

WACCI
the world's best CPC magazine and premier user group

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## Benefits of Membership

* The best magazine for serious CPC users.
* Index covering issues 1-104, soon to be updated..
* Telephone helpline (indispensible)
* Bargain buys/wanted list from Market Stall.
* Discount off goods from advertisers.
* List of PD discs, tapes, library books and services.
* Above all the advice, assistance and friendship from other

WACCI members. Benefit List: by Ernie Ruddick

## WACCI ON WEB

Matthew Phillips.
The URL, is:
http://users.ox.ac.uk/-chri0264/wowww.html

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## PRODUCTION METHOD

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Angela Cook starts a new PC magazine called Wibble

I've got a free issue next month for you. Angela's PC Mag has nothing to do with WACCI, so all correspondents regarding this magazine are to be directed to her. Good luck and thanks Angela.

# Thanx \& Stuff 

Edited By: John Bowley<br>Owned By: The Club Members<br>Chairman: Doug Webb

Conceived and Founded
By: Jeff Walker
In: October 1986
Developed and Expanded by: Steve Williams, Clive Bellaby, Paul Dwerryhouse and Philip (Tigger) DiRichleau.

Copy Date: 5th February 1998
Membership: 269


Carol and I would like to wish you all a very happy New Year. Here we are again and what's changed you may ask, well I've changed the Thank \& Stuff logo again as you can see, but what do you think of it? Also we've got a new Fair Comment editor ready and willing to answer all your letters.

## COPY DATE

The copy date is now the 5th of the month, so please note, if you're writing any articles (which I hope you are) or sending a letter to Fair Comment (on disc if possible) I will need to receive it by the 5 th of the month. This will then give me a few days to edit and lay-out the pages before taking it down to the printers.

## WHEN WILL I RECEIVE WACCI

You should receive WACCI around the 20th of each month. I tried to get this issue done a lot earlier but failed. Sorry

## FAIR COMMENT

I sure by now you've already have turned to page 5 to see who is doing Fair Comment now since Philip left us. What you haven't? What are you waiting for? Have a look and come back. Yes an old friend returns to do one of the hardest pages within WACCI. What more could you ask for?

## RADICAL SOFTWARE CLOSES

Angela has decided to close down Radical Software (see News Desk for info). Which is good and bad. The bad news is that another supporter of the CPC scene has closed. The good news is that WACCI has got permission to include in the PD Library all of Radical's software, except Route-
planner which is still available from ComSoft for only $£ 14.95$

## CAROL'S PAGES ARE MISSING

Carol has been very busy of late and she just hasn't had to time to do anything to include within WACCI this month, but she'll be back next month.

## WACCI SERVICES

First of all. New members don't know what WACCI has to offer, okay they know they get a great magazine, but most of them don't know about the software and other services WACCI has to offer.
To put this right I've included in this issue the following: On page 15 you will find the Homegrown Library Index giving details of the Homegrown Library software, the PD sections ( $P D$ discs 1 130) Book Library and Tape Library) will be published over the coming months.
On page 30 you'll find the Help-Line and a brief run down on all the PD software. On the back page titled "WACCI AT YOUR SERVICE" gives details of the Firmware Guide, Binders, cost of PD Discs and blank 3" discs its all here have a look.

## SPECIAL THANKS

My special thanks must go to Clive this month. Uncle Clive to you and me.

## OTHER PEOPLE TO THANK

I would like to thank all those who helped me in 1997. The authors of articles. The members that re-subscribe who still has faith (even when WACCI is late) in my ability (although sometimes when things go wrong I have had my doubts) to produce a magazine.

## WHEN THIINGS GO WRONG

When things go wrong and they do at times its nice to know that there are friends you can rely on such as: Doug Webb (whose direct approach frightens the life out of me) give me a kick now and then when needed.
Frank Neatherway for advice and help that I can rely on, even when I don't sometimes follow his advice.
Angie Hardwick for a shoulder to cry on when needed. Frank Frost whose care free life style and laid back approach I can relate to. Angela Cook who's only to ready to help either in writing articles or for a chat. Richard Fairhurst for the oodles amount of articles that he has written over the year.

Carol Bowley (who?) for her full support and loads of cuddles.
Without all of the above mentioned friends WACCI would not be able to continue. So a big Thank-You from me to you all. Happy Reading. John

# Future Perfect by Richard Fairhurst 

So you're upgrading/sidegrading/downgrading (delete as applicable) to a different system, but want to keep your data. No problem - with a $3.5^{\prime \prime}$ drive and DOS-Copy, you can convert everything to PC format in a matter of minutes. Here's how to do it...

## THE WRONG WAY

Search for three years to find a serial interface. Faff around with null modem cables, four different flavours of the XModem protocol, and hardware handshaking until you manage to get one byte across from the CPC to the PC.

Suffer terminal expansion connector wobble and ROM workspace problems. Throw your PC out of a window in frustration, resolve to murder anyone who mentions the words "RS232" and "standard" in the same sentence, and retire to a cave for 25 years.

## THE RIGHT WAY

Get DOS-Copy from your favourite local PD librarian. Pay $£ 3$ to nice Andreas 'Face Hugger' Stroiczek in Germany. Convert the relevant files to ASCII, copy them to $3.5^{\prime \prime}$ disc using DOS-Copy, and smile.

## COMMON MISCONCEPTIONS

That's basically all there is to it, which doesn't bode well for a full page article..
However, here are the subtitles. Easy one first. DOS-Copy does not run from drive $B$. However, there are tweaked versions about with a $\mid \mathrm{A}$ in the loader.

As a general piece of advice, you should never use high density (HD, or 1.44Mb) discs on your CPC. The discs are coated with a special substance which double density (DD/720k) drives just can't read accurately. You may be able to get away with it on CPCs, barring the odd read fail or two. However, some PCs will get very confused if you put in a dise which they recognise as being high density - but which you've formatted to 720k PC format. Stick to the DDs. It's safer.

Contrary to common belief, you don't need to worry about setting DOS-Copy to "binary" mode if you want to copy nonASCII files across. If you're going to
transfer CPC programs or other binary files to a PC, so that they can be read by emulators or uploaded to the Internet, you want to keep all the information intact - including the file header. "Copy as $A S C I I^{\prime \prime}$ mode just copies the file verbatim, and as such is suitable for both situations.

## CONVERTING TO ASCII

Most of the time, though, you'll be copying text files across to the PC. If you have PC Protext, you can just set DOSCopy to work on your CPC Protext documents: a file translator is included in the PC Protext package. This has the advantage that printer codes, such as bold and italics, are not lost in the conversion.

Most PC users, though, use something like Micro\$oft Word - which won't read Protext files. Such programs will read the lowest common denominator, ASCII files, which contain plain text without any fancy presentation. The easy way to get these is to go into Protext's Program mode (type PROG), save, and copy the resulting file with DOS-Copy.

For anything with multi-line paragraphs or justification, though, this won't work. To get a genuine ASCII file, go into Program mode, and use SETPRINT to set all five margins to 0 . Return to the command line, and use PRINTF to generate the final file.

Any word-processor, on any computer, will happily read the resulting file. (Unless it's an old mainframe. But I digress...) You can also save BASIC programs as ASCII by typing SAVE"filename",A

Ancient dialects such as GW-BASIC aren't very compatible with Locomotive's Z80 wonder: the PC program Locomotive BASIC 2, on the other hand,
is. Of course, in the brave new world of CPC emulators, all you need to do is copy the original files straight across.

## ACCESS FILES

You can then access the files from CPCEMU, CPE, or whatever you've chosen as your favourite emulator. Easier still is to use a PC program like CPCTRANS or CPDREAD, which converts CPC $3.5^{\prime \prime}$ discs (inserted into the $P C$ drive) into .DSK disc images, readable by all emulators. Richard Wilson's CPC emulator even reads ROMDOS/ParaDOS format discs directly.

## OTHER MACHINES

Practically any computer these days will read PC discs, so DOS-Copy really is all you need. Macs do it with a Control Panel called 'Macintosh PC Exchange': Amigas have their own equivalent of DOS-Copy, called CrossDOS: Atari STs and (I think) Acorn Archimedes will read them straight off. It's that easy.

## AMSTRAD PCWS

Should you want to copy stuff across to a PCW, it's easier still. Format a disc, $3^{\prime \prime}$ or $3.5^{\prime \prime}$, as data format. Save the files on it as ASCII. Put it in the PCW, and hey presto.

## DON'T LIVE IN THE FUTURE

And next month (ok, ok, next issue), I'll be explaining how to move stuff the other way - back onto your CPC.

If that sounds useless, you've evidently not seen the new CD-ROM full of CPC stuff...

# Fair Comment with Uncle Clive (2) <br> <br>  

 <br> <br> }

## HONEY....I'M HOME

Dear Clive, How come an old dinosaur like yourself has found his way back on to WACCI's hallowed pages? Come on and tell us the truth!

> Unal $_{n a} \mathcal{L}_{\varepsilon} C_{i \sigma \varepsilon}$ Nottingham
< Hiya Clive, It's good to hear from myself after being away for so long. The answer to your question is as simple as I am myself. It was a cold winter evening in Nottingham, the ice lay thinly spread on the pavements as I lay dozing in front of a large coal fire. I awoke with a start as the shrill piercing jangle of the phone entered my brain and brought me back into the land of the living. I grabbed the receiver from its cradle in anticipation, placed it near to my ear, and heard a well spoken voice. <<Who me? Nah! You've got the wrong guy -John $\gg$

"Hi Clive, John Bowley here, do you want to take over Fair Comment?"<br>"Err, Hiya John, Err, Yes! Err, Have a merry Christmas, bye!"<br>\section*{And that's the} true story. Honest. Clive >>

So what's going to change. Not a lot, WACCI has been, and always will be WACCI, and as far as I am concerned that's about the best we can ask for!

The main alterations to Fair Comment will be:- I have a full set of WACCI's, and I've noticed that many of the current letters are similar to letters that famous past
editors of Fair Comment, such as Mike Lyons and Peter Creosote (Sorry, I mean Cereal) answered so well, so I'll use their answers where I can.- There will be more spellink errors.

## FAIR COMMENT REVISITED.

In the past when I was young, many famous and infamous $I$ think that means not as well known) members wrote letters that were amusing, interesting and relevant, and they still are, so I'd though that I'd republish them. Of course, if you write in and say you don't like the idea, then you'll fill the pages and there won't be any room for it anyway. Best wishes and a Happy New Year to you all.

$$
U_{n d} \mathcal{L}_{\varepsilon} C \mathcal{L i v e} .
$$

## MARTIN ANSWERS PETER

Dear Clive, Regarding Peter Rogerson's letter in Fair Comment (issue 117) about using Ansiterm with eleven digit numbers, it is possible, but you can't use the directory facility, you have to enter the number yourself. Would a quick step by step guide be useful here? Okay then, here goes...

Plug the RS232 interface into the CPC. Plug the modem into the interface.
The leads for these two items shouldn't present any problems, they should only fit one way around etc. Don't bother plugging-in the 'phone lead just yet, as we can have a play-around with it first, just to make sure everything is working.

Switch on the CPC and modem. Run "D1" or "D2" (different font) from the Ansiterm disk. When it has loaded, you should be presented with a flashing cursor.

Type-in the following: atdt12345678901 then press RETURN) You should now hear a series of notes from your modem (assuming it has a speaker, that is!). The AT part gets the attention of the modem, the DT part tells the modem to use dial tones (DP would have selected pulse dialling), and the numbers are simply the 'phone number you wish to call; eleven digits in this example, although you can have more or less as required. Right, that's checked-out the connection to the modem, so now we need to hang-up.

Press the COPY key. A menu bar will appear at the top of the screen. Use the cursor keys to select SETUP, press COPY to display the SETUP menu. Again, using the cursor and COPY keys, select HANGUP from the menu. This will instruct the modem to end the call; you may hear a relay click inside the modem as it does so.

You can now plug in the 'phone line and try-out a real 'phone number if you want. Just press ESC to close the setup menu, then press ESC again to close the menu bar; you should now have "NO CARRIER" displayed on the screen (because the 'phone line wasn't pluggedin). Don't forget to type atdt just before the number though! Before you do actually call a Bulletin Board you'll need to know a few things first.

To start with, you'll need to know what Baud rate (speed) the BB (Bulletin Board) can operate at. This is usually printed along with the 'phone number of the BB .
This may look something like: 2400, 8/N/1 The first part is the speed (in bits per second) that the BB operates at, typically 2400 or 1200 for CPC BB's.

The next digit indicates the number of data bits required (to make each character that is transmitted); again, typically 7 or 8 .

The $\mathbf{N}$ indicates NO PARITY. This is an old form of error checking (E for EVEN parity or O for ODD parity) which is not usually used now, hence N for NO parity.

The 1 means that each character transmitted must end with one stop bit. Once again, this is the usual case.

Most BB's for CPC use are of the 2400 , 8/N/1 type; this particular speed is often called V. 22 bis (other speeds are: V. 22 (1200 bits per second), V. 21 (upto 300 bits per second)).

The default settings for Ansiterm are $2400,8 / \mathrm{N} / 1$, so you probably won't have to alter it; but if you do need to change it just go back to the SETUP menu and select the new settings from there. A word of warning here, if you select the DATA BITS option (even if you don't actually alter it) you may find that you cannot type in or dial a 'phone number from the keyboard. If so, you'll just have to select QUIT from the setup menu and then RUN the program again. You may even have to switch your modem off then on again. In practice this isn't a problem, as most (if not all) BB's use eight data bits anyway.

Once your modem has made connection to the BB you simply follow the instructions which will appear on your screen. Usually, you will be asked to enter your name and the town you are calling from, and also a password which will be used in future calls to ensure that you (and only you) get any messages etc. that are waiting for you. So, whatever password you decide to use, keep a note of it!

You may be wondering how fast your modem will transmit and receive data; well, assuming it is set to $2400,8 / \mathrm{N} / 1$, you can work it out as follows:

Each byte of data (i.e. each character) needs 8 data bits and 1 stop bit. It also needs a start bit, so that means 10 bits for every byte (or character).

2400 divided by 10 equals 240 . So, we can transmit and receive at the rate of 240 characters per second; which if you work it out, means that a 100 K file will take just
over seven minutes, providing there's no errors found in the data that is! All you need now is a list of BB numbers! One well-known BB for the CPC is ASPECTS in Manchester, but unfortunately, as from January 1998 it has closed-down. Does anyone know of any other BB's which are of use to CPC users?

$$
\begin{array}{r}
\text { Martin } \frac{B_{\varepsilon} L_{a}}{\text { Derby }}
\end{array}
$$

$\ll$ Hiya Martin, I hope that you're well. Many thanks for the clear guide which I'm sure that Peter will find most useful.
I've tried all the BB's which I used to use, and most have either closed, become PC specific, or moved over to a member only chargeable service.

