

# Frobnicate

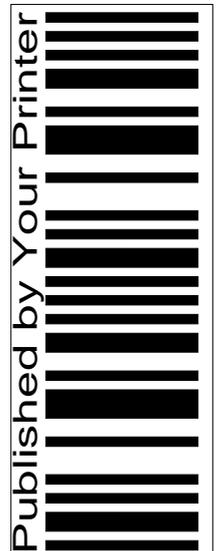
NOVEMBER  
1995

Issue 5. The magazine for Acorn Enthusiasts.



## In this issue:

- ☞ BBSs and pornography
- ☞ On-line games
- ☞ The Invisible SysOp debate
- ☞ Teletext
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# Editor's Page

Well, it's that time of the month again. Time to get another issue of Froblicate ready. :-)

As our regular readers are aware, Froblicate is a *little* bit different to your normal magazine. Froblicate has quite a good track record for reporting interesting and unusual articles with less hype than your regular magazine. For example, in this issue you can read a little bit about that old time argument of BBSs and pornography – something politicians like to dig up when they are bored. Also, tom Lawton speaks out regarding the rumours and innuendo surrounding the various “virtual SysOp” programs.

If you are new to Froblicate. Well... Hello. Welcome. Enjoy. If you do enjoy, there are four other issues you can read.

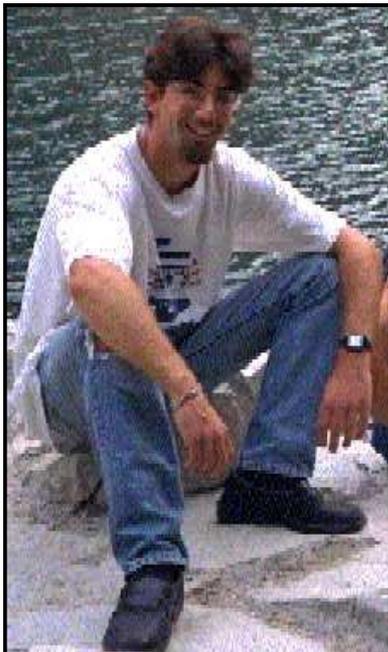
Back to the pornography article – which will no doubt be the cause of this months virtual mailsack. I wish to defend my decision to blank out *good* bits. This is meant to be an example of the sort of things available. It is not meant to be a cheap way to distribute sleaze. I must admit that when discussing the article with somebody, they gave me a picture of a dried-up looking sausage. I shall say no more.

To the left is a piccy of Robin Abecasis, which he bravely released into the public domain after ages of not telling what he looks like.

Shameless plug for his BBS:

Renegades : +44 (0)1224 621956

Running on award-winning ArmBBS.



About the “virtual SysOp” debate. Most, if not all, readers will know what this pertains to. I've edited certain references in the article due to the reactions I received. I'm not going to comment. Firstly, as an editor I should try to be impartial. Secondly - as Martin Luther King said, the old adage of “an eye for an eye” leaves everybody blind. I'm not going to fill Froblicate with personal comments. It's not Frob's scene and you don't want to read character assassinations here. If you do, get a few back issues of the mainstream Archimedes echos.

**Many many thanks to Emlyn Owen  
for the lovely front cover.**

Saw Windows 95 today. My, it looks like a Windows™ emulator running on RiscOS. :-)  
Actually, it's not all that bad - although listening to it when I moved the mouse - you'd wonder if manufacturers would cut the warrantee on the harddisc if you run that software.

Flicking through the Acorn magazines I picked up today, I remember seeing something advising along the lines of “forget Windows95. Wait for Windows97”. Joke right? <groan>

According to David Dade's math (Comms Col., AU Dec. 95) the new 128-bit IP address will give an estimated 3,911,873,538,269,506,102 addresses per square metre. Could I have a few? Free? ;^)

## *And finally...*

There is no Reader's Letters. Nobody wrote anything. Well, on December 16th 1995 I'm going to be 22. At least write and say happy birthday - even if you write after something like:

*“Hey diddle diddle, you're a year older and  
a year closer to DEATH. Have a nice day!”*

Richard Murray 14th November 1995 @ 01:46h

# BBSs and pornography

This topic was started back in 1994 when the Daily Mail newspaper ran an article on BBSs and pornography. In a way typical of the media, it was a bit one-sided and added to the outsiders impression of BBSs.

A BBS is a place where like-minded people can chat about topics of importance to them, transfer public-domain (generic) files and catch up on gossip. However you'd be forgiven for believing the communiqué that places BBSs firmly into the grasp is weirdo teenagers that spread pirate software around with all the zeal of the common cold. A place where hard-core porn is rife and accessible to everybody.

This is simply not true. Well. It is *partly* true. Places like that do exist, but they don't exist for long and most of the BBSs I've been involved with have been good decent BBSs.

This, the topic of pirate software and porn is a place the authorities wish to come down on. ELSPA and FAST have put forth the idea that BBSs should be licensed. Unconfirmed reports place this license fee at about 1000 pounds - which is, quite frankly - ridiculous.

Two theories are in existence:

- 1: Outlaw all BBSs.
- 2: Put a registration or licence on SysOps.

Well...

- 1: Doing so could drive those offending BBSs underground, and the sleaze and pornography will be joined with DIY handgrenade documents.  
It will also kill a major communications system for lonely/lost/bored community-spirited etc etc computer users.  
Some BBSs will defy that law, I for one would. There is NOTHING bad on my BBS. And I'm NOT having some schmuck in Amsterdam mess it up for me.

- 2: A 'suitable' fee, I was informed, would be around £1K.  
My system has already cost me £1500, and will probably cost a further £1K just to bring it up to my specifications...  
Then you expect me to hand over another £1K for the privilege of helping other users? You must be joking.  
What about those that scrape to pay the phone bill?  
And can you imagine the big brother situation?

A solution:

Bold title that, there are no quick'n'easy answers. However, it appears you logged-on to a system (from the photos). Why not go back, look around. Most BBSs advertise similar BBSs somewhere - so get yourselves a list of phone numbers to check.

Well. A year and a half after doing that bit of research, I though I'd go and dig up some porn.

What *exactly* is porn? One person I spoke to was under the impression that two people 'together' is porn. Well, it's even less definite than that.

The Collins GEM English Dictionary says:

**pornography** *n.* writing, films, or pictures designed to be sexually exciting.  
—pornographer *n.* producer of pornography.  
—pornographic *adj.*

So how do you define 'sexually exciting'? I'm sure the editor of PlayBoy would have totally different ideas compared to a nun.

The idea that a few SysOps take is to censor the images so what you see is roughly similar in category to your top-shelf magazines. This is a view that I myself support - especially if the SysOp takes precautions with who exactly is allowed access.

I have rewritten this article several times – both with and without 'examples'. I have decided that such images, even with the rude bits masked, are not in keeping with this article or Froblicate in general. Therefore, no images.

"There are thousands - many based in the US and Holland, and they frequently contain pornographic material."

If a school or parent doesn't notice a long call to America or Holland, something is obviously wrong.

So what about the situation in THIS country, which is where MOST British schoolkids are likely to call?

I hunted down a bunch of BBSs and logged-in. Nothing I found was worse than you'd see inside the pages of a certain newspaper, although I will admit that recently I found an MPEG (animation) of a man and a sheep...

...I was rolling around the floor in fits of laughter. The image was a few centimetres in size, jerkier than a 1920's film and in fuzzy black and white. For all I know, or could see, the sheep may have had a huge grin. :-)

"For those with advanced knowledge and the cunning to by-pass or defeat so-called security checks [...]"

If the kids have enough knowledge to hack such systems, give them a BTec and employ them doing something useful.

Intelligent people bore easily. With the pathetic mess of an education system, who blames intelligent people that go and try hacking and phreaking? It is an interesting and worthy challenge, unlike school. And so what about getting caught? It's very disconcerting for everybody when they realise the kid knows exactly what he's talking about. I've met some kids that know more about telecommunications systems than the employees of it.

