

The Forty-second

WACCI

April 1990 Vol 5 No 4

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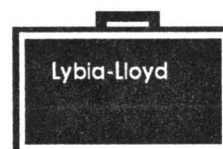
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WACCI IS PRODUCED AND EDITED BY
STEVE WILLIAMS

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WACCI was conceived and founded by

JEFF WALKER



Beek!

Hiya, you little WACCI *Funsters*. Your favourite mag is back again in double-quick time. WACCI has been a victim of its own increasing success. This, once again, meant that at the same time we were working on the March issue, we were also getting the April one sorted out. Those of you who have low-excitement-tolerance levels should put this issue to one side and finish reading the March issue properly before you delve into this one.

ERRATUM UNO

Okay, so combining some Spanish and Latin in the same paragraph-header is a bit unsettling but what the heck, this is WACCI, it's not as though it's brain surgery, is it? Anyway it's supposed to be a very feeble tie-in with some of the other paragraph-headers in this month's *Thank'n'Stuff*. Ho-Hum.

In last month's *Propergander* we told you that *Romantic Robot* had stopped selling *RODOS* v2.17 because of the bugs in it. The good news was that a new debugged version (2.18) was scheduled to be released the following week... well at the time of writing that was correct but as soon as they got the 2.18 version back from the

programmer they found that it still had flaws and immediately sent it back for correction.

Now they have released v2.19 and we've actually got our hands on it, not only that but Peter has given it a quick run through and it seems that it finally does all the things that it's claimed the Rom should do. Look out for a review coming shortly.

ERRATUM DOS

Over to Clive Bellaby for this bit (*Have you spotted that I'm doing a bit of subtle distancing by switching it over to the man himself? OK, in that case keep those letters coming.*)

There was a small bug in Part Two of The Bellaby File, the amendment to program 8, should've read:-

WORKING-STORAGE SECTION.

01 NAME.

03 NAME-TEST PIC X(4).

03 REST-NAME PIC X(26).

Apologies if this caused you problems.

*Clive Bellaby
WACCI at Ten
Nottingham*

NUMERO OH UNO (01?)

I told you it was a feeble link. You may have spotted an item in this month's *Propergander* about the fact that as from the sixth of May all the London telephone numbers are going to

be changed around. BT are doing away with the old 01 for London bit and changing it over to 071 for central London and 081 for the extraneous (*wow, not a bad word for this early on a Tuesday morning eh?*) areas.

THE WACCI TELEPHONIC CHATTER HELPLINE SERVICE

STEWART PEPPIATT (0245) 353903
(Chelmsford)

*Basic and m/code programming,
DMP2000, VDE, Scrivener.*

<<A Tech-Head -Ed.>>

PETER CAMPBELL (041) 5544735
(Glasgow)

OCF Art Studio, Vidi and Basic.

<<A Comms Guru as well -Ed.>>

FRANK FROST (0983) 882197
(Isle of Wight)

VDE, CP/M and Protext.

<<He LOVES a chat but nobody seems
to call him up -Ed.>>

PETER CERESOLE (01) 878 0391
(London)

*Protext, Promerge, Utopia and
nukes (amateur status only.)*

<<A total nutter to be avoided
at all costs -Ed.>>

TONY WALKER (0772) 700440
(Preston, Lancs) 10am - 10pm.

*Comms, Protext, Prospell, Tape
to disc transfer, CP/M on ROM.*

<<A MEX expert, a good chatter>>

CLIVE BELLABY (0602) 725108
(Nottingham)

*Basic, Cobol, CP/M, Dominoes
and VDE problems.*

JOHN HILTON (0272) 696015
(Bristol)

*Protext, OCF Art Studio and a
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<<A good chatterer -Ed.>>

NORMAN BUITON (0260) 223257
(Macclesfield)

Basic programming and farming?

<<Control codes a speciality -Ed.>>

STEVE LEADER (0689) 73633
(Orpington) 4.30pm - 9pm.

Adventure games and general help.

PAUL DWERRYHOUSE (0244) 534942
(Deeside, Clwyd)

*Basic, Bank Manager and a very
sympathetic ear*

<<The author of WACCIWORD and
WACCISPELL, errmm... -Ed.>>

RAY BARROW (021) 4294233
(Birmingham)

*MasterFile or MasterCalc (the
original versions) and Tasword.*

<<Another Looney -Ed.>>

BILL LAWSON (0239) 820212
(Newport)

*Basic, m/code and hardware and
someone to talk to generally.*

<<This WACCI Helpline Service is provided, on a purely voluntary basis, by these fearless WACCI members for the benefit of other WACCI members. Please use it as the FIRST option for a CHAT, HELP, or PANIC STATIONS! rather than calling our very busy WACCI HQ. If you do call a HelpLiner, on this list, please do it (unless specified otherwise) ONLY between 7pm to 9pm.

In addition, if I get any reports of this helpline being abused by software pirates I will scrap it without any further discussion - Ed.>>

I got on my trusty pushbike and pedalled on down to the nearest un-vandalised telephone kiosk (*only four miles before I found one*) and checked it out. *Guess what?* You can already reach WACCI HQ using the 081 prefix.

So if you want to get used to the new prefix you may as well start now. If you use the 01 prefix after May 6 I'm told all that will you hear is a polite *recorded announcement*.

WHO'S HERE, WHO'S BACK?

Oh yes, I nearly forgot about this bit, here we are again. This month we've got an exclusive review from Paul Dwerryhouse (*Executive Stress*) and a review of a program (*HFU*) by Peter Ceresole that's been and gone on the CPC scene but, thanks to our PCW readers, will soon be back on the CPC market (*exclusive to WACCI*.)

Due to the combined pressures of having to earn an honest bob and the effort of growing a beard, Auntie John is not with us this month. So no *AJ's Diary* and no *Basic Machine Code* in this issue. Fear not, the Gerry Adams look-alike, returns next month with *Basic machine Code (at least.)*

Glenn Carey has returned with *Glenn at Large*. Not to outdone by Jeff Walker's Laser Printer in February's WACCI, Glenn has followed suit and sent in a *Laserifical* column.

And finally (as they say) Ken Walker's *Simspot* has been noticeable by its absence over the last few issues. This was due to a short stay in hospital. I'm sure we all wish him a speedy recovery and the good news is that he has told me that *Simspot* will be back with us in the near future.

AJ'S BEARD

I could crack a million jokes here... *Nahh, I agree with you. It's not fair.* All of us grown-up boys remember what fun it was to advertise the advent of our puberty by allowing some wispy bum-fluff to cover our chins. (*Eeeek!* did I just say "bum." Am I allowed to say that in WACCI? Well I'm the Editor so I think not.) OK I apologise for the B-U-M word, for "bum" read "botty." After all we are all adults (*excepting Auntie John, of course.*)

THE PCW DEBATE

I think the time is fast approaching when the discussion, about whether or not we should include PCW material in WACCI, should be brought to a close.

Over the last four months there has been a general consensus in favour of inclusion, by about five to one.

I think John Olesen and Colin Baker put the argument most succinctly (that's another good word for a Tuesday morning) when they pointed out that if it came down to a choice between a WACCI with some articles covering the PCW or the *possibility* of (eventually) no WACCI at all... then there is no argument.

OK, so that's it. It's really not worth carrying it on further. Older WACCI members will remember the great "Eek! Jeff Walker wants to stop duplicating FSW Library stuff onto tape" debate.

Yup, people objected at the time but eventually, in the course of time, it proved to be the right decision.

So after my second anniversary at the helm, of *The Good Ship WACCI*, I am making an executive decision. We will include PCW stuff. If you haven't spotted it... we already have done for the last four months or more.

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the CPC's by AP and DJ Stephenson
- only £1.50

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Ian Sinclair - only £1.00

NOTE: all prices exclusive of P&P

Contact John Hilton on:-
0272 696015 (evenings)

BUSBY (35K)

Listen, I told you all, way back in the August 89 issue of WACCI, that a certain "Busby" had written an adventure game and sent it in for inclusion in The FSW Library. I said at the time that, although it was based around WACCI HQ and featured a low-life Editor trying to produce a CPC magazine, I would not be putting it in The Library because of the totally degenerate plot. I also warned you not to order this adventure because it was bound to offend you.

Unfortunately I made the mistake of mentioning that it was 35K long. Now a lot of you have been taking advantage of my little mistake and ordering the program anyway, even though it hasn't been given an AMS number.

So, *stop ordering it*. Yes you heard me correctly. *Stop it*. Why? Well if you do order it, you'll play it for a couple of minutes and then dash off a letter to Fair Comment saying how upset you were by the game. Joolz will get all upset because she hasn't seen the game and she won't know what you are going on about. All in all it will end in tears...

I'm not kidding. It is totally disgusting stuff and it was written by a pubescent, spotty, long-haired, yobbo who is employed by Arnor on a "Perver Protection Scheme."

OK, here endeth the first lecture. Sorry about going on and on but I really do want to protect your moral well-being.

Take my advice and just *remember to forget* that the program is 35K.

OUTRO

Oh bother look at this, I've been going on about Busby so much that I've talked myself out of space again. That's a shame because I really did want to tell you the best joke that I have ever heard. Never mind, next month perhaps.

Still I have got time to tell you the one about the dyslexic pimp who bought a warehouse by mistake. *Tarra*.

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STEVE WILLIAMS TAKES A LOOK AT THE NEWS AND GOSSIP

MAXWELL'S HOUSE

The latest rumours on the industry grapevine are that, the publishers of Amstrad Computer User, Focus publications, who have recently gone bust have sold the ACU title to Daily Mirror Supremo, Robert Maxwell. The actual buy-up of ACU has been conducted by Maxwell's Mirrorsoft company.

At the time of going to press it is not clear whether Captain Bob has bought up all the Focus titles or just the Amstrad Computer User one.

We'll keep you informed of the latest developments, next month.

RODENT'S HOSPITAL

Romulus Data Systems is offering a mouse cleaning and renovation service for £5.95.

This includes replacement of defective parts and for £8.50, the company will also fit a replacement lead. Repairs are under 28-day warranty. Romulus is at 44 Ayletts, Basildon, Essex, SS14 1UL.

THE BIG SWITCH

With only a few weeks to go before the biggest number change in UK telecoms history, the majority of Londoners seem blissfully unaware that all London phone numbers will change on 6 May.

On that date, central London telephone numbers will be hived off into a new 071 area code (071-xxx-xxxx) with outer London numbers given a new 081 area code (081-xxx-xxxx.) Calls to the old 01 London dial code will then be met with a recorded announcement.

Officially, the 071/081 area codes are switched in only on 6th May.

According to sources within British Telecom (BT) and Mercury Communications, however, the new codes are now fully operational.

Currently WACCI HQ can be contacted on either (01) 898 1090 or the new number (081) 898 1090.

Users of memory phones, modems, fax machines and other auto-dialling devices will be advised to reprogram their auto-diallers over the next five weeks, while printers and stationers are bracing themselves for a rush as business users suddenly wake up to the fact that their letterheads and stationery will be out of date on 6 May.

BT has been planning the change-over to the new area codes since February of last year. The change-over is made necessary because London is running out of 'phone numbers. New exchanges using the 071 and 081 codes will be switched in during early 1991, at which time the old 01 area code will be re-allocated to new services.

British Telecom users can obtain an information pack on the changes free of charge by calling (toll free) 0800-800873 between 9am and 7pm seven days a week. Mercury Communications subscribers can obtain similar facilities by calling 021-625-3010. International telephone users should contact their local telephone service provider.

CHARTER RESURRECTED

Just when it seemed that the recent Law Lords' report on computer misuse was destined for the Whitehall waste bin, a stroke of good fortune has turned into an unlucky break for serious hackers.

After coming third in the House of Commons lottery to decide which MPs will be allowed to raise Private Member's Bills, Michael Colvin MP has opted to resurrect the "hacker's charter" which recommends jail for certain cases of data theft.

GLOBAL PERSPECTIVE

Computer owners who want to use their machines as a home weather station are being offered a new system which developer ICS Electronics (0903 731101) claims is a price breakthrough.

Weighing in at a mere £689.95, it can receive weather pictures directly from the European Meteosat 4 satellite situated over the Equator and the Greenwich Meridian.

Full-colour detailed cloud cover of Europe is updated in high resolution every half hour by the MET-2 system which includes a receiver and pre-amplifier, a three metre-long Yagi antenna, a mains power supply, 20 metres of antenna cable and software - everything needed for weather satellite reception except the computer.

DTP GUIDE

An updated version of The Ivanhoe Guide to Desktop Publishing has been brought out in association with the British Printing Industries Federation. It is aimed not only at those wishing to buy DTP equipment but also at members of the industry themselves. Combining a large number of articles written by DTP experts, with product reviews and profiles it is the second edition of this useful guide, costs 5.95 and is available through most bookshops.

FAIR COMMENT

FAIR COMMENT
9 SOUTH CLOSE, TWICKENHAM
MIDDLESEX TW2 5JE

NOW THERE'S A THOUGHT...

Dear Joolz, I recently had a letter from a firm of Receivers acting for Focus Magazines regarding Amstrad Computer User. ACU owe me £50 for several programs that they published last year and despite numerous letters that I wrote, they neither answered or paid the money. Now the Receivers are requesting a detailed statement from me but I doubt if it will do any good.

If ACU ceases publication this will mean that Amstrad Action will be the only glossy mag left to cater for our machines.

This brings me onto the PCW debate. Instead of including the PCW in the mag, why not try one of the following:-

1. Do a one-off issue of the 'Best of WACCI' include a membership form and get the likes of Menzies and W H Smith to sell them.
2. A leaflet explaining the aims of the club, placed in either Amstrad Action or New Computer Express as these are the only other mags of any interest to Amstraders.
3. As above but send perhaps a dozen to each member so that we could put them into computer books in our local library. (This may be illegal but I like to live dangerously.)
4. Buy out Focus Magazines.

Options 1, 2 and 4 are probably too expensive but option 3 has possibilities. If Steve was to take full responsibility for the leaflets and my idea was illegal, think of the publicity - he could sell his story to the Sunday papers and use the money for option 4.

Better still, if he were to be sentenced to a couple of years inside then that would give you an opportunity to meet some Decent Young Men (if DYH are not your scene then remember you still have my address) also OMG would have plenty of time to edit WACCI. What do you think?

Finally, to show that I am not completely crazy, I have enclosed a program called 'Draughts Tutor' for the library. It is 34k in length. I hope you like it and can use it.

Willie Lawrie
Perth

<<We have discussed buying up the ACU title already, Willie. Although we have the necessary fifteen pounds we don't think that the extra four readers ACU would bring us justifies the expense. Besides which we've just heard that Robert Maxwell (*in the guise of Mirrorsoft*) has just obtained the ACU title.

Now down to your other options. The first one isn't really feasible. It would be a brave person who selected the columns to go into a 'Best of WACCI' special. Remember when the BBC recently did a 'Best of Monty-Python' special and left out the Dead Parrot Sketch? OMG was moaning and groaning about that for weeks.

Option 2? Believe it or not Future Publishing (which owns both the titles you mentioned) won't even let us use the word "magazine" in our advert, they insist that we use the word "fanzine" instead. If they are that scared of us I think it likely they'd have a blue-fit if we asked them to carry some of our leaflets.

Your third option has some potential though... How many years do you think OMG would get? Forget taking into account "time off for good behaviour" His Misseryness doesn't know the meaning of the words "good behaviour." Ten years perhaps? Hmm.. forget DYH, what about a new Editress for WACCI and at the same time moving WACCI HQ to a less central location, Perth for example... Yes this is starting to sound good. I'll find out the cost of getting a load of leaflets printed and get back to you.

Thanks for the draught tutor program Willie. It's as comprehensive as your

"GM Chess" program. I've put it into The FSW Library straight away, I just hope Old Misery Guts has updated the software list in time -Joolz.>>

OVER STIMULATION

Dear Joolz, I am not sure I can take any more. My doctor has advised me that WACCI is causing me far too much stress. Why, I hear you ask. Well firstly there was the late November issue, I had convinced myself I had forgotten to resubscribe and had written a grovelling note. Then on the day I came to post it guess what dropped through the letterbox. Wrong, it was WACCI 37. Within a matter of days WACCI 38 materialised. Two fixes within such a short time proved dangerously stimulating.

However this totally fades into insignificance compared to the results of The WACCI Survey. Can you imagine the shock of finding that I am an average WACCI reader.

Not only that but my peripherals are normal too. Still I don't expect anyone else has a "VICKI" as their second computer. I even like cats.

I am returning AJ's concept disc because good as the programs are I don't really want to have the same thing on both sides. Please can you send the disc back with the missing programs. Thank you.

Incidentally does anyone know if you can still get CP/M on Rom. I haven't seen it advertised lately.

Finally a few used stamps enclosed. Anyway keep up the good work.

Andrew (5 Cats) Freeman
Shrewsbury

<<Well you've got a double fix yet again Andrew, isn't fate cruel. Take my advice, try not to overdose. Visit the doctor and get some more tablets then read your copy very slowly in a darkened room.

The Graduate Software CP/M+ Rom is

still alive and kicking and living at 14 Forrester Road. Give Roger Bamkin a ring on 0332 702993.

Thanks for the stamps, they will be going off to the PDSA to help with the good work that they carry out.

Sorry about the one-sided Concept disc, you should have received the replacement one by now -Joolz.>>

INTO THE VORTEX

Dear Joolz and Steve, firstly may I apologise on two counts:-

- 1) my poor English
- 2) The fact that this letter is on the enclosed disc, as a WordStar file but not in the 38 column width. The reason is that you'll probably have to do a lot of editing to get it into a readable format, I'm afraid.

In the, February 90, Fair Comment (I got it today) you had a little discussion with Robert Heaton about the problem how to get Amsdos BINARY files from CP/M assemblers.

You replied that the person who managed to write such a program would become *mildly* famous. Well, you are reading a letter written by a (mildly) famous man and my program has already been in The FSW Library since OMG took over running WACCI.

But first a little contribution to the discussion in the last WACCI.

CP/M assemblers produce some different files, such as, .COM, .HEX, .PRN, .OBJ etc. COM files, though, are not in ASCII format but in binary. HEX and PRN are ASCII files. HEX is a standard, PRN is not.

It's no problem to write a program which creates BIN files from PRN but it would cope only with one assembler because they all produce different PRN files. Therefore it is better to use the Intel HEX format.

Not all assemblers are designed to load at &0100. There is at least one exception: ZSM (CPM-072). This one produces HEX files and the start address can be set with the ORG statement.

Some time ago I send some conversion programs to WACCI, amongst them HEXTOBIN.BAS and HEXTOBAS.COM. The first is an Amsdos program.

OMG has grouped the two together and put them under one FSW Library number (CPM-068) (HEXTO..) but HEXTOBIN it would have been better if he'd put in the Amsdos Homegrown Section. Now this is a good opportunity for him to correct the situation because on the enclosed disc you'll find enhanced versions of both programs.

HEX-BAS.COM produces a basic loader from HEX files. The program was written in Hisoft-C. The improvement is in the command line handling and it should replace the old CPM-068. The source code for the C compiler is enclosed in case anyone is interested in C programming and wants to make more improvements.

HEXTOBIN.BAS (+HP.BIN) converts HEX files to BIN files (with headers). I think this is exactly what Robert is looking for.