The growth of the inter-net has in many respects caused the demise of BB's across the country. There are still, or so I'm told, a number in both France and Germany, but I don't know the numbers, and the connection costs will be rather expensive. Best Wishes. Uncle Clive. >>

## FILE CONVERTING

Dear Clive, Oh dear, Oh dear, or as my late father-in-law was wont to exclaim "Ow dear 'eart!" I do seem to have trodden on a variety of pedal extremities don't I? For a start I didn't realise, and I suppose I should have, how many of the afore mentioned pedal extremities were firmly esconced in both "camps".

I honestly thought I was pouring oil on troubled waters but it seems to have caught alight and burnt my fingers! And, to have given offence to the estimable Angela, especially after the excellent service she and Arthur gave me when I had some disc drive troubles just recently, was far from my mind. So I shall grovel and retire "bloody but unbowed" and take note of John's admonition that enough is enough and say no more.
However, I remain adamant that the use of sexual and lavatorial expletives to punctuate and emphasise one's writing is, in the end, counter-productive. It adds nothing to the content of the writings, and, though it may titillate the reader momentarily, serves only to emphasise the paucity of the author's literary expertise. If this is professionalism then I shall be happy to remain an amateur.

Now to more mundane things. I have copied Richard's program for converting

DR files back to screen files, and I appear to be having the odd problem with it. It seems to retain the previous file in the memory, so that having decided to try a fresh DR file I find that, regardless of having entered another filename at the prompt, I get the previous file again! I seem to have to do a soft reset to get rid of it. Also it doesn't appear to like strip files such as headings in text.

Furthermore it has a nasty habit of printing the result well over to the left of the screen, which causes the left-hand quarter of the drawing to be produced on the RIGHT of the screen, which I am sure was not intended.
I had a thought that this may have something to do with the position that the drawing was saved from in the first instance, though MicroDesign + always returns it to the centre of the screen when it's loaded. All (polite) comments gratefully received.

Did I also perceive a hint that there might be a future conversion program for BMP files for the PC? That would be useful as I'm dabbling a bit with one of these brutes without much success.

So there you have it. I've said all I'm going to say and if I managed to put a few backs up then, as I said, I'm sorry. Let's move on, shall we? The CPC scene needs all the help it can get and internal squabbles do us no good at all.
Last Query. Why do Protext files transferred to the PC through Doscopy contain such a lot of garbage such as carriage returns/hard spaces etc?
$\mathcal{P}_{\text {on }} \Omega_{z \varepsilon t t}$
Ponterwyd
$\ll$ Hiya Ron, It's nice hearing from you again. Foul language, back-biting, backstabbing and non-WACCI arguments have no place in WACCI. If two or more members want to fall out, okay, but there respective arguments have no place in WACCI.
I've read (and re-read) your letter in WACCI 116 and I can't see anything in there that should cause problems for members, it was a well written, sensible plea for calm and understanding, and there was nothing in there for anyone to disagree with. Time is always the best healer, and as we all know things change with time. After all what's an ex-editor
who said "Ex-editors should neither be seen or heard from" doing editing Fair Comment. WACCI was born (and reborn as issue 50) from the concept that the CPC needed a forum where members could receive and give help to each other, and to mutually support each other in the enjoyment of CPC'ing.
I don't have of copy of Richard DR conversion program, so I'm unable to help, however, I'm sure that one of our wonderful members will be able to assist.
As to the problems of converting a CPC Protext files, well I'm getting to be an expert at solving the problems. It's not DOSCOPY that puts all the funny characters in to your text, it's the word processors themselves that do it!

All word processors use the standard characters for text, and they all use a range of non-standard characters for hard-returns, soft-returns, soft-spaces, page-breaks etc. and of course, they all use different characters for the same task.

The easiest method is to convert your Protext text files to pure ASCII files prior to copying with DOSCOPY.
Using the PROG(ram) command on Protext's command line does not convert a file to ASCII format, it just removes the printer control codes and ruler lines. I know this because John Bowley has exactly the same problem when converting files for use in Microsoft's PUBLISHER program under MSDOS.)

The correct method of converting a Protext text file is:
a) If you don't want to retain the left, right, top \& bottom margins enter $>Z M^{\prime}$ on the very first line of your file to Zero the Margins. If you want to retain some of the margins, or even set the margins use the commands on the top of page 11 in the Promerge Mamual, or on page 54 of the Protext manual.
b) Hold down the control key and press $J$ to remove the full justification feature. The "Right Justify" message on line 2 of the screen is replaced by a "Justify Off" message. This removes all the soft-spaces.
c) Set to ruler line "> $\boldsymbol{R}^{\prime}$ to the required page width. When the file is saved to disk, a hard return will be entered at the end of each line. If you are
going to import the text in to another program, you don't want lots of hard returns in the text, so set the right margin to column 1000 (or more).
d) Swap to command mode
e) Type 'FORMAT' to format the text to the new margins, remove soft spaces etc.
f) Type 'PRINTF filename' using a filename of your choice to save the program to disk as an ASCII file.
g) And Bob's (or Clive's) your Uncle.

PC Protext can and will happily convert CPC Protext files to PC Protext files, and PC Protext files to CPC, ASCII and similar formats. Most PC word processors can import files from other word processors.
Sometimes you have to be a little creative, I had some old Wordstar Express files I wished to convert to Microsoft Word format, and ended up converting them from Wordstar to ASCII using PC Protext, and from ASCII to Word using MS Word.

Actually, a simple CPC Protext to ASCII file converter would not be difficult to write? I wonder why nobody's done one? Best Wishes. Uncle Clive. $\gg$
$\ll$ Sorry to butt' in here Clive, but Richard Fairhurst has written a CPC Protext to ASCII file converter of sorts. Richard recently released a new PD program called Sanko. Sanko is dead easy to use (it must be if I can use it).

What Sanko does is converts a Protext text file into RTF (Rich Text Format) file that can be imported into many Windows applications programs such as Word and Publisher. Hey! I just had a brain wave, would you like to do a review on Sanko Ron? There is a program that converts mode 2 screens to BMP format and that was also written by Richard. Most of the pictures you see in WACCI was converted using this program. -John $\gg$

## FEED-BACK FROM MATTHEW

Dear Fair Comment editor or Clive, I though it was about time I wrote another letter to WACCI. Things seem to have been going through a lean patch recently,
but I hope that we find enough articles coming in to fill the magazine. I recently bought a large load of back issues of an American magazine called the Z-letter, which was produced almost singlehandedly by David McGlone for many years. It specialised in CP/M and Zsystem computers.

The Z-system is an upgrade to CP/M written by enthusiasts in the States. He had an interesting idea to help encourage contributions of articles, which was that if you had an article printed you would get a copy of the magazine free, or your sub would be extended by a month. It probably wouldn't work for WACCI really, as WACCI is so much more than a magazine. If you start giving free copies of the magazine to contributors, where would it all stop?! Still, there are probably other ways to encourage people to write articles.

Actually, one thing that would encourage me when I am writing articles is knowing that people are finding them interesting. It is very hard to get feedback on what people like. I hope that some of you are finding Programmers' Patch interesting.
It isn't meant to be a beginner's guide to programming, as there have been quite a lot of articles like that over the years, but I hope people are finding it useful. There have been a few problems in printing the listings from time to time, as it is very hard to get them to print right on a PC. If any of you are stuck because of that, do ask, and we will try to correct the mistakes.

I suppose I ought to give a bit of feedback on other articles while I am at it. I found John Hudson's Submit articles very interesting. I hadn't realised how powerful CP/M's scripting language is. The way you can specify the input for programs run from the script is more powerful than any version of MS-DOS can manage! Some of the reviews have been good - I must get myself a copy of Euro-WACCI, and the Bomb Room sounds worth a look.

John Hudson mentioned VDE in issue 115. I think it is a wonderful package. You can do so much with it, especially with its macro features. For example, when converting a listing from one form to another, I had to do the repetitive job of removing line numbers and the word
"DATA" from the start of every line. You can actually programme VDE to do this for you, so with a few key presses it will go through the whole file. It might be slow, but it is much more fun than doing it by hand!

I still find Fair Comment one of the most interesting bits of the magazine. Donald Hay was asking how he could load a large binary file so that he could examine it. I would think the best way would be to use a bit of machine code.
Binary files would normally be loaded by using CAS IN OPEN (\&BC77) followed by CAS IN DIRECT (\&BC83), which would load the whole file into memory. Instead of CAS IN DIRECT you could use CAS IN CHAR to read it a character at a time, storing it at a different address from 0040 and stop when you have read half the file or so. Or you could read in half the file, but only bother storing the second half. Let me know if you need any help with this Donald, and I can put something together.

If Bill Gifkins in New Zealand is still a member of WACCI, I just want to say thank you for the help you gave me a year or so ago. Programmers' Patch will be looking at MIDI interfaces over the next few months, so I hope you find it useful. I have almost finished a programme for playing AMS files on any CPC MIDI interface too, so I will post you a copy before too long.

Thank you for all your work on the magazine John - you're doing a great job. Let's hope that the recent bickering dies down so that we can all enjoy reading our WACCI and being friendly and helpful and back to normal again. Wishing everyone all the best for 1998.

$$
\begin{aligned}
& \text { Matthear Phillips } \\
& \text { Oxford. }
\end{aligned}
$$

$\ll$ Hiya Matthew, I hope things are going well at Oxford, I presume by now you'll have returned from your Christmas break and be getting into long discussions about the quality of beer under a labour government? A free issue for an article, that's an interesting idea! I don't know the committees views, but it could work, I think I like the concept that those who give, also receive!
I still remember the thrill of reading letters that said the writer had enjoyed, or
benefited from an article, that's what the club is all about. I sure that members will write in with their views on different articles, and please remember that each letter help fill this section of WACCI.
I've been a fan of VDE (and ZDE) for years, it's a simple to use Wordstar clone with a lot of interesting features. Best Wishes. Uncle Clive. >>

Dear Clive, Three quick points: interest in the CPC isn't dying so much as becoming concentrated; my view is that every WACCI activity should be self-sustaining and there should be no direct crosssubsidy. Making one activity dependent on income from another is a recipe for disaster; if members don't want to pay the real cost of something, don't subsidise it drop it!

If Donald Hay cannot do what he wants any other way (e.g. MAXAM or $D E V P A C$ ) and has access to CP/M Plus, it is possible to do it using a high capacity B drive, $\mathrm{CP} / \mathrm{M}$ commands and VDE (WACCI Disc 10). My number is in the Helpline if he wants more information. The method is a bit long-winded but that's why people wrote software - to do the things which the operating system couldn't do easily!

Thirdly, in case no-one else answers it, Nora Lees should enter ' $a=$ ' in BASIC followed by the calculation, then 'PRINT\#8, $a^{\prime}$. If she does the same type of calculation regularly with different numbers, it is worth writing a BASIC program; if she wants to do complex calculations, she may find it easier to do ' $\mathrm{p}=$ ', then ' $\mathrm{q}=$ ', then ' $\mathrm{r}=$ ' before ending with something like ' $a=p^{*} q / r^{\prime}$ so that the final result is in a. Alternatively, the MiniOffice II spreadsheet program may be worth using. Yours sincerely,

## Jokn ©R. Hudson Huddersfield

< Hiya John, thanks for your views on the subject. You're right about the CPC, it's still alive and kicking, and it will be for quite some time to come.

In a general sense you are right about cross-subsidising being a recipe for disaster, activities that do not pay for themselves should either be dropped or members should be charged a self substaining fee. However, this is never as simple to achieve in practice as the theory
suggests. Members pay a $\propto 2$ per month membership fee, but what does this cover? The magazine? Yes! But what else, surely WACCI would not be WACCI without the Book Library, PD Discs, Helplines (funded by individual members) and so on. Some of the membership fees must be a donation towards the costs of these services.
If the club officials were to charge for the time spent, postage and the general wear and tear, the membership fees would be astronomical. I think that you are right about MAXAM and DEVPAC being the best programs for Donald Hay to use to examine large blocks of machine code.
If he wanted to play with small blocks of code there are a number of Public Domain programs that can complete the take. CP/M 2.2's DDT.COM (on side 4 of the master discs) can be used to examine machine code programs, however, it's not user friendly.
I'm sure that Nora will be grateful for the help and advice. Maybe an article on the subject of calculations on the CPC would be a good idea? Best Wishes. Uncle Clive. $\gg$

## CALCULATIONS

Dear Clive, Have just noticed that in the October issue of WACCI, Nora Lees is looking for a program for calculation and the printing thereof. May I suggest LOGO 3? The program is on side 3 of the CPM system discs supplied with your CPC.
It is easier if you copy the program onto a separate disc, for one thing it gives you a whole disc full of memory to play with (minus the program of course).

Once you've loaded the program, you should see a '?' at the top left hand side of your screen. To get a printout, type "COPYON" (you need to switch your printer on first). You can now start your calculation, as you would if you were using a pocket calculator.

There is much more to LOGO than that. Most of us, no doubt, have played with the "turtle" or graphics side of LOGO, but that's only a small part of the program. LOGO has a very easy to use Editor and a workspace area, that's where the calculations are done.
I get the impression that LOGO has been forsaken, which is a pity. It has its limitation but so do a lot of programs. I
find the Editor and the workspace very useful. If only it were in mode 2 .

Concerning LOGO and calculators, I too have a question to ask, perhaps we should include it in Carol's Puzzle Page.
Playing with LOGO 3, finding the square root of a number is proving difficult. I remember in my youth (a long time ago), that to find the square root of a number, you took the Log and divided by 2 , the cube root divided by 3 .

As we all know, the cheapest Pocket Calculator can do it with ease. And yet the mighty Amstrad lacks this ability. Am I to believe that the chip/chips on the cheapest Pocket Calculator contain all the Logarithmic Tables? Perhaps Carol will offer a prize for the correct answer. Yours faithfully,

> Wally $^{\text {ColPinson }}$ Cheltenham
$\ll$ Hi Wally, I'm sure that this will help Nora find the right direction to take. I suppose the real problem here is that the CPC was never designed to be a calculator, and that we have to find $a$ range of methods to overcome this.
I seem to remember something from my dim and distant past about the correct method of calculating a square root without using a calculator, however I cannot remember how it was done.
I'm sure that Nora could pick up a calculator with printing ability at a car boot sale fairly cheaply that would solve her problems. Best Wishes. Uncle Clive. $\gg$

## FAIR COMMENT FAVOURITES

Way back in WACCI 51 Mike Lyons made us an offer we couldn't refuse.

## I'LL DO IT

Dear Clive, many, many thanks for the 50th WACCI. What a relief! Glad to see it when I got home from work tonight. It looks superb. I can't tell you how much I've missed the old mag. Happy Birthday every one!

