years and it's great.

Finally, what's happened to the membership total in the box next to the no-doubt accurate portrait of our editor on page 3? Over the past year or so it's been a comfort knowing that our number has remained reasonably stable, and should it show signs of dropping there are those amongst us who might put that little bit more effort into making other CPCers aware that WACCI exists.

Congratulations on your first issue as Editor. And well done. A huge number of marks out of ten.

Yours sincerely  
Peter Rogerson  
Mansfield Woodhouse

PS. Back to Protex. I've just had to save this text on a spare disc before saving it to the one I've sent to you because I always use grotty old discs when I mail a letter and the only grotty disc I had left needed formatting. So how about being able to format a disc from within Protex?

*<<What 'O' Peter (I don't think we've had that opener in Fair Comment before). If you've read my answer to Pauls letter than you know my reasons for publishing the BTL review of WACCI. As a point of fact, I also think that Richard missed the point a little, but not by much.*

*I'm actually going the other way to Richards suggestion. WACCI, within a couple more months, should be totally produced on a CPC. One of the tasks of a user group is to promote the machine their using and I see WACCI as a very good advertisement for what can be done of a humble CPC.*

*I hope Fair Comment does get a huge number of letters about ProText upgrades, the more the merrier as far as I'm concerned. Being as we are now the largest format for general CPC chat, I imagine that WACCO and the Protex programmers may well be looking towards us for ideas.*



Formatting within Protext? I do it all the time, but then I do have Utopia fitted in the Rombox as well and Protext happily uses any other ROM commands that might be available to the user.

The membership figures? Well, it didn't take long for you to notice, did it? Let me think of a good reason why they were dropped. Urm. Ah yes. We had to add John Bowleys name to the header, plus mine (whilst retaining Pauls further down) which meant we had to find two more lines. The Membership Figure was the line which had to be sacrificed (and that's not bad off the top of my head) -Philip>>

#### NO DISC-ASTERS, JUST A DISC-COVERY

Dear Philip, I have recently experienced a problem regarding my Amstrad CPC 464+, and I hope that you will be able to help solve the problem for me.

I received my Amstrad as a gift in 1990. I then decided to purchase a 3.5" disc drive from Siren Software with a Multiface. I had no problems with the computer at this stage.

However, recently I have received a 3" disc drive. I am having difficulties with them both because the computer will only accept the 3.5" as Disc Drive A and the 3" as B. This creates problems because it means I can't run games off the 3". I have tried swapping them around, but then the computer refuses to accept the 3.5" drive. What should I do?

I have also thought of purchasing The Desktop Environment System for my computer but I am wondering if this will add to my problems.

Please could you help me?

Yours sincerely  
Paul Ruegg  
Carrickfergus

<<I like letter like this, Paul, since it makes me appear to know an awful lot of stuff. It seems to me that what you need is an ABBA switch. It's a simple little modification to the CPC which flicks the A and B drives around (on the circuit board), so that the computer is fooled into thinking that the external drive is 'A' and the internal is 'B'. How do you make an ABBA switch for a 464? Now that's a question and a half, since I imagine that you're using a DDI interface to

get it working? Urm, dunno, but I bet someone in WACCI does know, in which case I hope they'll contact me before next issue.

DES is deeply wonderful if you're not utterly proficient at using the CPC. It shouldn't add any extra problems to you and it'll probably save you quite a few -Philip>>

#### PASSING THOUGHTS

Dear Philip, being a recent Subscriber and now writer for WACCI (Art/DTP Packages), I can, in all honesty, only find one fault with WACCI, this stupid and none achieving argument over which is best, BRUNWORD MKI or MKII ROMS as opposed to PROTEXT!.

What's it accomplishing? Nothing at all in my opinion. I personally use Protext (ROM), I have a friend who used both protext and Tasword, but now uses Brunword. So? Okay, with Brunword you can achieve a high quality printout with some very good fonts. Protext can use the same argument with the aid of Promerge, PRO-EXT etc. So Brunword might be less of a struggle when it comes to loading discs that hold fonts as opposed to the case of Protext? In the end we all achieve what we want.. Right? <<We do, but the arguments still fun -Philip>>

Now don't get me wrong here I'm not slagging off either Brunword or it's users. I, nor anyone else who hasn't got or used Brunword can, in all honesty, up-cast a utility they only know about from write-ups. What I'm objecting to when it comes the the "Brunword V's Protext" thing in WACCI is the sad thought that all these letters eating up valuable space that could/should be used for more pressing CPC problems, surely?.

Lets stop arguing over what's the best and get on with helping other user's out there who might be struggling with more important issue's.

I was reading somewhere a rather interesting review on Parados, where and when I forget. Anyway, it would appear that, because of the way the program on the ROM runs, various CPC types may or may not pick up on a bug in the ROM itself. I believe it was assumed that most people who used PARADOS wouldn't come across the problem so it was never or simply couldn't be in the end rectified.

Personally I use MAXIDOS and NIRVANA so I don't get DOS'ed up about it either way.

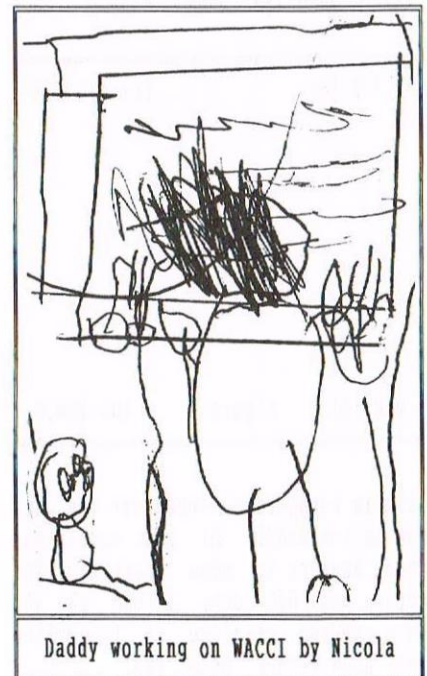
Is anyone (you never know?) out there is having problems with Advanced Art Studio? Then rest assured help is on the way. How? Simple yours truly, the GHOUL himself, will be giving a demo on Advanced Art Studio at the WACCI convention (What'd ya think of the demo-example screens Philip?) <<Excellent your Ghouliship -Philip>>.

Yours  
Jonty Jones  
Darkside Software  
UP NORF'

P.S. I've sent "TIGGER" on in advance to you Philip. I wanted to present him in person at the convention but I have too much to carry as it is. Give him a good home as he's sat on my monitor for two years now and he's let no harm come to it yet.

<<Thanks Jonty, especially for the Tigger. He's now defending the honour of the EPSON STYLUS 800 which I use to print out the Master Copy of WACCI on. Unsurprisingly, it had not come to any harm since he took up his new position at the WACCI Dungeon.

I've been enjoying the Protext and Brunword debate that's been carrying on but, at the same time, it hasn't effected any other letters in Fair Comment. I make room for every letter than comes in -Philip>>



Daddy working on WACCI by Nicola

# BASIC INSTINCT

By "Tigger"

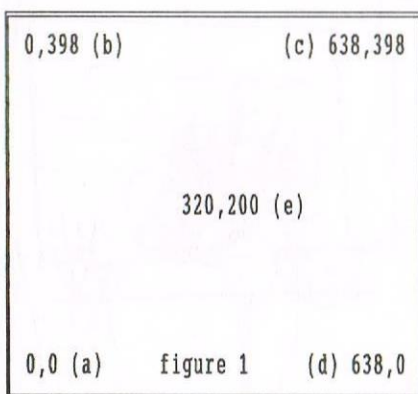
*I am often asked, by those friends I have introduced to computing, just where to start with computer programming. Now in most manuals, they start with the PRINT command and then FOR/NEXT loops. I don't hold, totally, with that idea since you don't get a little bit of magic appearing on the screen in a very short period of time. The best way to learn is by doing something that has instant impact and a least some appeal. How about creating a picture without an Art-Pad...*

## LETS START AT THE VERY BEGINNING

A very good place to start (with many apologies to Sound of Music fans). Keep things simple. When the computer switches on it's in MODE 1 so lets leave it there. Type in this little program and then lets examine the screen itself.

```
10 MODE 1
20 BORDER 26:INK 0,0:PEN 0
30 GOTO 30
```

So it doesn't do very much. It's not meant to. What we're doing here is examining the screen, which should be totally blank (and dark), with a border than should be light. Ignore the border, we're not interested in that for the moment. We are interested in the dark box in the middle. Look at this diagram just down here.



This is supposed to represent the dark box in the middle of your screen and those numbers do mean something. The screen has 640 dots across and 400 dots upwards, starting in the bottom left hand corner, point (a).

## WHEN YOU READ YOU BEGIN WITH ABC

Lets look at the five points as shown by the letters a-e. Lesson number one; computers usually start counting from zero given half the chance, whereas you mere humans seem to forget that zero is a number. The bottom corner is 0,0 (that's point (a) by the way). The other bottom corner is 640 dots away (point (d)). Start counting at 0 and add 640 and you get 638 (which does make sense if you think about it).

The top corner (point (b)), is 400 dots away upwards and, using the same calculation, we get 398. If you use position (400,400), we do get a dot, but we can't see it because it's off the top of the screen (useful for some purposes by very confusing). The dead centre of the screen (position (e)), is 320 dots across and 200 dots upwards.

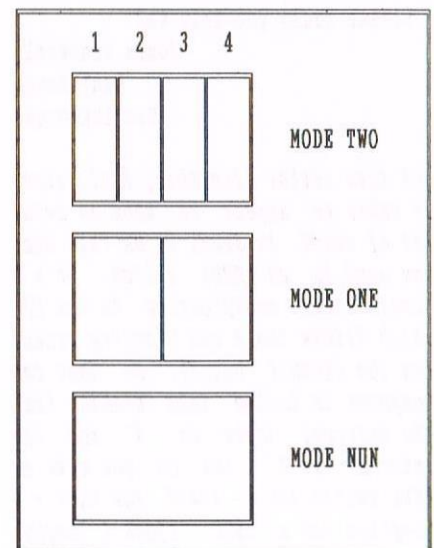
## THIS AIN'T HALF DOTTY

And it's about to get even more strange. Look at this little bit down here and then carry on with the paragraph that come directly after it. I promise, this will make sense in a little while.

	0	1	2	3	4	5	6	7	8	9
8/9										
6/7										
4/5										
2/3										
0/1	*									

So what does this little box mean. Well, it's supposed to be 25 pixels in the bottom left hand corner of the screen. The box marked with the (\*) is point (a). Now noticed the numbering. Each box has two numbers, not just one. That's because of the way the MODE system works. In MODE 0, the letters are very big, in MODE 1 there medium sized and in MODE 2 they're small (but they're always the same height). This is because the pixels in the different modes are different sizes. In MODE 1 they're square, whereas in MODE 0 they're twice as wide (in mode 2 they're half as wide).

The up-down numbers (lets call them the 'Y' axis since everyone else does), always remains the same. So, in MODE 1, where we are now, were have 200 dots from bottom to top, with each dot having two numbers, an even number and an odd number (we'll take '0' as being even). So, 0+1 are the same dot, as are 178 and 179. In MODE 1 it goes the same for the left to right dots (the 'X' axis). So, although there are only 320 dots across (at the moment), there are 640 positions, since each dot occupies two positions on the screen. To give you a better idea, look at this little diagram.



## BOTTOM OF PAGE 10 (ISSUE 103)

I just had to to that heading to show how clever I am. I know where this page is going (it's page 11) and I know which issue (103). But enough of this odd drivel, back to the screen once more.

Lot at the diagram down there at the bottom of the last page. Each of the boxes is a pixel in a different mode. A picture, they say, is worth a thousand words, well here's a picture with a thousand words to go with it. Each mode has different sized pixels, which is why each pixel can had more than one number to go with it, except in MODE 2 with each pixel has it's own 'X' axis number.

Right, enough of the explanation about how the screen works, lets get on with doing something a little more interesting instead, like actually programming the computer you should be siting behind.

## THE PLOT THICKENS

When we give the computer a coordinate for the screen we have to supply two numbers, first the 'X' and then the 'Y'. It's easy to get these mixed up, even experienced programmers do that, so get used to it. You'll know pretty quickly if you've got it wrong because it won't look right on the screen.

We shall start with two commands, PLOT and DRAW, both of which put something on the screen in a very specific manner.

