

The Thirteenth

WACCI

YOU'RE
NEXT
PUNK! *

AD
FEATURING
JUDGE WILLIAMS



* Translation.

WACCI

March 1989

Vol 4 No 2

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Hello and welcome to the March issue of WACCI. Straight away I'd like to point out that none of the subject matter in this magazine is intended to be in any way shape or form offensive to members of the Muslim faith.

The management at WACCI have the utmost and deepest respect for Islam, its culture and its values. It is definitely not WACCI's policy to use cheap jokes and snide remarks to lampoon and poke fun at the Islamic religion. No, this month, it's the Christians turn instead.

Yes, this month we have a fictional little article which we reckon should whip them into a frenzy.

I can just see it now, the entire Christian community of West London (all twenty-six of them) will grab their walking frames and take to the streets in protest marches (more like protest shuffles I suppose.)

These demonstrators will burn their copies of WACCI in public. There will be howls of anguish and much gnashing of dentures and loud wailing. Speaker after speaker will condemn the magazine as the work of Satan.

The Christians spiritual leader, the Arch-Bishop "I a Bobby Runcie" will offer a reward to the first person to snite me mightily about the head with

a copy of "Angelic Couplets."

Questions will be asked in the Houses of Parliament and behind-the-scenes diplomatic negotiators will be trying to calm the situation.

For my own safety, I will have to go underground (Circle Line, probably) or maybe even have plastic surgery (Access card removed.) Extreme Right Wing Nationalists will demand that the Christians are sent back to their own country unless they stay within the British Law, Auberon Waugh will support me and Roand Dhal will publicly condemn me.

All of this will be caused because I was foolish enough to print the article in this issue of WACCI....

Yeah, on second thoughts, I don't think I'll bother after all.

WRONG NUMBER

I think our local Telecom office must have a few Christians in it. Yes, you've guessed it, the (01) 898 1090 is still not connected and we are still having to use the temporary number. Amazing huh? It's been two months now. Do you reckon they're trying for some sort of record?

It's Sod's Law I suppose. I was really tempting fate last month in Thank and Stuff when I said "Hopefully

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by the time you read this our old number will be working as usual." Yup, it was a stupid thing to say. So this month I'm not going to say a word, not a dicky bird, not even a murmer....

Anyone know Oftel's phone number?

THANX

Gosh and blimey! By the holy beard of the "I'ya told ya so" There are Loadssa Peeps I've got to thank this month. Please don't get miffed if I've left you off of this list.

First off, Thanx to all of you that have included sticky-backed return addressed labels, return postage and even Jiffy bags, with your software orders in the last month. Yeah, most of the time I'm a bit puddle-headed but I do notice these things. Since I mentioned, last month, that it does ease the work-load at this end of the club, there has been a growing number of you who are getting into the habit.

Next, I've got to give *Muchos* Thanx to Joolz, firstly for taking over *FAIR*

COMMENT and secondly for taking over some of the day to day running of the club.

I have been instructed, to pass on a *BIG* bit of Thanx, from Joolz herself. It goes to all those people who sent in their letters on disc. She *does* appreciate it as it makes her job one heck'uva lot easier.

THE MAGAZINE

Have you realised that I've been the Editor of *WACCI* for nearly a year now?

I know that I keep whining on about the monthly workload that I have to contend with but it really is getting to the stage where there are not enough hours in the day.

I've been racking my brain to find some sort of solution but every time I streamline a part of the system the work to be done increases yet again.

So I'm seriously considering passing on the editorship of the magazine on to someone else. Yes, it's a bit of a drastic step and yes, I know that it has been tried before and it failed but at the moment I can't see a realistic alternative.

As yet I'm not sure of how this can actually be achieved or even if it will be possible. The truth is though that the pressures of paid writing work and those of putting the magazine together every month are conflicting badly. I mean I've done a 12 month stint now, perhaps it's time for me to move aside and concentrate on running the administration, subscriptions, offers, Public Domain and Homegrown Software Library departments.

I'll go off and have a long hard think about it, try and streamline yet another part of the system and tell

you what I've decided next month.

THE 1989 SURVEY

Many thanx must, this month, must go to Richard Burton who is slaving away down in Cornwall collating and trying to make sense of the survey forms that you sent off to him last month. *What?* You haven't filled yours in yet? Why not? Well I don't think that's much of an excuse. Go and dig it out from behind the settee and start scribbling right now. *No*, it won't wait until you've watched *Neighbours* first, go and do it now.

Listen, you DO know why it is important and you don't need me to tell you why. Or do I? OK then...

Imagine that everyone else thought, like you, "*Oh they won't miss my little vote*" and didn't bother to send off their survey forms. Then little Richard would be sitting down there in Cornwall, all alone, with nothing to do apart from twiddling his thumbs.

A few weeks later I'm going to phone him up and say "*Hi Rich, what do the members want changing in the mag?*" And he's going to have to say "*I don't know Steve, nobody's sent me any survey forms yet.*" Then I'm going to get annoyed and shout at him and then he'll get upset and probably start crying or at least feel very unhappy.

So there will be me, all steamed-up, frustrated and angry and then there will be poor little Ricky, all damp, snively and unloved. And you know who will have caused this? Yup, *YOU!*

Now you don't want that to happen do you? Okay, so you wouldn't mind seeing a grown man burst into tears (rather good fun actually) but you don't want to be held personally responsible for cruelty to an extremely dumb animal do you? No, I didn't think so. Therefore, you should send that completed form off to Young Richard right away.

All right, all right, I apologise. I know I shouldn't nag so much but you know I only do it for your own good. Yes, OK, you can get on with reading the rest of the magazine now.

THE FSW LIBRARY

Quite a few additions this month which is why I'm having to tell you about

WACCI TELEPHONE HELPLINE

CLIVE BLACKMORE (04536) 71686
Basic programming.

STEWART PEPIATT (0245) 353903
Basic and m/code programming,
DMP2000, VDE, Scrivener.

KEITH POMFRET (0524) 841712
Comms and hardware.

PETER CAMPBELL (041) 5544735
The WACCI first port of call
for Scottish CPC users

If I get reports of this helpline being abused by software pirates I will scrap it without any further discussion - Ed

them here instead of the order form.

The first is a monster of a program called *The Kirk Editor* (266K) which is a Word Processor for the 6128.

I don't know if it's strictly accurate to describe it as a Word Processor because it has several facets that do lots of other things.

Written by Alan Sharp, it was intended to be a very simple text editor, to do a few of the things he couldn't do with his existing word processor. It soon acquired a life of its own and grew and grew. This latest version puts a lot of the code into the second bank of the computer which now holds 26k of instantly available basic, and the text memory is increased to 28k. The program will work on the 6128 only but there is also a smaller version on the disc which may work with the 464.

Features include: view file, reads a file without loading it; scroll the screen sideways; insert mode for merge; two notepads which store 6 and 10 lines of text, for letter heading etc; rename utility; edit printer control codes; pull down calculator; Disc Formatter; macro key facility, and tabs can be set and changed.

Filo Fax, this program takes text files and prints them out directly to your personal organiser. It will print up to 40 lines on a single page.

Catalogued Inlay Cards. This part of the program produces disc inlay cards with a catalogue of the disc nicely printed on it. All you have to do is to cut around the dotted lines, and fold where indicated and put inside your clear plastic case.

XLINE is an RSX, which in mode 2, will output a line of text 5 times

faster than usual. There is also a fairly powerful database included.

Since it is such a large program I may have to split it up into its separate programs but I'll have to ask Alan if it's OK first.

Paul Dwerryhouse has sent DWERRYBASE, which is a simple menu driven database/label printer which saves you having to hunt around looking for your friends addresses.

PD STUFF

Many Thanx go to Tony Walker who has sent in some more programs for the FSU Library.

B29 is a NSWP workalike but it has some features added including being able to view .COM files.

MFT+: Updated version of MFT which will now use two Drives.

PRINT is a text file printing aide.

RESCUE rescues corrupted discs.

EDIT is a text editor.

Frank Frost has also sent some programs in to the library CRCBUILD is a disk cataloguing utility (a la MAXELLCAT) which works under CP/M 2.2. and MCAT which does the same job but runs under CP/M+.

HARD LUCK

How is it that the CPC has been around for years and yet there isn't a hard disc drive for it? Hmm. The thing is that I know someone who reckons that he could set up the hardware side but needs someone that could write the software for the controller card. Anyone interested?

LITERARY PRIZE

Do you like reading *Thanx and Stuff*? Do you like my literary style? I know that Joolz does. In fact I know that she thinks I'm as good a writer as what *William Shakespeare* was. No joke, it's true. only half an hour ago I heard her say to her friend on the phone "Yes, the *Old Bard's* typing *Thanx and Stuff* up at the moment." At least I think that's what she said? Tarrrrra.

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FAIR COMMENT

FAIR COMMENT
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WILD LIFE LOVER

I hereby claim this months star prize for useless information. If you poke BE78 with any value greater than zero the disc error messages are disabled, being returned as "bad command."

I have decided not to take the £5000 holiday in the Bahamas instead I shall opt for (the more likely prize) second hand copy of Amstrad Action and an empty crisp packet.

You will be further interested to know that the Blue Tits around here (and in warmer weather the Great Tits) are currently threatened by an old buzzard who, from time to time, tries to get hold of them (I jest not.)

Norman Buxton
Macclesfield

<<Sorry Norman but what you thought was the second prize was, in fact, the booby prize. Unfortunately you are too late because it's already been awarded to Alastair Scott -Joolz.>>

A MOVING TALE

It is possible that my problem of converting an ASCII file into a Basic one has already been solved by Mrs Peacock, my illustrious and eternally observant partner in life noticed that AMS-078 claims to convert text into Basic files. I'll keep you posted on developments.

Talking of postings (as we were) did I mention that my sentence in Germany is nearly over? In March, my brood and I up-sticks and move to Cyprus: sun, sea, sand, surf, oh yes and some work. Have the probing tentacles of WACCI infiltrated Cyprus yet? I don't suppose you can print the addresses of other members but could you let me know of any out there?

I'm glad to see that you have seen sense and made the FSW prices a bit more credible. Of course nobody will buy it if they think that the price is indicative of the quality. With the

slump in property and FSW looking so bullish, I am considering investing heavily in the Homegrown software market. After a couple of years, having checked that the programs are structurally sound and changed a few colours, their value should have risen by several thousand pounds.

With regard to Pomme-frite's (a chip off the old block perhaps) composition, will he permit wild guesses? My PF albums have yeilded no answers but I do not have the one with the ear on the cover, neither will anyone else around here admit to owning it. Is it called "Meddle" or "Echoes?" Sorry Keith but that's the best I can do.

Right, enough of this. Please process the enclosed order with your usual tender loving care.

Sgt P Cox
BFPO 32

<<Shame on you Coxy, don't you know that the 1971 Floyd LP with the picture of an ear on the cover is called *Meddle* (Harvest EMI label, catalogue No. SHVL 795.) *Echoes* is the name of the track that is on Side Two of the record. Personally, I think the boys were at their best when they recorded *Animals* (or even *The Piper At The Gates Of Dawn*.)

The Editor of WACCI (referred to from now on as *His Nibs*) disagrees with me, as usual. Evidently, his favourite Floyd track is Side one, title two of *Atom Heart Mother* LP but I think that is something to do with his fetish rather than musical taste.

Tsk, tsk, if you don't already have a copy of *Meddle* in your collection then you shouldn't really be entering KP's competition, even so I can tell you that you're not even remotely close to the correct answer yet.

Never mind, I'll forgive your essential music ignorance (EMI) if you promise to provide me with some Cyprus-type holiday accommodation.

Yes WACCI has eleven members in

Cyprus. If you'd care to send in your new address, for publication, I'd dearsay they might get in touch with you -Joolz.>>

RYFM SCOTTY

David Scott should find that a quick look in the Maxam manual will explain the 'READ' and 'WRITE' commands, that allow ASCII files - such as those created by Protext - to be read into a Basic program and assembled. This is a remarkably useful feature, and I've even used it to write my own compiler.

Regarding the story in *PROPERGANDER* about Commodores dubious TV advert: I've just got a copy of *FALCON* on the Amiga, and it is almost as good as the pictures shown. Smooth, colourful, detailed: go to a computer shop, ask them to run it and feel very depressed. I have.

Finally, *WHERE IS THE LAST CRYSTAL IN DARKSIDE?*

Auntie John
Bangor

<<Don't shout so loud John, I've asked *His Nibs* (who is dead chuffed with himself because *Darkside* is about the only game he has ever managed to successfully complete) to send you several saved end-game positions on a disc. Hopefully by the time you read this you will have received it and managed to finish the game.

For the benefit of those who are in a similar predicament here's a little hint: *enlightenment is to be found in the corridors*. Well I did say it was only a little hint -Joolz>>

ELECTRONIC MALE

Please find enclosed one 3" disc. On it is a copy of this letter, a review of Electronic Arts' *Bard's Tale*. If you like the review I would be more than happy to do reviews for *Football Director 2*, *Captain Blood*, *ATF*, *ATV*

Simulator, Anarchy, Enlightenment, Elite, Suspended, Hollywood Hyjinx and anything else I've got or am getting.