"Disturbingly, computer porn disks appear to have become a recognised currency for youngsters."

My own experience points at more fun to be gained from reading a copy of the Jolly Roger Cookbook.

Why?

Text has none of the relative hassles associated with graphics, for example you can fit a lot of text on a disc, but not a lot of graphics and graphics come in many many formats whilst text is text. If your average 12 year old can figure all that out, education is again failing them.

Another thing I recently got hold of was a file describing lots of ways to hack VideoCrypt (the scrambling used by SkyTV).

Now what's any sane kid going to want? A few anarchic files he/she can load up any time on almost any computer.... Or a bunch of 'GIFs' of naked people that don't look like anything. If a kid tries, he (less of she) can get an adolescent to buy them a porn magazine (usually at 200-500% price increase) which contains loads of clear glossy pictures.

Think about it.

And... modify the VideoCrypt details slightly and you can pick up the Adult Channel (which is boring as hell if I may say so myself).

"We could scan a porn video on to the screen to reproduce still images."

Yes, I recall scanning a 4x5 photograph (of myself) into a computer at 400dpi and 24bit (16 million colours).

The compressed TIFF file that resulted looked as life-like as the media make it out to be. However, there was a small incy-wincy problem. The (compressed) file was just under 8Mb in size. Anybody care to put **that** on a disc?

Or maybe kids are swapping SysQuests in the playground.

Yes, I admit that it is totally possible to cut the image down so it will fit on the disc, but you end up with an image that can be compared to a coloured-in fax!

A reasonable size is 2.4Mb upwards for a reasonable picture, or about 800K for a greyscale image (that'd fit on a disc...), but grey isn't sexy.

The images shown in this magazine are much smaller – between 300K and 30K, but the loss in quality is quite apparent.

"We could then animate them [...]"

Assuming you can fit more than one image on a disc, or the changes?

"That's technology for you."

Yes it is. Face it. It isn't going away.

In a world where various officials are mad enough to suggest the idea of parent licensing ("ethnic cleansing" ring a bell?), we certainly are running to double standards here when we decide to lay down the laws on parenting. The beurocrats have gone too far. This territory is not theirs. The technology is theirs, but the territory isn't. Besides, is 'hacker' culture really *that* bad when you consider that the ArpaNet (original name for the Internet) was designed as a government/military communications system in case of war.

"[...] schools should consider banning children from bringing in disks."

Then, a kid could quite easily pass out discs outside the school gates where the school no longer has jurisdiction (but just try telling the teachers that!).

Though if that was the case, that's where it would be done. So what are they trying to avoid? Do they run Nimbus networks? Do they want to prevent the system from being hacked?

All through my life, I have defied rules banning discs from being used on school/college systems.

Why?

System managers are usually a bunch of jerks and don't know what's going on. This has been repeatedly proven to me (I will, however, accept there are good system managers just as there are bad ones).

However when you need to get your lengthy PASCAL assignment in for BTec assessment, and the college:

- a) has insufficient after-school access to the computer system
- b) has a computer system that is grossly mismanaged
- c) has a computer system that is unreliable

You begin to think - sod this. The point behind an assignment is to leave it in your hands. "The computer system was down

sir" is a weak excuse. If you have a computer at home, why not use it.

This will, no doubt, raise the question of unfairness. Life isn't fair. Some people have after school jobs. Some people don't have access to the library. Some people have computers. That's how it is.

"Beaurocrats" and "Politicians" and "legal blokes" have this even more enviable ability to kill everything around them. Your local BBS is one of them.

You see, a BBS isn't just a techie hangout. It's a communications centre. Anybody can join, and anybody can say anything (within reason).

Freedom of speech is what the government doesn't like. It regards you, it's citizens, as illegals; with the attitude that as soon as you get together and talk to each other, you will plot how to overthrow the government and other not-so-nice-actions.

1. They justify this with hours of recordings. When something becomes illegal, it is the hardened law-breakers that will continue with that medium anyway.

2. If the government is so bad it fears being overthrown from all directions, then.....

Are you a sheep? Do you care about what you are told to do? CB radio exists and should be available to all at no cost, except for the equipment.

Cyberspace exists, and should be available to all at little or no cost, except for the equipment.

The opinions given in this article are entirely mine. If you wish to *discuss* something you have read here, please netmail me at : 2:254/86.1 @ Fidonet. If, on the other hand, you just want to insult my opinions – remember the Delete option is only two mouseclicks away.

# VIRUSES

A brief description of virus types.

This FAQ answer was written by Theora:

## Trojan:

Remember the Trojan Horse? Bad guys hid inside it until they could get into the city to do their evil deed. A trojan computer program is similar. It is a program which does an unauthorized function, hidden inside an authorized program. It does something other than what it claims to do, usually something malicious (although not necessarily!),

and it is intended by the author to do whatever it does. If it's not intentional, its called a 'bug' or, in some cases, a feature :) Some virus scanning programs detect some trojans. Some virus scanning programs don't detect any trojans. No virus scanners detect all trojans.

## Virus:

A virus is an independent program which reproduces itself. It may attach to other programs, it may create copies of itself (as in companion viruses). It may damage or corrupt data, change data, or degrade the performance of your system by utilizing resources such as memory or disk space. Some virus scanners detect some viruses. No virus scanners detect all viruses. No virus scanner can protect against "any and all viruses, known and unknown, now and forever more".

## Worm:

Made famous by Robert Morris, Jr. , worms are programs which reproduce by copying themselves over and over, system to system, using up resources and sometimes slowing down the systems. They are self contained and use the networks to spread, in much the same way viruses use files to spread. Some people say the solution to viruses and worms is to just not have any files or networks. They are probably correct. We would include computers.

## Logic Bomb:

Code which will trigger a particular form of 'attack' when a designated condition is met. For instance, a logic bomb could delete all files on Dec. 5th. Unlike a virus, a logic bomb does not make copies of itself.

# On-Line Games

BBSs are fine for downloading files and sending messages around. Looking at the main menu of your favourite BBS - did you know there are many other things you can do on-line?

This is accomplished by the use of something called a door. A door is an add-on that interfaces with the BBS to provide some function or other. Doors can be serious or fun. This article will list a few of the fun doors.

```

Renegade BBS           You've been online for 00:28
01224-621956          You have -- mins left for today!
Online 24 hours a day The time is 22:08:40 [ Registered User ]
Sysop : Robin Abecasis Entertainment

[A] HappyHak (NOT WORKING)  [I] ArmMail (New)
[B] CastAVote              [H] Tetris
[C] Virtual Cafe (NOT WORKING) [L] Breakout
[D] Snake                  [J] The Doobs Menu
[E] BoxedIn                [K] ReadTasks2
[F] Ideal                  [L] Hangman
[G] Trivia                 [P] Ideal Results
[H] Split Screen chat      [N] Node List Browser
[I] ArmTalk (MU chat)     [Q] Graffiti Wall
[J] Natter                 [U] Parlez!
[K] StarDate!             [W] !ONLINE
[L] Jain menu              [X] RealTime Online
                             [Y] Snoop (Online)

Select :
```

This screenshot of Renegades BBS shows that Robin categorises his *fun* doors under the heading "Entertainment". But the popular games are there, along with loads of other things like three different on-line listers. :-)

```

---- RECREATION ARENA ----

Online Games

<01> Box game              <0A> Box game High Scores
< > Trivia game           <0B> Trivia game High Scores
<03> Hangman              <0C> Hangman High Scores
<04> Snake game           <0D> Snake game High Scores
<05> Jumble game         <0E> Jumble game High Scores
<06> ARMsRace             <0F> ARMsRace Highscore
<07> Digibank Fantasy Football League

Online Utilities

<10> Node List Browser

You have 88:32 minutes left [M] Main Menu

Recreation Area Command:
```

This next screen is the Recreation menu on Digital Databank.

So here goes.

