

# WAAW

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

ISSUE 88  
APRIL

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The screenshot displays a graphical user interface for a route planning application. On the left, a map shows a network of roads connecting various locations. A route is highlighted in white, starting from Northwich and ending at Abergele. The map includes labels for several towns and their distances from Birmingham, such as Northwich (MS 13), Walsley (MS 11), Stourbridge (MS 12), and Solihull (MS 15). On the right side, a vertical menu contains several options: FASTEST, SHORTEST, DISPLAY, PRINT, ZOOM IN, ZOOM OUT, AVOID, and OPTIONS. Below the menu, the zoom level is set to 16X. At the bottom of the screen, a status bar shows the current route: FROM: NORTHWICH, TO: ABERGELE, and HERE: (blank). To the right of the status bar, the fastest route time is 08:53:45 and the shortest route time is 58M.

FASTEST  
SHORTEST  
DISPLAY  
PRINT  
ZOOM IN  
ZOOM OUT  
AVOID  
OPTIONS  
16X  
FASTEST  
08:53:45  
SHORTEST  
58M

FROM: NORTHWICH  
TO : ABERGELE  
HERE:

THIS MONTH WE REVIEW

*RoutePlanner*

BY RICHARD FAIRHURST

BUT HOW DID IT FAIR?

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### THE BENEFITS OF WACCI MEMBERSHIP

- \* The best magazine for serious CPC users.
- \* An INDEX of the above from issue 1 - 81.
- \* 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 Ruddick, December 1994

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WACCI: The club for Amstrad CPC computer owners.

FRONT COVER: by Paul Dwerryhouse

## THE TELEPHONE HELP-LINE

**BOB MOFFATT**, 01994 453509, Pendine, Carmarthen.  
Masterfile III, Mastercalc, Qualitas & Protex.

**STEWART PEPPIATT**, 01245 353903, Chelmsford, Basic M/Code, DMP2000, VDE, Scrivener & general problems

**PETER CAMPBELL**, 0141 554 4735, Glasgow, OCP Art Studio, Vidi, Basic, MicroDesign & Art Programs, ProPrint, CPC plus m/cs and VideoMaster.

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

**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.

**LAURENCE SAUNDERS**, (Work) 0161 480 4900  
Maplins & technical help. Now at Stockport.

**NIGEL MELLS**, 01784 250763, Ashford, Tape to disc  
problems, Basic programming and a general natter.

**MIKE LYONS**, 01942 59942, Wigan, Basic, Stop Press  
Dk,tronics Speech Synth, Rodos and general help.

**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 260616, Peterborough.  
Help and advice about the Book/PD Libraries.

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

**NIGEL CALLCUTT**, 01664 68738, Melton Mowbray.  
Technical advice, hardware and CPC repairs.

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

**PHILIP DIRICHLEAU**, 01522 511608, Lincoln.  
Powerpage 128, Gpaint, Tasword, Disc'o'Magic,  
PD Utilities, Basic programming, the Star LC10  
and Epson LX printers. Philip will natter away for  
hours with anyone who wants - 6pm 'til midnight.

### NB :

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

# WACCI

Edited by: *Paul Dwerryhouse*  
Owned by: *The Club Members*

Conceived and Founded  
By: *Jeff Walker*  
In: *October 1986*

Developed and Expanded  
By: *Steve Williams*  
And: *Clive Bellaby*

Membership: 378

Telephone: 01244 534942

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*Here we are again, happy as can be, all good friends and I can't believe how fast last month went. Mind you February was even worse. You will have recieved the March #88 edition on the 4 March and not the 1st as I intended. Why - somebody invented a month with only 28 days in it. At least I'll get an extra day next year. Enough rambling, let's move on to the news.*

## CONVENTION 24 SEPTEMBER 1995

The tickets are moving fast so please don't delay in letting Angie know your requirements. Fine details are now being worked on and I'll report back to you once a coherent plan has been put together.

## A QUESTION

Long shot this one but I reckon its worth asking. Does any member know if an Amiga Vidi Digitiser can be converted to work with the CPC?

## JOB VACANCIES

All those who hate volunteering please skip this section. Right, now that I'm only chatting to you mugs that like working for the greater good of the club I'll begin.

I need several volunteers to review software/hardware/books as and when required. I have in some games (I can get more) and serious stuff right now. Recently I have been dropping in on members and asking if they would help me out with a review. Everyone so far has obliged but I would rather have a list to work from. Interested?

## ANOTHER WORLD

The disczine with the above name, produced by Richard Avery, has closed down. All those people who ordered

Issue Five have had their money and disc back.

If you would like a look at the 'zine then Richard is still selling back issues 1 to 4 at 50p plus disc plus SAE. You can catch Richard at:

Another World  
35 Marlborough View  
Cove  
Farnborough  
Hants GU14 9YA

## CLANG

Guess who's been upsetting Steve Denson of SD Microsystems, yep me. Why have I been doing this - because I keep printing his company's wrong address and telephone number.

I'm sorry Steve, I do try to produce a professional publication but please remember it is done in my spare time. I dearly want WACCI to support those reliable companies that support the CPC and to this end I am proposing to change the way I currently deal with trade adverts in the magazine.

To this end I shall be chatting to Stamper and producing a monthly "trade directory" and donating a whole page to it. Any company that wants to advertise can do so free providing they offer some discount or special offer to WACCI members.

It this way Steve, I hope the problems I have caused you over the last few months will not happen again.

## CAMPURSOFT NEWS

The news is good from Peter Campbell this month. He is, as a way of saying thank you to WACCI members, allowing members a massive 25% discount on all Campursoft products for the month of APRIL. If you are an overseas or european member then Peter will extend the time allowed to APRIL and MAY. What can I say but thanks Pete.

## MEMBERSHIP LIST

You will remember the January edition of WACCI in which I stated that in the next issue I would print members names and the area they live in. Well the February edition didn't contain the list. Why, simply because the clubs membership numbers were growing rapidly that month.

For the benefit of all those new members the idea is simple. A CPC owner and WACCI member could live just round the block from you. However, not every member would like to see his name in the magazine in the format:

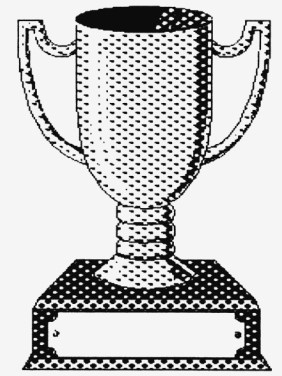
Paul Dwerryhouse, Hawarden, Clwyd.

so if you object then write or ring:

Bob Miller, 55 Den Lane, Springhead  
Oldham OL4 4NN Tel: 0161 620 2118

*That's yer lot for this month, I'm out of here. Take care all. -Paul.*

# COMPETITION WITH JOHN BOWLEY SPOT



*Hands up! Who's going to the convention then? I know one person who is and that's ME! My wife Carol says I can go provided that I put up the security light that was given to us as a christmas present in 1993. I think she's waited long enough don't you? Oh the things I do for WACCI. One thing that happened last month was that Carol's moped was stolen from our back garden and when we reported it to the police we couldn't stop ourselves from laughing. Why you ask! The moped would only go 5 mph, I bet the thieves were tired pushing it up and down the hills that we have around here. On with this months competition. <<John>>*

## SPECIAL THANKS

I would like to thank James Gall for the items that he donated to the Book Library. I should have thanked him in last months compo spot, but I forgot, sorry James. If I've forgotten anyone else and they know who they are. I thank them also. <<splat.splat -Paul>>

## FEBRUARY'S RESULTS

The answer is **STREET HAWK** a super powerful motor bike. Do you remember it now? The winners are:

\* 1st Marcus Ruegg \*  
\* 2nd Colin Hazell \*  
\* 3rd Bob Houston <<who??> \*

## MARCH'S RESULTS

I meant to put your entries to be with me by the end of April, but I put March instead. Silly me. Never mind here are the winners:

\* 1st Len Edwards \*  
\* 2nd Hanson Munro \*  
\* 3rd Angie Sinclair \*

The words that I wanted were: CLUB, HOUSE, TAX, PAPER, TIME, LOVE, CREAM, POINT, KNIFE, EGG, FRONT, BASKET, CARPET, TOP, TIME, PARTY, FAIR and WATER. If your name is not in any of the above then blame Carol, it's her fault. <<Not the lovely Carol? -Paul>>

## MY ADDRESS....

John Bowley. 97 Tirrington, Bretton Peterborough, Cambs. PE3 9XT. Tele no. 01733 260616 between 6pm - 8pm. <<Ok>>

## STORY TIME

Last months Story Time was a mystery for you to solve and the winner is: **Stuart Gascoigne**. His answer will be published as soon as I can type and layout the page.

## BOOK LIBRARY

Have a look and see if you've any of WACCI's books that are now overdue and return them to me please, I've other members who are awaiting for them.

## APRIL'S COMPETITION

For the benefit of new members who are entering this competition and future ones. Please put on your entry 3 PD or Homegrown discs that you would like even if you want the prize on offer.

You can also have all your PD prizes on 3.5 discs, please state if you've got a side switch.

All our PD librarians can supply your software on 3.5 discs which can save you lots of money.

## PRIZE ON OFFER

This months prize is: **THE BASIC IDEA** from Campursoft written by Sean McManus and comes to you with a 3" disc with loads of programmes on. So that's one good reason to enter.

## SETTING A COMPETITION....

If you would like to set a competition then send it to me please with your choice of two PD Discs.

## YOUR ENTRY

Needs to be with me by the end of May.

## WHAT YOU'VE TO DO

Each answer represents a flower or a shrub. See my example to get a better idea of what to do. Below are 16 questions and the winner will be decided on how many you get right, so if you don't know them all still enter cos you'll never know you could still win, so have a go. Good Luck.

- 1) A Musical Instrument. *Ans: VIOLA*
- 2) A Pet, where money is made.
- 3) An avalanche.
- 4) A fairy with shellfish.
- 5) Sweet little bunch.
- 6) An order in Scotland.
- 7) A lovers farewell words.
- 8) These birds sing like cats.
- 9) Take you and I away and it would be German.
- 10) A christmas decoration with a sweet wine.
- 11) Unlucky at the ball.
- 12) To adore in the fog.
- 13) Card game for St George.
- 14) Part of the eye.
- 15) Medieval punishment.
- 16) Many sheep.

Well folks, that's your lot for this month, got to go now as Carol is patiently waiting for me to rub her sore and aching feet. Seeya all next month, until then byeeee! <<John>>

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# Fair Comment

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## INLAY THAT PLASTIC

Dear Mike, for what seems like an age I have struggled to make something approaching a perfect inlay for use with individual plastic 3" disc holders. The PD programs that I have tried seem to me to be either a bit messy or inconsistent although I have often wondered whether my printer was always responding as the programmer intended.

The enclosed program owes its origins to "Amstrad Action" with subsequent mods by an enthusiast with the initials EAF. I have added my own contribution and the result I feel to be worth passing around those members who, like myself keep their discs each individually wrapped in a three inch translucent box. It may be that very few members now have the need for inlays and if you think this to be the case then it would be less embarrassing to us both if you didn't print this letter or the program but simply said that if anyone was interested to contact me for a copy of the program (I can only copy on to three inch discs.)

I trust you are now fully recovered,  
kindest personal regards,

M D Crook  
South Yorkshire

*<<Hi MD, thanks for the letter and program, please don't be so formal as Mike Lyons never liked it. First name terms please.*

*I tried the program and it works wonderfully well. I've sent it down to the master JB. If any members wish to donate a program to the library then please send it directly to John Bowley, this will save the club internal postage - taeverso.*

*This letter from MD was sent to Mike Lyons last November, I'm sorry it has taken so long to sort out FC mail sent to Mike but I'm sure you will all understand the reasons. -Paul>>*

## HOW DOES WACCILAND LIE?

Dear Paul, many thanks for the supplement and index. They make

interesting reading. I have, of course, been aware of the existence of WACCI for some considerable time, but have never quite managed to get around to making any enquiries about the user group.

My query regards some software which I may be willing to lend to WACCI. Hisoft Pascal 4T and Hisoft Fig Forth. However, I am not sure whether they should be sent to the tape software library, or the lending library?

I'd appreciate it if you would clarify the situation.

I would like to know, too, what safeguards are in place to protect software which has been lent to the club against misuse or damage etc. As you point out, it is exceptionally difficult to get hold of certain programs and I would like to know how software lent to WACCI may expect to be treated before I offer to lend WACCI any of mine?

I hope I don't sound too pedantic, but as a total newcomer to WACCI, I feel that I need to understand the lie of the land before deciding to lend books/software etc. Every good wish.

Phil Ramsay  
Manchester

*<<Dear Phil, welcome to WACCI and thanks for the kind offer of a loan of software to the club. John Bowley looks after the library side of the club and it is to him you should send any donations. Please indicate clearly to John whether it is on loan or a gift. This applies to us all.*

*With regard to safeguards to protect donated software, WACCI has none. The club is run solely on trust. So far we have experienced absolutely no problems whatsoever. However, if damage occurs then compensation can be made. You are correct that certain items can't be replaced - if you are worried then don't do it.*

*Stay awhile with WACCI, you might just experience that warm feeling most club members get from WACCI and then all your fears will disappear.*

*Which ever way, I'm happy. -Paul>>*

## LAST WACCI - NO!

Dear Paul, I have been sitting at the computer - for what now seems like hours - writing some particularly boring letters to various bureaucratic organisations. "What has this got to do with me?" you ask. Well, I have now arrived at the good part of this letter writing session, renewing my WACCI subscription. Having now experienced six issues of WACCI I must now confess to being hooked and need another 'fix', so please find enclosed a cheque for £9 to cover another six instalments.

Do you know, I have only just realised what "Your last WACCI is 86" is referring to; there I am thinking "Why is he telling me the number of last WACCI, what do I want to know that for, I've already got it!" The expression Rodney you plonka comes to mind. Now having WACCI number 86 arrive it has just dawned on me that by last, you mean last and not previous.

Have you noticed that the figure Amstrad Action are quoting for their circulation is now over a year old? At 15,168 this is less than half the previous quoted figure, at this rate AA will disappear in a puff of smoke never to be seen again. Being the only news stand CPC publication I feel it should be given all the support possible, unfortunately due to the decreasing size and lack of content, if it does not get any better, a renewal of my subscription will not be forthcoming. How many other readers feel this way? If CPC enthusiasts want continuing support for their machine, then WACCI will become increasingly important to that need.

Anyway; that's enough ranting for now, keep up the good work and may all your problems be 8-bit ones. Regards,

Ian Goulden  
Sussex

*<<Hello Ian, thanks for voting for the club with your dosh. It's good to know that the label reminder works, if you feel a better wording is needed then*

do let me know and I'll make the necessary alterations.

The AA debate is further expanded on page 28 by David Crookes, let's see how it develops. -Paul>>

#### TECHNO LULLABY

I love technology,  
it makes me think I'm smart.  
Any sort of 'ology was good  
at the start.

Then I discovered COMPUTERS,  
boy was I smitten  
Grinning like a fool,  
purring like a kitten.

I sat down at the keyboard to play  
Now I can never stay away.  
Sitting and staring at my green screen  
Things are appearing no  
one's ever seen.

Words my fingers find  
straight from my brain,  
Everyone else may think I'm insane.

But I don't give a \*\*\*\*  
ain't I a pain?

Dear old Amstrad can still  
give a surprise

To this ancient person,  
so old and wise.