I can't wait to find out what the most popular part of WACCI is (my vote goes to *FAIR COMMENT*, because you printed some of my letters.)

The reason for my enquiry about the Dripzone cheat is that AMS-049 is Dripzone V3.

I would dearly like to be able to build one of those DIY second disc drives which I keep seeing assembly instructions for in various mag's, but poor hand/eye coordination means that it is beyond my ability. Any chance of some kind person doing for cost plus a small remuneration?

Anyone got a copy of *Sorcery Plus* on disc they'd sell me? Well enough pointless questions. WACCI is the best and what's this I read? Expanding again? You'll be a multi-national by the end of the decade at this rate.

Don't we think these spell chequers are just grate? Brilliant idea this reading the manual thing. Trouble is, what do I rest my coffee cup on now?

John Hilton
Bristol

<<Thanks for sending the letter in on disc John, it really does save me a lot of time. Thanks as well for the review, I have passed it on to *O.M.G. (Old Misery Guts, yet another name for our WACCI Editor)* for you.

The Dripzone Cheat problem has been solved. Line 230 should read:-

230 LOAD"DRIPZONE.PT3",4864

Alastair Scott's mind must've been on other things when he originally typed that line in.

Whoops, hang on a second, the WACCI Readers Survey is *not* a "best column" competition. It is a method of finding out if readers are more or less happy with what appears in WACCI and what (if any) changes need to be made.

His Nibs kept the results of last year's survey pretty close to his chest but since you mention it: *THANX AND STUFF* proved to be the most popular column, which is hardly surprising because people read it to

find out how the club is doing. *FAIR COMMENT* came second, once again this was pretty predictable because it is the means of keeping up to date with the other members.

The average WACCI reader was male and aged either between 26 and 40 or over 60, had a 6128 with no B drive, read ACU as well and on average 3.5 other people read his copy of WACCI.

The survey showed that WACCI readers wanted more technical articles and utility reviews but weren't interested in games reviews (which were subsequently dropped.) The readers also voted that the level of humour was 'just about right.'

Yes manuals are lovely things, pity that reading them seems to have gone out of fashion though. The best thing to rest your coffee mug on is a copy of *Mini Office 11 -Joolz.>>*

FAIR COMMENT

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HAMMER HOUSE OF HORRORS

The reason I am writing is to say the usual "Thanx for a wonderful club/magazine etc." I'd also like to point out a couple of extra details omitted from Keith Pomfret's WOPS v MAX article, that appeared in the January issue.

The first point is that the system works well in the 464 with or without the 64K rampack, a detail that it may not have been possible to test in the time available.

A niggling detail is that if the program is installed in the extension memory, one cannot really jump back to it, if required. It could be reasonably argued why leave the program in the first place? I have a disc that corrupts the display, that's why. I can well imagine that there are other discs that can do worse.

Quirky at first glance it may seem but once one has used the system for a while, the program does not seem at all bad. Granted that the cursor may not be a pointing device, that one uses comfortably at first but the

accelerating cursor does not feel too unwieldy when used a few times. The wrap around effect of the cursor can be put to good use when trying to "move from one end of the screen to the other". It can be a time saver.

Finally, there is a detail that the WOPS programs detects disc changes. A novelty perhaps but something I would like to see added to a few other programs is this facility, perhaps incorporated into CP/M. A revised Dir extending for several disc sides 'til you've found that darn'd file mayhap a dream but maybe not.

Well, that's about all I wanted to say as a response to the article. One might gather the impression, correctly so, that I am not disappointed with the product. WOPS is the second product that I have purchased from Camel Micros, the first being their TOOL-BOX, supplied on tape for those who, like me in those days, couldn't afford a disc drive. I still use the tape now and again for the sprite programs. Funny how one gets attached to a program or tape, isn't it?

In conclusion, a question. Does anyone know why it is that when my 464 is running CP/M2.2 and the disc is accessed, I get the error message "disc missing." Pressing "r" works normally thereafter but the snag really is an annoyance to me. I'm getting to the stage where I think it may be a case of an adjustment being required, say, with a hammer.

Well, I must close now. Thanx once again for all of it, during the year. I look forward to this one. *Seizure.*

Ian Parker
Bognor

<<I think you've slightly missed the point of the MAX v WOPS article Ian. It was a comparative review between the two programs. These are intended to point out the differences between programs that are supposed to perform the same function and offer an opinion about which is the better (if any) product. A comparative review does not necessarily have to be as exhaustive as a review of one product but a justification of why the writer thinks one is better than the other.

It sounds as though you have an alignment problem with disc-drive. I get the same problem with the B drive on my 6128 here at WACCI HQ. The only solution is to pack it off to a disc-drive hospital and get it seen to by an expert.

If you are lucky enough to find a firm that do it cheaply (an, can you write back and tell me their address. *His Nibs* is to mean to send mine off for a check up so I need to find somewhere that will do it for a reasonable fee as well -*Joolz*.)

HITACHI, BLESS YOU

Dear Jeff <<Jeff who?? -*Joolz*>> I've decided that a second disc drive would not only be a nice toy but might also be useful. The drawback, however, was the large cost involved in buying one for the job.

A look through the computer mags solved the problem and I am now running a Hitachi HFD305SX, for a total outlay of £40. I would imagine you know all about these cheaper purchases, although I do not read about them in WACCI. Is this because it would upset Amstrad or is it because you know something I don't?

I would very much like to see a bargain basement section in WACCI and no doubt would a lot of your readers.

Cedric Rowland
Huddersfield

<<No there isn't any deep mystery about why the cheaper purchases don't get much of a mention in WACCI. We can only publish what we receive and *His Nibs* tells me that your letter is the first one in a long time to mention these cheaper purchases. Other readers might have found your letter even more useful if you had included the name and address of the company you bought your HFD305SX from -*Joolz*>>

FAIR COMMENT
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CPC 764+64

So it's subscription renewal time again? Yes, please, I'm hooked - hit me again. I thought you might be vaguely interested in an outline of the slightly weird system I've got. Having started with a 464 and added the Dk'Troniks 64k RAM and two 3" drives, I decided that it would be nice to be fully 6128 compatible and upgrade. But I prefer the 464 keyboard to that of the 6128, and I would also have lost compatibility with some early 464-only stuff. Changing the ROM would have solved the first problem, but not the second, though it would have been nice to have an integral drive. Then I saw a classified ad in our local paper for "NEW 664" (sic).

FAIR COMMENT
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It's a one-man-and-his-wife business operating from home, but the machine is the genuine article with 12 month guarantee (bankrupt stock I suppose). The supplier also does repairs (I just about know which end of the soldering iron to pick up), so I asked him about doing clever things with ROMs.

No problem; he's whipped out the 664 ROM and fitted 464 and 6128 ROMs with a changeover switch. While he was at it, he's also fitted internally the official Amstrad RS232 which I got in France at Christmas for 100 francs (under £10.) I think that makes it a CPC 764+64.

The 664 was supplied without a monitor, which was what I wanted since I was intending to use a TV anyway, provided I could get a suitable RGB input. Have you ever tried asking dealers about portable TVs with RGB input? Most, to be fair, started muttering about SCART, but not one knew how to do it.

After many trials and tribulations, I can tell anyone who cares that SCART is indeed an industry standard - just like RS232 is. AAARGH! I may well go to my grave with "Pin 16" engraved on

FAIR COMMENT
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my heart. But I got there in the end and am scribbling this on a Hitachi CPT1558. The resolution isn't noticeably better than Amstrad's monitor, but the colours are truer. I got the shock of my life when I saw *genuine* magenta for the first time.

P.S. This letter is on the enclosed disc to save your fingers.

P.P.S. Bet you can't get the accent.
André Coutanche
Bristol

<<Of course I can get the accent André, its West Country French isn't it. Thanx for sending your letter in on disc but like I've just said to young Cedric, why didn't you include the name and telephone number of the company that did the conversion? It's not a secret is it? -*Joolz*>>

PUNISHMENT

Having recently taken out one year's subscription to your wonderful publication, I am wondering whether you will be giving me the same value (purely in terms of number of copies) as an "Action" magazine. Mind you, in no way can such inferior CPC 'comic' be compared with WACCI.

Nearly two years ago I took out a years subscription to it (which also included several free books). I am still receiving copies from that subscription. Is this the way they keep up their circulation figures???

Please do not publish my name or address (they may stop sending me copies.)

Anon

<<I only printed this letter as an illustration of how some poor people have to suffer. Surely one years sub to AA is bad enough but when they start to send *unsolicited* copies...

What did you do to annoy them that was so bad Mr Anon? -*Joolz*>>

SCARLET RIBBONS

I like the mag. However that is not why I wrote. First some information that may be of use, then a couple of queries.

The first time I changed a ribbon on my DMP 2000, I fouled things up and trapped the ribbon. This gave a patchy ribbon - however on 'messaging about' with the buttons on it, I found that if the FF button was pressed whilst switching it on, the print head moved from side to side, printing nothing. This undocumented feature soon had my patchy ribbon to rights, and I always use it having put in a reinked ribbon.

Is a 'refreshed' ribbon better than a 'reinked' one, and does WD40 do the same job? Long may our club flourish.

Richard Moss
Stockport

<<Having seen Refresh in action I can assure you that it is a much better ink than that which is put on the ribbon in the first place. *Old Grumble Guts* swears by it but then it doesn't take much to make him swear.

WD40 doesn't re-ink at all, it merely moistens a dry ribbon and loosens up any remaining dried up ink. This might keep the ribbon running for a further few printouts but eventually there is no ink left to liberate.

Whatever you do though, despite what you may read to the contrary in mags like AA, **DO NOT** try re-inking your ribbon with endorsing ink. That ink was not designed to be used with printers and does not contain the special silicon lubricant that printer ink does. This means that eventually the endorsing ink will clog up the print-head pins and you'll end up ruining your printer head -*Joolz.*>>

PASSING THROUGH

At last I've finally found the urge to wander from the columns of SIMSPOT to reply to some of the interesting points raised by John Ridge in his 'A Passing Thought' article last month.

I am grateful to John for his opinion on computer simulations, being that we should not expect too much reality from the game or it will soon

reveal itself to be a sham. My own view is never to expect more than what is promised in the instructions or illustrated by the screen shots. However, experience at playing most of the simulations does provide a fairly accurate assessment of what can be expected and my complaints are usually confined to those which fall below the standard set by previous games.

Strike Force Harrier, *Tomahawk* and *Gunship* are excellent examples of fight combat which are easy to learn at the novice level and provide a close approximation to the sound, control and performance of their illustrious counterparts currently in service.

They are essentially tactical wargames which need some of the skills in co-ordination required by pilots today. Obviously one has only to glance at the cockpit of any jet fighter to realise that many of the controls and equipment are missing from the computer version, but the essential elements for take off, navigation and landing are present in the best games.

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Another quality of simulations I have come to expect it that the mission or scenario is plausible. '*Night Raider*' was not, as it was riddled with historical inaccuracies which made the mission to sink the Bismarck look like Superman saving Earth. Nothing to do with the programme being too complicated for greater accuracy, indeed the waves of attacking E-boats and aircraft, evident in the game, could never be so far out in the Atlantic. The main object of the mission was trying to locate the Bismarck and this hide and seek element of warfare is much better accomplished in '*Battle for Midway*'.

There will always be a problem in simulations to achieve the ideal compromise between graphic quality and control of the aircraft within the

barrier set by the available memory of an 8-bit machine. I use the above examples because aircraft are the most popular subject but there are other excellent examples to be found for cars, ships and trains. None of these games should ever be regarded as a sham, some are just better than others. A good simulation, carefully researched will last long after most shoot ups and platform games have been discarded - at least that's my passing thought.

Ken Walker
Darlington

<<I agree with you totally Ken, or at least I thought I did -*Joolz.*>>

HEATED SEARCH

Can any club members help me? I'm looking for a heat sensitive printer ribbon, preferably for a Citizen 120D (although I'd have a go at rewinding any suitably sized ribbon.)

I'm trying to obtain one to use with the lateral inversion facility contained in Tas-sign so that I can print out to iron on to cloth. I've tried Citizen but they don't import this type of ribbon any more and none of the suppliers that I have contacted can help me.

If anyone knows a source then I'd be grateful for the information, or does anyone know of a method of printing onto T shirts (for example) using any other method.

Could you tell me a bit about Protex Filer and what it does.

Bob Blair
Glasgow

<<Sorry Bob, I can't help you with the ribbon problem but have you tried using iron-on transfers instead?

Protex Filer consists of a menu-driven datafile management system and a sophisticated file sorting program (CPC users need Promerge as well.)

The file sorter can be used from within Protex, or as a stand alone program. The datafile management system uses Protex's mail merge and exec file facilities to provide an easy to use filing system that works

from within Protex.

Protex Office contains all of the above, plus the invoice generator and associated facilities. Again, this works from within Protex.