## ARMsRace

This game is a SysOp emulation, or Virtual SysOp. It allows the end user to control a BBS (which saves a heap of money). The game is much simpler than the alternative by Mirage Enterprises - but their P SysOp seems tied up with other problems. On the other hand this game benefits from its simplicity.

```

Report for Encina

Sysop:                Richard Murray
Computer setup:       BBC Model B
1200 modems:          1
2400 modems:          0
9600 modems:          0
14k4 modems:          0
28k8 modems:          0
Ports Free:           0

Phone lines:          1
Lines on order:       0

Free users:           146
Paying users:         0
Bank Balance:         £122

Score:                 165

146 : 0 : 91 : £122 > Work
By advertising on other BBSs, you increase your user base.

220 : 0 : 90 : £122 >
```

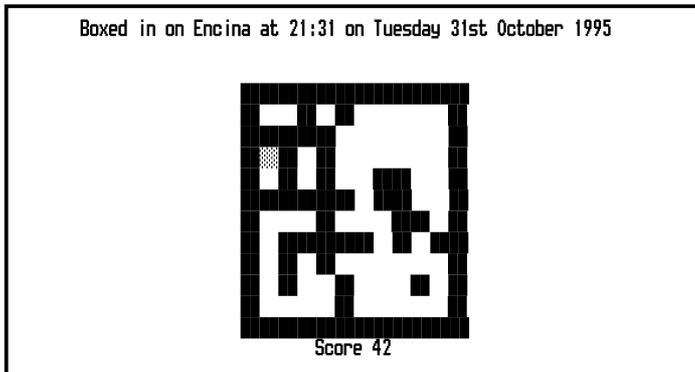
The idea is a little like the WIMP Game. You start off with a crap computer (here it's a Beeb and a 1200bps modem). Your aim is to become a huge BBS with millions of happy users, racks of 28800bps modems all running off of a RiscPC network that would make Acorn jealous. Can *YOU* do it? It's a popular door, so obviously many people are trying to.

Program	ARMsRace
Author	Tom Lawton
Vaddress	(tolawton@arcade.demon.co.uk)
Classification	ShareWare (£5 to register)
Rating	7 <sup>3</sup> / <sub>4</sub> /10

There is an article about the creation of ARMsRace elsewhere in this issue.

## BoxedIn

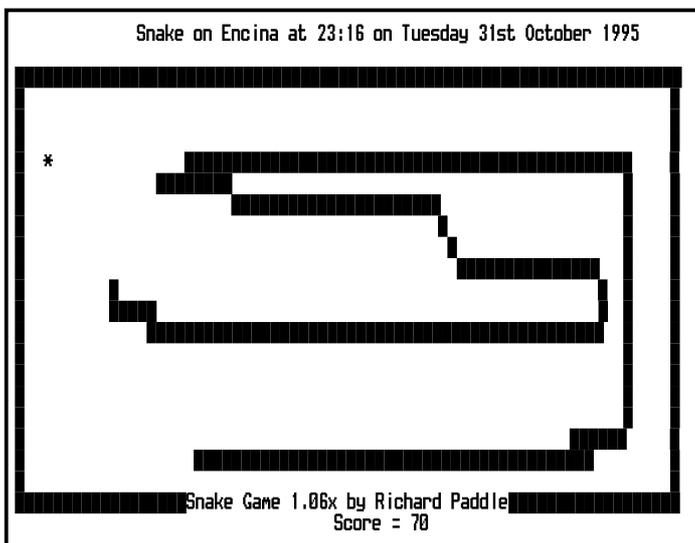
This is the classic door by Richard Paddle. You must move your little square around the 'playing area' without getting yourself boxed in by the computer that tries to block you.



Program            BoxedIn  
 Author            Richard Paddle  
 Vaddress          Richard Paddle@2:254/127.0  
 Classification    FreeWare (available from BBSs)  
 Rating            6/10

## Snake Game

Okay. This is where I start to get biased. I *love* this game and play it almost non-stop on local logon.

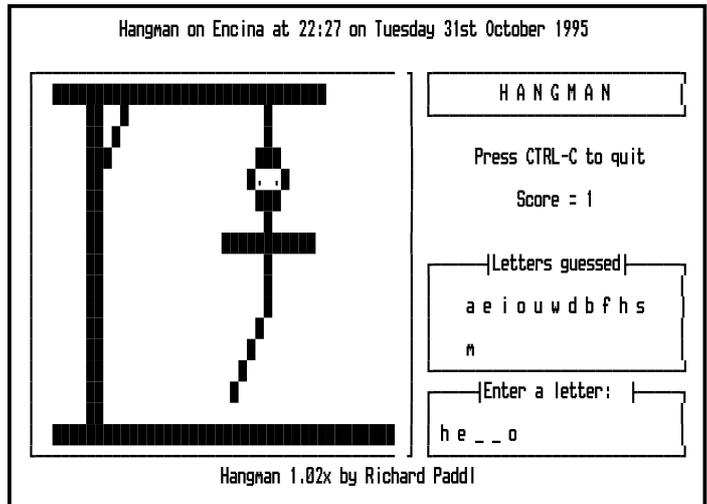


Again, another simple idea. Move your snake around to collect the food (\*) without crashing into the walls or yourself.

Program            Snake Game  
 Author            Richard Paddle  
 Vaddress          Richard Paddle@2:254/127.0  
 Classification    FreeWare (available from BBSs)  
 Rating            11/10 :-) Nah, about 6/10 really.

## HangMan

This is a door adaptation of the popular HangMan game. Adapted by Richard Paddle.



The layout of this door is quite nice. As with all of Richard's doors – it is easily configured.

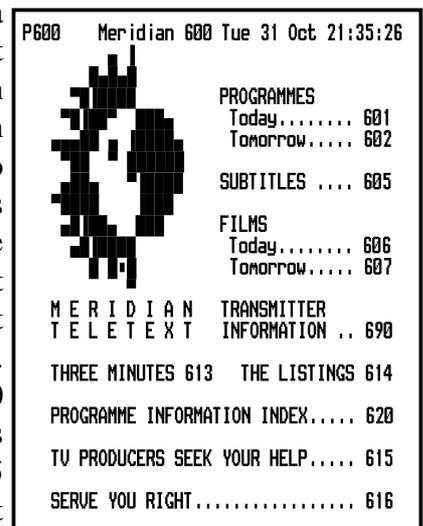
Program            HangMan  
 Author            Richard Paddle  
 Vaddress          Richard Paddle@2:254/127.0  
 Classification    FreeWare (available from BBSs)  
 Rating            7/10

## TeleText

This door, unfortunately, has various legal implications, so finding it on-line won't be easy. To add to that, not many SysOps have teletext receivers.

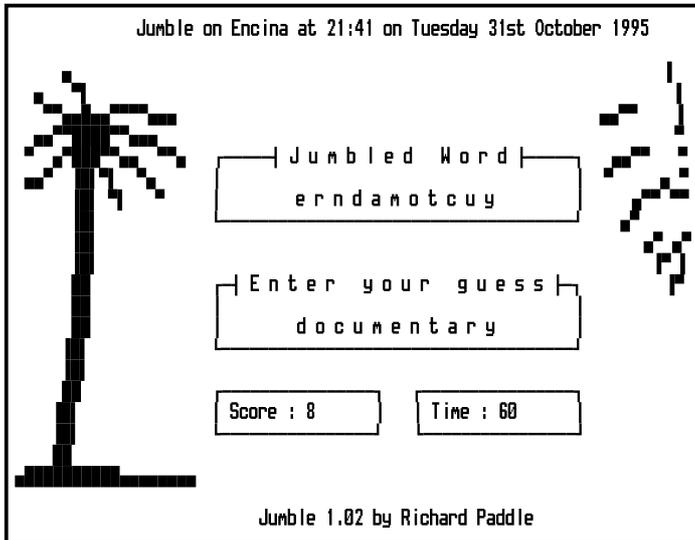
This door isn't a proper release. It started life as an experiment. A "can this be done". Two days later it was done. As you can see from the screen - it hasn't done badly at the conversions. Mapping some 60 SAA5050 graphics characters to 5 ANSI. You also get colour, underlined...