Thanks also to WACCI  
please accept my bouquet.

REM: A verse a day  
keeps the hearse away.

P.S. Last line not mine....  
Isobel Swade - Warrington

<<Thanks Isobel, a smile a day keeps  
the blues away. Angie>>

#### THE JEAN GENIE 4.06

Dear WACCI, I'm an absolute beginner  
with my CPC 464, I understand from AA  
No 113, that by joining your  
subscription magazine I would perhaps  
get more help.

I use my CPC mainly for my family  
history records on the Mini Office II  
word processor program.

I have a DD1 disc drive and an Epson  
FX 100 Printer, which I picked up  
pretty cheaply it's a bit big but does  
all I require at the moment.

What I would like to know is if I  
buy a 64K Memory Expansion unit what  
exactly can I expect from it? (See I  
really am a beginner, a 48 year old  
beginner).

Enclosed is a cheque for £3.00 and I  
am looking forward to reading WACCI.

Jean Stangroom  
Norwich

<<Dear Jean, it's great to welcome yet  
another new member, I hope WACCI helps  
you through the tangled world of  
computers and lets you see the light.  
Feel free to ask as many questions as  
you wish and we will do our best to  
answer them. You shouldn't give your  
age away so easily but you are making  
us all feel younger!

The 64K expansion unit for the 464  
enables you to run 128K programmes  
like the Advanced Art Studio. It is  
worth the investment and no less than  
Richard Fairhurst, on page 30,  
reinforces that statement. -Paul>>

#### A RAMBLER

Dear Paul, thank you for the latest  
issue of WACCI, the second of my  
subscription. Already you are more  
regular than Amstrad Action! As a new  
member of WACCI I thought I would  
write a rambling letter to you, so you  
will stop me if I become boring won't  
you? <<Too right I will. -Paul>>

I am a newcomer to home computing,  
having only recently bought a CPC 464,  
DDI-1 and DMP2160 printer from my  
brother-in-law. Also included in the  
"job lot" was a huge amount of  
software, including Amword,  
Masterfile, OCP Art Studio and loads  
of games.

The last few months have been hugely  
entertaining and many hours have been  
spent in labouring (in the nicest  
sense of the word) over a hot  
keyboard. Just about all my letters  
are typed and saved on disc now. No  
longer do I have to try and remember  
what or to whom I have written. I just  
load the disc and marvel at my  
lovingly typed words. Sorry about  
this, I said I would ramble!

Does anyone have any idea how many  
Amstrad CPC's were sold over the  
years? Wouldn't it be interesting to  
know how many sit gathering dust in a  
cold bedroom somewhere? Or better  
still, how many are in regular use?

I also have a Multiface II which is  
a brilliant thing to have. If only it  
wouldn't use so much memory when  
saving a program. Is there any way of  
compressing the program? Does Soft-Lok  
operate on the same principle but by  
using software instead of hardware?  
Perhaps I should buy the back issue of  
WACCI in which the two were compared.

Is it possible to save multifaced  
programs onto a second 3.5" drive

(either normal or large format)? Or  
would I have to copy it from A to B?  
If I had to copy it would I be able to  
load it OK from the second drive? I am  
sorry to ask so many questions but I  
want to get the most out of this  
machine and my children expect me to  
know it all! Keep up the good work.  
Best wishes.

Colin Hazell  
Thame

PS: We're All Computer Crazy  
Intellectuals?

<<Hello Colin, glad you are enjoying  
life with a CPC and WACCI. Boy do you  
ask some questions. How many CPC's  
have been made? Pass.

I only use my Multiface II to grab  
screen shots for the magazine so I  
can't help you on this one. I realise  
that it always saves to Drive A but  
what can be done to make it work with  
Drive B I shall leave it up to others  
to let you know through these pages.

It was I who compared Soft-Lok 2.2  
and a Multiface II some twelve months  
ago. I had successes and failures with  
both. Contact Frank Neatherway if you  
wish a copy of March 1994 (#76) and  
he'll speed one over to you. -Paul>>

#### A BELTING NUMBER

Dear Paul, someone called John left a  
message saying he wanted a belt, I  
believe you gave him my phone number.

I should have said in my last letter  
to include my address, the phone  
number you have for me is not my  
phone, so it's not a good thing to get  
too many calls, also it's a special  
line, I can't phone outside London! So  
if anyone wants to contact me please  
give them my address and not my phone  
number. I would however be happy to  
hear from you if I can help with  
Parados, hardware, electronics or  
anything else.

Re: members wanting side switches. I  
wonder if they know that Parados can  
side switch without the need to alter  
any hardware? All the best,

Andre Howard  
5 Altyre Way  
Beckenham  
Kent BR3 3ED

<<Dear Andre, thanks for the letter, I  
have, as you can see, printed your  
address. For those readers with a poor

memory (like me) Andre has some 3 inch drive belts for £2.45 if any member would like one.

Thanks for the offer of help, I do have a 3 inch drive (kindly given to the club) that doesn't work. Would you like a go at fixing it? Let me know if you can help and don't worry about turning me down. -Paul>>

#### WHO'S? GOT TO COME CLEAN THEN

Dear Paul, please find enclosed a year's subscription of £18. Thanks for the fine job you are doing of editing the magazine and of course for minding my money!

The standards of WACCI's contents are as high as ever they were, I though for a while that the humour had become a little childish/silly but Bob Moffatt has restored my faith and of course, your subtle humour is always welcome.

Enough of this creeping, come on tell me the real story of why Clive packed the Editors job in. Who upset him? There must be some dirty washing lying around somewhere just waiting to be washed in public. Go ahead. Come clean! After Clive's terse little note in Fair Comment, i.e "To Paul" - not "Dear Ed" or "Hi Paul Baby!", I strongly suspect you are the culprit. Not going to tell me, eh? Okay, I'll just have to wait until it's splashed all over the front page of The Sun or Computer Shopper!

Oh, Hell!! I've just realised that I've neglected to ring Angie for a ticket to the convention. Where does the time go? I was going to ring her weeks ago. I hope that my failure didn't swing the votes against a convention. <<It didn't Bob and I've put you on the list for a ticket. -Angie>>

Must go, got to get my entry in for this months competition. Not that I've much chance of winning these days. Not since about a year ago when a certain person told the world that I'd won more prizes than most. Haven't seen a prize since blabbermouth! Best Wishes,  
Bob Houston  
Runcorn

<<Dearest Bob, gosh how I love you. Yep, someone had to ask that question so why not you.

With regard to Clive I can't tell you as it is a personal matter between

Clive and myself. I have taken the advice of Doug Webb (who knows both sides of the issue) and as Clive has now left the club and, therefore, has no right of reply, anything I might say would be biased and that is unfair to Clive.

Needless to say, WACCI owes a huge debt to Clive and it is a far poorer place without him.

It'll be good to see you again at the Convention providing you don't bring any searching questions with you as this is the end of the matter. (Sounds like I've just put my foot down doesn't it Bob. Did you hear a thud in Runcorn on Saturday 18 March.)

Golly gosh, surely it wasn't me who fixed it for you and the competition prizes? Perhaps Compo John could do another list of the top three winners to see if that reinstates your luck once more. -Paul>>

#### APOLOGIES APOLOGIES APOLOGIES

Dear Members, I'm sorry I seem to have made some .... (ooops, nearly said it, what's the word I need, I know...) clangers last month, so to Bob Moffatt I'm sorry Bob I didn't realise you wanted me to put an ad in the mag, I just put you in my wanted book. I'll put the ad in this month.

Sorry also to Alan Tilling for selling the edge connectors twice, the next ones I find (Please Paul) will be your's.

Sorry again! to Ernie Ruddick, I missed a complete line out of his letter in the March mag, you will be pleased to know Ernie that I've bought myself a new typing chair for my birthday this month which is very comfortable so hopefully I shall not be making any more silly typing mistakes. <<Famous last words. -Paul>>

Next a big thank you to you all for your support for the convention and market stall, I really am enjoying talking to you as it's nice to get to talk to the grown-ups!! Whilst writing I'm wondering if members would like to send their letter addressed Dear WACCI instead of Dear Paul, Dear Angie, Dear whoever, what do you think?

Please note I am at home most of the time so if there's an item you want to buy etc., then ring. Very best wishes.

Angie Hardwick  
Bloxwich  
09122 476293

<<Dear Angie, thanks for not swearing in WACCI, it isn't allowed you know.

I'm sure all will forgive you but don't let it happen again mind you. It's only me who is allowed several clangers per issue.

Now what's all this dear business, Mike Lyons will be pulling his hair out as he reads your letter. WACCI likes first names and encourages members to use them. You will have to go and wash your mouth out for saying that. Gosh, aren't you getting told off this month, I think I'll start practising ducking. -Paul>>

#### ROUTE INSTRUCTIONS

<<The following is an extract from Ernie's letter of last month without any missing bits. -Angie>>

I have the facilities to print Route Instructions from anywhere in the mainland to Walsall City as per the Automobile Association type but without the latest road works of course. If any member would like a copy from their home town to the outskirts of Walsall I would be happy to offer this service for the cost of one second class stamp plus envelope.

Ernie Ruddick  
26 Spitalfields  
Yarn  
Cleveland TS15 9HJ

<<Hi there Ernie, thanks for sending me the printout from AutoRoute v1.2 so quickly. I can confirm that it is the AutoRoute that I know and have used on several occasions.

The route shows you the running time, instructions like "turn off onto A168 for 9 miles, direction south, towards Topcliffe", the total distance and the total time. It is well worth it as Ernie has done one for me and it got the route spot on. You can't do better than that.

Thanks again for offering the service to members. -Paul>>

#### BOOT SALES ARE UP

Dear Angie, Paul, further to Bill Rouse's letter on Car Boot Sales, I should like to tell you about the bargain I found one Sunday a few months ago at a Car Boot Sale.

Her indoors and me go to car boot sales a lot, this particular day whilst looking around the stalls, I

noticed what looked like a funny type of computer, (I am not being rude to the EINSTEIN COMPUTER) but it did look odd, taking a closer look, I noticed it had twin drives and yes they were three inch drives, I started to ask questions about it and the basic software it used, the chap didn't seem to know a lot about it other than it was for sale at £40.00, he then proceeded to show me a disc box full of discs, (all Maxwell 3" discs) most were blank.

He told me that it had the normal system discs plus a wordprocessor, database and spreadsheet, all had the CUMA label, I said I would think about it and would call back later, (I had to say that because her indoors was looking over my shoulder and beginning to foam at the mouth at the thought of me spending more & more on computer stuff as she calls it).

Well I did call back later after I had purchased her some more figurines to keep her happy, yes the EINSTEIN COMPUTER was still there, the poor chap looked fed up and didn't look as if he had sold much as his table was quite full, so I just asked him if he was open to offers, OK he said what will you offer me? £20.00 I said standing with the notes in my hand flashing them in his face. Done he said, I gave him the cash and he even helped me with carrying it to the car, gob-smacked wasn't the word, as soon as I got home I formatted them to Data and certified each one, all OK. Yipee 30 x 3" discs plus a computer for £20, but what was I to do with the computer? I know I said, I will place an advert in our local free adds paper and offer it for £50.00 ONO, well you could have knocked me over with a feather, the phone rang from someone who had a single drive EINSTEIN but wanted to upgrade to a double disc drive, he came along played around with it for a while and asked are you prepared to accept £40.00 for it, after picking myself up off the floor, I soon relieved him of his £40 and very gracefully helped him with the computer to his car.

So over all I made £20 profit on the deal and I had 30 x 3" discs which could have cost another £30 second hand. Also another time I brought a 6128 keyboard for £15.00, it had one or two faults but I was able to soon

put right. YES car boot sales are worth a visit. Happy booting,

Dave Stitson  
Plymouth

*<<As I typed this letter out I could just see Dave's beaming smile and I had the same experience: bought a 6128 with a green screen and loads of 3" discs for £40.00, I never miss a car boot if I can help it. -Angie>>*

#### BOO BOO TIME

Dear Paul and WACCI members, this is for those of you who may have followed my side switch article on drives from Siren Software.

A slap wrist time for Dave, I said the wire to cut was wire No 31. Oopsss, it should have read wire No 32 and wired up as per the drawing showed, the piggy back wiring can be either No's 31/33.

Please print my apology to anyone who cut wire No 31 and is still trying to get their side switch to work. Regards,

Dave Stitson  
Plymouth

*<<Hi Dave, I know just how it feels. Why do you have to see it in print before you throw your hands up in horror. Thanks for letting us know and don't worry about it. -Paul>>*

#### NOT FOR THE FAINT HEARTED

Dear Angie, I am writing for the first time, I have only taken out membership for a trial period but I will certainly be renewing because after receiving the first magazine I have solved two problems that have caused me sleepless nights for years.

I owned a 6128 from 1986 and enjoyed using it, then one Sunday at an All Formats Fair I brought a 6128 plus and CM14 monitor for £100. The sound and the keyboard were much better and, unlike some other owners, I bought the Tape conversion from AVATAR and it was delivered promptly. This was duly fitted following the detailed instructions. I was therefore pleased with the service from AVATAR.

At the next All Formats Fair I purchased a 3.5" Drive with a lead and a power source. However when I got the drive connected and typed 'B, all that happened was that both drives whirred and reported Disc missing, so I tried

'A, both drives whirred and again Disc missing appeared. Put a Disc in drive A, Turn computer off, unplug Drive B, turn computer back on, type CAT nothing happens.

I now had a 6128Plus with tape interface and no disc drive as I had killed my A drive. Further more I found when I tried the discs in my original 6128 the directories had been wiped. For the next few months I went back to using the old 6128 but I still wanted to use the PLUS because of the better sound and keyboard. Amstrad Action did an upgrade series. How to fit a Disc drive to a 464 PLUS and in the same magazine WAVE were advertising a Second 3" Drive for about £50. I wrote to WAVE to order the Drive for the PLUS.

It arrived three days after I posted my order but with a normal lead. The lady at the other end of the phone suggested I send them the lead back and they would supply the right lead and a blank disc. Now you might think this was reasonable but I decided not to send the lead back as I already had the lead I had purchased at the AFF. So I could use the Drive as a second drive on the old 6128 as well as a first drive on the Plus. This situation continued until February of this year when I found from WACCI a back Issue Index. Frank was very quick in sending me the three back issues I ordered with a nice hand written note. He was not quick enough or rather I did not join WACCI soon enough, you see I went to another AFF in February and bought another 3.5" drive and when I read the WACCI BIG DRIVE Article I found the Drive was not mentioned in the Boxout, but at least I now knew how to cure the Disc missing on the Drive. The next problem was I needed to install it as an internal A: 3.5" drive and switch between my 3" B: drive, an ABBA switch.

There are 3 problems with fitting a 3.5" drive, all of these drives that I have seen have 34 way connectors, the internal interface only has a 26 way connector, the solution is to take a 34 way cable with a 34 way IDC connector on them. With the drive facing away from you the power connector should be on the left, stepping motor in the middle, now cut the left most six wires and pull them away from the rest, connect the next

two wires to the first two pins, peel the next two wires back and connect the tenth wire to one end of a dpdt switch, connect a peice of wire to pin 4 on the internal A: connector and the centre pole of the switch. Now cut the back of the External drive socket 6th from the left, keyboard the normal way round connect the other pole on the same end of the dpdt of the switch to a length of wire from the bottom half of the 6th pin of the B: drive connector another wire to the top of the 6th pin to the end pole. The Switch should now have four wires connected one on each middle pole and one on each pole. The other four end poles are joined diagonally opposite ends of the switch. The rest of the

disc drive cable is connected onto the internal drive CONNECTOR as shown.