**PLOT x,y:** Places a dot at the position selected by x,y

**DRAW x,y:** Draws a line from where the graphics cursor is to the position selected by x,y.

## WHAT'S THE GRAPHICS CURSOR PHILIP?

The graphics cursor in an invisible dot on the screen. At switch on it's at position 0,0: Whenever we use one of the graphics commands it moves it position to where the last x,y co-ord was and stays there. It'll become a little clearer as we go on.

## DRAW OUT THE PLOT A LITTLE

Did I tell you to reset the computer? I must have done. Well, if I didn't, do it, right now. Done that. Right, type in this little program. It's up there at the start of the next column.

```
10 MODE 1
20 PLOT 0,0
30 PLOT 0,398
40 PLOT 638,398
50 PLOT 638,0
60 PLOT 320,200
70 GOTO 70
```

If you can't see anything then you either need to put your glasses on or you need to go to see an optician. There should be five little dots on the screen. Do they look familiar? They should do. Look back at the first page and glance at Figure 1.

Look at the program again (on this page, don't LIST the program) and work out what each line is doing. I'm not going to insult your intelligence by going through each line.

## I DRAW THE LINE AT THIS

Right, reset the computer once more and type in the next little program. It's quite similar to the last one and then run it. See what happens.

```
10 MODE 1
20 DRAW 0,0
30 DRAW 0,398
40 DRAW 638,398
50 DRAW 638,0
60 GOTO 70
```

We've just drawn a box right around the screen and left it there so that we can now see what had happened.

## BACK TO THE GRAPHICS CURSOR

What was going on in the computers mind whilst it was running. More importantly to us, at the moment, what was the so called graphic cursor doing whilst all this was going on. Lets look at program one to start with.

**PLOT 0,0 :** Move the Graphic Cursor to position 0,0 and place a dot there. Go on to the next command

Quite simple really, isn't it. The same goes for all the other PLOT commands. The DRAW command now.

**DRAW 0,0 :** Draw a line from where the Graphic Cursor is now, to position 0,0 and then place the Graphic Cursor at position 0,0.

Am I making sense so far? I do hope so. Now, where do we go from here. Well, that really up to you, not me. You know how the screen is made up in MODE 1, using 320 dots across and 200 dots upwards (that's 64000 dots before you ask). You know how the graphic cursors follows you around the screen and stays at the last x,y position you either DRAW'ed or PLOT'ed to. The sky has just become the limit. All you need now is a little imagination.

## DOT TO DOT PICTURES

When you are using these two commands you are, basically, just creating a dot to dot picture without having any dots on the screen. The dots are in your mind. It does take a little getting used to, as does a lot of computer programming, but at least you're going to get results a bit quicker and lot more interesting that just using PRINT commands.

You'll find that your pictures may well be distorted, to start with, either too high or too wide, at least until you've mastered the scaling of the screen. It won't take long, I promise you. If you start practising with them right now, you'll be able to draw at least something recognisable within a few hours (like a box-car, or a tank, or a house). You won't be able to do curves (just yet), but that doesn't really matter. The whole point of learning to program in BASIC is that it should be fun and the results should come fast and furious. The little touches of a master programmer come with time and, perhaps, a little bit of lunacy.

## THE PLOT DRAWS TO A CLOSE

I've scraped the surface of the graphics capacity of the CPC, nothing more. There are other graphic commands that you might like to look up in your manual. Oh, alright, since you ask, here's one of them and little explanation.

**MOVE x,y :** move the Graphic Cursor to the x,y position. Do NOT place a dot and do NOT draw a line.

You might like to look up PLOTR, DRAWR and MOVER as well. That's it, page finished. Happy drawing. Oh yes, and please read PAGE 21 right now if you want a WACCI next month.

# THE GUBBINS

By Richard Narain

*The non-plus Amstrad CPCs have 7-bit printer ports. This is something that bothered me for some time but then I came up with a theory. Maybe Amstrad made certain things on their computers non-standard so that we'd all rush out and buy more Amstrad objects. You can't call me a cynical old fool; I'm only 22. (But you'd be right in thinking Amstrad aren't my favourite people right now.)*

## SO WHAT DO PRINTERS DO?

Did you know computers don't ever send text to the printer? Our wonderful gadgets only work with numbers. For instance, when Protext is printing that all-important letter you've written what it actually does is scan the document to get a value for each character and send that to the printer. The value is taken from the ascii chart. Ascii is short for American Standard Code for Information Interchange, though it applies to all Western computers (I have no idea how Japanese or Chinese computers work). It simply means every letter of the alphabet in upper case and lower case, all ten digits (0-9), every punctuation mark and a few other bits and bobs each have a unique number. For instance 'A' is 65, 'B' is 66, 'C' is 67 and so on.

The 'official' ascii values go up to 127 which cover everything you normally need. But suppose you want to go higher. After all, printers have some lovely graphic characters. Somewhere near the back of your printer manual is a chart showing all the characters your printer can achieve. About half of these are numbered 128-255. If you want to access these... tough!

## WHAT'S A BIT BETWEEN FRIENDS

A 'bit' is a Binary digIT. The highest number you can send to the printer with a 7-bit printer port is the binary number 1111111 (seven one's) which is 127 in decimal. If you have an 8-bit port the highest number is the magic 255. (Your Amstrad manual will have a fuller explanation of binary and decimal conversion.)

So one function of an 8-bit printer port is to get at those extra characters. The other thing printers do (apart from running out of ink at inopportune moments) is print graphics. Virtually every application on the CPC works with the 7-bit port perfectly well. But it might help to have the 8th bit in your own programs. When printing graphics, the picture has to be converted into tiny strips 7 dots high. It would take another article altogether to explain printing graphics, but basically if you have an 8-bit port your tiny columns can be 8 dots high.

In the end, the only reason for getting an 8-bit printer port is so that everything in your printer manual makes sense (Ha! You wish!). The 8th bit makes talking to your printer easier and more versatile in your own programs. But for everyday use you won't need one.

## A SLIGHT GOLDMARK PROBLEM

My 8-bit printer port came from Goldmark. It looks just like an ordinary CPC printer cable but with some extra, flat, unobtrusive gubbins six inches along. The initialisation program is about eight lines of machine code but without it the port works just like an ordinary 7 bit port. The only downside is that the code clashes with ROMDOS XL and RANDOS. Effects vary between read fail on a B drive AMSDOS disc and an excruciating grinding noise from the drive. If anyone has found a way around this, I'd be grateful for any help.

Richard Narain

## AN EDITORIAL ADDITION

I have heard of this problem before and it's not unsolvable. The problem lies with the fact that the Goldmark Printer Port Patch Program resides in a very odd place, which is hostile to ROMDOS in what can be quite a terminal manner, at least for the Disc Drive.

Mike Lyons, in WACCI #60 had a letter in Fair Comment about this, has created the following little program which replaces the original patch program. It's only required for ROMDOS users, no one else. Fortunately, we ParaDos users appear immune to this, urm, 'undocumented feature'.

### THE MIKE LYONS PRACTICAL PATCH

```
10 SYMBOL AFTER 256
20 MEMORY HIMEM-65
30 M=HIMEM-1
40 FOR Q=M TO M+63:READ D$
50 POKE X,VAL("&"+D$):NEXT
60 H=INT(M/256):V=M-H*256
70 POKE &BDF2,V:POKE &BDF3,H
80 POKE &BD31,&C3:POKE &BD32,V+&17
90 POKE &BD33,H
100 POKE &BD28,&C3:POKE &BD2C,V
110 POKE &BD2D,H
120 DATA F3,C5,F5,01,32,00,3E,F5,
    DB,69,17,17,30,0C,10,F6
130 DATA 0D,20,F3,F3,C1,B7,C9,F3,
    C5,F5,F1,01,01,EF,CB,7F
140 DATA 28,0E,E5,F5,AF,26,08,ED,
    49,ED,79,25,20,F9,F1,E1
150 DATA E6,7F,ED,79,F6,80,ED,79,
    E6,7F,ED,79,C1,37,C9,00
```

## OUTRODUCTION

Why am I writing an Outroduction? You see, there are five lines left here and I don't know what else to fill them with and make the page look neat, so an Outroduction will fit nicely. Told you so.

# GHOUL WRITERS IN THE SKY

By Christine Raisin

*I was asked to do this review by Ernie Ruddick. I had never heard of the programme, so it was a challenge to me to write a review of it. I read the letter Ernie had sent me, done on the Ghoul's writer (GW-UK) and I was most impressed. I liked it, easy to read and pleasing to listen to the music.*

## INTRODUCTION

I first cataloged the disc, to find the DOC files. They are very good once one understands them. I must state here that is not because of the way that they are written, it was me not being able to follow them. Reading is very hard for me to take in and understand.

Running "-GW-UK" gives you the chance to print the manual to screen or printer. This is six pages long and a great help as one can refer to them often. I, for one, sure do need this extra assistance.

## THE GHOSTLY DEMO

I then ran the demo, which tells you what can be done with the programme. The screen and music was good and most informative.

Now! Here's me thinking I'll have a go. I load in "-GWEDIT" (this is where the programme starts) and all I got was MEMORY FULL IN 10. The same went for -GWLINK. Oh! What was I doing wrong? <<I bet you have a ROMBOX attached to back of your computer, haven't you -Philip>> I tried the "-GWEDIT" file again. This time I got the Ghoul's writer with INTRO screen up. No way could I get it to edit. Time for a break and a rethink. <<What about the many thousands of cups of tea? Vital component to all reviewers, massive amounts of tea -Philip>>

## ERNIE TO THE RESCUE

I phoned Ernie, ready to give in. After a chat, a few hints as to what could be wrong. I tried again. Hurray! It's working.

After all that, I found it very interesting and entertaining. Once the text is written and edited for mistakes it must be saved. I found editing has a few problems, adding in extra bits on a line looses the end parts, so it then needs re-writing, the cause being no word wrap. Then you convert the file ready for the next part. The programme editor cannot read it once this is done so keep a copy of the unconverted form as well as saving the converted file.

We now come to the interesting part of putting the text together. Run "-GWLINK" and load in the converted file for text, put in a file for each of the groups: Font, Logo, Music, 1st FX and 2nd FX. There is a very good selection of each of these files on the disc, which made things easy for me. Art and music programmes I have not mastered as yet.

This programme was a first for me and I am very pleased with the results. This review will be done on the programme and sent to Ernie. I am sure he will comment on that <<I enjoyed reading the pages of this review sent to me by Christine, just one point to mention about the programme. There is no facility to print out the pages from Ghoul's writer that I know of. Maybe someone knows better. Christine did send me a printout of the text and she did mention the Multiface II in conversation? -Ernie>> <<Christine, if you have found an effective way of stripping the text out of Ghoul's Writer File, let us all know about it will you -Philip>>

## JUDGEMENT DAY

On the whole I found the programme interesting and entertaining. It gave me a few hours of work to get it going and, I have to say, it's not ROM friendly, which one could get over if they had a switch to turn them off. I don't so had to take them off (manually). I don't like to do that to often. Once I had mastered all this, the main fault seems to be the lack of a word wrap in the text editor.

I am sure many could find it useful as well as lots of fun. There is lots of scope here for the Artist, musician and Animator, being able to put your own fonts, logos, music and animation files on. It could even be used for making a demo.

I rate it about 75% to 80% making it well worth the shareware price.

Thanks to the programmer Tom et Jerry of SPA we can keep it CPC.

Christine Raisin

*<<This is Christine's first ever review for WACCI and as she informed me that the review was finished between 12.30 and 1am in the morning, I can only imagine that she enjoyed the experience. Hopefully, other first time writers for WACCI will be encouraged by this. If any member would like a programme guide (more of a quick key press reminder) then get in touch with me with a SSAE and I will send them one -Ernie>>*

*<<I've used Ghoul's Writer on several occasions, using it for disc based letters to send off unusual messages to a few friends and, just like Christine, I quite like it, except for the somewhat annoying lack of a decent Word Wrap Feature in the Text Editor part-Philip>>*

# PD EXTRA REVIEW

Part Two by  
Dave Stitson

*This is my second article on the PD EXTRA discs and we take a look at Bonzo Super Medler and Hack Pack this time. First let me explain that using Bonzo is not only for those who have a vast experience of the CPC. You may have just acquired your Arnold, Idiot or Big Idiot and these programs will still be of use. Arnold, incidently, was the nick-name given to the CPC 464, whilst Idiot stands for 'Insert Disc Instead Of Tape'; this nick-name was given to the 664 CPC and, yes, you've guessed right, Big Idiot is the 6128, (larger RAM).*

## INTRO

So what does Bonzo Super Medler and Hack Pack do? Well, it's a group of programs that will enable you to transfer a large percentage of tape base games to disc. I hope that, through this article, you will have a better understanding of the Bonzo suite of programs.