Program            Teletext  
 Author            Richard Murray  
 Vaddress          Richard Murray@2:254/86.1  
 Classification    FreeWare (available from BBSs)  
 Rating            4/10 Slow. Offers no FastText or page caching.



## Jumble

This is another Richard Paddle door. Here you are given a scrambled word, and you have to work out what it is - an anagram.

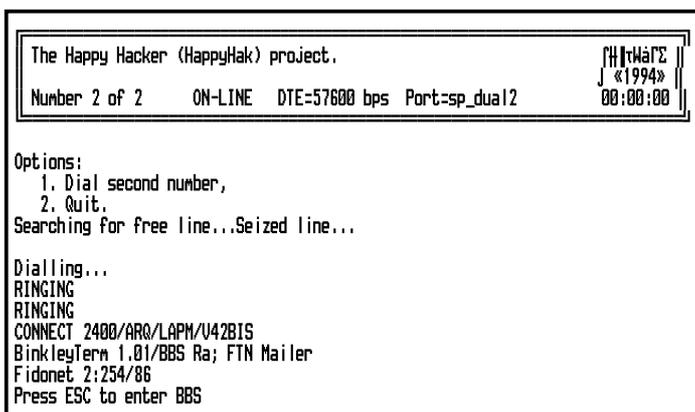


This game is initially quite difficult, but either you get the hang of things, or you dig up Impression Style's spelling checker and use the anagram mode.

Program Jumble Game  
 Author Richard Paddle  
 Vaddress Richard Paddle@2:254/127.0  
 Classification FreeWare (available from BBSs)  
 Rating 7/10

## HappyHak

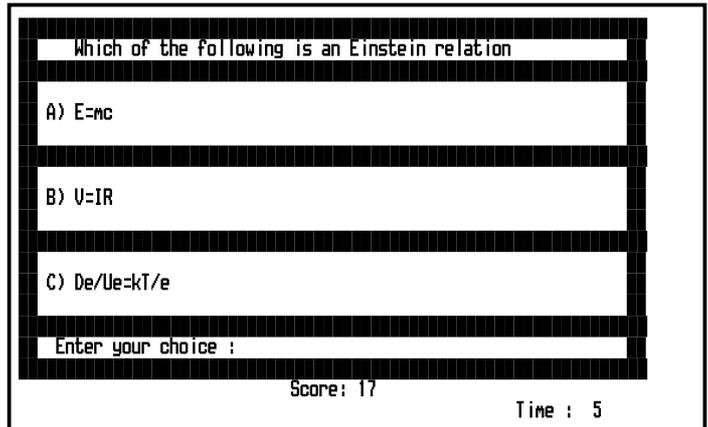
This one thinks it's an anarchic wardialler. It has had taken in many people, including a few SysOps. Late at night this program 'wardials', and records the results for you to try. The best bit, is it doesn't bump your phone bill through the sky. It uses special tones on your modem to access the telephone service.



Program HappyHak  
 Author Richard Murray  
 Vaddress Richard Murray@2:254/86.1  
 Classification FreeWare (available from BBSs)  
 Rating 6/10 Believe this and you'll believe ANYTHING!

## Trivia

This is yet another Richard Paddle creation. The objective of the game is to correctly answer the



questions within the allocated time. There are six topics, and all can be edited by the SysOp.

Program Trivia Game  
 Author Richard Paddle  
 Vaddress Richard Paddle@2:254/127.0  
 Classification FreeWare (available from BBSs)  
 Rating 7/10 Nice presentation.

By the way, the answer to that question is  $De/Ue=kT/e$ . It is *not*  $E=mc$  because  $E$  actually equals  $mc^2$ .  $V=IR$  is an old electronics formula. :-)

## National Voter

This is the main (only?) competition to CastAVote. As far as I'm aware it's only available on Arcade and InterComm.

Screenshots on the next page.

Program National Voter  
 Author Andrew Lobel  
 Vaddress Andrew Lobel@2:254/247.0  
 Classification Free, available from Mirage.  
 Rating 4/10 Looks good from the user's side, but clumsy on the SysOp.

```

                NATIONAL VOTER

Welcome to the National Voter. From here you can take part in national votes,
and even create your own votes for others to vote on nation wide!

                Menu
            Help & Information
                Vote
            Create Vote
            List Votes
            View Results
                Quit

This will display information about this service and how to use it.

Use SPACE or the Arrow Keys to scroll the bar, and RETURN to select.
!NatVote (c) Mirage Enterprises. Call InterComm BBS on 0181 959 8868

```

---

```

                NATIONAL VOTER

Vote 1 / 3   Set by Andrew Label on InterComm BBS
             at 09:50 on Thu the 31 of Aug

             What do you think should happen now?

[0] NatVote and CastAVote should go their own way
[1] CastAVote should join the NatVote database
[2] National Voter should be improved
[3] CastAVote should be improved
[4] Pork should be made kosher...

[Return] Skip Vote
[Ctrl]+[C] Abort Voting

Press the key that corresponds to the choice you want to take.

!NatVote (c) Mirage Enterprises. Call InterComm BBS on 0181 959 8868

```

## Linker

Not really a game as such, but good fun. The point of this simple little program is to grab data from a blockdriver and shove it to a BBS port via the door, and vice versa. This opens up such things as on-line Internet gates, second lines, even linking through to a slave BBS. Using this program I was able to call Arcade via HearSay PipeB linked through ArcBBS. This ate memory like there was no limit to it, but I could still Zmodem at 1300bps, which isn't bad considering how many times those little bits of data bounce around.

```

To quit from this door AT ANY TIME (you have keyboard input) simply hit Alt+R
or ^R more than five times in a row. Linker passes through that and everything
else you type.

Enjoy! ;-)

AT
OK
ATDT 141 0181 655 4412
CONNECT 14400/ARQ/U32/LAPM/U42BIS
Arc-Binkley 2.19/Test22; RISC-05 FTM Mailer

Arcade - The Archimedes BBS FidoNet#2:254/27.0
Press your Escape key *TWICE* to enter Arcade BBS, or wait a few moments!

```

Program Linker  
 Author Richard Murray  
 Vaddress Richard Murray@2:254/86.1  
 Classification FreeWare (available from BBSs)  
 Rating 5/10 Not bad for BASIC.

## CastAVote

The original, the best... It's CastAVote. This allows the user to create votes with up to 8 options per vote. It can handle, theoretically, 220 votes. John Stonier has taken it to 100 votes. CastAVote is well supported by utilities such as VoteEdit. The screen display has remained largely unchanged because I decided simple and uncluttered was better for CastAVote than something such as National Voter's scrollable selection bar. Both methods look okay. It depends on the program.

```

                BudgieSoft's Cast-A-Vote door v2.50f

Welcome, Richard Murray, please select...           There are 121 votes
                                                    in the database

[1] Create a new vote
[2] Cast YOUR vote
[3] List votes in database
[4] View results for questions you've voted for
[5] Quit back to the BBS server...
[H] Press "H" and then the option for help on that option

The most voted question is question #1.
The most active voter is Oliver Clark.

```

Program CastAVote  
 Author Richard Murray  
 Vaddress Richard Murray@2:254/86.1  
 Classification FreeWare (see note)  
 Rating 7/10 It's a year and a half old. :-)  
 Note Version 3 is still in development.  
 Version 2.50 is available currently,  
 and the upgrade is simple.

## Missed out your door?

Then send it to Richard Murray on Digital Databank or Arcade, and I'll look at it. :-)

# The Invisible SysOp debate

This article was submitted to me by Tom Lawton, to give his side of the story regarding the “virtual SysOp” doors, and the rumours regarding such.

I contacted both parties to ask for comments. To *other* party (not Tom) decided upon a threatening manner (ie “I will take this seriously and you will be personally responsible”). I just received a netmail from the *other* party saying, and I quote: “Following your undecisiveness and general rude approach and conversation with me earlier, I have decided that I will not allow you the privilege to hear what I was going to say, from me.”.