The next problem is the power connector has the live terminal on the wrong end of the plug. This is corrected by pushing the live red wire out of the power plug and then re-inserting in the end that has the red wire on the drive side, a watchmakers screw driver is ideal for removing these connectors from the plugs.

The 3.5" drive will fit internally by removing the circuit board from the computer case and carefully cutting the original mounting pegs off the case with a junior hacksaw. Next with the screws from the original disc drive screw the drive to the mounting pegs, apply some instant glue to the

bottom of the pegs and position the 3.5" drive so that the face of the drive fits flush against the top of the computer case approx 0.2mm from the front insdie edge of the bottom case and centrally of the drive slot in the top case. While the case is bare drill a hole to fit the switch, if you use an ultra mini toggle it will fit at the back of the computer casing between the external drive socket and the plastic lugs to the right.

This system is now up and running with Parados in Rom 7 and DES in ROMS 4 & 5. PARADOS is excellent! Advanced Art Studio; works perfectly on a 3.5" drive D20 format, including correct free space on disc. PowerPage also works on this format, both with the 3.5" drive as A:

I have a problem with the Rombo ROMBOX in that I have changed the edge connector for the correct type but unless I plug a Multiface 2 and 256k rampack on the back of the ROMBOX when I turn the computer on it continually boots up and resets, connecting these two cures this problem. Please can anyone help as I think this might also be causing a problem with copying discs from one Drive to the other.

I would like one ticket for the convention please. <<Will do. -Angie>>  
Cheers,

Mike Phelan  
Birmingham

<<Dear Mike, I love a success story, no matter how long it takes. Yours I like even more because it shows the depth in knowledge that WACCI possess. It also shows that armed with the WACCI Index many things are possible.

I followed everything in your tale but electronics leave me cold. I hope I have laid your table out okay. Please let me know if I have got anything wrong.

Anybody care to try Mike's solution, it sounds like the answer to failing drive A's and the shortage of decent new three inch discs.

The problem with the ROMBOX is very interesting. I had exactly the same problem with one on Jennie's 6128. It turned out to be the edge connect itself. You don't say if you connect Multiface and the Rampack before or after the ROMBOX or is the same which ever? Anybody help Mike? -Paul>>

#### DISC DRIVE CABLE TO INTERNAL DRIVE CONNECTOR

Computer Pin			Disc Drive Wire
			2 1)
			4 3) Cut out of cable
			6 5)
Index	2	1	Index 8 7
Do	4	Connect to DPDT switch	Do 10 ---Connect to DPDT switch
D1 not used	6	5	D1-----12----11) Cut out of cable
MOTON	8	7	Reserved 14 13) AT Computer end
DRSEL	10	8	MOTON 16
WGATE	16	13	WDATA 22 Move the cable up and
STEP	12	9	DRSEL 18 connect to match pinout
WDATA	14	11	STEP 20 labels
TRKOO	18	15	WGATE 24
WPROTEC	20	17	TRKOO 26
RDATA	22	19	WPROTEC 28
SIDE1	24	21	RDATA 30
READY	26	23	SIDE1 32
		25	READY 34 33 all odd numbers are 0v ground

## IT'S RUDE TO POINT

Dear WACCI Person, a couple of things. Firstly, I would like to respond to DS Anthes letter in iss 87 regarding mouses. I have an AMX mouse and to be honest, I find the thing next to useless. It has an interface that fits in the joystick port and basically replaces a joystick. Two of the buttons are marked "Execute" and "Cancel" but these translate as Fire One and Fire Two, as on a joystick. The third button is "Move". You can press it and move the mouse around without moving the cursor when you get to the edge of your desk. The whole kaboodle is powered from the 5v power lead from the monitor.

Any software that uses a joystick is directly compatible. But since I got the mouse, I have been wondering why they were even invented. I use a control paddle (the one designed for the GX4000 & Pluses). It works perfectly well with all CPCs. Generally when playing games I am leaning back with my feet on the edge of the desk, like you do. The control paddle has a long lead and doesn't need an acre of desk space. My desk is heaped with various books, letters, manuscripts, cats, stale tea cups, unexploded bombs etc. (Just as an exercise I'll look under the heap to see what's at the bottom... yep, guess what I just found? 3s 6d) There simply isn't room for a rodent. As to unsteady hands, I'm 21 so I have yet to experience that but the mouse is very sensitive. Perhaps a paddle would be easier. On the other hand, using the cursor keys on the keyboard might be just as easy.

So what it comes down to is convenience. And if my guess is right, this letter has been printed before another stating all the wonderful uses of mouses.

Having said all that I'll add that DS Anthes can have my mouse if someone could be so kind as to pass my address to Mr Anthes or pass Mr Anthes' address to me. I don't want any payment for it because (and the gods of WACCI may not like this) I won it in a competition. A WACCI competition.

Second; I have been reading Bob Moffatt's review of the Canon BJ 230 largely because I have a BJ 10 which Bob was upgrading from. Not that I'm thinking of getting a new printer but

I was surprised to see the mention of a letter from one Peter Ceresole regarding an address from where one might get more information on the BJ 10. Does that mean the Programmer's Manual, as opposed to the User's Manual which is supplied with the machine? Could you possibly print the address again? I was starting to think the Programmer's Manual didn't exist and was just a hoax. None of the Canon recommended companies I contacted had even heard of it.

Lastly, has anyone discovered any bugs on the Amstrad NC200 Notebook? I had one of the notorious NC100 Notebooks. Actually, I had three of them as they kept crashing and losing all the stuff I had typed. I lost around 9000 words of stories I had typed (and no, I didn't have any kind of backups or printouts). The NC200 seemed bug free until the other day when I discovered typing "OMP" really fast sometimes resulted in "OM", a pause and the cursor moving up one line. Very strange and exactly the sort of thing I am used to on my CPCs (ever tried pressing a line of three keys together?) and the NC100. Do all computers have these little quirks or will my Notebook crash and lose whatever I have on it at the time?

Is it true someone is making a 15 socket ROMbox? And finally, belated apologies to Ms Swade.

Have a nice day.

Richard Narain  
Middlesex

*<<Aye-up Richard, thanks for taking the time to write regarding the mouse for Mr Anthes. By the sound of it it might not be the answer that he is looking for but one man's meat is another's poison.*

*If you would care to take up the kind offer of Richard Mr Anthes, then please let me know and I'll send him your address.*

*The name and address given in WACCI issue #57 (August 1992) for Cannon by Peter Ceresole was:*

Noel O'Reilly  
Tech Support Manager  
Text and Data Products  
Canon (UK) Ltd  
Cannon House  
Manor Road  
Wallington SM6 0AJ

*Peter described it as "..... the programmers' manuals for the BJ-10 and its Epson emulation. These are effectively two manuals and they are fine, good and detailed, and what the customers' manual should have been in the first place ....."*

*Noel O'Reilly may not be there any more now but the address should be okay to use.*

*The Dwerryhouse household is deeply mistrustful of NC?00 machines. After two bad NC100's we bought a Panasonic and that has worked fine.*

*CampurSoft are busy making new ROM boxes, expect a WACCI review soon as Peter has promised WACCI a review model asap. Perhaps you would like to review it for the club Richard. Let me know if you are interested.*

*Finally Isobel Swade, I'm sure, accepts your apologies for calling her Issy. -Paul>>*

## A TIP FROM CHRISTINE

Whilst getting used to my 3.5" drive. I came up with "Disc Missing in A:Drive" I found putting a blank disc in A it would access drive B: Hope it's some help to someone.

While I was talking to Dave Caleno he said he was having the same trouble he was surprised when I told him what I did.

I know it's only a snippet to what I read; but it would be nice to help someone when so many help me.

Christine Raisin  
Nottingham

*<<Dear Christine, I love a good tip and yours is a good one. My 3.5" drive will not access the drive without a disc in drive A. There is another solution. After the:*

*Drive A: disc missing*

*Retry, Ignore or Cancel*

*press 'I' for ignore. It works on my setup but I always try to keep a disc in drive A as it saves pressing 'I' all the time. The only exception is when formatting a blank 3.5" to AMSDOS using Utopia. It stops you formatting the disc in drive A. -Paul>>*

## ONE MAKES A DIFFERENCE

Dear Angie, like a number of WACCI members I've got a modem and regularly

ring up various Bulletin Boards. I've got a number of Comms packages, but my favourite is ANSITERM. Thanks to good old BT, I've now got a problem. ANSITERM only lets you dial numbers with 10 digits. After "Phone Day", I'll need to use 11 digits - which means I'll have to use a different package.

I've got COMMSTAR in my RS232, but some of the BBS's corrupt the screen when I use it. Besides that, it's not nearly as user friendly as ANSITERM. I've also got ZMP, the CP/M prog. It also corrupts the screen when I use it with some BBSs.

Are there any kind members out there who think they can alter ANSITERM to work with 11 digit numbers? Thanks.

Bob Miller  
Oldham

*<<Hi there Bob, it sounds like a piece of one-upmanship to me and BT are certainly one up on the ANSITERM program this month.*

*I don't dabble in comms but I have used MEX to transfer data. The data corrupts under CP/M if the baud rate is too high. Is this your problem?*

*Anyway, enough of me taking about things I don't know, can anybody help Bob out with ANSITERM or point him in the direction of a comms package that that will solve his one and only problem with life just now. -Paul>>*

#### 6K-COPYMOD-XEXOR

Dear Paul, please find a small write up about the 6k-Copymod, not much but you can't see it or touch it, it just does the job of 6k copying and it works with XEXOR,

For those of you like me who like to make back-ups of your games, discs, and have been frustrated by the 6k Protection Systems namely the HEXAGON ones. Impossible to copy until now.

Not very well advertised is a 6k-COPYMOD from STS. This 6k-COPYMOD is a modification that STS do to your 6128,664 Keyboard or DD1-interface for the 464, this MOD along with XEXOR is able to copy the 6k protection system.

I read in a disc-zine (Impact) about the 6k-Copymod, so I rang Rob Scott of STS he assured me it does work, so I sent off my 6128 Keyboard on a Tuesday and 8 days later my 6128 arrived back.

Now to test the 'MOD', I loaded up XEXOR and set up the Disc copy and put

in a disc I knew was Hexagon protected. In just a short time I had a perfect copy, I then tried other 6k protected discs, 6k-Copymod made a copy first time.

Now how does it work STS don't give a lot away but a CPC can only deal with 5k copying. STS do a tweak inside so the CPC can 'write' 6k, the 6k-Copymod sits transparant in your system, only XEXOR can see it there and use it to copy disc to disc.

Having used it I've found it won't for some reason copy A to B drive, but as STS say you can do this if you have an ABBA switch thus getting your progs onto a 3.5" disc. I don't have an ABBA switch so I can't test this. Also STS say good quality discs must be used.

Now how much does it cost? £10.00 plus P&P. The P&P is £4.70 so in all it will cost you £15 to STS and £4.70 at your Post Office, I also paid 70p insurance. Rob Scott made a special point that the Keyboard MUST be very carefully packed as a couple have been damaged in transit, so be warned, use plenty of bubble wrap.

So for £20.00 is it worth it? YES if you like back-ups but you must also have XEXOR. STS supply XEXOR with the 6k-Copymod if you don't have it (I believe for extra £££'s but do 'phone first of all.)

I know we all like back-ups and to repay my debt to WACCI Members who

have helped me, I would be willing to make a back-up copy of anyone's disc, providing they send me their ORIGINAL disc and a good quality disc plus return postage. Don't ask for ten copies of one disc, I'll know you're pirating!!

Discs I've copied so far 'Chips Challenge', 'Robocop' (6k version), 'Renegae III', 'Platinum'.

Peter Curgenvin  
The Hollyar  
Bay Road  
Trevone  
Cornwall  
PL28 8QZ

*<<Hello Peter, thanks for the write up on 6K-Copymod. Instead of laying it out as an article I've placed it in the letter pages.*

*I've never heard of it and I bet many members won't have too but now we do thanks to you.*

*Thanks also for offering the back-up service. The only reservation I have about it is that a person could send you an original disc for backing-up purposes, sell the original and use the back-up copy. They are in no worse a position before the back-up was made and, indeed, somewhat better off from the sale of a disc.*

*However, I think we can trust WACCI members, can't we? Answers on a postcard please. -Paul>>*

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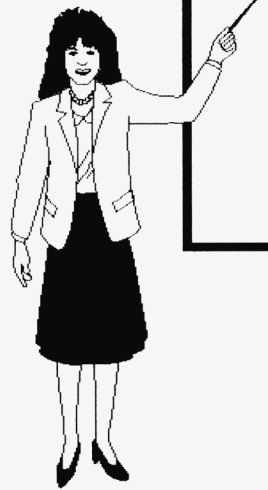
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# The Market Stall



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# In The Dark

## I GOT THE GERBIL INCINERATION BLUES by Richard Smith

*Yes, it's that time again, the time when you can put your feet up on a halibut and put the kettle on the fire... or you could read this months IN THE DARK! How was I? Next please.*

### INTRO

Well, lets get on with the general unpleasantness that is the the clock program, the chronological jewel in the crown of, er, something somewhere, probably... lets just get on with it. This is the penultimate IN THE DARK, so let us hope that soon the pages used for this series will be donated to a worthy cause and live happily ever after saving gorillas in the artic. No, that would be silly.

This subject of this week's article... *month's...* this week's month... today's... article is the clock face... the face of the clock, the actual clock *face*, if you like, indeed. Up until now the clock program has displayed the time as a little digital readout thingy in the top lefthand corner of the screen (or window). This is perfectly adequate, but I thought that a proper analog clock face would look flashier. So put the cat out, make a cup of coffee, put on that Velvet Underground record that's been gathering dust since 1969, turn the lights down low, load up your favourite assembler and prepare to do some machine code.

Alternativley, go on a few pages and read a different article.

### TWICE A DAY PLEASE

The first thing to change is the part of the counting module which resets the clock every 24 hours (one day, for those of you who don't know) so that it resets every 12 hours as most clocks are twelve-hour affairs, with the hour hand going round twice in one day. Video recorder clocks, for some reason, aren't. The offending lines of assembler are:

```

    HOUR.    LD A,0
            LD (MIN_),A
            LD A,(HOUR_)
            INC A
            CP 24
            JP Z,RES.
            LD (MIN_),A
            RET

```

Surprisingly, the clock can be turned into a twelve hour clock by changing the CP 24 into a CP 12. Now, I think I should explain this a bit before some people start getting confused. Us puny humans have our clocks marked twelve, one...eleven. The hour counter in the program goes zero, one...eleven, so twelve midnight would be zero hours (like on those damn video clocks), as would twelve midday (yum, yum, time for lunch), but one o'clock would still be one o'clock. God, I hope this makes sense. This may seem a little weird at first, but is much simpler in the long run.

