

The magazine for members of

# *The ARM Club*

**The ARM games scene  
present and promised**

**Finding the key facts with  
qualitative data analysis**

**DrawWorks Millennium  
on CD-ROM**

**Creative Digital Imaging**



**Issue 33 — Spring 2000**

---

## Cheer For 2000

---

Everybody is fed up with the *M* word now so I will use it very sparingly, particularly as the pedants among us point out that the true century and Millennium are still a year away! Whether or not you accept this, it *is* the start of a hundred years beginning with 20 and, with the new year traditionally the time to look forward, there is now even more reason to look optimistically ahead.

Last year was a time of great upheaval for Acorn users but, after a succession of losses, beginning with the company itself, there was the start of what could be the great revival when RISC OS 4 appeared on the scene.

Now, the year 2000 is bringing new ARM-powered computers, an advanced motherboard to give new life to existing machines and some blockbuster software. There are even two new magazines being born as one old favourite dies. Both of these will be on CD-ROM and are due out at about the time you receive this issue of Eureka and we are happy to

welcome both (*with some brief details, just received, on page 8*).

One of the magazines is the long-awaited quarterly promised by the RISC OS Foundation and it is a sign of how organisations, who in other fields could be seen as rivals, work together in the RISC OS community that the first issue includes an article on The ARM Club. Eureka, in turn, is inviting the Editors of both new magazines to contribute articles on their plans.

Happily, there is now less reason to leave the RISC OS scene for the aggravations of the Windows world and some who have done so are thankfully coming back.

So, on behalf of The ARM Club Committee, we wish all our fellow members a happy new Millennium (whenever you consider it starts), even if you are not planning to stay for all of it.

**Peter Jennings**

*All opinions expressed in Eureka are those of the authors and not necessarily those of the Club or its Committee members and officers.*

# CONTENTS

## **4 Around the Shows**

Two successful events for the Club at RISC OS '99 at Epsom and the Midlands Show in Birmingham.

## **8 Two new magazines**

Some late news on the two new CD-ROM based magazines.

## **9 Number Works**

A fun factory of machines which turn sums into play.

## **16 Qualitative Data Analysis**

Doing research and want to sort out the key facts in a mass of data? Here's a program that could find them for you.

## **20 The Archive CD-ROM**

Articles, information and programs from the popular subscription magazine and its discs make interesting reading and a valuable reference.

## **22 Your questions answered**

Our Technical Help team advise on scanners and sources for printer ink cartridges.

## **24 Site seeing**

Take a look at Deja.com. You may not have seen it all before.

## **27 Psions and similar**

Some of the new Palmtops coming onto the market and the Web site for finding the programs to use with them.

## **30 Feedback: Science Fair revisited**

Does the view from the classroom match how the reviewer saw it?

## **32 Getting on the Internet: Part 2**

The conclusion of our two-part series reveals how to register and what to expect from various free Service Providers.

## **40 English Keywords**

Words and pictures to explore the language associated with English grammar, punctuation and phonics.

## **44 Beginner's guide to TeX: Part 3**

Using LaTeX commands and the predefined document styles.

## **51 Acorn SouthWest Show**

Full details of the North Somerset event on 19th February.

## **52 The ARM Club Crossword 3**

The latest of our popular brain teasers.

## **53 DrawWorks Millennium**

A collection of graphics and print design packages on CD-ROM at a special price for Club members.

## **58 ARM Arena**

A look at the latest games and some new ones on the way in the first of a new regular column.

## **70 Creative Digital Imaging**

A second tutorial CD-ROM from David Cowell leads on from his *Introduction to Digital Art*.

## **74 Gill's Journal: Recognition at last**

But are spods really dull and how will they cope with the new century?

## **79 Crossword Solution**

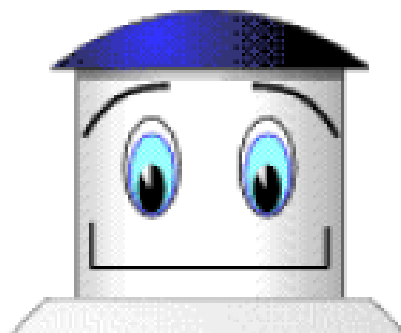
Fill in the last few blanks.

### **Member's ad — for sale**

A5000 computer with a large selection of software.

## **80 Club contacts**

Where to get the services you need.



*Unit, from the Number Works*

### ***The Club address***

Due to the continued problems with our “Freepost The ARM Club” address, we are now advising that mail should instead be sent to the Club Secretary's full address:

The ARM Club  
Merton Court  
38 Knoll Road  
Sidcup  
Kent  
DA14 4QU

The Freepost address will still exist for a time but, for the cost of a stamp, you can be sure your letter will be correctly delivered. Telephone and email contacts remain as listed on page 80.



---

# Around The Shows

---

As you might be aware, it's been a busy year for the Club's show organisation activities. Not only did we organise the major two-day RISC OS '99 Show at Epsom at the end of October but also what has become our regular single day event at the

machine, priced to compete with Castle's Acorn A7000+. Like the A7000+ it uses an ARM7500FE processor with built in graphics, sound and memory control functions rather than a StrongARM chip. RiscStation were also showing off the

---

*Organiser Mark Smith reports on the Club's successful RISC OS '99 Show at Epsom Downs and looks forward to the events and new products coming this year.*

---

Motorcycle Museum just outside Birmingham.

So, for the benefit of members who were unable to make it to either of these exhibitions, a brief run-down of what was on show...

## **New Hardware**

RISC OS '99 was perhaps most particularly notable for the range of new hardware that was on display, if not quite available. RiscStation had their new R7500 Lite on show. This boasts a range of features including built in networking, midi, sound sampler, PC style game port and a faster hard disc interface on a low end

Networx — basically an R7500 Lite without a hard disc for a hundred pounds (plus VAT) less. At the time of writing the first batch of R7500 Lites has shipped to customers.

Castle Technology were selling their latest addition to the Acorn range: the new A7000+ Odyssey which, like the R7500 Lite, has a faster clock speed of 56MHz. Managing Director Jack Lillingstone was also very pleased with sales of the StrongARM 233T Risc PCs, having had his best show ever.

Perhaps the most interesting new hardware on display was a prototype



### **Digital camera photo by David Ruck**

*Some of the dubious characters who could be seen on the Club Stand at RISC OS '99. From left: Journal writer Gill Smith, the Club's founders Maria and Rene Barreto, Treasurer Simon Burrows, Internet and Products Co-ordinator Tom Hughes and Discount Scheme Organiser Rob Brown*

Millipede Imago motherboard. Although it was barely doing more than displaying random dots on a high resolution monitor, it was doing so at 2048x1536 in 16 million colours — a serious improvement over the graphics capabilities of the fated Phoebe specification, let alone a Risc PC! The design also enables the maximum performance to be obtained from StrongARM for the first time as well as a much faster hard disc interface. By the time of the Midlands Show, just three weeks later, it was displaying a mock RISC OS 4 desktop in various resolutions up to 2048x1536 in 16 million colours complete with a backdrop showing off the full potential of the display. RISC OS Ltd were reported to be working on the necessary

alterations to the OS to enable it to work on Imago, though Millipede boss Richard Jowzefowski was keen to point out that the two programmable 'FPGA' chips that replace the VIDC20 video controller and Acorn's proprietary IOMD chip are programmed to be accessed in a similar way to the OS, minimising the amount of work required. Millipede is currently deciding whether to sell only complete computers based on Imago to the RISC OS 'enthusiast' market or to offer replacement motherboards to existing Risc PC owners. Though prices of the full specification machine, aimed primarily at Millipede's main broadcast TV market, will not be cheap (possibly in the order of £1,500 without a monitor), Millipede are also

considering a cut-down version. This is likely to have slightly inferior graphics capabilities that may 'only' be able to display the highest resolutions in 32 thousand colours.

### **New Software**

The R-Comp stand was very busy at RISC OS '99. They were doing a roaring trade in their Internet products and sold out of all of them by the end of the weekend. On the games scene, they had three new attractions: *Heroes of Might, Magic* expansion pack and the long awaited RISC OS *Quake* player. The *Resurrection* Pack with original *Quake*, *Malice* and *Q!Zone* as well as the player on a separate disc is now available from R-Comp at £23 instead of the £35 originally planned. This is because it is now based on an enhanced version of the freeware RISC OS player, rather than the originally intended re-write.

Elsewhere, iSV products were demonstrating their new Millennium edition of DrawWorks. This is an extension to the standard Draw package supplied with RISC OS, making it much more versatile. (See the review on page 53.)

Although Cerilica did not make it to the Epsom show, they were out in force at the Motorcycle Museum. As well as showing off their latest pre-release version of *Vantage* which is now set to ship in final release form during January 2000, they also had their brand new MultiMedia Keyboard (MMK) on sale. This has additional keys as well as a rotary control which *Vantage* will make use of. Cerilica are also keen to work with other third party developers to help applications take advantage of MMK.

Spacetech had the stand immediately opposite The ARM Club at RISC OS '99. They were showing off the capabilities of *PhotoDesk 3*, along with other applications such as the 3D modelling package, *TopModel 2*. The author, of *TopModel*, Giancarlo Castagno, made the trip from Italy to demonstrate it both on the stand and in the show theatre.

### **Other Attractions**

The Association of Acorn User Groups (AAUG) had a large stand at RISC OS '99. As well as representatives from a number of clubs, they were showing off a satelLite weather data collection

system, complete with a satellite dish sitting out on the balcony overlooking the racecourse.

Magazine publishers Archive and Acorn User were also reporting successful shows with subscriptions to Archive up 11% in total over the last three months of 1999. Archive were also selling their new CD of past magazines and utilities, a few of which it turned out mysteriously ended up with bagpipes music on instead!

On The ARM Club stands we were kept busy talking to members who had come along to say hello, as well as the usual stream of membership applications, renewals and product sales.

The show theatre was very popular at RISC OS '99, particularly on the Saturday where it was consistently packed for presentations from the hardware developers, application software developers and RISC OS Ltd. Our thanks go to Atomwide for the loan of a video projector to go in the racecourse's purpose designed cinema, making one very large RISC OS desktop!

## So Where Next?

This promises to be another eventful year on the RISC OS scene. Already the following shows are planned:

**Acorn SW Show:** Webbington Hotel, Loxton, North Somerset Sat 19th Feb.

**Wakefield 2000:**Thornes Park Athletics Stadium, Wakefield 20th-21st May.

**Big Ben Club Show:** TBA (probably close to Breda, Holland).

**Acorn SE Show:** St Albans Arena, St Albans, Herts, Sat 1st July.

The ARM Club's plans for shows in 2000 are still to be decided. We are, however, looking for people to look after specific areas such as publicity, exhibitors or venue for a rerun of the show at Epsom. Such volunteers will be needed in order to run the event, but they must be willing to commit sufficient time, depending on the role taken on. For some roles, living close to Epsom would be a distinct advantage but for others this is not necessary. If you are interested in putting yourself forward to help with the organisation, please contact me by email ([mark@armclub.org.uk](mailto:mark@armclub.org.uk)) or by phone (07050 679262) as soon as possible.

---

## Two New Magazines

---

If everything has gone to plan, RISC OS users should now have two new CD-ROM based magazines to add to the four surviving ones that you don't have to switch on your computer to read. This should help to compensate for the loss of Beebug's RISC User,

As the official publication of RISCOS Ltd, it will represent the company and have access to some of its people and resources, making it the most authoritative source of information on RISC OS.

---

*Just before this issue went to the printers we got the first details of the RISC OS Foundation's new magazine, one of two new publications appearing on CD-ROM.*

---

now completing its 12th and final volume.

The name at least will not die completely but will live on as Foundation RISC User, one of the two new magazines. RISC User has been bought by its former Editor, Richard Hallas — winner of the RISC OS '99 Award for Editorial Excellence with RISC User — who is now editing the Foundation's new quarterly.

Although it will have access to the wealth of material that the old magazine published, FRU will be completely different in content, style and format.

It has been established to add value to a Foundation membership as a successor to the planned Clan magazine, which Richard Hallas was to have edited. As with Eureka, it is not in competition with other magazines and does not want to poach subscribers from them.

There will be more in future issues of Eureka on the Foundation and its magazine and a look at the other new CD-ROM publication, *RISC World*, from APDL, which is to appear bi-monthly edited by David Matthewman.

We wish both magazines every success.

---

---

# The Number Works

---

“We want our numbers back!” cry the townsfolk, and it is the task of the unsuspecting schoolchild to retrieve them for the citizens of Singleton. This is the ingenious challenge posed by Sherston Software in this recently-

glued to the screen well into the milk-break. The main problem for the teacher will be shifting them off.

Sherston is synonymous with entertainment, and the exercise begins with an intriguing story about

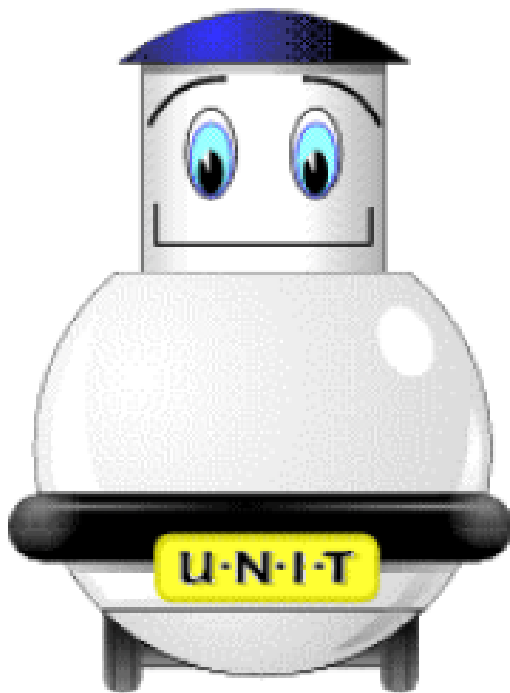
---

*An original plot, about the theft of a town's numbers, sets the action for a series of challenges to mend a factory full of machines. Rilla Paterson boldly tackled it.*

---

released triple CD entitled The Number Works. Here is a package to keep even the most reluctant seven to nine-year-old learner of arithmetic

a town in disarray, having made the mistake of ignoring the importance of numbers for too long, so the sinister Number Collector has decided to punish them.



## Cloaked figure

This mysterious cloaked figure appears on the town hall steps and admits to having confiscated all the house numbers, telephone numbers and digital displays relating to clocks, microwaves, telephones, every conceivable gadget, before vanishing with a ghostly laugh. The millennium bug has nothing on this! Now nobody knows who lives in what house, how many pints of milk to expect or which



*“You didn’t care about your numbers, so I, the Number Collector, have taken them all away! Ha! Ha!”*

bus goes where. An elderly gent, however, remembers the existence of the old Number Factory, long since defunct, and the people elect the unsuspecting child gawping at the screen to scale the ivy-covered walls of this crumbling building and go in search of their precious numbers.

Inside The Number Works the child finds a character called Unit, shaped rather like a dalek and with a similar

gravelly voice. Unit tells us that all the machines in the factory keep making silly mistakes, and if the child can fix the machines they will deliver a plethora of correct numbers. The task is therefore to visit each machine in turn, and correct its arithmetic, thereby developing competence in numeracy.

There are no fewer than 21 machines, operating at three levels of ability.

They have wonderful names, like the Snack Attacker and the Divider Decider. Using them the child tackles not only the basics of addition, subtraction, multiplication and division but also explores fractions, decimals, negative numbers, sequences and rounding up and down.

The graphics are first-rate. All the machines are brightly coloured with just the right amount of detail to make them interesting without being cluttered. All seven to nine-year-olds are compulsive knob-twiddlers, and these machines have an abundance of buttons and levers guaranteed to have universal appeal.

The child receives written instructions on the screen, and these are all repeated verbally for the slow reader. This facility can be switched off for the more able child who is then relying on the written word alone. Personally, I like to leave the sound on because of the sheer enjoyment offered by the amazing banging and scrunching noises. I suppose these could be distracting in the classroom and I can imagine the teacher preferring the silent mode to that of perpetual (com)motion.

### **Mice in the machines**

One very endearing feature of Sherston is that they are very good at including discreet humorous asides. During the introductory story, just as the unhappy denizens have roared off-screen on their irate journey to the Town Hall, there is a brief pause, and then a single straggler is seen running after them. Blink and you miss it. These injections of humour appear when you are least expecting them — mice keep cropping up in the machines. I bet Sherston's programmers have a lot of fun —if I were one of their quality controllers I'd spend most of the time rolling on the floor.

The machines are on three storeys. On the ground floor they relate to the number system and place value, those on the first floor explore relationships between numbers and computation, and the machines in the Attic concentrate on solving numerical problems. Between the floors is a navigation area with a remote control game leading the child to the chosen activity, all very good for confidence-building and mouse control. Each machine features a



particular area of arithmetic. The child works them by clicking on various buttons and icons with the mouse. The narrative tells the user what is wrong with the machine in question. There is a help button which provides the child with a more detailed explanation if necessary.

A typical example is as follows: the Delightful Divider would work correctly if it got the chance, but is “confused” because it is in a box with Multiplication Sums, each one done three times with a different answer, one of which is correct. The child clicks on the right answer, thereby arriving at the correct division sum. The whole exercise reinforces the relationship between multiplication and division.

Many of the calculators are designed such that the child is forced into mental arithmetic, or at least to manipulate the buttons in the required order. This makes the child practise the particular arithmetical process being illustrated. Moreover the task has to be repeated with up to ten different sums before that particular machine is deemed to be ‘mended’, and the child then moves to the

navigation area and on to another machine.

A detailed description of each of the 21 machines is beyond the scope of this review, but they include a Fraction Contraption, which produces painted shapes divided into halves, quarters, thirds, fifths and so on. The child has to match the fraction stated with the painted shape, which may or may not be correct, and choose True or False.