Yes, ahem. I had the decency to call the *other* party’s BBS and ask if the *other* party wanted to comment, in order to be as fair as possible. I refused to accept censorship (ie: “you will not print this without the consent of so-and-so”).

I wanted this to be an informative and decisive article to set the record straight. No such joy.

Well, to the *other* party... I will **NOT** give in to threats and warnings. I have thereby changed some of the names in this article.

The *other* party is identified as “the *other* party”. The company in America is identified as “XYZ”. Most readers will be able to insert the correct names.

This article is Tom Lawton’s perception of events, and contains Tom’s own opinions.

The *other party* also made it clear to me that in his opinion, Tom has nothing much to say, and I should not bother publishing this article.

In order to back this up, I have asked Tom if he can send copies of the original documents. However, this is all I’m prepared to say here as I do not wish to influence your thoughts.

## ARMs Race - The behind the scenes view

I was asked to write this article as a behind the scenes look, similar to the ‘Tornado’ article. I’m sorry, I don’t think I’ll manage. The bits I managed to understand looked like a message from the *other* party.

OK. The start. Basically, I had recently joined the Fidonet. There was a mention in one of the echoes about a game called ‘Virtual SysOp’. I tried it out on Trinity BBS and made the mistake of saying it didn’t look very good. Various people insisted I took another look. I did, and found it became addictive after a short while. I immediately joined the campaign to have it converted to the Arc. However, nobody seemed prepared to bother about a conversion, so I offered to write a game based on the same idea. I collected information on door writing and Virtual SysOp, and on the 3rd July, my very first door appeared. Not a very good one, it basically flashed up messages when you pressed keys. I quickly built up a library of procedures, such as PROCprint, PROCinput and PROCget, to make door writing as simple as possible.

I quickly wrote the first bit of the main ‘ARMsRace’ game, which I released at the end of July, before disappearing to Wales for a month. When I returned, I expected to find lovely lists of ideas waiting for me (I’m still waiting - the game only has 11 options when you [W]ork). What I actually found was that on multiline BBSs, the game had an unfortunate tendency to crash horribly, which meant Arcade wasn’t using the game, and others were worried. This problem was something odd to do with the file accesses, and I still don’t understand it. When I totally rewrote the file handling bits, it solved itself “magically” - at least that’s what it looked like. Then again, you can hardly expect me to understand the intricacies of BASIC V, when the most recent manual I have come with our BBC B in 1984 (and it still works perfectly).

Another surprise also awaited me. As I came down for breakfast at about midday (it was the holidays), I noticed a letter on the table. It looked very important, and very official. I was amazed. Had a big company finally taken notice of me? Did they want me to program for them? I read through the letter in a state of amazement.

Mr T Lawton 19 Park View Crescent Roughay Leeds LS8 2ES 1995	Our Ref: A0003  Your Ref:  Date: 28th August
---	--

Dear Sir,

Congratulations on your latest ARCbbs release, "ARMs Race." In the past few months, my A0000 Software Department along with our UNIX administrators in South A00000 have been working on providing services for the A0000 community, to reinforce the market against the likes of other machines/software.

Over the next few weeks, two very large ARCbbs doors are going to be launched into the small A0000 comms community, both of which have been the most complicated and expensive projects which the department has been working on.

If you are interested in us supporting your software locally, and on the internet (including your own email address - direct to your node, an information server, world wide web space and your own usenet support group) then please drop me a call sometime.

In my spare time, as a hobby, I run a Bulletin Board Service in London called I000000000. This can be reached by dialling 0000 000 0000 - where you will find some of our 22 ARCbbs releases and utilities, and where I can sometimes be reached for a chat.

If you call me via voice at the telephone number designated at the bottom, and the lines are busy or closed, please leave a message, and quote the reference number at the top of this page. That will ensure that your message is processed as quickly as possible.

Yours faithfully,

Transcript of first letter, with specifics edited out.

Apparently the signature was digitised.

When I reached the bottom, I became suspicious. I was sure that Chris Jackson had mentioned someone called the *other* party to me, as someone I should definitely not trust. (Please remember that I wasn't on the Fidonet when the *other* party last appeared). I rang Chris to get the details. He confirmed that the *other* party was not to be trusted on any account. However, I'm not one to let myself be prejudiced, so I rang the BBS.

When I logged on, the *other* party pulled me in for a chat. We nattered ( :) ) for a short time, before

he came out with the question. Could he have the source code? I politely replied that I wasn't intending to give it away, and I wanted to work myself. I had heard of his ripping off other people's programs, and I didn't want to become involved myself. However, the *other* party had other ideas. He demanded that I withdrew the program and made a complete rewrite. I asked why. He said that he hadn't heard much but... and launched into a long list of things that he wanted me to do. I pointed out that if he registered the program, his ideas would get a lot further. He refused, saying he was within the two week limit, and was intending to delete it after one week and six days. I continued to be polite the whole time (difficult, but I enjoy my reputation for staying calm under all circumstances) and he eventually offered me a trip down to London to look round <well-known satellite broadcaster's> studios, which apparently his company uses to make TV programmes for <well-known satellite channel> (is the offer still open? I'm quite happy to come down and meet you - I harbour no grudges. Despite what everyone else may think, I know that you're telling the truth. It wasn't you, it was your company.)

I later heard from a friend of mine, Rollie Wedge (Hi Beavis), that the *other* party had written his own version of Virtual SysOp, called 'The P0000000 SysOp', which from the outside appeared to be an exact copy of the original, except with many of the features disabled or removed. According to the *other* party, this was a conversion written by the original VS team, which he was debugging for them. He also made suggestions that ARMsRace wasn't exactly legal, and that his company were intending to sue.

I logged on to the *other* party's BBS, and found the *other* party. He refused to tell me why his company were wanting to sue me, and just told me to watch out for a letter from Toby Peanut <name edited!> in the near future. Meanwhile, he suggested, as a friend, that I considered withdrawing ARMsRace before the matter became too serious. I equally kindly replied that I had no intention of withdrawing anything until I found out what was going on. How did his company plan to sue me? (They didn't) Was the VS team really writing for the Arc? (No) What were the legal problems with my game? (None) A letter soon arrived.

Mr T Lawton	Our Ref: A0010
19 Park View Crescent	
Rounghay	Your Ref:
Leeds	
LS8 2ES	Date: 4th September 1995

Dear Mr Lawton,

I must apologise for not contacting you sooner, but I have had issues of more importance to deal with.

I regret to inform you that the "Vuuuuuu Sysop" package (known as the "Vuuuuuu System Operator Suuuuuuuu") for the Acorn series of computers is complete, and has been since the end of July. It is currently awaiting a certificate of release from the Board of Directors.

The team of keen programmers behind this new package have expressed clearly that they will not tolerate a second alternative to their package (namely yours), as eventually, for you to keep up, you would need to adopt the features from "Vuuuuuu Sysop" which your package is missing. As the Auuuu Software Department has the right to execute any of their rights which they have reserved, the only way to resolve this is to draw up a Policy and a Contract for both houses to abide by, clearly stating who can do what. This is rather costly to do, as it will require extensive research beyond those of any member in this Department, and of course, your pocket would have to fit half the bill - according to budget regulations.

You are hereby officially requested to stop further research, development and distribution of "Arms Race." This is to take effect from the day of receipt of this letter.

On the other hand, you have committed an offence by distributing - without a licence or agreement to do so, the binary licences of a commercial company and with intentions to charge. The officer in charge has been briefly notified, and a case file has been compiled along with a copy of your program archive. Should you refuse to withdraw "Arms Race," then you'll have both compainies to contend with. I trust you will make the right decision.

Yours faithfully,

Transcript of second letter, again with specifics edited out. Read it twice...!

This time there was no signature.

There was something suspicious about this letter. Was it the bad spelling? (The *other* party says this is his personal 'jargon') Was it the fact that my address had been spelt wrongly again? (I live in RounDhay) Was it that the style of the letter was almost exactly the same? Or was it that the crimes I was accused of were impossible?