Protex Filer and Protex Office will work with all Amstrad computers from the CPC range with Protex (ROM or disc) and Promerge (ROM or disc). The version of Promerge should be 1.02 or greater. If you have an earlier version a free upgrade is available from Arnor -Joolz.>>

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BIG TIPS

Here is tip for any Comms users who are also owners of Arnor's Utopia Rom. If you have sometimes down-loaded a Basic file from a BBS and when you try to load or run it the computer comes up with "direct command found" meaning that the file you have tried to load is an ASCII File. Here is an easy way to get round the problem.

Use Utopia'S !LOAD Command to load the file into memory, and when asked for the Load address enter &O170 (start of Basic) and, then try to list the file, if it will not list then use the !LINK command, you will then be able to List it save, load and run the program as normal.

Joolz, I'm sorry this letter is too late for inclusion in the February issue of WACCI but I was unable to get round to writing it sooner. I have put a copy of this letter on the disc, you should be able to load it into Protex and format it up.

Tony Walker
Preston

<<Thanks for the tip Tony -Joolz.>>

SHORT AND SWEET

Thanks for the brilliant magazine.

Dave Curtis
Bath

<<Thanks for reading it Dave -Joolz.>>

ROCKY HORROR

I'd like to thank A R Payne for the listing in the January issue as well as Steve <<Steve who?? -Joolz.>> for his help in amending the program for my own particular use.

With A R Payne's permission I'd like to see this program included in The WACCI FSW Library, as I have no doubt that (like myself) there will be a few VIDI Digitiser buffs out there who lack the necessary programming skills to write this type of program and who will find it of value.

In a wider context how about some feedback (letters) on the ratio of programmers to utility users in the WACCI membership?

PS. Is Peter Ceresole whose letter "Boxing Clever" was in the January issue the same Peter Ceresole who writes and produces for BBC2's Horizon program? I think we should be told.

Peter Campbell
Glasgow

<<Indeed you shall Peter. Yes, the charming Mr Ceresole (the author of Playing with Protex) is the same bod that turns out those marvellous BBC2 Horizon programs. You can always spot professional "journos" by the fact they usually display a flagrant disregard for grammatical protocol, for example sentences that start with 'And' or 'But' are a real giveaway.

You really have being working hard at the idea of the "magic lantern picture show," I was most impressed with Display. My only gripe is that you didn't include a picture of Jeremy Irons in the carousel.

I am sure that Mr Payne has no objections to your very much enhanced version of the Display program being included in The WACCI FSW Library (that's the reason for it being there in the first place) so I've asked His Nibs to put onto the FSW list, ready for the March issue -Joolz.>>

RINKY DINK

I'm after some software from the WACCI FSW Library please, but before you copy them onto the enclosed disk, there are a couple of letters for the

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mag saved from Pocket Protex (it may save you retyping them.)

I have received and used Sdump v2. I would like to use SDUMP1, but only print out one ink at a time. Please could you send a printout of the listing and suggest where to make this change. Thanks

Richard Moss
Stockport

<<Sorry Richard, I sent your disc back to you before realising that you wanted SDUMP1.ASM putting on it. If you send it in to me at WACCI HQ again I'll sort it out (the file is 4K long by the way.)

What puzzles me is why you should want to print only one ink at a time? I spoke to one of Sdump's authors (Jeff Walker) and he is as mystified as I am. In brief, he says it could be done but it would take a major re-working of the code and you would have to have four versions of SDump1 one for each of the four inks.

If you are thinking that maybe you could use it with a four colour printer, forget it. SDump is a monochrome only print routine. Even if it wasn't you'd never be able to re-align the paper correctly before printing out the other inks.

The effect would be similar to the pictures in the Today newspaper. Perhaps we should give you the nickname "Smudge Moss" -Joolz.>>

FAINT HEARTED

If this Refresh re-inking spray is supposed to be so good then why is the print on my copy of WACCI so faint in some places that it makes the articles nearly illegible at times?

Sue Denim
Leeds

<<It's not the printers fault it's Alex's photocopier, it's been feeling rather poorly of late -Joolz.>>

'INT 'INT

I would like to take this opportunity to thank you for the excellent *Wacciword* word processor. It suits my requirements very well. My only grumble is that after each dump to the printer the program prints a "2" at the top of the first page. I have corrected this by inserting a CLEAR INPUT into the program.

I am experiencing a problem with using JRT Pascal (obtained from another PD library.) I have written programs which successfully compile but refuse to execute. My disk contains these files:

COMPILE.COM, EXEC.COM, PASCAL.LIB, PASCAL0.INT, PASCAL1.INT, PASCAL2.INT, PASCAL3.INT, PASCAL4.INT, PROG.INT and your WORDY text editor.

After typing EXEC PROG, the screen displays a selection of strange symbols and two error messages "INT file not found" and "INT file empty" and then "Program termination."

One of the programs that didn't work was the example printed in *Auntie John's Diary* in WACCI issue 29, so I don't think my programming is at fault. The only other thing I can think of that may have contributed to the problem is that when extracting the INT files from a library on my original Pascal disc INDEXO.INT could not be extracted but instead gave another error message. I think this is unlikely to be the cause of my problem though since INDEXO.INT is not required for the above purpose.

I would be most grateful if you could be of any assistance to me. I found AJ's Pascal article to be very helpful, as have many other WACCI articles. Keep up the good work.

David Green
Drotwich

<<You are silly David, the first mistake you made was to get your copy of JRT Pascal from somewhere other than WACCI. The problem now is that I don't know what your version has had done to it or even if it's configured properly for the CPC, so it's not much use trying to offer advice.

You're right, the example program given in January's *AJ's Diary* does

work. The Editor (I've got to be polite about him now because he's just walked into the room) tested it out personally before we published it.

The easiest and quickest solution for you is to order CP/M Disc 6 (you've already got the JRT manual haven't you?) and use our version of the program which has been fully tested for the CPC.

Oh no, don't thank us for *Wacciword* it's Paul Derryhouse that deserves all the credit, he wrote it. All that *Misery Chops* (he's gone again so we can talk freely) does is distribute it to the members -*Joolz*.>>

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A WHINGER

Hello lovely WACCI person, how about publishing a WACCI yearly index? There is nothing like an index for unlocking all that information stashed under the bed. Hands up, how many people have sat on the bedroom floor all Saturday afternoon hunting for an article on the finer points of Bafflegab and even wondering if it was WACCI that it appeared in?

The United Amstrad User Mag has an excellent yearly index and according to them as soon as they publish an index they sell out of all of their back issues right back to day one.

Moral: *He who prints magazine indexes sells out of all back issues.*

That's all for now choochy face.

Phil Morely
Peterborough

<<What a great idea Phil, how long before you can send the index to me? What? You'd expect us to do it? Where do you think we'd find the time? Do you realise how long it takes to compile one of those indexes? The reason that UAUG can produce an index every year is because there is very little in any of their magazines worth cataloguing.

- You really *must* get it into your tiny cortex that WACCI really is the

biggest CPC club in the world?

This means that it involves an awful lot of work for *His Nibs* who basically runs WACCI as a full-time, one man outfit. Why do you think I offered to help him out by editing *FAIR COMMENT*? I'm only doing this on a part-time basis you know.

I agree, it would be great if someone out there had enough time to produce a yearly index for WACCI but it comes as a very low priority here at WACCI HQ.

One last thing, why did you say "Hello lovely WACCI person" and "That's all for now choochy face" when you'd written the letter to *His Nibs*? Is there something about you that you haven't told us yet?? -*Joolz*.>>

A NICE MAN

I very much enjoy the WACCI "fanzine." I recently received some of the early copies that I ordered from you. Its growth from birth to the present day is remarkable and shows great devotion and good thinking on the part of all concerned with its production.

E F Priestley
Honiton

<<Don't let old *Cheerful Charlie* hear you describe the magazine as a fanzine Mr Priestley, he goes bananas when anyone says that about WACCI. He says that WACCI has gone on for far too long and is far too big to be classed in the same category as "fanzines."

Anyway, thank you for the kind words about the mag, I agree with you it is amazing to see how WACCI has developed from those early days.

Perhaps you could have a little word with Mr Morely -*Joolz*.>>

OH NO NOT AGAIN

Could you send me some more details about the WACCI club and the software library that you advertise in Amstrad Computer User?

Karen Caswell
Enniskillen

<<Not unless you send a large stamped addressed envelope first -*Joolz*.>>

Unfortunately, the system is unable to take sections of songs from a host of different records and merge them into one, making even the most talentless people thousands of pounds through the pop charts. *That system is signed exclusively to the Pet Shop Boys.*



Boy Sugar?

SUGAR DIPS

A chastened Alan Sugar last month uncharacteristically admitted that *Amstrad PLC* had made mistakes over the last six months of 1988. *Amstrad* unveiled half year pre-tax profits down by a sixth at £75m. Turnover fell just over £2m to a mere £348.8m.

LET IT BE

Q. What has *Elanor Rigby* got to do with a computer?

A. An *Apple*.

Confused, let us explain. On the face of it *Apple Computer* looks like a company with everything going for it but in the UK it lacks one vital thing - the R after its name, signifying a registered trademark.

When *Apple Computer* arrived in the UK it set about registering its *Apple* trademark but found it had been pipped at the post, leaving them looking like right lemons. The culprits were *The Beatles* who had upset the *Apple* cart by picking the fruit for its record company logo.

Since then *Apple Computer* has been negotiating with *Apple Corp* for the right to register the name and get that vital R beside their logo instead of the plain TM.

When the negotiations started

the issue looked pretty black and white (or in *Apple Computer's* case green, yellow, orange, red, navy and sky blue. The two companies had separate and easily identifiable business interests. *Apple Corp* sold records and *Apple Computers* sold computers.

But now in the late eighties the core issue has become more complex and urgency for a settlement is increasing as the distinctions between the companies' businesses blur. *Apple Computer* is getting a taste for the compact disc, once the preserve of the record industry but now of interest for mass data storage.

These kind of negotiations could continue for ages before they come to fruition, so it might be quicker for *Apple UK* to look for another fruity name before it goes bananas - bearing in mind of course that apricots are out.

I.B.LATE

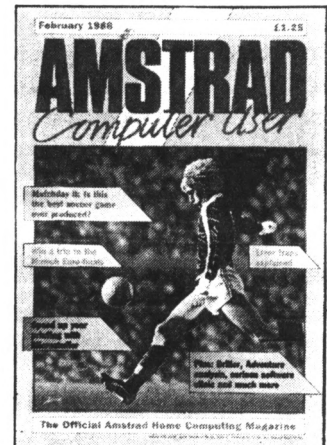
Some people seem to have the view of *IBM* that is possibly not the most technologically advanced computer manufacturer. Its PC's were first developed many, many years ago, and even its new(ish) sequel, the OS/2 does not break many new boundaries.

To these people it may come as no surprise to hear that the very same company has awarded its Science and technology prize for 1989 to the Swiss professor, *Niklaus Wirth*. The reason for the prize is professor Wirth's work on the structured programming language *PASCAL*.

IBM are not the first to recognise the achievements of this talented man, they are just the most recent. The language was originally developed about fifteen years ago in the early seventies.

At the same press conference, rumours that *IBM's* new series of micros could be based around valves was quashed by a top executive who claimed "Such advanced technology is often far too temperamental. *IBM* for one,

will not not be using these devices until they are fully tested.



THANK EVANS

Following the news of the sale of the *Amstrad Computer User* magazine to *Focus Publications* comes even more surprising news.

Mark Evans, the new editor appointed by *Focus* to replace Simon Rockman and Jeff Walker, has resigned only a few weeks after taking up the post.

His resignation comes after Duncan Evans (former technical editor of *Popular Computing Weekly* and also former editor of *Computer Games Week*) was appointed to the post of *ACU* editor above the head of Mark Evans. Rather than stay on as an editorial assistant Mark decided to quit instead.

PRINTER II

If the *MT-81* is not quite classy enough for you then the new *Panasonic KX-P1180* might interest you. This little miracle of modern technology has two different draft fonts and three different NLQ fonts.

Its speed is 192cps in draft and 38cps in NLQ. The printer can handle both A4 and A3 paper as well as envelopes, labels, carbon copies etc.

The printer retails for approximately £270 but contains such many features not normally found on any printer in a similar price bracket.

Playing with Prototext II



DAUGHTER OF PLAYING WITH PROTEXT OR THE JOOLZ IN THE CROWN

Here we are again. This is living proof that all it takes is one person to ask (thank you *John Hilton*) and the dull roar of the Editor calling for copy and here it is PWP2. Complete with problem.

-(***)-

PROBLEM

I really thought that "Playing with Prototext, The Article", was the definitive work. All the truly life transforming stuff you needed was there, gateways opening to new vistas in the manual. Nothing further left to live for. However, there is an attitude of mind to discuss, then a bug and some heart-felt pleading. We'll try the bug later but first:-

THINKING RIGHT

Prototext is a way to talking to your printer. After that, the printer talks to the paper and the paper talks to the other humans out there.... (This will go on until we go straight into the cortex. All those who haven't read "Neuromancer" and "Count Zero" hand back your techie badges at once). But right now, printers are what there is. If you have a Cray XMP connected to a DMP-1 everyone will know you're a nerd. But with a ZX-81 (with Post-Script) and a LaserJet you can write to the Queen. Or even the Prime Minister.