## RULE ONE

Always make a back up of your bonzo discs first. There is one rule of thumb for you to remember. If the tape won't load, then it's no good expecting Bonzo to make a satisfactory transfer. Another simple rule is that 664 & 6128 CPCs must have the Remote Control Lead connected from the Tape Player to your CPC, otherwise the ON/OFF signals sent via the remote will be missed and you will experience difficulty writing to discs between blocks and returning to read the Tape.

The simplest way to get started with your transfers, that I've found, is to make use of the DATABASE file on the BSM side of the disc before attempting any transfers. So how do we get to the Database? Just RUN"INFO and the details given will tell you the OPTION to use to transfer the game to disc. It should also give you any special information that you may require. I'm not sure if you can still obtain a 'printout' of the database but it's a very handy thing to get hold of and it saves you loading up the Info program each time that you need to see what option to use.

I have found in the past that there can be a variation in the option

stated, especially with Budget, Re-Released or Compilation labels; so if in doubt, run"DETECT and it will also come up with a few options for you to chose from.

## GETTING YOUR BAK-UP

RUN"BONZO and you will get a 'menu' of options 1, 2 or 3. There are also a few other useful facilities in the menu. All these Bonzo options when run will produce a typical "Press Play and Enter" prompt for the Tape. At this point, the BSM disc can be substituted for your proposed destination disc. All the other options are stand alone files on the BSM disc and can be run directly.

Want to get started? Before attempting your Tape to Disc Transfers, there follows one or two notes regarding the various options, most of which require you to do nothing except wait for the transfer to be made automatically. Some require you to make alterations to the files to ensure they run from disc, so if you feel that you not capable of making the alterations, skip this next piece and read up on Hack-Pack.

## OPTION 1

You will find that a great deal of software can be transferred using Option.1, usually files created using the standard operating system of the CPC. However, as AMSDOS files work under slightly different rules to those for Tape and the fact that Tape-Only machines have more free memory than a disc based one, it is possible that some time you will need

to make alterations to files to ensure they run correctly from disc. In most cases, this simply means editing the disc and adding a filename in a basic loader. A Tape based file need not have a name, but a disc file must have one at all times.

To do this when the last file has been transferred, you need to list the first file (if it's in Basic) and alter the instructions that load the remaining files to match the disc file names. Commonly, tape files use LOAD"!", in which case you must edit in the filename placed on the disc by Bonzo, resave the file and erase the original basic loader.

Option.1 automatically transfers tape to disc, file by file, until the routine is cancelled by recalling the menu. Unless you specifically input "N" to the relocation (Y/N) prompt, binary files will be relocated if they overwrite the AMSDOS workspace. The new Entry Address is indicated along with length etc. A call to the original entry address will jump to the new address (this is always 42701) which effects the locating of the file to the original address and then JUMPS to it, thus running the file. If the file is required to be located with a return to basic control, then POKE 42737,201: CALL 42701 places the code at its intended location.

Filenames are changed to suit the AMSDOS requirements, where a suitable filename does not exist. Bonzo names them "ANONAME", "BNONAME" etc. and you just rename these files to suit.

## OPTION .2

Option .2 is a Headerless file transfer program and has been effectively superseded by OPTION 2X, which rarely needs any amendments to the transfer. To run the files, run"BACK1 or the renamed file of your choice. Option.2 will run a program using "true" headerless (CALLS TO

&BCA1), and builds up files accordingly. Any Basic part will be skipped. Each file containing calls to &BCA1 will be named 'BACK1. BACK2' etc...

The files read in by these will be called B1, C1, D1. etc, the Numeric part indicating the BACK file from which it is called. You may have to edit the BASIC LOADER to get the files to run or create one to include: POKE &BCC8,&C9:POKE &BC6E,&C9. This should solve any problem.

#### OPTION .3.

This option will attempt to load and run Turbo, Flash or Speedlock files. If your transfer has been successful, a 42 K file called FLASH will be on the disc but any original loading screen will be lost. You can of course rename 'FLASH' to the filename of your choice.

You can also use the PICBONK file as an alternative. This will save the loading screen. The BONKEY files are well capable of handling extra long speedlock files. In all cases, where it works, running BONKEY or HIBONKEY, will produce 3 files on the disc, OFLASH, 1FLASH and 2FLASH. Don't forget to insert your destination disc, if the transfer is to be a separate disc.

PICBONK is the program to use to copy those programs that need the screen saved with it and will suitably

name the disc files for you. One filename will have 'SEVEN' characters. This is the one to use to run the game from disc.

#### OPTIONS .2X.4.4X.5.5X.5Y.6.7.8.&9.

The rules are the same for all these options. Run the option file and replace the destination disc prior to pressing the play key on your data recorder. All transferred files will be named based upon the information read from the tape and will carry a numeric last character, except for one, which is the file that will run the game.

#### CUTEDISC

What use is it? Well, you can get the header information even from so called 'protected' files of both Basic or Binary types and there is a very good transfer to tape program that is simplicity to operate.

#### HACK PACK

What is it? It's a program that you transfer the game to and TEST it out before you copy it to a resident disc. So make a BACK-UP NOW!

There are two HACK PACK programs, 'HackPack & HP2'. The rules for both are the same. They are designed as a very simple alternative to OPTION 1. Just run either 'HACKPACK or HP2' and follow the prompts on the screen. Initially, you are invited to accept

the defaults, MOTOR LOCK ON etc. Type "Y" to these prompts.

At first Hack Pack looks to see if the first file is Basic or not, so don't be surprised if it asks you to rewind the tape to have another look. The process will now continue.

All you need to do to effect the transfer is to press "TAB" when the game has fully loaded. I find it's best first to run the game through with the counter at zero, see where the counter stops when the game is loaded, count back ten and when attempting to transfer the tape to disc, press and hold the TAB key at that point until the transfer is complete.

Run "TEST? 6128 owners can test without the screen state. Tested OK? Now, just rename the "W" files to your own choice, copy the renamed game to another disc and erase the game from the Hack Pack disc ready for the next one.

#### OUTRO

More from the PD Extra Library next month.

<<Just as a total aside here, BONZO and BLITZ, two names which appear frequently on the PD Extra discs, were a couple of cats owned by the original programmer of the software. Just thought you might like to know that little bit of trivia -Philip>>

*Merline-Serve/KAD, Brympton Cottage, Brunswick Road,  
Worthing, West Sussex, BN11 3NQ. Tel/Fax 01903 206739*

## Merline-Serve

*Merline-Serve* is a non-profit making service run by CPC enthusiasts, for CPC enthusiasts. We supply software and hardware no longer available from the commercial software houses and publishing companies. We stock many books, magazines, fanzines, ROMs, hardware, software (both games and utilities) on disc, tape and cartridge. Our items are in good working order, or your money back. We will consider swaps, part exchanges and purchases ourselves. If you can't get hold of a CPC item, then try us, because we have probably got what you want, can get hold of it or know someone who can.

We also run *King Arthur's Domain*, a disc based PD library containing over 200 discs. For a catalogue, send a disc (3" or 3.5") and an S.S.A.E. to the address above. *Merline-Serve* is now offering a standard 10% discount to all WACCI members. To get our latest catalogue, simply send an A5 S.S.A.E to the address above, and we'll get one on it's way.

CF2 DISK (ex-software house) £15.00 per 10  
CF2 Crystal Boxes 15p each  
AMSOFT 3" 10's DISK BOX £4.00  
AMSTRAD MP3 £35.00  
1000's of TAPES from 99p  
Many DISK from £3.99  
eg: THUNDERBIRDS £4.99  
3" Head Cleaner £3.99  
BUSINESS, EDUCATIONAL & GAMES  
LIST AVAILABLE  
\* FREE POSTAGE OVER £10.00 \*

### CAPRI MARKETING LTD

COMPUTER CAVERN  
9 DEAN STREET  
MARLOW, BUCKS SL7 3AA  
Tel: 01628 891101 Tel/Fax: 891022  
CREDIT CARDS ACCEPTED

# A Guide to EPROMs on the CPC

With Ian Neill

*I'm back! Not content with boring you with technical mumbo-jumbo for the past lot of months, I'm back with yet more. In this issue I will describe how to put a BASIC program, with machine code, into an EPROM. As I created this EPROM, for Dick Hornsby in London, I thought "make notes, there's an article in this". So here it is.*

## WHAT TO PUT IN THE EPROM

I had a disc with the following programs on it:

### a. C.BAS

A BASIC number base converter

### b. D3.BAS

BASIC part of directory editor.

### c. DISCODE.BIN

BINARY part of directory editor.

Using UTOPIA I got the following information about the files:

	Load	Start	Length
C.BAS	&0170	&0170	&0c5d
D3.BAS	&0170	&0170	~&0d82
DISCODE.BIN	&1000	&1000	&1400

## MULTI-LOADING PROBLEM

Program b (D3.BAS) wants to load program c (DISCODE.BIN) from disc! Program b (D3.BAS) contains a line like this:

```
20 OPENOUT "H": MEMORY &FFF: CLOSEOUT:
LOAD"DISCODE.BIN",&1000
```

This is a common trick to get AMSDOS to load a file when HIMEM has been lowered so far that all you get is the "OUT OF MEMORY" error. Obviously this will not do! We want all the programs to be in the EPROM, and anyway the EPROM loader will put them into the right place in memory.

The line must be modified to this:

```
20 MEMORY &FFF
```

This also has the effect of changing the length of the program :

	Load	Start	Length
D3.BAS	&0170	&0170	&0d61

This is a problem you will never encounter if you are putting stand alone programs into EPROMS. However it must be "fixed" in any BASIC or machine code programs that have to go into the EPROM.

Watch out for BASIC loaders that load in a binary file that contains RSX's. The RSX's must still be "logged-on" by calling the machine code. In a case like that, only the bit of program that loads the RSX's from disc should be removed.

The EPROM loader copies all the programs in a multi-program program to RAM, but only RUNs the main program.

How to RUN a BASIC program from machine code? This is a fairly fundamental requirement, and isn't nearly as simple as RUNning a machine code program. Essentially what we have to do is copy the program to RAM, set up some of BASICs variables, and then convince BASIC that "RUN" was typed. This is how to do it:

I did not write all of this code - I put it together from other programs; I found most of the details and explanations in the Print-Out; Firmware Guide

```
ld hl,basstart ;BASIC program start
                ;address in the EPROM
ld de,&0170     ;ALL BASIC start here
ld bc,baslength ;Length BASIC program
ldir           ;Copy from EPROM to RAM
;DE will contain the address of the
;1st location after the end of the
;BASIC program
ld (&ae66),de ;Addr end BASIC prog *
ld (&ae68),de ;Addr start variables
                ;and DEF FN's area *
```

```
ld (&ae6a),de ;Addr of start of
                ;arrays area *
ld (&ae6c),de ;Addr strt free space *
ld hl,basrunner ;Routine to RUN BASIC
                ;program must be copied to RAM
ld de,&0060     ;Safe place to put code
ldir           ;Copy it to RAM
;Any machine code files needed by the
BASIC would be copied to RAM here
jp &0060 ;jump to BASIC prog RUNner
;
basrunner ld c,&00 ;Point to ROM 0
call &b90f      ;Enable the ROM at
                ;position 0 (BASIC)
ld hl,&00b0     ;Put &00b0 in register
                ;HL - why?
ld (hl),&00    ;Store &00 in the addr
                ;pointed to by HL
                ;- why?
jp &ea78 ;Where BASIC's RUN command
                ;is stored in the BASIC ROM**
```

\* These addresses are for the 664 and 6128 - of course the 464 is different. For the 464 use the following:

```
ld (&ae83),de ;Addr end BASIC prog
ld (&ae85),de ;Addr start variables
                ;and DEF FN's area
ld (&ae87),de ;Addr start arrays area
ld (&ae87),de ;Addr start free space
```

I have no idea what addresses to use on the plus machines.

\*\* This address is for the 6128 only.

For the 464 use the following:

```
jp &e9bd ;Where BASIC's RUN command
                ;is stored in the BASIC ROM
```

For the 664 use the following:

```
jp &ea7d ;Where BASIC's RUN command
                ;is stored in the BASIC ROM
```

I have no idea what address the plus machines use.



The "basrunner" routine must be copied to RAM. This is because it enables another ROM and jumps to a location in it. If the routine stayed in ROM it would disable itself in mid-flight!

#### THE ROM LOADER.

Figure 8 is the ROM loader for programs a, b and c. This is similar in appearance (except for the BASIC RUNning bits) to the DOSCOPY ROM loader of the last article.