I humbly offer my feeble assistance in writing Fair Comment. In doing this I hesitate to say that I have a large vocab, erm, voc, err.. I know a lot of words. I have a scintillating though frequently acid wit and can discourse on practically any subject given an absolute minimum of knowledge (all teachers have this knack.)

I ken spall is uall! I am caring, considerate and thoughtful which is just what you need for dealing with letters from the patients (sorry I mean club members.) All-in-all, I'm a very friendly Lyons, (but not called Parsley). Well, There it is!

Can you put in an ad for me? I have a large number of original disc games which came with my second 6128 , (yes, this is a two computer family - two and a half, actually, we also have a 128 K Spectrum, (or is that plectrum). I have enclosed a full list. All of the above are going for $£ 5.00$ per each. No, I'm not daft...(am I??), Each and every game on $3^{\prime \prime}$ disc, what more could I ask? OK, I could try and flog 'em at full-ish price, but that's not the spirit of WACCI is it?

Thank you for your invaluable help and information on comms, which I intend to put to good use as soon as possible. Thank you also to the ineffable Tony Walker for the same.

Anything else I can do to help?.... Just ask. I will be very happy, nay, overjoyed to assist. Time to finish off now. I've been doing this instead of working. Once again, thanks for bringing a little light into the end of my tunnel, if you see what I mean.

$$
\begin{aligned}
& \text { Mike Lyons } \\
& \text { Wigan }
\end{aligned}
$$

$\ll$ Hi there Mike, if you look at the top the page you will see that you are now responsible for the Fair Comments section. I have included your details in the Who's Who section. From now on club members should send letters for Fair Comment to Mike. Whilst I think about it, if you send WACCI a letter it will be included in Fair Comment unless you mark it as Private.

I have included Mike's advert on this page. So if you want some good quality games at a good price then give him a ring, quickly. $\ll I$ thought that it was politicians who could talk about subjects they knew nothing about and not teachers! -Uncle Clive.>>

## WHERE IS ARNOR?

Dear Clive, Thank you for the help you gave over the phone on regarding 3rd drives for my CPC 6128. I've being trying to contact Arnor, any ideas as to where they are now?

I am impressed with the quality of the WACCI CP/M PD software. The DCCPC Spreadsheet is just about the noisiest spreadsheet I have come across. Just about every other key I press except the cursor keys gives a beep. However upon reading the instructions for it I had to make a work disc which I was glad of because it gave me an idea of how to auto start my DR Logo disc.

Does the Mikedit Word-processor have any means of loading in a text file, I can find the save file option on the menus but no load options. I have even tried entering a text file name in the command tail at the A> prompt when loading Mikedit but that makes no difference except for loading the word-processor. Best wishes for the new year!
John Evans
$\ll$ Hello there, John. It's always a pleasure to be of service where possible. That's what we're here for. Where would we be without questions? Are you sitting comfortably? Then I'll begin.

Unfortunately, Arnor, the purveyors of high quality Word Processing Programs for the whole range of computers ceased trading several years ago. The products are still available from Comsoft and Brain Watson. Look in WACCI hallowed pages for details.

I'm also impressed with the quality of our software. When using the Mikedit word processor, press Ctrl \& $K$ (to action the block menu), press $R$ (read in file), enter the filename, press return, job done. Best wishes. Uncle Clive.>>


Josie and Uncle Clive

# First Steps In Machine Code by Richard Fairhurst 

Last chapter I looked at the "bit-wise" operations - AND, OR, XOR, RES and SET. There is also a way of testing individual bits of a register, the originally named "BIT" instruction.

BIT has a similar syntax to RES and SET - BIT bit,register (for example BIT $5, H$ ). What it does is take the appropriate bit from the register, complement it (if it is 0 set it to 1 and vice versa), and put that in the zero flag. For example:

LD A, $<$ any number $>$
BIT 0,A
JR Z, even
odd: ... a routine executed if the number was odd even: ... a routine executed if it was even

What this does is take the value in A , find bit 0 in it (which will be 1 if the number contains a I - so, for example, 128 doesn't, being in binary 10000000, but 129 does - 1000001), complement this and put the result in the zero flag. This means that zero will be 1 (i.e. zero will be "set") if bit 0 contained a 0 (it will be 1 if bit 0 contained a 1 ), and if bit 0 had contained a 0 (i.e. no I in the binary break-down of the number) then the number must be even!

As with SET and RES, the permissible forms are BIT bit,register where bit is a bit number from 0 to 7 and register is $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}, \mathrm{H}$ or L - and the other alternatives possible are BIT bit,(HL), BIT bit,(IX+ displacement), and BIT bit, (IY+displacement). Of the flags apart from zero, S (sign) and $\mathrm{P} / \mathrm{O}$ (parity/overflow) are altered but not in a predictable way, auxiliary carry is set, and carry is unaffected.

Of course, there are more sophisticated versions of testing available than this BIT instruction. This is where the CP opcode comes into play. CP is an abbreviation for compare. What it does
is compare the value in A with another register, or a value after the instruction. If they are the same then it sets the zero flag.

For example, say you wanted to CALL a routine if the A register contained 13. You would use a piece of code like this:

## CP 13 <br> CALL Z, routine

Although the zero flag is the most important one in this context, the other flags are set too. You can compare A,B,C,D,E,H and L with A, as well as a byte fetched from (HL), from (IX+displacement) or from (IY+ displacement), and a value directly after the CP instruction (as in the above instruction). CP A fulfills a similar function to OR A and AND A.

Incidentally, you'll rarely find CP 0 in a machine code program. It's far easier to use something like OR A, which sets the zero flag if the contents of A is zero but does not affect the value in A .

There are a few variations on CP , too these are CPI, CPD, CPIR and CPDR. What CPI (ComPare and Increment) does is compare A with a value fetched from (HL), and set the $Z$ flag accordingly. It then increments HL (so another CPI will fetch a value from the next memory address) and decrements BC (which is to be used as a counter).

CPD is similar, except HL is decremented rather than incremented. CPIR and CPDR are repeating versions of CPI and CPD: what happens is that CPI (or CPD) is carried out, and if BC is not zero AND the zero flag hasn't been set (i.e. A hasn't been found at (HL) ) then
the instruction (CPI/CPD) is repeated.
For example:

> LD BC, \& 4000
> LD HL,\&C000
> LD A,5
> CPIR

This looks through screen memory (the $\& 4000$, or 16384, bytes from $\& C 000$, or 49152) for the value 5 stored in a byte. If it's not found, then BC will be 0 , HL will be 0 (because it has been incremented \&4000 times from \&C000, and has wrapped round back to 0), and the zero flag will not be set. Otherwise the zero flag will be set and HL will contain the address where it was found.

The repeating instructions are not confined to CP , either. You may have heard that one of the features of machines such as the Amiga, STE etc. is that they can move memory about very quickly with their "blitter". The CPC can't quite match that, but the Z80 does have a set of very useful op-codes for moving memory.

LDI copies a byte found at (HL) into the address (DE). It then increments DE and HL, and decrements BC. So, if you wanted to copy three bytes from \& 2000 to $\& 4000$, you would do:

```
LD DE,&4000
LD HL,&2000
LDI
LDI
LDI
```

At the end, DE will contain \&4003, HL $\& 2003$, and BC three less than whatever it was originally. LDD is similar, but decrements (rather than incrementing) DE and HL. For example, if you wanted
to copy three bytes from \&2000 to \&2001, you would think of

LD DE,\&2001<br>LD HL,\&2000<br>LDI<br>LDI<br>LDI

But this won't work, because after the second LDI, HL needs to fetch a value from \&2001, and the first LDI had put in here the value of \&2000, so in effect all you would be doing is setting the three bytes from \&2001 to \&2003 to whatever was in \&2000 originally. Instead, you would do:

## LD DE,\&2003 <br> LD HL, \&2002 <br> LDD <br> LDD <br> LDD

Hopefully you can see how this will solve the problem!

You might want to shift, say, 80 bytes at once. It would be a pain to have to enter 80 LDIs (or LDDs), so you can use the LDIR or LDDR instruction. What this does is repeat LDI (or LDD) until BC is 0 . The effect of this is to copy BC number of bytes from (HL) to (DE), such as this routine to copy \& 4000 bytes from \& 4000 to \&C000:

> LD BC,\&4000
> LD HL,\&4000
> LD DE,\&C000
> LDIR

Or using LDDR:
LD BC, \& 4000
LD HL,\&7FFF
LD DE,\&FFFF
LDDR
Interestingly, the effect mentioned earlier where LDI in some cases of overlapping values sets all the values the same, can have uses. Take this routine:

XOR A ;sets A to 0
LD (\&C000), A ;put A, which is 0 , into memory location \& C 000

LD BC, \& 3FFF
LD HL,\&C000
LD DE,\&C001
LDIR
;copy \& 3FFF bytes
from $\& C 000$ to $\& C 001$. You can
hopefully see that this will clear the screen, as it sets all values from \& C 000 to \&FFFF (screen memory) to 0!

Incidentally, the OUT and IN op-codes (which will be dealt with later) also have repeating variations

## (INI,IND,INIR,INDR OTI,OTD,OTIR,OTDR)

but, due to the design of the CPC, these are unusable on our computer!

Before you tackle this check that you're quite sure of the following concepts...

* Binary numbers.
* What the different registers of the Z80 are.
* What flags are available.

The instructions dealt with now are "shift" instructions and "rotate" instructions.

What these instructions do is to either shift or rotate (surprisingly enough!) a register, or value held in memory, to the left or right, binary-number style. The basic principle behind a shift or rotate left, for example, is something like this:

You originally have this number: 0001 1001 (decimal 25) Shifted left it becomes 00110010 (decimal 50)
As you can see, all the digits have moved one place to the left.

Have a look at the decimal values on the right. The value has doubled, from 25 to 50. This has a logical enough explanation: the bit which was originally bit 6 (i.e. 64 in decimal) has become bit 7 (128), that which was bit 5 (32) has become bit 6 (64) etc. All these values have doubled in being moved left, because they are powers of 2 , and as you shift them left you are increasing the power of 2 that they are (e.g. bit 6 to bit 7 is like $2^{\wedge} 6$ to $2^{\wedge} 7$ ), i.e. doubling them. Similarly, a shift/rotate left could function as a division by 2 .

However, there are a lot of these shift/rotate instructions which have different effects. I'll explain each one below. Note that you can carry any of them out on a register ( $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}, \mathrm{H}, \mathrm{L}$ ), on a location in memory (i.e. (HL), (IX+displacement) or (IY+displacement) ). Remember that bit 0 is the one on the
far right (i.e. 1 in decimal) and bit 7 is that on the far left ( 128 in decimal).

## SHIFT INSTRUCTIONS

SRA (Shift Right Arithmetic) This moves bit 7 to bit 6 , bit 6 to bit 5 , bit 5 to bit 4 , etc. Bit 0 is placed into the carry flag. The value in bit 7, as well as being transferred to bit 6 , is kept in bit 7 too.

SRL (Shift Right Logical) As with SRA, bit 7 moves to bit 6, bit 6 to bit 5, etc. and bit 0 goes into the carry flag. The difference is that bit 7 is set to 0 .

SLA (Shift Left Arithmetic) Bit 7 goes to carry, bit 6 to bit 7 , bit 5 to bit 6 , bit 4 to bit 5 etc. Bit 0 is set to zero.
(Incidentally, you might have noticed the absence of "SLL", Shift Left Logical. This does exist, but not officially - it's one of the famous undocumented opcodes of the Z8O. Assemblers don't usually recognise it as a valid op-code, unfortunately.)

## ROTATE INSTRUCTIONS

RR (Rotate Right) Bit 7 goes to bit 6, bit 6 to bit 5, bit 5 to bit 4 etc. Bit 0 goes to the carry, and the old value of the carry goes to bit 7 .

RRA (Rotate Right Accumulator) This is like the $R R$ instruction $R R A$, especially for the A register.

However, it takes up one byte in memory rather than two, and there is no effect on flags except carry and auxiliary carry (unlike $R R$ A which will change all the other flags according to the result).

RRC (Rotate Right Circular) Bit 7 goes to bit 6 , bit 6 to bit 5 etc. Bit 0 goes to bit 7 (as well as going to the carry flag).

RRCA (Rotate Right Circular Accumulator) Like RRC A (see RRA above for the difference).

Now that you've got this far, it's probably a good idea to sit back and read this lot all over again to refresh your memory and to check that it's clear in your mind. There are some quite complicated op-codes coming up, so it will be easier to understand them if you know the principles learnt so far!


# Market Stall with Angie Hardwick 

Well folks here we are HAPPY NEW YEAR 1998 there is a lot happening this year, for me the good news is the launch of a new PC magazine based on the same lines as my beloved Wacci in which I shall be running a buy and sell page but don't fret I won't be leaving Wacci that would be like cutting off my right hand. But for those of you interested do contact me and I can share the details with you.

## FOR SALE:

BARGAIN OF THE YEAR !!

cPC 6128 Keyboard with Disc Drive, 1 m Printer lead and Joystick extension socket and lead. HiSoft devpac Editor Assembler and manual for $464 / 6128$. Amsword word processor and manual for 464/6128. Firmware for Amstrad tape and manual for 464/6128. Ocean Interactive Laser Compiler with 3 " disc and manual. Adam Machine Language Compiler on tape. 16 tapes including Connect 4, Turtles Graphics, Maze Mouse, Hoppit, Draughts, Tape Scanner and Screen Dump.

## BOOKS:

Ready Made Machine Language by Joe Pritchard. Advanced Amstrad Basic by Joe Pritchard. Introducing Amstrad CP/M Assembly Language by Ian Sinclair. Amstrad CPC 464 Whole memory Guide by Don Thomasson. The Amstrad Disc Companion for CPC $664 / 6128$ by Simon Williams. The Amazing Amstrad Omnibus by Martin Fairbanks.

## INTERESTED ALL TO GO FOR

£10.00 telephone Dundee 01382-660448 can also sell individual parts for offers.

FOR SALE:
$51 / 4^{\prime \prime}$ Drive
£8.00
3.1/2" Drive with side switch
£27.00
6128 Keyboard
$£ 9.00$
Colour monitor £15.00 all plus post and packing.

PLEASE CONTACT:
FRANK FROST 4, Rectory Drive, Wooton Ryde, Isle of Wight PO33 4QB TEL: -1983-882197

FOR SALE:
One CD plastic case which holds one CD
a bargain for $£ 10.00$ If you want this CD case then we will throw in ENCARTA 95.
Just as a matter of interest Encarta 95 is for the PC, System Requirements : Multimedia PC with 386DX or higher processor. CD Rom Drive, Audio board, Headphones or Speakers and SVGA Monitor with 256 colours or higher. 4MB of Ram, at least 3.5 MB of disk space Microsoft Windows 3.1 or later MS DOS operating sysem version 3.1 or later Microsoft Mouse.