### **Adder Upper**

Another machine presents numbers which must be sorted into columns by deciding whether the number in question should be rounded up or rounded down. The Adder Upper machine is opened up to reveal its entrails, so that the child can add the units, tens and hundreds in turn, and then add the final columns, reinforcing correct thinking procedures. My favourite was The Reverser. It is difficult to describe in words what this does, but suffice it to say that it teaches the child to work out whether a given number should be added to, or taken away from, another number to complete the sum, and it reinforces the opposite nature of

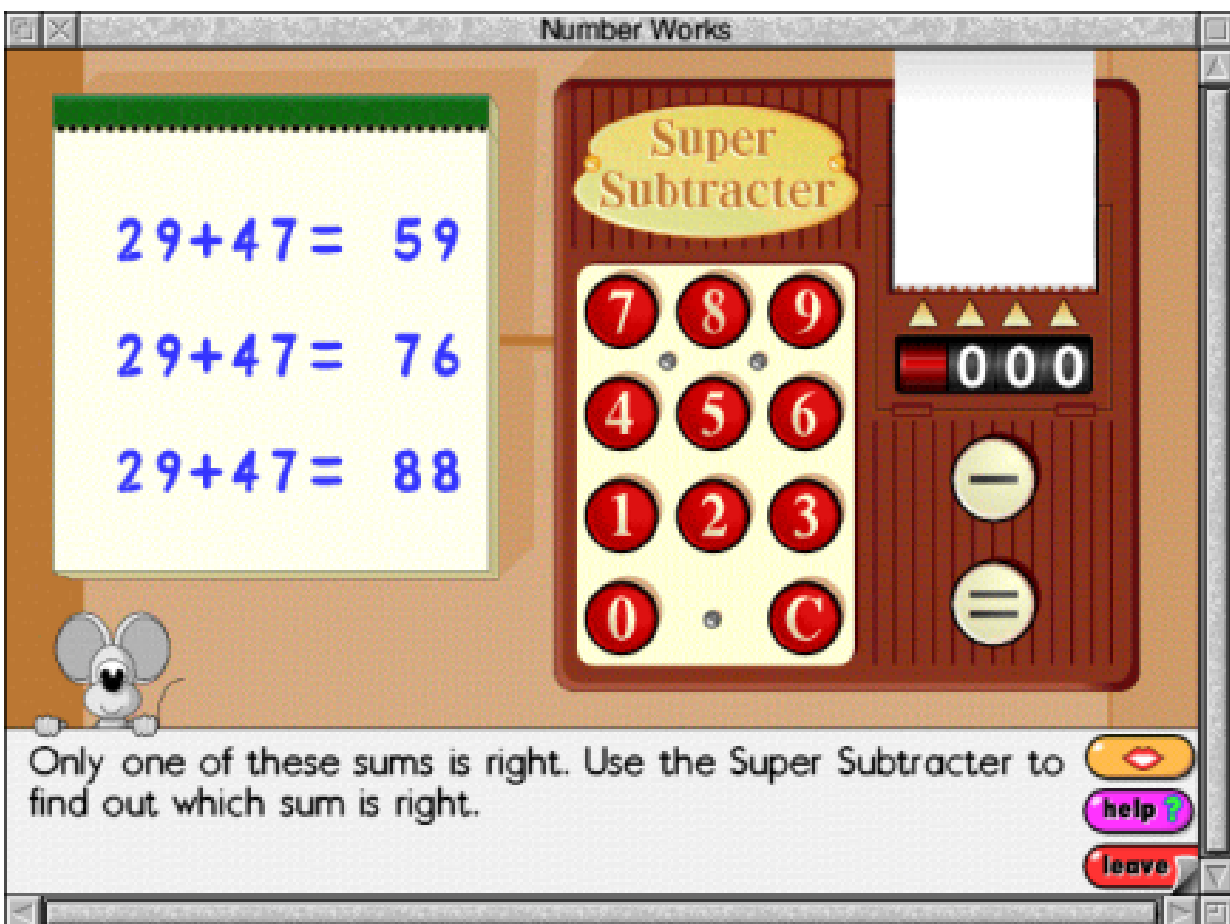
addition and subtraction by using an ingenious game of roulette.

If the child succeeds in 'fixing' every machine, Unit jumps up with congratulatory noises, and once again the merry chuntering of busy cogs, wheels and conveyer belts is heard in the Number Works.

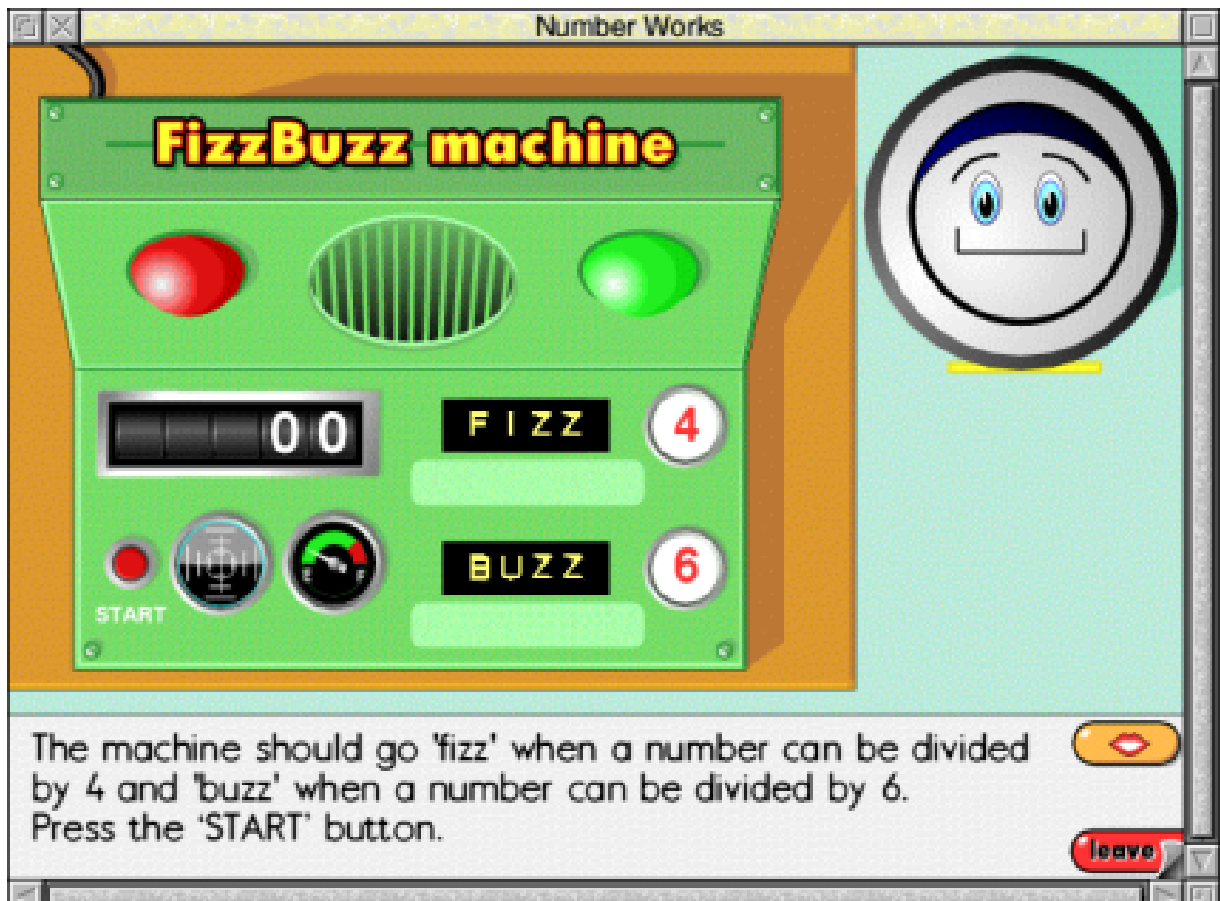
Occasionally I found the narrative less than adequate and had to resort to the help button, but these were all

very well explained, and the fact that the narrative is spoken as well as written would come to the rescue of the slow learner.

The teacher sets the level of difficulty, and the child logs his or her name. The computer keeps a record of the exercises each child has completed. Up to 40 names can be logged at any one time. It is possible to move onto another machine early, but the computer does not treat the activity as



*Carefully designed calculators ensure properly constructed answers*



*The fizz-buzz machine. The child clicks on FIZZ for multiples of 4, BUZZ for multiples of 6, and FIZZBUZZ for multiples of both 4 and 6*

finished by that child until all sums relating to that machine have been done. Nor is it possible for a child having completed ‘fixing’ a machine to return to it.

This is probably a good thing, because it stops children from hogging it. The only way to revisit a particular machine would be to delete the child’s name from the log, or log a different name. The class is thus encouraged to move through the

software, completing visits to all 21 machines. At the highest level the sums are appropriately difficult. With the Broken Calculator, for example, at level three the child is expected to solve  $16 + 15$  by multiplying 16 by 2 and subtracting 1. With the Divider Decider, the child would be expected to be able to divide 95 by 20.

The activities proceed slowly enough for the less able child, and for the brighter ones time-consuming

exercises like the initial story and the navigation to the various machines can be skipped by accessing them via a menu. The pace of the lesson is thus easily adjusted to the needs and abilities of the individual.

There is a useful and well-designed pack of photocopiable masters supplied with the package. These include worksheets, exercises and games, with clear instructions in the well presented teacher guide.

Installation is straightforward and the program can be run directly from the CD, though full installation on the hard drive is recommended. Minimum requirements for Acorn are A3020, Double speed CD-ROM drive, RGB monitor and 4MB RAM.

### **Sinister**

Here, then, is a package which is certainly up to Sherston's usual standard. My only slight disappointment is that the sinister Number Collector never reappears.

A suggestion for improvement would be for the programmers to have included the occasional discreet visit from this mysterious character, who

would find his plans to steal all the numbers gradually thwarted as the child progresses through the factory.

It would have been rather neat if the ghostly figure could have been made to fly into a tantrum every time the child succeeds at one task after another, and the town could have had a gigantic celebration at the end with the conquering hero presenting the mayor with a shopping trolley brimming with newly-minted super-efficient numbers. Never mind, there's always a chance with a release of a Number Works II.

The Number Works is excellent for Years three and four and special needs and is good value for money.

---

### **The Number Works**

Prices (all +VAT): single £49.95  
pack of three £74.93, five £99.90  
Supplier: Sherston Software Ltd  
Angel House, Sherston  
Malmesbury, Wilts SN16 0LH  
Tel: 01666 843200  
Fax: 01666 843216  
Email: sales@sherston.co.uk  
Web: www.sherston.com

---

---

# Qualitative Data Analysis

---

“Computerized Textual Analysis. That’s interesting. I thought that you could only analyse numbers with a Data Analysis Package?” This is the common response of a person who hears that it is possible to use a computer to analyse textual data

analysis of numerical data which uses well established algorithms.”

Unfortunately, this fictitious response is the view of many people who think that quantitative data is in some way preferable to qualitative data. This

---

*Paul Webb looks at a textual data analysis package you can use on a RISC OS computer and explains how and why you might want to use it.*

---

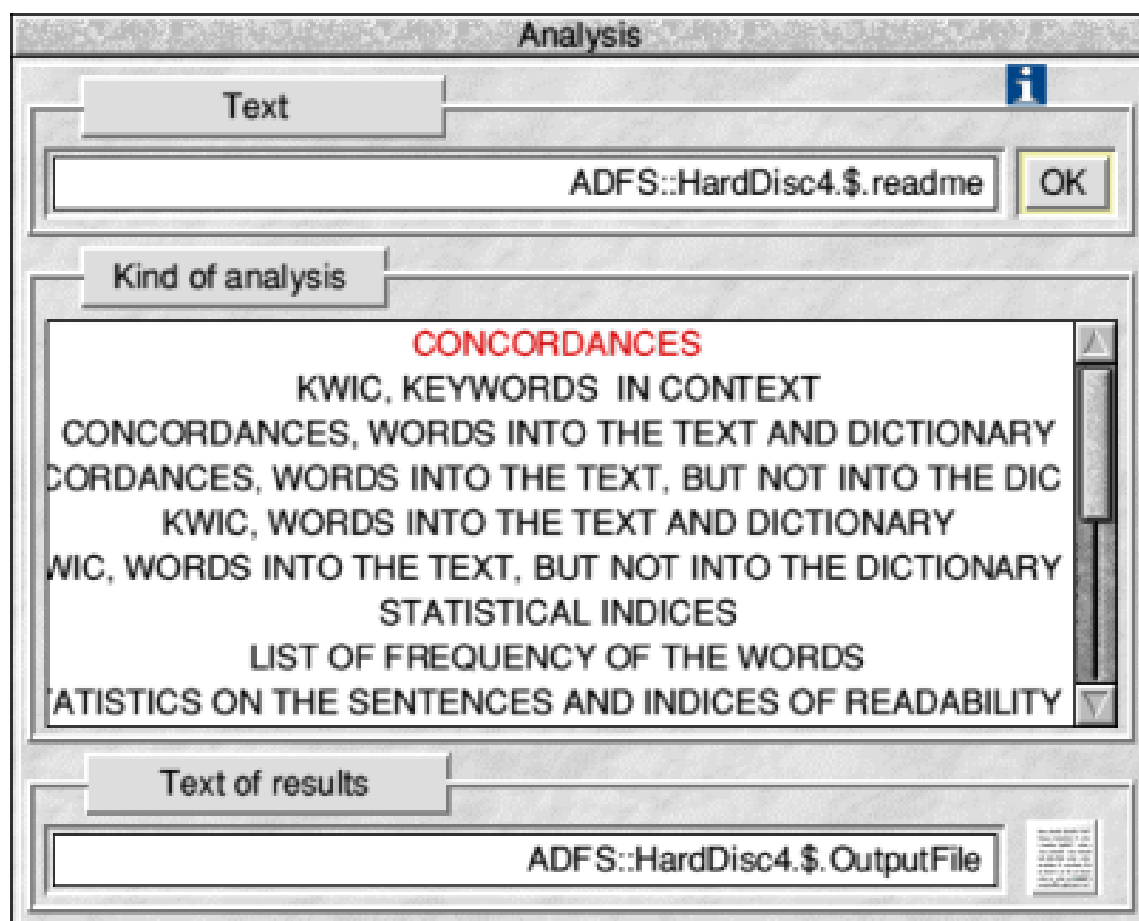
where such data may include interview transcripts, diaries or letters.

But Computer-Assisted Qualitative Data Analysis or CAQDA has an established pedigree which began in the early eighties and has culminated in sophisticated CAQDA programs like NUD.IST, The Ethnograph and AQUAD for the PC. Luckily, the RISC OS user can also use !Analysis for Qualitative Data Analysis.

“OK I can do Qualitative Data Analysis on my RISC OS machine but why would I want to? After all qualitative data analysis possesses none of the precision of the statistical

view is often seen in the real world where qualitative data is ‘mysteriously’ transformed into quantitative data in order to give the former increased scientific legitimacy. But our fictional respondent also betrays a lack of awareness of the goals and techniques of CAQDA which will now be described so that the reader is in a position to appreciate the evaluation of !Analysis which follows.

Imagine a researcher who has conducted hundreds of interviews with respondents on the topic of “Unemployment Amongst Unskilled Men in Town A.” The researcher



*Main Analysis Window with One Option Selected*

might be interested in the factors which predispose an unskilled man towards unemployment and would, in the normal non-computerized course of events, read through every interview looking for evidence of those factors. Our fictitious researcher might also notice that there is a degree of consensus amongst the respondents as to those factors and note this in the margin of each transcript. Such a note is called a *code* and is the means by which the qualitative data analyst discovers

patterns in the data.

Lack of Education beyond sixteen might be cited as a cause of unemployment and could be coded as 'EDU\_MINUS' on each transcript where the code occurs. As a result of coding the data the analyst is able to develop theories and investigate relationships between variables.

But there is a problem with such a procedure. It is very time consuming! This is where qualitative software can help. Using a qualitative data analysis

package has another positive spin off. Even the most attentive person can concentrate for only limited periods. This means that important trends in the data can be missed. Computers, in contrast, are very effective at 'consistently' identifying trends.

So how does !Analysis the package measure up? I first installed the package onto my hard disc. After double-clicking on the !Analysis icon, the app is installed on the icon bar and the budding researcher is ready to begin. To activate the program simply drag and drop your text file onto the icon. The !Analysis window appears and the researcher selects the analyses which are to be performed on the text. The first illustration (on previous page) shows the main window with one of the options selected.

To proceed, the user simply clicks on *OK* or sets a number of parameters from an additional window. A range of analytical techniques may be selected including concordance, keywords in context (Kwic), co-occurrence and frequency word lists. Interested readers should consult the reference at the end of this article for

more detailed explanations of these techniques. If the frequency word list option is selected, !Analysis simply creates a file called *OutputFile* which contains a list of words together with the number of times that they occur in your chosen text.

The second illustration (opposite page) shows the result of this form of analysis on a specimen file.

There are a number of points to bear in mind when using this package. Only documents in text format may be loaded into the program. Stressed letters are permissible if you have a foreign language document to study but this can increase the processing time. It is also possible to compare your document with a dictionary if you wish to do a concordance or Kwic test. If your document contains apostrophes, it is also necessary to place a space between the apostrophe and the following word.

So, what do I think of !Analysis? It contains many of the basics of a Qualitative Data Analysis program but does not provide many of the sophisticated features of its PC and MAC cousins. The *frequency of word*

File/Folder	Size (blocks)
-	6
1	1
Arts	1
Background	1
Boot	1
Configure	1
For	1
I	2
Icons	1
Media	1
Resources	1
Sprites	1
T1	2
Textures	1
Unfortunately	1
Xperience	2
all	1

### A 'Frequency of Word' Analysis

option is useful as a prelude to identifying the key themes of a very large document but could have been extended by providing a facility for attaching codes to the text.

I would also have appreciated the inclusion of some mechanism for generating networks of codes. The type of thing I am thinking of here is a diagrammatic representation of a number of codes which shows their relationship with each other. This is the type of technique that an anthropologist would use to study an unfamiliar culture. There is also no

provision for the testing of hypotheses, although readers who are interested in this approach to qualitative data analysis would perhaps be better advised to learn some variant of LISP.

