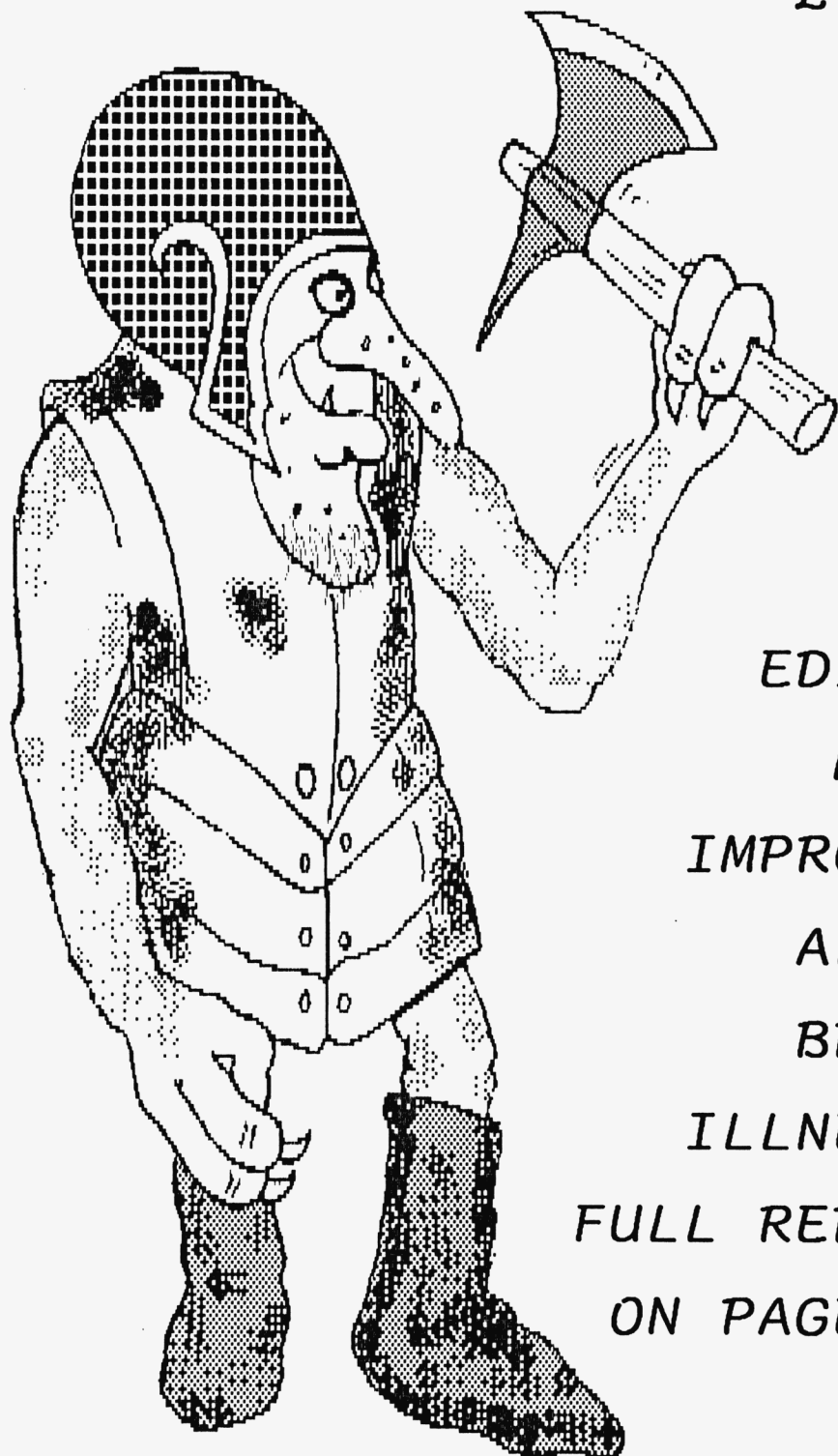


WAG

THE UK'S ONLY SERIOUS CPC MAGAZINE

MAY 1994
ISSUE 78
£1.50



EDITOR
MUCH
IMPROVED
AFTER
BRIEF
ILLNESS!
FULL REPORT
ON PAGE 73
BY
CLARK KENT

LETTERS, PROGRAMMING, ARTICLES, PUBLIC DOMAIN SOFTWARE
MACHINE CODE, BASIC, ADVICE, REVIEWS AND MUCH MORE....

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WACCI: The club for Amstrad CPC computer owners.

FRONT COVER: Adapted by Paul Dwerryhouse.

THE TELEPHONE HELP-LINE

BOB MOFFATT, (09945) 509, Pendine, Carmarthen.
Masterfile III, MASTercalc, Qualitas & Protext.

STEWART PEPPIATT, (0245) 353903, Chelmsford, Basic, M/Code, DMP2000, VDE, Scrivener & general problems.

PETER CAMPBELL, (041) 554 4735, Glasgow, OCP Art Studio, Vidi, Basic, MicroDesign & Art Programs, ProPrint, CPC plus m/cs and VideoMaster.

FRANK FROST, (0983) 882197, Isle of Wight
4pm to 10pm, VDE, CP/M and Protext.

IAN NEILL, Work (0928) 418157 9am to 5pm, Warwick
Eprom blowing, Hardware, Electronics and more.

MARK STEWART, (0773) 822599, Belper, 5pm to 9pm,
PAW Adventure Creator, Basic and general help.

PAUL DWERRYHOUSE, (0244) 534942, Deeside, Clwyd,
Basic, Bankman, PD Planner, Ispell, Accounts, etc

LAURENCE SAUNDERS, Herts, (Work) 061 480 4900
Maplins & technical help. Now at Stockport.

NIGEL MELLS, (0784) 250763, Ashford, Tape to disc
problems, Basic programming and a general natter.

MIKE LYONS, (0942) 59942, Wigan, Basic, Stop Press,
Dk,tronics Speech Synth, Rodos and general help.

STUART GASCOIGNE, (0272) 777828, Bristol, Basic,
Machine code and PD Discs 19 to 36.

VACANT, Do you want to help your fellow members?
Then here is a very good place to start!

JOHN BOWLEY, (0733) 260616, Peterborough.
Help and advice about the Book Library.

MARTIN YOUNG, (0224) 480217, Aberdeen, M/c code,
The audio/video chips, Page Setter 64, C and the
(by special request) RAM Music Machine.

CHRIS GREEN, (0895) 633641, 5pm - 9pm, Middlesex,
MS800, CP/M Protext, PowerPage, Art Studio, NC100
and NC200 notepads, The Plus computers and DTP.

NIGEL CALLCUTT, (0664) 68738, Melton Mowbray.
Technical advice, hardware and CPC repairs.

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

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

WACCI

Edited By: The Management

Owned By: The Club Members

Phone: 0602 725108

Conceived and Founded

By: Jeff Walker

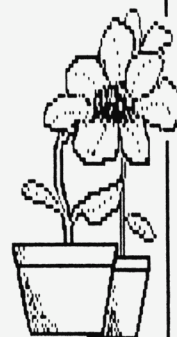
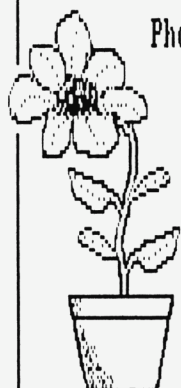
In: October 1986

Developed and expanded

By: Steve Williams

THANK & STUFF

The New
Editor



It's late and I'm tired I've spent fourteen hours sitting at this keyboard finishing off this issue of WACCI The problem with taking a holiday is that the work just sits there waiting to be done when you return You would have thought that by now, they would have developed a program that did all your work for you whilst you were on holiday.

HOLIDAYS, HOLIDAYS, EVERYWHERE

We're fast approaching the time when club librarians, treasurers and other members are on holiday. For lots of very obvious security reasons we cannot publish holiday dates before they go on holiday - If you try to get hold of someone and there's no answer, please bear this in mind.

PRIORITY SPOT

Once again, it seems that I must spell out my work priorities for you.

I work for a living and because we like to eat, that takes first spot.

I'm married, and have been for over nineteen years, so my wife (quite correctly) feels that she takes some priority over that magazine.

Next in line comes the magazine, it takes a fair amount of time each month to produce, and because I like it to appear around the 26th of each month it takes priority over most (if not all) other club business.

Next comes sleeping, eating and the occasional shower.

Next, I like to go out occasionally to play dominoes, have a quite pint, go for a walk by the river, talk, run the dominoes league and go shopping.

Next I have to answer the phone, if I leave it ringing, the wife, the cat and lots of neighbours get just a tiny little bit annoyed about the noise.

And finally, if there's time left I will write replies to letters, fill orders that have been sent in, answer queries and other similar tasks.

So if you want a quick answer, don't write to me, I'm busy. If you want to send a letter send it to Mike Lyons at the Fair Comment address. If you need some PD software, order it from the PD Disc librarian. If you send your order to me, it'll be at the end of my list!

These priorities cannot be changed, making sure the magazine goes out on time to hundreds of members must and always will take priority over the needs of a single member.

If you don't like the priorities, sorry, they are not negotiable. I will resign before I change them.

DARTSMA - A LEGEND DISAPPEARS

Adam Shade has decided to close down Dartsma for personal reasons. All his orders should have been filled. If you have a problem, please write to WACCI giving full details and I'll pass them on to Adam. Don't try to contact Adam at his old address, he's not there.

QUANTUM - GO TAKE A RUNNING JUMP

Quantum are not sending out orders to customers, they have probably closed down. So please don't send any orders. An Answerphone message says "the boys have gone away" - good!

CAMPURSOFT AND PARADOS

Campursoft, Scotland's finest (only?) CPC software house have taken over distribution of Parados, the all singing, all dancing large format DOS.

They've dropped the price down to £14.99 inc p&p. Perhaps we'll finally get a copy to review for you.

SURNAME ONLY - I HATE IT!

I'm fast developing two pet hates. The first is people who use surnames only, like Dwerryhouse and Lyons and the second is people who use an initial instead of a name. How can you have a conversation with a D Wilson or a A Theoldbold? I would much rather hear from David and Andrew!

PD LIBRARY - ALL CHANGE

Doug Webb has taken over from Patrick Dunne due to personal reasons - if you are waiting for your order to be completed, please contact Doug Webb of Paul Dwerryhouse.

ALL FORMATS FAIRS - SUMMER BREAK

There are only a few All Formats Fairs over the coming months as all the traders are away on holiday?

May 28 Washington, Northumbria Centre
29 Glasgow, Woodside Hall

June 11 Haydock Park, M6 J23
25 Washington Leisure Cent, D 1.
26 Nat M/Cycle Museum, Birmingham

Once again I've been beaten by the end of the page, never mind, I'll win one day! Have a good holiday. -Clive.

COMPETITION

WITH JOHN BOWLEY

SPOT

Have you ever read a quote that has been so true it could have been written just for you. Well have a gander at this. "A tax collector has got what it takes to take what you've got!" Thought provoking eh! By She who's must be obeyed

DISC OPTIONS....

Cos of the shortage of the 3" Discs. I would like to offer you a choice of either 3.5" or 5.25" discs.

If you would like your prize(s) on 3.5 or 5" discs would you tell me if you have a side switch or not.

I hope that you will give the above option some thought as WACCI needs to make economies where possible.

But please note, I can still give you your prizes on 3" discs if you prefer.

APRIL FOOL....

Did you get caught out by the April fool gags in last months issue.

I had ten entries for Marchs comp which is ten more than I expected. Let me explain - you see there was only 13 names in total that you had to find including my name and they were :

- 1 Clive BELLABY - Editor
- 2 Paul DWERRYHOUSE - Treasurer
- 3 Mike LYONS - Fair Comment
4. Derek HYLAND - The 'Zene
- 5 Stamper METCALFE - Discounts
- 6 Chris GREEN - CPC Essentials
- 7 Alan TILLING - Very Basic Basic
- 8 Patrick DUNNE - PD Librarian
- 9 Doug WEBB - PD Librarian
- 10 Ian PARKER - PD Librarian
- 11 Stuart GASCOIGNE - PD Librarian
- 12 Chris SMITH - WACCI BB
- 13 John BOWLEY - Competitions

All the above names were taken from issue 75 Who's Who. I know some of the above members do more. than one job but these are the ones that I was thinking about. And now down to the winners picked out at random either wrong or right and here they are.

MARCHS RESULTS....

* 1st - Alex Sanderson. Paper *

* 2nd - Dick Hornsby. 2 PD Discs *

* 3rd - Martin Bela. 1 PD Disc *

HOMEGROWN SOFTWARE....

Would you like to have our range of Homegrown software as prizes, well now you can but you must be a member.

CHOOSING YOUR PRIZE....

Please put on your entry your choice of PD software listing 3 discs even if you want the prize on offer. <<Ok>>

UNRECEIVED PRIZE(S)....

If you have not received your prize(s) yet then would you please drop me a line and I shall deal with them as quickly as I can. <<Thanks>>

DONATIONS....

If you have anything that you can donate to either this spot or the Book Library then please get in touch.

BOOK LIBRARY UPDATE....

- | | |
|---------------------------------|--------|
| 111. AMSTRAD DMP 2000. | 0.56p |
| 112. Z-80 REFERENCE GUIDE. | £1.00p |
| 113. EXPERIMENTS WITH EPROMS. | £1.50p |
| 114. HOW TO USE OP AMPS. | 0.50p |
| 115. DICTIONARY OF ELECTRONICS. | £1.00p |

INSTRUCTION BOOKS FOR SOFTWARE....

- | | |
|------------------------------|-------|
| 1. PRINTMASTER CP/W. | 0.25p |
| 2. DATEL GRAPHICS LIGHT PEN. | 0.25p |
| 3. COMMSTAR PACE. | 0.50p |
| 4. LINNET MODEM. | 0.30p |
- Please call or write for more details.

GET DOWN AND BOOGIE....

The Prize on offer in this month compo is SoundTrakker v 1.1 this program was kindly donated by Adam Shade of Dartsma. SoundTrakker is used a lot in demos and it must be the best music making program around. <<Thanks Adam>>

WAYS COMPETITION....

All you have to do is write down as many words that you can make out of the letters below and the rules are no plurals, no proper names, the words must be four letters in length and the letters can only be used once in any one word. Each word must contain the centre letter (V). You can make one word that contains all of the letters.

L E T A
V
I R C

YOUR ENTRY....

Your entry to this competition needs to be with me by the 30th June. <<Ok>>

SETTING A COMPETITION....

If you would like to set a competition would you please send your quiz to the address below and you could be awarded a PD disc of your choice. <<Ta>>

REMINDER....

Please read the paragraph about disc options when choosing your PD prizes.

SEND TO....

John Bowley. c/o WACCI Competitions
97 Tirrington, Bretton, Peterborough,
Cambs. PE3 9XT. Tele no. 0733 260616.

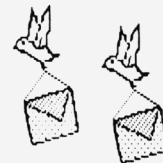
THAT'S IT....

That's about it for yet another months competition and I will look forward to receiving your entries. <<John>>

Fair Comment



Mike Lyons
85, Leigh Road
Hindley Green
Near Wigan
WN2 4XF



INTRODUCING JAMES COUPE ESQ.