Towards the end you will see the references ("LABELS") to where the BASIC and machine code programs are stored, and to the final length of the EPROM image. Take a note of the assembled values of these labels.

(This code was written using MAXAM, so the "DUMP" command at the end will cause all labels etc. to be displayed.)

#### CREATING THE ROM IMAGE

We have quite a few things to be put in the EPROM - the ROM loader code, and the three programs.

So far the info we have gathered for our programs is:

	Load	Start	Length	ROM	add
C.BAS	&0170	&0170	&0c5d	&c15e	
D3.BAS	&0170	&0170	&0d61	&cdbb	
DISCODE.BIN	&1000	&1000	&1400	&db1c	

The overall EPROM length is &2f1c

Using this info we can write a small BASIC program to build the image in RAM and then save the whole lot to disc. The final image on disc is the one sent to an EPROM programmer and blown into an EPROM. The following listing is the BASIC EPROM Builder that I used:

```

10 'Hornsby EPROM builder
20 MEMORY &3fff : 'The image will be
   built from addr &4000
30 LOAD"hornsbby.bin",&4000 : 'The ROM
   loader code (what figure 8 assembled
   into)
40 ;LOAD"c.bas",&415e:'Note,";LOAD" is
   a UTOPIA command
50 ;LOAD"d3.bas",&4dbb
60 LOAD"discode.bin",&5b1c
70 SAVE"hornsbby.rom",b,&4000,&2f1c,
   &c006
80 END

```

#### NOTES:

1. ";LOAD" is a UTOPIA command which will load any file, even BASIC, to any location.

2. The file addresses are &8000 less than what they will be in the EPROM. This is because we are building the image at &4000, which is &8000 less than &c000 (where the EPROM will eventually live).

#### WHAT'S NEXT?

Nothing! Unless I get requests for follow-up articles this is the last one on EPROMs. Good luck....

This is not as bad as it may sound because there just isn't a lot left to talk about concerning EPROMs - unless

you start getting specific. I am willing to put a few more articles together tackling specific EPROM related projects - I already have a RAMROM project, among others, brewing (all on a very slow backburner). Let me know if you want to see things like this in print.

#### FINALLY

If you have any problems do contact me

IAN NEILL  
 11 MILLWAY DRIVE  
 BISHOPS TACHBROOK  
 LEAMINGTON SPA  
 WARWICKSHIRE  
 CV33 9SE  
 TEL: 01926 337708

```

;ROM for H.R.Hornsby
   write "hornby.bin"
;
txtout equ &bb5a
org &c000,&4000
start defb 1 ;background Rom
      defb 1,0,0 ;Rom version refs
      defw nmetab
      jp init ;initialise Rom
      jp convrt ;number convert rout
      jp convrt
      jp direkt ;directory edit rout
      jp direkt
nmetab defm "UTILS v1.0","0"+&80
      defm "C","V"+&80
      defm "CONVER","T"+&80
      defm "D","3"+&80
      defm "DIREDI","T"+&80
      defb 0
init push de : push hl
      ld hl,logmes
      call strout
      pop hl : pop de
      scf
      ret
convrt ld hl,cvbegn ;convt prog strt
      ld de,cvdst ;BASIC start loc
      ld bc,cvlgth ;convt prog len
      ldir
      ld (&ae66),de : ld (&ae68),de
      ld (&ae6a),de : ld (&ae6c),de
      jp basrun ;run BASIC prog
direkt ld hl,debegn ;dir prog strt
      ld de,dedst
      ld bc,delgth ;dir edit prog len
      ldir
      ld (&ae66),de : ld (&ae68),de
      ld (&ae6a),de : ld (&ae6c),de
      ld hl,binbeg ;binary start
      ld de,bindst ;binary dest
      ld bc,binlen ;binary length
      ldir
basrun ld hl,runner
      ld de,&0060 : ld bc,&000d
      ldir
      jp &0060
runner ld c,&00
      call &b90f
      ld hl,&00b0 : ld (hl),&00
      jp &ea78
strout ld a,(hl) : or a
      ret z
      call txtout
      inc hl
      jr strout
logmes defm " HORNBY UTILITIES v1"
      defb &0a,&0d,&0a,0
hacker defm "COPYRIGHT I.NEILL '95"
      defm "FOR LISTINGS CONTACT "
      defm "IAN NEILL, "
      defm "11 MILLWAY DRIVE, "
      defm "BISHOPS TACHBROOK, "
      defm "LEAMINGTON SPA. "
      defm "CV33 9SE."
cvbegn equ $
cvlgth equ &0c5d
cvdst equ &0170
debegn equ cvbegn+cvlgth
delgth equ &0d61
dedst equ &0170
binbeg equ debegn+delgth
binlen equ &1400
bindst equ &1000
finish equ $
length equ finish-start
romlen equ length+cvlgth+delgth
      +binlen
dump
end

```

Figure 8

# FACTS AND FIGURES

by  
Paul Dwerryhouse

*Hi everyone, I'm back in to pages of WACCI with my Treasurer hat on to lay some facts and figures on you all. Rather than bore you too much at a time, I've decided to do the facts first and the figures (pennies) at a later date.*

## THE GRAPH

I suppose you have all had a gander at it by now and reckon you understand what it is telling you. Well I'd like to explain the data from my perspective, after all I have been collecting and analysing it for four and a half years now.

## THE BEGINNING

The time scale of the graph covers issues 50 to 100. There are two reasons for this, Clive Bellaby and myself started WACCI again after the issue 49 crash and 100 is a jolly good landmark in the clubs history.

The first month, Jan 1992, shows a membership level of some 175. This is the end of month figure, ie the number of copies of the February magazine to be posted out. At the

beginning of January 1992 the membership level was a mere 12. And that included Clive and myself.

The first 12 months saw some swings in the membership and this reflected the settling period of the newly born club. Many former members took out a six month subscription but then left. The same happened with former members who took out an initial 12 subscription. Those two groups account for the first two major drops in the membership level shown in the graph.

Membership then held extremely steady for the next two years. This doesn't mean we didn't try to increase the membership because we did. All that happened was that new members replaced members moving on to the other computers, generally of the plastic kind.

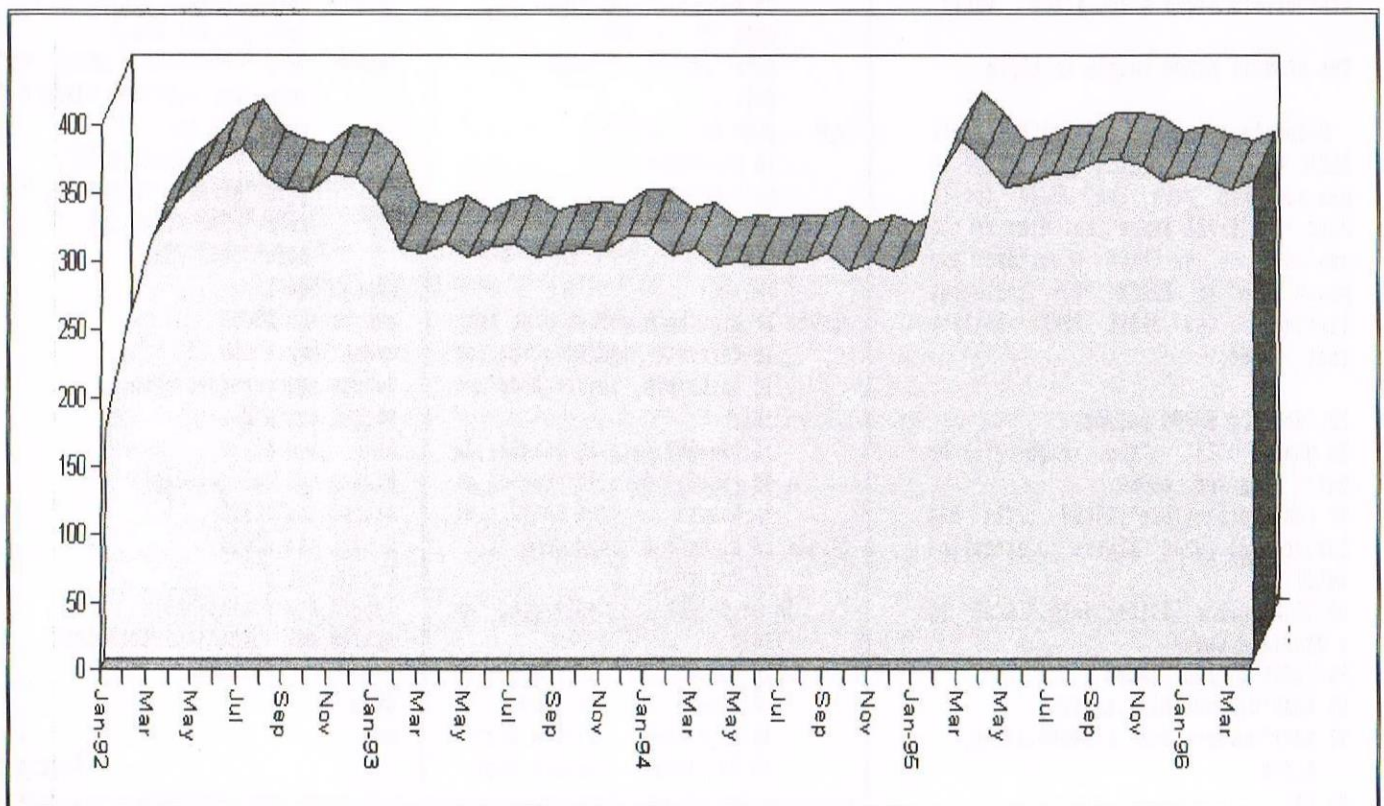
The next large increase came at the beginning of 1995 and this was due to the offer to Amstrad Action readers for a 33% off trial subscription. Not all stayed with the club but it settled down to a very respectable level of around 350.

The last AA was June 1995 and whilst a small rise can be seen in club membership, the closure of AA did not give the expected rise in club membership that we felt it would.

## AND FINALLY...

So I think you will all agree the statistics are boring but also that the club membership levels over the last 50 issues or so have remained amazingly steady. I hope and pray that the story of the next 50 issue are as easy to recount as these.

So there we are, I'll put together so statistics for the financial side of the club so you can all see where your pennies go. *Paul.*



# THE MARKET STALL



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

*The Convention gets nearer by the month and I'm still getting requests for information about tickets. PLEASE CONTACT PAUL DWERRYHOUSE FOR YOUR TICKET. Now, lifts to the Convention. I have the offer of a lift from the Slough area so if you're interested please contact Anthony Jordon on 01753-573695. I also need a lift from the Hampton Court area in London for Tim Burke & S Lucas. If you can help please contact Tim on 0181-549-1165.*

## SALES

### FOR SALE:

6128 Plus Keyboard complete with Burnin Rubber cart, system disc and Manual. £40.00 plus p&p  
PLEASE CONTACT: Dave Stitson 4, Connaught Ave, Mutley, Plymouth. PL4 7BX Tel: 01752-254404

### FOR SALE:

Games on Tape as follows all at 50p each plus p&p.  
Rollaround, Superstar Challenge, Mini Office, Nightbreed, Batman,  
PLEASE CONTACT: Mark Johnson, 13, Ashway, Corringham, Stanford-le-hope, Essex. SS17 9EB TEL: 01375-677631

### FOR SALE:

Disc Games £ 3.00 each plus p&p  
Driller, F16 Combat, Football Manager 2 and ext'n disc, Knightmare, Trivial Pursuit Genus, Starwars, Indiana Jones, Prince of Persia.  
Tape Games 40p ea plus p&p  
Mig 29, Darkforce, Daley Thompson Supertest, Knightmare, Solar Coaster, Skateboard, Bombjack 2, Pyscho Hopper, Beach Buggy, Pro-golf, Space Ace, Kane, 500cc Grand Prix, Kobayashi-naru, Operation Wolf, Trap-door, Paperboy, Spitfire 40, Bonzo Super Meddler.  
Boxed Games £ 1.00ea plus p&p  
Lemmings, Middle Earth, Wretle Mania, The Dambusters, Trivial Pursuit Genus, 3D Construction Kit, Compiation which

includes Decathalon, Sabrewolf, Beachhead, Jetset Willy.

Supercalc 2 Disc original in box and folder with all instructions for CPC and CPW £ 5.00 plus p&p.

Hardware for spares or repair, includes 6128 keyboards, 6128 circuit boards (working) disc drives and more, all cheap to clear, please phone for details.