So, think of the whole thing, Prototext, Promerge, Prospell, Utopia, the CPC and the KDS 8-bit interface,

as ways of driving the printer. If you have a problem, work backwards. If you can figure out how to make the printer perform, then you can do it with Prototext. If there are glitches, then it's you (in this case, me.)

KIT-CAT GLITCH

Phil Morley was asking about a hard copy CAT that would fit into a disc box. I thought AHA! and GOTCHA! With the "Tiny print" routine from PWP1, you can switch the printer into tiny print (subscript, condensed, half line feeds) and then a character dump (using Utopia's !printon) of the onscreen "CAT" will.... not QUITE fit into a box. This was a bit of a blow.

Adding 12 cpi (characters per inch) to the printer commands made for a (tight) fit but it was all terribly small. Time passed and then I remembered mode 1. Mode 1 CATs in two columns, the right shape for a disc box. So this is how you do a CAT in a box:-

Make a file with ">oc" (codes to set subscript, set condensed, set half line spacing)". On my NEC 2200 this is:-

```
>oc 27 83 1 15 27 65 6.
Print the file.
Mode 1
!printon
CAT
```

And that's it. A perfect Designer Fit. The only reason that the blindingly

obvious took me so long was that I always think of Mode one as being Ladybird Book Three, so I forget it exists. Mode zero is Janet and John. Wuthering Heights, though, was definitely written in Mode two.

```
>CAT
Drive A: user 0
A4      . 1K  GREEKDET.  1K
A4B     . 1K  GREEKSYM.BAS 1K
A4E     . 1K  JOYSTICK.  2K
A4EB    . 1K  KDC      . 1K
A4EN    . 1K  KDSTEST . 1K
A4ER    . 1K  KEYCODES. 1K
A4M     . 1K  LINE     . 1K
A4N     . 1K  LINEDRAW. 1K
A4R     . 1K  LINEDRAW.BAS 1K
A5      . 1K  LINEKEYS. 1K
A5M     . 1K  M        . 2K
BIGGRID . 7K  MERGE    .COM 2K
BIN-HEX .BAS 2K  MERGE    .DAT 2K
BOXDRAW . 1K  MFPLAN   . 3K
BOXDRAW .BAS 1K  NEC      .BIN 1K
BOXDRAW .EX 2K  NECCODES. 1K
BOXKEYS . 1K  PAINTIN .PRM 2K
BOXRUN  . 2K  PROBRN  .KEY 1K
CARD    . 1K  SCRIPT   . 1K
CHARBLOC. 4K  SECTORS  . 1K
COMMANDS.PRO 3K  SIGNATUR. 2K
DISC    . 2K  TESTPAGE. 1K
DISC    .NEW 2K  TINY    .PRM 1K
DISC    .PRM 2K  TINYITAL. 1K
GRADCOMS. 1K  TINYPRNT. 1K
GRAFGRID. 2K  UNEOX   .BAS 1K
```

```
84K free
>!printoff
```

fig 1.

PRETTY THINGS

Now there's really no limit, except the level of your masochism. You can print anything you want, for instance, your signature. On my NEC, you send a set of codes to go into a particular graphics mode, tell the printer how many bytes follow and then send the codes. All This can be done in ">oc" stored commands. Now in case that

sounds simple, it's not. It's quite simply a b***d (but fun, of course, on the right day.)

-(***)-

I found the simplest way of getting the graphics codes was to draw a grid. Use the "linedraw" routine from PWP1 to print a grid to design on, eight by however many you want for eight pins, 24 by whatever for a 24 pin printer. Then you draw your design over the grid, working out which pixels you want to fill. Reading up the columns, black pixels are "1", empty ones are "0". Write the decimal number corresponding to each binary byte by each column (to make this easier, it's worth designing lines extending down from each column of pixels on your grid. It's also worth having a basic "Bin to Dec" program running, because this phase is fundamentally a matter of bashing in the 1s and 0s).

-(***)-

As a straight piece of vain glory, I decided to do my signature this way. It's far from the best possible but the amount of coding to do it in quad density (plus twice the size) is too ghastly to contemplate.

This is two lines of graphic design grid, for a 9 pin printer.

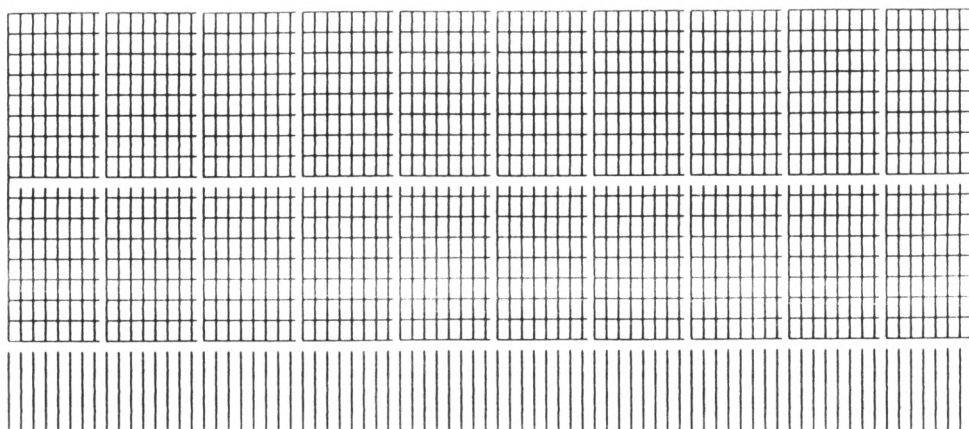


Fig 2. shows all the >oc numbers you have to type in and the result looks like this:-

The point is, designing graphics by numbers is always ball-breaking but in Protext you can tidy and mess the codes about with great ease.

ADVANCED STUFF

Now: does anybody out there in WACCI land have a way of designing, say, with *Advanced Art Studio* and then converting the screen image with some miraculous program to Epson codes. It would be a version of a screen dump program. If you could get the codes

into a file, it should be possible to get them into ASCII form, then load them into Protext, tidy them into a series of >oc lines and whoopee, you're importing graphics into Protext. Yes?

ANOTHER DAY, ANOTHER FIX

I've now got the Mark 2 *KDS 8-bit printer interface*. It's much nicer than the Mk 1, being smaller and not getting in the way when it's not been initialised (the Mk 1 corrupts everything unless initialised, so to do screen dumps from *Advanced Art Studio* I have to take the interface off). The problem is that the Mk 2 doesn't work with Promerge Plus either. *Arnor* have promised me they

```
>oc 27 64
>oc 27 36 120 0
>oc 27 42 33 110 0
>oc 0 0 7 0 0 7 0 0 14 0 0 14 0 0 224 0 0 224 0 3 128 0 3 128 0 13 2 0 13 2 0 49 15 0 49 15 1 194 49 1 194 49 6 4 193 6
  4 193
>oc 24 27 6 24 27 6 96 124 12 96 124 12 129 240 48 129 240 48 127 193 192 127 193 192 3 6 254 3 6 254 12 15 3 12 15 3 16
  112 2 16 112 2 97 192 4 97 192 4
>oc 131 0 8 131 0 8 12 0 62 12 0 62 16 1 195 16 1 195 32 2 6 32 2 6 64 13 24 64 13 24 128 14 96 128 14 96 128 1 128 128
  1 128 0 2 12 0 2 12
>oc 0 4 243 0 4 243 0 11 4 0 11 4 0 28 8 0 28 8 0 0 30 0 0 30 0 0 99 0 0 99 0 7 141 0 7 141 0 9 16 0 9 16 0 14 100 0 14
  100
>oc 0 0 141 0 0 141 0 1 26 0 1 26 0 6 225 0 6 225 0 11 2 0 11 2 0 28 14 0 28 14 0 16 113 0 16 113 0 33 131 0 33 131 0 2
  12 0 2 12
>oc 0 4 56 0 4 56 0 7 192 0 7 192 0 8 0 0 8 0 0 48 28 0 48 28 0 65 231 0 65 231 0 135 4 0 135 4 1 56 24 1 56 24 2 192
  124 2 192 124
>oc 5 0 130 5 0 130 14 3 131 14 3 131 24 13 4 24 13 4 32 17 4 32 17 4 0 33 8 0 33 8 0 32 8 0 32 8 0 0 16 0 0 16
>oc 13 10 27 64
```

fig 2.

will write a new loader for the KDS, as they did for the Mk 1 but they haven't come through with it yet. I guess they're busy adapting Protexit for the Cray but I still run to meet the postman each day...

PRINTERS FOR COURSES

John Hilton asked about getting double height characters. In fact the large characters in PWP1 were double height and double width, which are two sets of codes which can be combined on the NEC and which I've assigned to one keystroke. Steve <<Steve who?? -Ed.>> says his Citizen 120D supports this too but I'm not sure if the DMP 3000 does. I know that the DMP 2000 didn't. If your printer won't do something, there's no way that Protexit, or anything else, can help.

BUG-A-WUG

There is a bug in AMSDOS Protexit. So

far as I know it's the only one but it's a nuisance if you're trying to print single sheets using background printing. When a new page is due, the program interrupts the foreground action and asks you to put in a new sheet. The trouble is that, to pull off this trick, Arnor had to do something sneaky and characters from the foreground activity can get through and corrupt the keyboard routine (I think).

What happens is that the screen seems to behave in a random way as you type but there is a way out without a complete reset. You have to stay calm and think whether you're in command or edit mode (unless you've hit ESC it will be the last mode you were in). Get into command mode if you need to. The screen won't look right but have faith. Then type "CALL" [return] "BB03" and five times [return].

Nothing will come up right on screen

and if you make a mistake you're on your own but at the end everything will be fine. To get the Utopia function key definitions back, you type ":TOKENS,200". To get any custom keys back, go CTRL-Y to put your current file into the background, then QUIT Protexit, run "disc (or whatever) and go and buy a printer with continuous feed.

-(***)-

PRETTY PLEASE

And now, it's request time. Yes please Mr Pomfret, tell us soon about mega drives on the CPC. And yes please, Gerald England, tell us if there is a way for human beings to profit from User Basic in MasterFile. I've tried it but all those @s frighten me. Every time I use it I have to look it all up again, with the result that I don't use User Basic much....

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The Old man at the Gates of Heaven



And it came to pass that an old man of no particular interest to anybody died of natural causes. And being an uncommonly goodly man and one who had scorned the ways of mammon he came to find himself before the great wrought iron gates of Heaven, which were amazing to behold.

--}}}}}}00000(((((((--

And Lo, after no more time than it takes the beating of a raven's wing, a man. No, more than a man, appeared in shimmering white robes beyond the holy barrier. It was Jesus and He spoke thus: "What do you want, old duffer?"

--}}}}}}00000(((((((--

And the old man drew himself up and replied with pride an dignity as befits people who have died of natural causes: "I seek to gain entrance to The Kingdom of Heaven." Now Jesus, He that is supposedly born of Mary and no

other, pondered upon this and was greatly impressed by the old man's bearing and general disposition.

--}}}}}}00000(((((((--

And Jesus Sayeth to him, after his cogitation. "Tell me, old codger, what have thee done with thy life that I should open these great gates and let thee sup ambrosia at the feet of God?" The old man grew melancholy at this and looked humbly at his feet which were gnarled and wizened with age and stank as well.

--}}}}}}00000(((((((--

And he looked upon Jesus with tears misting his eyes and said, "I have done little to ease the suffering of my fellow human beings, for I have devoted my life to finding my son, who, went away when he was very young."

And Jesus came up to the great gates and gripped them until His knuckles were the same colour as His robes and gazing keenly at the old man saying unto him: "Quickly, old person, what did thy son look like?" And the old man, his breath shortening in the thin atmosphere which is noticeable about heaven stepped forward and said: "Why, he had holes through his ankles and through his wrist and..." But Jesus would let him go no further and flinging back the great wrought iron gates he caught up the old man in his arms and shouted joyously, "Daddy!"

--}}}}}}00000(((((((--

And the old man exulting in the love of God and love of man and in all creatures that inhabit the world clutched himself unto Jesus and cried: "Pinocchio!"

Sallamder Rushed-Tea

VERY

basic

BY
ALAN TILLING

Letters to:-

Very basic Basic
65 Lawrence Road,
Altrincham,
Cheshire.
WA14 4EL.

IF YOU'VE GOT A PROBLEM THEN TILLY'S YOUR MAN

Hello again 'tis moi. First off I have an apology. Last time I said that the computer was mine. Well, my daughter has pointed out that it was bought for her for passing the 11+. May I carry on now Melanie? I can? Oh good. (Times have changed, it used to be a push-bike when I was her age.)

-(vbbvbb)-

I've remembered another good book, this one is in the junior section of the library but really is worth getting out and having a read and, I hope, applying the progs. It is called Computer Programming by David Taft published by Kingfisher in their Science in Action series. ISBN 0-86272-167-9. For some reason it is in section 621.3 in our library.

-(vbbvbb)-

Now for a fuller explanation of the idiotic little program I did last time, lovingly reproduced once again this month in fig 1.