How to handle these programs? On the disk there is a sample file called TEST.ZSM. Start CPM, type in ZSM test <ENTER> and you will get two new files: TEST.HEX and TEST.PRN. The latter is useless and it is possible to avoid the generation of this file if disk space is short (see ZSM.DOC).

If you want a Basic loader you have now to type HEX-BAS <ENTER> and you will be asked for a filename. Another way is to type for example HEX-BAS B:TEST C:WACCI. This will convert the file b:test.hex to WACCI.BAS on drive :C, if you have one.

If you want to get a BINARY file without the diversion over the Basic loader you have to go back to AmsDOS by resetting your computer.

Run "HEXTOBIN" and you will be asked whether the program to convert is placed in the area of &40 to HiMem or between &C000 and &FFFF. Yes, you have all that space for your program because HP.BIN, the main program (M/C) will now be loaded from &B549 upwards. This is a little brutal method as it flattens down some firmware vectors and the soundbuffer but it works well and does not take any of the precious memory.

A word to the potentially wise and potentially (mildly) famous here, the soundbuffer area of memory is a good place for M/C program parts, like hardcopies etc. to be shoved, provided the Basic program does not use any sound statements.

But enough of this stuff, let's go on with HEXTOBIN. After HP.BIN is loaded you will be asked for a filename. Type in test (no extension) and after a few seconds and possibly some strange effects on the screen the



computer will reset. The screen effects can occur because the screen base is set to 4000 and the reset is necessary to restore the damaged firmware vectors. Take a look to the disc directory now and you will find the new file TEST.BIN. Next: RUN "TEST.BIN" and... voila.

Please take HEXTOBIN.BAS and HP.BIN out of CPM-068 and put it into the AMS range. To make testing of the programs easier to you, you will find ZSM (CPM-072) on the enclosed disc.

I've also included TORNADO.COM. This a game, written in Turbo-pascal. It will only run under CP/M2.2 because it uses some graphic and sound firmware routines. Any banked CP/M systems will cause problems.

The idea of the game is not new one (see "Bomber" AMS-016.) I have just converted a Basic program to Pascal for the hell of it.

All these programs have been tested on a CPC 464. Yes, it is the machine in the enclosed photo <<on the previous page -Joolz.>> I have put the board and the two drives (Amstrad 3" and Vortex 5.25", 704K) into a PC case. The keyboard case is made from plywood. The tape recorder can be connected to the computer with a DIN plug at the back.

My Vortex memory expansion card allows me to run a CP/M system with a TPA of 62K and a 444K memory drive but unfortunately it won't run CP/M+.

Under the desk I've fitted two car speakers, driven by a stereo amplifier.

But the most important part of my CPC setup is the little brass bird on top of the monitor. It is an bottle-opener for my beer supply.

Please find enclosed an order form, a eurocheque and a piece of the Berlin wall, Bernauer StraBe. You may put it into the sandfilled sock which seems to be so effective in tuning up OMG's brain.

Dietmar Langenohl
West Berlin

<<Firstly let me thank you for sending us a bit of the Berlin Wall (the Iron Curtain is finally coming down after all these years, Yeahhhh...) I've

FAIR COMMENT
9 SOUTH CLOSE, TWICKENHAM
MIDDLESEX TW2 5JE

taken the bit of concrete from OMG's sweaty fingers and I'm going to get it put into a proper display case.

Thank you for telling us about HEXTOBIN.BAS and HEXTOBAS.COM. Now that I now about the problem I'll nag Cheerful Charlie until he gets it sorted out.

Your setup is quite unique, the only thing I can't understand is why you took the 464 out of its case and put it into a new one. Lack of desktop space perhaps or did the tape drive really become that unnecessary?

Sand filled sock? No, I always use a shatter-proof, clear-plastic ruler. Much more effective to get him moving quickly -Joolz.>>

VDE IN INSTALLMENTS

Dear Joolz, I recently purchased CP/M Disc 5 (The Business) from yourselves and everything works as it should apart from the VDE text editor which I have been unable to install, you advice please.

I boot up CP/M on my 6128, insert disc 5, side 1, and at the A> prompt type, VINST23 (and then press Return), the response I get is:-

VDE(M)2.30 INSTALL 9/86
(c)1986 E Meyer
* File Error *
A>

I note that the documentation with VDE refers to version 2.31, is this the right version of VDE, your assistance please. I have enclosed an SAE for your reply.

M Hare
Maidstone

<<Now this is the sort of letter I like to read, short, to the point and because it refers to CP/M I can pass it straight on to Clive Bellaby for an

answer, leaving me with time to paint my nails, so its over to CB -Joolz.>> [[Hi there M, (I would prefer to know your name) the VDE document file applies to both versions.

To install VDE boot up CP/M and at the A> prompt type:-

VINST23 VDE (then press Return)

This loads the install program and the program that you wish to install. I have sent you a detailed reply in the post (Six pages of A4) because it is to long to print here. Detailed instructions on installing VDE are now available from the library -Clive.]]

THE GOOD LORD PROVIDETH

Dear Joolz, I was interested to see the comments in my belated November issue, which arrived the day after Boxing day. The December issue appeared a week later.

But back to those Fair Comments, I see that Gerald England has had some bother with Microstyle. He is not alone in this respect, although in all fairness, I must say that I have eventually received all that I had ordered from Mr Phil Craven.

My 3.5" disc-drive arrived in mid November 1989, having been ordered in mid July 1989; but discs for use with it were not sent and (after I complained by phone) they arrived a week later. This is hardly acceptable business practice and I doubt if they will hear from me again.

About the WACCI Helpline, mentioned by His Nibs and Bob "Robert's your father's brother" Moffatt, this is a very good idea and full of ancient Biblical wisdom. Exodus ch.18 v.22 reads thus:- "So shall it be easier for thyself and they shall bear the burden with thee."

It's always good to have a new look at the Old Book. Here endeth the Sunday school lesson and feeling full of fervour. I hereby volunteer to type a few Fair comment letters onto disc (say five or ten to begin with until I get used to the medicine.)

I was particularly interested in the letter by Philip Cox about RODOS. I also obtained this Rom and felt that it had quite a lot NOT going for it.

You remarked, in one of your replies in the October WACCI, that I had given my seal of approval to WACCIWRD. This is quite correct; as the things one can do with it are much more than simple word processing.

Doubtless there are more elaborate word processors but few as comprehensive at the cost. The support programs are a great strength of WACCIWORD; such as RESTYLE, FILTER, SPO and POPT. This later program was designed with the Amstrad printer range in mind but there is considerable room for the inclusion of other settings for printers such as the CITIZEN 120-D, which it is my good fortune to have.

Paul Dwerryhouse, who originally wrote WACCIWORD, has encouraged me to write my own version of POPT to take full advantage of the facilities available in the CITIZEN 120-D; and I submit my humble effort for your approval and possible inclusion in The WACCI FSW Library.

I have noticed many other printer setter uppers in the FSW but none for the CITIZEN 120-D. I have attempted to make the program as user friendly as possible, refusing incorrect settings and retaining a marker to show what has been already set until the end of the procedure. It will work with other printers but it won't know about their illegal settings, unless someone tells it different.

Since I have borrowed heavily from Paul's program, I have also used his title and the new program has been called "POPT120D." I have an idea that there may be a few unnecessary lines in the program but as it's not too long, there did not seem to be any urgency to remove them, so I left well enough alone.

I am a great fan of WACCIWORD and I was annoyed to discover that it could not be used with RODOS, because of an internal quarrel in my 6128 over a piece of RAM. Since I want to store my wordprocessor files on the larger drive, this is not acceptable at all.

Whilst RODOS has many good features such as it's built in formatter/copier and tree directory system, its inability to work with CP/M is a serious fault.

I have not yet tried to store more than 500K on a disk, at which figure Philip found a problem but I suspect that this was due to the number of files that he had reached, rather than the number of K.

One of my reasons for getting a larger drive, was that I have a program for making cassette card inlays, for use with a church tape ministry. This program uses a fixed set of data for most of the inlay and variable data for the parts to do with the tape content, date of the service and speaker's name etc.

This results in a large number of small files and so a drive that refused to accept more than such as 150 files would not be suitable. Rather than wait until a problem develops, I shall change my system.

Fortunately, since joining WACCI, I have made many genuine friends, one of whom leant me ROMDOS for a little while, so that I could decide if that was what I really wanted.

I must say that it seemed to be much better and the USER system can be made to do much the same job as the other Rom's tree directory system. I expect that some company will be getting an order for ROMDOS shortly. I do not see it among the Rom's advertised at the back of my December WACCI, do you sell it and at what price? I will want PROTEXT and PROMERGE + as well.

RPM Reprographics did a good job of printing the November and subsequent issues of WACCI but what is all this about "The Way Forward" and talk of including the Amstrad PCW in WACCI?

There are some magazines that I do not purchase simply because they deal with too many computers and I don't like having to wade through reams of print to find the bits that interest me. Frankly, I have already spent as much as I am likely to spend on the computer itself and I am a little apprehensive at the prospect of finding material in WACCI which does not apply to my machine.

**TO ADVERTISE IN WACCI
RING (081) 1090**

You will be more aware of the cash flow side of the thing than most of the membership and if it is necessary to broaden the base, in order to stay viable then so be it. At least there is some compatibility with the machine which you propose to incorporate into the club and perhaps some of the members may find ways to do things which hitherto have been considered to be impossible between these machines.

As regards the X-ray corruption of discs, I have prepared a program to print a label with a suitable "Do Not X-ray" message upon it. This program can print various sizes of label, with or without the Do Not X-ray message and will adjust to either 4 or 5 lines for the address automatically. This was used to address the envelope in which this disc arrived and a sample of it's work on the CITIZEN 120-D is enclosed. A version has been prepared for the Amstrad range of printers and Tony Walker informs me that the CITIZEN version works on his new STAR 24 pin printer.

Tony tried out my original version on his Amstrad 2000 and made some necessary mods, after which we developed the program to it's present form. You will find it on the disc under the title EVRYLABL.EPS or .AMS according to which printer you use. No DOC file is needed as the program gives full instructions as it goes along. LIST it, to have a giggle at the REMs. You can put it into the FSW if you wish but a further up-date may appear next month.

If I don't stop you will have to start a new magazine especially for my letter, so all the best for now,

Spot and Goldie send a few barks to the Cats. [Yap] [Yap] [Yap] [Yap].

AL "The L Plate" Cooper
Lisburn

<<Hi Al, thanks for your programs. I've bundled your 120-D version of POPT together with the new version of WACCIWORD.

I've answered your worries about taking on board the PCW in my reply to the next letter from Keith Williams.

Thanks for your report about Phil Craven's MicroStyle. We must wait for further information before drawing any lasting conclusions.

Rodos? Look out for a review of the latest 2.19 version of the little beastie in next months WACCI -Joolz.>>

IN FAVOUR - ON TWO COUNTS

Dear Mr Williams and Joolz. Many thanks for Feb issue WACCI. Enclosed renewal subscription. I felt that I should write following your editorial suggestions about including the PCW in these hallowed pages and in the face of a certain amount of criticism voiced recently against Microstyle (ergo Phil Craven.)

Distressing to note disappointment with someone who has given me such extremely courteous helpful and efficient service over several deals. Can't always say the same of others.

With absolutely no axe to grind I must say that Mr Craven has always shown great willingness to give complete satisfaction, frequently paying for quite lengthy phone calls and writing several helpful notes.

Everything Microstyle supplied has proved absolutely satisfactory and I shall certainly continue to deal with Mr Craven. Difficult to understand why he might deliberately offer lower standards of service to others.

Indeed, Phil's personal help has been largely instrumental in setting up two Rom-based Protext, Prospell, Promerge+, Utopia, KDS ROMDOS outfits with extra 3" and 3.5" drives, switched at will as required.

I have transferred hundreds of files (Amsdos and CP/M) freely between the two "B" drives and the 6128 built-in "A" drive without a single failure so far. My son is similarly satisfied.

Extended-format 796k 3.5" discs (which can also be formatted as "normal" 178k and operated just like a 3" drive but without the fiddle of "flipping") cost only 70p each these days and are a joy to use; but the standard 3" flip-discs themselves can

also be formatted to 400k a side using the KDS Ramdos programs.

Ramos works with Amsdos AND CP/M; extended or normal formats. The Ramos Rom (ROMDOS) automatically senses and compensates for the various disc formats. I find no problems and it all works perfectly.

Naturally, there are quirks and if anyone would like details of the system I will be pleased to give what account I can. It's convenient to have both extra drives. As noted in "*Fair Comment*" a few progs aren't too happy with the extended format but none yet that can't be handled. Utopia allows copying by two routines; one successful with extended-format.

What strange person would reject the improvements in printing style and editorial scope you suggest?

There is much CPC relevance in all PCW magazines, I imagine WACCI would stress this similarity to everyone's advantage.

CP/M awed rather than bored me too, until I actually set out to use it. We all know the WACCI "*YAWN*" is just a joke. CP/M is terrific - just refer to our WACCI FSW Library. And with word-processing being by far the most used feature of these Amstrads surely not only is the enormous establishment behind the CP/M domain a blessing but we are fortunate to be linked so intimately with a prime word-processor like the PCW developed in Britain and backed by a fund of literature, expertise and repair facilities right here in our own backyard.

The fact that both machines have been sold so widely and do a far better job than any typewriter in my view should guarantee their continued life for years to come. It's pitiful to read of their "*imminent demise*." Who returns to pounding typewriter keys after word-processing? And people just don't change these computers every five minutes any more than they did their typewriters in the past. For me there's no point in "up-grading" from a 6128 (*into what ??*) nor would up-grading seem valid for many small businessmen using the PCW today.

We're all aware that numerous hardware and software items extend

both machines well beyond basic word-processing; but how many of us WACCIites need more than our CPCs or PCWs can give us? We've little interest in ever higher-tech systems. I'll up-grade when I can TALK to a computer instead of keying it and I mean that seriously.

Wouldn't you agree that for most Club members our basic expenditure has already paid off? Spending another £5000 wouldn't buy better for our real needs. Many of us haven't even started to delve deeper into the workings of these wonderful machines. So please extend to the PCW - this *must* be a sensible decision.

Apologies for the screed Joolz, but you did ask for opinions on PCW coverage and about Microstyle (Phil Craven) and I know I would have welcomed more guff on someone else's experience of extended-format drives when I was groping around in the dark some time ago.

Best wishes and many thanks again for our even more Wonderful WACCI.

K P Williams
Polegate

<<Keith, please don't ever refer to our exceedingly cheerful little Editor (OMG) as *Mr Williams*. It makes him think that he is respected and that means Peter and I have to put up with him walking around saying "*I am respected*" for weeks. For our sakes, please just call him Steve (*at best*.)

Thank you for your views about including PCW orientated articles in WACCI. It's not going to be as painful as some people seem to imagine. For example there are eleven pages of programming and reviews in this issue (MFU, Windows and the Bellaby File) which could be of equal interest to either CPC or PCW owners. That isn't even counting the articles of general interest that appear like AJ's Diary, A Passing Thought, Propergander and Thanx and Stuff.

It's good to hear that Phil Craven has made someone happy -Joolz.>>

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NORWAY CALLING

Hello, do you remember I called a few days ago asking about my missing February issue? Well it has arrived. If you've sent another copy before you get this letter then I'll pretend I ordered it as a back issue and send £2.50 extra with my next order (which I will send as soon as I can get some more money).

Bob Moffatt was right about the reason why we read WACCI. Fair Comment is the best part of the magazine.

And now for the real reason for why I am writing. I agree 100% with Paul Derryhouse. I feel that allowing the PCW into WACCI is just an excuse to allow the Atari, Amiga and PC in so's you can drop the CPC.

If you allow the PCW in then I won't renew my subscription anyway. I have subscribed to Amstrad Action because they have no such plans. This is really sad because I liked the club. Everything has an end. Goodbye WACCI, hello AA.

Kjell Robertson
Vesteralen
Norway

<<May I refer the Right Honourable Gentleman to the reply I gave some minutes ago... it's OK Kjell, I'm just practising my Margaret Hilda Thatcher impersonation. Where were we, oh yes, I think I've answered your worries with my reply to K P Williams.

I don't know where you've got the idea that we will eventually be allowing the Atari, Amiga and PC in so that we can stop covering the CPC. OMG didn't say anything like that. Come on Kjell, for all his faults our cheerful little Ed. is a CPC fan. As OMG stated a couple of months back, the idea behind including the PCW is to ensure that WACCI would have a large enough user base to ensure its survival, as a magazine which covered the CPC, even if Amstrad stopped producing it.

As for threatening not to renew your subscription if/when we do include the PCW in WACCI, well I think that's a bit silly but it's your choice. Have you ever read the story about *the dog in the manger* by the Brothers Grimm? If you haven't, you should -Joolz.>>

THE PETERBOROUGH EFFECT?

Well here we are again face-ache, please find enclosed nine spondulaks which covers my subs including the ghastly 25% price hike. Will it be in colour soon? I'm listening to Tracy Chapman which is the only thing stopping me throwing a fit.

Can anyone out there nick a sensibly configured PC (Hard disk, at least ECD Monitor) clone to swap me for my 6128 toy. All serious offers considered.

I got the push from my last foray into the world of commerce but I am close to being part of the change from manual to computerisation of a Sales office in a well known Chip in the Oven outfit based near where I live, that should be fun. Especially when they realise their mistake

Did you know they get ten and a half quid an hour for night school teaching So I'm off now to see if I can get a City and Guilds 730 or better still an Rsa Computer instructors certificate, beats working don't it?

Pity they've done away with the old St Trinians gear. If flares come back maybe I can get away with the old mirror stuck to the shoe routine.

I enclose a ravishing photo for insertion (your choice). I bet that old buffer Bob Moffatt wishes he was as famous as me.

By the way any one else like the album Mr Bad Guy by Freddie Mercury?

I am reading Jayne Mansfield's Autobiography, did you know she was kinky about having her botty smacked. Doesn't bear thinking about does it? Yours a gnats breath away from a 1640

Phil Morley
Peterborough

<<Dear Old Phil Morley. Just when Fair Comment was getting a bit heavy you waft in like a breath of fresh air with your unique brand of bad taste.

Don't take that personally Phil, I meant it in a really caring way. Honestly I did. I do care about you... Well perhaps "care" is, slightly, the wrong word to use, "worry" might be more apt... Yes, I do worry about you little Phil. I think it's a bit sad that anyone, who is so obviously a masochist (as you are) should try and

get a cheap giggle out of another masochist's personal preferences.

Come out of the closet Ms Morley, I know that you really want to upset the WACCI membership so much that they will collectively turn up on your doorstep and smack your bear botty with a rolled up copy of ACU.

I suggest that, when the other members of WACCI read Phil's letter, they try and remember the joke about the sadist and the masochist... the masochist pleaded "punish me, punish me" and the sadist said "OK I won't" and went off and made a cup of tea.

OMG used your(?) photograph in the last issue of WACCI. I don't know why you insist in calling me face-ache? Your visage even manages to make Nigel Lawson look attractive -Joolz.>>

PCW V CPC

I have to confess that I've been reading the letters concerning whether or not WACCI should widen its scope by including the PCW, with more than a little amusement.

The reason that I'm having a good chuckle is that the only computer I own is, in fact, a PCW. Yes, even though WACCI is supposed to be a CPC specific magazine I still find enough in it to keep me, not only interested but *thoroughly entertained* as well. And I know for a fact that I'm not the only member that only has a PCW.