Next on the line for some drastic plastic surgery is the display module, which is responsible for... displaying the clock (durrr). This needs to be rewritten fully, I'm afraid. Scrap everything. No sneaky doing a James Cameron and using thinly disguised bits of the original for your new sequel. We are talking rewrite factor five... do you get the general idea? Each position of a hand on a clock face requires two coordinates to specify the x and y positions of the end of the hand on the screen. To draw a hand you move the graphics cursor to the centre of the clock, find the

coordinates of the hand and use the machine-code equivalent of DRAW x,y to draw a hand. Our main problem is how to work out the coordinates of the three hands of the clock from the time held in the computer's memory. If you imagine a line drawn from the middle of a clock to where the 12 is and let A be the angle that a hand is to the clockwise of this line. For an hour hand  $A = \text{hours} * (360/12)$ , so if it's three o'clock then  $A = 3 * (360/120) = 90$  degrees, ie. at right angles to the line pointing to the twelve. For the minute hand and the second hand  $A = \text{minutes} * (360/60)$ . So we've got the angle, great, wow man, is it happening or is it just the jossticks? How the flipping Hell do we work out the coordinates of the end of a hand from the angle it makes with the "12"?

It just so happens that I have here a pair of formulae for working out the x and y coordinates from A. This is pretty convenient because if I didn't there would be an embarrassing empty space right here:

```

x=<x origin>+<radius>*SIN(A)
y=<y origin>+<radius>*COS(A)

```

where <radius> is the length of the hand and <x origin> and <y origin> are the x and y coordinates of the centre of the clock. So if we positioned the clock in the middle of the screen and made the hands 100 pixels long we could work out the coordinates from A by:

```

x=320+100*SIN(A)
y=200+100*COS(A)

```

Which is fine and dandy from BASIC but really stinky to do from machine code, so the logical solution is to store all the positions of the hands in a table and "look them up" from machine

code. Yes it is. Don't argue. The first table will contain all the positions of the minutes/seconds hands, that's sixty pairs of 16-bit digits = 240 bytes. For the hour hand there need to be twelve pairs of digits = 48 bytes. These can be generated by BASIC, saved as an ASCII file and merged into the assembler program. Problem solved - here's a BASIC program to do just that:

```

10 DEG:REM DEGREES
20 OPENOUT "HOURS."
30 FOR A=0 TO 11
40 X=INT(320+75*SIN(A*(360/12)))
50 Y=INT(200+75*COS(A*(360/12)))
60 PRINT #9,X;",";Y;",";
70 NEXT:CLOSEOUT
80 OPENOUT "MINUTES."
90 FOR A=0 TO 59
100 X=INT(320+100*SIN(A*(360/60)))
110 Y=INT(200+100*COS(A*(360/60)))
120 PRINT #9,X;",";Y;",";
130 NEXT:CLOSEOUT

```

This produces two ASCII files called "HOURS." and "MINUTES.". The first of these contains twelve pairs of coordinates for the hour hand (75 pixels long). The second file contains sixty pairs of coordinates for the minute hand and the second hand (100 pixels long). These files need to be loaded into your assembler's text editor and changed slightly. First of all, load up the HOURS. file and add the following text:

HH\_WORD ..... hour hand data goes here

The final comma of the list of values will have to be deleted or your assembler will probably never speak to you again and glare at you when it thinks your not looking. Leave a few lines and type:

HM\_WORD

and then merge in the MINUTES. file, again deleteing the offending comma. This has now created an assembly language file which, when assembled, produces two tables of coordinates for the hands of the clock. The table for the hour hand begins at HH\_ and the minute/seconds hand begins at HM\_.

This procedure is a bit tricky to describe, and it may have seemed simpler for me to print a list of figures for you to type into your assembler, but this way is faster in the long run and requires much less strain on your typing fingers. For those of you who are hopelessly lost you can get a copy of the source files for the clock program by sending me an SAE and a blank 3 inch or 3.5 disk. Don't blame me if the disk gets lost in the post, though.

So now you've got your table of values saved (what? You haven't saved it? Well, now would be a pretty good time to do so), but what are you going to DO with them? Typing in this new display routine would be a start:

```

;DISPLAY ANALOG HANDS
DISP. LD A,1
DISP2. CALL #BBDE;GRA SET PEN
LD DE,HM_
LD A,(SEC_)
CALL HAND.
LD DE,HH_
LD A,(HOUR_)
CALL HAND.
LD DE,HM_
LD A,(MIN_)

HAND. PUSH DE;DRAW 1 HAND OF CLOCK
PUSH AF
LD DE,320
LD HL,200
CALL #BBEA;PLOT 320,200
POP AF
LD L,A
LD H,#00;HL=(SECS_)
ADD HL,HL;HL=2*HL
ADD HL,HL;HL=2*(2*HL)
POP DE;DE=FIRST MINUTE
;HAND POSITION
ADD HL,DE;HL=XPOS OF HAND
LD E,(HL)
INC HL
LD D,(HL);DE=XPOS OF HAND
INC HL
LD C,(HL)
INC HL
LD B,(HL);BC=YPOS OF HAND
LD H,B
LD L,C
CALL #BBF6;DRAW X,Y
RET

;REMOVE ANALOG HANDS
RDISP. LD A,0
JP DISP2.

```

How does it work? The routine has two points of entry, through DISP., which displays the clock in pen 1, and through RDISP., which Rubs out the DISPlay by drawing over it in pen 0. The pen numbers are loaded into the Accumulator depending upon which entry point is CALLED, and the graphics pen change is made by GRA SET PEN (#BBDE). The routine then Loads DE with the address of the minutes table (HM\_) and the Accumulator with the number of seconds in the current time. The program then passes on to the HAND. subroutine.

The first thing this subroutine does is preserve the values passed to it and set the graphics cursor to the center of the screen (320,200) using the GRA PLOT ABSOLUTE (#BBEA) firmware CALL. It then restores the value in the Accumulator (which can be hours, minutes or seconds) and multiplies it by four, as there are four bytes describing the position of the hand for every position in the table. This value is stored in HL. The address of the first byte of the table is then restored and added to HL. HL now points to the first byte of the coordinates for the hand. The first two bytes of the table are Loaded into the DE register pair, giving the X coordinate. The next two bytes are Loaded into the BC register pair, giving the Y coordinate. Then BC is put into HL, and the firmware CALL GRA LINE ABSOLUTE (#BBF6) is CALLED, drawing the hand. This is then repeated for the remaining hands, drawing our pretty clock face. If you can't quite see how this works, go through it with a pencil and paper and write down how the computer would behave. This is called a "dry run" and is absolutely no fun.

Problems occur when the second hand moves forward. The problem is that it leaves its former position occupied by a ghost hand which hasn't been removed from the screen. As you might have guessed, this is where RDISP. comes in handy. All will be revealed...

```

CLK. CALL #BBE1;GRA GET PEN
PUSH AF;STORE GRAPHICS COLOUR
CALL RDISP.;REMOVE DISPLAY
CALL SEC.;CALL COUNTING MODULE
CALL DISP.;DRAW UPDATED DISPLAY
POP AF;RESTORE COLOUR
JP #BBDE;GRA SET PEN

```

### DICEY BITS

This is the final bit of major slicing and dicing for this month. When CLK. is called every second, it asks the current graphics pen using GRA GET PEN (#BBE1). The reply, stored in the Accumulator, is PUSHed onto the stack. The RDISP. routine is then called, which changes to graphics pen 0 and redraws the old clockface, rubbing out the lines of the original clockface. The clock is then moved on a second by the SEC. routine and DISP. is CALLED, setting the graphics pen to 1 and drawing the new clockface. The graphics pen colour is then POPped off the stack and restored, using GRA SET PEN (#BBDE).

### HAPPINESS IS GHOST SHAPED

Another damn problem! When you use the 'TIMESSET RSX to alter the time, 'ghost' hands are left behind in the old positions. Worse than that, 'TIMESSET is still wired up to take a 24 hour time as a parameter. Make the following changes for your happiness and convenience:

```
;TIMESSET,n,n,n
SET.   CP 3
       JP NZ,ERR2.
       CALL RDISP.;CLEAR OLD CLOCK
       ;FACE
       LD A,(IX)
       CP 60
       JP P,ERR5.
       LD (SEC_),A
       LD A,(IX+02)
       CP 60
       JP P,ERR5.
       LD (MIN_),A
       LD A,(IX+04)
       CP 13;ERR5 IF HOUR IS GREATER
       ;THAN 12
       JP P,ERR5.
       CP 1
       JP M,ERR5.;ERR5 IF HOUR IS
       ;LESS THAN 1
       CP 12;CONVERT 1-12 HOURS INTO
       ;0-11 HOURS
       CALL Z,HRS12.;IF A=12 THEN A=0
       LD (HOUR_),A
       RET
HRS12. LD A,0
       RET
```

### THE HANDS OF TIME

The new routine wipes the old clock face before changing the time, solving the "has that clock got too many hands or am I drunk?" problem. It also checks to see if the "hours" parameter is within the range "1-12" instead of "0-23". It then changes a "12" to "0" to match the program's internal clock.

### AND FINALLY...

So once again IN THE DARK shuffles slowly towards the door marked "thats it for this month", pausing only to say:

*"All queries/verbal abuse to the usual address. Next month I'll be writing an on/off switch, an alarm, and some other stuff."*

TFN ... Richard.



# Bonzo's Scrapyard

## THE BONZO'S SCRAPYARD TEAM

**Bonzo's Scrapyard** - The occasional newsletter from yours truly! Any information you think may be of use for inclusion, tape-to-disc, and disc-to-disc back-ups, then please, please, send it to me. The tape-to-disc transfer programs *Bankraid II* and *III* are available exclusively through Bonzo's Scrapyard. A4 format - *hopefully* quarterly. Price a SSAE plus an extra first class stamp.

**Contact - Dave Caleno, Bonzo's Scrapyard, 29 Chapter Road, Strood, Rochester, Kent, ME2 3PX.** If necessary I can be contacted by phone between 8.30 pm-10.30 pm most evenings - (01634) 724262.

**Bonzo Database Print-outs** - If you haven't already got the latest version of this database of the tape-to-disc transfers - *then why not?* - Nigel has just reorganized the database, deleting entries for the same game, same transfer option, that were included under slightly different names.

**Contact - Nigel Mells, Shendale, 51 Avondale Road, Ashford, Middlesex TW15 3HP.**

*Please note when contacting any of the above, please send a large SSAE if you want a reply*

# VERY BASIC

# BASIC

Written by  
Alan Tilling

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



*Hello everyone, 'tis I. I've had a couple of letters from Nora Lees of Birmingham who says that I am neglecting the newcomers to computing. Well I try to cover every ones needs but until I get a letter like Nora's saying what's wanted, I can only hope I'm on the right lines. Nora's quite right, I have been getting ahead just lately so I had better make ammends.*

## INTRO

In 1989 I wrote a piece that should fit the bill so seeing that I've already written this I'm having an easy month. Don't forget, if I do miss your needs, please let me know. By the way, I write and test all my programs on a 6128 but I try to make sure that they will run on all the CPC range - if they don't, again, please let me know. Now on to....

## ERROR MESSAGES

Believe it or not these little beasties are there to be helpful, though it's often quite difficult to believe it.

Let's start with SYNTAX ERROR. It simply means "I don't understand" and is usually caused by a missing : or a spelling mistake.

DATA EXHAUSTED is an awkward one because the computer tells you where it was when it found the error not where the error actually was. The same applies to NEXT MISSING. Let me explain to you.

Imagine you have typed in a program out of a book or magazine and are having difficulty in getting it to run. The following proplet is supposed to be a piece of a larger program where lines 10 to 70 do something and lines 140 to 1050 do something else. Type this piece of program in very carefully because it is (purposely) full of mistakes and will be impossible to sort out if more errors are put in:

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

Note: In line 1050, for the purposes of this explanation, write the 1 in 10, as a small L. (This is a very common mistake when copying code from a magazine.) When you have typed it all in, type GOTO 2 [RETURN] and the program will be saved with the name "TEST". Ignore the message "broken in" that's caused by the stop command. If you are using a tape only machine, this might not be worth while.

When a RUN command is issued, Basic goes to the first line it finds, (be it 1, 10 or 1000), and starts from there. So Basic goes to 1 and is told to go (unconditionally) to 3 (ie skip over 2) and it finds a REM which means ignore the rest of this line. Basic will now go to the next line of the program, be it 10 or 100 or anything greater than (in this case) 3.

## ALWAYS, ALWAYS

I always put these three lines in front of all my coding so I can save

it easily (by typing goto 2) as I type in more and more of the program. If your using tape only this may not be worthwhile. Now type RUN [RETURN] Note: From now on I'm not always going to tell you to type RETURN unless it is vital for the explanation. Basic will respond with:

Type mismatch in 80  
Ready

## STRINGS AND THINGS

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

## REMEMBER, REMEMBER

Remember, when a FOR/TO statement is found the computer automatically looks for the NEXT statement to mark the end of the loop. In this case there isn't one. So where should it go? Well let's assume that the listing that is being copied is in error and that the line with the NEXT in has been missed by the printers. If you look at the bit of program that we have got you will find that lines 110 and 120 have an extra space at the beginning of each line. This is a common way to mark a loop so at a guess the NEXT should go in line 130.

Try it and see. If the guess was correct then the computer will respond

with Syntax error in 1050 and when you list 1050 you will see 1050 DATA 10,20,30. Hmm... it doesn't look bad does it? Remember earlier that typing a small letter L in place of a 1 is a common mistake (so is typing the letter O instead of zero). Edit the 1 to a l and try again. You will get Syntax error in 120

120 print a

This is a spelling mistake. Notice that the interpreter has not raised the word to upper case (that's a dead give away). Edit the line to read print a and then run it. You should now get:

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

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

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

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

```
80 says (let) a$="dog"
90 PRINT (on the screen) dog
100 FOR x=0 TO 3 (start of loop)
110 READ a (Read from DATA
somewhere else in the program
and call it variable a. Don't
confuse a and a$ - they are
different things to the
computer.)
120 PRINT (on the screen) the
variable called <a>
130 NEXT (End of loop) Note this
may also be written as
"NEXT a" which may be a easier
to understand, if you have
several loops using several
variables.
140 this
150 that
160 the other
1050 The DATA to be read into the
variable <a>.
```

The results on the screen ought to be:

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

Let's have a look at that data again, <a> will equal 10, 1st time round (loop count 0) and 20 the 2nd (loop count 1) and 30 the 3rd (loop count 2) and for the last time (loop count 3)

err...hod on there, there baint nowt left, ie the DATA in 110 is exhausted.

#### OVER TO YOU

Now your turn. Finish off the program to make the last printed number 40 with no error messages.

#### CLEAR AS MUD

I hope I've made it clear that, even though the computer said that the error was in one line, it does not necessarily mean that the line reported is at fault but it does mean that the line reported is where it was when the error was found.

If the error was a syntax error then the reported line (where Basic was) will be the same as the faulty line but if the reported error was like a data exhausted then the line numbers will look as if basic is wrong (but it wont be). If there is more than one set of DATA statements then it may be very difficult figuring out where the fault is.

#### AND FINALLY...

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

#### FOOTNOTE by Paul

*Following on from last months Very basic Basic, the lottery ticket program, I already know of one WACCI member that was a winner because of it. He used the numbers printed in the magazine and sent 90% of his winning to WACCI!*

*Actually he won £10 and sent in a six month subscription. Did any other member strike it lucky?*

## MARKET STALL Continued...

#### FOR SALE :

6128 with Green Monitor systems discs and Manuals c/w Tasword 464 and Mastercalc	£50.00
AMX Mouse and AMX Art	£20.00
OCP Art Studio	£4.00
Light Gun and Games	£10.00
Trivial Pursuit Disc	£3.00

Driller Disc	£3.00
Tape	£1.50
Aliens (no instructions)(D)	£3.00
The Pawn (D) Role Play	£3.00
Colossus Chess Tape	£2.00
Star Gilder (Disc)	£3.00
AA Elite Tape	£2.00
Paperboy II (Tape)	£2.00

Trivial Pursuit Childrens Version on tape	£1.50
---	-------

All the above are plus postage.  
Please contact Bob Miller,  
55 Den Lane, Springhead, Oldham,  
Lancs OL4 4NN TEL: 0161 620 2118

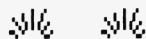
*Let Angie know of your buy/sell needs.*



# I Have-Raising Experience



Bob Moffatt belts up at last.