Yet, despite these reservations I have to say that I like this program. It's intuitive to use and comes with a comprehensive manual in Impression format. Admittedly, it will only serve the needs of the qualitative researcher in the early stages of an analysis but its existence at least means that the user will not be compelled to use CAQDA software on the 'dark side!'

So if you are a researcher in general or a social researcher in particular take a look at !Analysis.

### Reference

Kelle, U. (1995) Computer-Aided Qualitative Data Analysis. Theory, Methods and Practice. Thousand Oaks and London: Sage.

### Sources

Web: [micros.hensa.ac.uk/cgi-bin/browser/local/riscos/textprocess/](http://micros.hensa.ac.uk/cgi-bin/browser/local/riscos/textprocess/)  
CD-ROM: The ARM Club PDCD3



---

# The Archive CD-ROM

---

As readers of Archive will know, the monthly subscription magazine has a regular disc, which can be bought or downloaded free from the Archive Web site, and an annual CD-ROM. Like most

The magazine text comes in the original Impression page format (with many of the illustrations seen for the first time in colour), as text and, for the first time, as HTML documents. There are also text files of the regular

---

*Even if you don't read Archive you could still find the latest issue of the magazine's annual CD-ROM well worth buying, as Peter Jennings explains.*

---

magazine CDs it is a bargain buy and not just for regular readers.

Each year's issue is an update, rather than containing all new material, and is usually available at a discount to those who have bought the previous one.

The latest edition, for Volume 12, has the complete contents of the magazine from Volume 4, issue 5 (earlier ones were produced on an Apple Mac), all the magazine discs and most of the discs of Careware (originally sold in aid of charity), Shareware (in Archive terms this is PD with no registration fees to pay) and Utilities.

*Hints and Tips* and *Products Available* features dating back from the first issue.

Very usefully, Volume and Article indexes in HTML format and ArcScan files for the last few years of magazines and discs are also included.

The CD's reference value is further increased with a Fact File of names and addresses (including email and Web sites) of just about every company who has produced Acorn and RISC OS hardware and software and also a couple of glossaries of technical terms (a main one and another for audio visual).

## Risc PC – A World of Opportunities

Paul Beverley

In this article, I will give an overview of the Risc PC. David Webb will go on to give more technical details in his article on page 6. For an even fuller technical insight into the Risc PC, see the May edition of Archive magazine (Volume 7, Issue 8 – £2 from Norwich Computer Services).

The Acorn Risc PC is not just another in the range of Acorn Archimedes computers – it's a completely new concept which opens up a whole new world of opportunities.

Forget compatibility ...

limit.

One important difference from previous Acorn systems is that the Risc PC can have separate memory for the screen display. This means that the video system and the processor are not competing for use of the memory and so, even if you go into the highest mode of graphics, the processing speed will not decrease as it does with Archimedes computers. (From Risc PC onwards, Acorn 32-bit computers are no longer being referred to as "Archimedes".)

• Modular case system

As you can see from the various photographs, the

### *An Impression page from Archive's Risc PC Special supplement*

Users of the programs originated by Colton Software: PipeDream, Fireworkz, Wordz and Resultz, will find the CD worth buying just for the contents of the *Gerald* directory in the discs section. These contain the programs which accompanied the articles from Archive's most prolific contributor, Gerald Fitton of Abacus Training, who have now taken over the Colton products. Demo versions of the programs are provided but the subjects are, however, not limited to just this range.

The Archive CD-ROM is a massive library of information and advice on Acorn computers from the Archimedes onward (and a great nostalgia trip for the old timers among

us). You don't have to buy the magazine to get it but —a word of warning —if you don't already read Archive this could well turn you into a subscriber.

---

#### Archive CD-ROM

Price: £12

Upgrade from 1998 version: £8  
(Don't return old CD. You are trusted to be honest.)

Supplier: Archive Publications

18 Mile End Road

Norwich NR4 7QY

Tel: 01603 441777

Fax: 01603 460736

Email: [info@archivemag.co.uk](mailto:info@archivemag.co.uk)

Web: [www.archivemag.co.uk/](http://www.archivemag.co.uk/)

---

---

# Your Questions Answered

---

**Norman J. Burgess asks:**

models for £70, or less if purchased with a printer.

***Question:***

I have recently acquired a scanner, Epson GT-5000, using ImageMaster/Twain/ChangeFSI for manipulation. Although I get brilliant copies of

***Question:***

I have never been happy with the colour output (reds come out brown) of my HP550C printer and informed

---

*Some of the questions — with the answers — recently dealt with by our free Technical Help Service, co-ordinated by David Ruck.*

---

photos on screen, my printouts from an HP DJ550C, using a DJ550C Turbdriver, are never the same quality, usually being too dark or having banding on them. I would like to upgrade my printer to one capable of printing photos and was wondering if you could recommend one. I do use photo quality paper. Various companies produce them, such as Epson, Cannon, HP and Lexmark, but do Acorn have drivers for the latest photo capable models?

***Answer:***

SpachTech are the only company supporting photo printers. They have drivers for current Cannon and Epson

HP of the fact. Needless to say I had no response from them.

***Answer:***

The HP550C requires a very careful choice of paper to prevent colour problems especially with ink. I found only one plain paper that was acceptable, due to ink spreading. You may have more success with special coated paper. However the results are always going to be poor compared with more recent printers.

***Question:***

Also, is there a better photo manipulation package than ImageMaster?



*Technical Help questions are kept under guard on David Ruck's scanner*

**Answer:**

If you require better image manipulation software then ImageMaster I'd recommend Photodesk from SpaceTech. It is an extremely good package capable of professional results. Full and half price *lite* versions are available and a range of plug-in enhancements work with both.

A cheaper but still capable alternative is ProArtisan 24 from Clares.

**Question:**

Is there any company that recycles old printer cartridges, I have 12 or more.

**Answer:**

You could experiment reusing them yourself with ink refills. You can get them for HP550C and, while the

quality can vary, they can be useful if you want to print out a large amount of stuff. As the HP cartridges contain the head you can't damage the printer using them, so there is nothing to lose.

The Club Secretary, Chris Price, adds: tricolour replacement cartridges can be obtained from: Inkost, Unit 8, Signal Buildings, Brunel Road, Newton Abbot, Devon TQ12 4FD. They send you clone cartridges which work out about half the cost of the original branded ones.

Another company, which I have not tried, is: The Toner Factory (UK) Ltd, 614 London Road, Westcliffe on Sea, Essex SS0 9HU. Tel: 0800 0184733 Fax: 0800 0186433.

Email: [sales@toner-factory.net](mailto:sales@toner-factory.net)

Web: [www.toner-factory.net](http://www.toner-factory.net)

---

## Site Seeing: Deja.com

---

Mention the Internet and most people immediately think of emails and surfing; after that it is potluck what else is mentioned. Probably the third most used facility of the Internet are the Newsgroups.

from motor racing to walking, health, computing and everything one can imagine. Within these groups you will find answers to almost everything. You may be answered by a professional or someone with experience of the subject so, for

---

*In this issue, Geoff Lane suggests directing your browser towards [www.deja.com](http://www.deja.com) and highlights some of the interesting services it offers.*

---

Newsgroups are an absolute goldmine of knowledge and information but you must know where to look. Most Internet providers will have a News Server which will almost certainly have the address of [news.freeuk.net](http://news.freeuk.net) or something similar. Download a list of Newsgroups—they do vary slightly with each Internet provider—and you will be presented with between 20 and 30 thousand different Newsgroups with unimaginable subjects and titles.

There will be a group on practically everything from skydiving to potholing, from dieting to cooking,

example, a medical question may be answered by a doctor, nurse or just someone who has experienced the same problem.

This is where [www.deja.com](http://www.deja.com) can come in handy.

To make use of Deja.com you must register. This only takes a few minutes and it then opens up a host of useful facilities for you to use *free of charge*.

You will have to choose a *username* and password. Think carefully about the username as it will be an online email address that can be very handy

deja.com  
Before you buy

Help | User Tour | My Deja

784,585 USER RATINGS OF 33,964 PRODUCTS IN 951 CATEGORIES

Saturday, Dec. 4

QUICK SEARCH  
  
 Search | [Power Search](#) | [Search Tips](#)

[click here](#)

SPONSORS

Find any book, video, CD  
[SHOP AMAZON.COM](#)

Search for Jobs  
[Jobat.com](#)

Computer & Tech Jobs  
[Upgrade your Career](#)

eBay Auctions  
[Bid, Buy and Sell at eBay](#)

InfoSpace  
[The Ultimate Directory](#)

Get 100 Free Minutes  
[Deja.com-Click Here Now!](#)

TOP RATINGS

They Call It Art  
 This week's masters: [Sean Penn](#) in [Woody Allen's Sweet and Lowdown](#), and [Ralph Fiennes](#) and [Julianne Moore](#) in [The End of the Affair](#). Rate and review all of the new releases.

> Rate the Brands

Do clever commercials get you to buy a particular brand of [beer](#), [computers](#), [cigarettes](#) or [jeans](#)?  
 >> [Deja.com](#) and [Adweek](#) want to know why you pick one brand over another.

Consumer Electronics  
**The Camera Man Can**  
 What makes the world go 'round? Funny home videos that embarrass family members for years to come. Shoot some with one of the [camcorders](#) our members rate as the best: the [Sony CCD-TRV66](#), [Sony CCD-TRV68](#) and [Panasonic PV-L988](#).

[ REVIEW OF THE DAY ]

[Reebok DMX Run \(Men's Running Shoes\)](#)  
 Reviewer Ray, St. Petersburg, FL  
 Individual Rating 3.2

Comment "Comfort and looks were excellent. Performance was mediocre ... due to a ... squeak that never went away ... durability was disappointing ... good value had they lasted ..."

>> [See all ratings and reviews for the Reebok DMX Run](#)

### Start here — part of the Deja.com Home Page

if you need to send emails from someone else's computer.

Once logged in to the site there are excellent search facilities to enable you to look for messages containing text, names, subjects or phrases of interest. To narrow down searches you can enable dates or certain parts of messages and —here is the good part — you can save these searches which carry on automatically and send an email to your own personal email address advising of the results.

For example, if I search for 'Geoff Lane' I will be presented with a list giving all newsgroups containing

messages with Geoff Lane in the body, the newsgroups will be linked so clicking on them takes you to the newsgroup and then to the individual messages. This can be excellent in busy newsgroups as some can have 200 plus messages daily. So if you were unable to download for a couple of days the message may be difficult to trace. Obviously, as with all searches, it is what you enter that gives you the result. So if you enter 'John Smith' be prepared for quite a few possibilities!

All messages have *Subject* lines to indicate what the message is about and these are called *threads*. If there is

## DEJA.COM FOR YOU

### [My Deja](#)

Get more out of Deja.com:

[Register](#)

### [Easy Shopping](#)

We've added links to [leading online merchants](#) to make it easy to buy the products you find on Deja.com, including [online auctions](#) for computers. [Find out more.](#)

### [Deja Tracker](#)

Get email alerts about new posts in your favorite discussions.

### [What's New](#)

Welcome to the new Deja.com. Click here for a description of all our great new features.

### [User Tour](#)

Check out all the new features on Deja.com!

*Choose here*

a particular thread of interest to you you can ask Deja.com to track it and you will be notified by email of any replies to this thread. The email will contain a link to the message so if you

are online a click on the link takes you straight to the messages. Good eh!

Deja.com gives you many other facilities; you can view and send email messages online while logged on to any computer in the world, you can attach files in the normal manner and delete messages so as not to download them after reading or you can leave them there to be downloaded in the normal manner using your POP mail server.

Deja.com also gives you your own web page and various chat channels but it is one of those sites where you just have to go on and have a play. Many sites now are quite large and some are very complicated and unless you keep going back for a look a lot of useful functions may be missed.

Deja.com was one of those sites that initially I visited occasionally but since I have got used to its layout and facilities I am a regular visitor. It is generally a site I now visit every time I log on.

Give it a try — you will not be disappointed.

---

## Psions And Similar

---

**H**ave you got one of the New Series 5MX yet? If so why not share your experiences and comments with us? Do you have any tips that we can publish here in Eureka? Due to a change of jobs through one thing and

often but mainly after entering a lot of information or document writing. I tend to backup at least once a fortnight at the moment but in busy periods as often as once every two or three days, it takes only a few

---

*The range of Psion Palmtops continues to grow and there are some similar machines with other names also coming onto the market, as Ralph Sillett explains.*

---

another my upgrade to the 5MX will have to wait for a while.

With our Psion Palmtops we users tend to forget one of the most important jobs to do is *backup*. How many of you have lost those large data files or that long document in *Word*? It can be embarrassing to have to explain to the bank manager that you went overdrawn because your palmtop, with the accounts program, was stolen or broken and you didn't have the latest backup and so got completely out of touch with what you spent. We have all done it at one time or another—I lost a data files of some 400 items and had to start all over again. Remember to back up

minutes. The backup can either be onto spare CF or LSDs which are easy to carry around.

I backup to three separate locations: RISC PC, PC and a compact flash disc. In fact that reminds me to backup to my spare compact Flash now! Backup now or be sorry. Get into the habit; it pays in the long run. All the usual sayings come to mind but think of the other sayings if you forget and things go pear-shaped.

A new web search site is now available for all things Psion at [www.psimon.websearches.net](http://www.psimon.websearches.net). Try it out next time you log on especially if you are trying to find that elusive program.





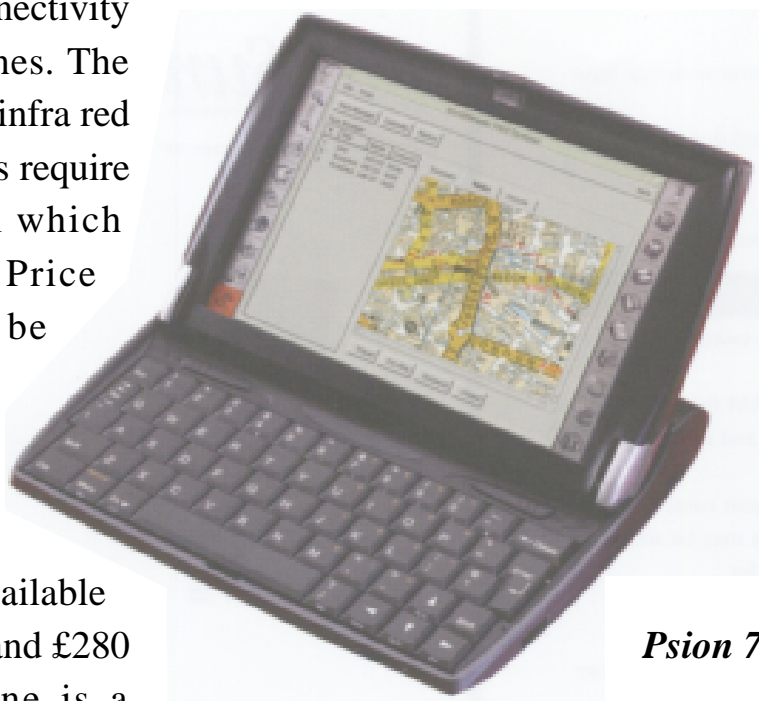
### *Where to search for that elusive Psion subject*

Along with the launch of the New Series 5MX a couple of other machine details were released. These machines use EPOC and should be available by the time you read this. The first one is from Oregan Scientific called the Osaris and the second is the MC218 from Ericsson. The Ericsson MC218 is basically a re-badged Psion 5MX but includes a carry case and of course connectivity to the Ericsson mobile phones. The SH888 can be connected via infra red but the other Ericsson models require the D127 infrared modem which comes with the MC218. Price £479.95 inc VAT (to be confirmed).

The Oregan Osaris is a quite different albeit around the same size and will be available for £220 for a 4MB version and £280 for the 8MB. The machine is a

standard clam shell set up with a smaller screen and keyboard but also with the smaller price.

I have just received details of the all New Psion 7, with a colour screen and a StrongArm SA1100 processor running at 100mhz. The machine is bigger than the current machines and weighs in at 1150g (just over a



*Psion 7*

pound). It's a bit more than a palmtop and not quite a laptop. The power is supplied by a re-chargeable Lithium-Ion battery pack giving in excess of 8.5 hours. The case is a clam shell design with leather clad outer. The Seven will be available by the time you read this article for a price of £699.95 for the 16MB model (upgradable to 32MB). This model is based on the recently launched netBook from Psion Enterprise Solutions.

The netBook processor runs at 190 mhz with either 32 or 64 DRAM. Maybe a bit pricey at launch but wait for a year and the price will come down.

Battery life on the Five is not as good as on the Series 3 but can be helped by using the mains power supply whenever you are at your desk or at home (or hotel) and near to a 13amp socket. I try to use the mains as much as possible and when convenient.

To keep my Five clean I use surface cleaner wipes that come in a plastic tub with 100 wipes made by Boeder and sold in places such as Staples and PC World for about £2 to £2.50. I

bought mine a year ago and still have quite a few left. Good for the screen on the Five.

Don't forget that if you damage your Psion then a well recommended company for the repair is Pinnock Organiser Services especially when the machine is out of warranty. They are much quicker than the Psion service centre, typically three days. I sent my Five to them just before Christmas 98 on a Friday and it was back in my hands the following Tuesday, now that's what I call service.

Contact them on 020 8677 9246. They can also supply custom coloured cases (to replace rubbery finish) on the Five but they cost £65. They supply and fit.

Does anyone have any other experiences of service like this? If so, then let us know. We are all too quick to criticise a bad service but rarely shout about a good one. If you have any good experiences of service within the computer industry, especially related to either Acorn or Psion products then why not let us know?