Think about it. Over the last few months I've been learning about Cobol with Clive Bellaby, I've found out about DU with Peter Ceresole. I read a review about the MGT Lifetime drive and then bought one (yes adding a big extra disc drive is a pleasure that is not exclusive to CPC owners.) I have been entertained by the likes of Auntie John, Glenn at Large, the Passing Thought writers and of course all the Fair Comment letters.

I've been a member of WACCI for 18 months now and I'm including a cheque for another year's worth.

Your CPC owners should stop complaining about bringing in PCW owners, we're already here.

Dave Bourne
Southampton

Filler Facts

PETER CERESOLE TAKES A LOOK AT A NEW FILE TRANSFER PROGRAM

YES...

We all love our CPCs and many of us work on them, stringing pearls of deathless prose on our wordpros and plinking the macros on our spreadsheets. Good stuff...

ooo00ooo

BUT...

The only problem (*always*) was that we could only communicate with the outside world through our printers or AAAArrgh! our modems. The only machine that could read our discs was the PCW, pretty good but not totally serious. (Right, that should cause an explosion, about a hundred kilotons I'd say.) But even *Real Joyceians* understand that, if you're to send discs to your new pen friends (key friends?) over the water in either direction, you have to be able to talk the language of *The Men In Suits*.

IBM, *The Big Blue*. And that simply wasn't on, 'cos Arnold doesn't talk Americanese. Then it all seemed to change. The megadrives turned up and suddenly the world was full of cheap discs *AND THEY WOULD FIT INTO OTHER PEOPLES' DRIVES*. Vistas opened. Computer would speak peace unto computer, or whatever. Stupid boy.

HERE'S THE RUB

Compatibility is a snare and a delusion. There have been 5.25" drives out there for years. Guess what, very few of them can run each others' discs, even between CP/M machines.

Almarc could not speak to Wren. Moon was deaf to Transtec (these are real names, nothing is invented.) All very silly. And a CPC with a 3.5" drive is even worse off than before—now, not even a PCW



can read our discs.

In the meantime the only standard worth spitting at is IBM with its operating system MS-DOS, which is where we came in. Now that's the sort of situation that positively attracts Public Domain software and there are swarms of programs out there to interchange discs between IBMs, Amigas, STs and Macs.

They're called things like *Dos-2-Dos* (I swear.) However, these are

American machines and America is the home of the hacker.

There are guys out there with workstations in their bedrooms (six Megs of memory, three hundred Meg hard discs, a thousand lines res, the bedroom machine is networked to the one in the spare room) and they do churn the stuff out.

But Arnolds are few and far between in Palo Alto and we've got to look for what's been cooking *here*.

ooo00ooo

RODOS

Well, first there was RODOS. It's an operating system with a host of goodies, with IBM transfer as an added feature with RODOS Extra.

It's fun to play with although so far it won't run with Promerge+ and it produces discs that are totally incompatible with CP/M+.

The main trouble is that it's had a series of problems and right now it's back with the programmers for yet another fix.

Last month Romantic Robot told us they'd got version 2.18 ready to go. When we were doing this review and we asked for the latest version, we were told RODOS had gone back to the drawing board once again.

Earlier versions had a slightly buggy IBM/AMSDOS transfer utility. It was very slow indeed but it did work. But the thought is a bit academic—right now, you can't buy RODOS.

There was a rumour about a Siren utility but so far we've not seen the software. Remember a bird in the bush just wakes you up in the morning.

MULTI FORMAT UTILITY

Say what you mean, that's what I say. What's MFU? Well, it's a *Multi Format Utility*, Brian.

What you see is definitely what you get. A nice green video box with a disc and a wonderful manual. This one is definitely written by enthusiasts.

So what does MFU do? Moonstone Computing tell us that they developed it as an in-house tool; CP/M+ was all there was and it will copy files to and from just about any CP/M+ computer to an Amstrad CP/M+ machine, although the PCW has the room to handle more options than the CPC.

So if the love in your life sends you her undying devotion in Wordstar files saved on a Kaypro and you have a 5.25" drive on your Arnold, you just fire up MFU and that's cracked it. *(She sounds interesting. Now if she sends 8" discs, she sounds totally fascinating and I'd like to meet her. And MFU can handle that too... The drive, silly.)*

MFU uses overlay files which it loads as required and on the CPC it will only operate from drive A, so it helps to make up a working disc with the files for your particular job.

Choosing them is simple and the explanations in the manual (written mainly for the PCW but with sections covering the CPC464, 664 and 6128 as well) are very clear.

ooo00ooo

GO GO GO

MFU welcomes you with a menu:-

A)analyse unknown format
C)copy files between discs in drive B
D)display drive B format
E)dit drive B format
F)ormat disc in drive B
L)ibrary manager
M)on CP/M file transfer
P)roduce stand-alone format setup
Program
S)et system defaults
T)rack-by-track backup of a disc in
drive B
V)erify disc in drive B
EXIT to CP/M+

Additionally, Ctrl-P will do a text dump of the screen. This is what the options do:-

A)analyse does what it says. It puts you into another menu which guides you through an analysis of the disc in B. This includes a disc editor (not as nice to use or as powerful as the Public Domain program DU but fine by normal standards.)

You will, mainly, get a very detailed description of the way the tracks and sectors are organised. There's a very full description in the manual of how to use this part of the program and more about disc formats than I ever thought there was to know.

Techies should love this manual. I found it great fun but exhausting. *Bring me an Epson QX-10, cry I, and I will wrestle with its Logical Sector Wrap-around. Shiver my Logical Skew.*

But without too much effort you can find out the nature of the beast and you can then move on to the next stages:-

C)Copy files, B to B. This uses another menu of disc formats with which you can separately define the format of both source and destination discs-but only with CP/M discs, no IBM or BBC stuff here. Reading the menu list is like a history lesson, machines I remember reading about.

As a buffer MFU uses a 3" disc in drive A (it can't use a dk'tronics silicon disc. As Captain Oates said, "I may be gone some time" even though MFU is reasonably quick in its copying.

D)isplay tells you everything anybody needs to know about the current format for drive B.

E)ditting the format. This is not a trivial business but the manual is solid here; using A)analyse and E)dit even I was able to get it right and set the format for D20 RANDOS discs.

F)ormat. What it says, using the formats available or any you have created (but only CP/M+.) Now I can format D20 discs without leaving CP/M+. But if it turns you on, you can make a Mimi802 disc.

L)ibrary manager. Another menu. You can install a format in drive B, or delete, rename, view or edit it (as above.)

ooo00ooo

THIS IS IT

M)on-CP/M+ file transfers are, nowadays, what makes this program a Big Deal. It will transfer to and from PC-DOS discs and BBC and Master discs. According to the instructions it will only read 40-track MS-DOS discs, which doesn't sound too hot if yours are 3.5" 80 track.

The heart sinks but you go ahead anyway and it works. MFU analyses the disc automatically, tells you it's 80 track IBM and gets on with it. It turns out that Moonstone have cottoned on to big IBM discs, so the program knows about them although neither the manual nor (so far) the README file has a clue. Never mind; onwards...

ooo00ooo

IN OPERATION

First the program asks you what file you want to transfer, without showing you a directory and if you're wise you tell it "everything" by pressing return. It then tells you how many files there are and asks you if you want to transfer the lot. If you say "no" it then presents you with the list, one at a time, from which you can choose. This seems a bit arse about face to me; it would be a heck of a lot better to get a directory listing and have done with it but it does do the job. MFU, while being idiosyncratic, is a clever old thing.

The copy is very quick in either direction and I can certify that it works. IBM files end up faithfully on the 3" disc and this morning I loaded all 113K of SCRIVNER.DOC (*why not?*) into Wordstar on the office Tulip PC-AT. Whizzo.

ooo00ooo

AND NOW THE SNAGS

The limitations are that, as you're using drive A only for the CPC files, you can't transfer more than 178K at a time and that can only be to or from

the root directory of the IBM disc. For a transfer from CP/M+, you also need at least one formatted MS-DOS disc and the transfer will erase any other files on that disc.

These are not crippling problems; you can select the files to transfer and if the IBM files are huge you can use a file splitting utility on the PC. It makes sense to use dedicated discs for the transfer so you can format them before hand on the PC.

For the same reason there should be no problem with making sure the files are all in the root directory.

When transferring BBC discs much the same applies, except that the CPC 6128 can't handle older single density discs (the PCW can be modified to do so *and the expanded 464 can do it naturally* but not the 6128.) Again, this is not a terminal problem as all modern BBC discs are okay.

N.B. Remember that EXIT means ESC. The manual is for the PCW.

MORE TRICKS

Set governs the way MFU operates, how it expects to find the CPC configured and how the printer works. With a 6128, Epson compatible and a MGT 3.5" drive everything came up roses without having to touch Set.

Track by track backup is a disc copy via a 3" disc on the CPC. You can't change the format of the disc you copy. Don't do this unless you really have to because a 792K disc it takes five disc swaps and nineteen minutes.

Verify is also just what it says. Any of the CP/M disc formats can be verified. As the manual says, if there's a fault after formatting, discs are cheap, throw it away. Sound fellows at Moonstone? I dunno; after I formatted a D20 disc it told me there was a fault on verification but the disc has worked perfectly ever since.

RUSH TO JUDGEMENT

MFU is overwhelmingly a CP/M+ transfer and formatting utility and just for that it's wonderful. However the ability to copy IBM files gives it a special place in the modern world. You don't need a ROM box to run it and the alternative way to communicate with a remote PC (by RS232 and comms) is *infinitely* more awkward and, unless you have the gear already, much more expensive. MFU also copies at the speed of light.

UHURU

MFU is a very practical utility, quite quick to fire up and, once you've got used to it, simple to use.

I'm using it to get files to and from my CPC to my PA's PC-AT. My word processor has always been better than hers but now for the first time I can generate text files that almost anyone else can read. It's a great feeling of liberation. *Try it.*

Simply the best . . .

. . . Bonzo

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Cheshire.
WA14 4EL.

LOCK UP YOUR PROGRAMS - ALAN TILLINGS BACK IN TOWN

Hello everyone, 'tis I with the piece that would have been better going out in February but as we know that wasn't to be. I've combed through looking for phases like "last month" and similar but if I've missed any, the January issue is what's meant.

-{VbbVbb}-

Put on your black mask and black cloak, keep a very good watch out for intruders because this month I'm going to discuss something I've never spoken about before - passwords.

Not the CP/M type - they can be dangerous, stay away from them unless you know what your doing.

The kind I'm on about are written in Basic. You may have seen some programs which say something like "Type L to lock or U to unlock." When L is typed the computer invites you to give a password and once the password is given the program is "frozen" until the correct password is re-entered.

I don't know whether you think these are worthwhile or not but I think they can be fun, so let's make a start.

-{VbbVbb}-

Often, the way to enter these routines is from a menu so we can bung it on the end of the Conversions program we were looking at back in January. The first thing is to change line 5090 if

it is still there, to something sensible like 2 SAVE"CONVERT":STOP. I should have done that last time.

The next thing is to add lock and unlock to the menu and to modify line 240 to allow it to work and, while we're at it, let's move "Which one do you require?" to the left hand edge. So roll your sleeves up and add the following bits and pieces:-

- 1) 225 locate 8,23:"8/ Lock/Unlock."
- 2) Edit LOCATE 8,24 to LOCATE 1,25 in line 230.
- 3) Add ,8000 to the end of line 240.
(Please don't forget the comma.)

Now for the routine itself:-

```
8000 REM -----
8010 REM Lock/unlock routine
8015 REM WACCI Feb 90
8020 REM -----
8030 ? "Enter password"
8040 pen 0:input " ",pass$:pen 1
8050 cls:input"Enter password ",
      word$
8060 if word$=pass$ then 140
      else 8050
```

And that's it. Short and sweet but that's all that is needed, so let's examine it. A PRINT statement is used to write "Enter password" because, in order to render the password itself

invisible, it is written in the same ink as the paper and so if "Enter password" was written by the INPUT statement it would be in invisible ink. The space in the input command is only because the input command requires to write "an invitation to respond."

Since the writing is in "invisible" ink and Arnold doesn't know what a question is anyway, a space fits the bill nicely. The pen 1 statement returns use to the pen filled with "real" ink but before this happens the password you typed in is stored away in a string variable labelled pass\$.

-{VbbVbb}-

Line 8050 CLears the Screen and invites a second password which it files away under the label word\$. The space after the word password is to make the writing clearer, try leaving it out and see what happens. The new password (word\$) is compared with the original password (pass\$) and if they are the same then control is passed to line 140 (like at the end of the other sub-routines) however, if word\$ and pass\$ are *not* the same then control goes back to 8050 and a further attempt is invited.

If you forget what password you have used, all you need to do is to break the operation of the program [ESC][ESC] and then type print pass\$

and Arnold will give the game away, which is rather futile because when you run the program again you will be asked for a new password anyway, ahh well such is progress.

-{VbbVbb}-

Last week I rang Steve up to complain that there wasn't enough time to write these bletherings but he (sorry, He) told me to get my nose to the grindstone and keep my shoulder to the wheel. Have *you* ever tried to write in this position?

-{VbbVbb}-

From this routine you can get an inkling of how computer "hacking" is done. I'm assured by the people at ACU that a beard is a must so if you haven't got one ask your wife if you can borrow hers.

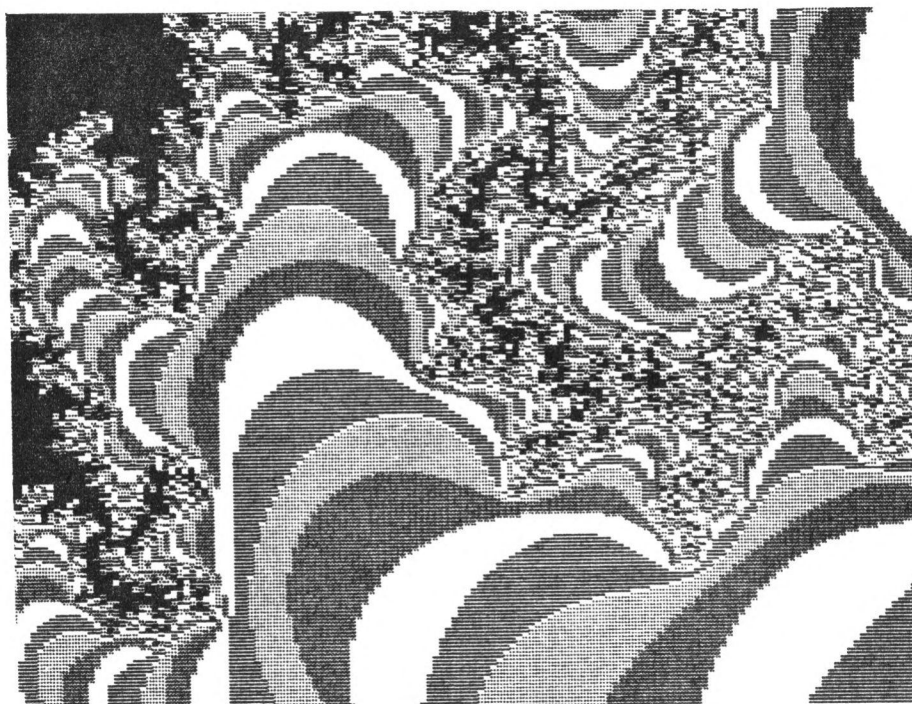
All you need to do to "hack" this program (assuming that you hadn't just typed it in yourself) is to list it and you would be able to see how it works and therefore you would know how to nobble the password routine. In this simple case all that would be needed would be to change line 8030 to GOTO 140.

-{VbbVbb}-

And now, as the man said, for something completely different. Have you ever pondered over 10-liners, from "some other magazine" and thought that they look awfully complex? You have? then read on, if on the other hand you're totally at home with them then turn now to Auntie John's Diary and become totally confused.

For clarity in Very basic Basic I tend to use single instruction lines but sometimes multiple statement lines do creep in (often when I have forgotten to CLS or something and I have to go back).

There is no magic in these more complex looking lines, they just *look* more complicated. If you take a 10-liner and at each colon create a new line, you will find that it will run just the same and will be far easier to unravel.



Nearly all of the keywords, well about 95% of them, can be lumped together on one line (separated by colons). There are some limitations though. For example GOTO. GOTO 100 means go to line number 100 and carry out every instruction there, you can't code "go to line 100 and carry out the third, fourth and six instructions." Also GOTO (or GOSUB) means go now, so if it were anywhere other than the last instruction in a line, the remainder of the line would be ignored.

Reading through a few 10-liners will show which keywords need a line to themselves - you will find lines stuffed with all sorts and suddenly you will come across a single statement line that looks completely out of place. A little digging around should show why.

The other main considerations are that it should be reasonably easy to read and that no line can exceed 255 characters in length.

-{VbbVbb}-

There are occasions when it is often sensible to write a multiple statement

line. If the Conversions program is examined it will be found that two lines (*Fig 1.*) early-on show this.

```
110 INK 0,14:BORDER 14:INK 1,0
140 CLS:a=0:b=0:c=0:d=0:f=0:g=0
```

Fig 1.

Line 110 is setting up the screen colours and line 140 is resetting all the variables. At the end of January's offering is the line shown in *Fig 2.*

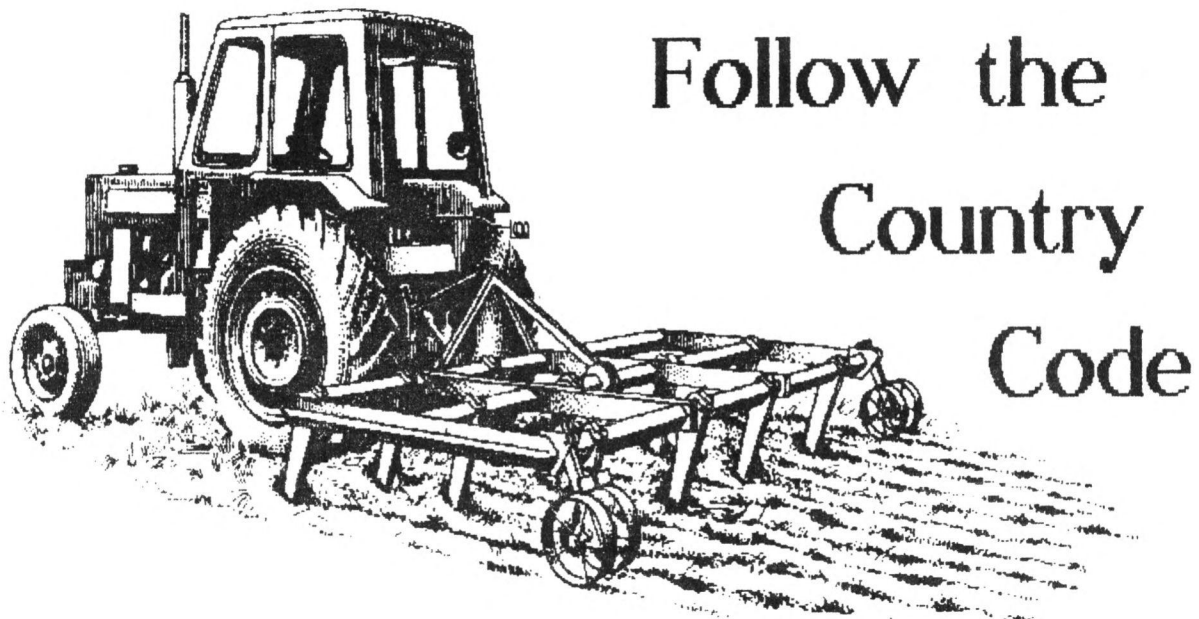
Because of the semicolons these print statements cause a single line to be output, so it seems to me that a single line statement is more sensible, at least I think it is easier to read as one line.