CPC 6128 Manual £ 4.00

DMP 2000 Printer with Manual £25.00

PLEASE CONTACT: Tony Taylor, 77 Anton Way, Aylesbury, Bucks. HP21 9LX TEL: 01296-433404

### FOR SALE:

Cassettes: Three cassette players and the following software: Sonic Boom, Scrabble, Guardian Angel, BMX Freestyle, Harrier Attack, Skate Rock Simulator, Soviet Fighter Mig 29, Cluedo, 10 Cpmputer Hits (2 tapes), St Dragon, Freddy Hardest, 4 Smash Hits, Guadacanal, 3D Chess, Subbuto, International Tennis, Barbarian 1, Barbarian 2, The in Crowd (6 tapes), Battle Stations (3 tapes), Daly Thompson Olympic Challenge (tape & disc) Rick Dangerous-firebird, Captain Blood, Amstrad Action Tapes April & July 1991. All tapes £ 1.00 ea plus post & packing.

Discs: Silent Service, Arcadia (2 discs) Solid Gold (2 discs), Driller, Gunship (disc for Spectrum), Colossus Chess, Chuck Yeagers Advanced Flight Trainer, Battle for Midway and Battle for Britain, Tobruk, Guadacanal, Galaxy Force, Trivial Pursuit, Softlok 2.2, PD Disc 7, Bonzo Clone, Multi Face Music Creator, Protex Filler, Prospell, At Last Plus, Prototype fonts, Pascal 80 and CPM+, many system discs. All Discs £ 4.00 ea and £1.00 p&p

Books, Instruction manuals & Magazines. Qualitas Plus operating Manual, Desktop Environmental System

(DES), Amstrad Micro Guide, Ramdos Manual, Utopia Manual, Maxam Z80 Development System manual, Stop press Desktop Publishing manual, CPC6128 manual, At Last Plus manual, Prototype manual, protex office & Protex Filler manual, CP/M Plus book. Please phone for prices.

Amstrad Action Issues 55-92 (April 90 to May 93) and Issue 113 (Feb 85). ACU Feb, Mar, April 89 and Nov 87. Phone for prices.

Hardware: Amstrad Modulator MVP 001 £ 10.00 3inch 'B' Drive phone for price. Quick shot joystick £ 5.00

PLEASE CONTACT: Tony Tozer 35, Guildford Road, Fratton, Portsmouth, PO1 5HU TEL 01705-732610.

STOP PRESS WILL ACCEPT £200 FOR THE LOT.

## WANTS

Alastair West wants a 3.5" disc drive PLEASE CONTACT ALASTAIR on 01358-721252

Tony Taylor wants Protex and Promerge on Rom PLEASE CONTACT Tony on 01296-433404

Bill Ford wants Chuck Yeagers Advanced Flying Trainer on tape or disc also Mouse and Interface for use with 6128/464 or circuit diagram for mouse Amstrad MS3 Ver 6. PLEASE CONTACT: Bill on 01244-321738

Ron Hegarty wants Roms for his rom boards such as protex, Maxam, Utopia, Des etc. PLEASE CONTACT Ron on 0161-795-9880

Tim Burke wants DES and Romboard PLEASE CONTACT Tim on 0181-549-1165

Isobel Swade wants 3.5" disc drive for her 6128 PLEASE CONTACT Isobel on 01925-658724

# A CROSS WORD

by Dave Stitson

I was asked by our 'Wishlist Manager', Ernie, if I would like to help out with a review and being the brains of DEVON <<No comment -Philip>>, ended up with the task of trying out this nice little program donated by Peter Campbell of 'COMSOFT' fame, aka, The Times Computer Crosswords.

## CROSSWORD 1 : DAVE O

I usually manage OK with crosswords; you either like them or you leave them alone. I now wished that I had left this one alone. If you do decide to purchase a volume, there are plenty of crosswords on the disc, 60 odd in fact, to keep you busy. May I suggest you don't, like I did, have a few drinkies before hand. You will need a clear head to solve these puzzles. And a good 'THESAURUS'.

I am not going to tell you how long it took me to solve crossword number one but boy was I glad I had finished it and without cheating. You can cheat and the way that you can do it is like this. NA!! I won't tell you, you can find out how to do it like I had to.

## TO LOAD UP THE CROSSWORDS

Just RUN"TIMES and follow the on screen instructions. Select the crossword number. I started with No.1 as I thought that would be the easiest. I was right, they do get harder the higher the number. Now you can either do the crossword by yourself or as a team. You can have the sound, what there is of it, turned on or off. Choose the clue numbers with the least letters in to start with; I usually do as I find it gives me letters towards the LONG words.

I am glad that I had my Thesaurus with me as some of the words I have never come across before. Even "er indoors", who is very good at crosswords, found them difficult. I thought I would be clever with the next puzzle by choosing the team effort. No good though, it still had us well and truly foxed and we had to resort to cheating to solve a few clues for us.

At the end of the Crossword, or you can quit at any time, you can find out how long it took you to solve the puzzle, what you scored and how many clues you had help with.

Now for the sixty thousand dollar question, is it worth buying? Yes, if you like these types of cryptic crosswords. There are some six volumes in the series with 60 + crosswords per disc and that's 360odd puzzles to keep

your mind tied up in a thousand tiny little knots. The cost per volume is £10.00+50p postage. Don't forget the WACCI discount which that very nice man Peter allows members. It brings the figure down to £9.50 per volume. Buy 2 volumes on one disc and get a further discount of £1.50, bringing the price down to £17.50.

Happy Crosswording

<<I'm not shy to mention how long it took me to finish the first one. Three hours and fifteen minutes in total, which isn't bad considering the clues -Philip>>

## The Times Crossword 1

1	B	E	G	A	T			4		P		6		7		8		
				A						A								
9				R						S		10						
				B						T								
11				O					12	H								
				O				13		A								
14	R	O	15	B	U	S	T	N	E	S	S		16			17		
				H						T		18						
12							20	C	O	P	E	R	N	I	C	U	S	
					21					R								
22											23			24				
										25								
26									27	R	E	C	T	A	N	G	L	E
28	D	I	S	C	E	R	N	E	D			29						

13D Champion golfer's casual request to caddie?  
(3,3,4)

C to cancel

Help (Y/N)?

# READ ME NOW!

by "Tigger"

*I have got NO articles for next months magazine. If that first sentence hasn't grabbed your attention, then I don't know what will. As I write this page, there are still three blank pages in ISSUE 103 and I have nothing to put in them. Not quite true, there are two blank pages because this is going to fill the third page and, hopefully, stop the same problem from developing next month.*

## THANK AND STUFF

I mentioned in Thanx and Stuff that I thought it might be a good idea if members started to send in articles. I also stated that anyone could write an article if they tried. I'm now going to change that slightly

*If you want a WACCI next month I had better start receiving some articles pretty quickly or there won't be one.*

*Philip DiRichleau*

I have six pages for next month that I can guarantee will be there, that's all, six pages. I know that summer is supposed to be a quiet time for the computer world, but if it stays this quiet then WACCI will go one of two ways. It will either get filled by rubbish (which I won't do), or it'll thin down purely because of the lack of articles to put in the mag.

## SO WHAT CAN YOU DO?

You could try writing for WACCI. It's really not as difficult as it sounds you know. They can range from single pages, to three pages, single issue or multi issue, I just want articles. If you really don't think you can write something but you have an idea, then let Ernie Ruddick know. His address is on the back page. He'll get one of our many Wish-List writers to knock something together.

Whatever you do, don't ignore this. The only peril that WACCI faces, at the moment, is the lack of articles. We have no money problems, we have

enough people to keep the magazine and the club going indefinitely and there is no threat of this editor having to give it up. But, saying that, I can't sit here and write the magazine as well as editing it. Not only would the work load be far too great, but you'd all get bored of hearing from Philip DiRichleau all the time. So get writing articles.

## WHAT DO I WRITE ABOUT

Do you have any Amstrad Actions somewhere? Try having a look through them. Before any die hard Techno-Rats start to have heart attacks, read the next bit.

A.A. had some great article idea during its lifespan. A.A. also seemed to cater to the lowest common denominator, which usually meant an underachieving hamster that would be incapable of finding its own trundlewheel without some assistance. WACCI, and that means you lot, can do a whole lot better I think. It's a good place to start finding subjects to work on.

I'm not talking about rampant plagiarism here though. There's little point in doing a marginal rewrite of an old article. Not only isn't it worth it, but it's probably going to be spotted very quickly indeed. It's just that Amstrad Action is a good place to get a little inspiration about articles.

## SOME MORE ROUGH IDEAS

We must all have used CPC books at some point in time. How about reviewing one of them? How about doing a quick article on a piece of software or hardware? I could do with articles on specific bits of hardware and their

uses. How many of you have got P.D. Discs from the library? Review them for the rest of us.

There are some difficult utilities out there you know, which you may discover that only you know how to use correctly (it has often happened), or maybe the instructions are all in french (DISCOLOGY in last issue) that you can translate for publications. There are quite a few useful bits of programming where the instructions looking like they were run up by a bureaucrat having a very good day.

It may be that you have a little hint or trick that you might like to pass over to the rest of us or a novel use for something (like cutting half an inch off the end of 3inch Crystal Cases and sticking five or six together as a good storage rack that fits nicely on a desk somewhere). You may know how to do something that other WACCI members would be very pleased to know about.

## TUTORIALS ARE NEEDED AS WELL

I have, at the moment, tutorials for PowerPage, MicroDesign and Protext in the pipeline. I'd like to have tutorials for things like ProMerge, Brunword, Tasword and other of the more used bits of software. Do you think you could run a quick series on these or anything else that comes to your mind. Let me know, I'm easy enough to contact and easier still to talk to (I don't bite too hard).

## THE FINAL BIT

It doesn't matter what you write about, so long as it's something to do with the CPC. WACCI certainly isn't written or produced by a group of Dickens or Shakespeares. We can always tidy it up for you so there's no difficulty there. It can take me just ten minutes to do the minor corrections to an article.

So, get working and lets see what appears in next months WACCI...

# UNDERSTANDING THE CPC

(part one)

by John Hudson

*This is the first in a short series of articles looking at the CPC computers as a whole. John Hudson is your host and this month talks about Early Morning Starts. Would that be with a bowl of corn flakes?*

## EARLY MORNING STARTS

Whenever you switch on a CPC it does an Early Morning Start, that is, it checks what is attached to it and that various parts of the computer are working. In particular, disc drives, serial interfaces, extra memory and ROMs. It does this by sending out signals to where each of these should be and waiting for a reply. If it gets no reply, it assumes there isn't one and, if there isn't a disc drive or if the one in your 6128 is not responding, it assumes you will be using tape.

You should always switch on the monitor and any peripherals that have their own power supply before you push the keyboard switch to the ON position. This is so that the peripherals are ready to respond.

Don't leave all the switches on and throw the mains switch so that everything comes on at once.

## I WANT A DISC

Some makes of 3.5" disc drive will only send a reply if there is a disc in the drive; so you may need to insert a disc before you push the switch to the ON position. If the Early Morning Start has not detected a disc drive when you want to use it, you can only get it to do so by switching the machine off and starting afresh.

Sometimes a ROM will respond to the computer's test by announcing its presence with a message on the screen. Once the checks are over, the computer hands over to the ROM in slot 0. In all the original machines this is the BASIC interpreter which announces itself with a message. In the Plus machines there is also Burnin' Rubber and the ROM puts up a message asking you to select BASIC or the game.

This arrangement did not have to be invented for the Plus machines; whatever ROM is in slot 0 will take over the machine, which is why putting a different game cartridge into a Plus machine starts that game.

The safety device of interlocking the cartridge with the ON/OFF switch on the Plus machines means that the computer does an Early Morning Start every time you put in a new cartridge.

## COCK-A-DOODLE-DOO

CP/M also has an Early Morning Start as it uses most of the components of the CPC in slightly different ways from AMSDOS. It does the same sorts of checks and then loads the Command Control Processor into memory before putting up the dreaded "A>" which means the same as "Ready" in BASIC. Unless you have the Graduate CP/M ROMs, this takes longer than getting to "Ready" in BASIC because everything is on disc and needs to be copied into memory rather than being instantly available from a ROM.

CP/M Plus also has one refinement over AMSDOS; if it finds only one disc drive, it sets up a 'virtual drive' to do the work of drive B: and the message 'Drive is A:' appears in the bottom left hand corner of the screen. This allows you to pretend you have two drives - essential for copying files between two discs. In theory you can use this with programs but in practice most large programs swap from drive to drive so frequently, it would wear you, and the drive, out.

If you have two drives and the message 'Drive is A:' appears on the screen after you have loaded CP/M, it means that the second drive has not been detected and you should switch off and start again.