All this talk about "Disc Missing in Drive A" got Bob's CPC worried. There were perhaps one or two discs which were hard to read but, until the letters poured in to 'Fair Comment', Bob didn't know he had a problem.

## INTRO

A letter in FAIR COMMENT set my poor old CPC thinking. If other machines can have time out by reporting 'Disc Missing', then why should not I? The whole shebang turned savage.

I had just written to our kindly Editor about life, 3.5" discs and everything. He said that I should try DISCOLOGY, and he duly sent a copy by return post.

I have a small collection of 3" discs which refuse to be read. To my disappointment DISCOLOGY seemed doomed to that category. Every attempt to start the disc ended in a "Disc Missing" or similar message. I tried a few old favourite discs. Lots failed. The time had come when I had to gut and fillet my machine.

## QUESTION TIME

I had learned from FAIR COMMENT that there were several types of 3" drives about. Was my drive about to join a scrap heap? Could I find a 'tarry substance'? Did someone near Pendine stock drive belts?

After 10 hours of agony, rain (a constant round this neck of the woods), a trip to pick up youngest (Work Experience) son from the station and a huge touch of bravery, here's how I got the CPC back on the road once again.

## DIVE IN

Turn off power. Disconnect keyboard from monitor. Arrange tea towels in a long line on table. Put key board

## RECIPE

- 1 medium Philips cross head screwdriver.
- 1 CPC 6128 with sick 3" drive.
- 2 Tea towels.
- 1 Table.
- 1 Soft bristle paint brush (1"?)
- 1 Pair of Tweezers.
- & Lots of courage.

upside down on the right hand side of the row of towels with the back face of the keyboard (the bit with the connectors on it), facing you. Figure 1 shows this arrangement.

Using the medium size Philips cross head screwdriver - unscrew all the screws in the base of the keyboard. None of the screws are hidden in the keyboards I have seen. There should be 7 screws. The screws seem to be of the same length but one (middle front) is brighter in colour. Just to be sure take each screw out of it's slot and place it on the table directly above the point where it used to sit. Now unscrew the two screws on the right hand side of the keyboard. Put them on the right hand side of the table. Figure 1 shows the layout.

Separate the two halves of the keyboard. Lift up slowly and carefully. The two pieces are joined by a ribbon cable and other cables. The ribbon and cables are long enough to act as a hinge on the left hand side of the assembly. Unfold the assembly so that the keyboard remains on the right hand side of the table and the electronic bit (mother board) and 3" drive is on the left. Figure 1 shows the bottom half of the computer in dotted lines to make life a little easier for you.

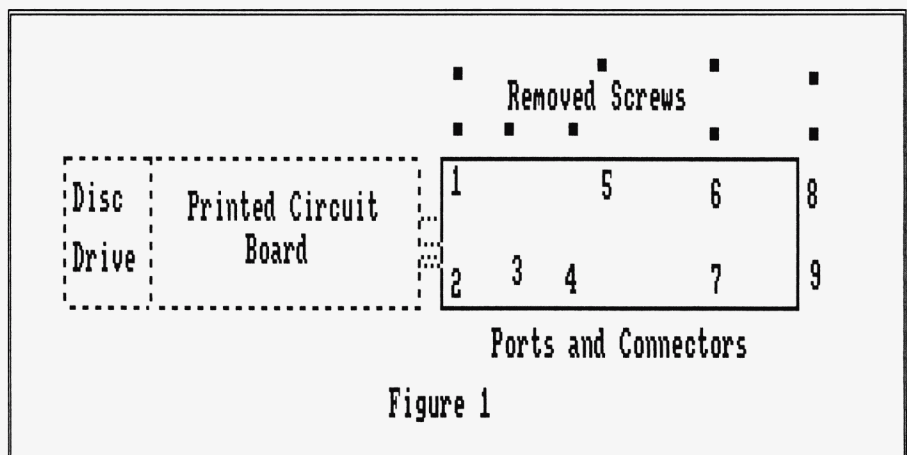
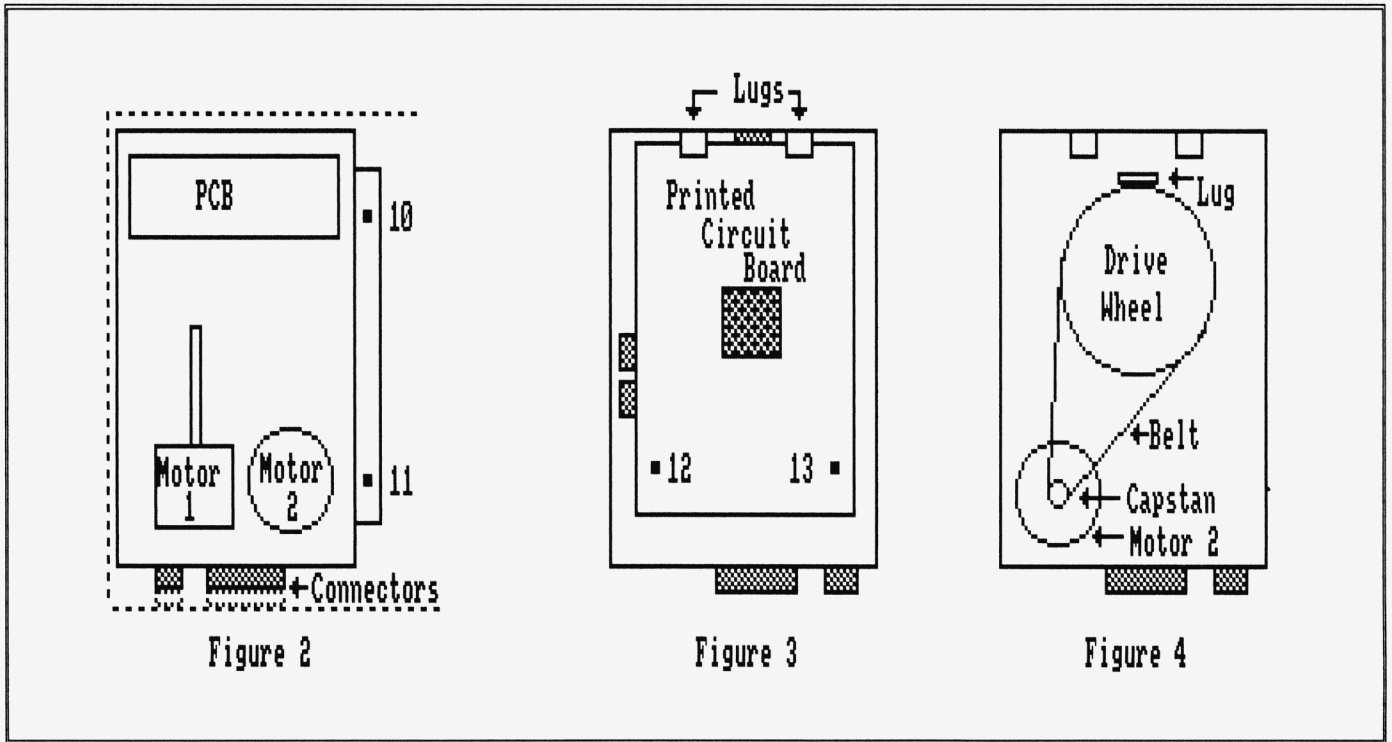


Figure 1



#### OPEN DISC SURGERY

The disc drive is now on your left and you can see the two motors and the read/write head. The belt you need to change is on motor 2. Figure 2 shows the general layout.

The next task is to remove the drive from computer case. Remove the two screws (10 & 11) on the right hand side of the drive assembly. Screw 10 will probably have a cable attached to it. The disc drive will become loose but there are still cables which join the drive to the mother board. Be brave. There is likely to be a flat ribbon cable and another 3 way cable. Both have connectors joining them to the drive. Remove them carefully. Undoing these connectors is the most difficult part of the whole process.

#### OUT IT COMES

You should now be able to remove the whole disc drive from the case. Turn the drive upside down and you should see something like Figure 3 - a printed circuit board held in place by 2 lugs and 2 or 3 screws. Figure 3 shows 2 screws (12 & 13). If there are 3 screws then the next process is going to be a little tricky - but you can do it.

You now have to remove the printed circuit board. Remove the two (or three) screws. Note that screw 13 has a castellated washer and 12 has a split washer. Ease the printed circuit

board away from the lugs. You will find that a host of cables, most of them with connectors will stop the board moving very far.

#### JUDGEMENT TIME

Now using your skill and judgement undo enough of the connectors so that you can peek under the board to see motor 2, the motor capstan and the drive belt. I am being a little vague about this part because different drives have the connectors in different places. You probably will not be able to remove the board completely but you don't need to. You just need enough space to remove the belt using the tweezers.

#### BELT UP

The belt which I changed was flat. The inside surface was smooth and shiney, the outside rough. I tried turning the belt inside out, hoping the rough surface would grip on the capstan but in fact it made matters worse. Time to buy a new belt.

The original belt was 3mm wide, about 0.5mm thick and 110mm long. It was not very elastic due to age. And so to St Clears and Mr Ben Evans, vendor of washing machines to the gentry. He keeps a youth locked in an attic with a vast collection of tape recorder and video drive belts - but none like the one out of my drive. I settled for a belt with a square cross

section of about 1.5mm and 100mm long simply because it was the nearest thing to the size I wanted. The young man hadn't a clue what the part number of the belt was, nor indeed what machine it was originally meant for. After a little haggling he let me have 2 for £1.50.

#### SUCCESS...

Back home I found the belt fitted. It was a bit of a squeeze getting the belt past the lug at the top of the drive wheel (Figure 4), but once in place the belt ran smoothly and did not snag on the lug.

Out with the paint brush, brush out the dead spiders, biscuit crumbs and cigarette ash from the inside of the casing and re-assemble in reverse order. Bingo! Even the impossible to read discs were now spinning sweetly in the drive and CATing as if there were no tomorrow.

#### AND FINALLY...

It's not nice seeing an old friend stripped down. It's a bit hair raising trying to undo the connectors. The longest seconds of your life will pass as you wait for the drive to read the first disc when you have put the computer back together again - but you can do it.

*May your disc drives always spin...*

*Bob.*

# STORY TIME

## RICHARD'S ADVENTURES IN WACCILAND by RICHARD DUGGAN

---

*Here we are again with yet another story. This too was an entry to a competition that I set in September and again the story had to include these words: WacCI, Computer, Monitor and discs. Now over to Richard for his adventure. <<John>>*

It was a very hot afternoon, Richard was supposed to be decorating the living room but it was just too hot, he could not decide whether to have a game of computer Chess or have a relaxing read of the latest WACCI magazine that had arrived that morning sensibly he decided on the latter!

As he sat at his desk, surrounded by a mountain of discs, reading, suddenly his computer monitor flashed on, he did not know why as all was unplugged.

He went over to the monitor and saw it said "Do you wish to go to WACCILAND? Press Y for yes N for no," Richard pressed Y and then there was a whirring sound with flashing lights and then the words Welcome to WACCILAND appeared and then followed "Press enter to continue..."

Bemused, Richard did as he was told and the next screen said "Beware you have entered WACCILAND. We hope that you will enjoy your journey. WACCILAND incorporates all the best people, i.e. those who have a serious interest in the Amstrad CPC machines. Press any key to continue....."

Immediately the screen changed and Richard found himself inside his trusty CPC - this did not seem at all strange to him and he headed off down the long winding road in front of him.

The first thing he saw was the local allotments and a man beckoned to him. As he approached he realised that the allotment was not like a usual one but was full of computer discs.

"Welcome to WACCI Homegrown Disc Library, I'm Doug Webb. Would you like to come and see the new harvest?" Richard spent a long interesting time

looking through the discs, then it was time for him to leave. "Have a safe journey, you'll find the market just down the road", Doug said.

Soon Richard could see the Market. As he entered he decided he would have a browse around the stalls and lo and behold! -he came upon Angie Hardwick's stall. What a great time he had looking at the bargains, reluctantly after an hour he left but not before buying a Video Digitiser, something he had been wanting for a long time.

With his bargain under his arm, he once again joined the winding road. As he walked he wondered what he would come upon next.

Then he saw the big building on his left WACCILAND Library welcomes you.

Great he thought, he gingerly opened the door and couldn't believe his eyes, there were rows and rows of WACCI books and also all the PD Library discs. "Hello, I'm John Bowley the Book Librarian, would you like a browse of what we have to offer?"

Richard didn't believe his eyes, there were so many books available. He made a mental note to start borrowing them as soon as he got home. "Don't forget to enter my competitions each month, you've got to be in it to win it!", John said as he waved him goodbye.

Then Richard saw once again the man from the allotment, Doug Webb, "Come and see the Disc PD Library these are not Homegrown but between Stuart Gascoigne, Ian Parker and myself, we have a lot to offer". As Richard left the Disc Library he was speechless it really was a comprehensive one.

There was a little door on the left and being nosey Richard knocked on the door. "Come in", said a voice "I'm

Arthur Cook, and I run the Tape Library please feel free to have a look". Again Richard was very interested in the Tape Library as he is responsible for the CPC User Library. They had a good chat and reluctantly Richard realised he must leave if he was to visit more of WACCILAND.

Just down the road Richard could see some shops, the first one he saw was WACCI Discounts. He entered and a man came and shook his hand "Hello, I'm Stamper J. Metcalfe. I can help you with all the discounts you'll ever need when buying things for your CPC". Richard thanked him but said "at the present there was nothing he needed."

The next shop he entered was CPC ESSENTIALS. Chris Green welcomed Richard and they had a long chat.

By now it was almost midnight and Richard was IN THE DARK when he stumbled upon Richard Smith, their conversation was just getting into full swing when.....

"Richard Duggan, wake up, you are supposed to have painted all the walls by the time I got back from shopping and all you've done is sleep!", his wife Elaine shouted. "I can't wake up yet I've not finished my visit there's still Paul, Mike, Mark, Clive, George, Alan and Frank to visit in WACCILAND", came Richard's sleepy reply!

It was all a dream, or was it?, as Richard got up, stretched his arms and looked at the computer monitor it showed the graphics of an allotment - he had no such disc!

### STORIES

Another good story I think you would agree. *Thanks Richard.*

Don't forget to send your story to me. My address is on the WHOS WHO page so get writing. You could be awarded 1 PD Disc for your effort. <<John>>

---

# GREAT

# WAZOO

# SERIES OF YEARS GONE BYEEEE....

---

## INSTANT TEXT By John Keneally

---

*Stepping back to July of 1987 and WACCI No. 10 of that month, John Keneally dreams up more techy bits. This time he tells us how to get two lots of text on the screen at the same time. Some of us have trouble enough with one!*

### A LA MODE

Problem - in MODEs 0 and 1, where does all the extra text go to? What I mean is, you can have 80 columns by 25 lines in MODE 2, but only 40 columns in MODE 1 and 20 in MODE 0. So what's happened to all the extra space, and can we get it back? In other words, why can't we get two complete pages of text simultaneously on the screen in mode 1, and would it be any use? Would I be asking if I knew the answer?