Dear Mike, I thought I'd introduce myself to the world of WACCI, being as I've been a member for quite a while. By the way, I'm possibly the most annoying person on this planet (ask my mum, dad, sister, brother and Uncle Clive - his editorship!)

My mum says that I should put "Can you put an ad in WACCI - DESPERATELY SEEKING ROMBOX (it worked for Susan." I don't think I need to. What do you think? I'm desperate to get hold of a Rombox for my 6128. I'd like to get hold of a Rombo (preferably with Jess Harpur's switch fitted) with Protext, Prospell and maxam 1.5 (with manuals.) If anyone wants to sell a similar setup - could they please contact me with full details (and the price.)

Also if anyone has Bard's Tale and (or) corruption of disc, they could contact me as well.. The reason I need to get hold of them on discs is simple - my tape recorder is playing up.

Whenever I try to save anything to tape, I get lots of bleeps and blops put onto the tape, when I reload it - the computer doesn't recognise any filename and so it does not reload it. This happens when I'm trying to save the Bard's Tale parties (I have the tape version,) Elite positions, Basic programs and so on.... as I found out whilst attempting to transfer some PD software for the wonderful (if small) WACCI PD Tape Library. Does anyone know what's wrong - help!

May I say I whole-heartedly support the removal of the PD Pages from the magazine. I don't know you intend to inform members about the PD Library from now on - but as it stood we were worse off with them in the centre pages than we were when they were at the back. Originally, on average they took up three pages per issue (Two PD and one Homegrown.) I assume that eventually a rota system would have been introduced, with an occasional 'book' library supplement. When they moved to the centre pages they took up four pages (instead of three) leaving less room for articles (not more!)

When someone sells me a Rombox, I'd also like to get a high capacity DOS for my three and a bit inch drive. Can we have a round up of HCDOSes, similar to DOS WARS in WACCI 43? My nominees for it are: Romdos, Romdos XL, S-DOS, MS800 and Parados. (Parados is the new HCDOS from Quantum, and the AA review makes it sound rather good.)

Talking about comparative reviews, I like adventure programming - which has nothing at all to do with comparative reviews. I have Quill and GAC, they are okay, but I want to upgrade to something easier and better. Quill's input routines are slow and it has too few flags - and GAC has a poor command structure (well I think so) and poor graphics. I believe the two main ones are ADLAN and PAW. Could someone run quickly through both the advantages and the disadvantage of each?

I saw a review of ADLAN in AA60, but saw your (Mike's) criticisms of it in the pre-issue 50 WACCIES.

I am happy with my CPC and pleased that companies like Campursoft are continuing to support it! BASIC Idea seems like a good idea and I hope we see a review of it in WACCI soon.

Another Campursoft product which looks good is MD2 - Can I please make two suggestions (being as Peter C and Jess H are both members?) Can we have an option to import text onto a page, similar to the option in PowerPage, so that the text doesn't have to be formatted as a graphics file? Also, please include an A5 option, I find it very handy for my school project work (I'm only thirteen!) Yours,

James Coupe
21 Victoria Road
Sutton Coldfield
West Midlands
B72 1SY

<<Hiya James, Clive here, Mike's still a bit tied up so I'm covering for him! I've included your plea for a Rombo Rombox with a good selection of Roms and I've printed your address so lots of members can write to you with full details of what they have to sell!

About that non-working tape drive. You can try the following, they may or may not help you solve the problem:-

1. Clean the tape's read/write head.
2. Try a good quality C15/C30 tape.
3. Adjust the tape recorders volume settings (try out a number!)
4. Change the tape to CPC lead.
5. Try the setup using a simple one line Basic program, like so:

```
10 'tape.out : 'disc.in
20 OPENOUT "TEST"
30 PRINT#9, "TEST DATA"
40 CLOSEOUT
```

Connect up the recorder, run the program, rewind the tape, then CAT the tape to see if it's there?

If it's not, write another letter.

If it is there, rewind the tape and try to re-load the data, use:

```
10 'tape.in : 'disc.out
20 OPENIN "TEST"
30 LINE INPUT #9,a$
40 CLOSEIN
50 PRINT a$
```

and if all's well, "TEST DATA" will appear on the screen. If it don't, then write another letter.

Seriously, try a few simple tests to try to find what does and does not work accurately and correctly.

A review of the different DOSes? An updated DOS WARS, why not, all we need is a mug, so volunteer to write it.

I'm still waiting for a review copy of ParaDos, many phone calls and two letters have resulted in .. Nothing.

Until I've (we've) reviewed it, we cannot (and will not) recommend it!. If we ever get a review copy then we will review it - if we don't we won't! I feel that I've wasted enough of my

time and money trying to get hold of a copy - after all, I have to pay my phone bill, and I like to know the money was not wasted. Also, according to AA, Quantum are somewhat lax in despatching orders - a trait that must be borne in mind when ordering. I don't know about you, but when I order a product, or if I'm told it'll arrive on Tuesday, I expect it to arrive! I don't expect to be kept waiting!

The extra four pages of articles are going to create a lot more work for me and for everyone who assists in producing WACCI, they create the same amount of work as one and a half extra issues per year!

The library details will be issued in book format every four months or so (updates will be issued as required!)

Not only does this create more work, it also increase the total production costs by around £800 per year! We can afford the money - it's the time we're always very short of.

You can help by sending letters in on disc or tape (rather than on paper) - typing in your letter took over an hour to do and check. Every bit that you can do to help us, helps us to produce a WACCI that helps you!

Jess H and Peter C will read your comments on MD2 with interest - and you never know, they may incorporate your idea(s) into MD2. However, I will say one thing (I know Paul Derryhouse agrees with my views) the A5 style of magazine is for beginners - all the best publications are A4 size.

I hope you sort out the tape drive, and I look forward to seeing you at an All Formats Show shortly... -Clive.>>

SILLY DISC SOLUTION NEEDED

Dear Clive, I like WACCI a lot and have particularly enjoyed your recent pieces on CP/M (running it as a .BIN file, customising the .SUB files etc) especially as they work; I have not always been so successful with my previous attempts at type-ins. My son Rob, who is slightly more technically inclined than me, has tried the same processes on a CP/M+ disc that has been patched by a dk'Tronics silicon disc to acknowledge its presence and for some reason it doesn't work.

Neither he nor I can figure out why not, especially as the information which is messing up your very clear

description is hidden in the patching process. This is done in two stages. Firstly, a bar command 'SETCPMPLUS puts a file PATCHER.COM onto the CP/M+ disc. Then you type PATCHER <return> and it creates the new version of the .EMS file to recognise the Sili-disc as drive C. My best guesses are that either the new file is of a different size, though why that should make a difference I don't know, or that there is a conflict of memory requirements when using the silicon disc.

I am using a 6128 Plus, but the Sili-disc works with both BASIC and CP/M in its original form as it did with my old 6128. Any ideas? I would be happy to let you practice with anything you might need to investigate the problem, though I appreciate you are very a busy fella.

I enclose a birthday card I found on my travels. I am in the greeting card business myself but I have not come across Smutz cards before or since. However, for some reason when I look at this card it reminds me of someone. Blowed if I can think who, but I keep getting a strange compulsion to draw in mouse ears....

A near neighbour (8 miles away) put an advertisement in Amstrad Action for his much-expanded CPC464 kit. Needless to say, he hasn't sold it yet, so when I put in a bid for the bits I wanted

to give a good home to, I suggested that a smart move might be to use the more targeted facilities of WACCI.

Silly boy, he is not a member. If he had been he would probably not be selling the kit now. I hope, however, that WACCI can take his advert; I would hate to think this lot went to a jumble sale or worse...

I'm all for a joint WACCI/UAUG get-together. As a member of both I find each group has its considerable merits and, having been to both the UAUG gatherings I am sure a good time would be had by all. Shared knowledge is what many people join clubs and societies for, and both conventions have given opportunities for people to see different combinations of hardware and software in action.

As a Protext fan, I nonetheless very much enjoyed seeing the late Mike Catton putting his Brunword through its paces and swapping tips with other Protext users. Also large amounts of kit changed hands to the satisfaction of all. As someone who has yet to savour the delights of the all-formats fairs due to previous clashes of dates the UAUG conventions have been my best experience of meeting CPC users.

Best wishes to you and all from the flatlands of the East.

Brian Watson
Sutton, Ely, Cambs

**** FOR SALE ** FOR SALE ** FOR SALE * * FOR SALE ** FOR SALE ** FOR SALE ****

Preferably as a complete set:

CPC 464 with user and workshop manuals
High-resolution orange screen with power supply
Also the original GT65 monitor
1st and 2nd 3" drives with interface
A dk'Tronics 256k expansion to enable the Brunword suite (below)
DMP2000 printer with manual and cover
MP-1 modulator for use with TV or VCR, 1 Joystick
28+ 3" discs in lockable cases, 30+ tape programs
Mini-office 2, CP/M Master discs, Amsoft
Microspread, Masterfile 2
Brunword Elite 128 set including: Infoscip database, spellchecker,
"Headline" font disc, 100 standard letters
Various homebrew programs and magazines, 13 books on programming for the CPC

Fuller details on application to:

John Gamble, 31, Cornmills Road, Soham, Ely, Cambs CB7 5AT
Telephone: 0353 624456

<<Hiya Brian, it's very nice hearing from you again. Let's move quickly to the probable cause of your silly disc problem. Most programs that patch CP/M actually alter a few bytes or alter a jumpblock or two.

The silicon disc actually increases the size of the C10CPM3.EMS file from 25 to 26k. This means that the program in WACCI 75, Page 21 will not work.

You can try the following, it should work correctly, however, I don't a present have a 256k silly disc so I can't try it out....

1. Patch CP/M for the silly disc.
2. Alter line 360 of the program in WACCI 75, Page 21 to:

360 DATA &11,&00,&64 : ld de,&6400
3. Use the modified program to convert the original .EMS file to a binary file (as per WACCI 75.)
4. It should now work! If not, please let me/us know.

Many thanks for the card, you're quite right, it looks just like my wife! I have reprinted the picture so members can make up their own minds.

It's a pity the John never joined WACCI, never mind, you did, so I have printed his advert on your behalf.

We're trying to find a suitable site for the convention, somewhere in the Birmingham, Sheffield, Manchester triangle seems the best option - more news when a site has been secured.

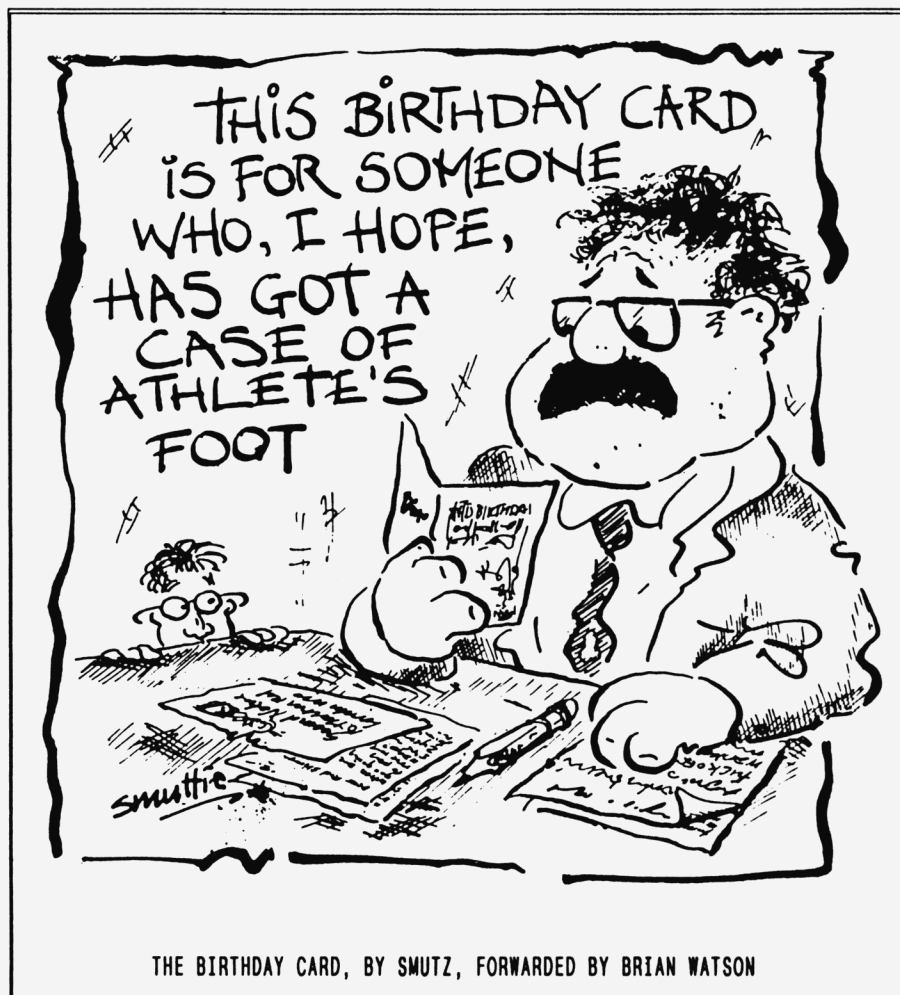
Summer must be on the way - the rain is a lot warmer at present. -Clive.>>

OVERTURE AND BEGINNERS PLEASE

Dear All. I hope you are all well and happy to be receiving your May WACCI, (preferably on time.) I'm writing this in the way of an apology.

This time of year is always difficult as we prepare to get our pupils ready for external exams, school concerts loom, Wigan Music Festival puts in an appearance, final submissions have to be collated and sent to moderators etc.

Last month was a complete and utter disaster. On top of the usual things I've suffered several family disasters and worries and my neck's been playing



up again. After having to completely re-do all of the composition folios I was in a flat spin. It was the 5th. of April before I'd even got around to looking at most of your letters and I lost my bottle. Me, "smoking guns" Lyons, panicked. I just dumped the whole lot on Uncle Clive. I suspect, (though Clive is far too much of a gentleman to say so), that it's my fault your WACCIs were late last month please accept my heartfelt and most humble apologies.

Now, on with the show. This month I've only had a few letters, so I have actually found the time to read them.

Mike Lyons
Hindley Green, Nr Wigan

<<Hiya Mike, don't worry about it. You can, however, panic if you wish! Life was always designed to give us too much to do, and too short a time to do it.

If you're going to start reading the letters before handing out advice then all I can say is, "Help!"

I've received a few letters, between us we should be able to fill the page. (Long live long answers.) -Clive.>>

MY FAVOURITE THINGS?

Dear Mike, a big thanks for putting our price list in WACCI. We've had to put a few prices up, but we have managed to bring some prices down.

3.5" disc drives are now £69.99 plus £5.00 p&p. ROMDOS XL is now down to £14.99 (£24.99 in a ROMbox.) We are also doing a special bundle of a disc drive and ROMDOS XL in a ROMbox for only £89.99 plus £5.00 p&p.

I am amazed to hear that so many are still sending money to Avatar/Phil Craven. A lot of our customers have tried to order products from him and either can't get through by 'phone or send cheques and do not receive any goods. It's the same old story.

Without blowing our own trumpet, <<Hang on, that's my job - literally. Mike.>>, Siren Software have supported the CPC from day one. We are in our 10th year of business and still going strong. We have seen so many come and all of them go.