## Science Fair Revisited

---

The Summer 1999 Edition of *Eureka* featured a review of Sherston' **Science Fair** by Rilla Paterson, where colourful characters Bert and Vicky introduce the intrepid early learner to a wealth of science ideas enclosed in a fairground, the

be unfounded; in the event the more able children enjoyed teaching the slower ones, resulting in a true mixed ability experience for all —just the kind of learning environment which can prove invaluable in a busy classroom. It held the interest of five

---

*After the review, a look at how the real users reacted to one of the education with entertainment programs for children which regularly appear from Sherston.*

---

Space Dome, the Hoopla Stall, the Fun House, the Bear Cave and the Big Wheel. Rilla recently received some feedback from a school which tried it out, and readers might like to know the reaction.

“One of my reservations was that it might be just a bit too easy, but I need not have worried — Science Fair is a big hit across the board.

My fear that the brighter children would tire of it quickly turned out to

and six-year-olds (Key Stage 1) for long stretches. This particular program is geared to Attainment Target 4 (Physics), and it is not easy to keep the attention of very young children in this field, but Sherston have managed to do so with flying colours.

The pace was slow, but just right for beginners, and there was plenty of opportunity for practising good mouse

control. The prize here goes to the Big Wheel at Level 2, where the child



*What caused the big bang?*



### *Light the bulb — the classroom favourite*

builds a circuit by connecting a battery, a lamp and two wires, causing the bulb to light up. The whole class positively squirmed with delight. The electronic games possessed by many children at home don't always have mice (mouses? mousen?) but Science Fair's drag-and-drop exercises filled the gap.

Many of the activities led naturally to other forms of learning: for example, using the one on musical instruments,

the children developed a game whereby they were separated by a screen from a variety of sounds and had to guess the instrument responsible for each one. This is just the kind of progress that can be initiated by a good program. So well done, Sherston. According to April's *Child Ed*, a new version is coming out featuring Attainment Target 2 (Living Things).

Can't wait!"

---

## Getting On The Internet

---

I started off with Freeserve as it was the easiest to get going and I liked the idea of a domain name as you get on Demon (that is, your email name is <user>@<something>.freeserve.co.uk where <user> can be anything you want and <something> is your chosen

However with FreeUK I found it kept dropping the connection after I'd been online for around two minutes, so signed up with UKOnline. Then I found out about another number for FreeUK and using this I've not had any problems. Their service is fast

---

*In the first instalment of this two-part series, David Ruck told how he decided to try out three free Internet Service Providers: Freeserve, FreeUK and UKOnline.*

---

domain name). However, after a week's use I found them to be rather slow and engaged a lot and, after an entire weekend when the email service was broken, I decided to move to my second choice which was FreeUK.

Your email name in this case is <something>@freeuk.com (extra users can be <user>@<something>.freeuk.com) which does have the advantage of being quicker to type, especially if you are using a service such as [www.mail2web.com](http://www.mail2web.com) to read your email when you are at work or otherwise away from home.

and has a wide range of newsgroups supported. So now I use FreeUK as my main ISP, receiving email and doing browsing from it.

I still use the Freeserve account when people want to send me very large email, so I don't pick it up on my main account when I dial up during peak time.

I can decide to log on to Freeserve whenever I want, such as during the cheaper weekend rate, to collect it. So far I'm just keeping UKOnline as a backup and haven't had much experience of using it but it has been highly recommended by some people.

With paying ISPs it is likely whatever package you are using already comes setup for the provider and all you have to do is enter a few details such as your domain/user name and password to get them going.

It is a bit more complicated with Free ISPs however, as new ones spring up all the time and you may have to hunt around for a script someone has written or make your own by copying on of the others. ANT suite provider scripts are available for the popular ones such as the three I tried.

The main difficulty with free ISPs is registering with them in the first place. A web page is used to enter your details but in most cases it will be transmitted using an encrypted connection. This requires you to have the AcornSSL module for Browse (available on request from [browse@acorn.com](mailto:browse@acorn.com)) or the HTTPS for ANT Fresco which is has only just become officially available ([mailto:paul.support@argonet.co.uk](mailto:mailto:paul.support@argonet.co.uk)) however in both cases you need to have an email address ending in '.co.uk' because of encryption export regulations.



Some such as FreeUK also use Javascript which you may or may not be able to handle, even if your browser supports Javascript, due to incompatibilities in its definition thanks to the PC world.

Due mainly to the script and excellent instructions by Paul Vigay ([www.vigay.com](http://www.vigay.com)) I was able to get Freeserver running first, although I did need to use the AcornSSL module with Browse to get at the registration page.

After filling out lots of information on the web forms, Freeserve registers you and sends you a file which you can use if you have a PC but you don't need for an Acorn. All you have to do is enter a few pieces of information in the ANT suite configuration page and you are ready to go.



Registering UKOnline was a very similar process, but due to its use of

Javascript and SSL I had to register FreeUK from a PC at work. I got the ANT scripts for both of them from Paul Vigay's site.

To save having to reconfigure the ANT Suite each time, I use the excellent !Multi-ISP utility by Richie Whincup ([www.richie.ukgateway.net](http://www.richie.ukgateway.net)) which allows me to switch between all my ISPs at the click of a button.



Remember if you are using Freeserve you must log in every two weeks so your account isn't automatically closed.

You don't have to log in all the time to check for email though. If you use a mail reading via a web facility such as [www.mail2web.com](http://www.mail2web.com) or [www.mailstart.com](http://www.mailstart.com) you can enter some of the info you used to configure the account (pop3 server name from the script and your email address and password) on to a web page and read any email that might be waiting on that account.

Some ISPs now offer a similar service from their own websites, which is better than trusting your account details to a third party.

Before getting my own connection, I was using my work's ISDN line, with MS Internet Explorer 4 and the freeware Pegasus Mail program connected to the company Exchange Server (no way was I using MS Outlook —an atrocious Internet standard ignoring system). I was interested to see how my system would compare using a slower 56K modem, the less well-developed Acorn browsers and our home grown email programs.

The first thing you notice is that it takes about 20 seconds to start a connection, compared with about three seconds using the ISDN line. When it is up, the first thing that usually happens is a download of news and email. If this is all you want to do, you may find the process is completed in just over a minute (unless someone sends you something large or you subscribe to lots of newsgroups). This means it costs you around 5p even at peak times.

Although the modem is 56K the status screen shows it usually connects at around 40K to 44K, which means around 4K per second downloading speed for files such as archives and JPEGs. When news and email are downloading, the modem is often able to compress it and I have observed download speeds of over 10.5K/s, close to the maximum speed of the serial link.

When downloading archives and JPEGs I barely notice any speed difference with the ISDN line even when downloading many things at once. The Acorn doesn't seem to just stall for ages like the PC did. The only thing the ISDN wins hand down on is the uploading of large files which is about twice as fast, because a 56K modem works only at 33K in the uploading direction.

For reading news and email, the Acorn programs such as ANT Suite's Marcel and Jonathan Duddington's Pluto compare with the best available on the PC, offering multiple mail folders, advanced sorting capabilities, address books and multi-user support. The latest beta version of Marcel is much improved, displaying mail

using outline fonts and colouring showing you who has written what within a message. This complements the facilities available in the ZAP editor's email mode, which is used to write email. Attachments are handled flawlessly with RISC OS types being preserved when sending between two Acorn programs. Importantly, they use the recognised Internet conventions for quoting other people's email and adding signatures, unlike the awful MS Outlook. Marcel has a useful feature to strip the useless HTML attachments from that program's mail, so you don't fill up your mail folders with junk.

Compared to the big two browsers on the PC from Netscape and Microsoft, which are constantly pushing the standards forward, the Acorn browsers are always going to be playing catch-up and there will be some sites which you aren't going to be able to access.

It all depends on what sort of sites you visit if this is going to prove a problem. Secure services such as online banking and shopping will require SSL, which you need to get hold of as it doesn't come with the



browsers. Some sites require plug-ins, such as Macromedia Flash, which aren't available for any Acorn browsers and a lot need Javascript which only Fresco and Webster XL support and then not fully (but not all sites work with Netscape and Internet Explorer either).

Personally, I've found very few sites I couldn't access with either Fresco or Browse, including all the popular search engines, news services and entertainment sites.

Out of the two browsers Browse is the more stable but hampered by the lack of Javascript. Fresco handles more sites but does tend to crash a lot which can be annoying. However Acorn browsers do have some advantages over PC ones. The anti-aliased fonts make a much more readable display and the ability to save out the entire page complete with text and images as a Drawfile, for reading offline, is invaluable.

Also when downloading a lot of files or pictures from a slow site it is not efficient to have a single download going only using a fraction of the download bandwidth, so I like to fire

off several at once. On a PC browser this results in a pile of windows and the machine generally freezing for several minutes. On Browse and Fresco you can download the target of the link without opening a new window, just giving a save and small progress box. It also seems no matter how many I fire off at once they all proceed in the background and I can even continue to view other web pages without the machine grinding to a halt. This has allowed me to download large quantities of stuff even quicker than on the ISDN line.

As well as email and web browsing I now have access to other Internet services which were blocked at work, such as chat rooms based on telnet and IRC protocols and messaging services such as ICQ. There are many freeware programs to allow you use these and you don't have to worry about the boss catching you!

### **Cost**

OK, so you have paid out the initial costs of the modem and software and are enjoying the benefits of staying in touch by email, keeping up to date with developments on newsgroups and browsing the endless depths of

the web. But what nasty surprise is in store when the quarterly phone bill comes?

The bill will all depend on how you use it. If you are only interested in mail and news you may do a few short calls every day just to collect and send. If you are lucky these will complete within the minimum call charge which is 5p on BT even at peak time.

If you become a web-a-holic you may spend hours at a time surfing and frequenting chat rooms, in which case as long as you keep to off peak times and weekends the cost per hour is reasonable.

### **Surfing**

But watch out it does mount up after three months. I've just got my first phone bill after going on line and the Internet share of it was £71.

It can be difficult so see from the bill how much is the computer's use. Long calls with the 0845 prefix of the ISP are easy to spot, but short calls under 40p aren't mentioned on BT's itemised bill, so a utility such as !Ringo which calculates the cost from

the logfile in the ANT Suite can prove invaluable at solving disputes over large shared bills.

### **Best friend**

You can do things to reduce the bill, if you are on BT you can put your ISP on the friends and family scheme to get a 10% discount, or 20% if you make it your best friend. You can even do this online at [www.customer-service.bt.com/friends\\_family/owa/bestfriend.who](http://www.customer-service.bt.com/friends_family/owa/bestfriend.who).

Watch out mind, while you can change the 10 friends and family numbers about 90 times per billing period, you can only change your best friend number once. I initially put the first FreeUK number in but couldn't change it to the more reliable alternative number for three months, so I only got 10% discount the whole time.

If you are thinking of going with an alternative to BT check that their discounted local rates cover the 0845 numbers of your ISP, otherwise it may not be cheaper.

Some companies now offer a service where you dial a prefix so the call

doesn't get put on your phone bill and instead you get charged, with up to a 30% discount, direct to your credit card, which would stop any disputes over the phone bill. I have yet to investigate this. If you find yourself making heavy use of the Internet and you are with a free provider it may be worth examining again whether you'd save enough on your phone bill to justify the extra monthly charge.

If you find you get lots of dropped connections, causing you to redial and run up extra minimum call charges, or your download speed is always far less than your modem is capable of, it might be worth it.

After all you have to be slightly suspicious that a Free ISP isn't offering as fast a service as possible as they make their money from you making as long a phone call as possible, whereas subscription services don't care how long you are on.

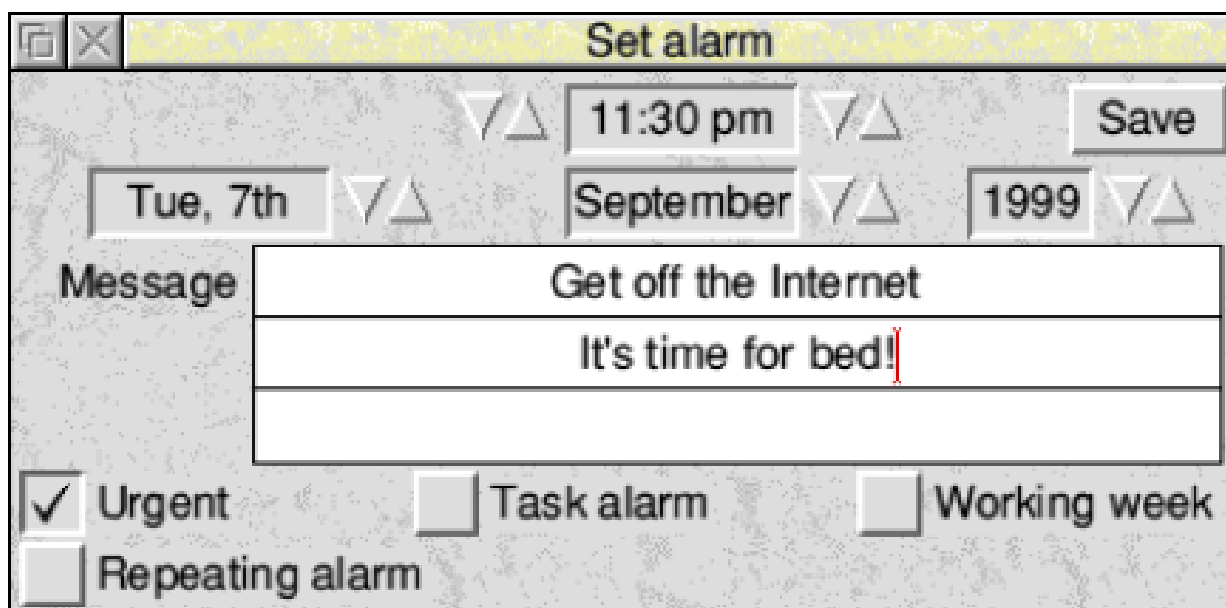
But if it is something like web browsing you are doing, the speed of the connection isn't as critical, as most of the online time is going to be you reading it rather than the computer downloading it.

## **How easy**

In conclusion I am very pleased at how easy it was to set up the system and how well it works, compared with what I was using at work. Mine is not much slower in actual use and I've actually found it more reliable than work with no nasty servers to crash and take days to repair. I am now able to use the Internet at any time of the day or night at a reasonable cost.

Here are a few recommendations:-

- Don't go for the cheapest modem, unreliability or inability to upgrade will cost you more in the long term.
- Get recommendations from friends about which is the best software and ISP to use.
- If you go for a free ISP you may need to register from work or get a friend to download scripts and instructions for you before you begin.
- Put your ISP number as your best friend on BT's Friends and Family scheme.
- Keep a log of your Internet calls to prevent family disputes.



*Follow this tip if you've got work in the morning*

- If possible use more than one web browser; some work better with some sites than others

- Use Alarm to remind you to go to bed instead of web browsing into the early hours!

If you aren't already on the Internet, you should definitely consider it. Once you have seen how useful email is and have the ability to download the latest PD program at the click of a button you'll wonder how on earth you managed before.

The ARM Club can offer a much quicker service for enquires and technical help to people with email.

Our email addresses include: [info@armclub.org.uk](mailto:info@armclub.org.uk) and [support@armclub.org.uk](mailto:support@armclub.org.uk) while our website is: [www.armclub.org.uk](http://www.armclub.org.uk).

These can always be found in the Club Contacts on the last inside page of every issue of Eureka.

### ***New BT Service***

***Since this was written British Telecom have announced the introduction of four new services allowing unlimited access to the Internet at all times for £34.99 a month, weekdays only for £26.99, and weekends only or weekday evenings and nights only for £6.99 a month.***

---

# English Keywords

---

English Keywords —Words and Sentences is the second in Sherston's Keywords series and as such uses the same user interface structure as the predecessor in the series, Science Keywords —The Living World (reviewed in Eureka

directly between the explanations for each entry in the word databank. This feature is easily utilised by clicking on the *links* icon and the cross-referenced words in the text explanation are highlighted in the form of hyperlink. That is, clicking on

---

*Andrew Weston brushes up his English with a database of key words and a library of pictures to illustrate their meanings and use.*

---

32). This current arrival in the series is aimed to allow children to investigate the words associated with 'grammar, punctuation and phonics' of the English language specified by the National Literacy Strategy.

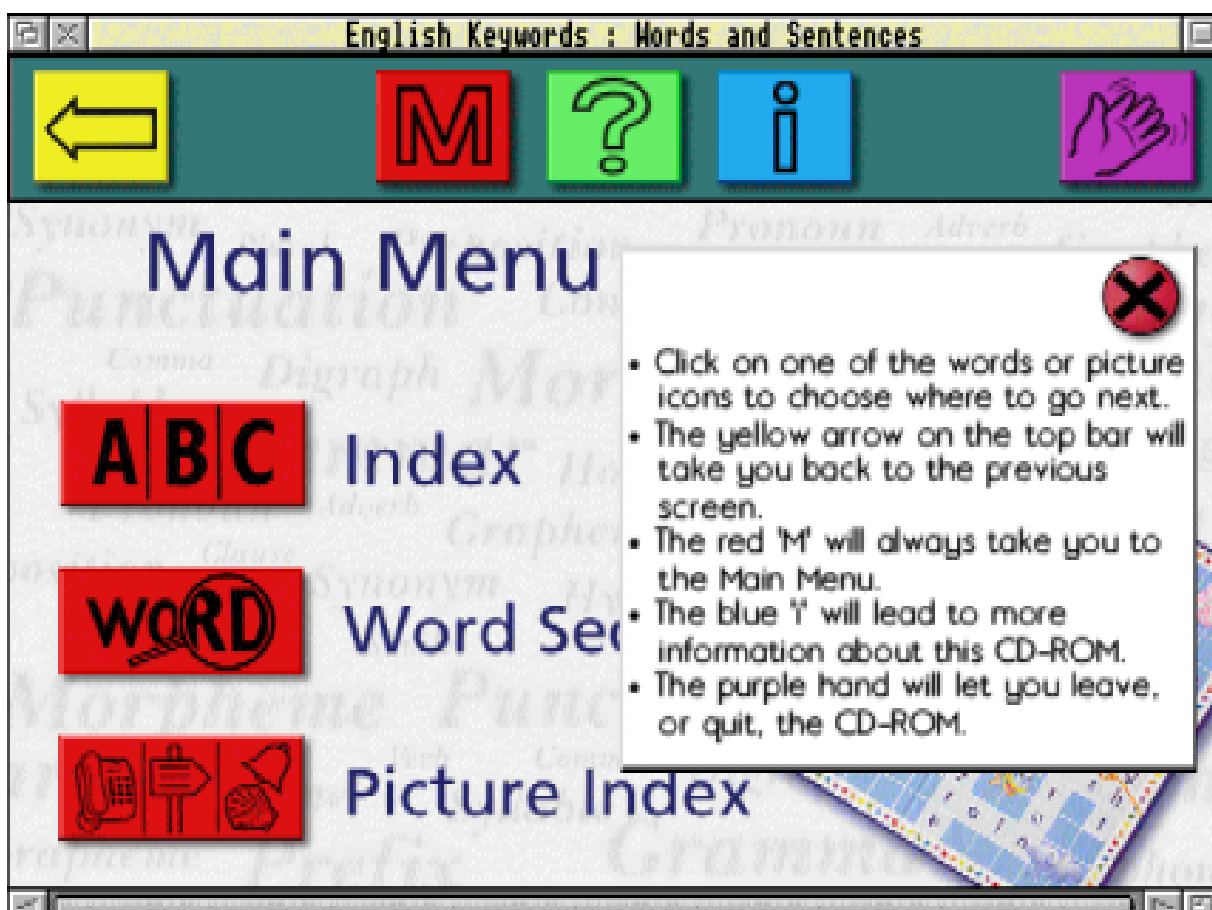
The concept of the series appears like an electronic encyclopedia for a particular theme. Therefore the application is based around a large set of words related to the chosen theme for which there are explanations and accompanying illustrations.