Lines 10 to 40 I hope you recognised as being last months colour change proglet in a thin disguise.

Lines 50 and 60 form a delay "loop". (This could also be written all on one line ie 50 for t=1 to 25000:next t). What this really says to Arnold is "keep track of where you're up to and do (other commands) then go back to

```
10 ink 0,0
20 ink 1,0
30 border 0
40 cls
50 for t=1 to 25000
60 next t
70 for d=1 to 500
80 next d
90 sound 1,10
100 goto 70
```

fig 1.

line 50 for the second time and do (the same other commands) and then go back to line 50 for the third time and do... eventually it goes round for the 25000th time and breaks out of the loop and ends up at line 70 which is another, shorter loop like lines 50 and 60.

Why two loops, I here you cry. Bear with me, all will be revealed.

Line 90 says make a sound of 10 tone periods pitch on channel 1. The handbook gives tables of tone periods for different musical notes. Lastly line 100 says go back to line 70 and carry on from there.

So what happens after you have entered the program and typed RUN (RETURN) is this:

The ink, paper and border go black and any writing is cleared. The first delay loop is being run whilst you are

(innocently) sauntering across the shop (30 seconds approx.) then the second delay loop is run (about 1 second) followed by the sound. After the sound has sounded the program loops back to line 70 then the second delay loop is run (about 1 second) followed by the... this explanation could go on and on for ever.

-(vbbvbb)-

And now for the bit you've been waiting for, the short delay is needed to break up the sound. Try getting rid of the second delay by editing line 100 to goto 90.

Some of you may be asking what are the "other commands" that Arnold is doing during the delay loops? The answer is there aren't any. All that Arnold is doing is count, do nothing, count, do noth ... Who said that computers were clever?

If you want any more information about how to go loopy rush an order to the WACCI hi-speed back issue mail order Dept. enclosing loadssamoney and ask for the June 1988 issue. Jeff Walker has written a couple of pages of good stuff about the subject.

-(vbbvbb)-

And now for the first time in a computer fanzine - Culinary Tips The WACCI chef says a good way to tell

the difference between mushrooms and toadstools is to peel them, cook them and then eat them. If you're still alive the next morning, they were mushrooms. You don't get good stuff like this in other magazines.

-(vbbvbb)-

PROBLEMS PROBLEMS PROBLEMS

I've had a letter from Emma Clayton in Bournemouth. Emma is only 9 years old (they start 'em young down in Bournemouth). Emma says:-

I got an Amstrad 6128 for Christmas and I want to know if I have to type a program in capital letters. My friend has an Amstrad 464 and she says you don't have to, but all the books say type it in exactly as it is written. Also how do I save a program, I can't do it like my friend.

Hello Emma, I always type a program in using lower case (*small*) letters. Then when I have finished I type LIST and

look for anything still in *lower* case.

To convert the English words that you type in into the 0's and 1's that the chips inside the computer can understand, an interpreter is used and if it accepts the command that you give, (the commands are called Basic *keywords*) it turns them into upper case (*capital*) letters but if it can't understand what you've written, it leaves them alone. Try typing this:-

```
10 cls:print "Emma" [return]
```

Don't forget to press return, then type *list* and you will see

```
10 CLS:PRINT "Emma" [return]
```

CLS means CLear the Screen, the rest is obvious. The : separates the two *keywords*. If you now type *run* [return] the screen will clear and your name will appear in the top left hand corner.

Type *new* [return] then *cls* [return] and the proggy will be cleared out of the memory and the screen will be cleared. Now type:-

```
10 clsprint "Emma" [return]
```

If you now *list* it and you will find that it is still in lower case. This is because Arnold can't find the keyword *clsprint*. If you type *run* now you will get SYNTAX ERROR 10 and line 10 will be presented ready for you to edit.

-(vbbvbb)-

Saving a program on to disc is easy, but you have to give it a name. So correct line 10 and make sure it works. Put a disc in the disc drive and type *save* "Emma" [return] the drive will make a noise and then stop. To check it, reset Arnold (Control, Shift and Esc) now type *run* [return] "Emma" or *run* "EMMA" or *RUN* "emma" and the proglet will be read into memory and Emma will appear like before.

-(vbbvbb)-

That's all for now folks. Don't forget, if you are starting out into the world of Basic and need a hand you can always write to me. *Bye for now.*

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A Passing Thought

MUST THERE MUST ALWAYS BE WINNERS AND LOSERS? - JOHN RIDGE PONDERS

Many games take the form of a competition between two opposing players or teams. Soccer, boxing, chess and noughts-and-crosses are examples. There are usually three possible outcomes for each player or team of players, although in games which cannot result in a tie or a draw there are only two.

<--++(*)+-->

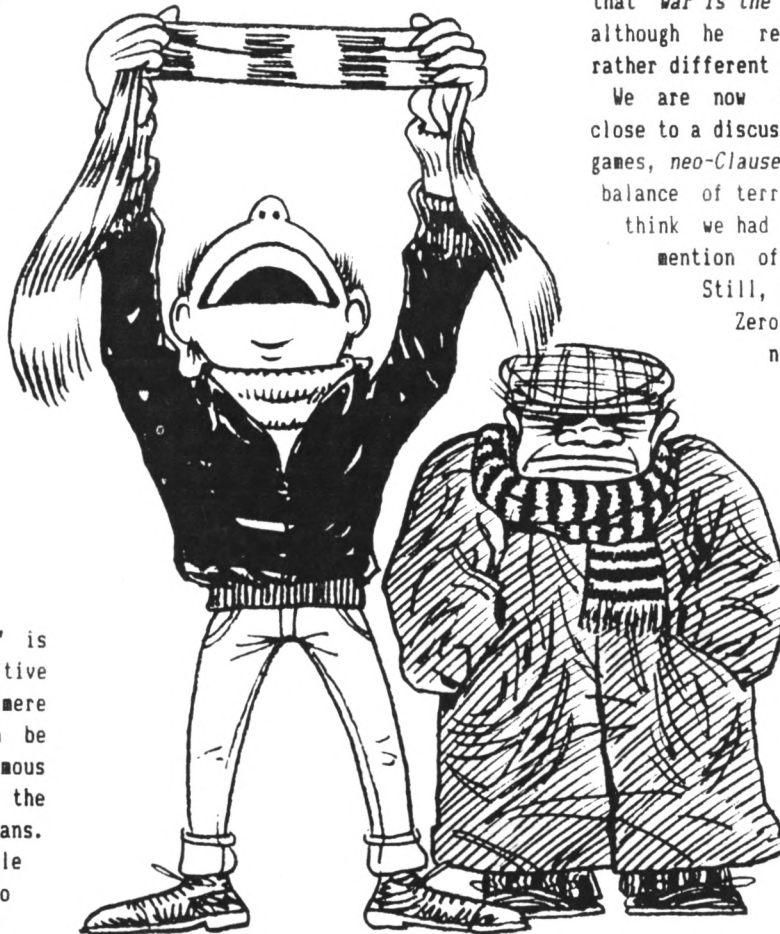
Let us assign +1 to the winner, -1 to the loser, and 0 to both in the event of a drawn game. In every game the sum will be zero. If I lose, I get -1 so you, being the winner, get +1. The sum of +1 and -1 is zero. If neither of us win nor lose, the sum will be 0+0 which is again zero. Such games are known as Zero-Sum Games.

<--++(*)+-->

If the definition of a "game" is broadened to include human competitive activities which are more than mere pastimes, the same pattern can be discerned. Clausewitz' most famous dictum stated that war is the continuation of policy by other means. Two nations with irreconcilable policies might very well attempt to impose their will on each other by going to war. There will be victory for one nation and defeat for the other, or possibly the outcome will be inconclusive so we can call it a draw. In short, it would be a zero-sum game.

Suppose, though, that both nations had a large arsenal of nuclear

rockets. Let us further suppose that simultaneously with a declaration of war, one nation launched a full-scale nuclear attack on the other. A matter of minutes later, the radar



defences would alert the attacked nation and it would launch its own nuclear rockets in retaliation. When the radio-active mushroom clouds blew away from the ruins of every major city in both countries, which would be

the winner and which the loser? The resulting destruction makes them both losers, so in such circumstances it would not be a zero-sum game. One is tempted to cite Von Seeke's addendum to Von Clausewitz and declare that war is the breakdown of policy, although he really had something rather different in mind.

We are now skirting dangerously close to a discussion of Pentagon war games, neo-Clausewitzian theories, the balance of terror and the like, so I think we had better avoid further mention of war and warfare.

Still, the subject of Non-Zero-Sum games is strangely fascinating, as Auntie John pointed out when he described for us the Prisoner's Dilemma in his Diary last November.

I am not sure where the game originated but it is minutely analysed in all the books, with pay-off tables and notes on the psychology of gambling, etc. I

think Auntie John's psychologist friend would be unwise to attempt a thesis on such a well-explored area of enquiry but no doubt his advisers know better than I what the adjudicators are looking for.

Another hypothetical non-zero-sum

game is known as "The Tragedy of the Commons." Villagers have the right to graze their cattle on some common land. A villager who puts more of his cattle to graze on the common than do the others will get more out of the system. Even when the common is so crowded with cattle that they do badly, this will still be true. If such were the case, then the best tactic would be for all the villagers to remove some of their cattle so that the number fell to what the common could support. The tragedy is that it will never pay any villager to remove cattle unless everyone else does, so the status quo will probably be maintained even though the grazing is inadequate.

<--++{#}+-->

The difficulty of reaching an agreement which would be to everyone's benefit can be seen in the way in which individual nations use up the world's natural resources. On a smaller-scale, why should I attempt to reduce air-pollution from power-stations by walking from Twickenham to Marble Arch when everyone else rides on electric-powered trains? Perhaps our democratic system is rather good at deciding what other people ought to do but it requires a dictatorial command from above to make us do anything much ourselves.

<--++{#}+-->

Here is another game known as "Auction a Dollar" but which I shall rename "Auction a Pound." I am going to auction a pound and Auntie John and Steve Williams <<aha that Steve -Ed.>> both recognising a good thing when they see it, will bid for it. However, I will impose certain rules.

The bidding must start at 5p and bids must be increased by at least 5p. Also, despite what everyone says, I am not totally stupid, so I will receive the two highest bids even though only one of the bidders will get the pound. So, if Steve bids 15p followed by John bidding 20p. if the bidding ends there John will get the pound and I will

collect 15p from Steve and 20p from John. What a generous soul I am.

All will go much as you would expect until the bidding reaches 50p. If it goes 5p higher, then I will collect 50p and 55p, which will provide me with 105p for my pound. I win.



At this point the bidders are in trouble. Even if they decide to co-operate by dividing the prize and pooling their losses, they will have to pay me more than 50p each. As such co-operation would benefit neither of them, their best strategy would seem to be to continue trying to out-bid each other.

The next crisis will be reached when John bids 95p. He is now deeply in trouble, for Steve will have to increase his bid from 90p to 100p. If John withdraws from the bidding he will lose 95p but if he bids again he has a chance of getting the pound and only losing 5p. That places Steve in a quandry, for if he withdraws he will lose 100p but if he ups John's bid he might win the pound and only lose 10p. As each tries to minimise his loss by bidding higher, their situation becomes increasingly desperate. At this point I can retire to bed and leave them to get on with it, safe in

the knowledge that my profit will be enormous. "Auction a Dollar" was invented by Martin Shubik, by the way.

I can see why Auntie John might find the notion of observing computers competing in a non-zero-sum game fascinating but I think he misses the point. In non-zero-games there is a trap which ensures that neither side can possibly win.

In some cases, such as Prisoner's Dilemma, it is possible to minimise loss but even then the result is lucky because there is no way of knowing what the opponent's last move was.

In a computer program it would be impossible to provide the machine with data to bias the program flow in favour of any particular branch in a decision tree. One would have to rely on generating a random number.

The outcome would be about as instructive as the tossing a coin, and neither competitor, human nor computer, would have an advantage. But we know that to be inherent in the very nature of the problem to begin with.

Equally, if a non-zero-sum game can be terminated by mutual agreement, such as by Steve and John plotting to cease competing for my pound by not bidding more than 15p. then there is no game for the computer to play. The outcome is decided.

It would be a different kettle of fish if one side had an advantage which the competitor/s did not. One villager might possess a herd of extremely aggressive cattle which would hog all the available grazing on the common, forcing the other villagers to remove their own more passive cattle. But that would mean that it was not a non-zero-sum game at the outset.

There are many interesting facets to games, in the broader sense of the word, so I may be tempted to return to the subject in the future.

To cover my rear from attack by experts, I must make it clear that I am aware that Auction a Dollar is usually cited as an illustration of certain types of behaviour which can occur in complex systems but it still remains a non-zero-sum game.



AUNTIE JOHN'S DIARY - FREE FROM ARTIFICIAL COLOURINGS AND PRESERVATIVES

Greetings were ordinary persons. This month, for your gastronomic delight, I have prepared a subtle blend of organically grown hardware and free range software, basted in a light white sauce of humour and served up with a small side dish of technical terms and quaint asides.

ooo0ooo

It has been one of those nasty months for me: so much work to do and yet I didn't feel like getting down to doing any. I finally got this written up but I still have lots and lots to do for a certain diminutive magazine editor regarding a certain new cream coloured computer (which Ed. says I call an 'AMNEEGARRR'.)