## PLEASE CONTACT

Angie Hardwick, 23 Station Place, Bloxwich, Walsall. WS3 2PH TEL: 01922-449730

## WANTED

Maps and or Cheats for
(1) Jet Set Willy
(2) Alien 8
(3) Nightlore

Also games on TAPE for Amstrad 464 Also Multiface around $£ 25.00$.

## PLEASE CONTACT

Mark Sutherland 16 John Street Helenburgh G84 8BA (Sorry no phone)

Dennis Read wants
Eagles Nest on Tape or Disc and a 664 in good condition at a resonable price

## PLEASE CONTACT DENNIS

at 46 Salford Road, Olton Solihull West Midlands B92 7NG TEL 0121-707-1136

## Frank Cosgrove wants

24 pin Dot Matrix Printer compatible with CPC 6128 within travelling distance of Bournemouth

PLEASE CONTACT FRANK at 59
Fenton Road, Southbourne, Bournemouth Dorset BH6 5BS TEL: 01202-432973

## THE DIRECTORY

## ComSoft

For products like Protext, Utopia, Prospell, MicroDesign+ contact Peter on telephone no. 01415544735

Credit Cards welcome

## H.E.C. (Amstrad Repairs)

47-49 Railway Road, Leigh, Lancashire WN7 4AA Telephone 01942 261866/672424 Quality repairs with most at standard charges. Free technical support, advice and information on all repairs carried out. A $10 \%$ discountis available to WACCI

## CrystalX Software

11 Vicarage View, Redditch, Worcs B97 4RF
Stellar Outpost, excellent strategy game.Tape $£ 2.50$ Disc $£ 3.99$
(Cheques payable to A Swinbourne)

## Merline-Serve/KAD

Brympton Cottage, Brunswick Road Worthing, Sussex BN11 3NQ Tel/Fax 01903206739 If you can't get hold of a CPC item, then try us, because we have probably got what you want. the latest Catoloque. KAD , a disc based PD library containing over 200 discs. For a cataloque send a disc ( $3^{\prime \prime}$ or $3.5^{\prime \prime}$ ) and a SSAE.

## Three Inch Drive Belts

AJ Howard, 65 Altyre Way,
Beckenham, Kent BR3 3ED For the CPC and PCW.
Flat fitting with instructions Only $£ 2.25$ including P\&P.

# The Right Perspective 

 by Jonty JonesAny works of art or doodles alike are all, when push comes to shove, nothing if not in the right perspective. With nothing more than a few simple lines and shades it's easy to make a doodle stand out from a page no matter what DTP package you use.

GET IN THE SHADE

Simply using two shades you can change a simple 2D doodle into a 3D doodle in seconds, take a look at FIG.1. By overlaying two circles at a slight off-set then adding a couple of lines you can create a cylinder. Use the darker
the air. Look at FIG.2. By drawing a central vertical line with a horizontal line at its base. Draw about six to eight lines a reasonable distance apart out from the junction of the vertical and the horizontal lines meeting point. From this bunch of lines you can create ANYTHING

shade you have created on the INSIDE or off-side and the lighter shade on the OUTER surfaces. Try drawing two circles farther apart to increase the length of the cylinder, but keep the shading the same. This method can be used on shapes other than just cylinders of course, try out some squares or rectangles. Keep it simple for now until you get the hang of it first.

## BEING SCENE IN THE STREET

The easiest thing to draw is a PERSPECTIVE, trust me. Have you ever come across the term LAYLINES? Well, these are imaginary lines that run across the surface of the earth and come together in one focal point. When you walk down any street you are looking down another version of these lines, but this time they are in
from a ship coming over the horizon or a line of trees or buildings disappearing into the distance or horizon.
buildings draw some vertical lines and horizontal lines from any points you like, after all nobuilding is the same size as its neighbour.
It makes NO difference which of the off-set lines you choose to be the TOP of your building as long as you use ONLY the off-set lines first drawn, don't add new ones.

## KEEP YOUR DISTANCE

ALL details that run off into the distance get smaller. So to keep this theme going with, say, windows, in the buildings at about half- way down or three lines in, halve the size of the windows.

From the next three lines in draw the window half as small again and cut their numbers by half as well as moving them closer together. In the LAST two lines or building you can get away with just drawing two sides of any window.


NOW FORM A STRAIGHT LINE!
Keeping all the off-set lines in the FIG. 2 (left hand side) as tops of

## MAKING LIGHT OF IT!

Always remember the one rule about light, IT DOESN'T BEND! The best
place to have light coming from in a street scene is from the central point. This helps reduce the need for details that get in the way as a picture moves off into the distance anyway. From approx half way into the scene you can use a single solid shade to create the darker areas of a building and eliminate any details from the buildings themselves at that point also.

Q7) Can I save my clip art drawn using Art Studio in colour?

A1) Replace your MD disc with a freshly formatted disc, either data or in the case of 3.5 " $/ 5.25^{\prime \prime}$ drives D1 - D2 format, in your DESTination drive. Press f2 on the function keys whilst in ?????? menu. Now either move the wire frame over the whole screen with the


DISMANTLE THAT PROBLEM
Here are some questions that I have found cropping up on more than one occasion: to most of us they seem like simple run-of-the-mill questions but some people still require help from time to time.

Q1) How do I save a picture using Microdesign and how do I save it as clip art?

Q2) How do I copy and OVERLAY a section or FULL picture using Microdesign?

Q3) Why, when I import Art Studio screens into Microdesign, do they turn into disjointed out-offocus lined pictures?

Q4) Can I use the ICONS I create in Microdesign in another DTP and if so, how?

Q5) Why are my pictures that I saved using Advanced Art Studio with PALETTE not re-loading in colour as I drew them?

Q6) WHY are my colour pictures drawn using Art Studio not printing in colour even if I use a colour printer?
cursor keys and press f0 or ENTER to select and then save the file. By using the space bar you can manipulate the wire frame at anytime within Microdesign to get a CUT of a section or WHOLE picture. Doing this whilst saving a file you create a CLIP ART style file.

A2) Select the BLOCK of picture whilst in DETAIL function that you want to copy and then overlay. Choose COPY and press F8 to allow merging of the block at any point available in the screen. Don't worry if you don't get it in the right position at first, simply press "." to re-do it until you get it right.

A3) You MUST inform Microdesign that it is either a MODE 0,1 or 2 screen BEFORE you convert it. Microdesign will automatically convert a screen into a MODE 2 format on default.

A4) Yes, although not in its original ICON format: (perhaps a feature Richard MIGHT want to incorporate into the improved Power Page when he's at it?). You'll have to save the ICONs as a PICTURE or SCR file using the

CLIP ART routine described earlier. Load each single file into PPage using the CLIP ART option. Either save them onto a PPage disc in PPage CLIP ART (CUT) format OR as a SCREEN option and then resave through Art Studio's CLIP ART (WINdow) option.

A5) IF you save an Advanced Art Studio screen or WINdow file with the PALETTE option ON, then you MUST switch this option ON again to re-load the screen WINdow file back into its original form.

A6) As with most things in life you still have to work for the end result or go to other utilities in thiscase. The fastest and less troublesome method is to use a colour dump routine such as COLOUR DUMP 3. Trying to print out a colour picture without a colour print driver will only result in a SHADED dump. IF you know how to incorporate the codes into a small external routine then there is no problem, but not everyone has that skill, right?

A7) Yes, simply switch on PALETTE when saving/re-loading the WINdow file(s). The last palette you created/saved will reload with the file(s).

Well that's the end of that then for this issue. As always, if you want a problem sorted I'm only a 26 p stamp away: errr, that is if you include a stamped self addressed envelope of course!!!

## CONTACT:

> JONTY
> 17 BEECH WAY NORTH SEATON ASHINGTON NORTHUMBERLAND
> NE63 9TD
> ENGLAND

OR TEL: 01670852835
10am - 10 pm
SAT - SUN

Jonty


| HOMEGROWN DISC 5 UTILITIES DISC 3 (Continued) |  |
| :--- | :--- |
| DIREDIT | A complete directory of your disc files. |
| DURNCALC | A utility to use with MASTERFILE 3. |
| EXPRINT | Print ASC11 codes greater than 127. |
| FILE-FAX | Print text files to your personal organiser. |
| GRAFPLOT | Plot a graph on the screen. |
| HEX-BAS | Make a data loader from a HEX file. |
| INVGEN | An invoice generator. |
| LNA | A logic network analyser. |
| MONTHLY | Make your own monthly calendars. |
| OHM | OHM's law calculator. |
| OSKD | On screen keydef. |
| PI | Calculate to decimal places. |
| PRINTCAT | Produce a disc inlay card. |
| RESID | A resistor information calculator. |
| SPX | Play stocks and shares. |
| TYPINGV2 | A typing course. |

## HOMEGROWN DISC 6 - GAMES DISC 1

CHESS Play against the computer.
CRAIG Educational program, recognize words.
DRAUGHTS Draughts tutorial game.
EDBUTT Amusing little game.
FRUITRUN Gamble against the computer, fruit machine.
KNOCKOUT Scoreboard type game.
LOOT
MAGICSQR
MATCH-IT
PGD
SELFDEST
WILD
BACKGAM
DOMSPLAY
FOOTBALL
GOMOKU
NOMOPOLY May straght ines aga the computer.
NOMOPOLY
PONTOON

CAVERNS
CHARDES
DARTS
ENGLE
FWORM
GRIDWAR
HELPHAND
LIFE
LOCKNKEY
OTHELLO
STARFIRE
VADERS
XOX
DIAMONDS
ESCAPE
GO
HOTRODS
MINES
NITESHOW
SHEEPDOG
SHIFTY
SNAKES
XSUN

Hunt for the mystic rings of power. A character designer.
Championship darts.
Cover the Pyramids with your foot prints. Guide the worm through the cabbage patch. Guide the warriors to safety.
Help you to solve problems.
What the future holds for you?
Find the right key in the maze.
A counters game.
A fast shoot um up game.
An educational Maths game.
Naughts and crosses.
Mine the diamonds.
Escape from WACCI HALL. Board game.
Car racing, how good are you at the wheel?
Find your way through the mine fields.
A Laser beam show.
Round up the sheep and pen them.
A Jigsaw game.
Guide the snake through the maze.
Naughts and Crosses.

## HOMEGROWN DISC 9 - GAMES DISC 4

3DXOX A 3 dimensional naughts and crosses game.
BEETLE Drive your VW out of town.
DRIPZONE You will get hooked on this one.
INVADERS A good space invaders game.
OTHELLO Another board game.
PACPLANT This game will keep you going forever.
PAIRS
PATHFIND
STORY
JGGSAW

Use your observation to match the cards. Find the right path to the diamonds. This one is for those with warped minds. Puzzle games. Beat your computer.

HOMEGROWN DISC 7 - GAMES DISC 2
BOUNCER Keep the ball bouncing.
CRAZYMAZ Another maze game.
MISSILE Shoot down the planes with your missiles.
PATIENCE The card game.
PHAROAH Find your way to the tomb, treasures to win.
SNAKES
A Snakes and Ladders game.
STARCHAS Use your laser guns to shoot um down.
TRIVIA Test your knowledge with this quiz game.
WAR
ZENNER
AUTHOR
DOMINO2
TUNNEL
UFO
MASTERS
TEE-OFF
OZ
A war game would you believe.
A card game against the computer.
Who wrote it?
Another dominoes game.
Collect Crystals to build up earths power.
Spacy shoot um up game.
Adventure game.
Play golf on the screen.
Move the blocks around a grid to win.
HOMEGROWN DISC 8 - GAMES DISC 3
4INAROW Get four counters in a row to win.
ADULT Statistics game.
BOMBER Drop your bombs, but watch out for missiles.
BREAKOUT
Escape through the wall.

## HOMEGROWN DISC 10 - UTILITIES DISC 4

120D A text editor.

ASCII MO2 Convert ASCII files for Mini Office 2.
DI-SYMM Symmetrical dimensions on the screen.
KIRKEDIT A word processor.
MORSE Learn morse code the easy way.
SDUMP1 A screen dump facility.
SEARCHER Edit and merge disc files easier.
SORTEDIT Sort and edit your disc files.
TINYEDIT A text editor.
WORDS A word search program.
XLINE Speed up loading of text files.
DATABASE A large database program.
MF-LABEL A disc labeller, use with MASTERFILE 3.
NPC A role playing system program.
READ Catalogue and read files from disc.
TRANSFER A Tape to Disc transfer program.

## HOMEGROWN DISC 11 - UTILITIES DISC 5

AMSLABEL Disc label printing program for the CPC 464.
DISPLAY Load and display digitised images.
MEMMAP Print the contents of the computers memory.
RINGMENU A useful subroutine to add to basic utilities.
DISPLAY2 View more digitised images.
XMAS View a christmas card on the screen.
(Homegrown are only available to members)

HOMEGROWN DISC 12 - UTILITIES DISC 6

| ART | Produce pull down menu's with boarders. |
| :--- | :--- |
| FRAME | Play with wire frame models on the screen. <br> Generate a screen picture,save it to TAPE and <br> GRAPHIC |
|  | reload into your own programs. |
| HEXENTER | Type in HEX data using the numeric keyboard. |
| README | A machine code tutorial. |
| RSX | Play with the upper rom's. |
| DAVART | A art program for the CPC 6128. |
| ID | Disc utilities. |
| SDUMP'S | Various screen dump facilities. |
| WORLD | A map of the world is drawn on the screen. |

HOMEGROWN DISC 13 - UTILITIES DISC 7
ADAM Assemble, disassemble and monitor text files
BANNER Banner printing facility.
CLOCK1 On screen clock.
COMPLEX Solve complex maths.
CONTOURS Plot a mathematical function, get a print out
DIAB
ENT A music tone envelope designer.
MUSIC Music composer.
ORGANISE Print out calendar pages, name and addresses
ORREY Explore the solar system.
POSTER Make a poster (needs PRINTMASTER)
PRINTER Improves your print out.
SCANNER Read and edit text files.
STROBE Make your own kaliedoscope.
WRITE-IT A word game to write correctly.
CAUTO Linear cellular automata program.
CGP115 Screen dump facility for TANDY CGP printer.
DFI
MCPGRAPH
PTXGG
RLOAD 2
XDRAW
XP

Disc format investigator.
A bar graph generator.
Protext graphics code generator. 6 new RSX commands for REGILOAD 11. A crossword drawing program. (Now PD) Crossword complier. (Now PD)

## HOMEGROWN DISC 14 - UTILITIES DISC 8

BANKER Keep track of your finances.
BIG LABEL Prints out WARNING. (computer disc)
DWPRINT Prints in double width.
WACCIWRD A word processor with associated programs.
SQUEEZE Screen squeezer.
PCBDIAG A printed circuit diagram on screen.
PCBDRAFT Design a printed circuit board on the screen
SPELL 2 Large spell checker.
UPDATE A large dictionary to use with SPELL 2.