One small point, in his review of DES, Stamper intimated that ROMDOS XL was full of bugs. Please could you put the record straight and let your

readers know that the current version is totally bug free. Long live CPC progressivism, best regards,

Simon Cobb
Siren Software
Radcliffe

<<Dearest Simon, with great pleasure I've given you a free plug in the letters pages. Mostly because it touches on a couple of issues which I think are important.

Firstly, Siren are (apart from the odd minor glitche) a very reliable and trustworthy supplier of CPC goodies.

Secondly, Phil Craven thinks that he's managed to buy me off just by paying back the money he owes me.

I wish that Clive would publish the letter Craven sent me with the cheque, (incidentally, the cheque was not in Craven's name but Avatar's), it was full of the most inane drivel, riddled with petty lies, insults and rubbish. From someone who claims to be a business man and a professional it is an utter disgrace. I think he's a bit sick in the head.

As to why people continue to buy from Avatar, I have a few theories:

- 1) Some people can only learn the hard way - by making their own mistakes.
- 2) Some people think I'm a sicko with a personal grudge against Craven.
- 3) Some people think it's just a myth and it won't happen to them.
- 4) Some people just like gambling with their money.
- 5) Some people are gullible.

Phil Craven has a problem. If enough people complain about him he won't get any advertising space in AA, (that's if they really are serious about protecting their own readers from unscrupulous advertisers. In spite of many things he has said, he does want advertising space in WACCI.

I suspect that soon, WACCI will be the only place he could advertise. However he can't do that if he owes

members money. Clive has promised me that. His reaction to Paul's totally innocuous letters make me doubt that many members will get their money back. We'll just have to wait and see.

As to Stamper's intimations. You may remember that Stamper had problems with the issue of XL that you sent him for review. The first couple which I received also had problems, (file copying, DOA), however, the version which I have been running for the last year or so is in good working order.

The copy works fine, as does the formatter, (even though you are stuck with only standard "B" drive formats and you can't make up formats of your own. I'm lucky I've still got the RAMDOS disc as it helps with one or two experiments I'm playing with when I've got the time.) I'm still cross that exiting XL resets the whole machine and exiting SECEDIT doesn't, (or doesn't clear the screen), but at least everything does actually work. Stamper is entitled to his opinion, which is based on *his* experience, just as my opinion is based on my own experience. I have no complaints. Stamper has. -Mike.>>

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ONLY A BYTE, NOT A MOUTHFUL

Dear Mike, dare I ask the following? When I first had my CPC464 I had a very good tape version of the game of Bridge, produced by Infogrames. The cassette inlay says that it runs on CPC464-664-6128 machines.

After buying a DDI-1 disc drive I successfully managed to transfer it to disc using (I think) Bonzo Meddler and it ran perfectly well from disc.

However, having recently obtained a colour monitor for my 6128, I thought it would be great in colour after years of using the green screen but it does not appear to run on the 6128.

The program gets as far as a screen which asks whether English or French language versions are required - then nothing! The machine is completely dead. However, if I connect a cassette recorder to the 6128, the program runs from the original tape version.

The whole of the data has loaded at the point of the seizing up, so the whole program has in fact loaded. Any ideas? Yours faithfully,

Alan Sheldon
Nottingham

<<Hello again Alan, long time no hear from. I can only suspect that the file on the disc is corrupt in some way, (it does happen), or that it is one of those nasty little problems that sometimes, (extremely rarely), happens through poor drive head alignment.

Have you checked whether the disc version of the program still runs on a 464 with DDI-1?

The type of monitor you use makes no difference whatsoever to the actual running of a program. To the computer a green monitor is no different to a colour monitor. It is much more likely that there is a bit of corruption in the data on the disc. I would suggest re-copying the program from tape to disc using the 6128. This might make a difference. -Mike.>>

YOU'RE NEVER ALONE WITH SCHIZOPHRENIA

Dear Mike, Yes, I'm back! It's been a long time since I've written, but I've been in hiding for a number of months, doing a lot of work with someone called DES. I haven't slept for six months, and I am now a deranged psychopath with red eyes. But it was fun. Especially when Uncle Pete 'phones and tells me that there's another bug....

Anyway, on with the show. I've noticed a number of letters about Ron Izett's problems with DosCopy. I can confirm that it works perfectly on an unexpanded, non-upgraded 464. I used it for transferring data to and from the PC discs I use at University.

I no longer use the 464, by the way. The amazing Mr Bellaby got me an old-style 6128, as well as a shiny new Rombox for my 6128+. Ta very much, Clive. You're a Saint.

Another DosCopy point. If you're a Plus owner, you may have discovered that the program will not work on your machine. This appears to be because Mr Hugger has included a pretty opening screen, which (I think) uses a hardware keyboard scan which isn't Plus-compatible. To get round this, you'll need to insert the following in the basic loader:

```
95 POKE &7007,0:POKE &7008,0
96 POKE &7009,0
```

Well, it works for me. And now, on to your favourite subject, Mike - good

ol' Phil Craven. Last June, I ordered a Ram/Rom from Avatar, which I needed to write the ROM version of DES. The £15 cheque was promptly cashed three days after I sent it off. After three months, and a number of phone calls to Avatar, I sent off a letter by recorded delivery, asking for a refund. Four days later, I received a cheque, and a very apologetic letter from Mrs Harris. I can't help feeling sorry for her, having to rely on Mr Craven as a supplier.

Anyway, true to form, you can keep this disc. I wouldn't want to break an old habit would I?

The meaning of WACCI, part 32b: Wot? Another Craven-Centred Interruption? Best Wishes,

Michael Beckett
Antrim, Norn Iron

<<Hiya, Michael. Welcome back to these hallowed pages. We seem to be hearing an awful lot about this DES person. He seems to move around a lot. Strange bed-fellows and all that.

Thanks for the DOScopy tip. I'm sure many people will be sampling the useful copying utilities. As it happens I am also copying ASCII files for use in a Database for a friend at work who uses a PCW. The translation is proving problematic, but I'll get there in the end.

Now, a question puzzles me. I'm glad you mentioned *him*. Why on earth did you ignore my warnings? Why do people not listen when they're told something important? The guy is a 'thief' of the lowest stripe. He is an con artist who preys on unsuspecting, (though after all my warnings they shouldn't be), CPC-ers. When are you people going to learn that Mikey Baby does not usually tell fibs about people in print? I'm relieved that you got your money back eventually. It seems that Mrs. Harris is an honourable trader. She does seem to be trying to return people's money. Let's be grateful for small mercies. I would be pleased to hear from anyone who has had their money returned by Avatar, after however long a wait. Good news is some news. -Mike.>>



THE CIRCLE TURNS....

Dear Clive, you may remember that way back in December 1992, I wrote to you bemoaning the fact that I was unable to write letters on disc. Well since then, thanks entirely to WACCI, I have progressed through WACCIWORD to VDE266 to ZDE16, which is the word processor that I am currently using. (The next step, I imagine will be to the Protext family - although my wife prefers WACCIWORD for writing her letters.)

The documentation with WACCIWORD and VDE266 is excellent, and in the case of VDE266 it allows the user to set up the program and the printer using the "Beginners Guide."

This guide is not included on the ZDE16 disc, and the program is sent out, ready set up with the variables for Epson compatible 9 pin printers.

As you know, I have an Epson LQ-100, 24 pin printer and I found the default settings already in the program were not fully compatible. So with the VDE266 "Beginners Guide" by my side, I set about altering the settings to specifically suit the LQ-100. Had I not had the VDE266 instructions, I would have found this impossible and would not have been able to use the program to its full potential.

I have taken the liberty of copying your "Beginners Guide" to installing VDE23 and VDE266, but have adapted it for ZDE16. With 24-pin and Ink Jet printers becoming cheaper and more popular I think it will be useful to anyone purchasing the ZDE16 program. I have put a copy of this adapted guide on the enclosed disc and I leave it up to you to decide whether you feel it's worth adding to WACCI PD DISC 57.

I have also adapted the DISC.DOC file to indicate that the instructions are available on the disc. Sincerely,

Ron Boreham
Pembroke Dock, Dyfed

<<Hiya Ron, it very nice hearing from you, I trust and hope all in well down there in deepest Wales?

Thanks for the updated instructions for ZDE16 - they're now on the disc. I have to admit to failing to put them on the disc, so much for our policy of supplying "ready to use" PD software. (I must be human after all - my wife says I'm not.) We've gone full circle, you started by asking for help, and end up supplying it. Cheers. -Clive.>>

IT'S ALL NEW TO ME!

Dear WACCI, I have recently bought a second hand 6128, plus lots of extra's including, Second Drive, Multiface, Speech Synthesiser, lots of software and some old issues of WACCI.

I'd like to subscribe to WACCI and I have enclosed £3 for two issues. The next time I'll subscribe for a year.

I'm new to CPC programming, having spent the last seven years programming commodores, so I am keen to learn.

I also have some games on cassette which I have no use for, I would like to donate them to WACCI, maybe you could use them? I've enclosed a list, if you want then let me know.

J Palmer
Morpeth, Northumberland

<<Hiya J, May I welcome you to WACCI and the wonderful world of CPC's. Many thanks for donating the tapes, Paul Derryhouse has, I understand, already written too you about them. -Clive.>>

WANTED WANTED WANTED WANTED WANTED

CTM644 COLOUR MONITOR
(for the a 6128)

Contact: Neil Griffiths
0244 531587

UNDERCOVER AGENT UNCOVERS.....

Dear Paul. Please find enclosed six copies of CPC Undercover and your disc (which I am returning.)

Many thanks for lending me the Ball Bearing game - I'll give it a review in Issue 5 of CPC Undercover. However, I really do think that WACCI should include a couple of pages of games coverage as this might increase your readership. I know WACCI is a serious magazine, but it's worth a thought!

And this leads me into the next part of my letter. I've struck up a bit of a deal with Crystal X Software and I can now sell seven of her games:

Cloaker, Pacifist, Sector 5, Mantis, General X, P.Z.P. and Justice (sold with part 2) - they cost £2 plus disc plus SAE each. I would appreciate it if you could ask Clive to tell WACCI readers that they can have a 5% discount off these too!

I am still producing the Office Collection disc which I have put together to help me with the costs of the fanzine. I'll copy this disc which has lots of serious software on it for 60p plus disc plus SAE.

Finally, I will do a few more mini-reviews once I've got my exams out of the way (which should be in about two weeks time.) Yours

David Crookes
CPC Undercover
Brandlesholme, Bury

<<Hiya David, Clive here... Thanks for the details of the Crystal X Software discount - I am sure that many readers will take up this offer.

Games reviews in WACCI? There's an old chestnut of a different colour so to speak... The real problems of doing this would be:

1. Finding an unbiased, good quality, games review writer.
2. A lack of new CPC games to review.

Whilst other potential problems would include: deciding what we remove to make space; deciding whether we want to compete with other magazines or if we complement other magazines.

WACCI has survived because it sits in a niche and because it meets club members needs. There will come a time when only a few CPC fanzines remain. Then each of them will need to cover a wider range of topics. That time is not yet upon us, and I hope that it will not arrive for quite some time (but who knows the future?)

Do you want a world where CPC User, CPC Undercover and WACCI are just pale imitations of each other?

I'd better get off my soap box. It's up to the club members, if they want a games section, then we'll have a games section. I'm sure we'll get a few letters on this subject. -Clive.>>

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CPC UNDERCOVER, DAVID CROOKES, 37 TRIMINGHAM DRIVE, BRANDLES HOLME, BURY, BL8 1JW
Alternative A5 size CPC magazine - usually 80p plus postage, now only 70p plus postage to club members.

SENTINEL SOFTWARE, 41 ENMORE GARDENS, EAST SHEEN, LONDON, SW14 8RF (TEL: 081 876 7032)
10% off all software. Phone for upto date prices, please mention WACCI when ordering.

PROTYPE PROBLEM PERSISTS!

Dear Clive, Nice seeing you at Haydock Park and the program:- America's Cup Challenge, (the very realistic sailing race) I bought from you is just great.

You'll recall I paid my subs, thanks for passing the subs on to Paul. Can you send you send me/us WACCI 76 as we seem to have missed it, and adjust the last issue number accordingly. Thanks.

H C Smith
Chadderton, Oldham

PS. This letter was printed using Protext and Protype and as you can see it has created a ragged edge. How can I stop this from happening?

<<Hiya Colin, nice hearing from you. I am sure that Paul D will read this and alter your last subs to 86 (was 87.) I have sent a copy of WACCI 76 to you!

I'm glad that you are enjoying the sailing simulation, we've been having the right sort of weather for a spot of jolly old sailing! Land Ahoy!

I'd better explain about your ragged edge for those who have not have the benefit of reading your letter.... You have my address on the left side of the page and your address on the right hand side, like so:

Clive Bellaby	H C Smith
Long Eaton	Chadderton
Nottingham	Oldham

On screen the right hand side address is aligned, but when it's printed out, the address is printed ragged.

The ragged edge is caused by Protype which is printing out the text using a microspaced font (this is a font where an 'i' uses less space than an 'n'.)

Because letters take up a different amount of space the edge on the second address column appears ragged.

GOTTA GET A PROBLEM OR TWO.....

Dear Clive, I ordered eight discs from Patrick Dunne, these were sent to me by return of post, with them he sent a note saying "if any of the programs do not work correctly, please tell him, and he'd try to find the problem."

I found several problems and I wrote to Patrick, but I've not had a reply, please can you help? I've included a full list of the queries and a brief explanation of each problem....

HOMEGROWN DISC 13

WACCIWRD cannot be run from within the MENU.BAS program. <<The MENU program was written as an example of how to write a menu program. Because of the way it was written it cannot be used to run a program that uses either the SYMBOL or MEMORY commands.

The reason is very simple: MENU.BAS alters the amount of memory available to Basic; Basic allows you to alter the available memory once; the MEMORY and SYMBOL commands alter the amount of available memory; So programs using these commands cannot be run from within MENU.BAS.>>

DAVART is a screen designer.

SQUEEZE is a screen file compactor. Standard screens use 17k of memory, this program reduces the file size to free up disc space.

All your other queries can be solved by reading the document/instruction files that are on the disc. Just load the files into a word processor - Oh, you don't have a word processor, never mind use this simple Basic program.

```
10 MODE 2:CAT
20 INPUT "file to view : ";f$
30 INPUT "(S)creen or (P)rinter ";w$
40 IF UPPER$(w$)="P" THEN w=8
50 IF UPPER$(w$)="S" THEN w=0
60 CLS
70 OPENIN file$
80 WHILE NOT EOF
90 LINE INPUT #9,a$
100 PRINT#w,a$
110 WEND
120 CLOSEIN
130 END
```

It allows you to view (or print out) standard ascii files. However the best option is to use a word processor.

WACCI PD DISC 75

CASSCARD, halts and displays "unknown command in line 30".

<<Line 30 is a Utopia Rom command, ;TOKENS,450. You don't have the Utopia Rom so the programs crashes. If you delete this line the program will run.