-{VbbVbb}-

Well I'm afraid that's the lot for this month. With a little luck we should be back on an even keel next month ... or is that tempting fate?

Bye for now, Alan.

```
1080 PRINT f"degrees F are";:PRINT ROUND (c,1):PRINT chr$(126)"C" (Fig 2.)
```

Follow the Country Code

"NORMAL" NORMAN BUITON TAKES US DOWN ONTO THE FARM

The story so far... Norm, WACCI's intrepid secret agent has been undercover in enemy territory for some weeks posing as a peasant in green wellies and chewing his straw, whilst investigating a sinister organisation called AMICO, believed to be plotting against WACCI and all it stands for. When he can, Norm transmits reports encrypted into tutorials inside his electronic booty box. Read this third report as we received it.

DAY 62: LIMA, PERU

Watson Also Carried Crackers Inside. One of the biggest concerns around at the moment is that of protecting the environment. I have long been a supporter of this movement but realism seems to be currently divorced from most of it. It never fails to amaze me how people whose knowledge of farming is a null string can get so worked up about the way a potato is grown, or the food an animal is fed.

I dislike the use of chemicals. But they are a fact of life and without

the chemicals to keep insects down, your lettuce would be full of caterpillar holes and greenfly would be part of your salad butties. Not to mention that without chemical fertilisers, there wouldn't be enough moth-eaten lettuce to go round.

Furthermore, it really pees me off to have some twerp fresh from his nine-till-five office lecturing on the environment (usually about the shortcomings of farmers) and the same twerp then hops in his 1.5 ton, new vehicle of totally unrecycled material, puts his boot hard on the pedals to race home along a new motorway for his high-fibre meal, unpacked from sterile plastic which is disposed of in the usual thoughtless way.

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THE WAY FORWARD

What's all this got to do with computers, you ask. I'll tell you. I firmly believe that the electronic whizz-kids amongst you have a huge role to play in improving and popularising the transmission of data by electronic means, so that people can do far more work at home, meaning

less traffic, and less burnt fuel and less new motorways and less spoilt countryside etc etc etc.

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OLD FRIENDS AND NEW

Now I've got that off my chest, maybe we should look at the real reason for letting me near a column.

We have started using control codes for screen control and having familiarised ourselves with control-X, control-R and control-T, I propose to introduce you to some new ones.

Control-Q operates in much the same way as control-R insofar as it clears from the cursor position to the edge of the current screen but this time clears to the left-hand side.

Control-S clears again to the left-hand of the cursor position but also clears all the way to the top of the screen.

(Incidentally, whenever I write of the screen, it means the current window in use and any reference to the cursor position as a limit to an action also includes that position.)

Control-Q is probably of most use when reprinting input to a particular

format and the prompt is to be cleared from the screen. Take care when you use it though, that you do not obliterate anything you want to remain on view. It must be placed at the start of any printed message or reformatted data.

Control-S has different uses altogether. Clearing to the start of a window offers the facility to use one locate and print statement when printing close to the middle of a largish screen.

Instead of `CLS #1:locate #1:print #1` you can use control-S and control-T to clear the screen but there are alternatives.

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Control-L also clears the screen but you can see the difficulties straight away. It is rare for reasons of aesthetics that you wish to print a message in the very top left corner of the screen but incorporating control-J in your text will dump the text there in spite of any locate or tab commands, as the `cls` is invoked after the other instructions.

Control-J is a nice, friendly code which harbours no nasty tricks when you use it. It just moves the cursor down one line without altering the horizontal position. So, perhaps we could use these in our epic little progette that you have saved on your disc from Part 1.

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Of course you saved it onto disc didn't you? How silly of me to even think that you needed reminding. Well I've included it again just in case (*see below.*) What we will do now is to try some little edits.

```
10 cls
20 print tab(9)"CONTROL CODES IN
   ACTION"
30 LOCATE 5,10
40 INPUT"ENTER A FIVE-LETTER
   WORD",a$
50 if len(a$)<>5 then 30 else end
```

Firstly, remove line 10. Secondly, type "Edit 20." Thirdly, position the cursor over the upper-case "C" of "Control" and press control-L to produce a little tree-like symbol.

When you run this now, you find your opening message printed in the top left-hand corner of the screen in spite of the tab command.

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BOW AND ARROWS?

However, we can move the cursor one line at a time easily by using control-J (This shows on screen as a arrow down.) Try editing line 20 again to add, say, two control-J's AFTER the control-L. If you really want to see the ease of use here, add another in the middle of the text, anywhere you like.

You will see that the cursor is displaced down by a single line every time control-J is used. If you seriously want to play silly beggars with your message, you could also install some control-K's (shown as arrows up that move the cursor up a line) in the text. Running the progette will show you how the codes move the cursor whilst printing the text onto the screen.

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THE LAST INTRODUCTIONS

And for my final trick, I pull out of this particular hat five more simple codes to complete your education for this month.

Firstly, two together. Control-H and control-I move the cursor one space backward and forward respectively. The use of these two codes is largely of academic interest and of very little practical use in their control form. Occasionally one may wish to use control-H (backspace) in the form `string$(n,8)` but not in the code form we have been discussing.

Secondly, we have control-G. This is probably more easily recognised as `CHR$(7)`, used to produce a 'beep' to alert the user but if there is text to be printed for information or prompting purposes, then there is no

easier way of producing the sound than by inserting control-G (like a little mushroom) inside the text to be displayed.

Try entering control-G in line 20 of our listing and notice how, like all the others, it produces its own action without affecting the screen text at all, even if you place it inside a word. It may be more useful for it to be placed in the input prompt so that if the program rejects the input, the beep will aurally reinforce the screen prompt.

Lastly we have another pair. Control-F and Control-U work together as the switch on and off respectively for the text screen. Now I myself have never found a practical use for this facility but I could well imagine that there could be circumstances such as program protection or data security in which such a feature could be invoked.

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Here's an agricultural joke to sign off with (*Sorry, off with which to sign. Must keep our prepositions in the right place.*) What goes "*Peck, peck, peck, BANG!*" Answer:- A chicken in a minefield.

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EASING MY WAY OUT

Have I reached the end of my allotted column space already? Next month, we'll start to look at some of the more complicated ones which can be put to work. I shall have to go and put on my wellies and smock once more before I foray again into the great outdoors.

Mind you, it's so damn cold out there that I'd much prefer to sit inside with you and certainly if it was Joolz... Well, we can all dream, *can't we?*

(*Signal falters*)

Remember the code for next month:-
Want Another iCe-Cream tonIght?

Yours... The Peasant

Signal lost:

Executive Stress

PAUL DWERRYHOUSE GIVES AN EXCLUSIVE PREVIEW OF MICROSOFT'S LATEST BABY

Multi-Tasking and *Windows* are buzz-words that have previously only been mentioned in the world of the IBM PC (and its clones) and latterly the ST and Amiga (*Heek!*.)

Now there's a new program on the market for the CPC and PCW series of Amstrad Computers, running Digital Research's CP/M Plus that can allow us to talk in terms of "Multi-Tasking."

EXPLANATION

To put it simply, *Multi-Tasking* is the process of getting a computer to run two or more programs simultaneously. So you could be number crunching with a program in the background whilst using a word-processor in the foreground... with a real-time clock running in a small window, in the corner of the screen, as well.

Windows is a program that has been

knocking around on PC's for few years but now it has been converted to the CP/M+ operating system by *MIRCOSOF*T.

This really is a double glazed program and because it is so complex, I'll cut the waffle and get down to the nitty-gritty.

WHAT YOU GET

Quite simply, you get a blue box which contains a set of two 3" discs, which have all the overlay files that you could possibly need, demo files and much, much more.

You get the manual and a registration card. Oddly enough you also get a wall poster for an Amiga game published by Ocean...? No, I can't see the logic behind this either, I'm sure it was a temporary aberration on the part of the person who posted off this particular copy.

THE MANUAL

Because I've been sent a pre-release version of *Windows*, I've also been sent a rough version of the program's manual. Having said that, the 54 A4 pages, that I received for this review are more than adequate to become very conversant with *Windows*.

THE PROGRAM

Windows is ideally suited to a two disc drive setup (it supports 3.5" disc drives as well) but it can be run on a single drive CPC 6128.

Because we don't have the on-board Ram that a PC has, *Windows* uses the disc as a buffer and because of this a number of temporary files are opened on disc whilst it is running. You must ensure that your working disc has at least 80K free on it before you start a *Windows* session.

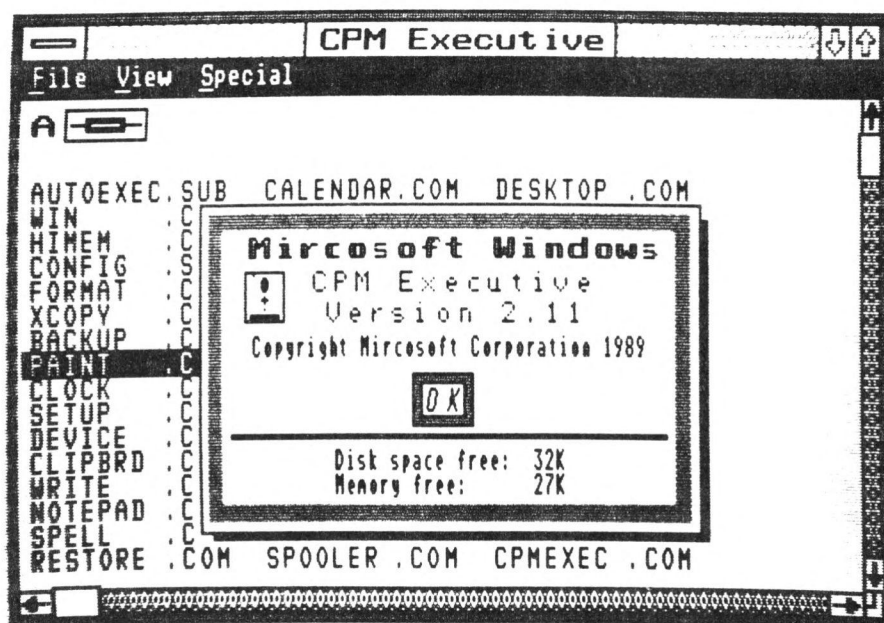
WHERE DO I BEGIN?

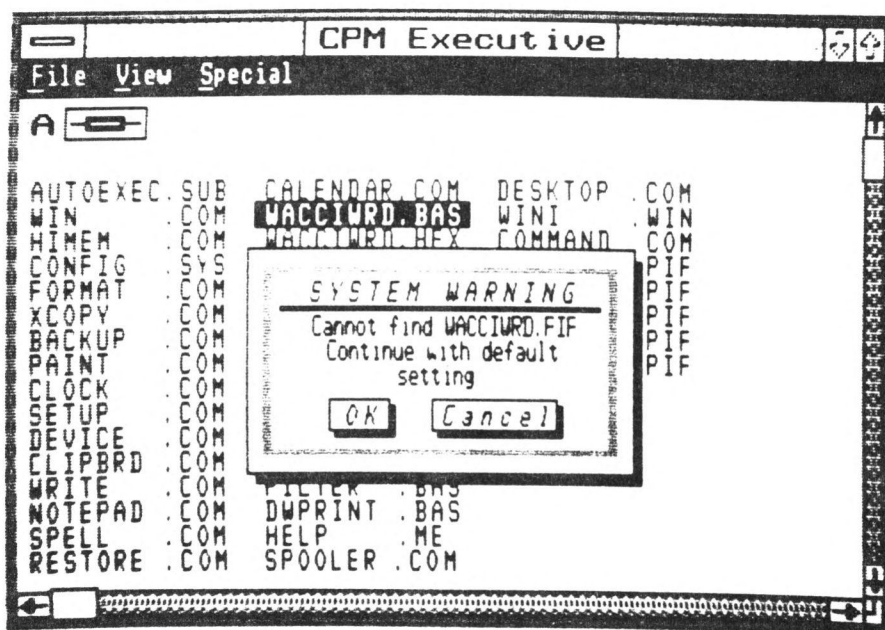
Windows is an extension of the CP/M+ operating system and it allows you to integrate the different tasks that you perform on your CPC, increasing your efficiency.

With *Windows* you can work on several programs at once, switch between programs with a couple of keystrokes or a click of the mouse and since you never have to quit a program, you can continue from where you left off.

Windows also provides an easy way to transfer information between applications, text and even graphics can be moved between programs but only if they are *Windows* applications.

Windows gives you a new and more visual way of working by organising your work in windows, rectangular





areas on the screen in which you use applications. You can alter the size of a window and then move it to another position on the screen.

This allows you to have two, or more, applications running at once and in view on the screen. You can easily move between each window.

CP/M+ EXECUTIVE

This runs automatically when you start a *Windows* session. It gives you access to CP/M+ commands so that you can run applications, copy and print files, rename and delete files and organise your files into convenient groups.

This last option is extremely useful to you if you have one of the three and a half inch drives as it supports directories with the tree structure.

If you find that your chosen application is tight on memory, you can close, or *kill*, the CP/M+ Executive program from memory whilst you run your application.

I found this option to be necessary if I wanted to run more than one application. VDE will run from within *Windows* but I don't have Protext (the CP/M+ version) but I suspect that I will be alright. <<I've got CP/M+ Protext though and I've checked it out running under *Windows* and it works fine -Ed>> Since *Windows* can do what Protext can do and more, then you may never want to do this anyway.

APPLICATIONS

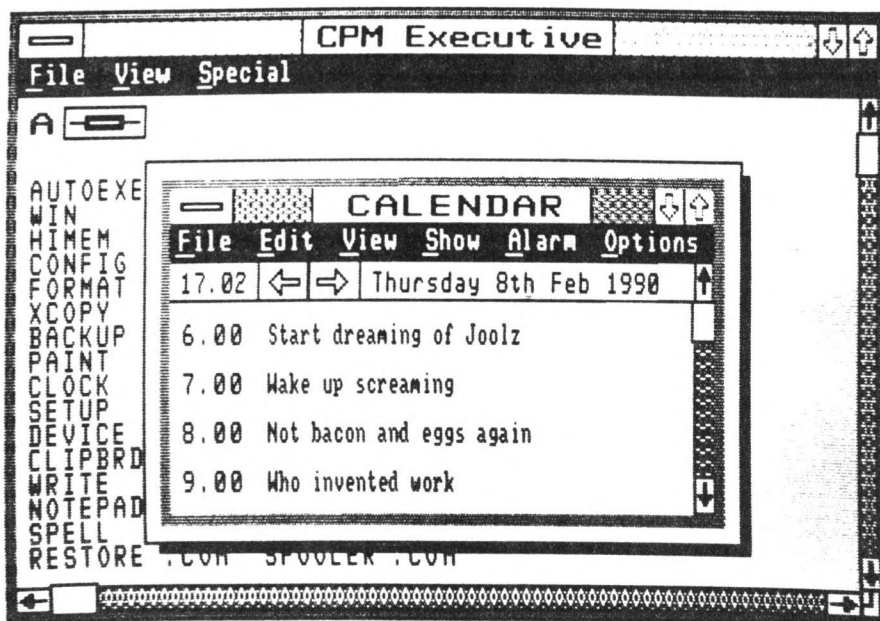
Windows comes with seven desktop applications that make working more efficient and far more enjoyable. You can use these applications to jot down notes, write letters, schedule appointments, calculate numbers and organise files. I'll deal with these applications, briefly, in no particular order.

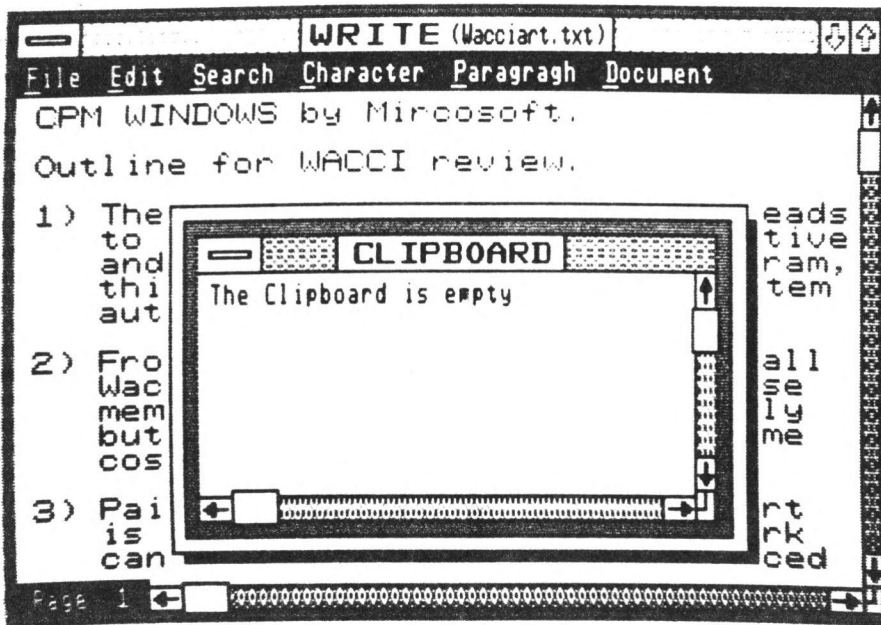
- 1) **NOTEPAD** This is a Text Editor that you can use to create, modify and display text files. It is designed

primarily as a place to jot down notes or short memos but you can create SUB files and customise your WIN.INI file, the file that *Windows* reads first on running. This allows you to alter the display, its colours and shading and also provides you with the facility to run an application upon running *Windows*.

- 2) **CARDFILE** This is a filing application that you can use to keep track of names, addresses, phone numbers, directions or anything else that you want quick access to. It is like a set of index cards that sorts itself. Simple it may look but I found it to be very useful, for example, it can print address labels using its very powerful print menu.

- 3) **CALENDAR** This looks like a desktop calendar and appointment book. You can use it to keep track of appointments and even set alarms to remind you of a particular event eg Neighbours. It gives you two views of time. One, the day view, you can enter, display or edit your appointments and in the second, the month view, you can select the day for which you want to see your appointments.





You can use the printing option to hard copy your appointment book and using this you can quickly make your own personal organiser.

- 4) **CALCULATOR** *Windows calculator* works much like a hand held calculator with basic functions and a memory. It can also handle percentages and square roots. A little bit disappointing this application, however, it is the same on the PC.
- 5) **CLOCK** *Windows clock* is a standard clock that shows the time set by

your system. You can size the clock and move it wherever you like so that the current time, including seconds, is displayed on the screen.

The only drawback with the CPC is that you have to set the time every time that you start a *Windows* session. This feature will soon become a pain when the novelty has worn off.

- 6) **PAINT** *Windows Paint* is a drawing tool designed for use with *Mircrosoft Windows*. You can work

with *Paint* to create, enhance, save and print black and white artwork.