The interesting feature of the interface adopted by Sherston however is the ability to move

the word will move to the descriptive text accompanying the highlighted link. There is consequently the opportunity to follow a 'trail' through this resource.

All this information and illustration can be exported to other documents in the form of sprites or textfiles or printed out.

The keywords are accessible initially through three main options as is evidently the case in this series of titles — *Index*, *Word Search* and *Picture Index*. Index takes the user to a menu with the letters of the alphabet and by selecting a letter, the words



*The main menu structure with interactive help selected. This is available for every page in the software.*

with that particular beginning are displayed below. The appropriate word can then be selected for explanation.

The explanation is displayed in a scrollable box and can be spoken by the software if desired.

One minor hindrance here is the necessity to scroll manually through the written explanation while it is being read as this does not proceed

automatically. For the younger user this, perhaps, could have been particularly helpful.

The *Word Search* option takes the user to two writable icons (empty boxes) allowing a choice or a combination of two words to be found, if present, in the databank. The results may be the actual word or an entry in the databank whose explanatory text contains the search enquiry. One could envisage that this would be

useful in showing the context of a particularly keyword. For example, the appearance of 'dialect' and 'slang' in the explanation for 'standard English'.

### **standard English**

Words that are spoken and used in a way that everyone understands. Standard English does not include dialect or slang, although it can be spoken with an accent.

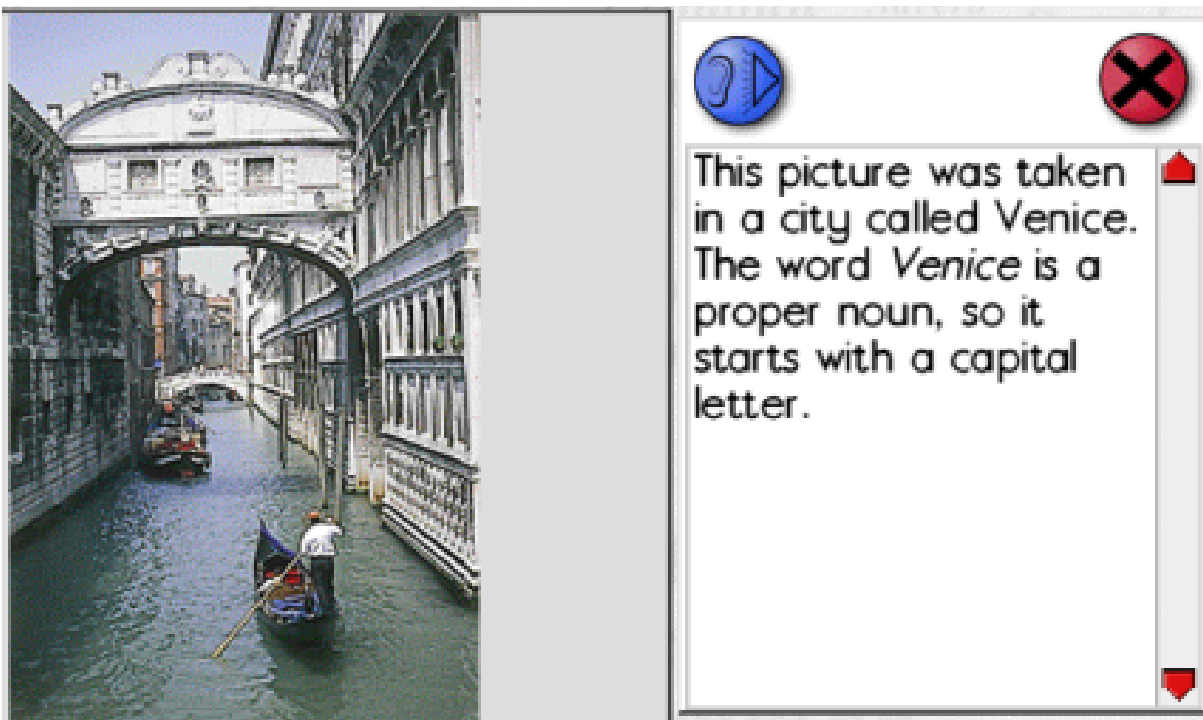
*The explanation for 'standard English' which has cross-references to other entries in the application's databank*

Another menu gives access to the pictures on selecting the *Picture Index* option. These pictures, intended to delineate or elaborate upon the keyword explanation of interest, are displayed initially as *thumbnails*. If the user's curiosity is taken by a picture, it can be enlarged to display the full image with an appropriate caption explaining its significance. This is often useful as the relevance would not presumably be obvious to younger children. Indeed, many of the pictures have been thoughtfully and cleverly chosen to illustrate the keyword and its context. Again, all captions and explanations can be spoken aloud by a click on the *sound* icon.

The software centres around quite a broad range of English language-associated keywords. Many of these

are fundamental to an understanding of English and as such are valuable inclusions. Others are equally informative and would undoubtedly be educational to adult users, like myself for example, who have not studied English for several years and perhaps do not encounter such definitions very often. It is often satisfying to know, say, when you use or encounter a metaphor, a simile or a mnemonic.

The program includes a comprehensive interactive help system. Help is available for every page of the software and in all aspects of using it. This information is also available in the comprehensive, but straightforward, manual. The manual also makes clear the skills it aims to teach, perhaps assisting the teacher or



parent in which parts of using the software should be emphasised—for example, the value of indexes in information searches.

Sherston have also included a range of supporting paper-based material—specifically, a colour poster of the different icons for easy reference, an index of all the words within the software's databank and a *Quick-Start* card. These would very likely be notably useful in the classroom to get the pupil or even teacher up-and-running as soon as possible.

So, overall, we have a well thought-out and implemented resource. This series promises to be a valuable aid in the classroom, yet will be

informative, I believe, to most adults as well. English Keywords represents a simple but effective concept that will hopefully be a well-received addition to the range of educational software available for RISC OS users.

---

### English Keywords — Words and Sentences

Prices (all +VAT): single £29.95  
(multi packs are available)

Supplier: Sherston Software Ltd

Angel House, Sherston

Malmesbury, Wilts SN16 0LH

Tel: 01666 843200

Fax: 01666 843216

Email: [sales@sherston.co.uk](mailto:sales@sherston.co.uk)

Web: [www.sherston.com](http://www.sherston.com)

---



# A Beginner's Guide To TeX

---

So you've installed TeX and have marked up a document with plain TeX commands. I will now show you how to mark up some text with LaTeX commands.

It will no doubt be very clear that TeX and LaTeX commands are quite different. The different commands occur because of the fact that things like page layout have been predefined by LaTeX so that the user can concentrate on writing rather than on specifying formatting commands. LaTeX therefore

---

*In the third part of his series, Paul Webb moves on to LaTeX and explains the basic structure of a document and the five predefined styles you can use.*

---

offers the user a choice of five predefined document styles: book, article, letter, slide and report. Of course, it is also possible to define your own class although this is not recommended by the experts unless you know what you are doing.

Observe the example of code below which shows the basic structure of a LaTeX document:

```
\documentclass{...}
```

```
\begin{document}
```

Enter text here or include a picture, table or equation.

```
\end{document}
```

Most LaTeX documents follow much the same pattern. The code for an article begins with the `\documentclass` command with “article” or some other document style as the argument of the command. The section between the `\documentclass` command and the `\begin{document}` command is known as the “preamble” and can contain commands which instruct LaTeX to include

packages which provide additional features which are not incorporated in the base system.

Obviously, this basic structure would be filled in with many other commands before a usable document could be generated. The code below shows a document with the blanks filled in. Many commands have been added but I have placed comments in the code to give the reader some idea of what each command does. TeX code can be quite hard to read if you are unfamiliar with the system so why not enter the code into your favourite editor and run the document through LaTeX? I have also included references to useful books in the code so you will have to run BibTeX—a program which generates a bibliography. The procedure is as follows: Run LaTeX, BibTeX, LaTeX and LaTeX again in that order. Four runs are necessary before the references will be listed correctly. Of course the filer will need to see the plain “bst” file and the “bib” file. Confused? Well the plain bst file is a style file which determines the way that a list of references is laid out. Look at the section on BibTeX in this article for information on what to do with this file. The bib file—“Eureka”—is in contrast a database of references that BibTeX has to see before the references can be included in the LaTeX document. Essentially, the bib file is a plain text file in which the references are laid out as follows:

```
@BOOK{lamp:guid,
  AUTHOR      = "Leslie Lamport",
  TITLE       = "\LaTeX\ --- A Document Preparation System",
  PUBLISHER    = {Addison-Wesley},
  ADDRESS     = {Reading, Massachusetts},
  YEAR        = 1994 }
```

```
@BOOK{goos:comp,
  AUTHOR      = "Michel Goossens and
                Frank Mittelbach and
                Alexander Samarin",
  TITLE       = "The \LaTeX\ Companion",
  PUBLISHER    = {Addison-Wesley},
  ADDRESS     = {Reading, Massachusetts},
  YEAR        = 1994 }
```

```
@BOOK{gand:grap,
  AUTHOR      = "Michel Goossens and
                  Sebastian Rahtz and
                  Frank Mittelbach",
  TITLE       = "The \LaTeX\ Graphics Companion",
  PUBLISHER    = {Addison-Wesley},
  ADDRESS     = {Reading, Massachusetts},
  YEAR        = 1997          }
```

```
@BOOK{chic:web,
  AUTHOR      = "Michel Goossens and
                  Sebastian Rahtz",
  TITLE       = "The \LaTeX\ Web Companion",
  PUBLISHER    = {Addison-Wesley},
  ADDRESS     = {Reading, Massachusetts},
  YEAR        = 1999          }
```

So here's the code for a simple LaTeX document.

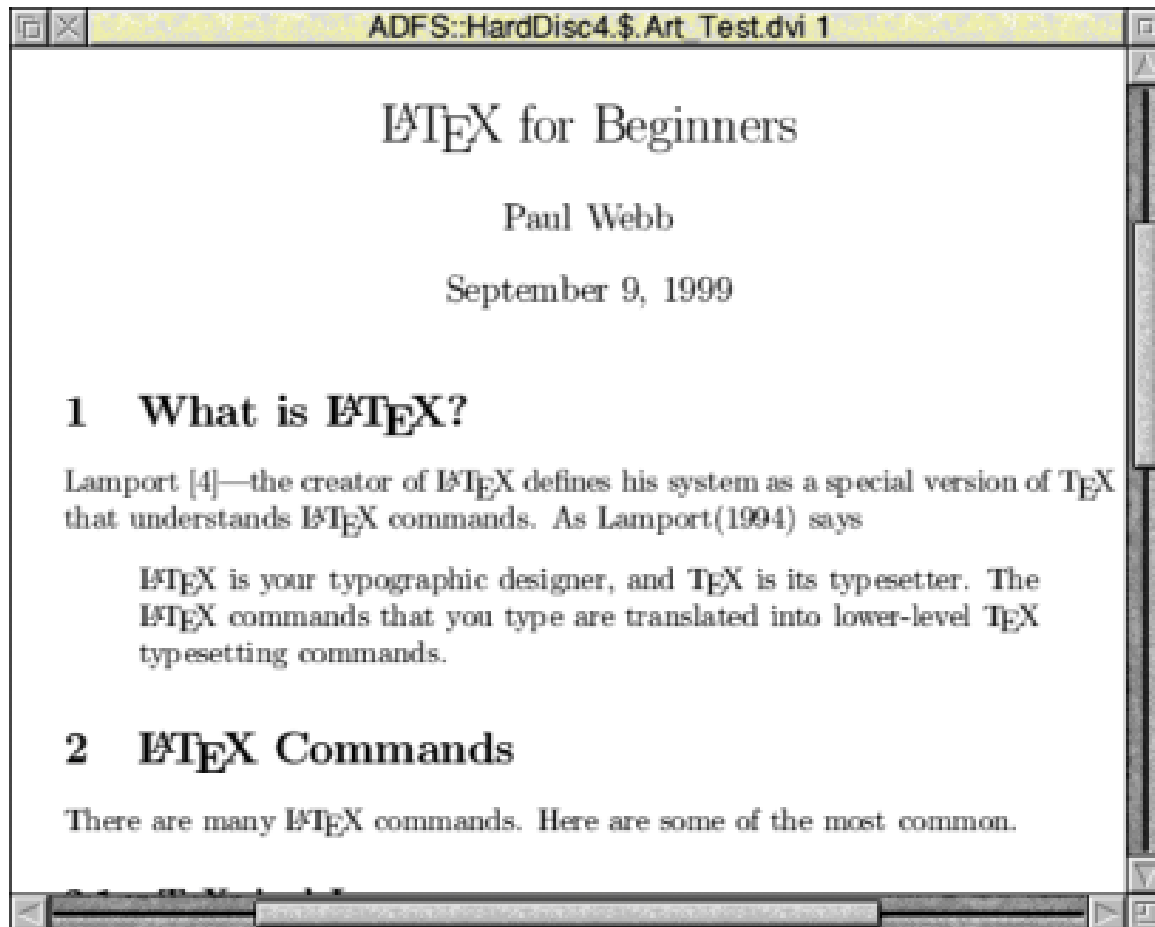
% a '%' character is used for commenting text.  
 % Text after a '%' is ignored.

```
\documentclass{article}                % Document class chosen
                                         % Beginning of preamble
\newcommand{\ttbsl}{\tt \char`\V}      % Defines backslash for text body
\newcommand{\BibTeX}{\rm B\kern-.05em{\sc
    i\kern-.025em b}\kern-.08em        % Defines a BibTeX logo
    T\kern-.1667em\lower.7ex\hbox{E}
    \kern-.125emX}}
\title{\LaTeX for Beginners}           % Declare document title
\author{Paul Webb}                     % Declare document author

\begin{document}                       % End of preamble
                                         % Beginning of text

\maketitle                             % Produces title

\section{What is \LaTeX?}              % Section command
Lamport~\cite{lamp:guid}---the creator of
\LaTeX\ defines his system as a special
```



*The first page of the document*

version of `\TeX` that understands `\LaTeX` commands. As Lamport(1994) says

```
\begin{quote}                                     % Begin quote environment
```

`\LaTeX` is your typographic designer, and `\TeX` is its typesetter. The `\LaTeX` commands that you type are translated into lower-level `\TeX` typesetting commands.

```
\end{quote}                                       % End quote environment
```

```
\section{\LaTeX Commands}
```

There are many `\LaTeX` commands. Here are some of the most common.

`\subsection{\TeX nical Logos}`

% Sub-section command

`\begin{center}`

% Note American spelling  
% of centre

`{\ttbsl LaTeX\ttbsl}` produces the `\LaTeX\` logo `\%` `\%` separates lines  
`{\ttbsl TeX\ttbsl}` produces the `\TeX\` logo `\%`  
`{\ttbsl BibTeX\ttbsl}` produces the `\BibTeX\` logo

`\end{center}`

`\subsection{Type Styles}`

Here are some of the commands which may be used  
to alter the type style.

`\begin{enumerate}`

% begins a numbered  
% list environment

`\item{\ttbsl emph}` is used to `\emph{emphasize} text`  
`\item{\ttbsl textup}` produces text in an `\textup{upright}` shape  
`\item{\ttbsl textit}` produces text in an `\textit{italic}` shape  
`\item{\ttbsl textmd}` `\textmd{produces text in the medium series}}`  
`\item{\ttbsl textbf}` produces text in the `\textbf{boldface}` series  
`\item{\ttbsl textrm}` `\textrm{produces text from the Roman family}`  
`\item{\ttbsl textsf}` `\textsf{produces text from the Sans Serif family}`  
`\item{\ttbsl texttt}` `\texttt{produces text from the Typewriter family}`

`\end{enumerate}`

% end numbered  
% list environment

`\section{Document Structure}`

In `\LaTeX\` words are separated by one or more spaces and the end of a  
paragraph and the start of another is denoted by a blank line.

And so the second paragraph begins `\ldots`.