This same error appears in: PROGRAM; CPCLABEL; CPCLABEL.AMS, EVERYDOS.AMS; EDIT; and EVERYDOS.>>

TESTCARD halts with a "Direct Command Found" error. <<No problem. Some files are Basic programs, some are not. The message is telling you that Basic does not understand the files contents, so it cannot be a Basic program. TESTCARD is in fact a "Test Card" for use with the CASSCARD program.>>

ALPHABET crashes, "File Type Error" is displayed on the screen. <<This is a similar problem, except that this file cannot be loaded by Basic, 'cos it's nowt like a Basic file.

The same applies to EDIT2, which is in fact a 'Protext Printer Driver' and it's part of, and loaded by EDIT.

NSWP-PRD.BIN is a 'Protext Printer Driver' as well! - It cannot be loaded as a Basic program either.>>

<<A number of files on the disc are in fact ascii/text files and contain the instructions and notes that will fully explain the programs - I hope!>>

<<Side B of the disc consists of several multi-loader programs, such as TUTOR (the typing tutor) this has ten subsidiary programs, which include, QWERTY.BAS, NOTES.BAS and loads of programs named NEXTn.BAS. These cannot be loaded as standalone programs.>>

WALES4PT1 not found and WALES4PT2 not found messages are displayed.... <<The 'not found' message tells you that the computer cannot find a particular file of the disc or tape. So it cannot find a file called WALES4PT1 in the disc.

The first thing to note here is the length of the filename - it contains 9 characters, this means that it cannot be recognised by Basic - which imposes an 8 letter maximum filename length.

The other thing is that there is no file by this name on the disc. I have tried to recreate the error and cannot so you'll need to tell me more about what happened...>>

WACCI PD DISC 55

Epic by Michael Beckett, halts with a syntax error in line 310. <<It runs perfectly well on my computer, use:

RUN "DISC"

Runs the menu program, then select the program you want to run from the menu

and press Enter to run the program. The program loads and runs happily. It adds a wide range of extra characters to Protext. Please note, the version on PD DISC 74 is a better version.>>

On side B of the disc RUN"HELP.BAS", enter name of text file to display, use ? to cat disc, output to screen or printer. It wont cat the disc to the printer. Cat not found. It might be possible that I am not doing it the right way, please have a look and tell me if it's me or if it is the program that is wrong?

<<No problem, it's you that's wrong! To CAT the disc, enter a "?" at the prompt and press Return.

The program was not designed to CAT the disc to the printer, and it cannot therefore CAT the disc to the printer.

CAT not found, it's not surprising, there's not one on the disc. I've got one at home, it's lazy, fat and asleep - no change there.>>

WACCI PD DISC 68

CATDBMCB.SRC gives a file type error, as does RUN "CAT3A.DOC". CATDPOK.ASC, how is this program worked and run, will you tell me as good as you can.

<<Read the document files disc they explain your queries. RYFI is the key to success. You ask about CATDBMCB.SRC and CATDPOK.ASC, these are explained in detail, try using:

RUN "DISC

This loads a "disc help" file, this clearly states that the programs are:

"George Ho-Yow's suite of programs, from his Inspiration series, used to create a disc CATalogue library. Read CAT3A.DOC for full instructions."

You need to take time to understand a disc, to probe gently, and to try to understand what the programs authors were trying to achieve. The worst thing you can do is rush around trying bits here and there in an attempt to find something that works in the way that you expect it to work.

The rushing around leads to errors, you said in the letter the CVM02.BAS doesn't seem to be on the disc - it is - it's on side B! - another case of, more haste, less speed.>>

Finally Clive, will you tell me how is a full letter blotted out from memory (like this letter I have written to you) to make room for a new letter?

When I go into Protext's command mode and use the CLEAR command it wont work. I use version 1.01. The only way I can clear a screen is by using the CLR KEY, I don't see any other way of doing it. Please help.

<<From command mode, that's where a '>' is displayed in column one, type in CLEAR and then press Return. If all well, a "Clear Text, Are you sure y/n" message is displayed, press "Y" to clear the screen. If this doesn't work then use the following method. Load Protext and from command mode, save an empty file to disc with, SAVE "EMPTY".

Now whenever you want to clear a file from memory, use LOAD "EMPTY" from command mode and the empty file is loaded from disc and it replaces whatever is in memory!>>

I enclose a 25p stamp and addressed envelope for a reply on the subject when you find out what is wrong, thanking you, yours.

John P Jordan
Lanesboro, County Longford

<<Hiya John. I answered the questions as I went along, it didn't make sense waiting until the end to answer them, there were far to many and the answers would be all mixed up.

I don't have the time to write long replies to individual letters - you'll have to settle for a reply in WACCI or one of my hand-written scrawls done during my lunch break at work.

It does help us if you send letters on disc - it saves a lot of typing in, and it ensures a quicker reply. Have a good day. I hope this helps, if not, send Mike Lyons a letter. -Clive.>>

HELP WANTED

I need help in writing a program that allows me to read and write to large format 3.5 discs.

Please Contact:

Mark Stewart,
3 Beaurepaire Crescent
Belper, Derbyshire, DE56 1HR

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All software is original and comes with instructions and packaging, list supplied on request. for more information contact;

Archie Fulton, 8 Grindahoul, Brae, Shetland, ZE2 9XS. or Phone 080 622 640

HINTS AND TIPS

SUPPLIED BY THE HAMILTON AMSTRAD CLUB OF NEW ZEALAND

These hints and tips were extracted from the club's newsletters by John Court.

AMSTRAD CPC Users Group. of the N.Z. Microcomputer Club Inc. Box 6210. Auckland. New Zealand.

THE SUN

Warning for summer - keep your discs and disc box out of the sun's heat. It is not only our skin that gets burnt!

.....

ROMBOX ROMs

In a rombox are great to have with the CPC. Your word processor and utilities are instantly available, with no fear of corruption. For those with a 3.5 or 5.25 inch second "B" disk drive, the order of the ROMs is most important.

Positions 0 and 7 are built into the computer for Basic and CP/M, and are kept empty in the Rombox. This is the order in which there is minimum interference between ROMs.

1. Romdos (Romdos XL)
2. Promerge Plus
3. Protext
4. Utopia
5. Prospell--
6. Maxam or Maxam 1.5

Remember though, the dip switches may be labelled 1 to 8 for ROMs 0 to 7.

.....

THANKS FOR THE MEMORY.

"Memory Full" is a message that comes up on the screen to put you off. It can occur when you try to load a program after the computer has previously received instructions to do something else.

The computer has a pointer that indicates where machine code can be safely stored. When the pointer is low, then there is not so much room for a BASIC program.

Reset the CPC by removing disc(s) from the drive(s), switching off, then on, resetting the machine and start again.

.....

CPC TO PC.

A number of members who have moved "up" to larger computers are often heard to sigh for the ease of use of Protext or Tasword that they used on a CPC. There is sometimes encountered computer snobbery amongst us. The reply is "It is not the size that counts. It is what you do with it!"

.....

NEWSWEEP

Peter Clement replies to those people who have asked if they can use the CP/M public domain program NEWSWEEP for legal copying of data files and PD Software on their CPC when they only have just the one disc drive.

The answer is yes for a 6128, but no for 464 and 664 models. The trick will only work with CP/M v 3.1 (CP/M Plus), but not with CP/M v 2.2, the alternate system of the earlier models.

1. With CP/M up and Newsweep Version 2.07 loaded, load source disc and key in L A (log in A drive.)
2. Tag files to be copied and key in M (mass copy.) When Newsweep asks which drive, key in B.
3. After it has read the first file, (or part thereof) it will tell you to insert disc for the non-existent drive B. Put the destination disc in drive A. It will then ask you to insert the source disc in Drive A and so on and on and on.....

PCW AND FILE TRANSFERS

Printing Problem: Recently I was asked if some long ascii/text files made in CP/M Locoscript on a PCW8256 could be printed out on a laser printer in best possible quality.

The PCW's are different sorts of beasts to the CPCs. Well, it was done, but in a roundabout way. Moonstone's "2 in 1" in a CPC6128, turned up its nose at the PCW's system formatted disc and refused to read it in CP/M for a DIR as the directory has a larger space reservation.

However the files did CAT under AMSDOS, so using Utopia's COPY, the files were transferred from the PCW 167K disc to a CPC 178K data disc.

These could be read by "2in1" and so were transferred onto a 3.5 inch MSDOS 720K formatted diskette.

Now the laser printer was connected to an Archimedes, which in addition to its own operating system, just happens to have a MSDOS emulator.

The files were loaded, reformatted, and printed. Eureka! Later, a PD program was found on disc TB20A called READPCW which does enable PCW files to be read directly from a CPC. The moral is that if you have a problem, look first in our PD catalogue.

.....

DIR [FULL] IN CP/M

Have you ever wanted to know just how long ago that your Supercalc2 spreadsheet data was updated or looked at, or in case of accidents, you made back-up copies of your precious data files of your word processing, spread sheets, databases, artwork, music, or desk top publishing? You have? Read on

this bit is just for you! First, we'll look at back-up copies of data files.

If you use a CP/M+ program, such as PIP or NEWSWEEP, to copy the data from your working disc to the back-up disc, using 2 drives, then it is possible to date-stamp the back-up disc.

To do this, go into CP/M and put the back-up disc in Drive B, to be first made ready using INITDIR from side 2 of your CP/M System Disc in Drive A.

Type INITDIR B: to reformat the directory of disc in Drive B. Turn System Disc in Drive A over to Side 1.

A> SET [ACCESS=ON] B: and
A> SET [UPDATE=ON] B:

And if you want the file to be private

A> SET [PASSWORD=YOURWORD]
A> SET [PROTECT=ON]

Then the back-up disc is ready to be used. Before making the copy in CP/M, set the date in the computer from the Side 1 of the Systems Disc.

A> DATE SET

Date in form mm/dd/yy, and time in form hh:mm:ss. So 2.08pm on 21 May'89 would be entered 05/21/89 and 14:08:00

Note: Date is in USA style, month first, and time has hours in 24 hour configuration, both with zeros first for numbers 1 to 9.

The Time can be checked by DATE or DATE CONTINUOUS or DATE C. (The present Time/Date disappears when the computer is switched off.)

Using NEWSWEEP or PIP, copy the data file to the back-up disc in Drive B. Then put the system disc with DIR on it into Drive A.

A> DIR [FULL] B:

shows you a much expanded Directory showing each file's attributes and the time and date when it was last looked at, and when it was last updated.

Or you can put a sticky label on the back-up disk and write the date on it. However you do it, get into the good habit of making regular back-up copies of all your data files, and then keep them in a different place to the originals. For database files, after updating, I always save them twice and

onto different discs. The back-up is thus always right up to date. For data files for CP/M Protext or Supercalc2, follow a similar procedure.

The data disc can be in DATA FORMAT & placed in Drive B, ready to be reformatted for date stamping.

A> INITDIR B:

from side B of 1st System disc.

A> SET [ACCESS=ON] B:

from side A of 1st System disc.

A> SET [UPDATE=ON] B

from side A of 1st System disc. Then copy DIR.COM from side A of 1st System disc onto data disc in drive B. Data disc is now ready for use.

CPM with 2 Drives

A> DATE SET

A> Program

After saving data to Drive B, the data disc can be looked at, under CP/M with

B> DIR [FULL] in Drive B

or

A> DIR [FULL]

if data disc is in Drive A

or

A> DIR [FULL] B:

if data disc is in Drive B and side A of 1st System disc is in Drive A.

.....

FRACTIONS AND PRINTERS.

To put vulgar fractions into your word processor copy, the trick is to make the printer code for superscript ON, then the top figure, superscript OFF, oblique stroke, subscript ON, bottom figure, subscript OFF.

In Protext, pc t, 3, pc t, /, pc s, 8, pc s, gives a printout of three eighths, (where pc = printercode). In reality they look a bit like this:

1/2 1/4 1/8 1/16 1/32 etc.

PROSPELL TIP

PROSPELL, the spelling checker for PROTEXT word processor, is nice and easy to use with 2 disc drives for the "A" versions 1.08 and 1.21, and easier still for the version 1.20 on ROM.

But for those with 1 drive, many have had problems. The method, for them, involves doing the spell check before saving the text file to disc.

Run "PROTEXT", and then when in Command Mode, type Q to return to Basic. Run "DISC" of PROSPELL side A, (that is not the Dictionary side), thus loading the checking program.

Then change back to the PROTEXT disc and enter 'P, (bar P), which returns you to the Command Mode.

At the prompt >, type SPELL and insert the Dictionary side of PROSPELL and start the check, using (I)gnore, (C)hange, (L)ook-up, (V)iew. (S)tore adds place and street names, telephone numbers and assorted new words to the Dictionary disc.

ESC takes you back to DOC mode. Bad spellers and speeding typists who are devoted to TASWORD, but who find TASPELL limited, should consider using PROTEXT with PROSPELL. The new tricks to master are the rulers and the commands SP (to customise the page and printer codes) and PR, to load the saved printer driver for repeat use.

CP/M PROTEXT HINT ONE

For the CP/M version of PROTEXT, and ROM versions of PROTEXT with PROMERGE PLUS, there is a Box command not found on the other versions.

This enables the printout of double and treble column pages. Use printer codes for Bold and Condensed font for easier reading.

AMSDOS PROTEXT HINT ONE

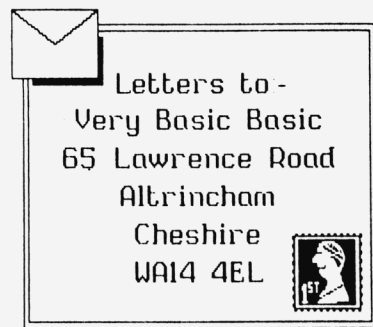
To print only a portion of a text file, insert block marks at start and end of the portion and then use the command PB (print block).

AMSDOS PROTEXT HINT TWO

Always switch on the computer before trying to load Protext. If you don't switch the computer on, you will find that Protext does not load. Every one a winner folks. Have a good day.

VERY BASIC

Written by
Alan Tilling



HELLO EVERYONE, 'TIS I TAKES ANOTHER SCREEN TEST!

Following on from last month, here is a further loading screen for the 'Electric' program. It is not particularly good from the artistic point of view but it does use some keywords that have not been explored in VbB before.

I wrote the first part of this on paper then fell into the dreaded trap and set at the keyboard and 'knitted' the code out of spaghetti. Eventually I realised that the program was very disorganised and so I re-wrote it with a little more planning and thus I was able to complete it.

ABORT, ABORT

I'm not going to explain program 3 - it's not worth it. You will see the relevant sections in program 4 but have a look at line 260. After I had got part of the program working I started to define more ink colours then again in 320. What a load of rubbish. Any way the point of showing you this is that I did not retype all that lot in again but listed the program then rearranged the lines (on paper) into a meaningful sequence. Then I renumbered them like this:

RENUM 10000,10[RTN]

This gave the same line numbers but starting at 10000. When I rearranged the lines I wrote the new numbers on the paper, in the margins, then all that had to be done was to edit the lines and change the line numbers to suit. When enter was pressed there were two lines with the same information but with different line numbers. All that was needed then was to type delete 10000-[RTN] and the program was changed over.

The new screen is supposed to be an electricity meter face with black numbers on a silver dial, a silver portion at the bottom and a disc that rotates. Yes we are into animation.