## HOMEGROWN DISC 15 - PAGESETTER 64

An ex-commercial DTP software package that is NOT PD or SHAREWARE and therefore ONLY available to WACCI MEMBERS

HOMEGROWN DISC 16 FAMILY TREE Not for the 6128+
Family Tree is a genealogical database with capacity for over 700 records of individuals.
Dates of birth and death may be stored, and charts of descendents may be printed on a Epson compatible printers capable of taking tractor-fed paper
It is written in Locomotive BASIC and Z80 machine code. Side 2 is already formatted and ready to use.

HOMEGROWN DISC 17 FAMILY HISTORY CPIM 3.1
Before doing anything you should make a copy of your original disc, then should anything go wrong and the disc becomes corrupt in anyway you will always have your original to fall back on. You will need your CP/M 3.1 (Plus) system disc, plus your Family History Disc. Before you start to use this excellent program I suggest that you first make a hard copy of the manual which takes up most of side B: Please make sure you've loads of paper and while its printing why not make yourself a cuppa. Once you've made your hard copy take a little time to study it then you won't get yourself in a muddle.

## PUBLIC DOMAIN EXTRA 1 - 6

PUBLIC DOMAIN EXTRA 1

MAXIDOS

OPTIMIZE
EDITOR
ARCHIVE
PROCOPY
PROGRAM1
PROGRAM2
RENAME
Is a very powerful disc utility with the added benefit of recognising RAMDOS formats D1, D2, D10, and D20. Backup copier etc. Will re-organise the disc files so that they use sequential sectors - Good stuff! Powerful disc editor. It saves an entire disc of any of the MAXIDOS recognised formats to TAPE! Disc to disc copier. Tape to disc transfer. As above. Rename files.

PUBLIC DOMAIN EXTRA 2
SUPER MEDDLER Various hacking programs. HACK PACK More hacking programs.

## PUBLIC DOMAIN EXTRA 3

| BONZO DOO DAH $\quad$ | Disc utilities. |
| :--- | :--- |
| DIVERSE | Great pictures \& Adventure game. |

## PUBLIC DOMAIN EXTRA 4

MS800
BLITZ
DATABASE
Extra large disc formatter. Comes with associated programs.
Powerful hacking programs.
Info on game hacks.

## PUBLIC DOMAIN EXTRA 5

BONZO BIG BATCH Database.
SCREEN DESIGNER Design sprites and screens.
POOLS PREDICTOR The title says it all.

## PUBLIC DOMAIN EXTRA 6

FLASH PACK
POSTER
DEDIT
SCRCOMP

Add RSX's to Basic. Comes with demos and help files.
Make your own poster.
Powerful disc editor.
Screen compressor.

# Programmers Patch by Hilary Phillips 

Yes, this month the proofreader gets a go at writing an article, to give Matthew and Stephen a break. This was intended to be a Christmas Special on card games, but WACCI's brief bi-monthly spell put paid to that idea so it has to be a New Year's special instead. I started programming card games after seeing a rather good patience game on my sister's Mac and wondering whether I could reproduce it on Matthew's CPC. I could, but the listing's a bit long to put into a two-page WACCI article so here is a shorter, multi-player game. Fun for all the family in the festive season with Pelmanism, or Matching Cards.

In the fine tradition of this series I'm going to go through the program showing how it works and picking out the most horrible lines and trying to explain how on earth I came up with them. I'll try to keep it down to just one article, though.

## SETTING OUT

The first few lines set up what we will need to play the game. In line 10 we create a special character so that the number " 10 " can be printed up as one character. Line 30 sets up arrays for the pack, the cards in the two-dimensional layout, the names of six players and the numbers of pairs won by the six players. Line 40 defines a string which we will use to print up the values of the cards.

In line 50 we put 52 entries in the "pack" array. We could just represent the cards by the numbers $1-52$ but it turns out to be easier to manipulate them in other card games I have written if we use 1-13, 1527, 29-41 and 43-55 for clubs, diamonds, hearts and spades respectively, hence the peculiar expression in line 50. Line 60 sets up the inks (black, red, white, and green for the card table) and line 70 gives us a window at the bottom for messages.

## A GOOD DEAL

The game starts by GOSUBbing 1000 to deal the cards out on the table. In line 50 we put the pack in order so we must shuffle the cards as well as dealing. We do both at the same time in line 1010. In a loop starting with $\mathrm{n}=52$, we pick a random card between 1 and $n$ using the expression cdel=INT(RND*n+1) We put this card in the layout array at c (row, col) and move the nth card in the pack to the position vacated by our chosen card. This leaves us with all the undealt cards in the first $n-1$ positions in the pack, and the
dealt out cards in the layout array. GOSUBbing 3500 prints the back of the card at the position for c(row,col). We can then decrease $n$ by one and go through the process again until all the cards have been dealt.

We need line 1020 as well as 1010 to do this because the layout array is not a rectangle but 7 rows of 7 and an extra row of 3 cards.

## PRINTING

Let's now look at the routines for printing things in lines 3000-4530 as they are used by many bits of the program. Each routine uses the position markers (row,col).

## 3000 Printing cards.

For simplicity in the version for this article, the cards are displayed by just two characters, one for the value ("card") and one for the suit. These are calculated from c(row, col) in line 3000. "card" takes a value from 1 to 13 and "suit" a value from 0 to 3: c(row, col) is in fact card + (suit*14), hence card $=c$ (row, col) $\bmod 14$ and suit $=\mathrm{c}($ row, col $) \backslash 14$.
The suit characters are in the ASCII character set which makes things very easy. The character for "card" is held in the string card\$ defined in line 40. All we have to do to print it is to take out the appropriate character using MID\$. The colour to print the cards is slightly tricky to work out as we want black (0) for suits 0 and 3 (clubs and spades) and red (1) for suits 1 and 2 (diamonds and hearts). Try out the expression for pcol and you will see that it works.

## 3500 Printing backs of cards

This is very simple: the backs are two characters gleaned from the ASCII character set.

## 4000 Deleting cards

This is ever so easy as all we have to do is print spaces over the top of the card previously there.

## 4500 Printing cursor

This is an "X" spread over two characters, printed in white in transparent mode over the card below. It is not printed up if the card is the one just selected, i.e. in the position ( $\mathrm{r} 1, \mathrm{c} 1$ ).

## 4520 Deleting cursor

We do not need to delete the cursor if it is over the card just selected, as it was not printed there in the first place. If there was no card under the cursor then the cursor is deleted using the routine at 4000: otherwise the back is printed up again using 3500 .

## ON WITH THE GAME

Lines 110-140 allow the user to select the number of players and enter their names, the first 16 characters of which are used by the program and are printed up to the right of the dealt out cards. All six players' scores are set to 0 regardless of how many are playing as line 150 checks the sum total of pairs won to determine when the game ends.

## TAKING TURNS

We now GOSUB the main loop in 2000 for each player's turn. The cursor starts off at $(0,0)$ and the position of the last card chosen, ( $\mathrm{r} 1, \mathrm{c} 1$ ), is set to be $(-1,-1)$ as this is outside the playing area so won't interfere with the printing up of the cursor. GOSUBbing 2500 tells the player to choose "a card" or "another card" depending on the value of mud\$ - this saves having to put in the same routine twice. Line 2520 waits for the cursor keys or the ENTER/RETURN key to be pressed. It only responds to the

ENTER/RETURN key if there is a card in that position, in which case a card has been selected and we can RETURN.

If a cursor key is pressed we need to move the cursor. This is done in lines $2530-2560$ depending on which key is pressed. If the player moves off the $8 \times 7$ rectangle the cursor wraps round and reappears at the top if it went off the bottom, etc. This is done using MOD. In line 2530 we have to add 8 before MODding by 8 , as the cursor might be at position 0 (the first row) and MOD -1 = -1 , whereas we want 7 , for the last row. Line 2550 is similar.
Before moving the cursor we delete it from its former position, and after moving we print it in its new position.

Once the ENTER/RETURN key has been pressed the card selected is turned over, i.e. printed up by GOSUBbing 3000. The value of the card (which we worked out when GOSUBbing 3000) is stored in cardsel and the position in ( $\mathrm{r} 1, \mathrm{c} 1$ ). The player is then asked to choose another card. Line 2030ensures that they do not choose the same card again, prints up the second card selected and then compares the values of the two cards.

If they are the same then we GOSUB 2100 , remove the cards by deleting them and setting $c(r o w, c o l)=0$ for each position, and add 1 to the player's score of pairs won, printing it below their name on screen. The player then gets another turn. If the cards do not match then they are shown for a set length of time so that all players have a fair chance to see what and where they were, and then they are turned over again by GOSUBbing 3500 , and it is the next player's turn.

## AND THE WINNER IS...

Once all the pairs have been won, the WHILE-WEND loop in line 150 ends and we get onto the business of working out the winner. As more than one player might have got the highest number of pairs we store a character for each of the winners in win\$, and the length of win\$ shows how many winners there are. We can then print up appropriate congratulatory messages in line 220 . Line 230 waits for you to decide whether to play again or not by pressing " P " or " Q ", and if you quit then line 250 resets the screen and text settings using two firmware calls.

## COULD DO BETTER

This is a very basic version of the game,
and lots of things could be done to spice it up. The cards could be a better shape and look more like playing cards. You could include appropriate music when
cards match or do not match. Or you could dispense with the computer altogether and use a simple pack of 52 cards and a table.

## LISTING

5 REM Pelmanism v.2.0 (Simple version), Dec 1997 by Hilary Phillips
10 SYMBOL AFTER 255:SYMBOL 255,76,210,82,82,82,82,76,0
30 DIM pack(52):DIM c(7,6):DIM pl\$(6):DIM pw(6)
40 card\$ = "A23456789"+CHR\$(255)+"JQK"
50 FOR $n=1$ TO 52:pack $(\mathrm{n})=\mathrm{n}+(\mathrm{n}-1) \backslash 13:$ NEXT
70 INK 0,0:INK 1,6:INK 2,26:INK 3,9:MODE 1:PAPER 3:CLS
80 WINDOW\# 1,1,40,24,25:PAPER\#1,3:PEN\#1,2:CLS\# 1
100 GOSUB 1000
110 LOCATE\# 1,1,1:PRINT\# 1,"Enter number of players ( $1-6$ )"; :npl $=0$ :WHILE npl $<1$ OR pl>6: npl = VAL(INKEY\$): WEND: PRINT\#1,npl
120 FOR $n=1$ TO npl:LOCATE\# 1,1,1:PRINT\#1,"Player";n;"enter your name:";
CHR $\$(20)$ :LINE INPUT\# 1, a\$:pl\$(n)=LEFT\$(a\$,16)
130 LOCATE 25,n*3-2:PAPER 3:PEN 2:PRINT pl\$(n):NEXT
140 FOR $\mathrm{n}=1$ TO 6:pw(n) $=0:$ NEXT:turn $=1$
150 WHILE $p w(1)+p w(2)+p w(3)+p w(4)+p w(5)+p w(6)<26: G O S U B ~ 2000: W E N D$
200 win\$="'":FOR $\mathrm{n}=1$ TO npl:IF pw(n)=MAX(pw(1),pw(2),pw(3),pw(4),pw(5),pw(6))
THEN win $\$=$ win $\$+$ CHR $\$(n)$
210 NEXT:LOCATE 1,9:PAPER 3:PEN 2:PRINT"The winner";
220 IF LEN(win\$) $=1$ THEN PRINT" is ";pl\$(ASC(win\$));"."ELSE PRINT"s are:":FOR $\mathrm{n}=1$
TO LEN(win\$):PRINT pl\$(ASC(MID\$(win\$,n,1))):NEXT
230 LOCATE\# 1,1,1:PRINT\# 1,"Press P to play again, Q to quit";CHR\$(20);:a\$='"'WHILE
$\mathrm{a} \$<" \mathrm{P}$ " OR $\mathrm{a} \$>" \mathrm{Q} ": a \$=$ UPPER $\$($ INKEY $\$$ ):WEND
240 IF a\$="P" GOTO 50
250 CALL \&BC02:CALL \&BB4E:MODE 1:END
1000 LOCATE\#1,10,1:PRINT\#1,CHR\$(17);"Dealing...";CHR\$(20);
1010 n=52:FOR row=0 TO 6:FOR col=0 TO 6:cdel = INT(RND* $\mathrm{n}+1$ ):c(row,col)
=pack (cdel):pack(cdel) =pack(n):GOSUB 3500:n=n-1:NEXT:NEXT
1020 FOR col = 0 TO 2:cdel = $\mathbb{N T}\left(\mathrm{RND}^{*} \mathrm{n}+1\right): c($ row,col $)=$ pack (cdel) :
pack(cdel)=pack(n):GOSUB 3500:n=n-1:NEXT:RETURN
2000 row $=0:$ col $=0: r 1=-1: c 1=-1$ :GOSUB 4500
2010 mud\$ = "':GOSUB 2500:GOSUB 3000:r1 = row:c1 = col:cardsel = card
2020 mud\$="nother":GOSUB 2500
2030 IF row<>r1 OR col<>c1 THEN GOSUB 3000 ELSE 2020
2040 IF card=cardsel THEN 2100 ELSE 2200
2100 LOCATE\# 1,1,1:PRINT\# 1,"They match! Well done ";pl\$(turn);".";CHR\$(20):
FOR delay $=1$ TO 500:NEXT
2110 GOSUB 4000:c(row,col) $=0$ :row=r1:col $=\mathrm{c} 1: c($ row,col $)=0:$ GOSUB 4000
$2120 \mathrm{pw}($ turn $)=\mathrm{pw}($ turn $)+1$ :LOCATE 27,turn*3-1:PAPER 3:PEN 2:PRINT pw(turn): RETURN
2200 LOCATE\# 1,1,1:PRINT\# 1,"They don't match!";CHR\$(20):FOR delay=1 TO 5000: NEXT
2210 GOSUB 3500:row=r1:col =c1:GOSUB 3500:turn=(turn MOD npl) +1 :RETURN
2500 LOCATE\#1,1,1:PRINT\#1,"Choose a";mud\$;" card, ";pl\$(turn);".";CHR\$(20)
$2510 \mathrm{kp} \$=$ "'":WHILE ( $\mathrm{kp} \$<\mathrm{CHR} \$(240)$ OR $\mathrm{kp} \$>\mathrm{CHR} \$(243)$ ) AND $\mathrm{kp} \$<>\mathrm{CHR} \$(13):$ kp\$=UPPER\$(INKEY\$):WEND
2520 IF $\mathrm{kp} \$=$ CHR $\$(13)$ AND $\mathrm{c}($ row, col $)>0$ THEN RETURN
2530 GOSUB 4520:IF $\mathrm{kp} \$=$ CHR $\$(240)$ THEN row $=($ row $-1+8)$ MOD 8
2540 IF $\mathrm{kp} \$=$ CHR $\$(241)$ THEN row $=($ row +1$)$ MOD 8
2550 IF $\mathrm{kp} \$=$ CHR $\$(242)$ THEN col $=(\mathrm{col}-1+7)$ MOD 7
2560 IF $\mathrm{kp} \$=\mathrm{CHR} \$(243)$ THEN $\mathrm{col}=(\mathrm{col}+1)$ MOD 7
2570 GOSUB 4500:GOTO 2510
3000 suit $=\mathrm{c}($ row, col$) \backslash 14:$ card $=\mathrm{c}($ row, col$)$ MOD 14:pcol $=\operatorname{MIN}(1$, suit MOD 3)
3010 LOCATE col*3+2,row*2+2:PAPER 2:PEN pcol:PRINT MID\$(card\$,card,1); CHR\$(226+suit):RETURN
3500 LOCATE col*3 +2 ,row* $2+2$ :PAPER 0:PEN 1:PRINT
CHR\$(220)CHR\$(222):RETURN
4000 LOCATE col*3+2,row*2+2:PAPER 3:PRINT " ":RETURN
4500 IF row $<>$ r1 OR col<>c1 THEN LOCATE col* $3+2$,row* $2+2$ PEN 2 :
PRINT CHR $\$(22) \mathrm{CHR} \$(1) \mathrm{CHR} \$(197) \mathrm{CHR} \$(199) \mathrm{CHR} \$(22) \mathrm{CHR} \$(0)$ 4510 RETURN
4520 IF row<>r1 OR col<>c1 THEN IF c(row,col)>0 THEN 3500 ELSE 4000 4530 RETURN