It was for this reason that I developed a rather idiosyncratic way of connecting the two computers (my beloved CPC and the new one) using the cassette relay and a broken joystick. The baud rate of data transfer is about .01 bits a second but it is great fun, very noisy and means I can use good old Prottext to write my articles. I'm building a MIDI interface for the new computer, which

means I'll be able to send data much quicker and interface my CZ101 into the bargain but that's another story.. Oh yes and I didn't get any Valentine cards so I'm sulking.



PASCAL: PART TWO

A slight buggy-poo crept into the last article mainly because I referred to

a file called 'COMPILE.COM' which didn't actually exist. The simple reason for this is that I re-named my own copy of the file JRT3PAS.COM to make things slightly easier for me to remember. I apologise for this mistake, Steve <<Steve who? -Ed.>> tells me that he has now re-named the file on the master disc to COMPILE.COM to conform with my protocols (what it is to have such power over editors) so if you got your copy of WACCI CP/M Disc 6 after February's issue of WACCI came out you won't have any problems.

If you got your copy of Disc 6 before then, remember that when I refer to 'COMPILE' it appears on your disc as 'JRT3PAS' instead. I think that's sorted that one out, did you follow all that? Is it clear? Now I've gone and given myself a headache after all that explaining. I think I'll have a lie down in a dark place for a while and try to recover.

BACK AGAIN

This month the wonderfully flexible way of declaring variables in PASCAL is under scrutiny. As an option in a program, just before the first 'begin' statement you can insert 'const'

(short for constant), 'var' (short for variable) and 'type' (errrrrr.. short for.. errrrrr.. type.)

A constant is a sort of "un-variable variable", if you see what I mean. You define it once at the start of the program and refer to it as many times as you like later on. Using intelligent names for the constants means your programs will make more sense when re-reading them.

A type statement is either followed by a range of possible values, or even a list. Some types are built-in to the language, such as 'integer', 'real', 'char' (for ASCII characters) and sometimes 'string'.

The double full stop defines a range using other constants, for example '1..5 means 1,2,3,4 and 5'. To define a type as a list use brackets and commas, for example 'fruit = (apples,bananas,oranges)'. I know it looks strange but you really can use this sort of thing in your program, as we shall see later.

The variable statement needs the name of the variable followed by its type, which has either been defined in the previous 'type' statement or is one of the built-in types, such as 'integer'.

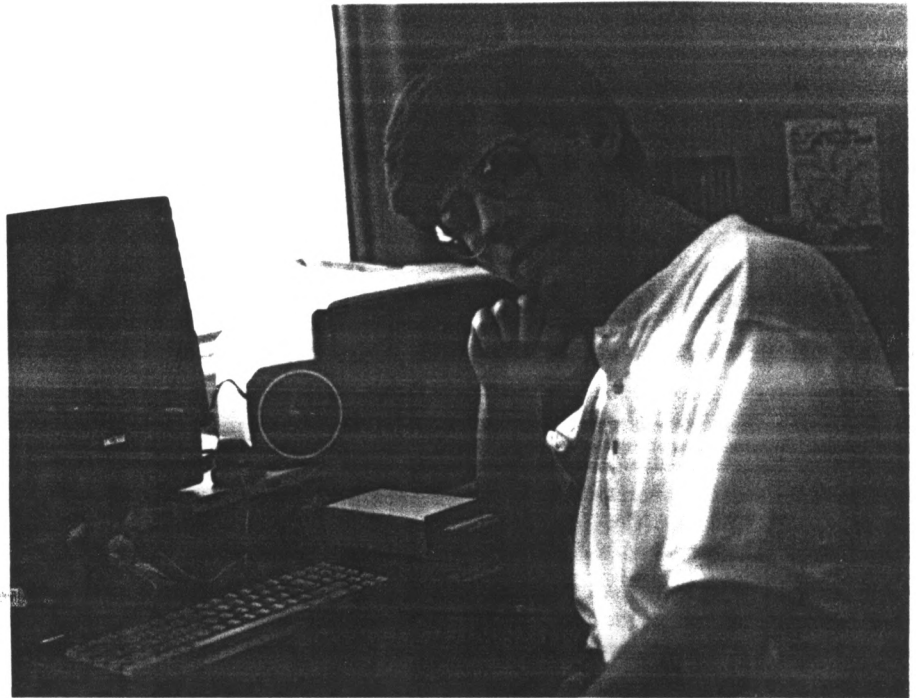
Let's look at another example program. The const, type and var statements MUST come in this order. The rest of the program is quite simple to understand but some points are worth noting.

First, PASCAL uses ':=' to assign a value to a variable and not a '=' as in BASIC. PASCAL does use a '=' but only when comparing values.

The 'repeat . . until' construction is one of many provided by PASCAL. It does what it says: REPEAT everything inside here UNTIL this condition is true. The indentation is not necessary but is included simply to make things more legible.

ooo0ooo

And so that's another exciting lesson in structured programming. Next month we will get onto the real reason behind PASCAL's success: the concept of Procedures.



SIDEWAYS RAM PROJECT

What follows is a design for a 16K sideways RAM project. When it is complete you can use it as a prototyping system for developing EPROMS or as another 16K of RAM to store screens or other data.

A previous design for a Sideways Ram project has been published in WACCI but this one is rather unique in needing only three IC's and a resistor. It is not a battery backed unit but this is not a real handicap and I have discovered that some-times data is retained as a consequence of tiny pixies.

To use the Sideways RAM project you will need a standard ROM board, such as ROMBO. Here a slight problem becomes apparent, because not all ROM boards will work with the project. I have

two boards: a KDS 5 ROM board and a HONEYSOFT RS-1 board. The former does not work with the Sideways Ram board and the latter does: it is not easy to tell whether or not any specific board will work. Boards that do work are the ROMBO one and the HONEYSOFT. Any others will require you to take your chances.

```
program example1 (input,output);  
  
(An example program using variables!)  
const  
  limit=10;  
  
type  
  rangetype = 1..11;  
  
var  
  count:rangetype;  
  
begin  
  writeln('Here we go, here we go, here we go..');  
  count:=1;  
  repeat  
    writeln('Count is :',count);  
    count:=count+1;  
  until count>limit;  
  writeln('Well that's the end of that!')  
end.
```

Listing 1: The wonders of PASCAL.

PARTS LIST

Two 6265 8K Static Ram chips *
 One 74LS04 Hex inverter
 One 2K2 1/4 watt resistor
 One small (preferably PCB mounting)
 push to make switch
 One 28 pin IC socket
 Connection wire

* These chips are of the CMOS type, which means they are sometimes damaged by static electricity. Do not rub them on the cat or your nylon jumper.

If your board does work with the project, please let other WACCI

readers know. If it doesn't, try selling the RAM chips to someone else.

If you want to test your board before building the project, you can send it to me and I'll try it with my (working) Ram chips. That is, if you trust me to return it.

GETTING STARTED

First 'piggy back' the two RAM chips and solder the all the legs EXCEPT pins 26 together. The pins that you have left unconnected are the Chip Select, since each 8K chip must be switched on independently to make up the whole 16K. Now connect the 74LS04 underneath the two Ram chips and wire the legs as shown in the wiring diagram. The inverter will take the highest bit of the addressing signal

and decide which chip to switch on by feeding either an 'ON' signal to one and only one, of the RAM chips.

Break pin 27 off from the IC socket. This is the Write Enable line, which we are going to connect via the push-to-make switch and a pull-up resistor to a suitable point on the ROM board later. Wire pins 27 from the EPROMs to the switch and also connect the resistor between these pins and a five volt leg (such as pin 28.)

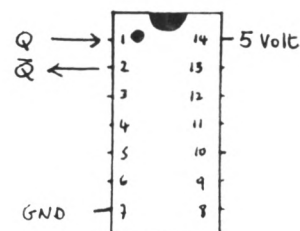
The other wire from the push-to-make must be connected to the WR or WE line. This line should be present on the ROM board somewhere, if need be at the point where the edge connector joins the ribbon cable. Check your Amstrad manual to find the correct pin and trace it back onto the board.

000000

Now insert the RAM chips into the socket, such that the 74LS04 and resistor are underneath. The switch can have its legs bent flat and be glued on top of the whole assembly, which is then plugged into a vacant slot on the board. The entire thing can be liberally covered with insulating tape and here is one that I made earlier: (oops, sorry. An attack of the Blue Peters I'm afraid.)

000000

Now power up. If the computer hangs, it is possible that there is not necessarily a fault in the circuit but some garbage present in the RAM chips that is confusing the computer. Hold the push to make down and switch the computer off and on a few times. If things still hang, bad news. Hmm.



The 74LS04 Hex inverter with one possible connection shown

```

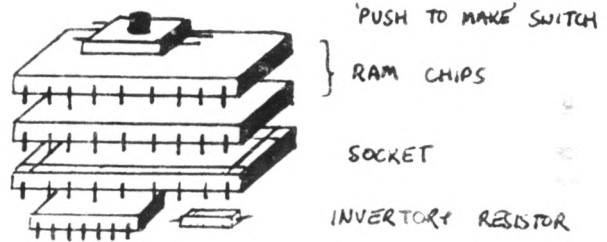
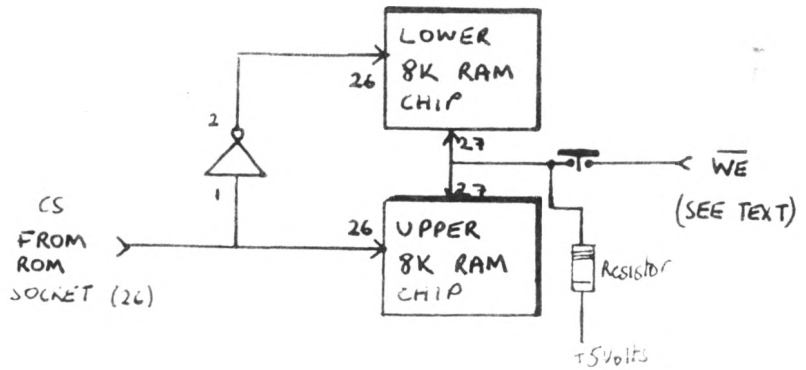
10 MODE 2:PRINT "Ram to Rom Program AJ 88"
20 MEMORY &3FFF
30 GOSUB 240
40 PRINT:INPUT "Please select ROM/RAM number: (default = 3)",n
50 IF n=0 THEN n=3
55 POKE &BE01,n
60 PRINT:PRINT "Rom number:";n
70 PRINT:DIR
80 PRINT:INPUT "Please enter ROM image to load from disc:",n$
90 LOAD n$,&4000
100 MODE 2:PRINT "Now the fun part..."
110 PRINT:PRINT "Hold the button down for as long as the border is white."
120 FOR t=1 TO 1000:NEXT
130 FOR t=10 TO 0 STEP -1
140 LOCATE 10,10:PRINT t;" "
150 FOR r=1 TO 500:NEXT r
160 NEXT t
170 BORDER 26:FOR t=1 TO 1000:NEXT
180 CALL &BE00
190 FOR t=1 TO 1000:NEXT
200 BORDER 0
210 FOR t=1 TO 1000:NEXT
220 MODE 2:PRINT "The ROM image should now be in the sideways RAM":
    PRINT:PRINT
230 END
240 FOR a=&BE00 TO &BE1E
250 READ b$
260 POKE a,VAL("&"+b$)
270 NEXT
280 DATA 0E,03,CD,0F,B9,F3,C5,21,00,40,11,00,C0,01,00,40
290 DATA ED,80,11,00,40,1B,7A,B3,20,FB,C1,CD,18,B9,C9
300 RETURN
  
```

Listing 2 Main memory to Sideways RAM program.

To program the Sideways RAM DO NOT USE AN EPROM PROGRAMMER. This would be very silly. Writing to the RAM involves calling a firmware routine at address &B90F and then, whilst the push-to-make is held down, copying the data to the address normally occupied by the screen memory (&c000 to &ffff.) The screen memory (unless moved to a lower location ie &4000) will fill up with funny patterns: this is ok.

ooo0ooo

If you are using a MAXAM 1.5 (and perhaps a MAXAM 1) ROM you will be able to select the RAM as though it were a ROM and then write to it directly. This is a good way to test the chips: at my first attempt at building the project I used a dodgy inverter but by using MAXAM 1.5 I discovered which one of the ram chips wasn't responding.



NC	1	28	5volts
A12	2	27	WE
A7	3	26	CS
A6	4	25	A8
A5	5	24	A9
A4	6	23	A11
A3	7	22	OE
A2	8	21	A10
A1	9	20	CS
A0	10	19	D7
D0	11	18	D6
D1	12	17	D5
D2	13	16	D4
GND	14	15	D3

The 6264 8K Static Ram

A Basic/Machine code program to transfer data held in normal memory from &4000 to &7fff to sideways RAM is supplied in Listing 2. You must supply the 'ROM number,' that is the number of the ROM socket you plugged the module into.