Notice that the revamped program has several REMs to sign post the way

PROGRAM THREE BY ALAN TILLING

```
100 REM every 50 GOSUB 1000
110 MODE 0
120 BORDER13 : INK 0,13 : INK 1,0
130 LOCATE 4,4
140 PRINT STRING$(12,143)
150 FOR bezel=5 TO 15
160 LOCATE 4,bezel
170 PRINT CHR$(143);:
    PRINT SPACE$(10);CHR$(143)
180 NEXT bezel
190 LOCATE 4,15
200 PRINT STRING$(12,143)
210 LOCATE 5,7
220 PRINT STRING$(10,"_") '10x_'s
230 LOCATE 5,11 : PRINT CHR$(95)
240 LOCATE 7,10 : PRINT "-----"
250 WINDOW #1,5,14,5,7
260 INK 3,26 : PAPER #1,3 : CLS#1
270 LOCATE #0,3,22
280 PRINT "METER READINGS" : PRINT
290 LOCATE 6,24 : PRINT "LOADING.."
300 LOCATE #1,3,2 : PRINT #1,"12345"
310 WINDOW #2,5,14,12,14
320 PAPER #2,3 : CLS#2 : INK 4,6
1000 REM ***** DISC ROUTINE *****
1005 PEN 4
1010 FOR disc=7 TO 12
1020 LOCATE disc,10 : PRINT #0,"-"
1035 FOR delay=0 TO 500:NEXT delay
1040 NEXT disc
9999 PEN 1
10000 CALL &BB18
```

through. After the title line Basic is sent to a sub-routine at 750 to set up the initial conditions. Notice that ink 2 has been added this says that the INK in pen 2 is coloured number 26 (bright white) which is to represent the silver parts.

Line 780 represents the edge of the disc. Even though the picture is animated, only text graphics are used hence disc is a string (\$) of text.

The next line is new (I think) to VbB and I'll explain it later on. The RETURN at 800 returns control to the first command after the one that sent it to the sub-routine which is, in our case, 30. Line 30 is of course a REMark just for we humans or is it us humans? Anyway the computer ignores it. Notice that an apostrophe has been used in place of the 3 letters.

The cursor is placed at the top left hand corner of the metal case and line 50, another new command means print a string of text made up from 12 blocks of chr\$(143) which is the square block symbol, causes the top of the meter case to be formed.

The sides are made by drawing a blob, missing ten spaces and then drawing a further blob.

Notice that to move the "drawing" down the page, a loop is used to change the locate command. Please notice also that the loop starts at 5 and finishes at 15. So the first time around the loop the locate command is LOCATE 4,5; second time LOCATE 4,6 etc. etc. up to 4,15. 110 is exactly the same as line 50.

By the way, the easiest way to write this line is edit 50 [RTN] [del] [del] [del] 110 [RTN]. This is the way that the whole lot was renumbered earlier.

PROGRAM FOUR BY ALAN TILLING

METER READING SCREEN FOR WACCI 78

```

1 GOTO 3
2 SAVE"prog4",a:STOP
3 ON BREAK GOSUB 1020
10 '
20 GOSUB 750'** Initialisation **
30 '**** Draw bezel ****
40 LOCATE 4,4
50 PRINT STRING$(12,143)
60 FOR bezel=5 TO 15
70 LOCATE 4,bezel
80 PRINT CHR$(143);:
PRINT SPACE$(10);CHR$(143)
90 NEXT bezel
100 LOCATE 4,15
110 PRINT STRING$(12,143)
250 REM *** Meter Face ***
280 LOCATE 5,7
270 PRINT STRING$(10,"_") '10x's
280 LOCATE 5,11
290 PRINT STRING$(10,CHR$(95))
300 LOCATE 3,22
310 PRINT"METER READINGS"
320 PRINT
330 LOCATE 6,24
340 PRINT"NOW LOADING ..."
350 WINDOW #1,5,14,5,7
360 PAPER #1,2:CLS#1
370 LOCATE #1,3,2
380 PRINT#1,"12345"
390 WINDOW #2,5,14,12,14
400 PAPER #2,2:CLS#2
410 LOCATE 7,10
420 PRINT disc$
430 EVERY 250,1 GOSUB 500
440 WHILE x<10:WEND
500 REM ***** DISC ROUTINE *****
510 FOR dot=1 TO 7
520 MID$(disc$,dot,1)=CHR$(146)
530 LOCATE 7,10
540 PRINT disc$
550 FOR delay=0 TO 250:NEXT delay
560 disc$="-----"
570 NEXT dot
580 RETURN
590 END
750 REM *** Initialisation ***
760 MODE 0:INK 0,13:INK 1,0
770 INK 2,26:BORDER 13
780 disc$="-----"
790 AFTER 2000,0 GOSUB 1000
800 RETURN
1000 REM *** Loading section ***
1010 RUN"test"
1020 MODE 2:INK 0,14:INK 1,0:
BORDER 14:PEN 1:LIST

```

Line 80 uses PRINT SPACE\$(10) to print ten spaces. Beware, including an extra 's' (spaces\$) will cause an error. Lines 270 and 290 are the same, they section off the dial and data plate.

WHEN I'M CLEANING WINDOWS

Window number 1 is set up at 350. The hash sign (#) means stream and is set to #0 by default. You may see the hash written as a £ (because printers are set up to print in english text and the £ uses the same ascii code as the american #. (Remember to type #.) The construction of the command is

WINDOW No. left,right,top,bottom

These four parameters are the window's corners. 360 sets the colour of the paper in stream 1 to the colour in pen 2 and switches the colour on. This is done by CLearing the Screen (CLS#1.)

The cursor is moved using the locate command and a meter reading inserted. 390 and 400 do a similar task for the data plate (but there is no writing.)

Look at the locate at 410. Since the locate command follows two lines about #2 you might be fooled into thinking that the position referred to was in stream 2, but it's not. If a stream isn't referenced Basic assumes #0 (the main screen) by default. So the cursor is in the middle of the meter face and it prints disc\$. Remember disc\$ (from 780)?

A while/wend is entered at 440. When a loop is entered, the program carries out actions, increments a "control variable" then nips back to square one and continues to go through the loop until the "control variable" signals that loop has been completed. 440 says while x is less than 10:wend (go back to the while and re-loop). This means that x is never incremented so Basic is stuck in an endless loop!

IF I MAY INTERRUPT

The terms in 430 & 790 are new to VbB. There are four interrupt timer which count in 1/soths of a second. Timer 3 is the least important, timer 2 next, then 1 and the boss is timer 0. Basic has passed line 430 and has set off timer 1 and is looping like mad in 440. line 430 says EVERY 250 counts of timer 1, stop what you are doing and go to the sub-routine at line 500. So every 5 seconds (250x1/so) Basic is

yanked out of the loop and enters the disc routine. This explanation could be messy so hold on to your hats. 510 is a loop that will be actioned six times and 520 is a MID\$ command. MID\$ has been used many times before in VbB but not in this manner.

Using it causes CHR\$(143), a thicker hyphen, to be placed in the MIDDLE of disc\$. What mid\$ does is in disc\$, dot characters from the end place one lump of CHR\$(146). 530's locate causes 540's now modified disc\$ to be printed in the correct place.

A small delay is introduced at 550 and disc\$ is reset to six hyphens by 560. The RETURN sends control back to 510 and so the meter's disc appears to rotate round and round and round.

Remember line number 790 in the initialisation routine? The AFTER command being controlled by the most important interrupt timer, timer 0 says that after 40 seconds (2000/50) drop what you are doing and goto the sub-routine at line 1000, and 1010 is a run command. So the computer acts as if you had typed run"test [RTN] at the keyboard and the disc drive will stir into life and like me you will probably get the message TEST NOT FOUND. All that is needed now is to substitute the name test for your chosen filename and that's it - an animated loading screen.

LILY GILDING TIME

If you would like to gild the lily even further, why not add the lines in program 5? This gives a meter reading that is constantly changing.

The meter reading is incremented and displayed on the meter's face.

PROGRAM FIVE BY ALAN TILLING

```

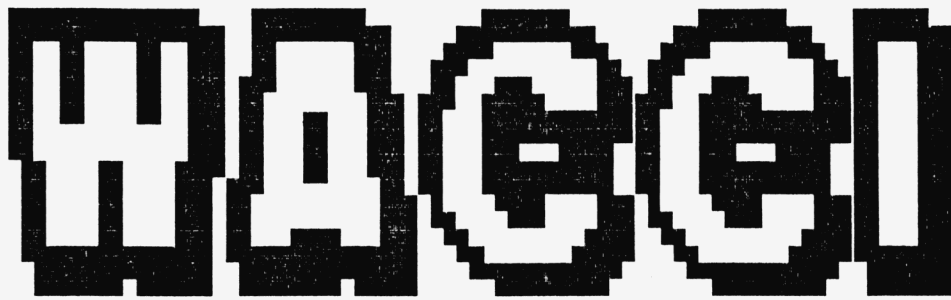
370 LOCATE #1,2,2
380 PRINT#1,number
565 number=number+7
566 LOCATE #1,2,2
569 PRINT#1,number

```

OUTRO

For originality, you could cause a random number to be displayed as the first meter reading. You should use Randomize time and RND(number) between 780 and 790. Have fun. Byeee. Alan.

GREAT



SERIES OF YEARS GONE BYEEEE....

BANKMAN by Alastair Scott

Last month we left off as Alastair was explaining the SCREENSWAP and SCREENCOPY commands. The venetian blind effect seen when using these commands (or from BASIC using LOAD "filename.scr",&C000) can be overcome and Alastair starts off this months episode with his favourite solution - take it away Alastair.

VENETIAN BLIND FURY

There's very little you can do about this, the neatest solution I can think of involves the video chip. Add the following to last months program:

```
65 OUT &BC00,1:OUT &BD00,0
75 OUT &BC00,1:OUT &BD00,40
```

Evelyn Waugh once said, "Only school children and spies know the second verse of the National Anthem." He should have added "WACCI contributors" to the list as the line "Frustrate thy knavish tricks" occurs in the Royal toon and these OUT commands do precisely that.

Line 65 tells the video chip to make the screen width zero. Despite this the 'SCREENSWAP command still works as normal, line 75 restores the screen width to its default value and Hey Pagoda the swap is visible with only a longish blackout rather than the previous mess.

ALERT ALERT ALERT

A warning: don't use ESC to break out of the loop, if you break into line 70 you'll have to type RUN 75 blind in order to restore the screen and don't alter the OUT parameters as you can easily tie the screen in knots. If you don't like this you could set all the INKs to the same colour in line 65 and restore them to their original values in line 75, although the original method is much more elegant. Needless to say, this trick masks the fault

rather than corrects it, so I'm afraid Bank Manager is useless if you want fast graphics manipulation.

STRINGS

Okay, here comes the program I'll be using to illustrate Bank Manager's string handling and only the names have changed to protect the innocent.

```
10 DEF FNpadout$(maxlen,name$)=
   name$+SPACE$(maxlen-(LEN(name$)))
20 CLS:maxlen=17
30 'BANKOPEN,maxlen
40 FOR name=0 TO 11
50 READ name$
60 name$=FNpadout$(maxlen,name$)
70 rec$=0
80 'BANKWRITE,@rec%,name$
90 NEXT
1000 DATA Alastair Scott
1010 DATA Clive Bellaby
1020 DATA Ian Parker
1030 DATA Stuart Gascoinge
1040 DATA Russell Macdonald
1050 DATA Peter Campbell
1060 DATA Mike Lyons
1070 DATA John Bowley
1080 DATA Steve Lee
1090 DATA George Ho-Yow
1100 DATA Doug Webb
1110 DATA Phil Craven
```

Define a function key (f0) by typing:

```
KEY 0,"PRINT rec$"+CHR$(13)
```

This will save you having to type PRINT rec\$ lots of times. If you have Utopia, enter 'TOKENS,200 before the KEY command otherwise you'll get an "Improper argument" error.

THE BOGEYMAN ARRIVES

This program reads the names of eleven people and one bogeyman in turn into a string variable and stores them in the second bank of 64K ram. Each string takes up a certain number of bytes. This number, called the record length, is fixed, being determined by the maximum length of the strings you are trying to store. Each stored string as called a record, the first record number is 0 not 1 as you would expect.

With this program the maximum length (maxlen) of a name is fourteen characters so the record length is fourteen. This record length is set by 'BANKOPEN,length as in line 30.

THE CRUCIAL BIT COMES NEXT

The crucial point about storing strings with Bank Manager, which can't be emphasised strongly enough, is that they must all be the same length. That is where FNpadouts\$(maxlen,name\$), defined in line 10, comes in. It takes string name\$, of length less than maxlen and adds spaces onto the end until the string is exactly maxlen characters long. Add it to your library of useful routines.

You store the string name\$ in memory using 'BANKWRITE,@rec%,name\$. The variable rec\$ is an integer variable which must be defined before using the command (line 70.) This program, as you expect after looking at the loop counter in line 40, puts the names into records 0 to 11. After each

BANKMAN by Alastair Scott

'BANKWRITE command is executed, rec% points to the last record number. So after running the program, press f0 and you should get the answer 11.

LOSS OF MEMORY

The variable rec% can also return (*extremely rare*) negative values. It will return -1 when you manage to fill up the entire 64K of RAM. This is the equivalent of the "Out of memory" error message in BASIC. If it returns -2 then this means a hardware failure and severe withdrawal symptoms as your computer is away getting repaired.

STRINGING IT OUT

What if you forget to pad out strings with spaces? Well, things will go wrong, although the computer won't crash and will blunder on regardless (*artificial intelligence? huh.*) Here's a spectacular demonstration of what I mean. The stored strings in this example are CLIVE, MIKE, ALAN and STEVE and an asterisk denotes a space.

1. Record length: 5

Strings correctly padded out with spaces

Computer stores strings as:
CLIVEMIKE*ALAN*STEVE

You read them as:
CLIVE, MIKE*, ALAN*, STEVE

2. Record length: 5

You forgot to pad the strings

Computer stores strings as:
CLIVEMIKEALANSTEVE

You read them as:
CLIVE, MIKEA, LANST, EVE**

In the first instance the strings are read back correctly, all you have to do, if necessary, is remove the excess spaces. In the second instance you get complete nonsense, so the moral is a bit like Marilyn Monroe (*well padded.*) Conversely, if you try and store a string which is longer than the record

length, it will be cut off to fit. For example, trying to store "Clive Bellaby" with a record length of 10 would result in just "Clive Bell" being stored (*with a very sour ring to it - or should that be him!*)

Now add the lines:

```
100 FOR record=0 TO 11
110 rec%=0
120 name$=SPACE$(maxlen)
130 'BANKREAD,@rec%,name$,record
140 PRINT CHR$(24);name$;CHR$(24)
150 NEXT
```

This part reads back the records you stored previously, then prints them out and, by swapping pen and paper, it highlights the spaces that were added by FNPADOUT\$.

DANGEROUS STUFF

The command you need to do this is 'BANKREAD,@rec%,name\$,record. In this command the variable rec% is the same as before and record is just the record number you wish to read but name\$ is different. It must be defined before the 'BANKREAD command (*line 120*) and it must consist of maxlen spaces. After the command is executed name\$ will contain the string stored in record number record.