This letter may require a small amount of translation. It basically says that the "team" (The *other* party and errr... The *other* party?) of programmers who wrote "Puuuuuu Suuuu" are happy with my program (which came out before the *other* party's BTW), and they want me to withdraw my program or give them a large amount of money. Alternatively, I can carry on with ARMsRace, and

be sued by two companies (where's the third one come from?). The lengthy statement at the end took myself, a dictionary, and my IS teacher a while to translate. It basically accuses me of taking the source code for Virtual SysOp (I'd like to know where I got that from), copying it EXACTLY into ARM code (or compiling the C or whatever it's written in), and distributing the result. Now either I've been doing some funny things in my sleep or the *other* party has been fibbing. I know which one I believe. Research on the copyright laws of both Britain and America produced information which, to me, made ARMsRace perfectly legal (There is no protection for ideas, concepts, names, titles or general themes) and Puuuuu Suuuu illegal. I ignored the letter.

I managed to get hold of a copy of Puuuuu Suuuu, and the source code (Watch out whoever made that, the *other* party is after you), from which I produced a spool of a game session (I had asked the *other* party, but every time I tried to access the 'Games' menu, he threw me off or pressed buttons to select the wrong menu items). This spool was duly sent on its way to America, along with a text file explaining the situation. Soon later, the *other* party rang me up. He wanted me to give a definite answer as to the future of ARMsRace. I repeatedly asked him if he intended to give me a straight answer as to the crimes he was accusing me of. Neither of us yielded. He then mentioned that something was 'for the benefit of the tape'. This launched me into my preaching that he was committing a crime by recording the call without my knowledge. I spent the rest of the conversation calmly repeating my two points, ignoring anything he said. He became angrier and angrier and eventually slammed the phone down.

I heard very little from the *other* party after that. Occasional attempts to call his BBS, asking for source codes or spools (for XYZ), resulted in him locking me out, much to my disappointment. Little happened for a while afterwards, apart from discussions in various echoes about what was going on. Improvements to ARMsRace were made, including the new file format. I occasionally sent messages to the *other* party, but failed to get a reply. Eventually, he sent me a message asking about a member of the XYZ group. I tried to reply, but again he was inaccessible. I got fed up and logged onto the *other* party's BBS, setting up a new account under the name 'Thomas Lawton' (my earlier one used

'Tom'). When I met him, he asked about XYZ, and I refused to give a straight answer (getting back at him), and he eventually got stropy with me and kicked me off again, saying that if I ever logged on again, I'd be sorry. Don't worry, I wouldn't touch your BBS with the broken end of a diseased bargepole.

That pretty much brings me up to the present. the *other* party is back on the FidoNet, so you can ask him what's going on. I have heard rumours that the XYZ group are ringing round trying to find out about Pxxxxxx Sxxxx, and are suing the party's parents. However, these are rumours and I don't know. What I do know is that before the show, The *other* party rang up and demanded to speak to me about "AMX" or something like that. My mother has a poor memory for names. Could that be XYZ? Are they after him? I can only say that in my opinion, it would seem that he got what he deserved.

The future? I can't say anything about the *other* party and XYZ other than it seems the *other* party is packing up and leaving. ARMsRace, I do know more about. Development continues, when I have time. The latest addition is the 'programming' option. I will be adding more. However, I'm getting short of ideas, so anyone with any, however strange, should send them to me (2:250/372.2 or on Arcade, Northern ARM). With any luck, I should be starting my own BBS sooner or later (probably later), which will give me a lot of ideas. I'm intending to move slightly away from the SysOp part, to make the game more varied. I don't want it to be a conversion of Virtual SysOp, but a separate idea in its own right.

Remember that this story is still continuing. ARMsRace is always under development, and we still aren't sure what's going on between the *other* party and XYZ (go on, tell us). Watch this space for more details.

### STOP PRESS

I literally just finished writing this, when the *other* party phoned. He told me various things. "Toby Peanut" has been sacked ("Toby" wrote the 2nd letter). The XYZ group have been in touch, in the form of Darren X, who cannot be found, as it seems

the *other* party's switchboard cannot handle international calls. XYZ are not suing, but as the *other* party is leaving, he needs to sort the matter out quickly. Nobody is suing me (God, I was sooooo worried when the *other* party told me that three companies were going to sue :-> - he was "gassing" - his own words - when he said that). And to squash any rumours, the girl he was with at the show was his PA [Ed: personal assistant?]. Please bear in mind that all these details are straight from the *other* party. I don't know if they're correct or not.

*Tom Lawton*

Thanks Tom...

The opinions in this article reflect those of the author, and not necessarily those of Froblicate.

Froblicate declines to make any opinion. It'd be stating the obvious.

For a nice friendly BBS,  
why not call:  
**The Northern Arm BBS**  
on +44 (0)1274 530831

675Mb of files and CD-ROMs on-line.  
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Running on the award-winning ArmBBS server software.

## WEREWOLF SOFTWARE

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Tel: 0181-289 6003 (7am-7pm) • Tel/Fax: 0181-464 7510  
Tel: 0181-467 1138 • Support BBS: 0181-289 6003 (7pm-7am)

# Buying a 2nd user system

Unlike cars or shoes or practically everything else which is “second hand”, a computer is “second user”.

Buying already used systems often won't put you in the forefront of technology, but can represent a great bargain. However there is also the obvious chance of getting a huge white elephant.

Buying a second hand system isn't something you should take lightly. With new stock, you can always go and moan at the dealer when something goes wrong or you get stuck. Buying second hand, the vendor (seller) may be willing to help, but all too often you are on your own.

In particular, you should be aware of the following things:

- \* What are your computing needs? How are they likely to develop? That old A310 with ARM3 looks stunning, but with 2Mb of RAM and no harddisc, it'll be totally useless for all but the simplest of raytracings.
- \* How do your interests need to be supported by external add-ons? If you get into the line of writing your very own Froblicate lookalike then some form of scanner or digitiser is a must. Also a printer, preferably a LaserJet. Can your hardware cope? Not to mention you'll need a DTP package.
- \* The current price for the equipment. Like with many electrical goods, you should expect to pay less than half the retail price. Less so if the machine is physically obsolete. A good place to look is in the computer press. Look to see how much trade-in is offered for the computer you are interested in, then double it. Then look through the second-hand adverts for a similar system. An average of all of these should give a rough rule-of-thumb price.

Be aware of the *hidden* costs, such as going to the vendors house to check the computer. Often the

vendor will have some software and/or hardware that is not mentioned, and s/he may try to sell these to you when you turn up. Drive a hard bargain, especially if the vendor is buying an incompatible system and won't be able to use the software.

- Tip : Offering cash is more dangerous than plastic as cash has no built-in guarantees. However it could knock £££s off of the price of the equipment. If you take cash, take a friend or don't let on you have the cash on you, especially if it's a large amount.

When you go eyeball the computer, take along a checklist and, if you can manage it, a techie friend. Don't be hesitant about asking for a full test of the equipment.

Remember your hardware. That old A310 can take RiscOS3 (with fiddling). It can take 4 podules, it can take a harddisc and it has a serial port. However that newer A3010, whilst being faster than the A310, has lousy upgrade potential. Micropodule connector (no podule backplane), and an all-in-one processor chip that contains the existing MEMC, ARM CPU and VIDC in one lump of silicon.

Always try to get the literature enclosed with the system. Computers are supplied with a manual. You'll need that lump of paperwork from time to time, especially when something goes wrong.

Ensure you receive the necessary wires... The mains lead, the mouse, monitor lead etc. These seem small items, but can cost quite a lot of money to replace.

Give the computer a careful eyeball when you see it. As the user to switch the machine on about an hour or so before you are due to arrive. Then you can see any faults likely to show up when the machine is operational. Don't forget to feel the casing to make sure it is as warm as you would expect. Run a few programs. Try simple things like displaying a testcard (RiscOS3 comes with a little application

that will do this. Try changing screen MODE. Try a reboot or two.