# The News Desk with Angela (ITGA) Cook 

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There must be something in the air as everybody goes PD crazy. Well, Brian and myself at least. Also Philip says he needs some thermal underwear before entering his cold computer room and the newsgroup held a get together in East Horsley, mirroring the Germans who did the same (except in Germany).

## PD OR NOT PD

Firstly lets deal with Brian Watson. Brian posted a message on the Amstrad newsgroup (comp .sys .amstrad $.8 b i t)$ on the first of December stating: "Regular readers of this newsgroup will recall that I recently posted that the sales of Maxam 2 had been awful, probably because of the asking price resulting from the high printing costs of the manual. Well, Peter Campbell and I the WACCO partnership) think we have come up with a sensible solution: As from 1st December, the assembler Maxam 2 is available as Shareware."

## RADICAL

In similar circumstances to Brian, I am closing Radical Software. This is due to very poor sales, rather than the time involved to work on Radical. Who Said That?, Masters Of Space, Star Driver and MegaBlasters have all been put into the public domain now, thanks to the generosity of the authors Stephen Lond Baker and Georg Odenthal.

Masters of Space and Star Driver are available on one disc. Who Said That? takes up two disc sides because of the free software that came with it, but is actually only disc side on it's own. Who Said That? will probably come with the manual as a text file on the disc, more next issue when I've sorted it out.

MegaBlasters also has a manual, though this will not be available as a text file with the game as both discs it comes on are entirely full. I do still have some of the manuals left, and these will be passed on to Brian Watson (Robot PD) so you can still get a copy of this if you want to. But game players probably own't need it as you can work out things as you go along. A word of warning though, MegaBlasters
does still contain bugs. I have tried for at least the last two years, and Rob Buckley before me, to get a fully working version but to no avail. Every copy seems to have the bug in a different place so it seems just pot luck. It's still a very playable game most of the time (I know, I play tested it for weeks and weeks on end) and the bugs just and odd hitch every now and again.

All of these programs may be freely copied by third parties, but permission for PD libraries to distribute must be requested (my address is above). The PD libraries with permission so far are the WACCI library, Robot PD, CPC South West's PD library and, of course, King Arthur's Domain.

The only program Radical sold that is not to become PD is Richard Fairhurst's excellent RoutePlanner. The updated version of the program includes newer roads, more coastline and faster calculation times. RoutePlanner is still available from ComSoft (0141 554 4735) for just £14.95.

The software on the B side of Who Said That? includes a program that generates an odd picture of a tree that's quite relaxing to look at. Stephen told me recently that if left running for 24 hours or more it tends to crash.

If you want to get hold of the new version which is crash proof then send a 3 " disc and SSAE to:

> Stephen Lond Baker, Flat 2 The Granary, Stells Lane, Boston, Lincolnshire, PE21 8AB.

## TIGGER AN IDIOT, OFFICIAL

Philip apologises to all those who have been kept waiting for EuroWACCI 2 and begs for your patience. He will resume normal transmission as soon as possible.

## THE PINK GARLIC

Why we went to a restaurant called The Pink Garlic is anybody's guess, but we did. And a fine time we had too. Brian Watson arranged a Christmas get together for all the people that post messages to the internet newsgroup csa8. Of the many people there are, only eight managed to make it, only five of which actually read the newsgroup.
Undaunted we traipsed around the country side in two cars following Brian going the wrong way who had Richard Fairhurst navigating (RoutePlanner, $£ 14.99$ at ComSoft...). Then we got to the restaurant and I drove off to the station trying to find James Coupe, who was already at the eaterie. $£ 124$ worth of Curry, Lager, wine and ice cream later we headed back to Rob Scott's in Leatherhead for a small celebration (being Rob's birthday).
Paul Fairman went to bed about midnight, my dad went home about 2 am , Brian Watson slept under Paul's keyboard after downing too much Bovarian lager, Richard Fairhurst and Rob Scott staggered to bed about four, James Coupe slept on the welcome mat and Tamsin the Wondercat kept my feet warm. A lovely weekend it was too.

## P.S.

Sorry, I haven't done the CPC South West convention article yet, I'll get the photo's developed and attempt it (again) for next issue.

# Protext Office/Filer by Frank Neatherway 

All businesses need a system of dealing with orders, despatches, invoices, etc., and the documentation and filing necessary effectively to deal with the running of a successful venture. However small the business may be it is just as necessary to have as comprehensive a system as possible. This package consists of a 60-page manual and a disk holding the programs and example files.

INTRO, or FIRST THINGS FIRST.

My habit with any manual is to read it through quickly to try to get the feel of whatever it is meant to do, then just to have a break (coffee and sandwich(es)?) and read it again, slowly, to follow the logic of progression.

Only after that do I attempt to check out any examples on the principle that if I can do them then anyone else could certainly do so. So straight away, let's have a look at the book and the disk to see just what they contain.

## THE MANUAL

Chapter 1 covers all computers and all versions of Protext. Any minor differences are noted and apply mainly to Amsdos CPC users and are due to the limitations of the Amsdos disk operating system. CPC users need Promerge as well but this is already included in the $\mathrm{CP} / \mathrm{M}$ version.

Protext Office and Protext Filer are the two applications programs designed for the small business and work with all versions of Protext to help user to organise the general office documentation by allowing the set up of alpha or numeric datafiles, sort, print the file or labels and to use the data in mail merge routines, generate invoices and statements.

Protext Filer consists of a menu driven datafile management system and a file sorting program. The file sorter can be used from within Protext or as a standalone program. The datafile management system uses Protext's mail merge and EXEC file facilities to provide an easy to use filing system that works from within Protext. Protext Office contains all the above plus the invoice generator and associated facilities: again, this works from within Protext.

## Chapter 2 Protext Filer Tutorial.

The user is guided at every stage for setting up a file from choosing the most suitable file format, i.e., variable or fixed record, to entering data. The user is taken gently by the hand and led at every step through a worked example covering the use of the Filer Menu (fig 1) from
and every field must be present. Briefly, a 'field' is one item of data such as a name or one line of an address, a 'record' is a collection of fields which relate to one subject. For example, in an address file each line is a field, the whole thing for each individual is a record and a number of records constitutes a file.

data input field by field through editing/deleting records to using the Filer Menu options and checking that the file has been initialised correctly. It deals also with the search for or selection of records from a file, print/display records, addition of new records, mail merge labels, file sorting, changing to a different datafile, counting records and production of reports.
The two example datafiles are named "ADDRESS", containing names and their addresses and "MUSIC", containing details of a music collection catalogue. The datafiles can be of two types, i.e., variable length, ideal for addresses where some can be longer than others, or of fixed length where the number of fields per record is constant

Chapter 3 Protext Filer Menu
This discusses the menu options (briefly described in Chap 2) in detail and explains that it makes extensive use of two temporary files, the update file and the selection file, as well as the main file which is the datafile.

## Chapter 4 Sorting Files with FSORT

This program will sort the contents of a file in any of several ways, such as alphabetical, reverse alphabetical, numerical, reverse numerical, name, first or last word in a file. It was designed with the specific requirements of sorting datafiles containing names and addresses but is of more general use and can also sort tabulated columns. FSORT can be used either directly from Protext
command mode or from the Filer Menu There are more options available when used directly but the menu is perhaps easier to use.

Checking for duplicates is a useful feature, those compared are shewn on the screen for visual checking: either can be deleted or both retained. Single records can be found from the current datafile or the update file or the selection file: printing can be done from any file. Users with Protext and Promerge on disk will not have enough memory to load FSORT as well and so cannot sort files from the menu.

Chapter 5 INVGEN, The Invoice generator
This requires the Protext Office Menu. (fig 2) which is called from the Filer Menu. If you are not using a Product file details of products must be entered manually but a Product file can be set up shewing details of the goods which you supply, e.g., code numbers, costs, etc., so that when creating an invoice all that needs to be done is to type in the quantity required and Protext Office does the work for you. INVGEN can be used in different ways depending upon your
printed invoices. All invoices can be sent to printer or to screen and saved for printing later.
Credit notes can be dealt with in the same way as invoices and, if desired, refer to the relevant invoice. Statements can be produced as required with options to shew lists of invoices details, outstanding debits or credits and can be printed immediately or sent to $s$ file for later printing.

Appendix : explains the EXEC command for executing a file of commands.

Note: an EXEC file is one that contains text commands and codes and which when called with the EXEC command will be read by Protext and have the contents acted on as if they had been typed in at the keyboard.

Now let us look at the examples given in the manual and see how they bear out the promises contained therein.
The first observation is that the disk supplied has files using 62 out of a possible 64 before the directory is full so any BAK files created must be deleted before testing can continue. So let's have a look at the menu, letter by letter.

requirements. Datafiles are used to store addresses of account holders and to store product information such as descriptions, product codes and prices.

Since INVGEN is designed to be used in many different situations there is an extensive configuration program. This can include, inter alia, size and layout of the invoice itself, prices calculations, differing VAT codes and rates, discount codes, automated invoice numbering and automatic copying of invoices to disk.
The manual also includes a suggested invoice layout diagram and allows many variations to attempt to cater for existing

1 F: FIND SINGLE RECORD. [From an example file supplied.] The instructions are easy to follow and the record is found without difficulty. You are offered a record, $\mathrm{OK}(\mathrm{Y} / \mathrm{N})$ ? Note: this creates a file FM.ONE with this one address.

2 S: SELECT RECORDS. [From an example file supplied.] To select all people with a Peterborough 'phone number. Enter 'S': you are asked to choose a file, Main, Update or Selection.
Enter 'M': you are asked to select type of condition 1-7.

Note: manual states to enter ' $M$ ' for main file but this must have already been entered to get this condition request.
Choose blank line following record Y/N. Records are now shewn on screen.

## 3 P: PRINT/DISPLAY RECORDS.

Both display to screen and printing were successful.

## 4 C: COUNT RECORDS.

The count of Main File records (12) was successful.

## 5 A: ADD NEW RECORDS TO UPDATE FILE.

For this test I entered four records to create an Update File. However, the file count gave seven instead of just the four entered.

## 6 U: MERGE UPDATE FILE INTO MAIN FILE.

This was done but the count of files in the merged file was 19. The merge was successful but the count was incorrect as it should have been 16 only, $12+4$.

## 7 Z: SORT FILE.

It was only after obeying the instructions and finding myself back at Filer Menu that I found that it was necessary to install FSORT before loading Protext and that was because I couldn't find the Sort options referred to earlier. I didn't find them until I checked FSORT eleven pages later! After this the test was successful although the screen shewed the 16 names and the blank false records found at test 5 above.

## M: MAIL MERGE.

The manual instructions offer a list of available templates, 1,2 or 3 across. The test was successful as the labels were printed 3-across except that they included the 'blank' records.

## OUTRO

The three blank records were included in a file count of only 19. However, a business file count would have been very much greater and inflated by the 'blank' records generated at any addition of new records to an Update file. This failure would, in my belief, constitute a Fatal Error.
I have, therefore, ceased any further testing of Protext Office/Filer.

Grank $\mathcal{N e a t h e r w a y . ~}$

# The Greaderif Shoot em Upot'ThemIII <br> by Peter Rogerson part 1 

GETTING THE LIE OF THE LAND The Commander looked at her through the bushiest part of his bushy eyebrows and snarled wordlessly, the sound like audible vitriol, ugly in the still autumn air. So you think you know better than me, then?" His snarl became words and the words formed a question.

## BETTER THAN YOU

she smiled that little smile he'd seen so many times before, half a smile really, and pulled her coat on. "Better than you with your trousers down." she murmured pointedly. Then she pulled the tiny gun from where she'd always kept it and shot him straight between the eyes, twice in case the first bullet somehow went astray.

## OUR LITTLE BUDDY

What a scenario! And straight from that best shoot 'em up of them all, Protext to you and me, the Grand Master of words and our CPC's most literary little chum. WACCI's been going for years, so many years we all know all there is to know about the most popular software available for it. Or do we?

## I WANT TO TELL YOU A STORY

Let's look at it like this. Quite a few new members (and we do get new members, a measurable proportion of our membership is fairly new and I don't think there's anybody left from the start) may be fresh tocomputing.

They maybe picked their CPC up cheap at a boot sale, "Twenty quid, mate, and it's in colour, cheap at half the price. " Why, there might even be some who haven't heard of Protext or know what it is and how to use it.

## "There's a novel in all of us"

That's why I'm writing this, to pass the message on to those still awaiting enlightenment.

They say there's a novel in all of us waiting to get out, and if that's the case I suppose it behoves us to try and write it.

## MIX AND MATCH

Although I'm a lover of Protext I don't very often use it on its own. At least, when I'm doing something serious I don't. I need a little extra, so I have a disc containing a load of programs that I mix and match according to my requirements, and it's this disc load of goodies combined with Protext that this article is about.
I mean, who'd think of extolling the perfection of a cream horn by praising the gorgeous pastry cone and not mentioning the cream? So let's see what I've got.