% the ellipsis command

`\subsection{Sub-sections}`

The “power” user can also take advantage of a number of % ‘or’ not ‘or’  
special environments. The most commonly used environments are

`\begin{itemize}` % begin bulleted  
% list environment

`\item{the picture environment for drawing}`  
`\item{the tabular environment for tables}`  
`\item{the itemize environment for lists}`  
`\item{the math environment for in-text formulae}`

`\end{itemize}` % end bulleted  
% list environment

## `\section{Packages}`

The user can also access many packages through (CTAN)`\footnote{Comprehensive \TeX\ Archive Network ftp.tex.ac.uk}` or obtain packages and complete `\TeX\` distributions from DANTE`\footnote{Deutschsprachige Anwendervereinigung \TeX\ e.V. http://dante.de/}`---the German `\TeX\` Users' Group who produce a mirror of the CTAN site as a set of three CDs. This set is freely available to any member of a `\TeX\` Users' Group.

Additional packages are available to produce diagrams, tables, game boards and non-Latin scripts. The interested reader should consult Goossens and Mittelbach et al~`\cite{goos:comp}` for a description of over 150 packages and Goossens and Rahtz et al~`\cite{gand:grap}` for information on embedding graphics within a `\LaTeX\` document. Readers who want to place their `\TeX\` documents on the net should also refer to Goossens and Rahtz~`\cite{chic:web}`. Articles in `\textbf{Baskerville}`---the journal of UKTUG and in `\textbf{TUGboat}`---the international journal for `\TeX\` users can also be very informative.

`\vfil\eject` % start a new page

## `\section{\BibTeX}`

`\BibTeX\` is used to generate a bibliography but it will only work if a ```bib"` file has been constructed. Essentially, this bib file is a plain text file which contains lists of references cited in the text.

I'll look at `\BibTeX\` in detail in the final article of the series

but please also ensure that one of the `\BibTeX\` style files (bst files) has been seen by the filer. There are a number of style files included with ArmTeX and each one has a slightly different effect on the layout of your references. The ``standard" `\BibTeX\` file---`\texttt{plain}`---sorts entries alphabetically and includes numeric labels. The style files may be inspected by holding down shift and double-clicking on the !TeX icon. Clicking in the Bibinputs Directory reveals the style files which are at your disposal. Other style files include `\texttt{unsrt}`, `\texttt{alpha}` and `\texttt{abbrev}`. `\texttt{Unsort}` uses numeric labels and prints entries in the order in which they are cited whilst `\texttt{alpha}` generates entries which are composed of snippets from the authors' names as well as months and journal names. Style files are also available for a range of journals.

`\section{Mathematics}`

`\TeX\` and `\LaTeX\` have a justly deserved reputation for being able to typeset mathematics. This topic is too specialized to cover in a general series but mathematical readers will appreciate the ability of `\LaTeX\` to handle sub and superscripts, fractions, roots, mathematical Greek, calligraphic letters, log-like functions etc etc.

<code>\bibliographystyle{plain}</code>	%Select plain style
<code>\bibliography{Eureka}</code>	% Read ``Eureka" bib file
<code>\end{document}</code>	% End of document

So that's it. You should hopefully have some idea of the power of TeX and LaTeX. In the final article of the series, I will take a closer look at including tables and pictures with LaTeX. I will also look at BibTeX and MakeIndex as well as outlining some exciting developments which are underway in the TeX community.

Until then, happy TeXing!

**UKTUG enquiries:** [molyneux@kingston.ac.uk](mailto:molyneux@kingston.ac.uk)

**TUG:** [www.tug.org/](http://www.tug.org/)

**Previous issues of Baskerville:**

[www.tex.ac.uk/tex-archive/usergrps/uktug/baskervi/](http://www.tex.ac.uk/tex-archive/usergrps/uktug/baskervi/)

**Previous issues of TUGboat:** [www.tug.org/](http://www.tug.org/)



in association with  
Bristol Acorn Risc User Group



## ACORN SOUTHWEST SHOW

*Supporting RISC OS users in SW England and S Wales*

**SATURDAY 19th FEBRUARY 2000**

The Webbington Hotel  
Loxton, Nr Axbridge  
North Somerset

- Companies and clubs
- Special show discounts
- Seminars and talks
- Games Arcade

**DOORS OPEN AT 10am UNTIL 4.30pm**

### ADMISSION CHARGES

Adults £2 / ARM Club or Foundation members £1

Children under 16 FREE (accompanied by adult)

(Pay at door only)

Bus shuttle service from Weston-super-Mare train station

For further details - Phone/Fax: (01935) 413170

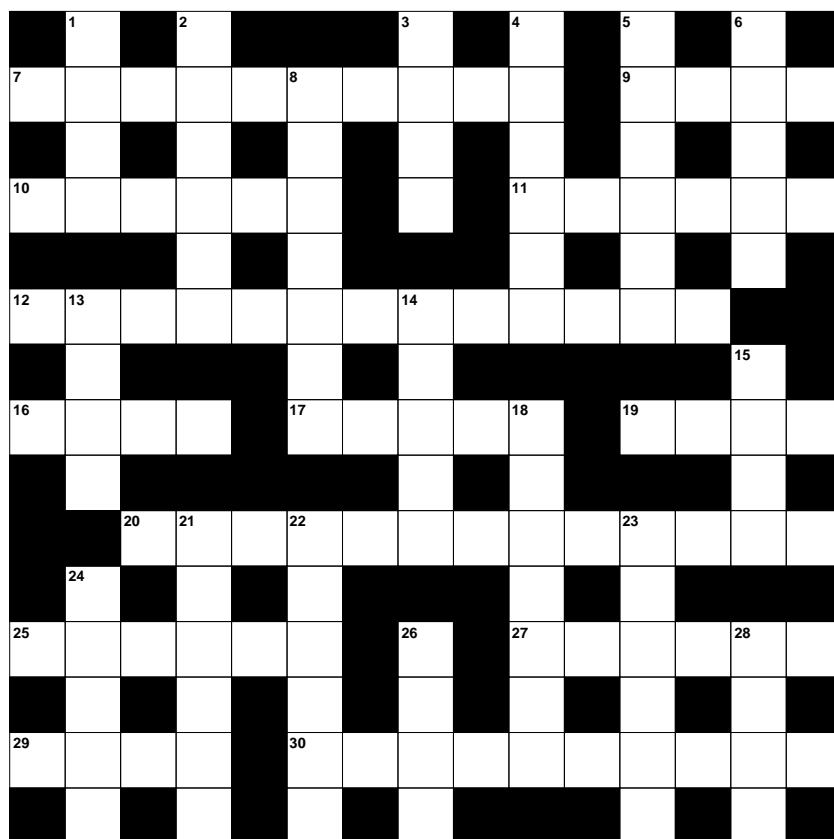
Email: [acornshow@argonet.co.uk](mailto:acornshow@argonet.co.uk)

<http://www.argonet.co.uk/acornshow/>



# The ARM Club Crossword No. 3

*Compiled by Roger King*



27. Proprietary name for a tranquiliser drug (6)

29. Crumbly cheese from Greece (4)

30. Hero of many old Western films (4,6)

## Down:

1. Sacred mountain of Japan (4)

2. The young man beloved by Aphrodite (6)

3. One of a West African race (4)

4. Device for generating electricity (6)

5. Relating to the name of two ancient Scandinavian books (6)

6. Hatred (5)

## Across:

7. A stringed instrument whose strings are sounded by the turning of a wheel (5-5)

9. A cubic block forming the base of a pedestal (4)

10. A plant with bright, showy flowers (6)

11. A counting-frame (6)

12. His selection of horse was nearest to the stable door! (7,6)

16. Former King of Mercia (4)

17. Fatty secretion that lubricates the hair and skin (5)

19. Plant of the maple genus (4)

20. Welsh nationalist leader who defeated Henry IV and his armies in three campaigns (4,9)

25. Any bird of the gull family (6)

8. Monitor lizards found in Australia (7)

13. Fish belonging to the carp family (4)

14. Computer language (5)

15. The Hawaiian goose (4)

18. White fur (7)

21. Australian marsupial (6)

22. Central columns of spiral staircases (6)

23. Variety of black tea (6)

24. Part of the setting of a precious stone (5)

26. A vessel for heating liquids in a dish of burning alcohol (4)

28. Any plant of the gorse genus (4)

***Solution on page 79***

---

# DrawWorks Millennium

---

CD-ROMs containing lots of programs are quite common now but, good value as most of them are, the majority are usually filled with PD.

DrawWorks Millenium —described as ‘a complete graphics and print design studio’ — from iSV, contains

the hard disc. To speed up the operations, iSV recommend installing at least the main DrawWorks application and, if space allows, Mr Clippy, Dr Fonty and the RunFromCD application as well. This will take a total of about 30MB of space. The fonts and clip art resources

---

*Peter Jennings looks at a package which promises you ‘a complete graphics and print design studio’ on a CD-ROM, and offers a special price for Club members.*

---

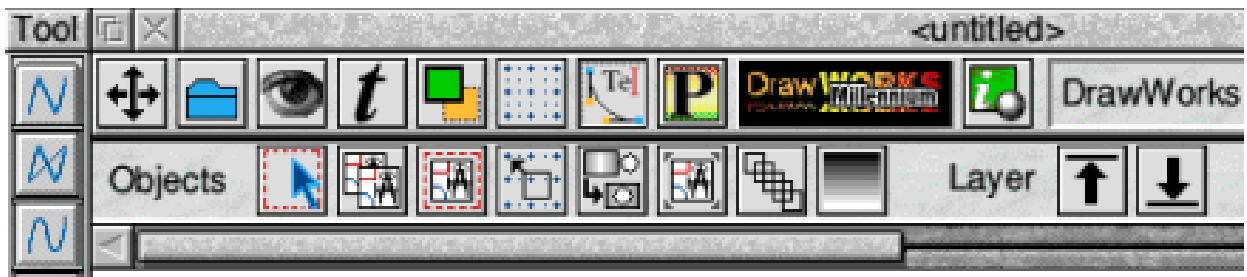
the full, latest, versions of six best-selling packages: DrawWorks, Mr Clippy, Dr Fonty, Professional Typography Expert 2100, VIVID graphics enhancers and iSV Clip art collection. All the applications come with an on-line but printable manual.

Earlier versions of three of these programs have been previously reviewed in Eureka; DrawWorks Designer in issue 26, Professional Typography Expert 2100 in issue 29 and Mr Clippy in issue 22.

All the programs can either be run directly from the CD or installed on

can be left on the CD and will be requested by any of the applications which need them.

DrawWorks will already be familiar to users of RISC OS 4 from the entry-level version supplied on the RO4 CD-ROM. It is designed as a bolt-on addition to Draw, which is apparent from the additional toolbar with two rows of icons which is attached to an opened Draw window. The purpose of each of the additional icons is easily discovered by moving the mouse arrow along the line when each is identified in an information panel.



*Part of the DrawWorks toolbar which is added to a Draw window*

Those on the top line are basically to load different selections onto the second line to provide tool bars for View, Text, Object Style, Grid, Select and Edit, Pure Tint and Spot Colour and Special Tools. These provide a quicker way to access almost all the functions provided by menus in Draw and add numerous new ones. The on-line manual can also be opened from here.

If you prefer to position the DrawWorks toolbar somewhere else it can be dragged away from the Draw window.

Although DrawWorks Designer was issued only about a year earlier, the Millennium version has significantly extended its features, including some advanced colour options, such as CMYK and spot colour separations and contrast/brightness and colour balance and tinting tools, which will greatly add to its value for professional users.

Of more general interest is the huge variety of effects which can be added to graphics and text and these too have been extended. The first to catch my eye was the spiral tool which coils lines of text into a shape which winds round as you watch. The diameter and the gap between each ring of text can both be set.

Text can be manipulated into various other shapes, such as circles and arcs, filled with a graphic design and merged with other elements. The new *Lining* tool, which can be used for vector graphics or text, provides some unusual outlines with a choice of styles and fill and line colours.

A neat *Mapping* tool converts a series of single lines and intersected circles into a map of roads and roundabouts, although the roundabouts do lack a central reservation unless you add the extra circles yourself.



### *Spiral text*

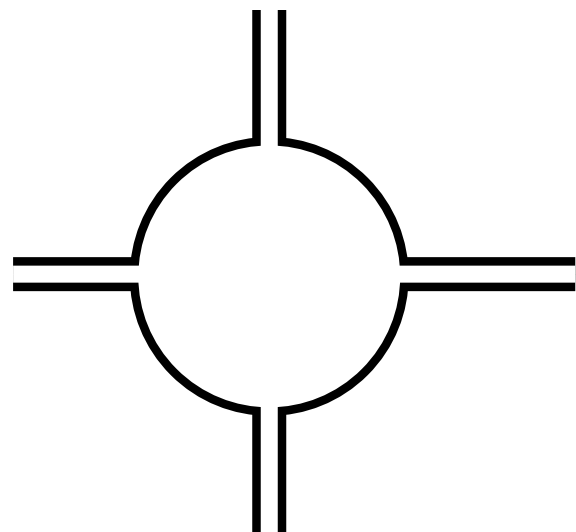
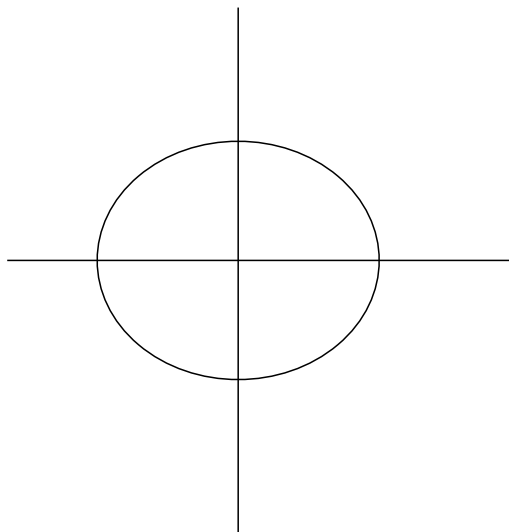
It's always refreshing to find an unexpected touch of humour in a 'serious' piece of software and it comes in DrawWorks with a panel which pops up on loading offering a useful tip supposedly from some impressively titled company member with an appropriate portrait. If this facility doesn't match your own sense

of humour it can be switched off from a preferences window.

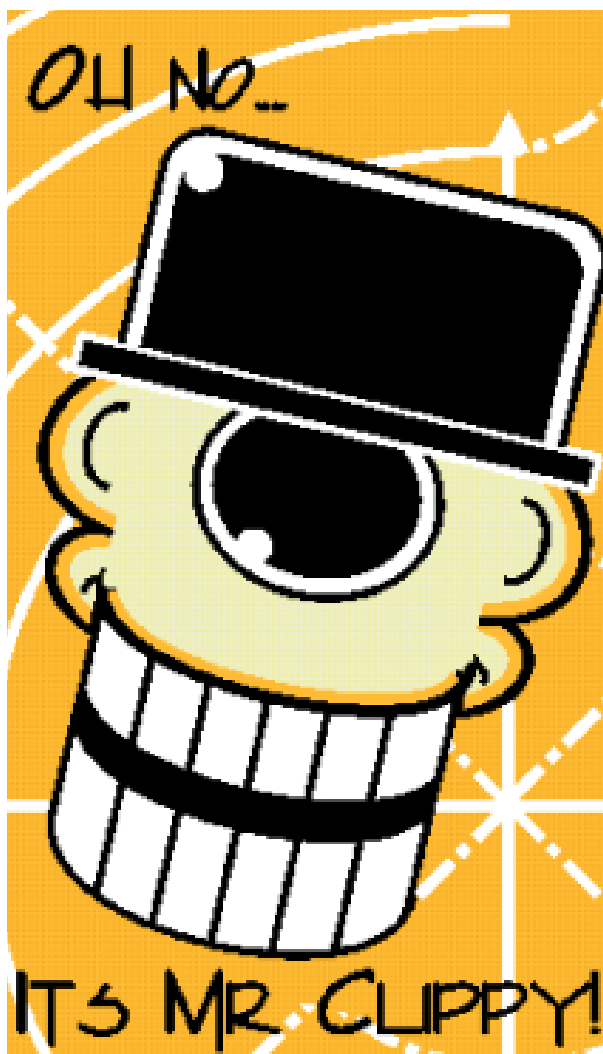
### **Mr Clippy**

The humour is more blatant when Mr Clippy, the clip art manager, comes on the scene. When this program is loaded Mr Clippy makes his entrance as a skull-like head singing his theme song: "Mr Clippy stores clips for you; he handles vectors and bitmaps too" in a voice which will remind older users who remember the Goon Show of Eccles. The voice and a strident 'funky' yellow colour scheme can both be turned off for those who prefer silence and a restful John Major grey for their backgrounds.

Behind the fun image there is a seriously good application which will



*The Mapping tool converts lines and circles (left) to roads and roundabouts*



### *Mr Clippy's singing skull*

store your clip art in named groups and sub groups and quickly find and display any file. It comes ready loaded with more than a thousand images from the supplied iSV collection, which contains samples from a number of collections issued by other companies. If you put Mr Clippy on your hard disc you can still see all the contents as *thumbnails* — which can be printed out with a

choice of 20, 30 or 42 clips on an A4 sheet —but the actual clips will stay on the CD, which Mr Clippy will ask for if any of them are needed.

Files can be added singly or in directories by dragging them into the main window and can be stored and automatically compressed or have the originals left on their source. They are stored in their original format but can be exported as other types if you wish.

### **Dr Fonty**

Dr Fonty is a font designer intended to replace Acorn's FontEd and it has been made to work in a similar way. An existing font can be loaded in and editing or you can start from scratch and design your own by drawing the shapes of the letters as outlines and importing these. You can then give your letters appropriate widths and add a matching space and, optionally, provide scaffolding and kerning.

### **Typography Expert 2100**

If you don't want the bother of designing a font of your own you can turn to another of the applications included on the CD, Professional Typography Expert 2100, and you will be very hard to please if you

don't find something to suit your needs here. The 2100 refers to the number of typefaces you get (a few more, actually, if you take the trouble to count), classified into 13 groups: Decorative, Designer, Digital, Eastern, Gothic, NonLatin, OpenFace, SansSerif, Script, Serif Symbolic, Uncial and Western.