With *Paint* you can create drawings very easily, whether you're making flow charts or doing freehand illustrations, you'll find the tools you need on the *Paint's* Tools Palette. Such commands as *Zoom In*, *Copy* and *Invert* make it easy to enhance your work. The ease of use is similar to the *Art Studio* but it just has the edge on the *Art Studio* in my opinion.

- 7) **WRITE** *Write* is the WP of *Windows* and with *Write* you can create, edit, spell check and print all kinds of documents for business or personal use. Because it runs in a graphics environment, it gives you unique advantages such as pasting information or graphics into your *Write* documents to make your documents more informative or eye catching.

Write uses the familiar conventions of the *Windows* environment such as command menus, dialogue boxes, icons and the *Windows Control Menu*.

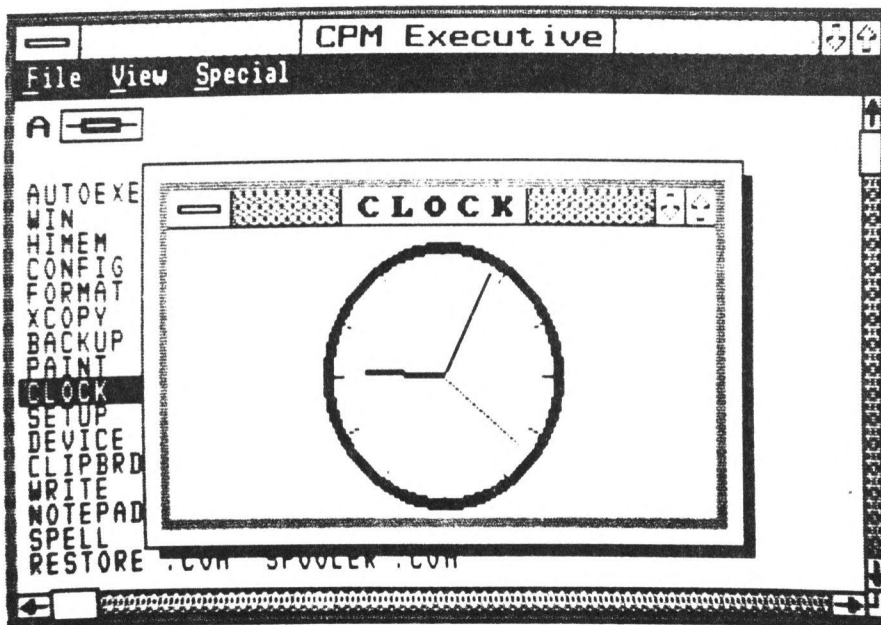
I found this application very easy to use, the pull down menus meaning that you don't have to refer to the users manual every time you want to know how to do something. This also has the advantage that you soon learn all of its features very quickly.

The Clipboard really comes into its own using the *Write* application. You can cut a drawing from *Paint* on to the Clipboard and then paste it in to *Write*. *Write* holds it in memory as a bitmap, so that at printing time the artwork is printed in graphics mode and scaled to fit the margins set within the document. This is done so easily that all you *Protext* owners will some become *Write* users overnight.

CLEVER BIT

One very clever thing that *Windows* can do is to run Basic programs from the CP/M+ environment.

How it does this is very simple.



Since the CPC's Basic Rom and firmware are always available, *Windows* sets up CP/M+ to look like Basic, switching in and out the Basic Rom and calling the firmware routines as required.

In order to get the best from this system you must firstly create Program Information Files (or PIFs) for each application. This is done using the PIF Editor supplied with the package.

For example, you might use the PIF Editor to change a programs setting in your applications PIF file to give the application more of the CPC's memory.

The second bank of Ram available to Basic through the Bankman program still works in this CP/M+ environment. *Windows* sets up a 64K buffer on disc to do this, so you must make sure that you have enough room on your disc before starting a Basic program which uses the Bankman program.

You can, of course, alter the size of the second bank of Ram buffer on disc, using the PIF Editor, so a 178K buffer can be set up. Very useful.

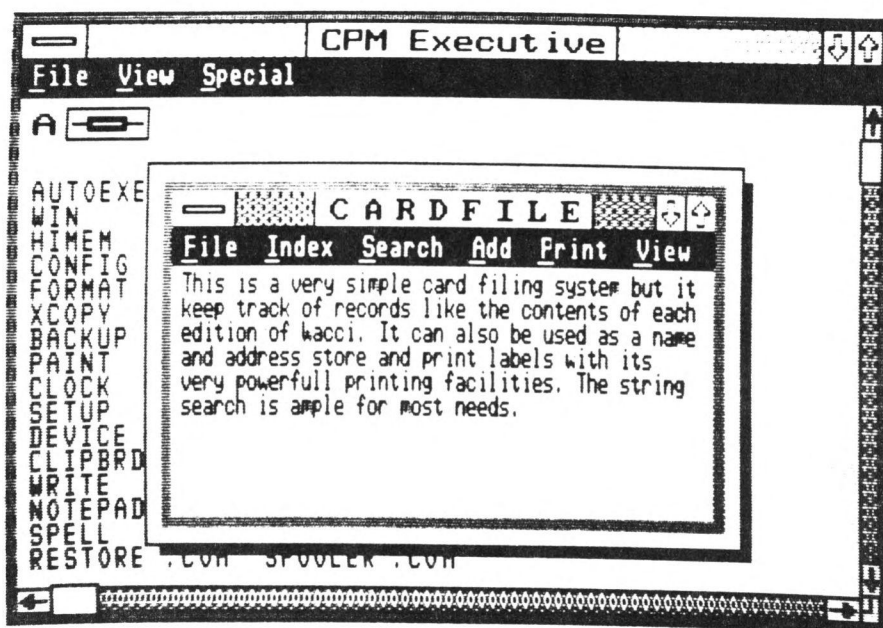
AND THERE'S MORE

So far I have only mentioned using *Windows* with a standard CPC6128 setup with one or two disc drives. The manual points out that, when *Windows* is run on a PCW, it grabs the memory disc and puts the PCW overlays into the area. This not only frees disc space on the A: drive but it also speeds up the process of accessing other special routines.

Of course 6128 users can use their dk'tronics 256K silicon discs and take advantage of this facility. But if you have both the 256K memory expansion AND the 256K silicon disc it gives you a 444K C: drive. This means that if you have this particular setup the operation of *Windows* is very swift and restrictions imposed by disc space become a thing of the past.

Windows will work with 3.5" drives and there is a separate program included with the pack which allows you to format big discs to, seemingly, any parameters. This includes the dreaded IBM disc format.

Think of the possibilities that this little feature could open up! More about this one next month.



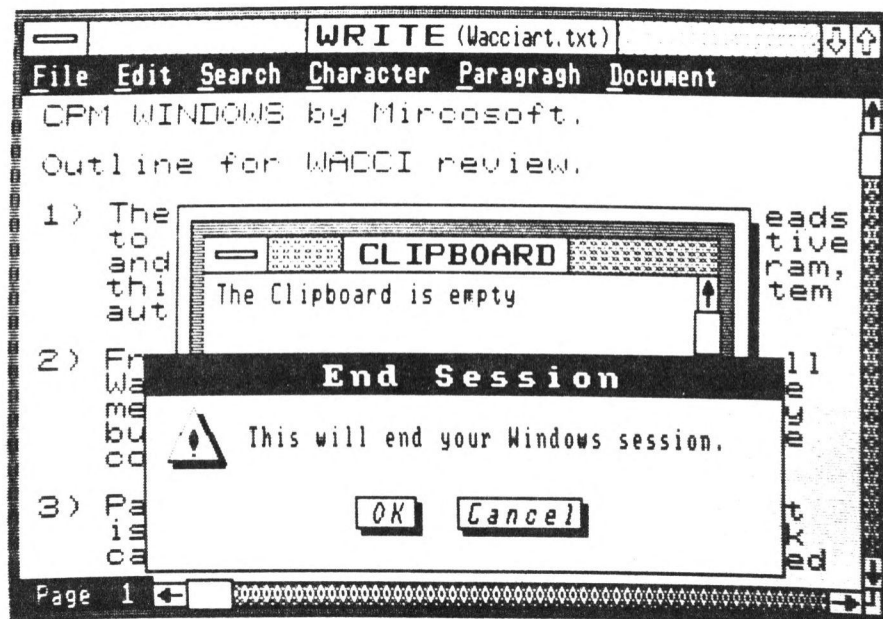
THE PENNIES BIT

Windows is likely cost between £60 to £70 and it is due to be launched in June this year. The Rom version will cost you an extra £20 but that gives you the very great advantage of not having to wait while the disc drive is spinning round. If 464 or 664 users want to take advantage of multi-tasking they will have to upgrade with a 6128 chip, at £20, a 64K memory pack at around £50 and the CP/M+ master discs for another £20. That's a hefty £90 to spend out before they consider the cost of the program itself, ouch!

END OF PART ONE

There is far too much in this package to give it justice in a quick review, like this. Next month I'll fill in the many missing pieces and check out more of the features yet to be discovered in this excellent package. See you next month for more on what must be the best news for the CPC for ages.

Windows will be available in a couple of months, distributed by Gordon O'Donnell Technology Ltd.



The Bellaby File

THE FOURTH IN UNCLE CLIVE BELLAMY'S SERIES ABOUT PROGRAMMING IN COBOL

INTRODUCTION

Yes, yet again you join us at the start of this article, the weather is warm and sunny, there's a light breeze blowing across the page and if it wasn't for a strong slope favouring the WACCI side we would have every chance of getting a good result.

This month we have more file handling, more Cobol commands and we create a print file.

So boot up the old CP/M+ and we'll get started.

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YOUR QUERIES ANSWERED

I have been asked how long it takes to write, compile and test a program, well programs fifteen and sixteen took me approx 65 minutes, which is slightly slower than writing the same program in Basic. (This is probably because I am not a fast typist)

Dear Maggie, I am sorry to have tell you that biting your fingernails does disqualify you from becoming a vegetarian.

Thanxs to Mr I Botham for pointing out that CP/M+ is more interesting than English cricket.

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ESC KEY SEQUENCES AND CP/M

You can use the ESC key commands at the A> prompt to set the mode, clear the screen etc.

To clear the screen and send the cursor to the top, press:-

ESC/E ESC/H

Then press the Return key. When you press the ESC key the screen will actually show ^[.

To set the screen mode, press:-

Mode 2	ESC/3 6
Mode 1	ESC/3 5
Mode 0	ESC/3 4

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MORE FILE HANDLING

Last month we used Cobol to create and the display a sequential file, this month we are going one better with a program which adds extra records to an existing data file.

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PROGRAM FOURTEEN - NOTES

- A) The program now uses more meaningful names for the identifiers and procedures. Cobol programs are written in near English and should be easy to read.
- B) The READ 'filename' END command now uses a different format. When the end of the file is reached the program uses a GO instruction to jump to a new procedure. This method is quicker in operation but does not look as neat.
- C) The CONTINUE-YES/NO procedure has been altered to allow testing of both upper and lower case characters.
- D) Some of the instructions have been split onto two lines to fit into 38 column format. This doesn't effect the way that the command works eg:-

READ TEMP-FILE
END GO END-PROGRAM.

PRINTING FILES

This version of Cobol does not allow you direct access to the printer, so if we want printed output we have to create a text file formatted to the layout we need and then use VDE to print out our data.

This method is quite easy to use and the programs fifteen and sixteen demonstrate the principles used.

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CURIOUSER AND CURIOUSER...

Program sixteen uses the file from program fifteen to create the ASCII file which will be printed out using VDE. Program sixteen is quite long so the program notes have been included between the program commands.

PRINTING THE PRINT FILE

When you have typed in and run programs fifteen and sixteen you are ready to print out the results.

To print out the results, we'll use VDE. The command sequence goes:-

VDE PRINT.DOC

This loads VDE and the print file, when VDE has loaded type:-

CTRL/O P

CTRL/O followed by P, switches off VDE pagination mode, so forms feed etc are disabled. ESC/P is the VDE command for print the file. You will be asked for OPTIONS.

00000000

Typing Return indicates no options selected, so the file is printed as it stands. That's enough on file handling for this month I think, now on with some more commands.

00000000

NUMERIC OR NOT NUMERIC

If you enter alphabetic data into a numeric identifier then your program will crash <<oops!>>

To get round this problem all data should be entered into string identifiers, tested to check that it is numeric and then moved to a numeric field. The following, short, program demonstrates the very fundamental principles involved:-

```
IDENTIFICATION DIVISION.
PROGRAM-ID. Example Seventeen.
*
DATA DIVISION.
WORKING-STORAGE SECTION.
    01 NUMBER-ENTERED PIC X(4).
    01 NUMBER PIC 9(4).
*
PROCEDURE DIVISION.
START.
    DISPLAY ' '.
    DISPLAY
        'Please Enter A 4 Digit Number'.
    DISPLAY
        'Press CTRL C To Abort'.
*
    ACCEPT NUMBER-ENTERED.
*
    IF NUMBER-ENTERED NOT NUMERIC
        DISPLAY 'I SAID A 4 DIGIT NUMBER!'
        GO START
    END-IF.
*
    IF NUMBER-ENTERED NUMERIC
        DISPLAY 'Well Done'
        MOVE NUMBER-ENTERED TO NUMBER
        GO START
    END-IF.
```

PROGRAM NOTES

- A) The string identifier and the numeric identifier must have the same PIC clauses.
- B) If you enter more than 4 characters then the extra characters are 'lost' when then they are moved from the keyboard buffer in the W-S SECTION. Type in an eight digit number to see the effect; only the first four digits are displayed.

00000000

OTHER TESTS

As well as testing if an identifier is numeric or not, you can do other tests.

```
IF 'identifier' ALPHABETIC
IF 'identifier' NOT ALPHABETIC

IF 'identifier' EQUAL
IF 'identifier' NOT EQUAL

IF 'identifier' GREATER
IF 'identifier' NOT GREATER

IF 'identifier' LESS
IF 'identifier' NOT LESS
```

DATES

We use the format DD/MM/YY to express the date, the americans use MM/DD/YY (although they are learning slowly.)

Just to be awkward, when you want to compare dates within a program then you are better off using YY/MM/DD. Think about it; which is earlier, 20th March 88 or 15th December 89?

Write them normally, 20/03/88 and 15/12/89. If you simply compare the ASCII values of the characters making up the strings (which is by far the simplest way,) the date starting with 15 comes before the 20th no matter what the year. Wrong. But if you put the year first, as in 88/03/20 and 89/12/15 then a simple evaluation gets the dates in the right order.

NEXT MONTH

More Cobol programming.

COMING SHORTLY... SID AArrgh!!

PROGRAM FOURTEEN

IDENTIFICATION DIVISION.

PROGRAM-ID. Example Fourteen.

```
* This program adds additional
* names to the data file NAMES.DAT
* Method -Copy OLD FILE to NEW FILE
*         -add new names to NEW FILE
*         -Copy NEW FILE to OLD FILE
*
```

ENVIRONMENT DIVISION.

CONFIGURATION SECTION.

SOURCE-COMPUTER. Amstrad 6128.

OBJECT-COMPUTER. Amstrad 6128.

INPUT-OUTPUT SECTION.

FILE-CONTROL.

SELECT NAME-FILE ASSIGN NAMES.DAT.

SELECT TEMP-FILE ASSIGN TEMP.DAT.

DATA DIVISION.

FILE SECTION.

FD NAME-FILE.

01 STORED-NAME PIC X(30).

FD TEMP-FILE.

01 TEMP-NAME PIC X(30).

WORKING-STORAGE SECTION.

01 REPLY PIC X.

PROCEDURE DIVISION.

OPEN-FILES.

DISPLAY ' '.

DISPLAY 'Opening The Disc Files'.

OPEN INPUT NAME-FILE.

OPEN OUTPUT TEMP-FILE.

COPY-OLD-FILE.

READ NAME-FILE

END GO ADD-NEW-NAMES.

MOVE STORED-NAME TO TEMP-NAME.

WRITE TEMP-NAME.

GO COPY-OLD-FILE.

ADD-NEW-NAMES.

DISPLAY ' '.

DISPLAY 'Please Enter A Name'.

DISPLAY ' '.

ACCEPT TEMP-NAME.

WRITE TEMP-NAME.

CONTINUE-YES/NO.

MOVE ' ' TO REPLY.

DISPLAY 'Enter C to Continue'.

DISPLAY 'Enter E to End'.

ACCEPT REPLY.

IF REPLY EQUAL 'C'

GO ADD-NEW-NAMES END-IF.

IF REPLY EQUAL 'c'

GO ADD-NEW-NAMES END-IF.

*PROGRAM FOURTEEN *continued*

```

*
  IF REPLY EQUAL 'E'
    GO CLOSE-FILES END-IF.
  IF REPLY EQUAL 'e'
    GO CLOSE-FILES END-IF.
  GO CONTINUE-YES/NO.
CLOSE-FILES.
  CLOSE NAME-FILE.
  CLOSE TEMP-FILE.
COPY-NEW-FILE.
  DISPLAY ' '.
  DISPLAY 'Copying File.'.
  DISPLAY ' '.
  OPEN INPUT TEMP-FILE.
  OPEN OUTPUT NAME-FILE.
COPY-NEW-FILE-1.
  READ TEMP-FILE
    END GO END-PROGRAM.
  MOVE TEMP-NAME TO STORED-NAME.
  WRITE STORED-NAME.
  GO COPY-NEW-FILE-1.
END-PROGRAM.
  CLOSE NAME-FILE.
  CLOSE TEMP-FILE.
  STOP RUN.

```

IDENTIFICATION DIVISION.

PROGRAM-ID. Example Fifteen.

*
* *Creates DATA.DAT which is used in*
* *PROGRAM SIXTEEN.*
*

ENVIRONMENT DIVISION.

CONFIGURATION SECTION.

SOURCE-COMPUTER. Amstrad 6128.

OBJECT-COMPUTER. Amstrad 6128.

INPUT-OUTPUT SECTION.

FILE-CONTROL.

SELECT NAME-FILE ASSIGN DATA.DAT.

DATA DIVISION.

FILE SECTION.

FD NAME-FILE.

01 EMPLOYEE-RECORD.

03 NAME PIC X(30).

03 WORK-NUM PIC X(8).

03 DEPT PIC X(8).

03 DOFB PIC X(8).

* *because there are no additional*
* *identifiers to be declared we do*
* *need the WORKING-STORAGE SECTION.*

PROCEDURE DIVISION.

OPEN-FILE.

OPEN OUTPUT NAME-FILE.

PRINT-INSTRUCTIONS.

DISPLAY 'Enter The Following Data'.

DISPLAY 'For Five Employees'.

DISPLAY ' '.

GET-DETAILS.

PERFORM ENTER-DATA 5 TIMES.

CLOSE NAME-FILE.

STOP RUN.

ENTER-DATA.

DISPLAY 'Enter Name'.

DISPLAY 'max 30 chars.'.

ACCEPT NAME.

DISPLAY 'Enter Works Number'.

DISPLAY 'max 8 chars.'.

ACCEPT WORK-NUM.

DISPLAY 'Enter Department'.

DISPLAY 'max 8 chars.'.

ACCEPT DEPT.

DISPLAY 'Enter Date Of Birth'.

DISPLAY 'Format DD/MM/YY'.

ACCEPT DOFB.

*
WRITE EMPLOYEE-RECORD.

IDENTIFICATION DIVISION.

PROGRAM-ID. Example Sixteen.