ON THE RECORD

The beauty of this type of filing system, which is called a random access file, is that you can read, write and alter a certain record without having to wade your way through all the others before it. Lack of this facility is one of the weaknesses of AMSDOS. The files you create with OPENOUT are sequential and if you have 1,000 names on disc and you want read the 999th, you have to read the 998 before it as well.

PSSST

A quick aside - a version of BASIC which supports random access files is the CP/M program MBASIC <<available on PD DISC 3 -Paul.>>

BACK TO BASICS

After that flirtation with CP/M, back quickly to Locomotive BASIC. How do you read and write individual records which are not in any kind of order? All you need are a couple of fairly obvious extensions to the 'BANKREAD and 'BANKWRITE commands.

GOOD MOVE

Say you want to replace Peter Campbell with Stuart Gascoigne (*and why not.*) <<GasparSoft does not have the same ring to it -Paul.>> You then notice that Peter Campbell occupies record number six and that Stuart Gascoigne is 16 letters long, so therefore you need to pad his name out with one space. So you would type directly into the computer:

```
rec%=0:name$="Stuart Gascoigne"+" "
'BANKWRITE,@rec%,name$,6
```

then press f0 and 6 should be printed, the number of the current record, as usual. Now type:

GOTO 100

and you should see that Peter's name has vanished and Stuart's name has appeared. Conversely, suppose you wanted to find out whose name occupies record number 9. Looking at the program you should agree with me that the lucky man is George Ho-Yow. To check this, type:

```
rec%=0:names$=SPACE$(17)
'BANKREAD,@rec%,name$,9
PRINT name$
ENT -1,8,-4,1,4,4,1
SOUND 1,200,100,15,,1
```

and "George Ho-Yow" should be printed, as you would expect, followed by an appropriate fanfare.

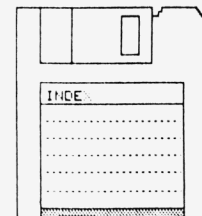
THIS MONTHS HAPPY ENDING

Try having a mess around with the program as well; for example alter the FOR ... NEXT loop in line 100 to:

```
100 FOR record=11 TO 0 STEP-1
```

See what that does and try a few of your own. *I'll be back next month.*

LARGE FORMAT DRIVES



ANOTHER UPDATE - THIS TIME IT'S BY UNCLE CLIVE

Once again we delve into the world of large format disc drives and bring you news, views and updates of the drives which will work correctly with your Amstrad CPC.

In this month's exciting instalment we look at the Mitsubishi MF355F-250MG Disc Drive. But first - Andre Howard is looking at a wide variety of 3.5 inch disc drives, to establish which will work correctly with your CPC - and we'll be publishing Andre's findings, just as soon as he sends them in.

INTRO

On the right is a schematic diagram of the Mitsubishi drive, it contains all the standard jumper settings. You can obtain full details of the settings from Mitsubishi, but if like me, you do not enjoy wading through pages of technical jargon, I've listed the five most popular settings for you.

HOWEVER, ON THE NEXT PAGE

There is another schematic diagram for the same drive, however, it's for Revision B (the later version,) whilst the one on this page is for Revision A (the earlier version.)

The two models are similar, but different. They use different jumper pin layouts, the jumper pins are fitted differently, and the earlier version can be designated as drive A or B, and the later version can be designated as drive A, B, C or D.

I would have thought that the changes warranted a revision in part numbers and not just a small note indicating the drive was version A or B. To make life just that tiny bit harder for the average mortal in the street, the revision number is denoted by meaningful message of: DEL REV A or DEL REV B. Wow!

POWER SUPPLY

The drive needs a 5 volt DC power supply, this can be supplied using the diagram in WACCI 67, or by purchasing a computer power supply unit. A Sinclair +3 power unit will do nicely, and you can normally find them at "All Formats Computer Shows" and similar venues for around a fiver.

All the CPC's (plusses or standard, tape of disc, all) have a 5 volt DC supply for the circuit board and electronics, Andre is going to establish whether this is powerful enough to power the drive and the computer - if it is, there'll be full details in a WACCI near you - very shortly.

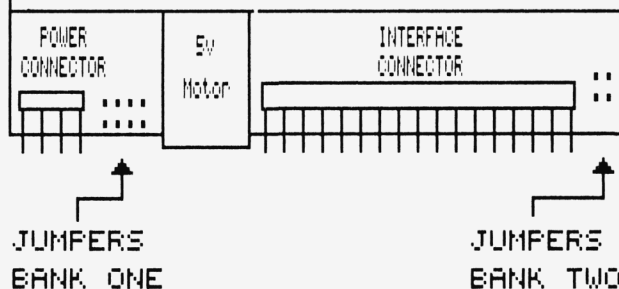
CHANGELINE OR READY SIGNAL

I will explain! Many years ago when drives were first invented, the manufacturers needed a method of telling the computer that the drive was ready to be used, this was achieved by sending a ready signal via pin 34 to the computer saying "all is well!"

However, life and computers move on and those less than nasty PC manufacturers decided that a better method was needed, so the nasty so and so's invented the changeline system!

AVAILABILITY: The MITSUBISHI MF355F-250MG disc drive is readily available from a wide variety of sources. I obtained mine from Maplins Electronics for £37.95.

Mitsubishi MF355F-250MG Revision A TOP VIEW



THE JUMPER SETTINGS

:::	CPC DRIVE B:	!:
:::	CPC DRIVE A:	!:
:::	PC: 720k Drive A: With Changeline Set.	==
!::	PC: 1.44Mb Drive A: With Changeline Set.	==
!::	PC: 1.44Mb Drive A: Ready Signal: Pin 34	!:

Simply, this works by signalling the computer when either a new disc is inserted in the drive, or if the disc in the drive has been changed. The "benefit2" of this system is you only need to CATalogue the disc when the disc has been changed! Or in other words the changeline system has been activated.

The better quality manufacturers design disc drives that are multi format, 720k or 1.44 Mbyte and changeline or Ready Signal and the poorer quality manufactures don't!

THOSE DISC DRIVE MARKINGS

When you look closely at a 3.5" disc drive you'll notice a wide range of markings of the drive. These are not a random pattern that was designed to ward off evil spirits, they are there to help you understand how the drive works and it was designed and what the jumper options are and how the jumper block is linked.

To assist you, here are the more common options and messages, (these were deciphered by Andre Howard from ancient Greek and Latin texts that were found near the dead sea....)

THOSE DISC DRIVE MARKINGS

Option	Description
DR0 or DS0	Set drive to Drive A.
DR1 or DS1	Set drive to Drive B. (DR2 is drive C, etc.)
LD	Set drive to MSDos 720k format.
HD	Set drive to MSDos 1.44 mbyte format.
RDY, RS, SR	Set drive to Ready Signal on pin 34
CL, DC, (DC)	Set drive to Changeline signal on pin 34.
SW	Switch, when jumped, it allows the drive to switch between 720k and 1.44mbyte discs.
1, 2, 33, 34	The pin numbers for the disc drive cable.

THE DIFFERENT 3.5 INCH DISC TYPES

Three and a bit inch discs come in two standard variations, the 720k and the 1.44 mbyte varieties. The real difference between them is the quality of materials used to manufacture the discs. (And you've guessed, the 1.44 mbyte discs are better quality.)

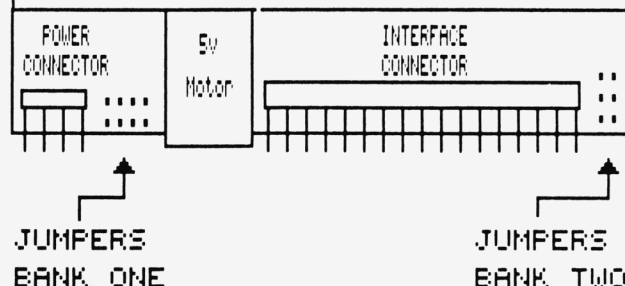
The correct methods of telling which disc is which is to read the disc, the newer 1.44 mbyte discs are stamped as "HD" by the disc manufacturers and the have a small square hole in the left hand corner of the disc. This hole is used as a sensor by disc drives to determine automatically the correct disc size.

Because of the "automatic disc size" sizing method we advise CPC users to buy standard 3.5 inch DSDD (720k) discs. If you buy 1.44 mbyte discs, and the drive has a disc sensor you may that the drive tries to swap into 1.44 the mbyte version.

OUTRO

I have traced another drive that works correctly, the Panasonic JU-257A604P (N1306) - manufactured by Matsushita. More about on this in later issues. Oh yes, ignore the bit in WACCI 72 about the Mitsubishi MF355F drive not working, I was wrong! -Clive.

Mitsubishi MF355F-250MG Revision B TOP VIEW



THE JUMPER SETTINGS

...	CPC DRIVE B:	..
...	CPC DRIVE A:	..
...	PC: 720k Drive A:	..
...	With Changeline Set.	..
...	PC: 1.44Mb Drive A:	..
...	With Changeline Set.	..
...	PC: 1.44Mb Drive A:	..
...	Ready Signal: Pin 34	..

W A N T E D

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CONTACT

MR E GERRARD
051 474 6891

HAND TO MOUT H

THE HARDWARE

I babbled on and on last month about diaphragm switches and the need to make them easy to construct, first because not everybody has a mechanical turn of mind and second, because I've not seen anything of this sort for sale commercially. This month I babble on some more about diaphragm switches!

INTRO

There are of course, single action low pressure switches to be had, washing machines use them to monitor water levels. RS Components Ltd sell several types (trade only unfortunately) so if you stick to the single keypress games then one of these would do.

However if you want a two-way switch I offer the following ideas as a basis for a DIY version which can be made quite easily but is wide open to modification, depending on your personal skills and equipment.

ROUGH GUIDE

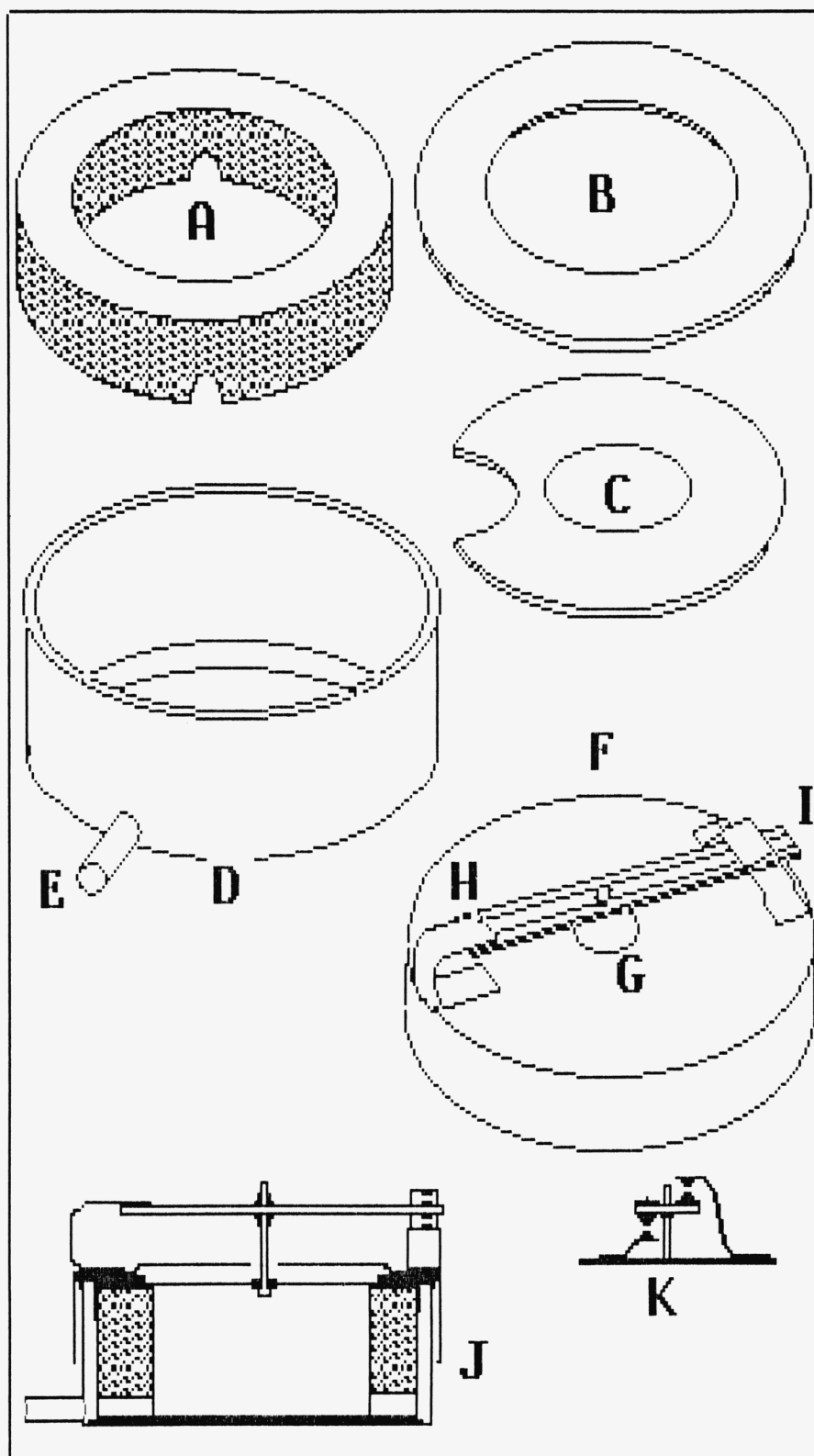
I have quite deliberately not put any measurements on anything, the reason being that it is designed to be made out of whatever you have to hand.

All I am offering is the basic idea and the simplest way that I could find to make a viable gadget.

After all, I am basically a simple man. (Raucous laughter off stage.) I used a Tuxan boot polish tin because it had a domed lid to clear the diaphragm, and remember, your user might not have a lot of lung power so don't get too big.

Item (A) is a softwood/ply ring cut to fit easily in the tin (D) and about the depth of the tin in thickness or less. The thin card/paper packing (C) makes the necessary adjustments.

Make cut-outs in the bottom of the ring to let the air in and stretch a piece of toy balloon fabric over the top and secure round the side with staples. Cut the gasket (B) to fit the lid and clear the flexible bit of the diaphragm and then stick it in place



with a non-petroleum based glue. A few more staples (clear of the sealing surface) helps. Drill a small hole in the centre of the lid and using it as a guide make a hole in the centre of the diaphragm, then open the lid hole (G) out to clear the small screw which is pushed through the diaphragm and secured with two washers and a nut.

About 8BA/2mm is about right, and should of course be long enough to reach the switch armature with a bit to spare. Drill a hole in the centre of the base for a fixing screw, 6BA/2.5mm and solder the nut in place. Add a small piece of brass/copper tube(E) for the plastic tube.

The armature (H) is a piece of 3 strip wide Veroboard soldered to a U shaped strip of thin metal (the flat battery contacts are very useful) and soldered to the lid as shown.

Likewise the fixed upper and lower contacts. (K) Make the contacts on the armature with two opposite loops of wire soldered in place and adjust the gaps with pliers.

Break the copper strips to isolate the contacts and attach the wires. These need to be very light so as not to drag at the armature and stop the diaphragm from working.