They can all be used directly from the CD or installed in a !Fonts folder, EasyFont Pro or FontDir.

The application is accompanied by two directories of Font Tools and Utilities to use with it, including FontEd and FontTrixPro, another font editor, which can make new weights from existing typefaces.

A Font Catalogue will show, and optionally print out, a complete font family (including any other fonts you may have) and a separate sample viewer will display a good slab of text in any typeface you wish to see in more detail.

### **Vivid**

For Acorn users with pre Risc PC machines there is a directory of ViVID graphics enhancers to provide

extended screen modes with a variety of monitors.

### **Special offer**

If you have any doubts about the value offered by this CD-ROM you have only to look at the iSV price list. An order form, included on the CD, shows the cost of each package bought separately. Without the bonus clip art they total more than £200 (although you wouldn't need all the different versions of Vivid). Even at full price, the CD-ROM is a bargain.

***There is a special offer for Club members.*** At nearly half price, this is outstanding value for a collection of graphic design programs that can be thoroughly recommended.

---

### **DrawWorks Millennium**

Price: £61.50 (RRP) inclusive  
(overseas +£2 postage)

Special Offer to Members: £31.50

Supplier: iSV Products

86 Turnberry, Home Farm

Bracknell, Berks RG12 8ZH

Tel: 01344 455769

Email: atimbrell@aol.com

Web: [www.isvproducts.co.uk](http://www.isvproducts.co.uk)

---

---

# ARM Arena

---

I suspect there will be a respectable number of Eureka readers who have an interest in the RISC OS/Acorn game scene. With this in mind and my own interest in developments in the scene, I have been granted the opportunity to do a games column in this issue.

There is promise for die-hard Acorn gamers however and RComp's 'consolidation' has been invaluable; generating a number of very high quality games.

Having set the picture, I will run through some of the more recent

---

*In the first of our new games columns, Andrew Weston surveys the scene and looks ahead to some of the exciting programs to come for RISC OS computers.*

---

I hope this will be of interest to existing gamers and perhaps stimulate theirs' and others' interest in the scene.

The Acorn games market has a chequered history dating as far back as the BBC Micro and no doubt farther and has produced a fair number of classics along the way. The efforts of such programmers however have rarely been rewarded as they perhaps deserve, especially in more recent times, and the number of games appearing for our computers has been reduced to a trickle.

releases and then make some mention of future ones. I will also provide some food for thought on the debate concerning the value of future hardware developments to the Acorn games scene. The pastime of emulation may also be of interest to some so I'll try to cover the latest developments in this area. I don't claim to be an expert but hopefully the sources of information I provide will be enough to prompt anybody interested in the right direction.

Here goes then, starting with recent releases. I hope this proves enjoyable to you!

## **Quake**

This 3D 'walkabout' game from ID software has been promised by RComp Interactive since the Wakefield Show in 1998. It has only recently been released however due to problems in obtaining the main program (the game engine). The game was eventually finished by the author of the freeware ArcQuake programme. This has been enhanced beyond the freely available version and released with the original Quake Resurrection pack.

The Resurrection pack contains the original Quake level data plus two sets of level data created by third-parties (Q!Zone and Malice).

The commercial Quake player supplied by RComp has support for the two add-ons, an improved front-end and is easier to install and configure. With this in mind, for the best Quake experience it is perhaps advisable to buy the complete Quake bundle from RComp rather than using the freeware player with Quake CDs bought elsewhere. Also, RComp have said they would like to upgrade their Quake player at some point as they did for Doom.

## **Heroes of Might and Magic II**

HoMMII is another RComp Interactive release and has quite a different theme from many of their previous PC conversions. It is reviewed extensively on Acorn Arcade but a short description will be given here.

The theme for the game is based around a struggle for control of a medieval land between two brothers following the death of their father, the king. The battle for territory and resources in the fictional world can be played among different people or against the computer. There are multiple lands which are represented as large maps with all features depicted in high resolution. Armies must be built up for the inevitable battles. Each player has his or her 'turn' (in other words, their own share of the control of the game) allowing time to make strategic moves.

The standard of sprite-based graphics overall is exceptional for the Acorn platform and reflects a notable amount of talent on the part of the original artists. The game however is complex at first and the variety of options during your struggle for



power is quite large. You are referred to the web-based reviews for more details if the game sounds appealing. Interactive help is available though and I am confident that once the player has become familiar with the interface the game will offer many hours of enjoyment in often very long playing sessions!

There is also the bonus of an extra set of levels and an editor provided with the basic HoMMII package which underlines the value of the game. If after all this, a further challenge is wanted, RCI have recently released an expansion pack *The Price of Loyalty* which I understand adds further campaigns amongst other expansions to the original game.

### **Botkiller 2**

Artex Software's Jan Klose released the platformer Botkiller in 1998 which proved to be a lot of fun to many. As a result, a commercial sequel has been created by a different author (Richard Wilson of WAG Software) and released by Artex. Botkiller 2 has much improved graphics, more features (weapons for example) and harder puzzles and is packaged nicely. Some comparisons

can be drawn to the RCI conversion of the PC game *Abuse* but Botkiller 2 has been criticised for having a short 'shelf-life' because of certain tedious or overly-difficult sections. However, perhaps the experienced (and rather starved) Acorn platform-game fan will be less affected and better enjoy this visually impressive game. Indeed, the standard of presentation of this game is a hallmark of Artex Software.

### **Eurofighter Typhoon**

Flight simulators have not been common in the Acorn games scene for several years and *Birds of War* by 4th Dimension is showing its age, being a long way behind the standard of current releases on other platforms. Recently released, and seemingly missed by gaming websites was Eurofighter Typhoon, a simulation of the Eurofighter warplane. The game is reportedly high on detail and contains training facilities and battle missions. It has however, been criticised for not showing much which we haven't seen before. This is especially true of the graphics — although the cockpit detail appears impressive, the scenery and game objects are not really comparable to

the standards of certain modern PC flight simulators.

Perhaps the author has focused mainly on making Eurofighter Typhoon true-to-life in terms of flight-mechanics rather than an arcade-style game so those with a special interest in this genre may well be satisfied with the product.

### **RISC OS-invaders!**

A recently discovered hidden 'extra' to RISC OS 4 is a space invaders-style game that is available by entering a particular call to the operating system. The reason for its inclusion is not known but I'm sure many RISC OS 4 users will find it entertaining in their spare moments, particularly as the 'invaders' are actually RISC OS sprites!

### **Future hardware**

There is currently much excitement in the RISC OS community concerning hardware projects and the significance for the future of the platform. Enhanced performance is a major component of the progress in any computer platform but it will always attract attention from games enthusiasts interested in how the new

capabilities can be exploited for leisure.

With the recent shipping of the first generation of machines from RiscStation, the UK and Australia-based RISC OS computer manufacturers, the future looks more promising. In the case of RiscStation, subsequent machines should be capable of accommodating expansion cards which use the PCI interface architecture. This is of great interest to games enthusiasts as graphics-accelerator cards have long been available for PC machines to provide assistance in certain aspects of graphics rendering, for example certain 3D calculations. This allows additional cosmetic or gameplay-based features to be added to the game being developed without imposing an excessive load on the central processor. This allows both the all-important desired 'framerate' to be achieved in 3D (vector graphic) games or achieved far more easily at least.

With such cards (assuming Acorn developers release suitable software drivers), conversions of a variety of more advanced current games are

theoretically possible. Even games native to the RISC OS platform may be enhanced or developed to take advantage of these capabilities if the market can justify this development.

Even without PCI-interfaced cards, improvements can be still made. For example, the RISC OS hardware-partner Millipede Electronic Graphics is generating equal excitement in the RISC OS market with its development of a much faster motherboard which can be accommodated in the space of the existing Risc PC case.

This will, it is planned, greatly improve the performance of the computer removing the restraints imposed on the StrongARM processor by existing Risc PC circuitry.

It should be noted though that the existing StrongARM Risc PC will be capable of running all the games mentioned here. In view of the standard of the Iron Dignity 3D engine, even a small improvement in performance could, in principle, open up many possibilities if exploited well

Castle Technology, the manufacturers of Acorn Risc PCs, expect to bring 'new ARM technology to the RISC OS market'. There is considerable loyalty behind the 'green-nut' logo and I would expect such developments would prove popular. It is tempting to speculate this will mean new, faster Risc PCs on our desks but we must be patient for now.

### **Emulation**

The subject of computer emulation — running software that allows your computer to operate as far as possible as another platform — is surprisingly extensive for RISC OS users. A wide range of emulation software exists and is under development.

The Acorn Gaming web site has links to news on most of these. For example software exists for emulating consoles such as the GameBoy, Colour GameBoy, Nintendo's NES and SNES, Sega's Master System GameGear and MegaDrive in addition to old computers such as the BBC Micro, Commodore 64, Spectrum and Atari. In fact, most of this software is freeware or shareware but some is commercial. Occasionally there is the choice of a commercial or

freeware version of an emulator such as Beebit (freeware) or 6502em (commercial) —which emulate the old BBC Micro. Again, please follow the links on the Web for information on availability.

There are legal issues to take into account when using software in the environment of an emulator as companies or authors (many of which no longer exist!) may still hold copyright and therefore distributing the data without the original authors' permissions is illegal. This data is available on the Internet regardless.

There is the notion amongst many emulation fans that providing they hold an original copy copyrighted game then using the same data for emulation is not exploiting the original publisher. Obviously I cannot endorse this though! Acorn users for example may be particularly interested in original BBC games for example. Strictly though, I understand it is still illegal to distribute copyright material without permission even if you cannot obtain such permission or consider legal action unlikely or absolutely unnecessary!

### **Future software**

Probably the most exciting prospects for the Acorn games scene are set to come from Artex Software, the Germany-based RISC OS games software producers. Already released and reviewed with praise are *Exodus* and *Ankh*, but their current products are *Iron Dignity* and *TEK*. With these games lie a lot of expectation from Acorn gamers and I am happy to report that the current news is (and always has been) that both games will see the light of day destined for a RISC OS machine. It is worth noting that both games are native to the RISC OS platform as opposed to being conversions and understandably have therefore experienced long development times. Their release will hopefully underline, though, the advantage of being a user of a distinct platform such as RISC OS. That is, the opportunity to use alternative and hopefully quality products rather than being restricted to a single leisure marketplace.

Iron Dignity is previewed extensively on both the Acorn Gaming and Acorn Gaming '99 Web sites with accompanying screenshots. I will



*One of the latest Iron Dignity screenshots*

make a brief mention of both separately here though together with two other separate previews.

### **Iron Dignity**

At the time of writing (mid-December 1999) the news is that work is continuing apace but the original target of a Christmas 1999 release is unavoidably not achievable. This is primarily due to Artex's search for a PC publisher which is expectedly demanding on their time.

The game, for those not aware, is a strategy game set in a fictional world where the player has to manage his/her military units in battle with other units. This is represented with three dimensional graphics where units can be observed to battle or the player can control any unit and experience the battle from a first-person perspective.

It is the graphics which make the initial impact of Iron Dignity though. These have been substantially

improved over the past year and a look at the latest screenshots on Acorn Arcade, Acorn Gaming and on Acorn Gaming '99 are fine examples of the graphical quality of this game. A demonstration of the game is also available from Artex's website. With the combined graphical features of texture-mapping, lighting, shadows, reflections, lens-flare effects and so on it is clear that Iron Dignity's graphics will be unprecedented on RISC OS computers.

The latest screenshots also show more of the gameplay element that Artex have been working on showing a 'head-up' display and weapons-display for example. As Artex main-man Jan Klose states "the engine is running very fine both on RISC OS and Windows". It looks likely therefore that we will be enjoying this ground-breaking game on at least some of the current hardware at some stage this year.

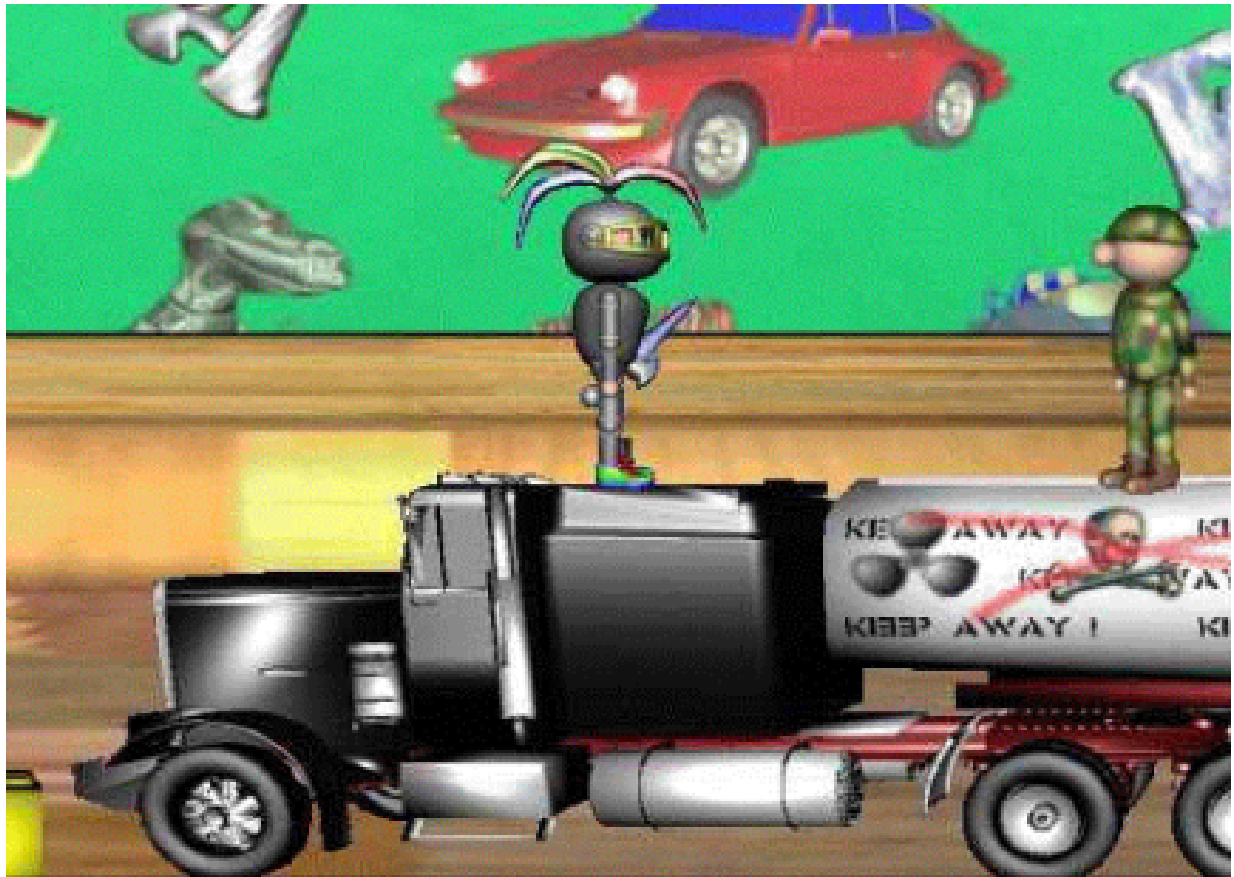
### **TEK 1608**

TEK is another strategy game with a military theme but is played from a different perspective from Iron Dignity.

The player controls battle units from overhead in a style drawing comparisons to *Dune II* on the Acorn and *Command and Conquer* on the PC platform. The strategy required is notable for being implemented in so-called real-time. That is, the player does not have to wait for a turn to carry out an action.

TEK has several other features which I understand make the game a noticeable enhancement on both the aforementioned games. High quality music, sound and even video-clips are promised which will enhance the atmosphere and game playing experience a great deal. There is even a movie-style preview trailer available from Artex's web site in addition to a demonstration of the game. All of this certainly gives the feel of a real story behind the game's theme. It seems to me that all that are needed now are film-style posters advertising the game and people will start turning their heads!

Artex intend to implement multi-player facilities so that players can manage battles across a local network or even the Internet. This is a significant feature of the planned



### *Fantasia's Toy Chronicles*

release and originates from the intention at the game's conception to utilise Acorn's Network Computer for gameplay. The withdrawal and break up of Acorn Computers Ltd has reduced the resources available for TEK's development but a release for the Risc PC (presumably playable also on the NC) is nevertheless the objective still.

Interestingly though, Jan Klose has recently announced that Artex hopes to release TEK onto the RISC OS, PC

and MAC OS platforms. However, only a RISC OS release is certain apparently!

### **Toy Chronicles**

This is a two-dimensional platform game from Greek coding group Fantasia and is evidently being actively developed judging by recent screenshots posted to Acorn Arcade for example. Both the background and sprites appear highly impressive with high resolution and colour usage. The more-than-competent



### *The flight simulator F16 Fighting Falcon*

TopModel application is being used in the game's graphical development which is potentially highly valuable in this area.

Details on gameplay are spartan but it is to be hoped equally high standards are at least aimed for. Above all, let's hope it is as fun as it looks!

#### **F16**

RCI have recently announced their plans to convert the PC flight-simulator F16 Fighting Falcon. RCI

are, I'm sure, wisely being reticent in discussing this game but previews on the Internet (see Acorn Arcade for example) imply this has more of an arcade-style feel than the above-mentioned Eurofighter Typhoon. This is not to say the game is not realistic of course and readers are referred to the Internet-based previews which also have links to the web site of the PC game producers.

Judging by the screenshots, the game is several steps ahead of the



simulations currently available on the Acorn platform. The most striking of these is the use of texture mapping on game objects which no doubt would have been the next stage of flight-sim development on the Acorn platform had the release of such games not dried up several years ago.

In short, I suspect there is definitely a gap in the market for this game!

### **Sources of information**

#### **Acorn Arcade**

Arguably the best games web site for RISC OS users. Many dedicated sub-sections and services for the use and enjoyment of enthusiasts.

[www.acornarcade.com](http://www.acornarcade.com)

#### **Acorn Gaming '99**

Stylish Acorn games website, more recent than Acorn Arcade and Acorn Gaming but has its own interesting features and approach.