Let's sleep on it a while... zzzzzz... uh? What. Ah yes, it never fails - another brilliant idea bursts into life: you've drunk instant coffee, brewed instant tea-bags, and now you can display with INSTANT TEXT.

If you're writing several pages (eg: instructions) it looks a bit amateurish for each one to unfold line by line onto the screen. You can, of course, hide the actual writing by changing the ink colour to be the same as the background while writing the text, and then change it back, but this still means a second or two of blank screen between pages. If we could have two pages on the screen together, then the next page could be written while the current page was being read - sneaky, huh?

Can we do it? is the next question. How can the second page be written and not be visible? Well, then letters have got to mimic a chameleon. With a

FIG.1

```
100 MODE 1: BORDER 0
109 '
110 INK 0,0: INK 1,24
120 INK 2,0: INK 3,24
130 PRINT CHR$(23); CHR$(1); : TAG
140 pencolour=1: RESTORE 1000: GOSUB 500
150 pencolour=2: RESTORE 1200: GOSUB 500
160 WHILE INKEY$="" : WEND: INK 1,0: INK 2,24
170 pencolour=1: RESTORE 1000: GOSUB 500
180 pencolour=1: RESTORE 1400: GOSUB 500
190 WHILE INKEY$="" : WEND: INK 2,0: INK 1,24
200 WHILE INKEY$="" : WEND: INK 1,0: INK 2,24
210 WHILE INKEY$="" : WEND: TAGOFF
219 '
220 CALL &BB4E: CALL &BC02: END
498 '
499 'print a page
500 column=0: lin=398
510 PLOT 700,0, pencolour
520 READ a$: IF a$="" THEN RETURN
530 MOVE column, lin: PRINT a$;
540 lin=lin-16: GOTO 520
998 '
999 '
1000 DATA "PAGE 1", " "
1010 DATA "The object of LOCK'N'KEY is to collect"
1020 DATA "a key from the chamber in the top right"
1030 DATA "corner of the screen, at which point the"
1040 DATA "maze you are in will turn green, and"
1050 DATA "take it to the keyhole located in the"
1060 DATA "bottom left corner of the screen, at"
1070 DATA "which point the maze will return to"
1080 DATA "blue."
1090 DATA " "
1100 DATA "Press any key for next page..."
1110 DATA "***"
1198 '
1199 '
1200 DATA "PAGE 2", " "
1210 DATA "Also in the maze is a mutant daffodil"
```

FIG.1 (Cont)

```

1220 DATA "which will fatally kill you at a touch"
1230 DATA "resulting in the loss of one of your"
1240 DATA "five lives. You can delay your enemy by"
1250 DATA "using one of your stuns, the effect of"
1260 DATA "which gets less as the game progresses."
1270 DATA "But be careful - you only have a"
1280 DATA "limited amount of stuns."
1290 DATA " "
1300 DATA "Press any key to continue..."
1310 DATA "***"
1397 '
1398 '
1399 '
1400 DATA "PAGE 3"," "
1410 DATA "You are only able to carry one key at"
1420 DATA "a time, which you keep even after you"
1430 DATA "die, and after all the keys have been"
1440 DATA "collected you will progress to the next"
1450 DATA "sheet, and earn a bonus of 500 pts."
1460 DATA " "
1470 DATA "Control is via the joystick and the"
1480 DATA "fire button operates stun."
1490 DATA " "
1500 DATA "          GOOD LUCK"
1510 DATA " "
1520 DATA "Press any key for previous page..."
1530 DATA "***"

```

bit of thought this is possible by writing the second page using a different pen whose colour is the same as the background. (Fig. 1)

#### HIDE AND SEEK

The second page is invisible until the colour is changed. Set the colour of page 1 to background, the colour of page 2 to a visible colour, do a quick genuflexion in the direction of Alan Sugar, and the job's done.

You could also do the reverse and allow the user to flip back to page 1 instantly, presuming, of course, there wasn't a page 3 on the way - cue Glenn Carey and a page 3 joke.

<A topical reference to WACCI #8 -Ron>

Unfortunately things are a bit more complicated than this since just writing page 2 on top of page 1 would put holes where the text overlaps. However, by using the TAG command, which lets characters be written in graphics mode, we can write the second page in XOR mode. For those who aren't sure what the logical operator XOR does, here is a brief example:

#### TO XOR OR NOT XOR

That is not the question: or is it? Suppose we had two bytes of data (A and B) containing the binary data below. Most will know that if these are OR'ed, the rule is that if either bit is set (1), the result is a one, otherwise the result will be a zero.

```

A = 00101101   B = 01101010

    00101101 (A)
OR   01101010 (B)
     01101111 (result)

    00101101 (A)
XOR  01101010 (B)
     01000111 (result)

```

So A OR B would give 01101111.

If we XOR (eXclusive OR) the two, the rule is that the result is a 1 if the bits are different, otherwise the result is 0. The difference from OR is that if both bits are ones, OR gives a result of ones, but XOR gives a zero.

A XOR B would give 01000111.

The nice thing about XOR is that repeating the same operation returns you the original value (ie: A XOR B XOR B = A), and the operation can be done in any order with the same result. Also, XOR with itself gives 0, and XOR with 0 leaves the original unchanged (ie: A XOR A = 0 and A XOR 0 = A). The classic way of clearing the Z80 accumulator register is to use XOR A, which only uses one byte, rather than LD A,0 which uses two. But I diverge...

#### THE PERFECT CAMOUFLAGE

Let's suppose the screen is in MODE 1 and we write text on it in the normal way using PEN 1. So, some pixels will be 0 and the others 1. If we could now merge page 2 on top of this using XOR mode and pen 2, there are four possibilities:

- 1) The existing pixel is 0 and so is the page 2 pixel.  
The result is a pixel written in PEN 0 (0 XOR 0 = 0).
- 2) The existing pixel is 1 and the page 2 pixel is 0.  
The result is a pixel written in PEN 1 (1 XOR 0 = 1).
- 3) The existing pixel is 0 and the page 2 pixel is 2.  
The result is a pixel written in PEN 2 (0 XOR 2 = 2). <<I hope you lot are all following this. -Paul>>
- 4) The existing pixel is 1 and the page 2 pixel is 2.  
The result is a pixel written in PEN 3 (1 XOR 2 = 3).

If that last possibility confused you, let's expand the numbers 1 and 2 to binary (01 and 10). Now to do the XOR operation bit by bit. It's easiest if we write it as below.

```

    01 (PEN 1)
XOR 10 (PEN 2)
   = 11 (PEN 3)

```

The left bit is 0 XOR 1, giving 1; the right bit is 1 XOR 0, also giving 1. The result is binary 11, which is decimal 3.

So now we have the situation where any of page 1 which is overlaid by blank pixels from page 2 stays as PEN 1. Also, any of page 2 which is written over blank screen on page 1

comes out as pen 2. In places where both page 1 and page 2 letters overlap, the pixel is written in PEN 3. If we set, say, PEN 3 to be the same colour as PEN 1, and PEN 2 to be the same as PEN 0 (ie: the background colour), then only page one will be visible. If we then change PEN 1 to be equal to PEN 0 and PEN 2 to the colour pen 1 was originally, then page 2 flips up instantly.

If desired we can now erase page 1 simply by re-writing it using PEN 1 in XOR mode. Page 3 can then be written using PEN 1 and XOR again. Both these operations will be invisible to anyone watching the screen.

#### QUESTIONS

The only remaining question is how to get into XOR mode. It is slightly more complicated than using the normal PRINT command since text is written in graphics mode. The main difference is that the text is written at the

graphics cursor position, so you can't use the LOCATE command (or any of the control characters below 32 for positioning text etc because the actual character will be printed instead).

#### THE EXAMPLE PROGRAM

Line 120 sets INK 2 the same as background, and INK 3 the same as INK 1. In line 130 the graphics mode is set to XOR, then printing is swapped to graphics mode using TAG.

Lines 140 and 150 write pages 1 and 2 in PEN colours 1 and 2. Remember that INK 2 is invisible, so although both pages have been written, only page 1 is visible.

Line 160 waits for a keypress, and then swaps the ink colours so that page 2 is visible and page 1 is invisible.

Line 170 erases page 1 by rewriting it using PEN 1 and line 180 writes page 3 using the now invisible PEN 1.

Line 190 makes page 3 visible, and line 200 shows how you can flip back to the previous page instantly.

Lines 210 and 220 reset everything so you don't get in a mess with your colours. Notice what happens to the text!

The routine to print a page on XOR mode starts at 500. Since we are in graphics mode the text must be written at the graphics cursor position; we keep track of this using the variables 'column' and 'lin', which are initialised in 500.

The next line sets the PEN colour for graphics using a dummy PLOT which plots a point off the screen. Line 520 reads the text, line 530 moves the graphics cursor to the correct position and prints the text, and line 540 decreases the 'lin' variable by 16 points (one text line) and loops back to get the next line of text.

*See you next month.*

## THE THREE BEARS

### A SLIGHTLY DIFFERENT VERSION

Once upon a time there were three bears. There was Mummy Bear, Daddy Bear and Little Bear.

In a nearby house, in the same woods, lived Nancy, a very special witch. Not a nasty horrid, spooky, bats and frogs sort of a witch but one who told fortunes and the weather forecasts. She also sold Lottery tickets (but they were always old ones).

One day she knocked at the Three Bears front door to find them all with sad faces and Little Bear even had tears in his eyes. "I know you are unhappy" said Nancy "That's why I came."

The bears were astonished and asked "How do you know that?"

The witch carried on with what she was saying, asking "Tell me what is wrong." The bears went on to tell her that Sydney, their pet pig had gone missing. "It really isn't like him to wander off like that." they said.

Nancy the witch then tried to console them saying that she knew it was about the pig. "Unfortunately," she added "I know that the pig has been stolen."

Once more the bears were very surprised about what Nancy had told them. "How do you know about it?" they said. "We had only just found out he was gone when you knocked on the door."

"Aha!" said the witch "How do I know so many things? It's part of the mystery of the job to know things. That's some of what being a witch is about."

"It's what my fortune speaking lottery chicken told me after the weather this morning. She said '...and today's the day the teddy bears have their pig nicked.'"

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*April 1995*

# Route Planner

RELEASED BY RICHARD FAIRHURST

THE REVIEW BY IAN PARKER

<<Richard Wildey, he of Sentinel Software fame, kindly sent WACCI a copy of Richard Fairhurst's RoutePlanner to review and then to place in the hands of John Bowley as a Competition prize. Thanks for that Richard. I persuaded Ian Parker to do a review for the club (thanks Ian) and here it comes... -Paul>>

## WHAT'S IN IT FOR ME?

This is one of those 'fair' questions that anyone should ask when buying something. After all, you don't vote for people without making an informed decision about them do you? Oh you do, DO you?

Well, first of all you get the disc and a manual of your very own. For those of you that don't need to point

to the words as you read them, the manual is printed in a nice clear script and is reasonably easy to follow. (However, for those of you that do point to the words there are not too many that are long. If you do find some words that seem a bit long - just sound them out.) Whilst on the subject of the manual nowhere in the said manual does it say that this

programme is to replace a road atlas but rather to complement one. Indeed, the manual actually recommends one breed of road atlas.

## IS THERE ANYTHING ELSE I NEED?

Apart from an Amstrad CPC with 128K of ram available, then nothing else is needed to run the system. A mouse will work with the program but I did not try this function out. This may cause a bit of confusion in the manual when it says click on a box or location as it means press "return". The pointer arrow responds to the cursor keys and the COPY key acts as the enter key on my machine. A printer, if you have one, may be needed but more of that later. Oh yes, how about some paper for the printer.

I tested this programme on a CPC464 with 64K bolt-on RAM, DDI-1 and various ROMs: Protext, Utopia, Maxam and Prospell. I kept the ROMDOS turned off. (I find it "gets in the way" too often) The programme ran from the B drive with no problems. I did not find any failures, bugs or crashes at any time - always a sign of a well tested and checked programme.

## HOW DO I GET STARTED?

Just type RUN"DISC" and tap return. It's that simple. The programme starts with a green screen and a selection menu. Now this

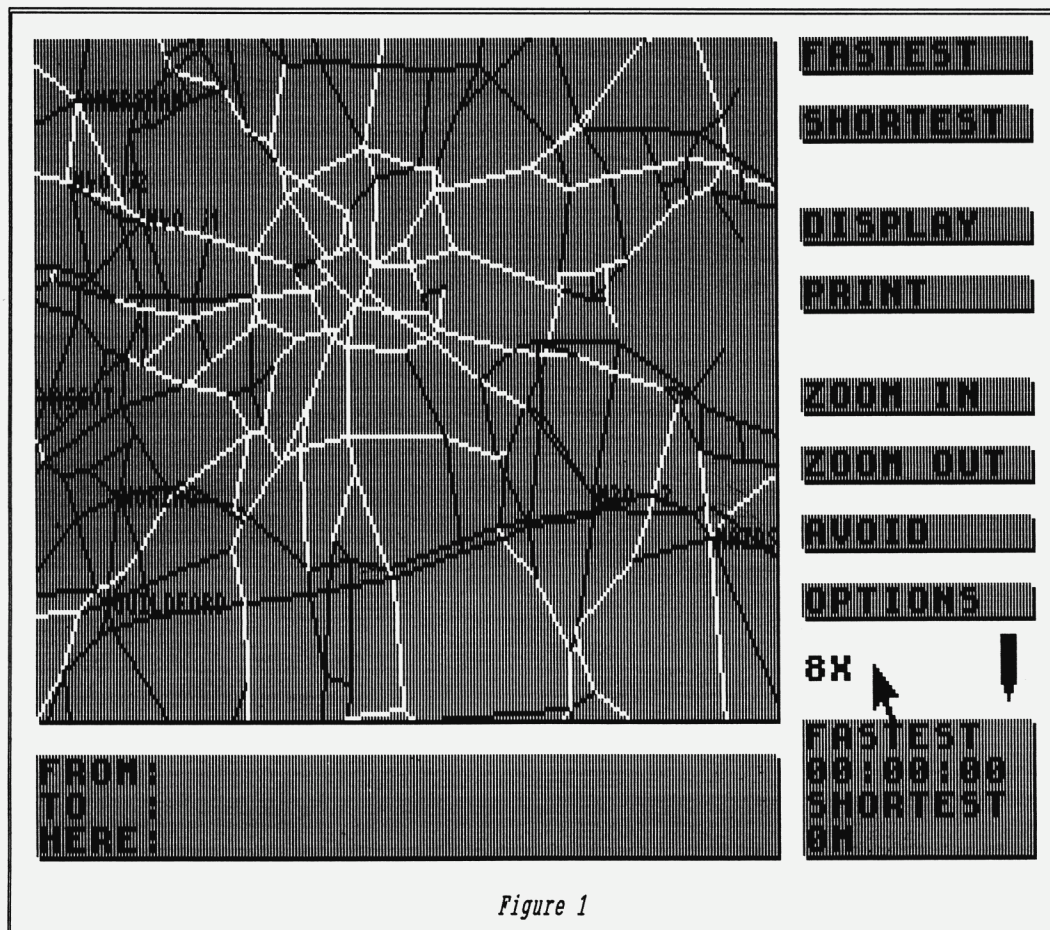


Figure 1

menu is different in that you are asked what part of the map you do not need, see below:

**ROUTEPLANNER**

PLEASE SELECT THE AREA TO OMIT:

- 1 SCOTTISH HIGHLANDS
- 2 WALES
- 3 SOUTH-WEST ENGLAND

I must interrupt the flow at this point to say that this programme runs under some considerable constraint, the memory, it is just simply not big enough to hold all the data for the complete UK. So this is why you are asked to select which part of the mainland you do not need. It does not seem to put a constraint upon the route searching capabilities going to/from Scotland to any part of the country and likewise Wales. At this point I feel I should say to those of our readers across the sea reading this, the programme does not include the Emerald Isle, the Channel Islands etc. This is probably due to memory constraints again. I do not know if this will be remedied in later issues or if it will be made as an upgrade. Out of interest, I asked the programme to forget using Scotland and then found that I could still ask for a route to Edinburgh, from Lands End and get it. Pretty good, well I think so any way.