Push a length of plastic tube onto the stub of pipe and the whole lot

should be fitted into a suitable box to protect the works as it's a bit fragile. Connect a 9-pin "D" type plug (Joystick type) to the other end of the cable as follows.

LEFT armature contact: Pin 3.

RIGHT armature contact: Pin 4.

FIXED contacts: connect both to Pin 8.

The drawing (hopefully) makes things a bit clearer. The plug is shown from the connection side. You also need a mouthpiece for the tube, a pipe one might do if you can find a genuine tobacconist these days.

Last but not least, some sort of support might be necessary to hold the mouthpiece in place, which could perhaps hung round the players neck. Finally, surprise, surprise, the contraption worked rather better than I expected but would probably benefit from better contacts.

FINGER BUTTONS

Simply use anything you can lay your hands on! Mr. Maplin does a nice line in push buttons and boxes. Ordinary rectangular bell pushes screwed to a piece of wood, or for single key games an old fashioned pendant bell push like wot the "gentry" (and Clive) used to summon the butler with.

A defunct 2-button mouse could be re-wired to serve. I used a couple of ex GPO push on/push off switches with the locking mechanism removed simply because they were there.

Of course you could also have a bulb or another diaphragm in place of the mouthpiece (provided you restricted the amount of pressure produced else you'll rupture the diaphragm.)

OUTRO

There you are. Nothing too technical I hope, and always supposing anyone's interested in having a go, but lacks workshop facilities or expertise.

Of course if you've no ambition to make things there are always viable commercial alternatives, but the whole idea is to make a little dosh go a long way, to help in an area where income is likely to be at a low ebb.

Most of the popular DIY "type your own" programs seem to lend themselves to conversion, I am also toying with the idea of a simple calculator type of program so watch this space.

AND FINALLY

Wild rumour holds that there are other computers besides the CPC, so perhaps somebody could do conversions! (I'd better wash my hands after writing that last bit.) -Ron Izett.

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SIREN SOFTWARE, WILTON HOUSE, BURY ROAD, RADCLIFFE, MANCHESTER, M26 9UR (TEL: 061 724 7572)
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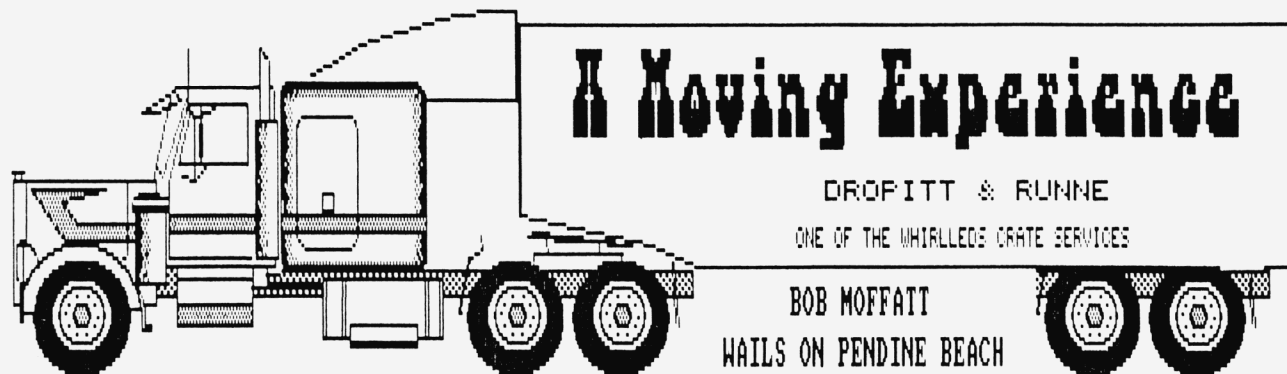
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CPC UNDERCOVER, DAVID CROOKES, 37 TRIMINGHAM DRIVE, BRANDLES DHOLME, BURY, BL8 1JW
Alternative A5 size CPC magazine - usually 80p plus postage, now only 70p plus postage to club members.

SENTINEL SOFTWARE, 41 ENMORE GARDENS, EAST SHEEN, LONDON, SW14 8RF (TEL: 081 876 7032)
10% off all software. Phone for upto date prices, please mention WACCI when ordering.



It's quite clear that eldest son has to leave home. I'm off to Pendine and it's a real beggar to commute between London and Pendine. He has been working in London for a month and has taken over from someone who has been pioneering FORTRAN applications for a few years. The last year appears to have been spent trying to create FORTRAN graphics (see Box 1) and export them to a modern language. Shame son only did MODULA 2 at University.

THE WONDERFUL FORTRAN GRAPHICS

* *
/
. - .
..

Box 1

'SPLUE DILLY, DILLY

Eldest son had been shopping around for digs and had very luckily found somewhere which met his demanding requirements just before Christmas.

The flat was just off Lavender Hill. Gave him a bit of stick about becoming a member of the Lavender Hill Mob.

He returned the usual blank stare. Later questioning revealed that he had never heard of the film. Really! The youth of today.

BROKEN HERTZ

Odd how few van hire firms are open on New Year's Day so we moved eldest the following day - Sunday but we found a firm that was open. His Archimedes and PC were loaded in the van, hundreds of books, a few shirts and socks.

Our first born had fled the nest. One down and three to go. She Who Must be Obeyed was heartbroken.

She says it was because she was very sorry to see him leave the house, but of course, I know better.

When alone in the house she would creep up to his room and play Shanghai and Patience on the Archimedes. So much for mother love.

ADIOS AMIGAS

Next son, having helped to move his twin brother's stuff to Lavender Hill, realised that moving is seriously hard work. He made his excuses and left for Middlesborough and his Amiga - broken since this time last year if the number of letters we get from him is anything to go by. Just four of us left now to do the real work.

NOTE - I'SE TO QUIT

They rate moving house, Christmas, divorce and losing a loved one amongst the highest stress factors in life. I came near to doing the lot in a week.

My CPC wasn't the last thing packed (that was the telephone), but it did sterling work bashing out the final change of address note, tips for the new householders (next door's rabbit thinks it is a cat but is *much* more savage) and 'No milk today thank you, send the bill to Lavender Hill'.

THUNDERBALL

Eventually, very shaken and stirred, the four of us arrived in Pendine.

The journey had been uneventful, unremitting rain broken by heavy showers, until daughter announced that she had invited a boy-friend to stay over the weekend.

It was Wednesday, cold and pitch black. All our worldly goods were (we hoped) in a furniture van a hundred miles behind us on the M4.

The air round the car turned purple. "ERA *.*" I screamed, "You must be ERA *.*". <<Are daughters worse than sons? Or are they just as bad as each other? Me? I've got a cat! -Clive.>>

LETTER SPRAY

The new house is smaller than the one we left. Thank heavens one child has left. Two letters on the doormat.

Throw them to one side for later. No study so I'm going to have to steal a corner of the dining room for the computer. I must have led a righteous life because it stopped raining when the furniture arrived.

She Who Must be Obeyed has strange priorities. Here I am trying to set up the CPC and all she wants to do is make beds. A compromise is reached. We make up the beds, squeeze past 127 unpacked boxes and walk to a local pub for a drink and a meal.

NO VOTE - HELL

In the cold light of day the house is bare. It would echo but every square foot is taken up with packing boxes. The letters turn out to be from the Dyfed Electoral Registration Officer - I should have registered last October, heavy fines for false declarations etc. The other one was from John Bowley, our good old compo organiser. My efforts to get the computer running were re-doubled. Her Indoors felt that perhaps we should locate a box of cooking implements and a box of plates and then go shopping for food. Daughter wants to go for a walk on the beach - it's only about 12kms long. Remaining son wants to stay in bed. Strange things, wimmin.

THE WONDERFUL FORTRAN GRAPHICS

* *
/
. - .
..

THIS TIME, PRODUCED ON THE BBC

PRINT ENHANCER

THE MINI REVIEW by DAVID CROOKES

Geoff Short's Print Enhancer is a sort of Public Domain answer to the influx of commercial packages that have arrived on the CPC in recent times. If the thought of splashing out over a tenner (for what are, admittedly, very good programs) gives you the creeps then this could be a very useful substitute. The program can be found on PD Disc 95 which is available from Doug Webb.

INTRO PRINT

It takes up two sides of a 3" disc. One side consists of eleven fonts as well as some demonstration files which give you some visual examples of what the fonts look like and the various effects you can achieve. In fact there is a set of characters in the shape of symbols such as cars and trees and these are a welcome addition.

Flip the disc onto side one and you'll find some instructions to load into your word processor, some more fonts and the actual program. It comes in three parts.

1 THE WORD PROCESSOR

This is a simple word-processor which while not being fully featured is as good, if not better, than most other PD processors. You don't have to use the package, though, as long you have a word processor that can save a file as pure ASCII.

In terms of speed it is more the way of Tasword than Protext, but for quick

sessions is perfectly suitable and there is a little set of instructions built in to the word processor if you get in any difficulties, accessed with a quick CONTROL and H (see below.)

2 THE FONT EDITOR

Even though you are supplied with some fonts, you can design your own using this. It works in much the same way as the other font designers around with the options to edit, load and save, and make global changes. All of the key presses are listed quite handily down the side of the screen making the editor a joy to use (see fig 1.)

3 THE ACTUAL ENHANCER

This is the main part of the program. You can load five fonts into memory and then print out a file using any one of them depending on the codes that you have embedded into the program. Confused? Then I'll try and make it a bit clearer. As you type into your word processor be it the one

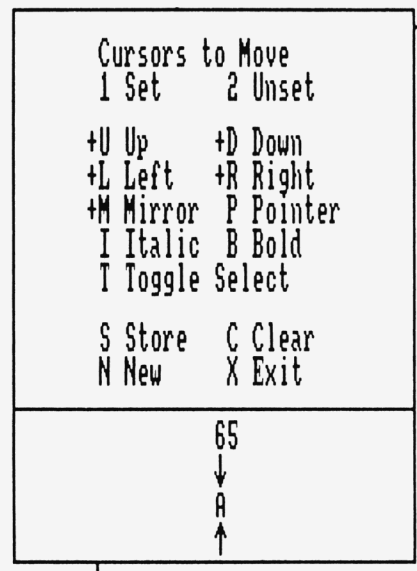


Figure 1.

LIST OF KEYS :-

Cursors to move
Shift & left/right : To next word
CTRL - Q : Quit
CTRL - H : Show this Help Screen
CTRL - A : Drive A
CTRL - C : Catalogue
CTRL - S : Save
CTRL - I : Insert a Line
CTRL - E : Delete a number of lines
CTRL - T : Toggle between Normal, Second set & Graphics set
CTRL - F : Load character set

Shift & up/down : Page up/down
Control & up/down : Top/bottom
CTRL - N : New document
CTRL - I : Draft Print
CTRL - B : Drive B
CTRL - L : Load
CTRL - D : Delete a Line

provided or otherwise you must place an embedded command into the text to indicate a change of font. So for example if you wanted to use font one, whatever that may be, say FIN-18.TYP, you would just type in a simple %CODE FONT 1 above the text. I don't want to go too deep into this suffice to say that this makes the operation of the software easy and quick.

There are many more of these commands which allow the user to manipulate their text in their preferred way. The options menu allows you do a few things from within the program such as setting the page length, margins etc.

OUTRO PRINT

It is a very neat program. Everything is accessed via a series of menus and all aspects of the program are linked by the one title page. If you want a cheap but not a nasty method of improving your output then I suggest you try this and you will not be disappointed at all. David.

WORD PROCESSOR Geoff Short 1992 CTRL-H: Help Set: 1 Line: 1/ 1

In The Dark

INTERRUPTS AND <BEEP>S BY RICHARD SMITH

Okay, so you've typed in last month's program and found out that it is, to be fair, a pretty useless clock. In fact, it is a totally useless clock. I can just imagine the laughter of Swiss precision watch-makers as they discuss in a mixture of disgust and sheer delight, the total uselessness of the clock program. Old grannies come up to me in the street and hit me with shopping bags full of freezer packs of peas asking why I wrote such a useless program. My cat hates me, and all my friends have moved out of the county.

So now, as promised last month, comes CLOCK II - The Sequel (Now he's back with a much larger special effects budget despite all his personal problems.)

DON'T INTERRUPT - I'M WRITING

With so many thousands of explanations of what interrupts do and how to use them I won't even try to explain them fully here. Basically, the CPC can be told to interrupt the main program running on the computer and jump to an address anywhere in the memory or ROM after so many 50ths of a second.

This can be achieved by using two firmware CALLs, KL ADD TICKER (#BCE9) and KL INIT EVENT (#BCEF).

KL INIT EVENT (#BCEF)

This firmware call requires register B to contain the "event class" (usually 129), C to contain the "ROM select address" (whether the program is in the ROM or the RAM), DE to contain the address of the program, and HL to contain the address of the "event block" where this data is stored.

KL ADD TICKER (#BCE9)

And this firmware call actually puts the program on the CPC's list of jobs to do. Register pair HL contains the address of the tick block (the last 7 bytes of which are the event block, the rest are blank), DE contains the initial value for the count entry (the length of time from calling KL ADD TICKER to the first interrupt calling the clock program), and BC contains the "recharge entry" (the length of time between each count from the first onward). So simply add the following bit of code to last month's clock

program for everlasting life, riches beyond your wildest dreams, and Pop Tarts which don't land you in the casualty department of the local hospital when you bite into them:

That's enough of clocks for one month, on to something even closer to our hearts - the humble <BEEP>. This delightful indigininuous creature can be found by typing:

PRINT CHR\$(7)

and is oft used to indicate an error, such as deleting something which isn't there. Sadly, this wonderful animal is now extremely rare due to the fact that it is hunted for its fur, (these are liberally scattered over records when they are manufactured.) So next

ADD THIS INTERRUPT ROUTINE TO LAST MONTHS PROGRAM

```
ld hl,event_      ;Event block address
ld de,sec.        ;Address of clock program
ld b,129          ;Event Class
ld c,0            ;ROM select address - 0 as routine is in RAM
call #BCEF        ;Call KL INIT EVENT
ld hl,TICK_       ;Address of tick block, including event block
ld de,1           ;Wait a 50th of a second
ld bc,50          ;And then interrupt every second.
jp #BCE9          ;Call KL ADD TICKER and return to basic
```

I suggest you put the tick block at the end of the program (for neatness):

```
TICK_   rmem 6      ;Reserve 6 bytes of memory for TICK_
EVENT_  rmem 7      ;Reserve 7 bytes of memory for EVENT_
```

PLEASE NOTE - I use # to denote a hexadecimal number. Some assemblers prefer to use the & symbol, but most will work with either.

That's your lot as far as clocks are concerned for this month. In the next instalment of *I'm in the dark and well and truly flummoxed* (can I say that?) <<I may be confused, but I'm sure you can. Is that how it's spelt. -Clive.>> I'll be showing you how to display the time on screen, so until then you'll just have to PEEK it from BASIC.

time you pluck fluff off your record, just think of all the <BEEP>s who died to make it. <BEEP>s are now protected by law, but, its relatives are still hunted and killed for the fluff which you find inside PC's. If you buy a PC, make sure it's <BEEP> friendly. You won't buy a PC, will you? Who needs one when you've got a CPC? Ahem.

let's suppose that after the computer <BEEP>s at you for the five millionth time you get fed up and bury a hatchet in the monitor. This causes the dying monitor to send out a really massive electromagnetic pulse, knocking out all global communications networks and plunging the planet back into a new dark age. If only you could add some variation to the <BEEP> this common household accident could be avoided.