Then look at the computer in more detail. Is the computer casing overly scratched or dented? Are there marks where something like a screwdriver has been used to prise the case open. Are any screws burred? Are any screws missing? Is the fan from the power supply clogged with dust? Are the air vents dusty? On the other hand, if it looks totally clean, ask to look inside. If the circuitry is totally clean, be suspicious of the cleaning method used. I've known people to clean the dust from their motherboards with a paintbrush. Erk!

A good way to begin the proceedings is to ask why the computer is being sold - and be willing to investigate more if you are not entirely convinced.

You should at least see the computer:

- \* Working in it's normal environment. This is the DeskTop on Acorn computers.
  - \* Change to two opposite screen MODEs, low res and high res.
  - \* Display a full white screen. Look for impurities in the screen. Display full red, full green and full blue screens. On an Acorn, in BASIC type: "MODE 12". Then type "COLOUR x : CLS" where 'x' is 129 for a red screen, 130 for green, 132 for blue and 135 for white.
  - \* See the parallel port in operation if possible.
  - \* See the serial port in operation if possible.
- A friend of mine bought a 2nd hand PC and took a printer and a modem with him, and an assortment of leads / software.
- \* Test the disc drives.

You may think this is excessive, but compare with a 2nd hand car. You'd want to know the lights work, wipers, engine, clutch, brakes, starter and so on. Why should a computer be any different.

Preferably when the vendor isn't looking, give the computer a gentle bash on the side (not when loading or saving to harddisc). Then give the monitor a gentle bash. Get suspicious if the display flickers or, worse, if the machine crashes. Make sure you perform at least one cold-boot so the computer goes through it's self test. Go into the command line

and press each key, especially the commonly used keys such as 'Z', 'X', '“', '”' and Return.

Finally, get the vendor to make you a cup of tea whilst you sit down with the machine and either write a short program, or write your mother a letter in a word processor. Do you like the keyboard? Does the monitor bother your eyes? This may become *your* system and you may be spending long amounts of time sitting by it. You don't want a bad keyboard or a monitor that'll paralyse your eye muscles.

As long as the motherboard functions, the system will last for ages. Other things come and go (harddiscs, floppies, keyboards), but the solid-state bits should last.

Private vendors seem optimistic about the price of their system. If you do not succeed in knocking down the price, don't be afraid to go away and come back after the vendor has tried the price on a few others. The biggest warning anybody can give is the "I want this computer" syndrome. Your eyes dilate and you'll start drooling and want to get this computer at all costs because it represents a huge leap forth from your clanky old heap. Well, let me tell you that an A5000 is an A5000 and several thousand such machines exist. If *anything* is wrong with the computer - make your excuses and leave. You'll feel depressed and have a caffiene dependency for a few days, but you'll get over it and you'll thank me for it. There are other people selling other computers. Only buy systems you don't like if you've won the lottery and can't think of anything better to do with your millions [you could post me a few hundred! :-) ].

Above all, remember it's your money. It may be your system. Also remember that you have no obligation with the vendor. You turned up on time. If you don't like the price or the system - say so and leave.

To anybody thinking of buying 2nd hand - good luck, there are many good deals out there.

# Teletext

So where can you obtain masses of varied and interesting information... For free? Some people might suggest the Internet. Good, but not what I had in mind.

What I was thinking was something carried in your spare VBI lines. Not with me? Tweak the horizontal hold on your TV so you can see above the picture. You should see lots of flickering dots. This is translated by special hardware into something known as teletext. Many broadcasters provide this facility.

For your computer, you'll first need some form of



decoder. This is my decoder, made by Ground Control. Sadly Ground Control don't exist anymore. Happily, Paul Skirrow of Octopus Systems will sell you one

of these units, and his software for £169 (inc. VAT). The device includes a UHF receiver with teletext decoder circuitry. As an added bonus the unit has audio and video outputs.

The system transmits digitally encoded information in the vertical blanking interval (VBI) of a television signal. A display format of 40 columns and 24 lines has been adopted. This seems small compared to computer displays, but remember people sit further away from their television and also many TVs are not 'good' enough to correctly resolve high-resolution computer displays. Therefore 80x24 is ideal. The system is similar in appearance to viewdata, and in fact uses the same codes as the SAA5050 chip in a BBC micro (MODE 7).

The pages are transmitted sequentially, so there is a small delay between requesting a page and seeing it.

So what's available?

Many things: news, TV guide, reviews, teen



magazines, womens articles and stars. You can even find the shipping forecast and up-to-date airport information. For the hearing impaired,

many programs now carry subtitles.

Teletext is also a useful learning aid. Armed with a satellite receiver and the teletext unit, you can tune in to foriegn channels and read the text in German, French or Swedish.



Paul Skirrow can be contacted:

Octopus Systems,  
9 Randwell Close,  
IPSWICH IP4 5ES  
England  
+44 (0)1473 728943

email: [pskirrow@octopus.thenet.co.uk](mailto:pskirrow@octopus.thenet.co.uk)  
html: <http://www.thenet.co.uk/~octopus/>

Please note, reception of SECAM signals on PAL equipment is a pain and for techies only!!!

# Qu'est-ce que c'est, ça?

Well... I got a good feeling today. I bought my regular dose of Acorn User (as per doctors order :-)) and saw Mike Cook has done an article on something a little more techie... Principally the I<sup>2</sup>C system. Well, in a future Froblicate I hope to expand on that theme with some weirder equipment. I'm currently working on a tilt-pan gizmo for my video camera. I've got a stepper motor stuffed in the back of the computer. The hard part is getting it to be fast enough. Maybe I need a dedicated processor? Life in that old Beeb yet!

Looking also in Acorn User, I see there is more on Tornado. I've asked Niall if I can help - and I'm willing to stick the system on my computer for testing and/or reviewing. I wait as eagerly as you lot do.

Also last issue I wrote a bit about *Acorn needs help and it needs it now*. From what I've heard (COMP.SYS.ACORN), Acorn have laid off some of their workforce (somebody said 1/3!). Not quite what I had in mind. Many people that went to the Acorn Show seemed unimpressed - compared to previous shows. Acorn has a new head henchman. The result? Shares took a jump to 145 pence. Right now, Teletext reports Acorn Computers shares at 140. This could be the start of something? Let's hope so.

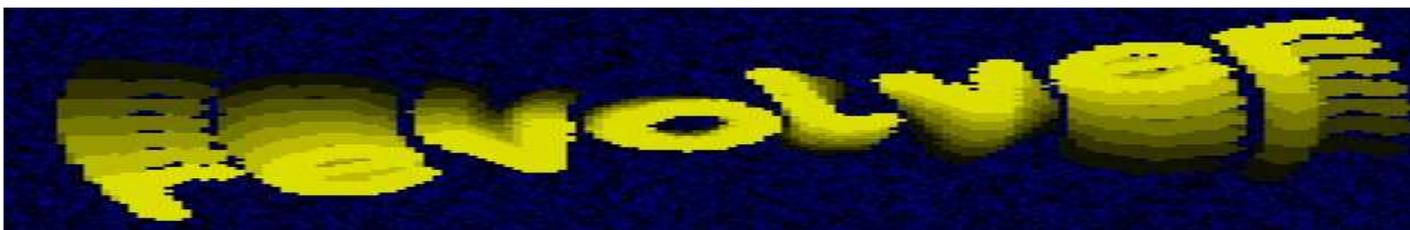
Incidentally, most shares appear to be measured in pence. Then along rolls BT at £66. Erk! That's gotta be a reception error - surely?

## A little something I dug up from Fidonet...

```
class upper {
private:
    void nothing();
public:
    char* sex_life
    char& tabloids=sex_life
    friend operator(bribe)(void british_justice)
}

upper::bribe(void british_justice)
{
    account.pay(75000000)
}
```

This snippet by Charlie Bayliss. He told me he plans to write an entire social satire in C++. Can't wait! :-)



I slammed my Archimedes World MEGA DISKASAURUS (?) into :0 and said something like "Okay, baby - gimme your best", in a rather crap impression of Arnie.