The tools, one might say, of what I'd like to think was my trade if only someone would pay me for my prose.

## WHAT YOU NEED

The first requisite is Protext itself. I've got it on ROM and if you're thinking of using the program frequently I'd advocate that you invested in the ROM version. Oh. And a rom-box to put it in.

The good news is that both are still available in the fragile remnants of the commercial market as well as amongst the dusty provender of boot sales and flea markets, Merline-Serves and Market Stalls. Then Prospell. Get that on ROM too. After that, the Public Domain will provide most of what you require. Here's a list:

## ROM/DISC SOFTWARE

| ProText | Rom/Disc |
| :---: | :---: |
| ProSpell | Rom/Disc |
| Available from | WACCO ( $B$ Watson $)$ |

PD SOFTWARE

| Epic | PD Disc 74 | (WACCI) |
| :--- | :--- | :--- |
| Proclip | PD Disc 130 | (WACCI) |
| Doscopy | PD Disc 86 | (WACCI) |

## LETS PLAY PROTEXT

Now let's take an easy little journey into the magical and mysterious worlds in which our imaginations rule supreme and the night is something else. Let's play Protext, starting at the beginning!

First of all, we need to have everything nice and convenient on a disc - not the roms, of course, but everything else. Let's start with PD disc 74, the mighty EPIC, a program that allows us to output box shapes and accented characters without he need to invest in an 8-bit printer port. (Historical note: CPCs don't have an 8bit printer port so they can only normally access half the available printer characters).

You'll need the ROM version of Protext, though, so if you've only got the word processor on disc forget EPIC. No, don't forget EPIC - buy the ROM instead and thus combine improving your set-up with supporting the dwindling remnants of the CPC commercial market.

## CONFIGURING EPIC

EPIC program needs to be configured for our particular needs, but the job isn't that daunting, and there is a comprehensive document file on the dise to help. I'd advise taking a hard copy of that file if you've got a printer (and if you haven't, what are you doing spending loads of dosh on word-processing software?) Follow the instructions and you'll find that you end up with a printer driver suitable
or your own printer. Mine's an elderly Citizen 120D and initially I had a few problems sorting it out so that it worked properly with EPIC, but with very limited technical expertise I managed, and if I can so can anyone else.

Test it every so often by loading the "Example.Doc" file into Protext and seeing how it prints out once EPIC has been installed. But a word of warning wait a few seconds for the printing to begin and don't assume that there's something wrong if the program pauses occasionally before it's finished printing.

It does that. Copying without an eight-bit printer port has its problems and the computer/printer set-up needs to mull over them from time to time.

There's a facility for macros within PIC, and this is really useful. For the uninitiated, a macro is a whole word or collection of words that can be accessed from a single key stroke. There isn't much memory allocated to this, but enough for you to create some really useful macros. Stuff that you type frequently or Protext commands can become available aith a single keypress.

## MICROING AROUND

Here's what you do. Load the program "EPIC.BAS, list it and edit lines 350-399 in order to include your own macros. I have macros allotted to all nine function keys, things like Yours sincerely, (return) and Save"TEST (return). Return is ASCII character 13, so to have Save"Test (return) the instruction in Epic.bas would read KEY 158, save" + chr\$ (34) + "TEST"+chr\$(13). Chr\$(34) is the ASCII number for speech marks which you can't include directly or the computer will conclude that you've just typed part of a direct command.

Then, at a single keypress (f8), you can save your document any time you want against the event of something like a power cut arriving when it's important that one doesn't.

You might have to create your own BASIC lines if there aren't enough, and be careful to keep the macros brief because as I said there isn't a great deal of space in memory allotted to them.

## CALL PROTEXT

Right. EPIC's sorted, so run it. It automatically calls Protext. Check that's
it's working by pressing the ENTER key. The top line of the black strip across the top of the screen should change to show a collection of accented and foreign characters as well as quite a few graphic characters. The cursors select and COPY grabs. Press escape to return to normal.

The process might seem a bit fiddly to start with, but like most new things you soon get used to it. Now try pressing the function keys and hey presto! You should have all the box characters you could ever need. Excellent.

Those on the disc are single line boxes, but it's child's play to replace them with double line boxes if that's the kind of guy you are. I've got the program on both sides of a disc, side one with single lines and side two with double lines. But then, that's me.

## NOW FOR PROCLIP

Proclip's on the disc because from time to time I want to include something like an ornate letterhead which is way beyond Protext's capability. Using Proclip you can convert small pieces of clip art into huge lists of printer output codes which load into Protext and which reform the clip art once they get to the printer, but be warned: it's very greedy when it comes to memory.
My own letterhead, which occupies a space at the top of the paper equal to maybe eight single-spaced lines and almost the full width of the paper, is 24 k of code when it's loaded into Protext!

There's still plenty left for letters, though, with the ROM version of Protext. I'm afraid that 24 k is more than the disc version will take. But if you're a saddo like me you get a disproportionate amount of pleasure from such things as unique personalised letter-heads then 24 k is no cost at all

## DOSCOPY OVER TO A PC

I've included DOSCOPY on my list of requirements because once you've written that roller-coaster of a novel with all its gypsies sizzling away in their wagons you'll need to convert it into a form that PCs the world over will understand. DOSCOPY does this, easily and efficiently and gorgeously invisibly.
Again, it's Public Domain and worth getting even if its something you think you might need one day though you can't say when.

PROSPELL
Finally, Prospell. If you've got the ROM version the dictionary still comes on disc, and it's the most comprehensive CPC dictionary I've ever used. I know that Brunword is supposedly better in this direction, but as I haven't used the program I'm not in the position to judge. I suppose that Prospell is the weak link in my chain of programs, though.

It is limited with quite a few words missing that you'd think would be there and it is slow. But it works and traps all those spelling mistakes and typos you never knew you made, and anyway there's a facility for adding more words of your own, around 6000 of them. And Prospell is so much more convenient if you've got a second drive, so go on, rush out and get one.

## A Disc full of goodies to play around with...

So there we have it a disc full of goodies. A word processor that is second to none when it comes to ease of use and speed of operation together with a rag-tag of odds and ends that improve it even further.

And maybe by the time this article appears in print Richard Fairhurst will have perfected his Fidelity Rom which should make it even better, with WYSIWYG screen text and even the ability to import clip-art without needing EPIC. Mouthwatering!

## AND ON WE GO

We looked at what we might physically and with pounds and pennies do to have the best word processor on the CPC market tailored to our own (or rather my own) particular requirements. Now for a blast on the beast! Unplug your joystick (though it isn't essential to unplug anything), run"EPIC and we're off?

The screen, once loaded, is workmanlike. There's a command line with the cursor below it. Anything we type now is an instruction or command to the computer to do something. We might load an existing document, for instance. And the joy of joys is that Protext allows abbreviations!
A more long and laborious typing-in of words like "load" because a simple " 1 " will suffice! And an equally simple "s" will do for "save" and " $m$ " for merge!

We can even omit the bar command from RSX's. Talk about being spoiled! If we make a mistake and type gobbledegook then it'll content itself with severely telling us that we've entered an "Unknown Command". So let's content ourselves with relatively normal things like loading documents.

But we've just switched on and run Protext for the first ever time and we've nothing so far to load. So press "Escape" and the cursor moves to above the command line. Now for the blast 'em up! Now for the roaming through those magical kingdoms that are the product of our own imaginations! Let's get down to it! But first, slip a blank disc in the drive because we're going to use all of the facilities we've created and save our masterpiece at regular intervals.

We do this quite simply by pressing Esc to get to the business end of the control line and then CONTROL-f8. The drive will whir and save a file called "TEST". You can call it what you like, depending on the mood you were in when you tailored the EPIC program to your own liking. I used a four-letter word in order not to carve out too great a chunk of available memory. But you can call yours anything, up to the normal maximum of eight characters. Pressing ESCAPE returns us to editing mode. I'd advise going through this proceedure every 100-200 words.

The disc won't get full. After the second save it will have two files, Test and Test.bak. No matter how many times you save the file it'll only have the two.

In text-creating mode (above the command line) there are quite a few keypresses that do things which we may well need to use in the future. There's absolutely no need to try and learn them all straight away. Time's a wonderful teacher, you know. But there are one or two we need to start off by getting to grips with.

First of all, look at the two-line menu at the top of the screen. On the top line there's the document's name (if you haven't loaded a document in it won't have a title because the computer grabs that bit of information from the loading procedure). Then there's your position within the document - the page, line amd column. The page length is determined
by the setprint option, which we'll come to later. There's even the amount of memory left for you to play with there as a reminder that pretty soon you'll have to be saving the whole thing and moving on to another chapter.

But back to the inverse menu at the top. See where it says Right-Justify? You might not want your document to be right-justified. You might have a fondness for ragged right-hand edges. Press CONTROL-j. It's changed, the Lord be blessed! It now says Justify Off! And it is!

Type a few lines with the words RightJustify showing. Now change it to Justify Off by pressing CONTROL-j. Put your cursor on the top line and press CONTROL-f. See what happens? All the extra spaces that were put in as padding in order to get the passage to justify to the right vanish as if they'd never been, and in an instant the whole passage shuffles to the left! Magic or what? And here we've learned a second control key-press, the CONTROL-f of format. This reformats your work paragraph by paragraph. If you want to reformat more than that, say a whole chapter-full of paragraphs there is a quicker way, which we'll come to soon. But at the moment don't let's confuse matters by deviating from the CONTROL keypresses currently under discussion.

Type on. Ah, we need to put a hyphen but we don't want the computer to split the hyphenated word if it chances to end up at the end of a line. CONTROL-(hyphen) sees to that! The same with spaces. There might be an occasion when you don't want a word to be split at a space. CONTROL-n puts a splodge on-screen but prints as a space. Or rather, doesn't print anything because it's a space. Spooky.

Type on. The demon spun, light flashing from his gollden buttons and evil bellwos cracking the air as he howled and howled and howled.... Oh dear! Look at that word bellwos. We've spelled it wrongly. In fact we've been so enthralled by the creative process that we've typed the w and the o the wrong way round. We can always go back and erase them (delete) then type the offending letters again. Or we can use another one of Protext's keypresses. Put the cursor on the first of the inverted letters, the $w$, and press CONTKOL-a. My goodness! What
magic! The whole word becomes, in less than the time it takes to blink a single eyelid, correctly spelled! To start with this CONTROL-a business is a tad wearying but I can assure you it soon becomes automatic and a phenomenal boon to hastening the gap between the creative process and getting the words down accurately.

Type on. As darkness fell and the moon rose above the

## BLACK MOUNTAINS THE DEMON FINALLY SUCCUMBED TO ITS INEVITABLE DOOM..

What's happened? We gave Black a capital B because that's what it was crying out for, but in our haste we pressed Shift Lock instead of Shift and look what's happened! A whole row of capital letters, and not one of them wanted! It's a darned good job that Protext has a solution, or we'd be here all night, deleting words and retyping them. Put the cursor on the L of BLACK and press CONTROL- 1 and watch as it zooms along changing the offending capitals into lower case letters as it goes. Impressive. And if we'd really wanted capitals but inadvertently typed lower case letters, then CONTROL-/ does the trick for us in much the same way.

Before we get too carried away with our masterpiece let's give some thought to tabs and line length. You see, the default ruler (that's the dotted line at the very top of the screen, the one decorated with exclamation marks) is maybe not suited to our own particular tastes. The dashes represent letters and the exclamation marks do the job of marking where tabs might be. A tab is a place where the cursor automatically zooms to when you press the tab key, usually used for the indent at the start of a paragraph.

We can create our own ruler, though, and do it anywhere in the document, thus changing the tab and length parameters. I use one that is 66 characters long and has one tab position, four characters from the left of the text screen.

It's my choice and that's all there is to be said about it. More next month until then happy New Year to you all.

$$
\mathbb{P}_{\text {eter }} \text { Rogerson }
$$

# Are Jou Game For A Game? with Angie Hardwick 

Here we are again with another page for the gamesters amongst us. We all play games from time to time and this series is about having some fun with our CPC. Don't forget if you got any cheats, pokes for either commercial or PD games then please send it along to me. My address is on page 2.

## ASTROPLUMMER

Control Keys - ] Up or Down, $Z=$ Left $\quad X=$ Right Shift $=$ Fire, return $=$ Jetpack $\mathrm{S}=$ Sound Copy $=$ Freeze and Del = Unfreeze. Spacebar Transports.

## THE GAME

You are the maintenance man just arrived from Earth. Your task is to repair the leaking air pipes in caverns under the moons surface, which supply the scientists of Colony 11, a research station.
There are inhabitants of the underground caverns which are indestructible, so must be avoided. To help you avoid them you are wearing a jet pack, enabling you to fly over them, but watch your fuel supply.

Press the return button to take off and land again. You can't use the jet pack on the surface.
To repair the pipes, you are carrying a plasma laser which when fred underneath the pipe engulfs the leaks and seals it. This also drains your fuel supply so use with care. If you leave a screen without repairing all the leaks, on returning to that screen all the leaks will appear again.

The air tanks on the Moons surface can be used to replenish your air supply, by plugging into them. Your air indicator will show how much air you have CAUTION - DO NOT OVERFILL. The game ends if you run out of air, fuel or lives. With every screen you complete an extra life is gained. You lose a life if you come into contact with any inhabitants, so be warned.
On certain screens there are transport pads, you stand on the pad and press SPACE, you will then be transported to the transporter directly above or below you. When the pressure indicator is full
then that round is complete. A bonus will be added to your score, the next round then increases speed making it harder to complete.
$I$ shall be working for a time in alphabetical order but if $I$ get any requests for specific games instructions then I'll try to oblige.

## BATMAN THE MOVIE

Bruce Wayne the multi-millionaire of the Wayne Foundation is an unassuming type of guy. However, when night falls and evil stalks the streets, he sheds his daytime person and become masked vigilante of Gotham City - BATMAN!!

Crusading against crime from the rooftops of the sickened city, his objective becomes the elimination of Gus Grissom's criminal empire, in particular, the conquest of Jack Napier the psychotic second-in-command.

Napier was the most cunning and sadistic force of Gotham anyway, but when an accident befell him, twisting him both physically and mentally he became the ultimate criminal - The Joker!!

You control the Caped Crusader in five different scenarios as he is pitted against his malevolent nemeses in the life or death struggles that ensue.

## CONTROLS

The game is controlled by either Joy-stick or Keyboard. The keyboard is redefinable.

## KEYS

$Q=U P, A=$ Down, $K=$ Left, $L=$ Right, Space $=$ Fire, $\mathrm{S}=$ Pause. Joy-stick control for this game are rather complicated if you need them let me know and I photocopy them for you.