*
* *This program saves a data file to*
* *disc. The file has been formatted*
* *ready for printing out using VDE*
*
* *Method - Read data file from disc*
* *- Create an new ASCII file*
* *with the page headings and*
* *text ready formatted for*
* *printing*

ENVIRONMENT DIVISION.

CONFIGURATION SECTION.

SOURCE-COMPUTER. Amstrad 6128.

OBJECT-COMPUTER. Amstrad 6128.

INPUT-OUTPUT SECTION.

FILE-CONTROL.

SELECT NAME-FILE ASSIGN DATA.DAT.

SELECT PRINT-FILE ASSIGN PRINT.DOC.

DATA DIVISION.

FILE SECTION.

FD NAME-FILE.

01 EMPLOYEE-RECORD.

03 NAME PIC X(30).

03 WORK-NUM PIC X(8).

03 DEPT PIC X(8).

03 DOFB PIC X(8).

FD PRINT-FILE.

01 BUFFER PIC X(80).

WORKING-STORAGE SECTION.

01 TITLE-LINE-1.

03 FILLER PIC X(69)

VALUE SPACE.

03 FILLER PIC X(5)

VALUE 'PAGE '.

03 PAGE-NUMBER PIC 9

VALUE ZERO.

'The TITLE-LINE-n identifiers are set up within the W-S SECTION with the format and values that are used when saving the ASCII file to disc.'

'FILLER is a special identifier, it's used in the W-S SECTION for values that are not used elsewhere. You cannot access the value held in a FILLER identifier from the PROCEDURE DIVISION.'

'SPACE is a reserved word which fills an identifier with spaces. SPACE cannot be used with a numeric identifier.'

'ZERO is a reserved word used to make the value of an identifier 0, it cannot be used with a string identifier.'

01 TITLE-LINE-2.

03 FILLER PIC X(30)

VALUE SPACE.

03 FILLER PIC X(19)

VALUE '- EMPLOYEE REPORT -'.

01 TITLE-LINE-3.

03 FILLER PIC X(5)

VALUE SPACE.

03 FILLER PIC X(4)

VALUE 'Name'.

03 FILLER PIC X(30)

VALUE SPACE.

03 FILLER PIC X(12)

VALUE 'Work No. '.

03 FILLER PIC X(12)

VALUE 'Dept. '.

03 FILLER PIC X(8)

*
*PROGRAM SIXTEEN continued

```

VALUE 'D of B '.
03 FILLER      PIC X(9)
VALUE SPACE.
01 BLANK-LINE.
03 FILLER      PIC X
VALUE SPACE.
01 PRINT-LINE.
03 FILLER      PIC X(5)
VALUE SPACE.
03 PRINT-NAME   PIC X(34)
VALUE SPACE.
03 PRINT-WORK-NUM PIC X(12)
VALUE SPACE.
03 PRINT-DEPT   PIC X(12)
VALUE SPACE.
03 PRINT-DOFB   PIC X(17)
VALUE SPACE.

```

'PRINT-LINE is a storage area which we are using to format the data which will be saved to disc and then printed out using the word processor.'

```

01 LINE-COUNT   PIC 9(2)
VALUE ZERO.

```

```

*
PROCEDURE DIVISION.
START.
OPEN OUTPUT PRINT-FILE.
OPEN INPUT NAME-FILE.
PERFORM PRINT-PAGE-HEADING.

```

```

*
READ-PRINT.
IF LINE-COUNT EQUAL 12
PERFORM PRINT-END-OF-PAGE
PERFORM PRINT-PAGE-HEADING
END-IF.

```

'The IF statement command instructs the computer to complete both the PERFORM commands when the value of LINE-COUNT reaches 12.'

'The value of LINE-COUNT can be set between 0 and 99, LINE-COUNT counts the number of lines that have saved to the print file.'

```

*
READ NAME-FILE
END GO END-OF-JOB.

```

```

MOVE NAME TO PRINT-NAME.
MOVE WORK-NUM TO PRINT-WORK-NUM.
MOVE DEPT TO PRINT-DEPT.
MOVE DOFB TO PRINT-DOFB.

```

'The MOVE commands move the values from the file record that has been READ into the W S SECTION, where the area has been formatted ready for writing to the print file.'

```

MOVE PRINT-LINE TO BUFFER.
WRITE BUFFER.
MOVE BLANK-LINE TO BUFFER.
WRITE BUFFER.
ADD 2 TO LINE-COUNT.
GO READ-PRINT.

```

'We add 2 to LINE-COUNT because we have written two lines of text to the print file.'

```

END-OF-JOB.
CLOSE PRINT-FILE.
CLOSE NAME-FILE.
STOP RUN.

```

*
* Sub Routines
*

```

PRINT-END-OF-PAGE.
MOVE BLANK-LINE TO BUFFER.
WRITE BUFFER.
WRITE BUFFER.
WRITE BUFFER.
WRITE BUFFER.

```

'The four WRITE BUFFER commands are used as form feed commands, this will separate the pages of text.'

```

PRINT-PAGE-HEADING.
ADD 1 TO PAGE-NUMBER.
MOVE TITLE-LINE-1 TO BUFFER.
WRITE BUFFER.
MOVE BLANK-LINE TO BUFFER.
WRITE BUFFER.
MOVE TITLE-LINE-2 TO BUFFER.
WRITE BUFFER.
MOVE BLANK-LINE TO BUFFER.
WRITE BUFFER.
MOVE TITLE-LINE-3 TO BUFFER.
WRITE BUFFER.
MOVE BLANK-LINE TO BUFFER.
WRITE BUFFER.
ADD 6 TO LINE-COUNT.

```

SUB-ROUTINE NOTES - PROGRAM SIXTEEN
'ADD 1 TO PAGE-NUMBER increases the page number displayed at the top of the print file headings.'
'We ADD 6 to LINE-COUNT because we have written 6 lines of text to the print file.'

AN OUTRO ON FIRE?

Okay, by now you ought to be cooking with Cobol. Remember, if you're getting on well with the PD version and you're willing to shell out real money then there's a Microsoft version (for instance) which doesn't have any problems with printing.

However, programs fifteen and sixteen are useful examples in themselves and if you've persevered this far you've also found that this Cobol business can be fun.

That's it for now, write or phone if you get stuck, **ITFH...**

Clive Bellaby
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Strings 'n' Things

PRACTICAL STRING HANDLING BY PAUL DWERRYHOUSE

FOR STARTERS

To start with we'll look at how to scan an ASCII file and split it down into words.

Now why should we want to do this? Most of you have a word processor of some sort or other and all of them do this sort of thing in order to word search, word count, spell check and format. We can do this within a simple BASIC program and you can then see how your WP handles strings.

Of course the way that I show you might not be the best way, or the actual way that your WP does it but it will show you what you have to take into account when writing such a program.

BASE STRINGS

Any pure ASCII file can be loaded by the program, which then has to make sure that, no matter how you have laid out the text, it finds all the words. The program must not be fooled by things like justified text, words placed in brackets, full stops and so on.

I wrote a program like this when I put together WACCISPELL (AMS 178), so I shall use the method from this file as my example (Fig One).

THE UPPER HOUSE

Lines 10 to 60 set things up for us and load the text file. The variable 'n' counts how many lines of text have been read in. Lines 70 to 90 form the main loop.

In the spell checker everything is stored in upper case so it can make a fast, simple comparison without having to worry about the case of the

characters. Although we're only separating words here, we'll use the technique in this program because then, when we are looking for the start of a word, we need only check for an ASCII value between 65 and 90 (A to Z). So line 80, before it sends a text line to that part of the program which looks for words, converts it into upper case and stores it in 'temp\$'.

FROM HERE TO ETERNITY

Well actually from the start to the end of a line.

A FOR/NEXT loop is set up in line 130 and this part of the program looks for the start of a word. Before it does so lines 110 and 120 do a couple of simple checks to ensure that there is something to look for.

Line 140 places the ASCII value in a variable named 'askey' and line 150 checks that its value is in the range that we require and if so the the program branches off to find us a word. If the ASCII value is outside our range then onwards! to find one that's within it.

When the program arrives at line 180 the loop counter 'h' holds the position of the start of the word. In order to use the MID\$ command we must supply it with two parameters, the start position, which we now have, and the sub-string length.

To find the sub-string length, which is the length of the word we are trying to find, there is an easy solution. We are all in the habit of putting spaces between our words so all we have to do is to look for the next space along the line.

For this we use INSTR with the loop counter as the start position for the search. Line 180 places the value returned by INSTR in the variable 'spacpos'. Two things can happen at this point; the value of 'spacpos' will be nought or a value greater than nought (this is deeply philosophical folks). If the value is nought then no space has been found so the word fills all the rest of the line. If the value is greater than nought then that value will be the position along the line that the space occupies.

Either way line 190 places the word into a variable called 'find\$' using the RIGHT\$ command if the word fills all the rest of the line and the MID\$ command if the word is in the MIDDLE of the line.

Now we need to check that the ASCII value of the last character of 'find\$' is within our 65 to 90 range to make sure that it is not a full stop, comma or other funny character and this is done in line 200, using the RIGHT\$ command. Line 210 checks the value and, if it's out of our range, the LEFT\$ command is used to chop off this character. Line 230 updates the loop counter ready to look for a new word. One more thing to mention here, 'find\$' comes from 'text\$', not 'temp\$', as we don't want the words in upper case at the end of the program.

ALL DONE

That's all there is to it, so I have finished the listing by making the program print out the results to the screen so you can actually see one of your ASCII files split into its individual words.

YOU CAN COUNT ON IT

Listing the words isn't that useful in itself but it's the necessary prelude to a lot of practical work. Most magical looking software has a number of basic building blocks and there are many uses for a word listing routine.

If the words are once sorted into order you can then check them very quickly against an alphabetical list

(generally known as Spell Checking, Clive). You can easily find out how many times you've used individual words too and so start on a style check.

FOR OUR NEXT TRICK

For now let's keep things simple. If you want to count the words then add the following:-

```
Line 10 :count=0
Line 90 :PRINT count;" words found"
Line 220 :count=count+1
```

There is, of course, much more that a simple routine like this can achieve, so next month I'll use it again but this time to reformat a text file.

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Spreading it on thick

RAY BARROW SPILLS THE BEANS ABOUT MASTERCALC

SPREADING IT ABOUT

No this is not an article about my allotment. I thought I'd write a bit about spreadsheets and in particular using the, *truly wonderful*, Campbell Systems MasterCalc 128. Right - have you got it up and running? - *yes well take it out again because that's not a very good place to start.*

---<<128+128=128?>>---

QUESTIONS AND ANSWERS

"What is a spreadsheet" you may ask? A good question and one which deserves a good answer. Sadly I don't have it as a spreadsheet can be different things to different people.

I have a variety of uses for it - eg keeping track of share dividends; annual consumptions of electricity gas, and telephone bills going back nine years and showing annual percentage increases. That one is a real eye opener when you compare it with wage increases.

MasterCalc 128 also gets used as a "calculator" for working out the most economic way to take the Brownies on Pack Holiday. Then there's the one that's used as a score sheet. I've even got a spreadsheet at work on the big mainframe that keeps a track of my hours worked (*I work flexitime.*)

In short it is versatile and flexible, "limited," as they say, "only by your imagination."

So why did I say "take it out of the drive?" The reason is that good use of spreadsheets begins not by running the program but by using pencil and paper to decide *what* it is that you really want to do with it.

THE NATURE OF THE BEAST

A spreadsheet consists of a number of horizontal rows and vertical columns which can relate to each other mathematically, producing sub-totals, full-totals and working out formulae which, in a good spreadsheet, can be very complex. The columns and rows can be moved about to varying degrees whilst still maintaining their original mathematical relationship with each other (if you didn't *get* that, hold on, I'll explain...)

One or more items, such as interest rates or discounts, can be altered at will and the whole thing recalculated in the blink of an eye to produce a series of "what if Chancellor John Major blows it?" type calculations.

---<<128+128=128?>>---

UND NOW... AN EXAMPLE

We'll start by doing a simple one to work out the cost of buying a house (very topical around here - keeping our fingers crossed.)

Start at the left hand side of your sheet of paper listing each of the items down the page:- savings; mortgage loan; total income; purchase price; purchase costs; removal costs; and total expenditure.

Looking at this list we can see that the following sums apply:-

[savings + mortgage loan = total income]

[purchase price + purchase costs + removal costs = total expenditure]

There's one formula needed. We have to calculate the purchase costs. They are things like Estate Agents' commission, lawyers costs and stamp duty and are a percentage of the purchase price. Are you still with me? *Really?* Good.

---<<128+128=128?>>---

RUN "MASTERCALC"

Now that you've sorted out what you want you can run MasterCalc 128.

At the first menu type in "N" for New plan. You should see the prompt "How many rows". Type in "16" and press Return and for columns type in "5" and press Return. Why sixteen and five? Trust me, children, I know what I'm doing (*click- what I'm doing - click- what I'm doing - click- what?*)

You should now be faced with an almost clear screen with numbers one to sixteen down the left and one to five across the top. This is your own empty spreadsheet waiting to be filled. Let's set it up, always the time consuming part.

---<<128+128=128?>>---

SETTING UP

The cursor should be ready in Row two/Column two (R2/C2.) Try moving it about using the four arrowed keys and when you have finished playing leave it in Row one/Column one (R1/C2.)

From now on I will use "R" for Row and "C" for Column and using the standard MasterCalc notation of R1/C2, R2/C2, R10/C2 etc, etc.

Now to type in some text. Hold down the Shift key and press "<" (shift/2) to enter the text mode. It tells you

Life....

by Steve, John and Andy.

Eternity is a terrible thought. I mean...



...where's it all going to end?



at the bottom left of your screen you are ready so type in the date (2 MAR 90) and then press the Return key.

Move the cursor down to R2/C1 and enter the text mode again then hold down the <-> key until you have drawn a line across the screen to the end of C5, then press Return. Putting lines across like this helps to make the things easier to locate.

The cursor is now at R2/C5 so press "L" (for Left) to shoot it over to the far left hand column. Press Ctrl/D. This puts the cursor into automatic so that every time Return is pressed is moves down a row; D is for Down and a downward pointing arrow bottom left of screen confirms this. The other option is Ctrl/R for auto right movement with a suitable arrow showing. Try it but go back to Ctrl/D before you continue.

---<<128+128=128?>>---

ONWARDS AND DOWNARDS

Now where were we? Oh yes... Use the cursor and go to R3/C1, pop back into text entry mode and type <Savings> and Return, cursor moves down to R4/C1. Pop back into text entry mode ">". Type <Mortgage loan> and Return twice to bring the cursor down to R6/C1.

Type in <Total income> here and in R8/C1 type in <Purchase price>; in R9/C1 enter the <Purchase costs>; in R10/C1 enter <Removal costs> and in R12/C1 type in <Total Expenditure>.

ON THE STRAIGHT AND NARROW

The truly observant among you will have noticed that the text for some of

those items ran over into column two. Text will keep on entering across the spreadsheet till you press Return or reach your last visible column. So what can we do about it? There are three choices.

Firstly make the column wider, secondly abbreviate the text, thirdly (and our choice for the moment) ignore it. If we do our sums in column five then anything in columns one to four will not affect us.

---<<128+128=128?>>---

TAKE THE MONEY AND RUN

Place the cursor in cell R3/C5 and type in a figure for savings, say 5000, which will be displayed at the bottom of the screen. Press Return to transfer to cell R3/C5. Repeat the procedure for the mortgage loan, putting 60000 into cell R4/C5, then purchase price in R8/C5, 40000 and removals in R10/C5, 500.

Nearly there. Place the cursor at R6/C5 and press "T" "C" "S" for Total, Column and Sub-total, watching the prompts at the bottom of the screen. The total income box should now show the figure 65000. Do exactly the same but in R12/C5 which should then show the figure 40500.

---<<128+128=128?>>---

THE FORMULA FOR SUCCESS

Sub-totals are totals of all the items preceeding the designated cell up to but not including, any previous sub-total. Before you say it, I know there

is nothing in R9/C5. That's because this is going to contain the formula. Let's have a go at it.

---<<128+128=128?>>---

HERE WE GO?

Press Ctrl/F (for Formula) to type in the formula mode. Then press "N" (for New); "1" and press Return for our first formula, then:- <R8C5*4/100> and Return twice.

This formula will now take whatever figure we have in cell R8/C5 multiply it by four and divide by 100. That's four percent which is a rough guide to purchase costs around here.

We can put that formula anywhere and it will always give us the same answer. For our purposes it is going into R9/C5 so move the cursor there and press "F". You will be prompted for the formula number at the bottom of the screen so type in "1", press Return and bingo there is the result in place. It should be 1600.

---<<128+128=128?>>---

AND IN THE RED BOX...

Finally recalculate the whole spreadsheet by pressing Ctrl/C (for calculate) to give our final figures. That's all the hard work done now so save it by pressing Ctrl/X to get back to the main menu then <S> to save. Give it a file name at the prompt and press the Return key.

Press <R> to resume the plan and have a play with it. Try altering the figures (don't forget to recalculate it with Ctrl/C) and try putting lines across on rows five, seven, eleven and twelve to tidy it up a bit.

---<<128+128=128?>>---

A CALCULATED EXIT

I hope this has been a help to those of you who are trying to "get to grips with MasterCalc" for the first time

If "they" up there at WACCI HQ let me do a follow up article then next time we can have a look at folding the sheet, splitting it, graphics and probably being too clever by half.

<<We're waiting for it Ray -Ed.>>



Poking in the Library

with
Joolz

THE CHIEF LIBRARIAN TAKES US ON ANOTHER TOUR OF THE FSW LIBRARY

Hello, my little Library lovers. Here we are again with a decent amount of space for a leisurely stroll through The WACCI FSW Library. The good news is that not only are WACCI Discs Ten and Eleven finally with us (I poked OHG into action with my clear plastic ruler) but WACCI Disc Twelve will shortly be with us as well.

---{{PiTL-PiTL}}---

GROVELLING TIME

First off I must apologise to Stuart Gascoigne who sent the Linear Cellular AUTOMata (CAUTO) program to us for inclusion in The FSW library.

When I mentioned it in PiTL I remarked that although it seemed a very wonderful and colourful program, I didn't actually know how to describe it. Stuart seems to have been a little upset about this.

This morning he sent me a rather admonishing letter which included the following paragraphs:-

Since my cellular automaton prog is too intellectual for the massed brains of WACCI HQ, I'll make sure the next contribution is nice and simple, OK? It should reach you soon (no clues!)

Sorry Stu but you must admit that describing CAUTO as a complicated version of "LIFE" wouldn't really be doing it justice. It is complicated though isn't it. For example this is a part of the documentation...

The automata catered for by this program are a subset of the total universe of linear cellular automata, in that they all have a 'totalistic' transition rule. This means that the states of the cells in the previous

generation are added together, then used to obtain (via the rule table) the state of the cell in the current generation. More general systems allow a cell state to be determined by the distribution of states in the previous generation, rather than by just their total. The advantage of totalistic rules is that they can 'average out' some of the information contained in the automaton, which tends to result in a less random distribution and prettier patterns.

Well if that's not complicated then I'm a football pitch.

---{{PiTL-PiTL}}---

Not all of Stu's letter was about my dimness, it also contained a tip for a program already in The Library:-

AJ's Englebert suffers a bit from the characteristic slowness of a game written in Basic. But you can speed it up noticeably by including just the one following line -

35 DEFINT A-Z

Thanks Stuart, now I think we really should get on and see what's new in The Library this month.