**WHAT ELSE IS THERE?**

Nothing else is required, you should by now be looking at a screen with a green background, (for those of you without colour monitors) on this are set several boxes through which you can "drive" the system. At the right are eight Prompt boxes which from the top are Fastest, Shortest (route selection), Display (the selected route), Print (I told you about this), ZoomIn, ZoomOut, (of the map), Avoid, (anyplace) and Options (speed adjustments to real driving). See Figure 1 or Figure 3.

Beneath the eight prompts is a space that can contain up to two symbols at any

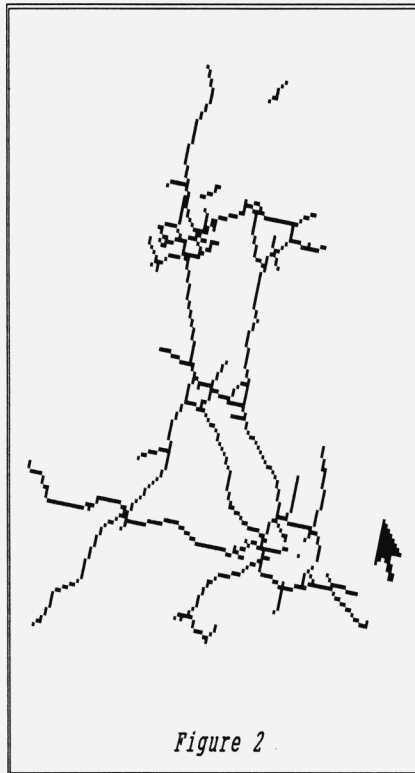


Figure 2

time, there is always the current magnification and then either the pen or the clock symbol. The pen symbol indicates that the map is still being drawn while the clock symbol is the "wait" symbol. (I understand that some

computers use an egg timer shape for this porpoise) Below the space, in the bottom right of the screen is a rectangle with two titles. Fastest and Shortest with spaces for time and mileage. In the top left of the screen is the largest area, about 17\*12. cm. This area is the main display for the map diagrams. Finally, below the main area is the long rectangular box with three prompts in it: From, To, and Here. This is the area one enters place names for the journey.

**WHAT GOES IN TO IT?**

First of all after initial boot-up, the map area shows a picture of just the motorways (see fig 2.) These are shown in blue. If you are not very conversant with the motorway network or are not good at geography, then this may be a stumbling block. There are no coast outlines or major landmarks defined which would aid quick recognition or location. The map screen is kept small, probably for good reason, perhaps speed of response.

Not all the towns and villages are included, yet another reminder of the architecture of ones's computer. At

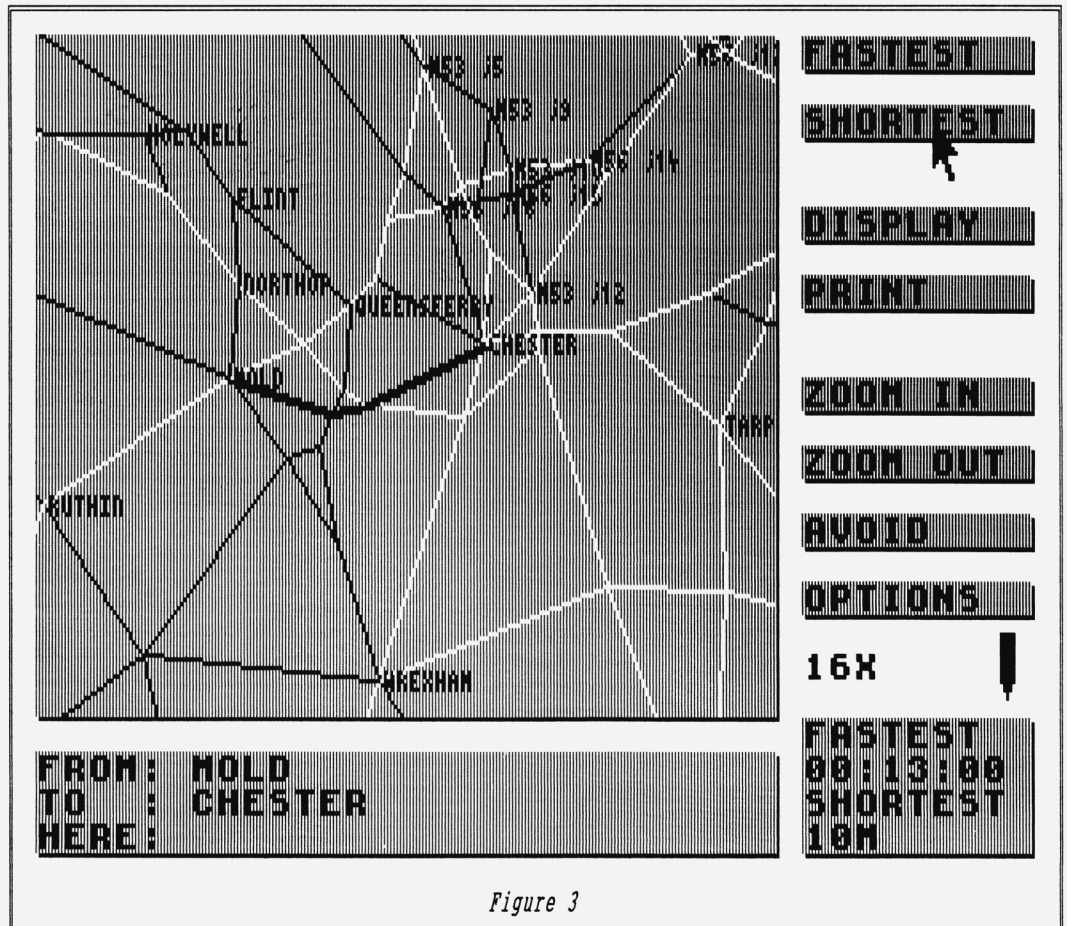


Figure 3

first there are no names shown on the map display. To get to a level where the town/ city names are shown, the magnification must be at 8 times. To put this another way, at the 3rd level of magnification or zoom-in.

If you are used to using Autoroute on a larger computer then forget what you have learnt there. This program has to have its action inhibited because of the amount of memory storage available.

Having had a whinge about the memory limitation on the hardware, I have to say that the programme works very well. It is smooth and effective in operation. (Sorry, that's not a whinge - it is what is called a constructive criticism.) (It's not the last time I'll mention it tho')

To start the ball rolling, all you have to do is tell the programme where you are coming from and where you are going to. Then you have the decision of fastest or shortest route. The machine now goes into its calculation mode. Whilst calculating one is shown a little clock face with a moving hand to signify 'wait'. After a few moments this is changed to the figure of a pen to indicate the map is being drawn.

The map display will show the route that has been calculated as a black line. (For those of you with a green screen, this still holds true.) Now, if so wanted, one can request the opposite function to what has just been calculated. e.g. If you asked for the fastest route you can now ask for the shortest and vice versa. For each route, the results are displayed in the box, bottom right on the screen.

**CAN I TAKE THIS WITH ME?**

So far, so what? I can imagine you saying. Its time for an example: Bognor Regis (who?) to Royal Tunbridge Wells. - The fastest route goes via Angmering, A27, to Lewes, Uckfield and on the A26. It should take 1Hr 31 mins and 15 secs, the distance covered being 60 miles. The shortest route goes via A29, A264, A24, A264, A220, Crawley, M23 j10, A22 and thro' East Grinstead, taking 1Hr 35 mins and 0 secs, covering a distance of some 60 miles.

It may just happen that your memory is a bit like mine - intermittently non functional. If so one of the

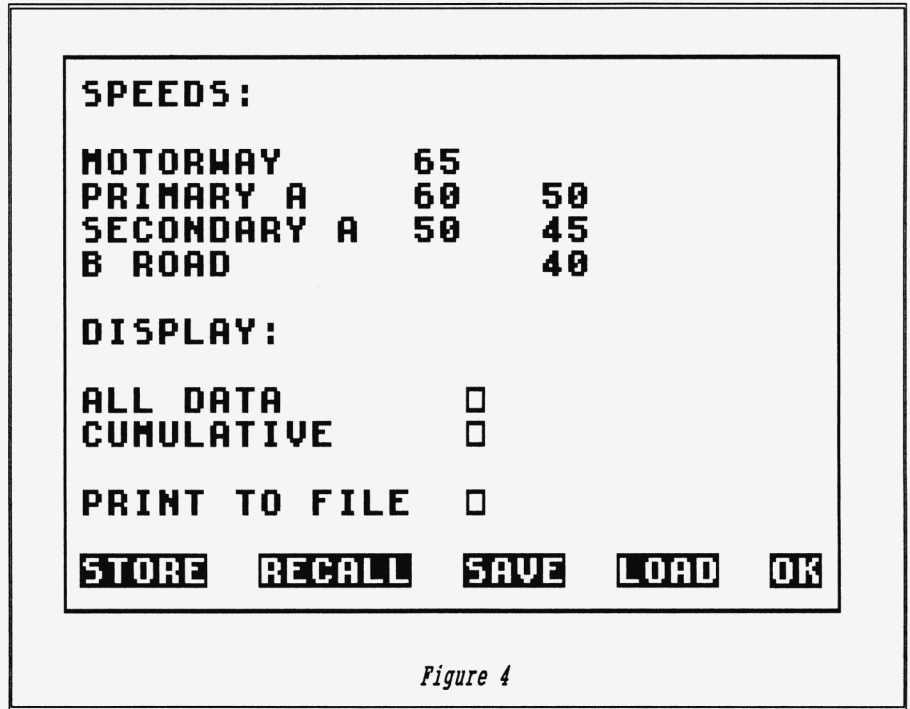


Figure 4

facilities on the DISPLAY page is right up your street - you can print the listed route. This is where the printer I mentioned earlier comes in very handy.

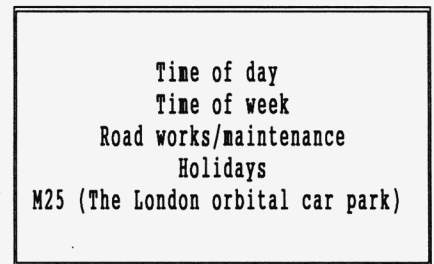
**HOW WAS IT FOR YOU?**

Now as it happened, I had to go to Tunbridge Wells and so I used the routes described to and fro. Imagine my surprise to find both sets of timing results were incorrect. Some routes are set differently for speed versus distance. I have confirmed that the routes for Bognor to Tunbridge Wells are both different but about (plus or minus something) the same distance. I also found that the planner assumed that the A29 is dual carriageway for a lot of its length, this knocks the speed calculation out of play. After a bit of playing with the road speeds in the OPTIONS panel I found the time calculated was about right for the journey. From this I found that there were figures more suited to "my way of driving" and the road conditions I often have to travel on. <<slow slow quick quick slow, well that's 3 slows to 2 quicks, is it close to your road conditions? -Paul>>

If you are going to use the programme a lot, then it is advisable to modify your speed using the OPTIONS window and save the file. (see fig 3.)

There are a lot of variables that no programme like this can give allowance

or bias for. Some of those variables are as follows:



These and other reasons, will always beset the driver with traffic flow changes no matter what the reason for the journey. It is not a failure of any person or programme, it is just our road system, such as it is.

**WHAT ELSE WOULD YOU LIKE?**

The system allows route choices to avoid or include specific location(s) if wanted. This way you can avoid driving near Aunt Sally's town, in case you are recognised and dragged in for a cup of tea and family photo's. (If there are any Aunt Sallys reading this and who are taking exception to my remarks may I just say that your name was picked by my computer as worthy of special mention in a nationally distributed publication. Any other hypothetical aunt could have been chosen but your name was considered the nicest. ((That should save a libel suit, Paul) (I expect

there are a lot of Aunt Sallys that get insults thrown at them, amongst other things)). See fig 5.

**DO YOU FEEL CONTENTED YET**

The operations are really quite simple for this programme. It is a feature that I rather like. When I was asked to review the programme I thought that I would just "Run it up to have a look at it and run it properly when I'd read the manual". What I found was that the programme was so easy and smooth in operation that I had plotted two routes before I had read the title on the manual. Yes, I like it.

**WHAT HAVE I MISSED?**

Several things that show even more of the engineering and thought that has been applied to this product. Short cuts are close to some peoples hearts, how about Control & key functions to save time? Yup they are in there, six of them are shown in the manual. There are two more that I have found; no I am not going to mention Zoom-In or Zoom-Out or to put it another way unzoom. (If you can have undelete and unerase, I'm sure you can have unzoom)

I haven't mentioned how to avoid Aunt Sally or how to ensure that the route does go near that nice little picnic spot off the West side of Byfleet. What can I say? (RYFM) It's all there. It is a good manual. That is even with or without pointing at each word as you read it.

There are a few other facilities in the programme that I haven't even mentioned yet. How about putting the route you have just planned into a disc file. Inclusion of the file in a letter to give is only a matter of a quick merge on screen and Robert is married to your Aunt. How about the fact that the OPTIONS for road speed can be set for three different types of driving? Did I mention the detail that most of the different road types are shown in different colours to aid

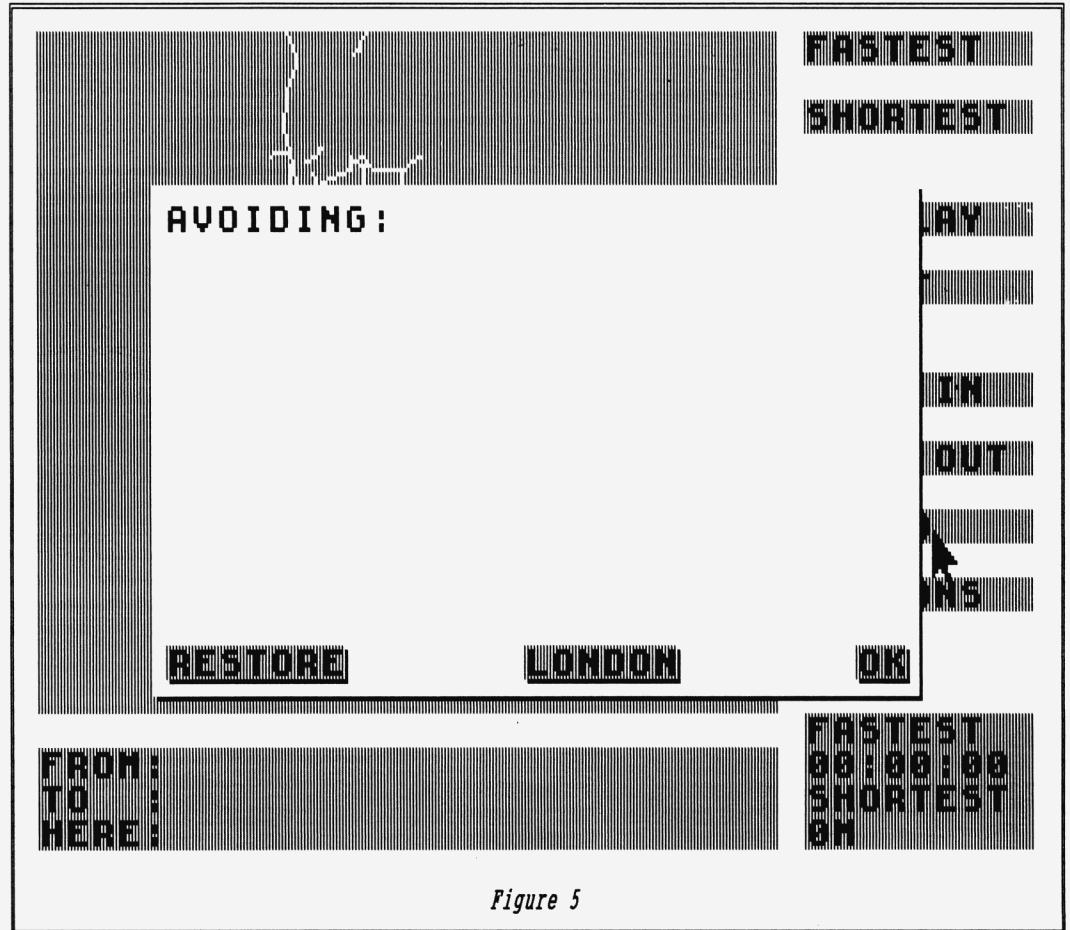


Figure 5

identification. (The aid is lost with a green screen though).