## MY FLEXIBLE FRIEND

CP/M is slightly more flexible than AMSDOS in that you can customize the Early Morning Start to suit your needs. In CP/M 2.2 this is done through the SETUP routine; in CP/M Plus, the Command Control Processor looks for a file called PROFILE.SUB and carries out the commands in it. These commands can be used to customize the machine or to run a particular program.

This last is the equivalent in CP/M Plus of replacing the ROM in slot 0 under AMSDOS and, with some limitations, you can customize CP/M Plus in several different ways to suit the different programs you might want to run without having to turn the machine off.

Some games programmers take advantage of the way CP/M is loaded to load their games; entering 'CPM causes AMSDOS to read the first sector of the first track of the disc in drive A: - which is why CP/M on ROM is loaded with 'EMS instead. So games programmers put their own code there to load the game into memory, customize the machine to their needs and then ask the player to start playing.

## BASIC, BIN AND COM

As everyone knows, computers can only handle "0"s and "1"s; the chip in the CPCs handles 8 or 16 of these at a time; each group of eight or sixteen can be:

an instruction  
a value, or  
an address.

But rather than instruct the computer directly in "0"s and "1"s, as the original programmers really did, we use a program which may have been written using a compiler or an assembler or may include an interpreter. Both compilers and

of "0"s and "1"s which are stored in binary files which can be sent directly to the computer. These have the ending .BIN in AMSDOS and .COM in CP/M. Programmers usually store their word-processing or database programs in such files because it means they are ready for use the moment the user wants them.

BASIC, however, was invented as the Beginners All-purpose Symbolic Interaction Code to allow non-programmers to learn basic programming skills. Rather than making them go through all the stages of turning their programs into binary files before they can use them, BASIC stores programs largely as written (in jargon, as "source code") and then converts (or "interprets") them into strings of "0"s and "1"s each time it is asked to "execute" a single line or "run" a program.

#### **NO MATTER, THEY WON'T NOTICE**

Most BASIC programs will run more slowly than binary programs but, where the difference is not perceptible to the user, this does not matter. (There are a few versions of BASIC which can compile their programs into binary files.)

When BASIC programs are saved to disc, they normally have the ending .BAS; this means you only need to give the first part of the name (before the full-stop) if you want to load, run or save a BASIC program. The same, in practice, applies to .BIN programs. If AMSDOS cannot find a program with that name ending in .BAS, it will look for a program ending in .BIN, load that and try to run it.

This is exactly what happens in CP/M, though CP/M uses the ending .COM (for COMmand) rather than .BIN (for BINary). In addition, since CP/M has a different way of responding to single line commands, it assumes you want to "RUN" any program you mention; so both "RUN" and .COM can be omitted.

"FORMAT" in CP/M means the same to CP/M as 'RUN"FORMATS' does to AMSDOS; CP/M looks for FORMAT.COM while AMSDOS looks for FORMATS.BAS and, not finding it, for FORMATS.BIN which it loads in order to let you format RAMDOS discs.

Though .BIN and .COM files contain much the same instructions, they're not directly interchangeable because they use the RAM slightly differently.

#### **SINGLE LINE COMMANDS**

BASIC, being an interpreter, can handle single line commands easily; so commands such as LOAD, SAVE and CAT which are more important for manipulating files than for running programs can sit happily in BASIC.

If you want to issue a series of single line commands, for example to lower HIMEM, load BANKMAN or poke certain values in RAM, followed by an instruction to run a program, you can write a short program with the commands in them ending with a command to run the program. Many games and business programs written in binary code have a short BASIC program, usually called DISC.BAS, which performs this function.

CP/M is more geared to running programs and so only has a handful of single line commands. However, you can achieve a similar effect to a DISC.BAS program by using SUBMIT.COM. You write the series of single line commands

(without line numbers) in a file whose filename ends in .SUB and which has the name of the program you want to run as the last line. Whenever you want to run the programs on the disc, you enter SUBMIT followed by the name of the file and CP/M acts as if it had been asked to run a DISC.BAS file.

This facility was improved in CP/M Plus which looks for a file called PROFILE.SUB as soon as it loads and carries out all the single line commands in this file before doing anything else. So you can switch on a 6128, enter {CPM and sit back while CP/M automatically sets up the screen, keyboard, printer, serial interface and anything else you want before running your chosen program.

#### **BUT WAIT, THERE'S MORE**

Next month I will look at storage devices and how they work along with some of the advantages and disadvantages of each type.

**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.

# A 32-BIT PORT

by Martin Bela

Ever wanted to control your domestic appliances from your keyboard? Or fully automate your model railway? You have? Well, you're going to need an input and output port of some sort and this could be just what you need...

## THE FIRST BIT

It's possible to control things via the printer port, but with only seven bits it's rather limited.

The 32-bit I/O port described here is designed to access upto 32 external devices each of which can be either an input or an output device.

## WHAT'S WHAT?

Connector K1 is an edge connector for plugging into the expansion port of the CPC. IC1 and IC2 provide most of the address line decoding, with the outputs of IC2 (pins 15 and 13) selecting the appropriate Parallel Input/Output Controller (PIO) chip.

When IC2 pin 15 goes low, IC3 is selected, allowing data to be passed to or from I/O ports 0 and 1.

Similarly, when IC2 pin 13 goes low, IC4 (ports 2 and 3) are selected.

## A BIT TOO SELECTIVE

As you can see, the circuitry around IC4 is almost the same as that around IC3; the only difference being the select lines from IC2. If you really need more I/O lines then you can duplicate the IC3 circuitry again, but this time take the select line from pin 11 of IC2. This will add two more ports (4 and 5) giving you a grand total of 48 lines (or bits).

You can of course remove the IC4 circuitry if you only want 16 lines.

## THE CURRENT PROBLEM

The output pins from IC3 and IC4 cannot provide much current, and so it is intended that these outputs will be used to control relays, which in turn will switch the external devices (such as lamps, motors, solenoids etc) on and off. The circuit draws it's power from the CPC's 5 volt supply, but I would recommend using a separate Power Supply Unit (PSU) to power the relays themselves so as not to overload the CPC's supply. An interface for the

relays will be needed and this will be covered next month.

I haven't shown a separate Power Supply Unit in the diagram, as you will either be quite capable of building your own or if not, then as it would need to be mains-powered, it would be safer to buy a ready-made unit.

Devices other than relays can of course be connected to the ports, such as an analogue to digital converter, for signal measurement or sound sampling for instance or perhaps infra-red LED's for control via fibre-optic cables.

For the moment though, I'll assume that you wish to use 12 Volt relays, as these are probably the easiest to understand and use.

## A TERMINAL CASE OF PORT

The items labelled T00, T01, T02 etc are terminal blocks to connect the relay interface (or whatever) to.

Each PIO chip has two 8-bit ports which I will refer to as PA and PB. The actual ports that you connect to are indicated by the letter T followed by the port number, followed by the bit number; so T24 refers to bit 4 of port 2; T00 is bit 0 of port 0; and T31 is bit 1 of port number 3 etc.

## WHAT'S YOUR ADDRESS?

I don't think the addresses used by this design clash with any other add-ons, but just in case, it's best to remove other expansion add-ons before plugging this board in. The addresses used are the ones recommended in the CPC manual, and are as follows:

&FAEX (selects ports 0 and 1)  
&FAFX (selects ports 2 and 3)  
&FBEX (selects ports 4 and 5 if used)  
where X is one of the following:  
&8 (i.c.'s port PA Data in/out)  
&A (i.c.'s port PB Data in/out)  
&C (i.c.'s port PA Control Register)  
&E (i.c.'s port PB Control Register)

So, to send data in or out of port 2 (which is terminals T20 to T27) the address required is &FAF8.

Another example; address &FAEE would give you access to the Control Register of port 1 (I.C.'s port PB).

## PORT PARTS LIST

Below is a parts list for the 32-bit version. For the 48-bit version add an extra R4, R5, C5, IC4, and Terminal blocks (or connectors). Delete these parts if you only want a 16-bit port.

ITEM	DESCRIPTION	VALUE
R1-6	0.25W 5% resistor	1k0
C1,2	Ceramic capacitor	100nF
C3	Electrolytic capacitor	100uF
C4,5	Ceramic capacitor	22nF
IC1	13 input NAND gate	74LS133
IC2	3 to 8 line Decoder	74LS138
IC3,4	4.5MHz Z80A PIO	Z8420APS
K1	50 way edge connector	
T00-T37	Terminal blocks or connectors of your choice	

The capacitors should be rated at 10 Volts or greater and the tolerance isn't too important; 20 percent or better is quite adequate. C1,2,4, and 5 should be mounted as close to the i.c. legs as possible.

The connector K1 can be an IDC type which is attached to a length of 50 way cable (like that used on romboxes, multifaces etc) in which case the I/O board end will need another plug and socket or, alternatively, you could use an edge connector which is soldered directly to the I/O board.

If you decide on the cable, then make it as short as possible, no more than say about 300mm or it could give you some problems. The pin numbers shown are those of the CPC's expansion port, as shown in the CPC manual.

## THE NEXT BIT

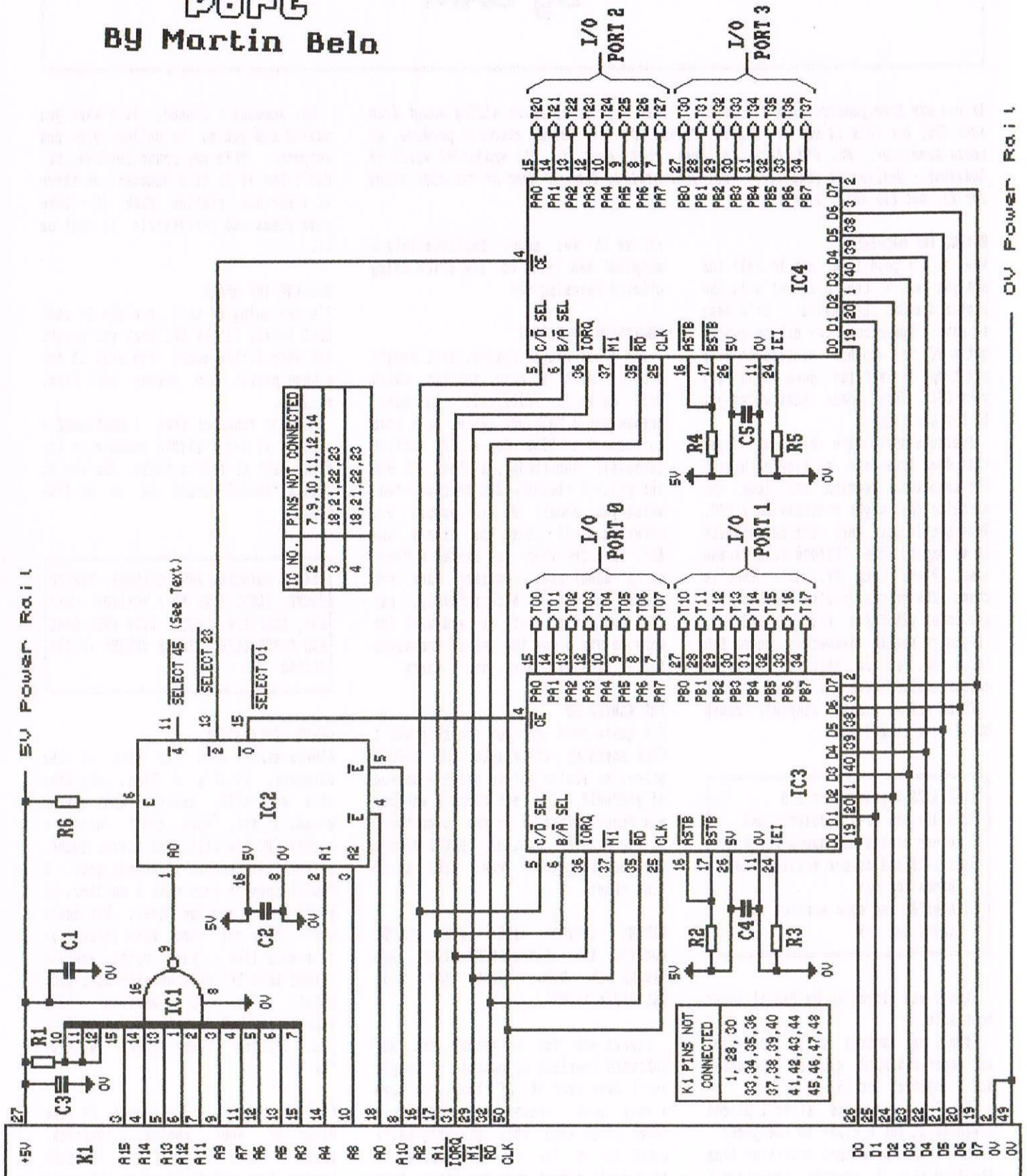
Next month we'll have a go at programming the ports, and find-out how to connect relays, switches, and some LED's to it.