---{{PiTL-PiTL}}---

WACCIWORD III - THE REVENGE (108K)

This is the latest version of WACCI's very own word-processor (courtesy of Paul Derryhouse.) The first thing to mention, about this latest version, is the use of XLINE by Alan Sharp. This

does speed up the printing on a Mode Two screen and is the main reason why a version three of WACCIWORD has been produced. There are lots of other improvements but I think that I should pass this one on to Peter Ceresole for an impartial review (sadist am I not?)

---{{PiTL-PiTL}}---

OHM - OHM ON THE RANGE...

As we all know Ohm's law states:- "The current through a metallic conductor is directly proportional to the potential difference across its ends if the temperature and other physical conditions are constant."

Quite straightforward stuff isn't it. So if you knew two of the following values:- the current (in amps) the resistance (in ohms) or the Potential Difference (in volts) with the aid of a pencil and paper you could work out the missing value.

Nothing could be easier. Well in fact there is something easier. OHM (3K) by Chris Marlow, is a little program that does all the calculations for you. Not only that but it will also dump the results to the printer, should you wish.

Chris seems to be going through a "windows with everything" phase just recently and OHM is no exception. This program is worth getting if only to see how windows can be correctly used to make a program look attractive.

RESID (3K)

Ever looked at a circuit board, seen a little resistor and wondered what those little coloured bands mean about the value of its resistance? Of course

you have, I do it all the time. But now I need wonder no longer because Mr Marlow has written a program that tells me all I want to know.

I type in the colours of the four bands and the RESistor IDentification program tells me the value. Gosh, I can sleep easy now, every home should have one of these.

Once again the program makes excellent use of windows.

OSKD (3K)

Another one from Chris Marlow. OSKD stands for On Screen Key Definer and is based on KEYDEF (AMS-22) by Alex Aird and allows you to define keys to produce Basic keywords. This is a great boon when typing in a program. Pressing Control and S produces the keyword SOUND, CTRL+L gives LOCATE and of course CTRL+W gives WINDOW #.

---{{PiTL-PiTL}}---

CODER (144K)

John Shawyer has written a *Machine Code Tutorial* which will be appearing in WACCI as a new series very shortly. The articles describe machine code routines that can be used to provide a fancy menu system. It's definitely pitched above the beginners level and contains some very useful routines.

Not only that but CODER includes the PRT source code files, the compiled machine code binary files (that are the programs used in the series) and finally two additional programs README.BIN and PRINT.BIN which is an additional program to set up a DMP-2000 printer.

DRAUGHTS (33K)

Woe Willie Lawrie has sent in a super draughts tutor program. Willie is the programmer that wrote the GM Chess program that used to be sold by Camel Micros (*what's happened to them, anyone know?*) Black Doctor, white doctor, black dyke, Glasgow, double corn, single corn, Pioneer, switcher, yes all these are names for opening moves in draughts. I never knew that, did you? This program is well worth a look, perhaps I'll get Uncle Clive to do a review for us?

EXAMPLE 2 (9K)

Fed up with having to type in example programs shown in *The Bellaby File*. Well your Uncle Clive has your best interests at heart and has sent in another set of the type-ins that are about to appear in *The Bellaby File* over the next few months. Yes you can give your fingers a well earned rest for only the price of 36p.

INSTALL.VDE (11K)

Having problems installing the VDE word-processor? Have you read the documentation and found yourself none the wiser? This month, once again, Uncle Clive has come to your rescue.

Clive has sent in a detailed tutorial which shows you how to install VDE for your system.

Written in plain English it's so simple that even I could follow it, unlike CAUTO (*oops sorry Stu!*)

---{{PiTL-PiTL}}---

HEXTO (3K)

This is a set of programs from Dietmar Langenohl which enable you to produce Amdos binary files from CP/M assemblers. HEXTOBIN.BAS (+HP.BIN) converts HEX files to binary files.

---{{PiTL-PiTL}}---

THE CP/M SECTION

No you're not seeing double. I haven't made a mistake. The first program we are having a look at in this section is written by Dietmar Langenohl.

HEX-BAS.COM (18K)

This produces a Basic loader from HEX files. This program was written in Hisoft-C. The major improvement over the previous version is in the command line handling and it replaces the old CPM-068. The source code for the C compiler is enclosed in case of anyone is interested in C programming and wants to make more improvements.

---{{PiTL-PiTL}}---

CLS (1K)

This is a short little program written by Frank Frost that clears the screen.

That may not sound very useful but evidently it's something that CP/M 2.2 users don't have but CP/M+ users do (*or was that the other way around.*)

---{{PiTL-PiTL}}---

TORNADO (15K)

And here's yet another program by Dietmar Langenohl. This is a really unusual program. It's the classic "Bomber" program. You know it, it's the one where you are flying over a city in a plane and you have to bomb the sky-scrapers below to clear a space to land.

Nothing spectacular about that except that this version runs under CP/M and 2.2 to boot! What is even more unusual is that it has colour graphics and sound.

Yes, Dietmar has been quite clever and has made the CP/M routines access the CPCs firmware routines. All good stuff and well worth getting, if only to run it the next time one of your friends makes a derogatory remark about the limitations of CP/M.

---{{PiTL-PiTL}}---

BYE-BYE TIME

I think that I've just about finished Poking around The Library with you for this month. Please remember though, if you've see me write about a program in this column but you don't see it on The FSW Library list, then go ahead and order it, it just means that OMG hasn't had time to update the list.

---{{PiTL-PiTL}}---

THE VERY LAST BIT

I must be getting sentimental (*or should that be semi-mental*) in my old age but I do actually feel a bit sorry for the *old fart*.

I mean, you lot send me the letters and the programs, while he's partially comatosed somewhere else (most of the time.) So I get the kudos for writing this column and he gets to be an easy target for not updating The FSW Library list. It's not fair really, is it? (sob!)... *yes of course it is.*

See you next month..... Joolz.

the WACCI FSW Library

PROBABLY
THE BEST
LITTLE
LIBRARY
IN THE
WORLD

LOOSE PUBLIC DOMAIN SOFTWARE - Copying charge = 4p per K

To obtain loose PD software, fill in the FSW Library order form and send it with a CF2 disc or discs (330K maximum per disc) in a Jiffy bag, plus the correct charge (min £2), to WACCI HQ. The copying charge is 4p per K. (four pence per

Kilobyte). The CP/M programs have been tested by WACCI on an Amstrad CPC6128 computer. Although the programs have been tested, they are supplied on an as-is basis. WACCI accepts no liability for faults or non-operation.

CPM-001: BINCALC 10K - On-screen calculator.	CPM-039: WRDCOUNT 26K - Another word-counter.
CPM-002: COMPARE 10K - Compares two files for differences.	CPM-040: ADVENT 101K - Big text-only adventure.
CPM-003: LOOK 12K - Views and Edits ascii and binary files.	CPM-041: TEAM-GEN 22K - Scoresheet generator.
CPM-004: WDDT 11K - Improved version of DDT.	CPM-042: USERFUNC 12K - A small library of Basic DEF FNs.
CPM-005: NSWP 37K - Disc and file management utility.	CPM-043: BIO 14K - Biorhythm chart generator.
CPM-006: QK20 10K - Assigns character strings to keys.	CPM-044: CAL 6K - Calendar generator.
CPM-007: RASMB 17K - Z80 reverse assembler.	CPM-045: CHESS 26K - CP/M 2.2 version of the board game.
CPM-008: UNERA 2K - Unerases erased files.	CPM-046: GOLF 26K - A text-only swipe round the golf course.
CPM-009: XIZI 22K - 8080 to Z80 to 8080 code translator.	CPM-047: MAZE 3K - Maze generator.
CPM-010: ZMAC+ZLINK ... 40K - Z80 assembler and linker.	CPM-048: NEWPUZ 25K - Wordsearch generator.
CPM-011: CONV2 3K - Converts CP/M 2.2 files to CP/M Plus.	CPM-049: OTHELLO 22K - Version of the board game.
CPM-012: LASH 10K - Improved version of ASM.	CPM-050: UKM7 26K - Comms utility adapted from MODEN7.
CPM-013: LOHD 2K - Improved version of LOAD.	CPM-051: INVENT 35K - Inventory database.
CPM-014: Z80ASM 15K - Z80 assembler.	CPM-052: VDE 76K - Fast, powerful word processor.
CPM-015: Z8E 190K - Z80 debugging monitor and assembler.	CPM-053: SPELL 33K - Spelling checker with dictionary.
CPM-016: ZDEBUG 31K - Non-symbolic Z80 debugging tool.	CPM-054: SCRIVENER ... 194K - Relational spreadsheet/database.
CPM-017: SMALL-C 157K - Floating-point version of the language.	CPM-055: JRT PASCAL .. 208K - Floating-point, standard version.
CPM-018: SCI 59K - Small-C-Interpreter.	CPM-056: JRT MANUAL .. 200K - Manual on disc for the above language.
CPM-019: EBASIC 84K - Compiles a subset of Basic to m/code.	CPM-057: COBOL 97K - NPS Micro-Cobol v2.1.
CPM-020: LISP 81K - The essence of a Lisp interpreter.	CPM-058: FORTH 54K - 16K version, can be enlarged easily.
CPM-021: EPRO 37K - A version of the Prolog language.	CPM-059: STOIC 62K - A version of the language.
CPM-022: CHEK 5K - Checks disc quality.	CPM-060: EXPERT86 52K - A very good expert system.
CPM-023: D 4K - Directory utility.	CPM-061: HEX 141K - Modem EXecutive comms utility.
CPM-024: DISKDOC 11K - Disc doctor (not sure how it works).	CPM-062: KERMIT 28K - Comms utility for little green frogs
CPM-025: DISPLAY 5K - Displays text files f/wards or b/wards.	CPM-063: LUCKY13 11K - Lottery number generator and checker
CPM-026: ED.DOC 22K - Instruction file for ED.COM	CPM-064: LOGAN 15K - LOGic ANalyser and frequency counter
CPM-027: FORM3 3K - Allows CP/M+ owners to read PCW discs.	CPM-065: WSCLEAN 4K - Clears the high bits from text files
CPM-028: GREP 13K - Emulates the UNIX grep command.	CPM-066: OPT 21K - A Three Pass Optimiser for Small C
CPM-029: LOOKAT 3K - Dumps files in ascii format.	CPM-067: STARTREK 11K - Scotty's in there again.
CPM-030: RPIP 8K - Improved version of PIP.	CPM-068: HEXTO .. 18K - Make DATA loaders from HEX files
CPM-031: SD 4K - Directory utility.	CPM-069: MAXELCAT 57K - Print out a catalogue of all your files
CPM-032: SETCOLOUR 12K - CP/M 2.2 easy colour-change command.	CPM-070: MAKEASH 17K - Converts ZNAC files to source for JRTASH
CPM-033: SORT 4K - Sorts the contents of text files.	CPM-071: 80TRK 59K - Stick a 5.25" drive on your CPC
CPM-034: VLIST 2K - Controls text file scrolling speed.	CPM-072: ZSM 24K - PD assembler
CPM-035: WCOUNT 7K - Counts the words in text files.	CPM-073: DISZ80 22K - Z80 op-codes into Zylog, 696 mnemonics
CPM-036: LBRDISK 16K - A library utility.	CPM-074: CPM2TO3 7K - Run 2.2 programs under CP/M Plus
CPM-037: DU 44K - Powerful disc sector editor.	CPM-075: XRAS 160K - Scrolling bulletin board host program
CPM-038: NULU15 82K - Improved version of Library Utility (LU).	CPM-076: MFT 3K - Easy one-drive Multi File Transfer.

CPM-077: CRUNCH/UMCR .. 17K - <i>User-friendly file squeezer.</i>	CPM-097: EDIT 16K - <i>A text editor.</i>
CPM-078: SIDEWAYS 34K - <i>Prints spreadsheets sideways.</i>	CPM-098: FINST 40K - <i>Cardbox filer program.</i>
CPM-079: DISCKITA 31K - <i>General purpose disk formatter +</i>	CPM-099: SHELL 7K - <i>CP/M menu driven environment.</i>
CPM-080: CLEANUP 3K - <i>Slicker file erasing and typing.</i>	CPM-100: BD04 6K - <i>Checks discs for bad sectors and files.</i>
CPM-081: SUPERZAP 27K - <i>A full screen interactive disc utility</i>	CPM-101: ALLDIR 1K - <i>(2.2) All User Area DIRs.</i>
CPM-082: PASSWORD 3K - <i>Protect your programs from prying eyes</i>	CPM-102: UDIR 1K - <i>CP/M+ All User Area DIRs.</i>
CPM-083: SCRANBLE 2K - <i>Similar to PASSWORD but trickier.</i>	CPM-103: VIEW 6K - <i>Prints ANY file to the screen.</i>
CPM-084: DISPLAY 5K - <i>A smart text reader.</i>	CPM-104: OSB2ANS 6K - <i>Run Osbourne CP/M programs on the CPC.</i>
CPM-085: FILECHOP 6K - <i>Breaks down ANY program.</i>	CPM-105: ANDYBASE..... 56K - <i>Powerful database program.</i>
CPM-086: LIST 3K - <i>Improve the appearance of listings.</i>	CPM-106: VDE266 161K - <i>The ultimate version of CPM-052</i>
CPM-087: MAKE 3K - <i>Simplifies area user changes.</i>	CPM-107: XOX 9K - <i>Pascal version of noughts and crosses.</i>
CPM-088: NEWCCP 9K - <i>Adds extra commands to CP/M.</i>	CPM-108: RDMS 55K - <i>Read MS-DOS files.</i>
CPM-089: PCW 3K - <i>Read AND write to PCW formatted discs.</i>	CPM-109: UNERA 6K - <i>Recover erased files.</i>
CPM-090: EPSETUP 11K - <i>Configuration program for Epson printers</i>	CPM-110: STATUS 12K - <i>Displays the current status of your CPC.</i>
CPM-091: B29 47K - <i>MSWP workalike, views COM files as well.</i>	CPM-111: PACHAN 24K - <i>CP/M version of the arcade game.</i>
CPM-092: MFT+ 3K - <i>Multi File Transfer with two drives.</i>	CPM-112: MAKEBATCH 4K - <i>Easy creation of submit files.</i>
CPM-093: PRINT 7K - <i>Text file printing aid.</i>	CPM-113: ANDYBASE 56K - <i>Powerful database.</i>
CPM-094: RESCUE 6K - <i>rescues corrupted discs</i>	CPM-114: TORNADO 15K - <i>Graphics, colour and sound under CP/M2.2</i>
CPM-095: CRCBUILD 3K - <i>Catalogue your discs. (CP/M 2.2)</i>	CPM-115: CLS 1K - <i>Clear screen under CP/M.</i>
CPM-096: NCAT 23K - <i>Catalogue your discs. (CP/M +)</i>	CPM-116: INSTALL.VDE ...11K - <i>A guide to installing VDE on the CPC.</i>

LOOSE HOMEGROWN SOFTWARE - Copying charge = 4p per K

To obtain loose HG software, fill in the FSW Library order form and send it with a CP2 disc or discs (330K maximum per disc) in a Jiffy bag, plus the correct charge (min £2), to WACCI HQ. The copying charge is 4p per K. (four pence per

Kilobyte.) The AMS programs have been tested by WACCI on an Amstrad CPC6128 computer. Although the programs have been tested, they are supplied on an as-is basis. WACCI accepts no liability for faults or non-operation.

AMS-001: MASTERS OF MIDWORLD . 29K - <i>Graphical adventure.</i>	AMS-026: STAR CHASE 11K - <i>Space shoot-em-up.</i>
AMS-002: MINIMON 4K - <i>Mini machine-code monitor.</i>	AMS-027: UFO ESCAPE 18K - <i>Haze game.</i>
AMS-003: CHARDES 3K - <i>Big-character designer.</i>	AMS-028: HEADLESS 3K - <i>Headerless file tape to disc.</i>
AMS-004: HEADER READER 2K - <i>Colourful tape header reader.</i>	AMS-029: BEETLEMANIA 31K - <i>Machine-code game.</i>
AMS-005: FRUIT WORM 4K - <i>The old caterpillar/fly type game.</i>	AMS-030: DISC 2K - <i>Intelligent disc menu.</i>
AMS-006: OTHELLO 6K - <i>Reversi simulation.</i>	AMS-031: SDUMP 10K - <i>Five mode 1 & 2 screen dumps.</i>
AMS-007: FOUR IN A ROW 6K - <i>Version of Connect 4 board game.</i>	AMS-032: ENGLEBERT 8K - <i>Bert game.</i>
AMS-008: THE WORLD 26K - <i>Graphics demo of Earth spinning.</i>	AMS-033: GLOBE 7K - <i>view Earth from space.</i>
AMS-009: CHAT 5K - <i>Based on the famous Eliza.</i>	AMS-034: MULTIPROG 2K - <i>Holds 4 Basic progs in a 2nd 64K.</i>
AMS-010: JIGSAW-1 34K - <i>Educational jigsaw.</i>	AMS-035: PIXELPLOTTER 5K - <i>6128 Etch-a-Sketch program.</i>
AMS-011: EDDY 15K - <i>Good text editor for all CPCs.</i>	AMS-036: STORY 12K - <i>Zany prog that invents stories.</i>
AMS-012: XOX 3K - <i>Two player noughts and crosses.</i>	AMS-037: FUNCTDR 2K - <i>Plots graphs of matha functions.</i>
AMS-013: PONTOON 37K - <i>You against the computer.</i>	AMS-038: FUNCSOL 2K - <i>Solves quadratic equations.</i>
AMS-014: PROGDOC 33K - <i>Programmer's utility.</i>	AMS-039: FORNULAE 3K - <i>Mixes chemicals.</i>
AMS-015: HELPING HAND 5K - <i>Decision aid.</i>	AMS-041: CGEN 6K - <i>Icon-driven character generator.</i>
AMS-016: BOMBER 4K - <i>Bomb the town & land your plane.</i>	AMS-042: EXCAT 5K - <i>Extended cat to screen/printer.</i>
AMS-017: LIFE 4K - <i>The Game of Life.</i>	AMS-043: EXPRINT 5K - <i>Prints ascii chars > 127.</i>
AMS-018: LOCK'n'KEY 8K - <i>Haze game.</i>	AMS-044: PROPORNA 2K - <i>Cassette filing sheets to a DMP1.</i>
AMS-019: TUNNEL DIVE 4K - <i>Freefall game.</i>	AMS-045: NEATLIST 4K - <i>Emulates the BBC's LISTO command.</i>
AMS-020: HEAD 3K - <i>Tape or disc header reader RSX.</i>	AMS-046: ROMREAD 3K - <i>Tells you about your roms.</i>
AMS-021: NENDATA+ 3K - <i>M/code into data statements.</i>	AMS-047: SYMPHONY 4K - <i>Kalaedoscope pattern generator.</i>
AMS-022: KEYDEF 2K - <i>Single keypress command typing.</i>	AMS-048: ANSIG 173K - <i>Handlebrot Set Generator.</i>
AMS-023: CHAMPIONSHIP DARTS .. 12K - <i>Bonk... Bonk... Bonk...</i>	AMS-049: DRIPZONE 54K - <i>Addictive machine-code game.</i>
AMS-024: GRID WARRIOR 4K - <i>Another caterpillar/fly game.</i>	AMS-050: DISCED 5K - <i>Disc sector editor RSX.</i>
AMS-025: JIGSAW-2 51K - <i>Educational jigsaw.</i>	AMS-051: STARFIRE 25K - <i>Machine code zap-em-up game.</i>