**IS THERE ANYTHING YOU DON'T LIKE**

Not a lot really. I would like the chance of an extra level of magnification. Perhaps the titles of towns and cities could be a little better laid out so they don't overlap and obscure each other. I'm not sure how much extra storage this would take as the disc has only 90K of spare space left on it. I have difficulty in thinking of points I don't like about this programme. I feel it is held back by the environment it has to work in. (I think I know what that feels like. Perhaps that's why I feel so empathic about Routeplanner).

**WHAT, OR DO I HAVE TO PAY?**

Of course you have to pay, it is well worth the £19.95 for the disc though. Yes it is up to date, not too many leagues away from Bognor is the M3 Twyford Down extension only recently finished. This is already included in the data file. There are other road changes already incorporated and these

are listed in the advertising sheet that came with the manual. All in all, a nice little programme that leaves me feeling good about life, the universe and everything... Except perhaps the constraints that the architecture and memory size puts upon....  
*The Bognorian*

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# The AA Debate

## DAVID CROOKES STARTS IT OFF (AGAIN)

*AA has taken some stick lately about the decline in the number of pages. But does this really mean AA is rubbish? Isn't quality better than quantity? David Crookes pauses for thought.*

### INTRO

How many people have decided to take a complete objection to AA's current situation and stop buying the magazine? Probably quite a few and granted, AA has got fewer pages and an unboxed covertape and the paper it is printed on is not brilliant. But let us look more closely at this and analyse the facts.

O Amstrad Action is the only CPC magazine left in the newsagents. Future Publishing have shown tremendous support for the magazine despite it not being as commercially viable as most of its other magazines. To this end it should really be supported. Why?

O The reason why is simple. AA is the only CPC magazine that has a readership of 15,000, that has colour pages and is professionally produced, that is able to introduce many new CPCers to the fold because WACCI, despite it being a wonderful club, cannot reach as many people as AA can.

O Without Amstrad Action being around the CPC market will vastly depreciate. It will become even less commercially viable to produce software for the computer because the market will be in limited numbers. Where a user base of 15,000 is available now, 600 would be the figure present when AA closes. If products do not suit these select few then the individuality and diversity of the software that we have come to know and love will disappear in favour of a limited number of functional software and so strangle the machine.

O If AA closes, many people won't bother to stick with the CPC. Many will get fed up with the situation

of a reduced user base, of limited new software, and they will leave to buy PCs and Amigas (once the Management buy-out is complete).

### SAM SONG

Shocking predictions? Sure, but isn't this true? You only have to look at the SAM Coupe market to see a good machine that has no national magazine support. It has floated into obscurity along with the Spectrum. There are SAM user groups but are there thousands of active SAM users? No, there aren't. Is loads of stonking software being released for the SAM? No!

### DRAMA SCHOOL

In CPC Undercover magazine, issue 6, Dave Golder, Amstrad Action's ex-editor, wrote an article defending his magazine from a critic. He stated dramatically, *"This might surprise a few people coming from the current editor of the magazine but I agree, AA is not as good as it was. But I sincerely believe that it is pretty much as good as it could be at the moment. A lot of people blame AA's falling circulation on its lack of pages. Wrong. The exact opposite is the case. The page count has decreased because there are fewer people buying the magazine. Why's that? Don't kid yourselves. Ever since the high street stores stopped selling cassette games interest in the CPC has plummeted and so have our sales."*

### PREVENTION NOT CURE

To prevent the continuation of a lack of interest in the CPC scene, people must still continue to purchase Amstrad Action because we are in a vicious circle. If people stop buying AA then its circulation obviously falls. People and firms are not looking at how many people buy fanzines, they are looking directly at AA's sales. If they see a downward

trend continuing then firms will think that they are wasting their time producing software and hardware and go elsewhere. We have lost some brilliant coders in the past because of a lack of support such as Logon Systems. Support is definitely the name of the game at the moment.

### THE AA TEAM

But Amstrad Action is not the worst magazine around. As Brian Watson so rightly pointed out last month, AA is now using people who are involved in the scene and are not just "jobbing journalists." If you stop buying AA then the collective CPCing talents of Richard Fairhurst, Rob Buckley, Richard Wildey and all of the other contributors are going to go to waste.

We have a band of writers who are genuinely interested in the scene. I produced a fanzine for a year for little money, taking up hours of my time every month because I wanted to provide a service for CPCers and now I am offering very cheap PD which makes no profit for me. Richard Fairhurst has spent hours writing top quality software such as Powerpage and then sold it for buttons. Rob Buckley has written loads of software including the free Eve Of Shadows. Lee Rouane produced a fanzine and he has a lot of coding knowledge, the same goes for fanzine owner, Keith Woods.

### CONCLUSION

I think a good job is being done by all those involved and if quantity is at issue then surely quality isn't. Think before you act. Do you want AA to survive, providing a platform for every CPCer to survive or do you want it to disappear forever. And what then? The CPC to slip down the pan because it doesn't offer the same quantity of features as a PC?

Indeed were it not for AA, the 73 people that helped to boost WACCI's readership recently would never have found out that WACCI existed. *David. <<Well what do you think? Let us know via the Fair Comment pages. -Paul>>*

# The COOK Interview

THIS MONTH ANGELA CHATS TO:

RICHARD FAIRHURST

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*Richard Fairhurst has been Amstrad Action's techy bod since about issue 85. Since then he has answered our queries, written the odd article, and taken the blame for the covertape. With the launch of Better Than Life, it is now his turn to bite back....*

## INTRO

Richard is a student at Cambridge, doing a degree in Anglo-Saxon Northern Celtic and is in his final year. He's 20 and happily single, owns a 464, 664, 6128 Plus "Which doesn't work because it was brought from Quantum", an NC100, Atari Lynx, PCW 8256 and an Apple Macintosh, what they use at Future Publishing, in case any of you wanted to know, which you probably didn't.

## ENTRY LEVEL

Richard got 'into the CPC/PD Scene' in the late eighties, by learning programming. Since his creations were not then deemed to be saleable, he opened up Robot PD, which is one of the longest running PD libraries ever.

## GLOSSY LEVEL

Richard did an article for Amstrad Computer User, and has written for CPC Attack. At one point they offered him silly amounts of money to become exclusive to them, and leave AA far behind. He is now glad he did not, what would AA do with out him? "What would I do without AA?" he responds. Would Richard work on another magazine given the chance? "Possibly." he says.

Richard got the job after Adam Waring left. This arose because AA had put some of his programs on the covertape and they were looking around for somebody to fill Adam's gap, "And since there was no one available I got the job." Richard says modestly.

The first month that Richard was doing Techy Forum, he says was quite easy, and not as unsettling as I had

found, trying to fill Simon's boots. "It was all about Power Page you see." explains Richard, "Everybody had written in asking how to use it." Since then, Richard has been forever dependable, and usually get's things in on deadline, which is more I can say about me....

## STANDALONE

"Do you ever have to consult people about the problems on Techy Forum?" I asked. "No." he replied. "With the possible exception of a few hints from Rob Scott".

## THE QUESTION

'Why does my printer give a double line feed?' used to be the most asked question in Techy Forum, now they are all about how to convert CPC to PC files, which just shows the general sway of the market I suppose.

## HOW DOES HE DO THAT?

What is the secret of Richard's success (a bad movie starring Michael J Fox perhaps?), how does he know so much? "I have read a lot of books, and been around for a long time. You just pick stuff up." I suppose I had better learn how to read then.

Writing for AA does not just have one responsibility (most people get lumbered with making the coffee, but it's a bit hard doing it from hundreds of miles away). What else can we blame Richard for? The occasional feature, Techy Forum, of course. Assembly Line has also swapped authors and The Cover Tape Nightmare, well you didn't think Simon was still doing it did you?

## THE COVER-UP

Richard decides what is going on the covertape, by phoning around people, to see what they will let him buy, reader suggestions does also play a part. The problem is, that many software companies have gone down the plug hole, taking their programs with them, or wiped all copies of their master discs, as one previously golden company did. Ball Bearing, Spaghetti Western, and TUSS are all coming up on the covertape. Other possibilities include XTREME and Chuckie Egg one and two. There are also, coincidentally, lots of Richard's programs going on the AA covertape, funny that.

## MOVING ON

To skip quickly onto another subject, what has Richard programmed? Well, this part of the conversation went on for an extremely long time, but what was deduced, was PowerPage 128 (PD), PowerSpell (PD), CharleyTraCker (PD), BTL (We'll get onto that in a moment), Pro-Ext (from Sentinel Software) various demo's and other bits and pieces (including the music for Pluff. At this point, it may be worth mentioning the fact that when I reviewed Pluff, I was not doing the bizz for Radical, the article was printed quite a time after it was written, since some WACCI readers have mentioned it. The same also goes for Star Driver, which is looming in the not too distant future. Also, of course, Route Planner, is one of Richard's creations. <<Yep, they know that because they have just read the review. -Paul>>

## PLAN IT EARTH

Route Planner has finally been finished, and updated with new maps for 1995. It is available from either

Radical Software (i.e. Me), or Sentinel Software (Richard Wildey) for £19.95. See the address box for details. Richard commented that he would like to be able to do a version of Route Planner for the Nintendo Gameboy. I was sceptical at first, but here's what he said, "Well, you could have it there when you're travelling. You wouldn't get lost quite so easily." I think I might buy my dad one if it ever comes about. He can get lost walking around an empty room.

#### THE BLT BIT

Better Than Life is a controversial new disc zine. Controversial, why? Well, it has been blasted by several people, for the libelous remarks, especially towards the Irish 'CPC scene'. The coding of BTL was none other than Richard's handiwork. He is not only the coder, but general co-ordinator and editor of it all. The BTL, Better Than Life, name is taken from the second book by Rob Grant and Doug Naylor in the Red Dwarf series (oh dear, a mention of Red Dwarf, WACCI members, all but Patrick Hanlan, won't be pleased). Richard had no say in the name (well that makes for a boring story), it was Matt Gulam that came up with the idea. If Richard had his way, it would be called Power, Corruption, Lies - I wonder why?

BTL is aimed at the younger end of the market (although anybody with eyes can read it), and has lots of hot gossip, well, hardly, the first issue took a year in the making. (Is BTL going to get a reputation like James Hockney?) <<No, that could not possibly happen. -Paul>> Also in BTL, surprise surprise, are some decent articles, reviews, and some good old fashioned plugs. Although you may want to be wary about letting younger CPCers getting hold of it, because of the swearing, most of it is few and far between though. One of my favourite columns (apart from the goss) is the quotes, where all sorts of quotes end up, so be careful what you say to any one involved with BTL, or anyone not involved with it for that fact.

#### WHATS IN A NAME

Richard has come to being known as CRTC (as most programmers have a pseudonym). This sort of stands for

#### RICHARD'S TOP TECHY TIPS

- 1) Buy a 3.5" drive
- 2) Upgrade your memory to 128K
- 3) ALWAYS ALWAYS keep a backup

ChaRley TroniC, but is actually the video chip inside your CPC, which is called the Cathode Ray Tube Controller. Now isn't that clever? <<Answers on a postcard... -Paul>>

#### FAVOURITE BITS

Now down to the nitty-gritty, the really important and serious stuff that we must know about any CPC personality: What is Richard's favourite colour? "Black." Well, that's what I expected him to say, everyone else has. Actually he said blue, "Reflex blue", which is what Peter Saville calls it, who designed the New Order <<who? -Paul>> sleeve. Richard's favourite games are Prehistorik II (the music is mind blowing), and Chuckie Egg (the music is there).

His favourite utilities are ParaDOS, Xexor (with which BTL 1 would never have been released), also Protex and Maxam. As hardware, he regularly likes to entertain a 3.5" drive and his "Custom made Simon Mathews ROMBoard with lots of flashing lights, which is virtually indestructible apart from when Rob Scott steps on it." He said all that in one breath too.

#### WINE, WOMEN AND SONG

Richard's philosophy of life is "Drink And Be Merry", although after waking up this morning with a blinding

hangover, he seeks to correct that (he has a hangover, then speaks to me, the poor darling must be feeling even worse now!) Another philosophy of his is "To Keep HMV In Profit For The Next 20 Years", you can guess where most of his freelance money goes can't you.

#### NAMELESS

None of Richard's computers have names "I don't think I am that mad am I?", reference to me bringing up the subject in a rather sad excuse for a story. Actually another of my bits of technology <<It's a SNES. -Paul>> is called Dave Lister, because it does nothing all day (aghhh, another reference to Red Dwarf, at least Patrick and I will be happy). <<You're doing this on purpose aren't you Angela? -Paul>> (Yes). And who does Richard admire on the CPC scene? "Well Richard Wilson is the best programmer" ..... there are just too many Richards.....

#### AND FINALLY...

Well, that is about it <<what, no other reference to Red Dwarf? -Paul>> (Well, if you insist...) other than the fact that Richard deems the CPC as "A very nice machine. It is well designed, but with a lot of annoying features, as with any computer you use a lot. But it is very expandable, and easy for beginners to use."

Richard is very nice, and has warped sense of humour like the rest of us (I don't think he will be all that pleased I said that though). Whilst talking to Richard, we had a bit of a moaning session, what did we moan about? Well, I am not getting done over for what he says, read BTL instead.

Angela Cook  
A WACCI Reporter

#### THOSE ESSENTIAL ADDRESSES:

ROBOT PD, 2 Trent Road, Oakham, Rutland, LE15 6HF. For a copy of BTL, send a disc, and an SSAE.

RADICAL SOFTWARE, Brympton Cottage, Brunswick Road, Worthing, West Sussex, BN11 3NQ. Phone/Fax 01903 206739.

SENTINEL SOFTWARE, 41 Enmore Gardens, East Sheen, London, SW14 8RF.

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