Program  
Author  
Price  
Address  
Rating

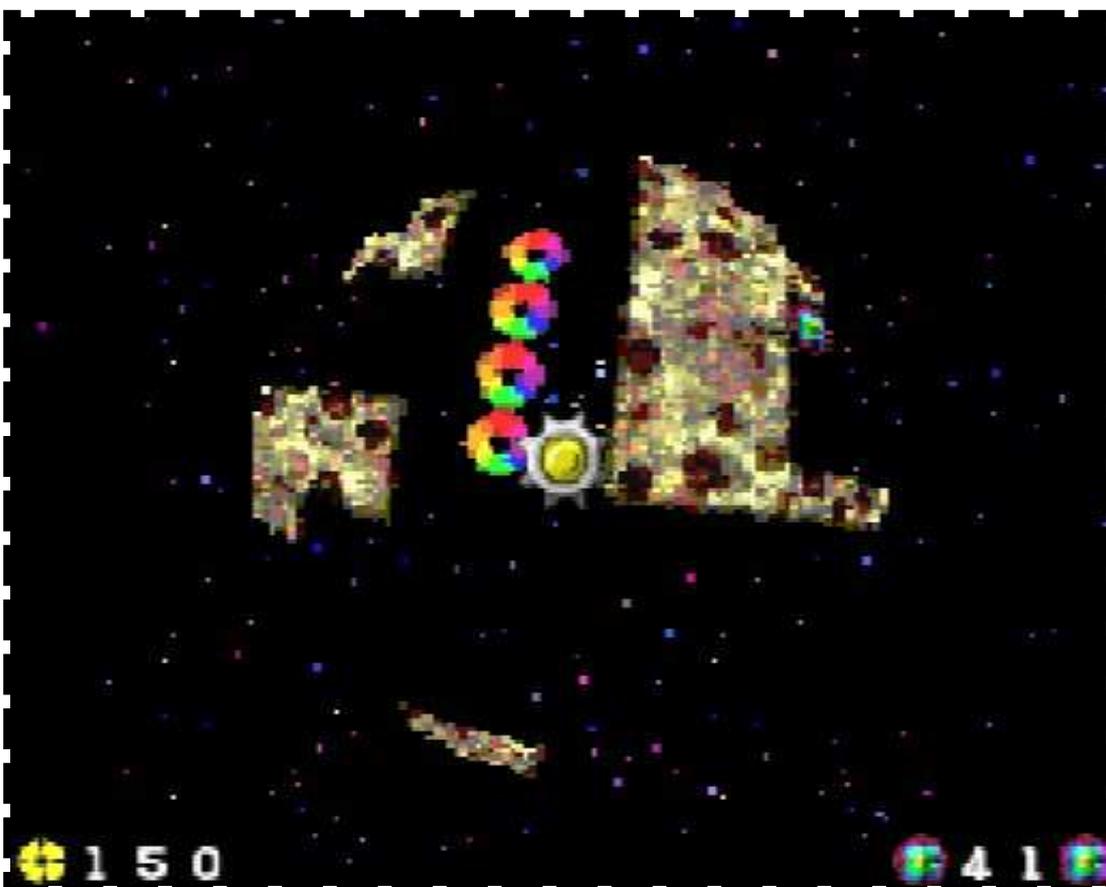
Revolver  
Psycore  
£14.95 inc.  
Psycore, PO BOX 3837, London NW3 1JF  
9/10 I'm getting this game!

What I got certainly took my breath away. It's this basic Repton style of game that has been, erm, like wrapped around a sphere. You have gravity. You have little grey things that reverse your gravity. You must collect all the pills and head for home.

This must be the world's simplest game - only two buttons to remember and it's oh so easy. Hehe... Poor you. It's quite difficult, but soon you get the hang of it.

Look at the scene on the right. The sphere moves with stunning fluidity. If that's not enough, the stars wobble and twinkle in the background.

Information from within program. Assumed to be correct.



## Would YOU like to write for Froblicate?

Froblicate is looking for interesting articles, preferably Acorn related (I suppose meaning "Acorn" a few times is acceptable :-)).

Can YOU help? If so please submit your ideas to Richard Murray on Arcade (#427) or Digital Databank (#765) BBSs.

Text only? You can netmail it to me at "Richard Murray" 2:254/86.1

Preferably ASCII and Sprites/DrawFiles but I can convert from: Impression2/Junior/Style. ArtWorks. JPEG/GIF/TIFF/PCX/BMP/Clear & IFF. WordZ. EdWord. 1stWord+. I'm working on programs to convert PC formats to ASCII.

# The Big BBS list.

So, I hear you say. What the heck is Digital Databank? Well... It's a BBS. Here is a list of my usual haunts (except ArcBase - bit expensive Sweden). They are in alphabetical order. Get your modem and call a few.

**BOLD** listings denote 'mainstream' BBSs. Other BBSs are smaller systems that may specialise in certain things.

For a complete list, refer to the file supplied on disc 2 of this months Acorn User.

Laid out like:

<BBS NAME> [Location] <On-line times>  
 <Phone number> <key> / <optional 2nd number> <key for 2nd number>  
 <SysOp's name(s)> <BBS server used>

Key : <sup>1</sup> - 14400bps/HST  
<sup>2</sup> - 28800bps/V.Everything  
<sup>3</sup> - 2400bps/something-equally-dismal

**ARCADE** [London 24hrs]  
 +44 (0)181 654 2212 <sup>2</sup> / +44 (0)181 655 4412 <sup>2</sup>  
 David Dade / Dave Coleman (ArcBBS)

ArcBase [Stockholm (Sweden) 24hrs]  
 +46 8 321702 <sup>1</sup>  
 Hans Ringdahl (ArcBBS)

**ArcTic** [London 24hrs]  
 +44 (0)181 903 1309 <sup>2</sup> / +44 (0)181 903 1308 <sup>1</sup>  
 Steve Pursey (ArcBBS)

**Digital Databank** [Welwyn Garden City 24hrs]  
 +44 (0)1707 323531 <sup>1</sup> / +44 (0)1707 329306 <sup>2</sup>  
 John Stonier (ArcBBS)

**Northern ARM BBS** [Bradford, Yorks 24hrs]  
 +44 (0)1274 530831 <sup>1</sup>  
 Chris Jackson

OuijaBoard [Devon 22:00h-08:00h]  
 +44 (0)1363 82303 <sup>1</sup>  
 Alex Howarth (NewsFlash)

**Plasma Sphere** [Cheshire 24hrs]  
 +44 (0)1925 757920 <sup>2</sup> / +44 (0)1925 757921 <sup>2</sup>  
 Keith Hall (ArmBBS)

**Renegade BBS** [Aberdeen (Scotland) 24hrs]  
 +44 (0)1224 621956 <sup>2</sup>  
 Robin Abecasis (ArmBBS)

SkyLine Online [London 24hrs]  
 +44 (0)181 255 6912 <sup>3</sup> (getting a faster modem!)  
 Robbie Record (ArmBBS)

Werewolf BBS [London 20:00h - 23:00h]  
 +44 (0)181 289 6003 <sup>1</sup>  
 Dane Koekoek (ArmBBS)

The World Of Cryton [Wells (Somerset) 24hrs]  
 +44 (0)1749 670030 <sup>2</sup> / +44 (0)1749 679794 <sup>3</sup>  
 Hugo Fiennes (ArcBBS)

You can fairly safely leave "Richard Murray" messages on the **BOLD** BBSs (pref: Arcade/Digibank). Messages left for me on the other listed BBSs may take a while to get picked up.

This list is correct to the best of my knowledge. If anything is wrong - tell me!

It is with regret that a BBS had to be removed from this list at the last moment. The *Rich In Paradise* BBS is now terminated, following a recent unrecoverable file/messagebase crash. Richard is closing down and selling off his hardware.

Richard, if you're reading this. Thank you. It was your Snake Door that got me into writing doors in the first place. Good luck in your new pursuits. :-)