AMS-052: SCANNER	2K	- Scans lots of ASCII files.	AMS-110: PHARAOH	9K	- Maze and beasties game.
AMS-053: BOUNCER	4K	- A version of Breakout.	AMS-111: SHIFTY	10K	- Educational jigsaw type game.
AMS-054: BASIC+	13K	- 45 new commands to Basic.	AMS-112: DIAMOND MINER	8K	- Underground hunt for jewels.
AMS-055: LABEL PRINTER	6K	- Single address labels.	AMS-113: CRAZY MAZE	5K	- Maze game.
AMS-056: MISSILE	6K	- A version of Missile Command.	AMS-114: PATHFINDER	8K	- Confuzion type game.
AMS-057: SKETCH & PROGRAM	8K	- Turns sketches into prog lines.	AMS-115: SPELLBOUND	17K	- Educational spelling tug-of-war.
AMS-058: SYNTH	3K	- 3-channel keyboard sound.	AMS-116: GRAPHIC MAGIC	9K	- Mode 0 screen designer.
AMS-059: HOTRODS	6K	- Race game.	AMS-117: JIGSAW-3	92K	- Jigsaw game (includes 5 jigsaws).
AMS-060: BREAKOUT	3K	- Yawn.	AMS-118: WRITE IT RIGHT	12K	- Educational word game.
AMS-061: DEPRO	2K	- Load and list protected Basic.	AMS-119: SHEEPDOG	5K	- One man and his computerised dog.
AMS-062: DIS	5K	- Good Z80 disassembler.	AMS-120: NOMOPOLY	20K	- Variant on the board game.
AMS-063: PAIRS	4K	- A version of Pelmanism.	AMS-121: BACKGAMMON	40K	- Plays a hard game, but addictive.
AMS-064: XREF	15K	- A Basic cross-reference utility.	AMS-122: DOMINOES	30K	- Fives and Threes.
AMS-065: WACMON	16K	- Versatile machine-code monitor.	AMS-123: DYS-SYMMII	5K	- Colourful pattern generator
AMS-066: MUSIC COMPOSER	14K	- Compose one-channel melodies.	AMS-124: PRINTER	2K	- Printer setup utility.
AMS-067: LOGOPOLIS	15K	- Version of Logo.	AMS-125: SDN	11K	- O.S. for Bigscreen Programs.
AMS-068: MATHS MAGIC	11K	- For numerical freaks.	AMS-126: ORRERY	9K	- Watch the world go round the sun.
AMS-069: BREAKER	3K	- Dumps screens to disc.	AMS-127: MUSIC	13K	- Easy music creator.
AMS-070: DISC MENAGERIE	29K	- Good disc utility.	AMS-128: ENVELOPE	8K	- Fiddle with EMT and ENW commands.
AMS-071: NOSEY	4K	- Edit memory and banks, view roms.	AMS-129: POSTER	6K	- For use with Siren's Print Master.
AMS-072: SPRITES	6K	- Mode 0 sprite designer.	AMS-130: CONTOURS	9K	- 16 colour mathematical contour map
AMS-073: SQUEEZER	4K	- Squeezes ascii files.	AMS-131: COMPLEX	9K	- Electrical engineers toolkit.
AMS-074: CAVERNS OF SKELETON	14K	- Multi-coloured maze game.	AMS-132: DIABOLO	35K	- Multi format Solitaire game.
AMS-075: ZENER CARDS	23K	- ESP test.	AMS-133: ADAM	6K	- Prints out A.D.A.M. text files.
AMS-076: SUN-VADERS	7K	- Educational maths game.	AMS-134: BANNER	4K	- Print 10" high lettered banners.
AMS-077: ASTROSUITE	35K	- Find out about space.	AMS-135: GLOBE II	45K	- Much enhanced of the original.
AMS-078: TEXT & PROGRAM	3K	- Text screens into program lines.	AMS-136: SYNTH2	17K	- Another Synthesiser program.
AMS-079: WORDY	27K	- Advanced text editor.	AMS-137: QUIZ	96K	- Trivia quiz + speech.
AMS-080: TRIVIA QUIZ	72K	- 2 to 4 player quiz.	AMS-138: SDUMP V.3	7K	- Sdump suite+ helpful front-end.
AMS-081: PROTO	16K	- Good Z80 assembler.	AMS-139: STATS	10K	- Statistics program.
AMS-082: CHESS CLOCK	10K	- For chess freaks.	AMS-140: COLPRINT	1K	- Prints out text in columns
AMS-083: DEFFONT	14K	- Excellent character generator.	AMS-141: SPREAD	45K	- A spreadsheet program
AMS-084: CALENDAR	7K	- Calendar generator.	AMS-142: DISC MENAGERIE II ...	28K	- Much enhanced version DM
AMS-085: SNOOKER SCOREBOARD ..	4K	- For snooker freaks.	AMS-144: BIO	5K	- Hi-res Biorthym generator.
AMS-086: PATIENCE	9K	- The solitaire card game.	AMS-145: NUMERO	12K	- The Cabbala made easy.
AMS-087: AUTOLINE	3K	- Intelligent graphics demo.	AMS-146: 3D MAZE	7K	- Can you find the exit?
AMS-089: CRUNCH	8K	- Educational Pacman.	AMS-147: PHI	8K	- Answers on a postcard please.
AMS-090: CALCULATOR	21K	- Scientific calculator.	AMS-148: S-LIGHT	3K	- Sound to light generator.
AMS-091: FONT	8K	- 40-column text in Mode 0.	AMS-149: DOMINOES II	10K	- The normal dominoes game.
AMS-092: FIRMWARE EXPLORER	5K	- Similar to Regiload.	AMS-150: STRAIGHT	8K	- Generates straight line graphs.
AMS-093: GOMOKU	5K	- Hybrid of Othello & Connect Four.	AMS-151: REGILOAD II	13K	- Regiload re-visited.
AMS-094: MENU	4K	- Intelligent disc menu.	AMS-152: HARDCAT	2K	- Printed disc catalogues.(6128)
AMS-095: OTHELLO	9K	- Another version of Reversi.	AMS-153: PACPLANT	25K	- Auntie John's version of Pacman.
AMS-096: UDGRAB	6K	- Grab user-defined graphics.	AMS-154: SDUMP V.4	29K	- Now with added AGE enhancements.
AMS-097: STYLE	2K	- Analyses documents.	AMS-155: BIONORPH	9K	- Tinker with genetics (6128).
AMS-098: DISCHAP	3K	- Maps sectors on any format disc.	AMS-156: BANK+	5K	- Manipulates banked memory (6128).
AMS-099: TAPE RSXS	2K	- Quick save and load screens.	AMS-157: DECOMP	7K	- Load compressed Art Studio files.
AMS-100: VIEWFAX	12K	- A Teletext type system.	AMS-158: EZMUSIC	14K	- Frequency tables become redundant.
AMS-101: GO	15K	- Ancient Chinese strategy game.	AMS-159: WACCIWORD v2.0.....	87K	- WACCI's very own word processor.
AMS-102: DI-SYNN	2K	- A colourful pattern generator.	AMS-160: INVGEN	17K	- Send other people an invoice.
AMS-103: AGE	4K	- GEN type windows generator.	AMS-161: KEYBOARD	10K	- A comprehensive sound generator.
AMS-104: SNAKES	5K	- A game (I think).	AMS-162: GRAFPILOT	4K	- Plots graphs I think?
AMS-105: OZ	4K	- Addictive peg-and-holes game.	AMS-163: DCHEAT	1K	- A cheat loader for DRIPZONE v3
AMS-106: FRACTAL	11K	- CPC conversion of Macfractal.	AMS-164: SPX	20K	- A Stock Market analyzer.
AMS-107: TEE-OFF	12K	- Golf game.	AMS-165: 3DXOX	7K	- 3D noughts and crosses.
AMS-108: PRIMES	2K	- Calculates prime numbers.	AMS-166: LWA	7K	- A Logic Network Analyser from AJ.
AMS-109: SOUNDFX	2K	- Explode, Ping, Bang, Zap RSXS.	AMS-167: PDG	3K	- The Prisoner's Dilemma Game.

AMS-168: AGE128	10K	- GEN type windows generator (6128)	AMS-193: FRUITRUN	30K	- Multi-feature fruit machine game.
AMS-169: STROBE	16K	- Flashy pattern generator.	AMS-194: KEYCARD	24K	- Prints 4 colour user key reminders
AMS-170: MAGIC SQUARES	4K	- A bit of a puzzle.	AMS-195: MPCGRAPH	56K	- Tandy 4 colour plotter graphs.
AMS-171: TYPING TUTOR	9K	- Improov yur typping accccuracy.	AMS-196: PCBDRAFT	82K	- Printed Circuit Board designer.
AMS-172: FOOTBALL	60K	- A pools predictor (it's a goody.)	AMS-197: TRANSFER	3K	- Music System tape to disc utility.
AMS-173: THE KIRK EDITOR	262K	- A very comprehensive WP.	AMS-198: DISPLAY II	170K	- Magic Lantern Picture show mark II
AMS-174: DWERRYBASE	20K	- Label printer with database.	AMS-199: NO-MO.RSX	9K	- Does illegal things with upper ROM
AMS-175: DISPLAY	139K	- Magic Lantern Picture show.	AMS-200: WAR	13K	- Wargame Program.
AMS-176: CHESS GAMES	16K	- Three chess puzzles.	AMS-201: ASCII2	3K	- ASCII files to MOII format
AMS-177: M-FILE	41K	- Masterfile tutorial and examples.	AMS-202: EXAMPLE	22K	- Bellaby's Cobol example files.
AMS-178: WILD	15K	- An educational wildlife quiz.	AMS-203: CGP115	8K	- Colour Dump for the Tandy CGP115
AMS-179: GENERAL.DR	18K	- MicroDesign clip art files.	AMS-204: CAUTO	42K	- Gaud knows!
AMS-180: CASS.DR	4K	- MicroDesign clip art files.	AMS-205: PROGDOC4	28K	- Much enhanced version of AMS-14.
AMS-181: ORGANISER	4K	- A Personal Organiser	AMS-206: WACCISPELL2	91K	- Much faster than the original.
AMS-182: CONVERT	6K	- Swap screens from & to mode 1 & 0.	AMS-207: MORSE	2K	- Morse code translator.
AMS-183: NPC	36K	- Roleplayer's character generator.	AMS-208: CRAIG	4K	- Children's word recognition prog.
AMS-184: TANDY DUMP	8K	- Tandy Printer Dump.	AMS-209: XSUM	9K	- Arithmetical noughts and crosses.
AMS-185: M-FILE II	K	- Now included with AMS-177	AMS-210: ESCAPE FROM WACCI ...	80K	- AJ's animated adventure program.
AMS-186: TIDY	4K	- Clever Disc Maintenance Utility.	AMS-211: HEXTOBAS	3K	- Convert Hex files to Amsdos binary
AMS-187: INVADERS	35K	- AJ's classic space invaders game.	AMS-212: DRAUGHTS TUTOR	33K	- Precisely that.
AMS-188: GRAPHO	7K	- Psychedelic screen display.	AMS-213: MCODER	144K	- M/Code tutorial with example files
AMS-189: WACCISPELL	53K	- Spell checker.	AMS-214: OSKD	3K	- On Screen Key Definer.
AMS-190: FSWFORM	6K	- The FSW Library order form (ASCII)	AMS-215: OHM	3K	- Calculates Ohm's law for you.
AMS-191: XDRAW	24K	- Crossword grid plotter.	AMS-216: RESID	3K	- Electrical RESistance Identifier.
AMS-192: XWORD	56K	- Crossword generator program.	AMS-217: WACCIWORD 3	108K	- Latest, speedier version.

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(Oohs, ahhs and finally... Gasps!)

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GREEN'S STRIP PONTOON

Embarrassingly awful digitised pictures of Green taking his clothes off, if you play your cards right.

DRIPTZONE PLUS

An enhanced version of Dripzone, with 54 possible sheets, digitised pictures, digitised sound, and little twinkly things. Oh yes, it's not Cyan anymore either.

ENGLEBERT

A version of an arcade game that was quite popular some time ago.

SAUCER ATTACK

Basically a machine code shoot things game. But do you feel fulfilled?

THREE DIMENSIONAL MAZE

Totally un-original, but damn fast 3D maze program. Where would we be without logical colours, eh?

BEETLEMANIA

Pure machine code highly graphical game, with ducks and trees and things.

GLOBE

Graphical view of the Earth from any point in Space. (Converted from a BBC computer program, so it must be good).

JUGGLE

Want to learn to juggle? This won't help.

NB: The first two programs mean that the disc will really only run on 128K disc-based machines.

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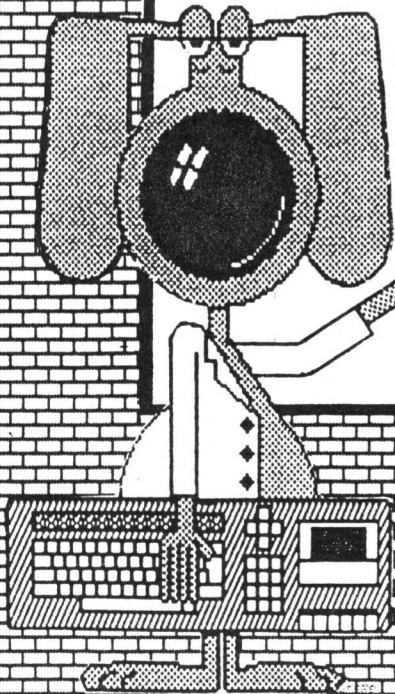
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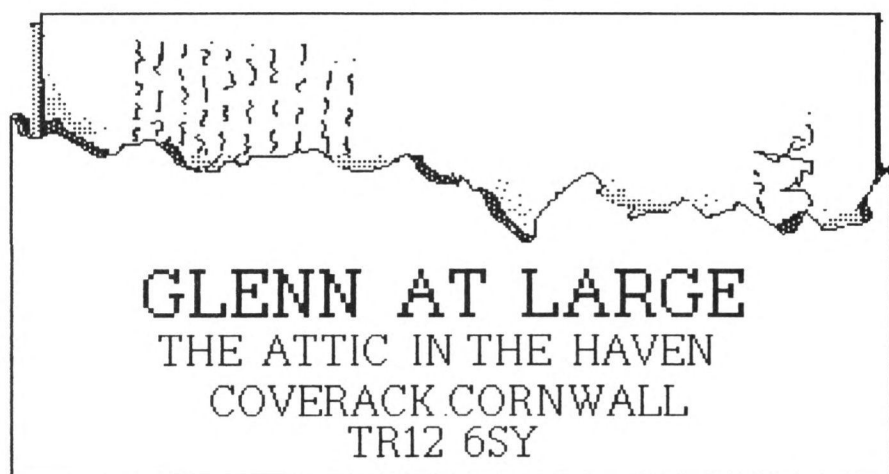
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MEANWHILE, BACK AT WACCI HQ...

GLENN: Steve, please can I have my job back?

STEVE: Well, I don't know Glenn. It's been such a long time, and we've only had two letters asking for your return, and one of those was from your Mother.

GLENN: Go on.

STEVE: Alright, but I can't pay you.

GLENN: You never have.

STEVE: You'll also have to do all your own layout work for the first month and lick all the stamps for when we post...

GLENN: Fine. When do I start again?

STEVE: Now...

INTRO

Um, ok, and welcome once again to AT LARGE. It's been a long while since I last pushed my way in to the pages of this mag, and since then there must be at least three new readers - so let me explain my purpose in life. Way back in 1988, when WACCI had only three readers and Steve Williams thought an Eprom Blower was a kinky prostitute, my brief was to write a column that "took a side-ways look at life". This later changed to "discuss an alternative subject every month", and now it finally is "just write whatever you can when you're sober Glenn."

So, if you've got any strange or weird facts hidden away, send them to me. It's also reassuring when someone writes and says that he/she actually reads this stuff.

GLENN: Is that intro long enough?

STEVE: Get on with it...

HUMOUR FAILURE

Thanks to Justin Bennett, who's mad about farm machinery. He writes: "I'm especially in-

terested in tractors, in fact I'm mad about them. Over the years I've collected magazines, brochures, videos - everything to do with tractors. Anyway, one day a farmer said he'd give me his tractor if I destroyed all that I've collected. Of course I leapt at the chance, and set fire to my house. EVERYTHING went up in flames, but I got the tractor and loved going around the countryside ploughing up every bit of land there was.

All was well, until one day I stopped off at a pub. Inside it was really smokey - everyone had cigarettes or cigars on the go. So, in one breath I sucked up all the smoke in the room, opened a window, and blew it all outside. The air inside was much cleaner, and everyone was amazed at my new found talent. 'How did you do it?', asked the barman. 'Easy', I replied, 'I'm an ex-tractor fan'."

KING LEARING

Commissions this month to a West German theatre company, after fifty people walked out of their production of Shakespeare's 'King Lear'. According to a news agency there, the fuss started after the audience realised many of the actors were stripping off during the play. "The last straw was when King Lear came on stage and dropped his trousers", said a British tourist.

A PONG FOR EUROPE

If you visit a certain museum in Riquewiher, France, then you'll be able to smell nearly all 12 EEC countries! A 'revolutionary exhibition' there means tourists can remind themselves of home just by taking a selected whiff. "People recognise their country by their odours", an organiser says.

A sniff of Old Whiskey depicts Ireland and the smell of freshly cut grass reminds visitors of

England. The only country left without a smell is France itself. "We're working on that", a technician said. How about B.O. and garlic?

SOAP FROM THE CO-OP

If your fantasy is to step in to your favourite soap opera then you have two choices. Either you see a doctor about it straight away, or go to the Co-Op at Ilkeston in Derbyshire where you can book a stay at JR Ewing's mansion, South Fork, in Texas. The price? Only £1,562 for 24 hours.

And I only popped in for a pint of milk.

WAKING UP AT THE DENTIST

A coma victim woke up by a dentist, according to the American newspaper USA TODAY. The road-crash patient was given emergency dental work at Wisconsin University Hospital, and woke up five minutes later. Should of used a pain killer.

~~~~~

ONCE AGAIN THE BBC HAVE COMMISSIONED A NEW TV SERIES OF "THE LITTLE AND LARGE SHOW". THIS IS YET ANOTHER INFRINGEMENT UPON OUR RIGHTS AS TELEVISION VIEWERS. I WOULD LIKE TO REGISTER MY DISGUST AT THIS INSENSITIVE ACTION, ALONG WITH MILLIONS OF OTHERS. I REFUSE TO WATCH BBC1 UNTIL THESE SO-CALLED "COMEDIANS" HAVE BEEN FIRED.

Signed.....

Cut out and post to:

The controller of BBC1, BBC Television Centre, London W12 8QT.

~~~~~

And that's it. There's no more room. Special thanks this month to Andy Campion, for the new "At Large" graphic. This edition of Glenn At Large was produced using several RM NIMBUS VX/2 machines and a POSTSCRIPT laser printer at Chippenham College's Journalism & Radio rooms, Wiltshire. Join me next month for more bizarre but truthful stuff, when I'll be back on my old CPC at home in Cornwall. Til again then... Take Care,

Glenn



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