Happy Soldering...TTFN...



# 32-BIT CPC Input/Output Port

BY Martin Bela



# TO BE A MILLIONAIRE

by SAM

*As you may have guessed from the title, this article is about making money from your CPC, but this is not a simple review of the latest accounts package, or pools predictor. No, I'm here to open your eyes to the wonderful world of business - dealing in computers. Not just selling the odd game at car boot sales for £5, but the thing itself.*

## BUYING THE MACHINE

Now, it's a good idea not to sell the one you use, or the one that's in the cupboard under the stairs - it's best to have a spare computer unless you've got a PC or another machine to keep you happy if anything goes wrong with your CPC. This means that we've got to buy one first.

Everyone must have a local paper that does free ads so browse through the computers section and look for anything that might possibly be a CPC. Some people put very strange adverts in my paper, like 'GX4000 road racing game. Plugs into TV. £5'. That is cheap. The prices you're looking for are under £25 for a Plus or 6128, or, if you're really desperate, under £10 for a 464. It is best to go for a colour monitor with a 6128+ or 6128.

These prices sound stupidly cheap but I have picked up:

- 1) A 6128 keyboard for £15
- 2) A 464 and MP-1 modulator and green screen and games for £15
- 3) A 6128 and colour monitor and games for £25
- 4) A 6128+ and mono monitor and games for £25

Item 1 was picked up by Dad at a car boot sale.

Item 2 was spotted in my local free ads paper and sold with 40 tape games and a joystick for £52

Item 3 was purchased after I placed a wanted ad for a 6128+ in the paper.

Item 4 was purchased resulting from the same ad. I thought the price I had stated was £30 and I offered them

£25 as it was mono. Unfortunately a misprint had led to the price being offered becoming £20.

## ADMISSION OF IDIOCY

I'm a bit stupid really, as I bought a 6128+ with a mono monitor, which will make it difficult to sell. Anyone got a CM14 out there, or a lead to connect a Plus to a CPC monitor (CTM644)? Admittedly, I took £5 off the price I thought had been printed, which you should do if people are offering stuff that you didn't ask for, ie a CPC when you wanted a Plus, or a mono/green monitor when you wanted colour. Alternatively, say that you don't want it and wait for someone who's got the stuff you asked for - they will have, don't worry.

## THE WANTED AD

I'm quite sure that you probably won't find anything advertised for such a price, so you've got to place a wanted ad yourself. I'm not certain whether you should place it in the 'computers' or the 'wanted' section, but I always use the 'computers' one, with an ad like this:

WANTED: AMSTRAD 6128+ WITH COLOUR MONITOR AND GAMES/ACCESSORIES AND MANUAL IN VGC. WILL PAY £25. TEL:01234 567890

Always ask for a manual and any software (serious or games). If people don't have over 30 of them, you have a very good reason for offering a lower price than what you originally asked for in the ad. Of course, if they don't accept your new offer, take the thing anyway.

So, someone's phoned, it's what you wanted and you go to collect your new computer. This may sound obvious, but don't buy it if it's damaged, or there is a serious problem with it - take some games and peripherals to test on it.

## SELLING THE BEAST

I'm now going to tell you how to sell that lovely little CPC that you bought for very little money and sell it for a huge profit, so making your first million.

You may remember that I mentioned a strange ad for a GX4000 console in the first part of this article. The way to sell a GX4000 would be an ad like this:

GX4000 CONSOLE, 4096 COLOURS, STEREO SOUND, PLUGS INTO TV / MONITOR, COST £80, SELL £30, VGC. WITH FREE GAME AND CONTROLLER. PHONE NUMBER :01234 567890

## QUICK EXPLANATION

Always start with the name of the computer. If it's a Plus, say that it's got 4096 colours and stereo sound, if not, then don't forget, a normal CPC has still got stereo sound, so put that because it sounds good. A GX4000 doesn't come with a monitor, so you'd better mention that. But don't say - 'does not come with screen' as it sounds like a minus point, whereas 'plugs into TV' will usually be a plus point. Try to mention that accessories are 'free', as opposed to just listing them after writing 'with':

CPC6128, colour, stereo sound, 30 free disks of your choice, joystick, manuals, vgc, only £60' is much better than: 'CPC6128 with 30 games and joystick, £60'

I believe that Ocean have recently made all their games PD and most games are available freely in disk image form on the Internet, so have some blank discs ready and just copy 30 of your huge collection of Anti-Multifaced games for them, provided that they are old enough for people not to mind about - I don't want to trigger letters saying that I'm advocating piracy and killing the software industry - what software industry?? Oh, yes, and make sure they realise that it is perfectly legal. <<I still haven't had this information confirmed -Philip>>

#### THE PRICE AND MY ARGUMENTS

Should you include the price in your advert. The obvious answer is yes, but if you don't include it, then it's going to encourage people to phone and ask how much it is. When they do that, ask them how much they were expecting to pay in the first place. Always aim about £10 higher than that, unless they were offering an exceptionally high price (take it at once), or a stupidly low one, preferably about £30-£40 more than you paid for the machine - about £50-£60 is about right for a 6128 or Plus. Always negotiate, it's worth it. If you do state the price, you'll only get people phoning who will accept that price and there might not be that many, but it's up to you.

Lets assume that someone has phoned (I usually get 1 call per advert on average), and someone is coming over to see your computer, or has said that they will phone back. DON'T GET EXCITED. I reckon that there must be only a 25% chance of them turning up or calling you back.

The coin has landed on its edge and the doorbell rings. Shove 'THE DEMO' into you CPC and get it on the TURN DISK DEMO SIDE A for adults (those skulls are amazing), or the 3D vektorballs part of Face Huggers Ultimate Megademo if you reckon kids might be scared by those brilliantly drawn skulls opening and shutting their mouths. Oh yeah, turn off the awful reflection with R for those vektorballs. If your CPC is connected to stereo speakers, turn on the sound, otherwise, don't bother.

Casually mention the capabilities of an old machine before resetting and talk a bit about the CPC. Load up something like Exolon to let them marvel at those graphics or some other game with amazing graphics - don't worry about gameplay - they won't realise how difficult the brilliant Exolon is until they get home. Show them a manual (only the front cover preferably - don't let them read it) and load up MegaBlasters (don't copy that though!) Mention that the CPC version has more levels and is better than the SNES version.

#### AND THEY WANT IT?

When they say they want it <<being positive about this whole buisness I see -Philip>> they'll probably work out pretty quickly that it will take you ages to copy all those discs, unless you have PARADOS, which of course, you should. If you can, have all the discs ready beforehand and give them everything before they go. Don't forget any of the system, it's easily done.

- \*the keyboard
- \*the monitor
- \*the manual
- \*the joystick
- \*Angela Cook's phone number (01903 534942) <<What -Philip>>
- \*one of those WACCI adverts from Issue 100 <<Good idea -Philip>>
- \*ask them for the money

#### GOING, GOING, GONE

I think that I've now covered all the important facts about making money from your CPC, (or someone elses for that matter) but if I've got anything wrong, phone me on 01903 241054 because I'm bored, but only between 5pm and 10pm, or all day during the summer holidays. If I've upset anyone, sorry, or if anyone thinks that this article is the most amazing rubbish that they've ever read, I'm chuffed, thanks. See you. Don't forget that you're alive.

## The one and only Second Great WACCI Convention

SUNDAY  
29 September 1996  
at the Bescot  
Stadium

WALSALL

\* 10.30 am to 4.30 pm \*



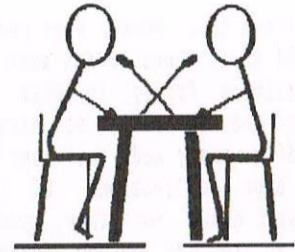
Refreshments and  
Bar available

NB: Lunch must be  
booked in advance

Just ask Angie

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

# THE ANGELA COOK INTERVIEW



*As I stepped out from the chauffeur driven limousine and stared up at WACCI Towers, shimmering golden turrets and flying flags greeted me. I thought that the man that lived here must have been mad. I was right. He is none other than previous WACCI Editor, Steve Williams.*

WACCI) If Jeff planted the WACCI seed, how would you describe your role in the WACCI evolution?

Steve) Analogies, don't you just love them. If you want analogies then all I did was water the seedling and watch it grow and, as it happened, the seed turned into a whacking great sunflower. But you can't take it away from Jeff, he was the guy who saw a barren patch in the garden and decided how it might be used. I think that's enough analogy gags for one article.

You know, it's easy to take a superb, original idea and turn it into a success. That's all I did. But there's not many people who can actually come up with the idea in the first place. Okay, I took the membership to just over 700 but who's to say what the figure would have been if Jeff had stayed on as Editor. Knowing Walker's determination it probably would have been a lot higher.

W) What made you decide to take on WACCI rather than let it go to sleep when Jeff left for pastures new?

S) Well we didn't talk about it in the mag at the time, not wanting to freak-out the membership by telling them how close WACCI was to folding due to lack of funds, but during the first few months of its existence I saved WACCI a few times, either with injections of money or with articles. Jeff lives a couple of miles up the road from me so I used to go over to WACCI HQ and help him out with software orders, collated pages, helped with front covers and even entertained his dog, Ben. In short I did anything I could to keep the club going.

Why did I do all this? Well I thought WACCI was such a unique concept that I didn't want it to go under. You have to remember that at the time there were magazines like Amtix, A.C.U., CwTA and A.A., none of which were accessible in the same way that WACCI was. I mean, you could phone WACCI HQ and get straight through to the Editor, who always seemed to know the answer to your particular CPC problem. Deeply marvellous! You couldn't get that with any of the other mags, they were only interested in making money.

Jeff had been running WACCI for 18 months or so, when Simon Rockman (the Editor of A.C.U.) asked Jeff if he wanted to go and work as the new Editor because Simon was going on to be the Editor of an Amiga publication. It was an offer that Jeff would have been daft to refuse.

In March 1988 he phoned me up and said "I have two options. I can fold WACCI now and repay everybody's subs or I can pass it on to you." He gave me eight days to decide. As daft as it sounds, I chucked in a £14,000 job, with pension and holiday-leave, in order to make sure that WACCI survived the 'fold' that Jeff's departure would ensure. So over an Easter Bank Holiday I was shown how to run and produce WACCI by the aforesaid Walker. On April 4th 1988 I became the Editor of WACCI. Scary experience.

Fortunately, 'Jiffy' kept popping over to WACCI Towers from WACCI HQ to give me moral support and advice. Good job too because I'd lent him my car so he could commute to and from ACU's office at Brentwood. I knew that lending him my car would be a damn good investment.

W) Was following Jeff's pre-set style easier or more difficult than coming up with an original idea?

S) Jeff's 'pre-set style' as you call it, was actually WACCI's "house-style" and it was remarkably easy to follow. In the time that Jeff had been running WACCI, he'd done a lot of experimenting and research with the magazine. Look at issues #1 to #6, every one is radically different and better than its predecessor.

By the time I inherited the Editor's chair, the hard work had been done. WACCI was WACCI. It existed in its own right, separate from the influence of the Editor. It had a 'corporate identity' which was firmly established in the first 12 months of its being.

For the first few months of my tenure I actively tried to keep the magazine looking 'exactly' as it had been during 'Jiffy-no-legs' era. Of course you can't really do that, but Jeff helped as much as he was able by continuing to write his programming articles for a few months after he moved to ACU. Eventually Jeff dropped-out from the CPC and WACCI scene and I had to take total responsibility for the magazine. I think that my only flair or talent, if that's what you'd call it, was that I understood the meaning of the maxim "If it ain't broke, don't fix it!"

W) What is it about WACCI that attracted people ten years ago and is still doing so now?

S) The magic is still there, even after ten years. The magic originates from the membership and of course the CPC itself. A damned good computer. Okay it looks dated by today's standards but stick a Rombox on the back of it, put Protext, Promerge Plus, Utopia and Prospell in there and you've got a very sexy machine at your

fingertips. But it's the membership that's important and 'Fair Comment' is their voice. I remember the first time I got a letter printed in WACCI, in issue three or four I think. It was a great feeling seeing my name in print for the first time. The rest, as they say, is history.