Next month I'll show you

how to go about writing your own software to put into the RAM or into an EPROM, which is quite interesting.

ooo0ooo

All I want to know now is who this Sallamader Rushed-Tea on page 15 is?

That's it, there is no more. I'm going to make myself a milky cup of cocoa and crawl back into my dark space, under the stairs, to contemplate my navel for yet another month.

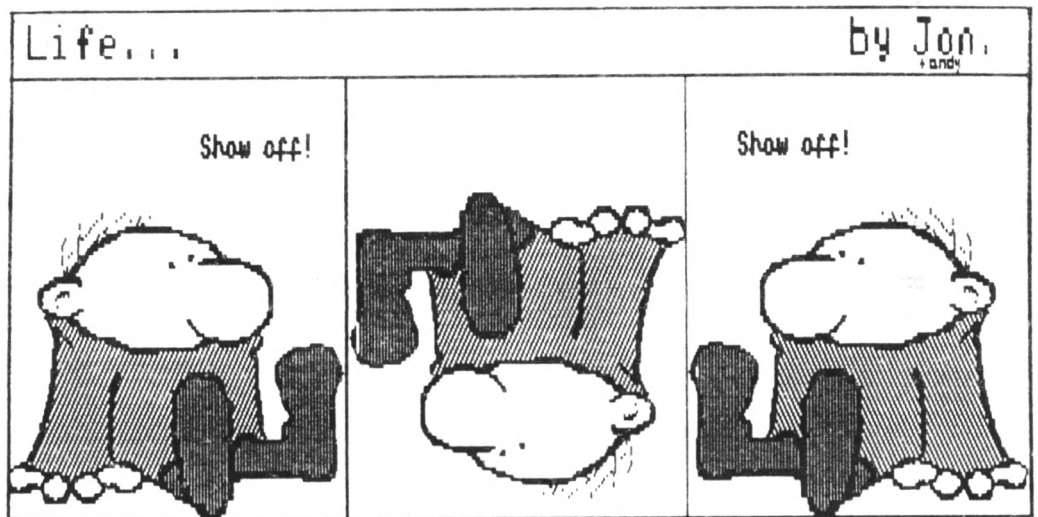
Oh, before I go... did I tell you that someone stole my motorbike last month? I think it was some sort of

divine punishment because for about the first time in three years I accidentally watched 'That's Life.'

Have a better one.

Your Auntie

32 Bayview Road
Bangor
Co. Down
BT19 2AR.



YES Chancellor

Ken Walker shows you how to ru(i)n the country.



SIMSPOT
55 GREENBANK ROAD
DARLINGTON, DL3 6EN

MOVE OVER NIGEL - KEN WALKER REVIEWS YES CHANCELLOR

After years of incompetence arising from the policies of two parties who have either pushed up inflation, unemployment and the price of booze and fags (that really hurts), you must sort out the economy.

Your moment has arrived with the help of *TOPOLOGIKA*, who have produced a disc only economic simulation which puts you in No 11. It's time for action - before you can even sit down behind that impressive desk, a memo arrives from Maggie. 'Try to get it right this time', followed by words of advice that low taxes are the key to prosperity but borrowing can cause inflation and you must keep those reserves for emergencies. She may know all about winning elections but can you be sure the economy will improve in the long term?

The best advice would appear to come from the pages of the information booklet which provides useful data on public expenditure, taxes and interest rates, albeit from 1984 records. If your grasp of 'public affairs' rises above the level of *The Sun* or *Star* (surely that must mean everyone above the age of 10), then there should be no real problem in understanding the rules of the game and coping with the first five years of office.

There are four levels of difficulty. The main difference appears to be in the amount of reserves held at the

start of the game - £533m(1) down to £220m(4). All levels have an extremely low inflation rate of around 1% during the first year which I found unrealistic these days.

It could have provided more strategy if the starting point of inflation had been varied between 5% and 20% and required a different approach for each condition. Another omission is that the budget is based on only four items of public expenditure as being representative of the economy as a whole. Whilst Defence, Law and Order, Education and Social Services are important elements, they only account for about half of the actual total and therefore simplify the programme unduly. Similarly, taxes are restricted to a single figure for income without any regard to N.I., excise duties (beer, fags and petrol) and motor licences for example.

The aim of the game is to last fifteen years and earn a peerage, this simple model of the economy makes for a relatively short game of under an hour. For a disc game I expect more.

BONUS POINT

However on the plus side, it does handle the limited information fairly well and decisions are required to settle public sector pay claims each year or risk a strike which will dramatically increase your borrowing. Interest and Tax rates must also be

set for each year before the Budget is prepared and economic progress (or failure) is indicated in a Treasury Report with graphs displayed for inflation and opinion polls before the next year begins. Being able to send this information to printer would have been an useful addition but again this has been ignored and therefore you need to take notes or be blessed with a good memory.

The most important fact to remember is the need to survive in the political jungle and that means getting your opinion poll up during election year. Do what every Chancellor does and lower taxes at the right time, you should get elected once again.

The programme was devised by *Tom Tuite* in 1985, who was a senior official of the Inland Revenue and can therefore be regarded as an accurate simulation based on the data provided.

CONCLUSION

Having shouted a few niggles about the game, it must be said that it has few competitors and I wish there were more. Politics can be absorbing and there's plenty of scope for developing strategy, whilst learning about our complex system of Government.

You can be sure, despite what you might have said about nasty Nigel, it's impossible to keep all the people happy all the time.

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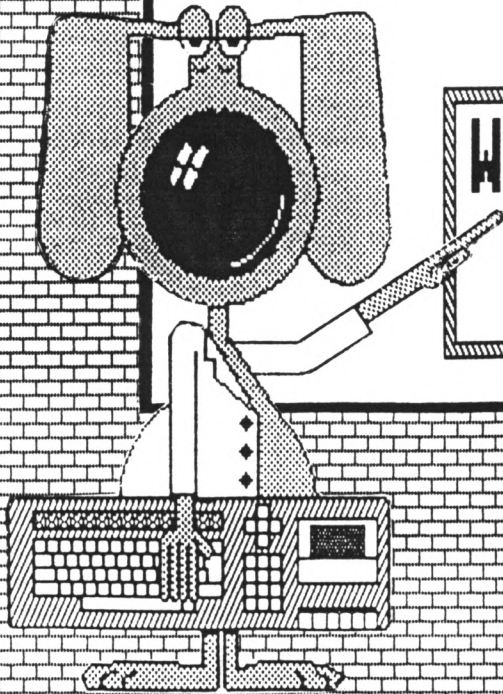
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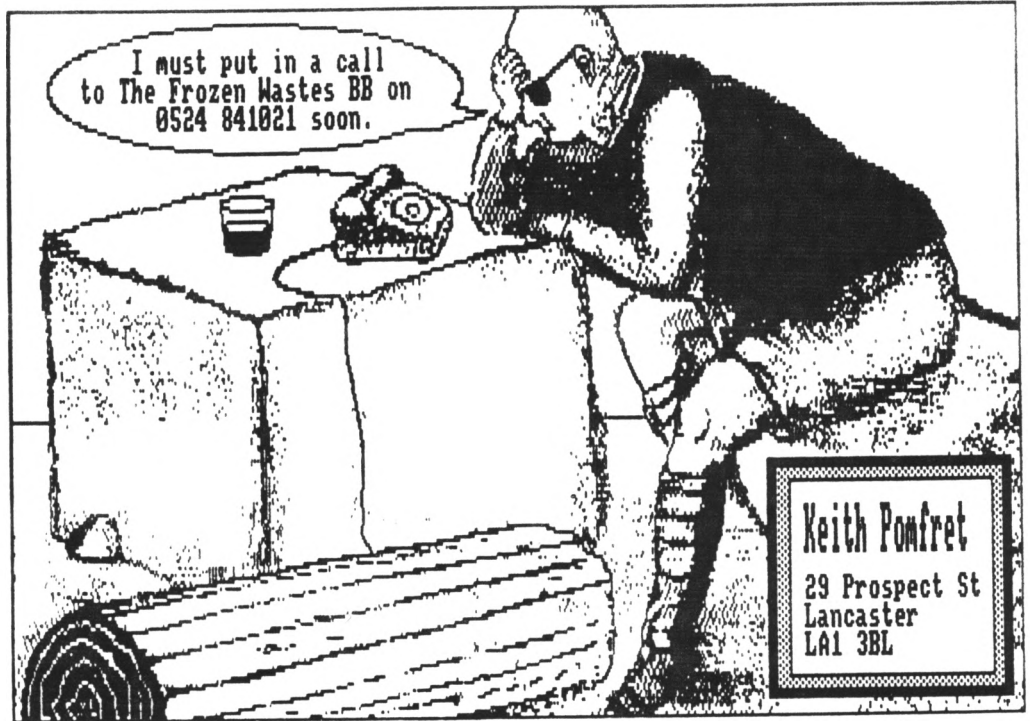


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EE OO FF



I recently took yet another trip down to the "Twickenham Retirement Home for the Terminally Bewildered" where the previous writer of this column has been incarcerated for the last six months or so. For those WACCI readers who remember the poor old soul, the news is not too good.

-WoliWoliWoli-

Continually shifting in and out of a comatosed state he is in a sorry condition (believe me, double incontinence is no laughing matter.)

The nursing staff do a wonderful job trying their best to cope with him. Whenever he briefly returns, to the world as we know it, they quickly decant him into his bath chair and ply him with his favourite "medicine" (a mixture of lighter fluid, Castrol GTX and Turtle car wax.) This restores his sensibilities for a short while before he passes out again and the staff have to pour him back into bed again.

I was fortunate enough to visit him just before he slipped away from reality once again. Gurgling happily he warmly shook me by the throat....

"Where's that bloody switchable Mega B drive article you promised me last

month?" the old chap chuckled. After slipping the leather restraints back around his limbs I reassured him that I would include it in this month's column. So here we go...

-WoliWoliWoli-

THROTLINGS OLD DISGUSTABLE

At least several and a half pints of Throttlings Worstest Liver Salve and I can't get the courage together to



pry into Arnold's innards with a craft knife. A quick phone call to Craven Towers and the butler informs me that "His Lordship is taking a long awaited break cataloguing the slag heaps of Wath-Upon-Dearne."

Frightened of my own strength I hitched on the trusty backpack and gathered together the Sherpa and set off to visit WACCI's latest catch. The troglodyte, "Techno Tom."

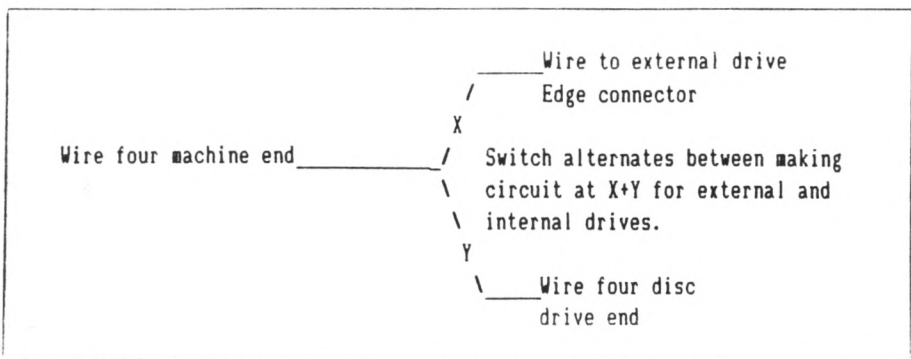
MEGAD RIVESFOR ALLAN'S UNDRY

Running a Bulletin Board on a CPC is a pleasant way to run up other people's phone bills while getting the enjoyment of being on line and reading everyone's secrets.

The trusty Z80A is quite capable of running an adequate BBS and processing all the in and out bits but once Arnold has done the old in and out stuff, his pockets aren't quite deep enough to hold all the goodies.

178k on two drives equals... ummm eight and eight is sixteen carry one plus the fifteen and anyway, it ain't a zillion meagabytes.

The smallest BB system occupies over seventy kilograms for it's operating system and even with two 3" drives that only leaves about two hundred and



inches long should be carefully soldered to this leg making sure that it doesn't either foul the plug from the disc drive, or cause a short circuit with any of the other legs.

-WoliWoliWoli-

All that needs to be done now is to connect the three wires in the manner shown in the diagram above and you should have the external A drive selector switch. Where you put the switch is up to you but below and to the right of the mains light adjacent to the F9 key on a 6128 looks OK.

-WoliWoliWoli-

That's the hard part. Next month, with the help of Dave Gorski, I will explain how to tell the new A drive that it is a Mega drive and getting nearly 800k of useful space on it.

If you want the modification done but you don't feel confident to do it yourself, Techno Tom can be persuaded to upgrade your machine for a mutually satisfactory sum.

COMMS NEWS?

Is it *that* time already? I'd better go and see what else is happening in the big wide world.

I received a letter from Stephen Lillis, a WACCI member in New Zealand, who has been trying out the WACCI "suck it and see" version of XRAS and from his letter, it looks likely that there could be an antipodean WACCI On Line BB soon. I'm going to rush him the latest software to compile at his leisure and support his venture with WACCI PD software and a tie in with a couple of our own WACCI ventures.