## STATUS AND SCORING

The panel shows the present score, lives, time and Batman's energy. Batmans face represents full energy. The Jokers face represents no energy, when the Jokers face is fully visible then Batman will lose a life. If time runs out on any level Batman will lose a life. The score is achieved on each level as follows.

Levels 1 and 5 Shooting the Jokers Henchman, Shooting Jack Napier (Level l) Shooting The Joker (level 5)

Level 2 Points are scored by progressing further along the road. A bonus is awarded on reaching the Batcave based on the amount of time remaining.

Level 3 The score is based on the amount of time taken to find the correct combination.

Level 4 Points are awarded for every balloon you cut free.

## Energy is reduced as follows!!

Levels 1 and 5: Running into Policemen or the Jokers Henchmen, Standing under acid drops or in the way of burst gas from pipes, Falling down too far, swinging on the rope into a wall, being hit by bullets and grenades.

Level 2 Hitting other cars (as if)
Level 4 Hitting balloons instead of cutting them free, allowing balloons to burst before you cut the ropes.

More about batman next month until then have fun.


Ten issues, four editors, one convention... all washed down with a helping of vodka margarine and a really rather nice Brummie Balti. That was 1997, somewhere in between WACCI's annus horribilis and the start of a Brave New World. Lest older WACCIs be forgot, here's the best and worst of them. Spliced with spleen...

## ISSUE 109, FEBRUARY 1997

Way back in February, 3 BC (three months Before Crash), Philip DiRichleau - remember him? - was editor, I was writing Fair Comment, and Paul Dwerryhouse was Mr Admin. The
 magazine was still being produced with Protext CPC and that really nasty Epson Stylus default font. You see how things have moved on.
Anyway, 109 is a dead easy issue to review. Half of it comprises Blast From The Past (and if I review that, it'll end up like those pictures of a telly on a telly on a telly on a...), the "ComSoft Marketing Special" in which Philip annotated the back-page advert with insightful comments like

## "I have no idea about Nirvana",

and Brian Watson telling people to be nice. Brian also managed to get the word "crap" into his ITGA interview, which is quite an achievement. Surprisingly enough, he wasn't talking about Brunword at the time. The headline was

## "It's That Girl Again: Brian Watson".

Is there something we don't know? Meanwhile, the increasingly deranged Thanx \& Stuff offered this example of the storm gathering over DiRichleau Towers (shurely "DiRichleau Family Swimming Pool"? - Hangman): "We at WACCI HQ are a bunch of raving
lunatics who never seem to be able to get anything right."

## ISSUE 110, MARCH 1997

The highlight of 110 , the last WACCI ever to be produced on a CPC, was a wonderfully long line of BASIC in Matthew and Stephen Phillips' techy article.

40 WHILE $\operatorname{INKEY}(47)+$ INKEY(18)+INKEY(9) $=-$ $3: b=x: c=y: x=\operatorname{MAX}(0, \operatorname{MIN}(632, x+3 * \quad$ ( $I$ NKEY $(8)>-1)-$-(INKEY $(1)>-1))^{*} \quad\left(4+3^{*}(\right.$ INKEY $(21)=-$ 1)) ) : $y=\operatorname{MAX}\left(15, \operatorname{MiN}\left(399, y+3^{*}((\right.\right.$ INKEY2 $)>-1)-$ $\left.\left.(\operatorname{INKEY}(0)>-1))^{*}((\operatorname{INKEY}(21)=-1)+2)\right)\right):$ MOVE b,c:PRINT CHR (215);:MOVE $x, y: P R I N T$ CHR\$ (215): WEND

Reminds me of a type-in for the Archimedes which implemented a full game of Tetris in one line. Makes Nicholas Campbell's ten-liners seem unimpressive by comparison.

Someone was justifiably rude about Worktop, but lacked the courage of their convictions to sign it (or perhaps Philip had lost the accompanying letter, again). And poor old Nora Lees got ever so mixed up in Fair Comment. Not that surprising, really, when you consider what Philip was putting into Thanx \& Stuff at the time. Example quote:
> "Lord Philip smiled, the manic type of smile that usually belongs to an axe murderer being offered a lumberjack position."

Jonty reviewed CPC emulators for PCs without actually using any of them (WACCI, home of quality journalism). Ben Watt faced down the wrath of Peter "Clockwork" Curgenven to write about "Beginneers Hardware" ("Which word-
processor?", anyone?), while Philip's detailed how-to attempted to convince us that there actually was some skill to laying out WACCI pages. This was the last issue he edited. Coincidence?

ISSUE 111, APRIL 1997
Actually, Philip did the tricky bit for issue 111, in that he collected a fine heap of articles from WACCI members and nonmembers (hi Rob) alike.


Richard Fairhurst
As you all know, WACCI relies entirely on your submissions. Ergo those who haven't contributed anything to the club, or to the wider world of the CPC, have no right at all to criticise those who are putting hard work into the magazine every month. If I were still doing Fair Comment I'd be tempted to institute a rule that critical letters would only be accepted from those who'd had an article published in the last year. Perhaps it's not really surprising that I'm not writing Fair Comment any more.

Anyway, WACCI 111 was produced on my Apple Mac (running Quark XPress) with its spanking new laser printer, and not, I repeat not, with "PowerPage Professional" and its alleged Resolution Overscan Expansion. Philip's drug dealing neighbour again, bet you.
The only non-Macified bits were the front and back covers, produced as ever on Paul's PC. Paul was described inside the magazine as Paul "Ollie Alderton" Dwerryhouse, a reference to the famed $A A$ art editor of yore. I actually met Ollie on a trip down to Future a few months later. He was ever so chuffed to find that his name had entered into the annals of CPC folklore. I suspect that if you paid the same compliment to, say, Rod Lawton, he'd run away screaming...

Since the spoof relied on Philip nominally editing this issue, I couldn't litter the magazine with BTL-style editorial asides. Which was a shame. James Coupe's article on Discus, for example, referred to "another quality SD Microsystems program". A what?

The Worktop review was me, though, writing under a pseudonym. Hmmm. And just as WACCI 111 looked more like $A A$ than ever, even down to the cover logo, the number of reviews also evoked the glory days of the CPC. The quality of writing was similarly impressive, the likes of Ray Powell, John Hudson and Peter Rogerson proving that they can pen livelier and better-informed articles than certain $A A$ freelancers whose names I perhaps shouldn't mention. See, you can do it. Thanx \& Stuff quote:
> "The growing friendship between WACCI and BTL can do nothing but good for the CPC scene."
> Famous last words...

## ISSUE 112, MAY 1997

Oh my hat. This is going to be a tricky one. Anything I say about this issue will doubtless be taken down and used in evidence against me. But really it was pants. It's nothing personal. It just wasn't a remotely interesting issue, unless you count Sajad Hussein's attempt to get as many facts wrong as possible in two columns of Fair Comment. (BTL agreeing to merge with WACCI? On which planet?) Coding Brothers, Matthew and Stephen, were on
top form once again - while John Hudson and Peter Rogerson made their usual informed contributions. But the rest? We're talking space-filler city. I'm not sure who decided that the best way to rescue WACCI from its near collapse between issues 111 and 112 was to produce the least marketable issue since, ooh, the Steve Williams era and bring it out two weeks early but it takes all sorts. Paul's Thanx \& Stuff quote:
> "I don't think it will be the last we shall hear of Richard."

## ISSUE 113, JUNE 1997

A welcome return to form, with tons of CPC stuff - in a CPC fanzine. Whatever next? With a good balance of ingenious brain-fodder for programmers (especially from Stuart Gascoigne) and splendidly nonce-friendly reviews, once again starring Mr Rogerson, this set New WACCI (New Life For The CPC) off on the right foot. As opposed to New Labour (New Life For Clapped-Out Old Tory Policies), which set off on the rightwing foot. The reactionary old scr... (that's enough politics -John).

David Godfree followed up Rob Scott's drive-bending $6 \mathrm{k} \bmod$ (111) with instructions on how to build that essential enhancement, the ABBA switch. Everyone should fit ABBA switches. Then we programmers wouldn't have to faff around with B-drive compatible loaders. Please?

The permanent move onto a PC (spit) with Microsoft Publisher (bleeurgh) brought drastic changes to the layout, and although this inevitably diluted the unique character of WACCI, it didn't half make it easier to read. Another Bowley innovation was Carol's "people page", called Fish Baklava, or something. David Crookes would be turning in his grave. Thanx \& Stuff quote, courtesy of Mr Bowley:

## "As much as I like talking to you, I've got to go to work at times."

ISSUE 114, JULY 1997
The aftershock of the Great WACCI Crash of 1997. Thanx \& Stuff began with the immortal words "Paul Leaves WACCI". What can I say? It's all
documented in BTL 4 and recent WACCIs. There really is no more to it. Everything has now settled down again. Thank Fegg.
July's issue otherwise carried on along the same lines as 113, albeit with a slightly higher waffle content. Philip was (briefly) restored to his rightful place in Fair Comment. Reader reaction to the changes of the past few months was curiously muted, however, with only Norman Davies contributing his (rather protracted) ha'pennorth. I think. I still haven't figured out what he was on about.

And the strain of writing all those sensible, meticulously researched, wellargued reviews finally got to Peter Rogerson, who cracked and wrote a bizarre allegory comparing Pentiums to nubile young wenches with long golden hair, or something. (Calm down, Mr Wildey.) Brian Pope, a BTL scribe, wrote to ask "Are you all on drugs?", but the letter was censored somewhere along the line. Shame.

Angela finally endowed WACCI with a news page, an even more glaring omission in the years since Amstrad Action's closure. After all, WACCI's the only monthly left now...

## ISSUE 115, AUG/SEPT 1997

Sure, it was late. But John was honest about it. Remember how issues like WACCI 49 would claim to be "February 1991" (say), and not "August 1976February 1991", which was the real period since the last issues? And this time there was a reason other than blistering incompetence. A very splendid reason, in the form of the very splendid Convention. More on that later.

Thanx \& Stuff had lost its potplants, while John set a trend by getting Brian and Angela to write half of it for him:

Dave Stitson would receive the same "honour" in October. Space was also filled with a map of Walsall, and as Roy Everett later pointed out, the station is in the wrong place.
Since Sunday services at Bescot still haven't started, though, the point is rather academic. (They should be running by the time of the next Convention... which will probably be held somewhere else. Ah well.) Fair Comment was getting back to normal, with John Hudson going
into techy overdrive and Christine Raisin into admirably diplomatic mode. Diplomatic is also an adjective which might be applied to Angela's review of the X-Files and Red Dwarf discs. But writing good stuff about the X-Files is pig's ear into sow's purse time, anyway.

WACCI went international with a (now obsolete) article about the projected Tribal Mag online, reviews of the "debugged" MegaBlasters (heard that before...) and Jaysoft's RC Quest - for the Holy Grail? - plus some Internet stuff. Meanwhile, Stephen and Matthew continued to plough their programming patch, which is worth reading for the subheads alone.

## ISSUE 116, OCTOBER 1997

Most of this issue was about the Convention, with a charming 9-page report written by the charming Ms Cook.

The light hearted touch and liberal use of photos made this possibly the most enjoyable article to appear in this year's WACCI: appropriate, as the Convention was easily the most fun of the three so far.

It's all been said before in much more lucid terms than I could ever manage, so I won't harp on about it - but here's yet another round of cheers for Angie and everyone else involved in organising the day's events, in the hope that there'll be another one this year. Hooray!


Angie Hardwick


L-R: Paul Wass, Chirstine Raisin, Frank \& Janet Smart
than ever before. As they say on Jazz Club, nice.

Philip bowed out of Fair Comment with the wonderful suggestion that we should throw PCs in rivers. Having said which, after preaching against both the evils of PCs and those of CPC hard drives for many years,

John hadn't quite figured out how to remove control codes from articles, which resulted in Programmers Patch becoming spiced up with delights such as "we set kf to [] show that we were Snot interested in it". Perhaps this was the bad language Ron Izett was complaining about. And John Hudson continued his detailed explanation of the uses of CP/M's SUBMIT command. If I didn't know better, I'd suggest he was preparing the ground for the return of Uncle Clive...

## ISSUE 117, NOV/DEC 1997

Contributions were generally on the up, though, with rarely seen names such as Peter Robson and Mike Gushlow writing helpfully about the superlative DMON (hooray!) and, er, Brunword (no comment). Usual suspects such as the Phillips brothers, the Ghoul and the Rogerson were still very much in evidence, with Peter giving a deservingly warm welcome to Philip's new venture, EuroWACCI.

$$
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$$

Several months after WACCI lost the "serious" qualifier from the cover's proclamation of "The Best CPC Magazine", the magazine finally took the plunge with the start of a regular gaming feature by Angie Hardwick.

Another fundamental change was the quality of paper on which WACCI was printed. Whereas $A A$ (whose tally of issues was equalled by WACCI that month) degenerated into bog roll quality as time went on - and that's just the PD column - WACCI actually feels thicker

I've just bought a PC... so that I can turn it into a CPC with a hard drive. Ooops.

There was another welcome outbreak of diplomacy, this time on the part of Doug Webb, Peter Robson et al, while Jonty fulminated about "back-stabbing in less than grown-up disczines". What's with all this stuff about being "grown-up"? I want to stay young and irresponsible for as long as possible.

And while I'm at it, you don't actually need to use Ansiterm's directory to dial numbers. Just type the command "ATDT" followed immediately by the number in question, and press RETURN.

MicroDesign just won't print at the bottom of an A4 page - as opposed to PowerPage, which will print at the start of the next page if you let it (oops). Back in the halcyon era of French paper fanzines, this led to editors adding little three-line comment pieces at the bottom of each page. Those were the days...
...and that was 1997. Charley's predictions for 1998: some splendid new (PD) releases, major changes in at least two major CPC fanzines, greater contact between the British and European CPC communities, CD-ROMs packed full of CPC software, and more CP/M content in WACCI. And if I'm proved wrong, Brian Watson will eat his hat.


Happy New Year! Richard Gairhurst


Homegrown, PD Extra, Discs 1-18:
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| 22-4 | Pictures 1-3 | 36 | Teach Yourself Pascal | 44 | Demos 2 |
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| 27 | Mini Print Shop | 38 | Games 2 | 46 | The Demo (Logon) |
| 28-9 | MicroDesign Art 6-7 | 39 | Logos, Women \& pics | 47 | Utilities 1 |
| 30 | GPaint, RSXlib | 40 | MicroDesign Art 11 | 48 | Adventures 4 |
| 31 | Amiga Graphics 2 | 41 | Eve of Shadows \& advs | $49-53$ | Pictures 6-10 |
| 32-4 | MicroDesign Art 8-10 | 42 | 22disk/22nice for PC | 54 | Parrotry demo \& clip art |

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