POINTED PATCHING

The point of this exercise is to demonstrate a technique called "patching". The idea is that whenever Arnold wants a character printed or a control code to be executed, s/he CALLs a Firmware Indirection - IND:TXT OUT ACTION (#BDD9). This then Jumps to the appropriate routine in the ROM:

1. Call to indirection
2. Jump to rom routine
3. Rom routine
4. Return

To change the action of control code 7 (which produces the <BEEP>) we need to

write a routine to filter CHR\$(7)s out from other characters passed through IND:TXT OUT ACTION.

A Jump to this filtering routine needs to be "patched" over the Jump to the ROM routine, like so:

1. Call to indirection
2. Patch to filtering routine
3. Filtering routine
4. Jump to rom routine
5. Rom routine
6. Return

To do this we use the following piece of code:

```
PATCH.  ld de,#BDD9
        ld hl,PATCH_
        ld bc,3
        ldir
        ret
```

PATCH_JP [Address of filter routine]

This copies a new Jump instruction into the space where a Jump to the ROM

usually sits. The filtering routine should (usually) end in a Jump to the appropriate ROM routine. In the case of IND:TXT OUT ACTION, the three bytes which make up the Jump are:

BYTE #C3,#0A,#14

Great. Now all we have to do is write the program to filter out CHR\$(7) and produce a new <BEEP>. A simple filter looks a bit like this (the character to be printed is in the Accumulator):

```
cp 7      ;Test for chr$(7)
call z,BP. ;if yes, call BP.
byte #C3,#0A,#14 ;JP to rom routine
```

BP.

```
call #BD20 ;Flash border once
ld a,0     ;Replace chr$(7)
           ;with a chr$(0)
ret        ;And return
```

This doesn't actually produce a sound, but flashes the border once when a CHR\$(7) is printed. If you know about producing sounds in machine code then you can produce much more interesting substitute <BEEP> noises, if you don't then you'll have to wait 'till next month. Bye for now. Richard.

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The graphics for the ProPrint advert were produced using MicroDesign and an Amstrad DMP3160 9-pin printer.

LD A, CODE

UNCLE CLIVE POKES ABOUT IN MACHINE CODE

Those of you who have good memories and who also read this part of the magazine will remember that I explained why a good assembler was a necessity and why using Opcodes and direct pokes was only a temporary solution.

to demonstrate how the two programs are both different and the same, and how they still achieve the same

WHERE ARE WE NOW....

This months program doesn't do much, but it does demonstrate one of the main problems with machine code - the program grow very quickly in length.

This months offering takes virtually a hundred line of code, and all it does, in reality is:

- a) Clear the screen.
- b) Display instructions on the screen.
- c) Lets you to enter characters A to F inclusive on the screen.
- d) Quits when ESC is pressed.

Which in reality is not that much, but because we have to write the machine code instructions in full, the program quickly grows in size.

You also notice that they are far more notes in a machine code program, than there are in a Basic Program.

Size is the penalty you must pay for the increased speed that machine code programs offer the user!

Size hinders understanding, which is why you'll find (hopefully) much more detailed comments, remarks and notes within a machine code program.

BEGINNERS BASIC VERSION

For comparison, the same task written in Basic, looks something like:

```
100 MODE 2
110 PRINT "A Word Processing Concept"
120 PRINT " Use Keys A to F only "
130 PRINT " Use ESC to Quit "
140 PRINT
150 a$=inkey$
160 IF a$="A" OR a$>"F" THEN GOTO 150
170 PRINT a$
180 GOTO 150
```

Okay, so the machine code program has a neater finish - so what? I'm trying

PROGRAM 26: KEYPRESSES, CHECKING AND WRITING TO THE SCREEN (A WORDPROCESSOR?)

```
org &8000                ;address where the assembled code is stored

.txt_output equ &bb5a    ;prints the character in the A register
.scr_set_mode equ &bc0e  ;set screen mode to the A register value
.km_initialise equ &bb00 ;initialises the key manager
.km_wait_key equ &bb18  ;wait for a key press

; **** OPENING SCREEN

ld a,2                    ;load the A register with 2
call scr_set_mode         ;set the screen mode to 2

ld hl,message1            ;Print the first message line
call print_text

ld hl,message2            ;Print the second message line
call print_text

ld hl,message3            ;Print the third message line
call print_text

call km_initialise        ;initialise the key manager

; **** THE MAIN PROGRAM LOOP

.main_program_loop

call km_wait_key          ;wait for a key to be pressed
ld (key),a                ;store key pressed value in 'key'

ld a,(key)                ;recall value
cp 252                    ;cp with 'ESC'
jp z,end_program         ;if yes, jump to end program routine

ld a,(key)                ;recall value
cp 65                     ;cp with 'A'
jp z,print_char           ;if yes, jump to print char, jump back to start

ld a,(key)                ;recall value
cp 66                     ;cp with 'B'
jp z,print_char           ;if yes, jump to print char, jump back to start
```

Continued from page 27.

```
ld a,(key)           ;recall value
cp 67                ;cp with 'C'
jp z,print_char      ;if yes, jump to print char, jump back to start

ld a,(key)           ;recall value
cp 68                ;cp with 'D'
jp z,print_char      ;if yes, jump to print char, jump back to start

ld a,(key)           ;recall value
cp 69                ;cp with 'E'
jp z,print_char      ;if yes, jump to print char, jump back to start

ld a,(key)           ;recall value
cp 70                ;cp with 'F'
jp z,print_char      ;if yes, jump to print char, jump back to start

jp main_program_loop ;jump back to the start of the loop

; **** THE FINAL SCREEN

.end_program         ;come here when ESC has been pressed

ld hl,message4       ;Print the final message
call print_text
ret                  ;return control to Basic

; **** MESSAGES

.message1 defm "A Word Processing Concept",10,10,13,255
.message2 defm " Use Keys A to F only",10,10,13,255
.message3 defm " Use ESC to Quit",10,10,10,13,255
.message4 defm 10,10,13,"Good bye",10,13,255

; **** VARIABLES

.key defb 0          ;a 1 byte variable called 'key'

; **** SUBROUTINE - PRINT TEXT

.print_text          ;prints text (and control codes) on the VDU
ld a,(hl)            ;load the A register with the first ascii code
cp 255               ;if it's 255 - it's the end of the message and
jp nz,print_text_2   ;if it's not the end jump to print routine
ret                  ;if it is the end jump back to next command

.print_text_2
call txt_output       ;print the character in the A register
inc hl               ;increase the address in the hl register by 1
jp print_text         ;jump back for the next character of the message

; **** SUBROUTINE - PRINT CHARACTER

.print_char          ;print the character in the A register
ld a,(key)           ;load the A register with the character
call txt_output       ;print the character
jp main_program_loop ;jump back to the start of the loop

; END OF PROGRAM
```

results. It's obvious that in real life you would not use machine code to achieve such a simple task.

The machine code (assembler) program demonstrates the principles involved in achieving the task using machine code (assembler) programming.

NEW JUMPBLOCKS FOR OLD...

The program uses two new firmware jumpblocks &bb00 and &bb18 - let me outline them for you.

KM INITIALISE - &BB00

Action: Initialises the key manager and sets up everything as it is when the computer is first switched on; the key buffer is emptied; Caps and Shift lock are turned off; the expansion and translation tables are set to normal.

Entry Conditions: None

Exit Conditions: AF, BC, DE and HL register are corrupt.

KM WAIT KEY - &BB18

Action: waits for a key to be pressed. (does not expand any expansion tokens)

Entry Conditions: None

Exit Conditions: Carry flag is true, A holds the character or expansion token, other registers preserved.

NEW INSTRUCTIONS AND VARIABLES.

I've used a number of new commands and instructions, like:

.KEY BYTE 1

This reserves a 1 byte area of memory which we can refer to as 'key'.

LD (KEY),A

This stores the value in A into the memory location address by 'key'. This acts in the same way as a 1 byte variable in Basic. It is also similar to Basics: POKE key,a or POKE 4000,6

LD A,(KEY)

This recalls the value stored in the memory location addressed by 'key' and stores it in the A register. Similar to Basics: a=PEEK(key) or a=PEEK(4000)

The advantage of using a 1 byte block of memory is it gives us a permanent, protected home for the value, in other words, the value is held safely. Bye.

Macro Magic

THE MIGHTY MACRO EXPLAINED BY DAVID LIGGINS

A MACRO A DAY KEEPS THE DRUDGERY AT BAY ... OR THAT'S WHAT I ALWAYS SAY ...

Do you use your computer for fiddling with words? Sick and tired of typing your address? Suffering from carrying out routine tasks that would be easy to automate? You are about to enter the wonderful world of the MACRO.

LESSER SPOTTED MACRO

Why call these widgets "MACROS" ?
Well, macro is short for
macro-instruction. Macro is the
Greek for "large". So with one
small keypress, a large number of
instructions are executed, saving
a load of typing. Now you know.

WHICH WORD PROCESSOR?

My CPC gets a fair bashing. I need a word processor with a large filespace: Tasword! It's a good program, even if sometimes a little slow.

Whatever you choose is up to you, and different packages suit different people. Anyway, much of this article is relevant to any word processor with the capability for macros. (I confess that when I'm using CP/M, writing a PASCAL program, I use ZDE. This has excellent macro facilities, but I don't really need them simply for editing a source file.)

BACK TO BASICS

With a majority of word processors the functions available - printer control, insert, delete etc. are defined as ASCII codes. Some are built in to the CPC as codes from 0 to 31 inclusive.

For example, CHR\$(27) - ESC
CHR\$(13) - CR

By some very technical jiggery-pokery beyond my ken (explanation, anybody?) the word processor in use changes the ascii codes in the range 128-255 into

control characters. Normally in Basic, PRINT CHR\$(248) will produce a little figure. But when Tasword is run, it takes you to the top of the text file. And in Protext, it takes the cursor up twenty lines.

Your word processor may redefine some of the low 0 to 31 ascii codes. For details of all CHR\$ definitions, refer to Protext Chapter A2 (technical appendix) or, for you Tasworders, the section "Codes generated by the Tasword command keys" in the "Readme" file on the master disc.

IMAGE OF A MACRO

If a function key is holding a macro, when you press the key, the macro code will be printed to the screen. No, you won't find the letters CHR\$(xy) coming up on your screen, because they are control codes. Instead they will be executed. Only strings in inverted commas will be printed, just as if you had typed them on the keyboard. So in Basic, most macros will look something like this example:

```
KEY z,CHR$(xy)+CHR$(za)+"BcDeF"
```

which will execute the control codes xy and za, and then print the message "BcDeF" on the screen.

Say you wanted to repeat something, moving the cursor for example. What would you do then? Well, I would use the BASIC command STRING\$(a,b), where a is the number of times CHR\$(b) is to be repeated. Look in your Amstrad CPC manual for more details.

May I recommend that you do not use spaces in your macros unless you specifically want to overwrite.

To move right five characters for a new TAB setting, for example, could overwrite some of your text if you use spaces, while leaving it untouched by a simple cursor movement.

The best place for your macros is in the loader for your program. If in doubt, save a program like this:

```
10 KEY z,CHR$(xy)+CHR$(za)+"BcDeF"  
20 RUN "DISC"
```

(This only works because running a BASIC program does not undo function key definitions.)

NUMERO UNO MACRO

Here it is, printed in full: (Tasword version)

```
70 KEY 5,"WACCI"+CHR$(13)+"12  
Trafalgar Terrace"+CHR$(13)+"Long  
Eaton"+CHR$(13)+"Nottingham"  
+CHR$(13)+"NG10 1GP"+CHR$(13)  
+CHR$(13)
```

And it's the simplest of them all. All it does is slap down my address (well, in this example, WACCI's, change it to

your own. Unless your name is Bellaby, of course.....) But why two carriage returns at the end? The first one takes you down to the next line. So far so good. And the second takes you down another line so that you are all ready to type their address, without pressing anything such as CR.

LADLING OUT LABELS

```
KEY 0, CHR$(248)+STRING$(6,189)+
STRING$(7,241)+CHR$(2)+CHR$(249)+
CHR$(22)+CHR$(241)+CHR$(3)+
CHR$(248)
```

What this is saying is: Get to the start of the text, Delete 6 lines, Cursor down 7 times, Mark the start of a block, Get to the end of the text, Mark the end of the block, Cursor down, Get rid of the block, Back to the top of the text again.

To summarise: it takes out the top 6 lines (that's my address) and deletes everything more than 7 lines down from there, leaving the seven lines it missed, which are the address of the person you're sending the letter to. Adjust those figures in your version if your address, or those of people you write to, are shorter or longer.

AS BOLD AS BRASS

```
KEY 1, CHR$(246)+CHR$(247)+
CHR$(242)+CHR$(185)+"B"+
CHR$(247)+CHR$(246)+CHR$(243)+
CHR$(185)+"b"
```

This will embolden the word you're on when you execute it. It doesn't have to be bold, you can change it to anything you want. In English it's:

Go a word left, Go a word right, Cursor left, "Bold On" control code, Go a word right, Go a word left, Cursor right, "Bold Off" control code.

This takes you to the start of the word, the the space before it, then it puts in the control code, then it takes you to the end of the word and puts a space to the right and then it puts the control code in. It's okay for individual words, but for titles, something a lot more sophisticated is needed. You could search for the next carriage return? ZDE macro anyone?

Unfortunately, some word processors use different interpretations of "word left" and "word right". They always go to the start of the word, not the nearest end to the cursor position when the command is executed. So this macro might have to be altered if you use such a program.

DON'T MARGINALISE THIS MACRO!

```
KEY 6, CHR$(13)+CHR$(26)+
STRING$(25,243)+CHR$(1)+
STRING$(5,243)+CHR$(181)+
STRING$(40,243)+CHR$(4)+CHR$(13)
```

That is: Carriage return, Clear all tabs, Cursor right 25 times, Set left margin, Cursor right 5 times, Set a tab there, Cursor right 40 times, Set the right margin, Carriage return.

This works okay for quotations. I won't provide an "inverse" of this, because most word processors provide a

restore margins command. Change the numbers for different margins-- the WACCI 38 column format, for example.

INTRO MACRO

Everyone will have a different version of this, so I won't give mine, but this macro should set up your preferences: for instance help display on/off, insert/overwrite mode and even justification on/off. These are quite easy to write, just make your choices, look up the keypresses and shove them into the macro. Then Robert's your mother's brother.

OUTRO MACRO

```
KEY 2, "Yours, etc."
KEY 3, STRING$(5,13)+"David Liggins"
```

All this does is slap down my standard letter outro, then my name a bit further down. Why use two keys? Well, when I want to put something a little more, ahem, affectionate for outro, I type it, and then I touch key 3, to put my name on the bottom. Simple!



OUTRO

You get to like this kind of wheeze when you start to develop your own macros. Almost every time you press the key, you think, "How clever it was to put that in as well." Such is the joy of CPC computing.

David Liggins.

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