LOOK OUT

Watch out for the new HI-TEC EC2400 Quad Speed Modem. The designer is our very own Glyn "Gnome at Home" Phillips. The modem supports all speeds up to 2400/2400 baud with MNP Level 5 for throughput up to 4800 Baud. It's not yet BT approved but is available for a mere £279. An approved (identical) version will be available in three to four months, BAPT willing but it will a little more expensive.

It's fully speed buffered, it is best to set it up for use at 9600 baud and then let it work out the rest. You

can set it up to have a buffer of up to 1280 bytes on send and I assume it does at least as well on receive.

The makers of this little marvel, Hi-Tec Supplies, address is:-

611 Lincoln Road,
Peterborough,
PE1 3HA.
Phone: (0733) 52440

which the more discerning amongst you will already have noticed is the same as that of Arnor Ltd. Hmmm perhaps I should give the lads at Arnor a call and find out if there's a connection.

END BIT

Dave "Monster" Wright, who provided so much of the source material for my recent MIDI article, has had to give up playing with his favourite organ since a perforated eardrum has been diagnosed. Dave's youngest was heard to cry, "Can I have my 6128 back to play Chuckie Egg on now Dad?" Enough is enough, so bye bye for now.

- The HI-TEC EC2400 Quad Speed Modem Features.*
- 1) Quad speed - V21, 300/300. V23, 1200/75 and 75/1200. V22, 1200/1200 Full Duplex. V22bis, 2400/2400 FD
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 - 4) Hayes Compatible - or V25bis if you prefer.
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 - 10) Ten Battery Backed Stores - Keeps your numbers and settings permanently.
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 - 17) Telephone Socket on the rear of the unit.
 - 18) Built in Power Supply.
 - 19) Mains Lead, Plug and Three Metre Telephone Lead.



bankman



ALASTAIR SCOTT'S GOT THE ANSWER - YOU CAN BANK ON IT

Here I am, back again for another, shorter than usual, dabble into the realms of Bank Manager. This month we will have a further look at the :BANKFIND command.

Wildcards can be used to ignore characters at the start of a string. For example:

```
rec%=0
find%=STRING$(10,0)+"Smith"+CHR$(0)
:BANKFIND,@rec%,find$,0
```

then pressing f0 should return 3, namely "Frederick Smith". The STRING\$(10,0) before "Smith" means "ignore the first ten characters of any record found", which happens, in this case, to be "Frederick" plus a space. If find% had been STRING\$(5,0)+"Smith"+STRING\$(6,0), pressing f0 would have returned 2, corresponding to "Fred Smith".

Here's a silly example of how the -2 code can be obtained, there'll be a subtler example to finish off with.

```
rec%=0
find%="Zytogorski"+STRING$(6,0)
:BANKFIND,@rec%,find$,0
```

then press f0.

Finally, two examples showing how a search can be partitioned using the r1 and r2 parameters:

```
rec%=0
find%=STRING$(5,0)+"Smith"
+STRING$(6,0)
:BANKFIND,@rec%,find$,4
```

then pressing f0 would return 5; it would have returned 2 if the last parameter was zero, as the given find% matches both "Fred Smith" and "Fred Smithers". Also:

```
rec%=0
find%=string$(5,0)+"Smithers"
+STRING$(3,0)
:BANKFIND,@rec%,find$,2,4
```

then pressing f0 would return -2; find% is not found as it can only match "Fred Smithers", which is the fifth record. This is out of range of the search, which only looks at records 2, 3 and 4.

My advice is simple. Use :BANKFIND only as an absolute last resort as its syntax is so complex. On to happier things, which don't need that command.

There's only one program in the FSW Library which uses Bank Manager directly. It's my own Trivia Quiz, the UB40 version of Trivial Pursuit.

QUESTION TIME

I decided to include 400 questions, so that there would be very little chance of the same ones coming up in successive games.

Each question was stored in a record made up of six sections:-

The question itself (80 characters maximum.) Four possible answers (20 characters maximum each) and a number which represents the correct answer (1 character.)

Total record length: 161 characters. Now 400 records x 161 characters equals 64,400 bytes, far too many to

store in an unexpanded 6128, which has only 42,619 bytes free with a disc drive and no ROMs attached.

Hence Bank Manager had to be used, as there was no quick way of reading in the appropriate question from disc each time one had to be asked, remember the problem with the 1,000 names? I typed a list of questions into Protect in the format shown below and saved the resulting lump of text as an ASCII file. The Trivia Quiz control program loads Bank Manager,

```
Question,Answer1,Answer2,Answer3,Answer4,Number
qu$ a1$ a2$ a3$ a4$ nu
```

reads the questions in from disc and transfers them to the extra RAM.

WHAT'S NEXT

Next month I'll be showing you a routine similar to the one I used to sort out this problem and also the routine to find a question, read it back and interpret it.

It will also mark the end of the conventional stuff about Bank Manager. Quite a while back I had a little look around the code using Maxam 1.5, and came up with an improvement and a surprise. So there will be a new loader in the next issue with a few pokes thrown in for good measure.

Revelations still to come in this series include three undocumented commands I found which, for some reason, were suppressed by Amstrad.

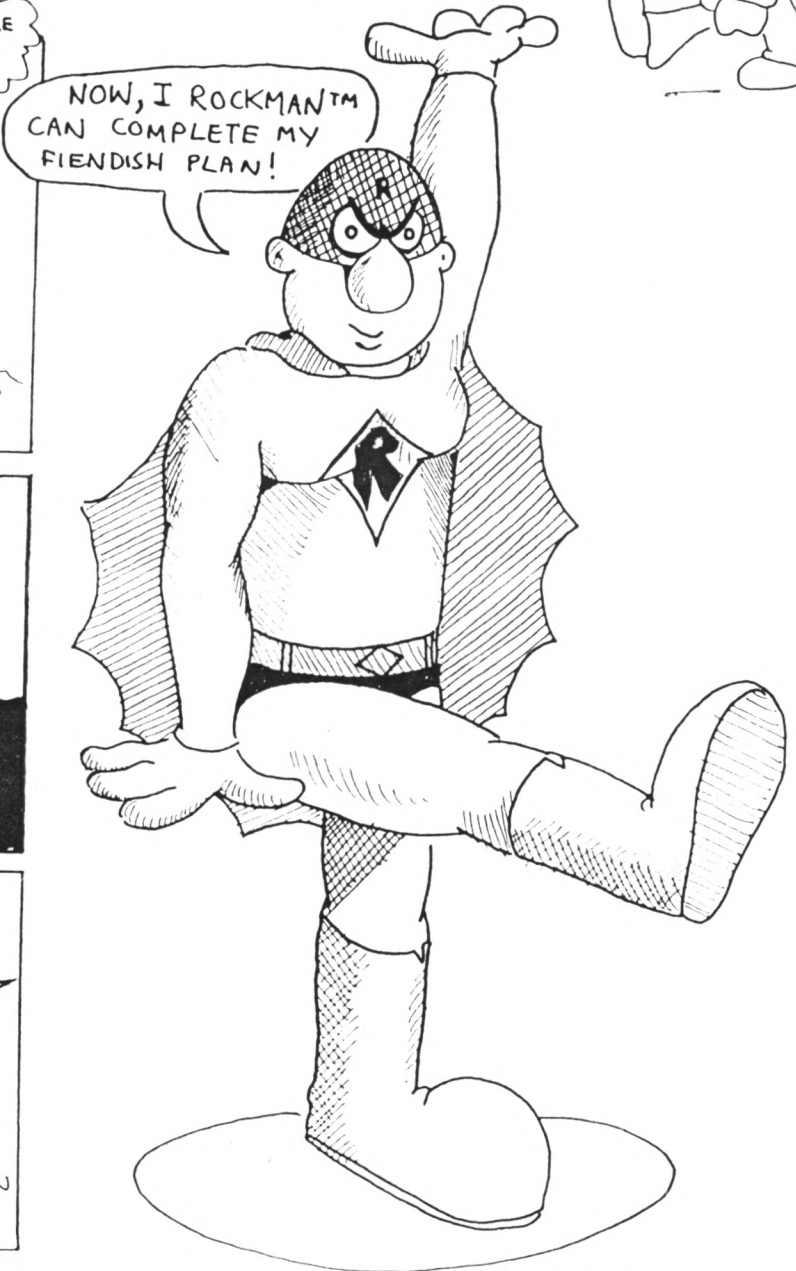
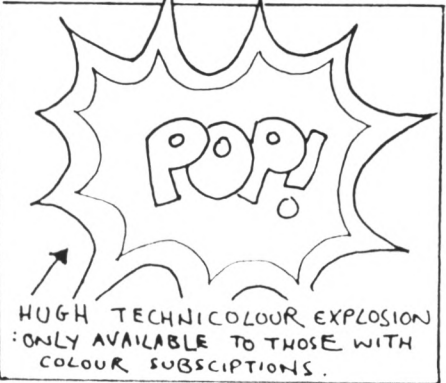
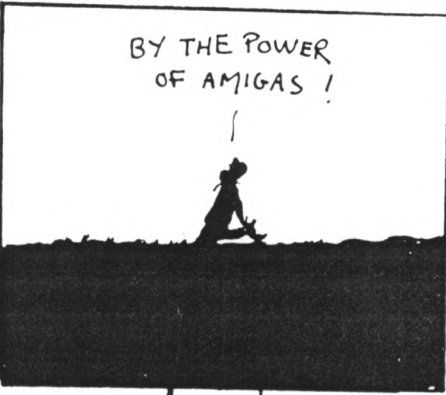
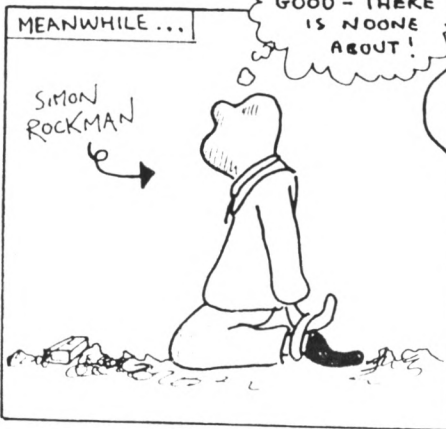
To round everything off we'll look at the programs in the FSW Library which make use of the extra 64K.

SUPERPHIL

SCRIPT : AJ
ART : ANDY



SQUINTY - DIGITISED AND TURNED TO CRIME - HAS TAKEN OVER ACU!



IN SUPERPHIL'S HOUSE....



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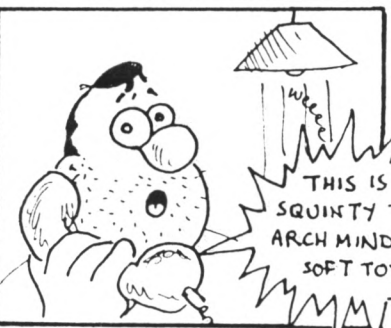
HMM. CAN I BE ON THE FRONT COVER?

YES.

MUST HAVE DOZED OFF... HELLO?..

OK! ITS A DEAL!

HAW! HAW!



THIS IS SQUINTY THE ARCH MINDED SOFT TOY...



IN ACU TOWERS....



HURRAH! IT'S SUPERPHIL! HE'LL SAVE US!



HI GUYS! WHERE'S THE WORD PROCESSOR?

TO BE CONTINUED...

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STEVE WILLIAMS

Andy

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Enhanced version of Maxam for CP/M+. Extras include:
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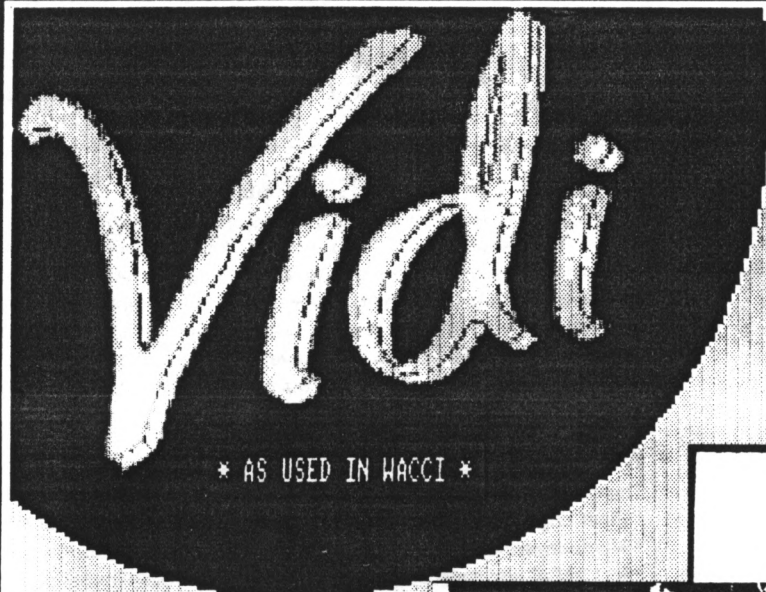
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