If you notice any radical difference between Jeff's later magazines and my early issues, the most striking variation (and I've only just noticed it when I was preparing for this interview) is that Jeff used to keep 'Fair Comment' to a page or three at the most. When I took over I remembered that buzz that getting something printed in 'FC' gave me and the fact that it inspired me to write so many articles and reviews for WACCI. So I printed as many letters as I could every month and I tried to give a full answer when I could. If I couldn't, like the classic case when Peter Creosote wrote in and asked how he could get his CPC to 'boot' from Drive B: under Amsdos, then I called upon the WACCI intelligencia and they generally came up with an answer, as Stuart Peppiat did for Peter. Great stuff because not only did WE get a great reply in 'FC' from Stuart but WACCI also gained an extraordinarily gifted and thoroughly unforgettable Deputy Editor, Peter... What's-his-name? <<Sir-a-Salt? -Philip>>

It was the only change in WACCI that I made that Jeff winced about. He didn't complain or criticise, he's too much of a gentleman to do that. I showed him my third, maybe fourth, issue of the magazine which contained twelve pages of Fair Comment. After he had scrutinised it, he looked up at me and said "There's a lot of readers letters in this month!" I answered "Well they ARE the people that are paying for the pages in the first place!" He unpretentiously replied "Well you're the Editor now, you know best" and went off to fetch me a coffee. It was the nearest that we ever came to having an argument.

Not long after I increased the size of the column Joolz took over Fair Comment because, frankly, she was much more politic in the answers that she gave. I'd done it for a few months but I don't tolerate fools easily. Okay, I never ever castigated a member that asked as a "new-CPC-user" but I was

quite chastising and acerbic when some members asked puerile questions. Joolz took over 'FC' from me and I noticed that she was getting some good feedback from the WACCI membership.

I quickly and sanguinely promoted or conned her to "Poking In The Library" and made sure she was the lady who answered the WACCI hot-line. Peter Campbell once described her telephone-voice as "liquid-chocolate running into your ear!" God knows what Peter does when he's given a Cadbury's Flake! But he is right when he says that Joolz sounds very seductive over the phone.

W) What is "house style" and how important is it to WACCI?

S) At the highest level 'House style' is the personal signature of the Editor upon the magazine. It's something that pervades every page of the magazine so that when you pick up a publication you recognise it immediately. It's also something that transcends individual Editors, if it's done properly. For example if you picked up a copy of The Daily Mirror from the 60's you'd still be able to recognise it as being the same thing as The Daily Mirror in the 90's. You know, there are certain elements that persist... The Perishers, Garth, the logo printed white on red.

It's probably easier to answer this question by pointing out what 'isn't' good 'house-style.' For example, take a magazine like the one that the United Amstrad User Group produces. Every single page looks different. Different typefaces, different point sizes, different punctuation rules and different page formats. I mean I know why they do it like that, to show how clever they are, but it simply ends up looking like one big mess and ultimately distracts from the article you are trying to read. Very amateurish.

WACCI's completely at the other end of the spectrum. It has a consistency that runs through every page and every issue. The changes in style and format (if any) are gradual. At a pinch you could look at issue 12, issue 49 and issue 100 and still recognise them as being the same magazine. That's the clever bit. That's what house-style is all about.

W) Why did you hand WACCI over to Clive Bellaby?

S) It had to happen eventually. You've got to remember that I was the longest serving Editor in WACCI's history, Clive did more issues but I did more time. In fact I'd done it for three and a half years without a break. That's an awfully long time and a dreadful amount of pressure to be under. Someone once asked me how long it took to put the magazine together. I told them it took five weeks, but I had to do it in two. That wasn't too far off the truth.

At first running the club was great fun, WACCI was the best game in town. Then as the membership began to grow and the magazine really began to take off and the workload began to grow the fun element got pushed to the back somewhat. Joolz and Peter Ceresole helped with software orders and editing articles, they were both marvellous and very supportive. Unfortunately every time we made the beastie run more efficiently the membership figure jumped higher making even more work. And you've got to remember that the two weeks of every month that's set aside for putting the magazine together is immutable. You can't cut down on that time, well you can if you are prepared to turn out a bad issue, which I wasn't.

So after three and a bit years of being in the big chair I wasn't a happy bunny. Every issue became increasingly harder for me to produce. I got to the stage where I couldn't bear to sit at the computer or answer the phone. It was an insidious torture but I soldiered on with another few issues anyway. Eventually I worked myself to a standstill, if that's the right word for it.

Then Clive Bellaby came along and proposed a solution - that he and the "committee" would take over WACCI from me. It made a lot of sense to me. It was a hell of a relief too.

W) Why have you stayed silent for so long and why did you agree to do this interview now?

S) After such a long tenure it was a terrible emotional wrench giving up the WACCI Editorship but it was the only way I could make sure the club

survived. It hurt a lot when issue 50 came out and my name wasn't on it. I'd been looking forward to it for a long time. It was a milestone in WACCI's history and I missed out on it.

During my era I became terribly proprietorial about the magazine. I expect all of WACCI's four 'former' editors would confess to that particular sin. You know the syndrome, the "I was the best Editor WACCI ever had" type of nonsense. My only saving grace was that I knew I was proprietorial and so I kept out of the new team's hair. I knew that the last thing Clive wanted was some old-boy past-editor phoning him up and making "useful" comments. Jeff never did it to me so why should I have done it to Clive? I was there if he needed me (just as Jeff was for me) and indeed I did get a few phone calls initially but for the most part I was prepared to sit quietly in the background and just wait for my monthly dose of WACCI to slip through the letterbox.

Very soon after I gave up the job as Editor history was re-written and a lot of misinformation was inserted into various issues of WACCI. I was painted as some type of blackguard and I was surprised to see that the editorial team did nothing to correct these rumours. My apparent fall from grace was breath-takingly fast.

I had two options, both of which were no-win scenarios. I could either whinge in 'Fair Comment' (in which case members would just think it was a case of sour grapes from a former-editor) or I could keep quiet. I decided that, for the sake of the club's future, silence was the best option.

And I know what you're going to say next... Why am I talking about it now? Simple! It's five years on, two editors later, and what I'm talking about is history, it's not going to effect the current membership figures. Hehehee, most of the current members have never heard of me anyway.

You may blush but the reason I'm doing this interview now is because I've been pleasantly surprised by the last few interviews you've done. I want to try and put the record straight and at last I can see an opportunity to do that. <<WACCI Policy is that EVERYONE has a right of reply in the pages of the magazine -Philip>>

W) You were with WACCI for a long time. What is one of the best moments that has stuck in your mind and what is a regret?

S) One of the best moments? God that's difficult. Let's start with the other one. Well apart from my obvious worst time, losing WACCI, there is one event that I thoroughly regret, introducing Phil Craven to an unsuspecting CPC world. Honestly, the guy was the biggest con-man going, he certainly conned me. I used to read the complaints in 'Fair Comment' about some of the people he so blatantly ripped-off and I felt very, very guilty about the fact that I'd given him so much publicity. I was very naive when it came to Phil.

One of the best moments? This Morrison chap tried to take Jeff to court when Jeff absolutely slated his 'Pascal' ROM in a WACCI review. So Jeff took it to the authorities, proved everything he said in the review and blew Morrison's objections out of the window.

W) Briefly, what's your side of the "Great Crash" story.

S) Basically it was all rubbish. There never was a "great crash" story. It wasn't even a "bumpy-landing" story. In fact it was a "gentle-thud" story, if it was a story at all.

I handed WACCI over to Clive and "The Committee", with a membership figure of over 700 people. I invited Clive into my house for the weekend, just like Jeff had invited me into his house so that he could learn all about WACCI. He came in, did his calculations and said "Yes, WACCI will survive!" And he did it! But then they started to re-write history.

When I handed WACCI over it was financially stable. Okay, I admit that producing issue 50 would have involved dipping into Joolz's bank account but WACCI had £5,000 worth of stock in reserves that was waiting to be sold. When I passed WACCI on to Clive there were no debts to be settled with any of the commercial companies like Arnor, Rombo or the printers. I was personally responsible for them and I sorted them out, WACCI didn't pay a penny towards any of the so called "old debts."

You know this bit already. With our joint blessing, the two of you have just extricated at least another £1,000 pounds of assets from WACCI Towers that I've had lying around doing nothing for the last five years. <<An awful lot of stuff which is now in the safe hands of John Bowley, Angela and myself -Philip>>

If I'd had just a bit more energy I would have produced issue 50, but I didn't manage it. Sad, because somebody really did fiddle around with club funds and I wonder if I wasn't made the scape-goat in order to cover for other peoples' mis-deeds? If I'm wrong then the guilty parties can always resort to litigation to prove their innocence but I doubt that will ever happen. Perhaps a whinging letter or two in Fair Comment but nothing truly substantial. I mean I'd welcome it after all the nonsense that's been talked about the so-called "Great Crash", the WACCI membership would finally find out the truth.

W) Finally. What does the anachronism WACCI really mean?

It means "Walker's Amstrad Computer Club International" and I hope that's an end to the endless speculation! I've kept quiet about that one for a decade and it feels good to finally come clean!

Can I go back into my box now? I'm really tired. Having finally vented my spleen I may need to sleep for another five years. On the other hand I might just be returning in the near-future. Just in case I never appear in WACCI again I'll wish all the WACCI readers a final Tarra...

## DISC LABELS

BLACK BLUE RED ORANGE

Quantity	Price inc p&p
1,000 Labels .....	£8.00
500 .....	£4.00
250 .....	£2.00
100 .....	£1.00

Send PO's or CASH to:  
John Jones, 41 Westmorland  
Avenue, Newbiggin-by-the-sea,  
Northumberland NE64 6RN

# WHO'S WHO

EDITOR: PHILIP DIRICHLEAU, GROUND FLOOR FLAT, 121 RIPON STREET, LINCOLN, LN5 7NG  
 Telephone 01522 511608 (But not after 11pm if you wish to live)

## MARKET STALL

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

## WISH LIST MANAGER

Ernie Ruddick  
 26 Spitalfields  
 Yarm, TS15 9HJ

## WACCI HOMEGROWN DISC LIBRARY

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

## IT'S THAT GIRL AGAIN

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

## ACCOMPLICE TO THE EDITOR

Ron Izett  
 c/o WACCI HQ  
 address as above

## PD LIBRARY - DISCS 1 TO 18

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

## FAIR COMMENT

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

## BOOK LIBRARY & COMPETITION SPOT

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

## THE ABC OF PD

Mark Johnson (01375) 677631  
 13 Ashway, Corringham  
 Essex SS17 9EB

## 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

### WACCI SERVICES

Frank Frost  
 4 Rectory Close  
 Wootton, Ryde  
 Isle of Wight  
 PO33 4QB  
 Phone (01983) 882197

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 £5.00

### PAST WACCI'S

Frank Neatherway  
 3 Glebe Close  
 Rayleigh  
 Essex  
 SS6 9HL  
 Phone (01268) 784742

01-03,40-42 .... 50p inc p&p  
 44,46-50 ..... 50p inc p&p  
 52-62,65-69 .... 50p inc p&p  
 70,72-73,75-79 . £1 inc p&p  
 80-83,85-98 .... £1.50 ditto  
 99-100 ..... £2.00 ditto  
 Go on, grab a back issue.

## SUBSCRIPTION FORM (103)

NB: Subscription includes club membership.

UK \_\_\_\_\_ ISSUES @ £2.00 EACH = £ \_\_\_\_\_

EUROPE \_\_\_\_\_ ISSUES @ £2.50 EACH = £ \_\_\_\_\_

OVERSEAS \_\_\_\_\_ ISSUES @ £3.00 EACH = £ \_\_\_\_\_

NAME \_\_\_\_\_ PHONE \_\_\_\_\_

ADDRESS \_\_\_\_\_

POSTCODE \_\_\_\_\_

From:

To:

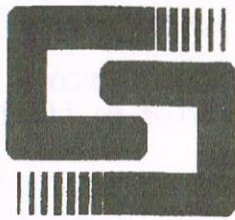
Please send your cheque  
 or Postal Order to:

### WACCI

7 Brunwood Green  
 HAWARDEN  
 Flintshire  
 CH5 3JA

Cheques payable to  
 WACCI please.

SAE needed for receipt.



**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)**



# WACCI

## With Compliments

Hi Jonathan, We are still here - current edition enclosed.  
You need a new drive belt - see page 4 and order  
one from Andre Howard - I did and it solved my drive  
problems

Regards

Paul

Paul Derryhouse (01244) 534942  
Distribution and Subscriptions  
7 Brunwood Green  
Hawarden, Flintshire  
CH5 3JA