[www.argonet.co.uk/ag99](http://www.argonet.co.uk/ag99)

#### **RComp Interactive**

Current saviours of the RISC OS games market with an actively growing repertoire of PC conversions. Also distributors in the

U.K. for Artex Software.

22 Robert Moffat

High Legh

Knutsford

Cheshire

WA16 6PS

Tel: 01925 755043

Email: [rci@rcomp.co.uk](mailto:rci@rcomp.co.uk)

Web: [www.rcomp.co.uk](http://www.rcomp.co.uk)

#### **Artex Software**

Vitally important Acorn game software producers. Showing much vision in their various projects. Eurofighter Typhoon (£24.95 inc VAT) a donation is made to the RAF benevolent fund for every copy sold.

Dave Watts

5 Charlton Road

Midsomer Norton

Bath

BA3 4AB

Tel: 01761 418773

Web: [www.artex.oaktree.co.uk](http://www.artex.oaktree.co.uk)

#### **Fantasia FAN**

Greek group developing the promising Toy Chronicles.

Email: [fantasia@hol.gr](mailto:fantasia@hol.gr)

#### **Acorn Gaming**

The longest-running web site dedicated mainly to Acorn games.

Contains much information on almost all aspects of the games scene but perhaps not as feature-laden as Acorn Arcade. Contains a detailed section on emulation with a variety of links on current emulation software and emulation projects in development.

[www.acorn-gaming.org.uk](http://www.acorn-gaming.org.uk)

### **Acorn User**

The news-stand magazine has admirably run a games column every month for many years.

Tau Press

Unit 2A

Heapriding Business Park

Ford Street

Stockport

Cheshire

SK3 0BT

Tel: 0161 429 8902

Email: [enquiries@acornuser.com](mailto:enquiries@acornuser.com)

Web: [www.acornuser.com](http://www.acornuser.com)

### **WAG software**

Suppliers of Botkiller 2.

5 Queens Close

East Markham

Nr. Newark

Nottinghamshire

NG22 0QY

### **Millipede Electronic Graphics**

Developers of the new replacement motherboard for the Risc PC.

Cambridge House

Hargrave

Nr Bury St Edmunds

Suffolk

IP29 5HP

Tel: 01284 850594

Email: [info@millipede.co.uk](mailto:info@millipede.co.uk)

Web: [www.millipede.co.uk](http://www.millipede.co.uk)

### **Newsgroup**

In addition, if you have the opportunity, it is always worth checking the [comp.sys.acorn.games](mailto:comp.sys.acorn.games) newsgroup for news, rumours and sources of further information regarding the gaming scene.

Who knows, your comments may even provide Acorn authors with ideas or inspiration!

### ***Are you a games writer?***

If you have written a PD game and would like it reviewed in this column please email details of it to The Editor: [eureka@armclub.org.uk](mailto:eureka@armclub.org.uk) or write to the Club's address on page 80.

---

# Creative Digital Imaging

---

David Cowell's second Digital Art Tutorial for Spacetechnology is even better than the first! As before, the program has been written using Multimedia Textease, which is probably the best way of presenting anything in RISC OS at the moment.

These facilities are quite standard now in any multimedia product and, in my view, absolutely essential. With a book you can just flip the pages and see what it contains. With a CD you cannot, so you must be provided with the nearest equivalent. I was tempted

---

*Christopher Jarman gets his wish with a second digital art tutorial CD-ROM by David Cowell, issued by Spacetechnology as a successor to 'Introduction to Digital Art'.*

---

There are 10 chapters, all well illustrated and mouth watering enough to make anyone keen to have a go straight away!

to add the facilities myself with Textease but, with 333MB on the CD, I did not have the room to put it on my hard disc.

But before I describe some of the goodies, I must warn you that navigating around the pages is not easy, as David has not provided a way back to the contents from each separate page. This means that casual browsing is quite difficult. You have to proceed logically through the sections, which is a bit frustrating. What he calls an *Index* is really a Contents page. I wish that a true index of all the pages/subjects was available, plus an escape button.

With that small rant over, I cannot speak highly enough of the content. Obviously, the CD is designed to help the users of Spacetechnology's Photodesk but it is much broader than that and would be of great value to anyone who uses a computer for artistic work. The chapters on the CD are as follows.

## **1. Digital painting techniques**

The first section deals with creating palettes and your own brush shapes as



*‘Cottage’ shows how a colour photo can be turned into  
a black and white drawing*

well as basic drawing and scanning procedures. I found these very useful as most bitmap programs assume that you either already know these things or that they are self evident. This subdivision is educational and revealing.

## **2. Creating and painting with textures**

Textures can truly transform many rather dull and cliché images. This part not only shows many different ways to use texture but demonstrates

how to create your own using the facilities of Photodesk.

## **3. Digital photography**

With the fast growing use of digital cameras, this set of examples is very timely. Beginning with four pages on the history of photography, David then goes on to explain simply the main uses of the Digital Camera. There are hints on composition, back lighting, perspective and the photographers’ mainstay *cropping*!

All illustrated with first-class shots of his own. This leads naturally onto the next section...

#### **4. Photo illustration techniques**

The author shows how a simple photograph can be turned into a graphic and/or a black and white drawing. I was particularly pleased with this last technique and so will you be! I love drawing, but sometimes it can be too time consuming for a deadline. Here you can learn how to turn a photo into a black and white drawing quite easily. You can then colour it too if you wish!

#### **5. Creating a montage**

The instructions on photo-montage, and especially the use of layers, is one which I particularly appreciated. I have never been able to understand layers and masking and this, with the brilliant use of examples, has helped me a lot. I would say that anyone using the CD professionally, would earn the cost of it back very quickly by this one section alone.

#### **6. Painting Portraits**

The way in which portraits are created from photos may appeal to some people. The illustrations and

instructions are very detailed and helpful. Do not be put off by the complexity though, as it is possible to make portraits using much simpler techniques than shown here. However, as an exercise in the wider uses of masking and the smudge tool it is a really good lesson.

#### **7. Ways with Words**

This is a fascinating tutorial on the making of all kinds of embossed letters and alphabets. There are instructions on metallic, chrome plated, wood carved and other designs using the masks and channels to best advantage. I confess that I found this section quite hard to follow but it certainly repays study. There are also some extra few pages here on creating a transparent/translucent panel which I found helpful.

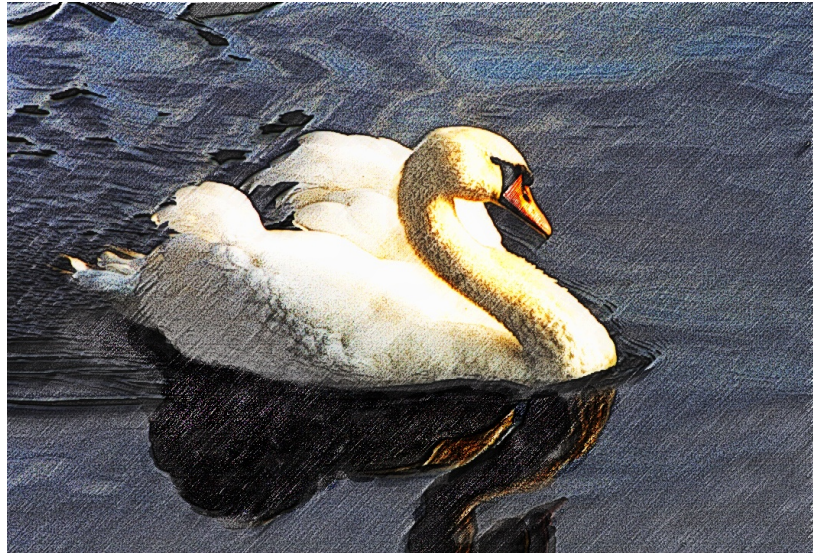
#### **8. Creative Masking**

Following on quite naturally from the last set of work is this beautifully illustrated chapter on the many ways of masking. Clearly David Cowell's interest is in making art works from digital photographs and his techniques are not only inspiring but practical too. He is particularly interested in buildings and how they

can be presented in black and white as well as colour.

### 9. Painting Effects

Giving a painted effect to the look of your photo image is the nearest many people will ever get to painting like a pro! The 'paintings' which David has produced in this CD will upset many purists who hate the idea that computers can take over the work of 'proper' artists.



*A 'painted' swan*

and time again over the years, I am sure.

I believe that you already have to be an artist before you can use computers in this way! At least use these helpful chapters to have a go and see whether you can achieve similar results!

### 10. Hints and tips

Everyone will find the final tips a boon and a reminder of basic commonsense practice even for those who have been using digital art with computers for a long time.

I believe everyone, whether novice or professional, would benefit from this excellent CD-ROM. I am very glad to have it and will be referring to it time

When I reviewed David Cowell's first Digital Arts CD I ended by saying I wanted more. Now we have it and we should be grateful!

---

Creative Digital Imaging  
CD-ROM

Price: £24.95 including VAT

Supplier: Spacotech Ltd

1 The Courtyard

Southwell Business Park

Portland DT5 2NQ

Tel: 01305 822753

Fax: 01305 860483

Email: [sales@spacotech.co.uk](mailto:sales@spacotech.co.uk)

Web: [www.spacotech.co.uk](http://www.spacotech.co.uk)

---

---

# Gill's Journal: Recognition At Last

---

This new year everyone who calls themselves a spod deserves to stand up and give themselves a pat on the back. OK, that involves a bit too much contortionism — stick to feeling proud of yourselves. I suppose you'll want me to explain why. All

Anyone favour 'garden tool'? Or perhaps 'unappetising meal' or 'office'? I thought not. I don't really agree with the definition they give as correct — 'a dull person' — with a fuller description, which implies a bookworm. Personally, I think spods

---

*So spods get recognised at last but has the Reader's Digest got it right? Gill Smith looks at their definition and the perils spods face in the new century.*

---

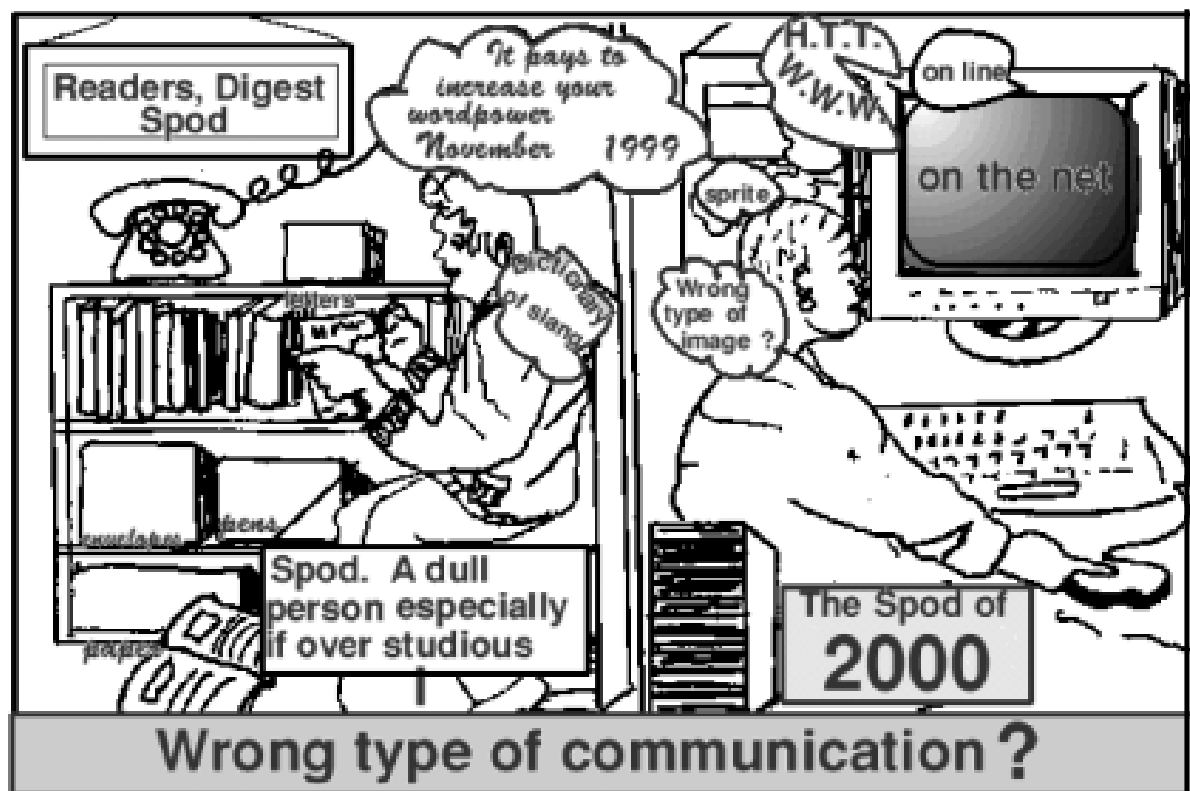
right then. No, it's not because of the enormous success of RISC OS '99, although I should say that those who sorted that out deserve a lot more than a pat on the back. No, it's because as of last November, you spods have officially been recognised publicly! (Cue wild cheering!) November's issue of Reader's Digest, in the regular feature *It pays to Enrich your Word Power* posed the question of what a 'spod' is.

They aren't the first people to ask me such a question but they are the first to answer it also. The traditional four possibilities that RD offer mostly miss the mark but one comes close.

are much more technologically advanced than a bookworm.

Books are only in the spod's vocabulary because they were one of the first products sold by e-commerce on the internet. Of course, all spods use 'Bookmarks' with abandon, but that's due to stealing the term from the dark ages, where it goes back further than the days of the Acorn Electron.

In spite of this minor dispute I have with RD, this is interesting proof that 'spod' has entered the English language. Recognising this, I felt it my duty to go shopping instead of



attending the Birmingham show, as I wouldn't want to be mistaken for a spod and, having helped out at Epsom, that could have been dangerous. I can only apologise to anyone who'd hoped to say 'hello' there — I have a reputation to maintain you know! My husband managed somehow to allow himself to get to a show approximately 30 minutes late. The others looked confused when he arrived — normally you expect to see Toby a good hour before anything starts!

So, fully recognised by the great British public, what does the future hold for spods? Well, there are many

options and largely we will all have to wait and see.

RISC OS '99 gave you the chance to see how the Acorn market has changed, adapted and —dare I say it —in places even thrived, in just one year since Acorn gave up the ghost, leaving everyone confused. Most people I spoke to at the Show seemed impressed by the new atmosphere. Personally, I never had the chance to see Acorn at their best, so I get occasional history lessons from spods who watched the rise of Acorn through slightly rose-tinted spectacles. They had to watch and wonder just over a year ago, when the





changes at Acorn left their friends worrying about jobs, no certain future for ARM technology in personal computers and only misty views of what might happen to The ARM Club.

Instead of gracefully letting things go, they organised a show, somehow miraculously timed, that the only complaints we've heard from the industry is from those who refused to come! Beyond that, the future is still unclear. New technology, in new places—such as the graphics on *Who wants to be a Millionaire?* which is now sold around the world, using the

same technology, although rumour has it the Italians aren't impressed by winning a million lire and still needing more cash for the bus ticket home! This is bringing money into the arena, allowing further development to be funded, and giving the future of ARM technology that *will-he? won't-he?* quality of the £125,000 question.

Outside of the RISC market, technology is changing at its usual fast pace, with digital TV, DVD and a constant stream of simpler and cheaper ways to get on the Internet. It's definitely time for an Acorn Web

browser to compare in functionality with the big names in PC technology, as competition seems to be moving in that direction. TVs are getting bigger and stranger shaped, just as computers are becoming smaller and stranger coloured.

This millennium could start with one of the most exciting centuries you've ever lived in! More and more of us use a computer of some sort at work. Suddenly, it simply is a way of life. Every Christmas TV advert screamed out to get your credit card out at Spend.Lots.com! Friends e-mail you jokes many times over, forgetting that you sent it to them a few days before. Life starts to depend on the machine on the desk. For most of us, at work at least, that's a PC running some system designed by a guy called Bill from the States. You may have heard of him. He's had a bit of bother with the law recently. As we left work on Christmas Eve, we were still awaiting a version that definitely wouldn't have any problems in January. We probably still are, when you read this, in about February. Nothing seems to have gone too badly wrong, sadly. So much for a week off while they fixed everything—I'm going to have to get

the Millennium flu bug instead, now that it's officially an epidemic. As for the real 'Millennium bug' that passed so quietly, we only have ourselves to blame for it at all. We got two digit dates, because this 'passing phase' of having computers at home and in every business wasn't going to last. It still hasn't quite passed. Now we even have to check the technology in our videos and microwaves for Millennium compliance. That's assuming you're in the small percentage of the population who can program the vid in the first place. Of course, although I started writing this on a PC (at lunchtime!) I had it safely backed up on the RISC PC at home, to ensure that it does actually get to you in this first Eureka issue of the New Millennium.

Well, I'm still alive and haven't been hit by a plane falling out of the sky—I trust you're fine too? Seemed a bit daft, checking that the fridge will still work, but for those of you with ARM technology, knowing that if anything goes wrong, you could still e-mail for pizza, if the phone lines were fine and the pizza company running a compliant system. I'm just amused by all the hype. By the time you read this,

planes were supposed to have plummeted, hospitals were supposed to have stopped working —bring a torch with your Millennium baby — cars were thought to do all sorts of strange things and your company should have been wishing that they'd offered you much more money to work, as the phone lines were going to go mad with trivial questions from the exciting sort of people who are checking their systems at midnight — find a party! Your television, video, hi-fi and even telephone lines were possibly going to stop working and the whole modern world was expected to come to a standstill.

As it was, our phone line went down before Christmas instead, due, we believe, to the 'wrong kind of snow' in our line box and I spent New Year's Eve afternoon watching TV and wondering if Peter Snow's Millennium bug Swingometer was bug-free. It seemed to be, disappointingly. Power companies were thought likely to fail and we'd all be back to the dark ages (about 1975) but worse still, you'd have to make sure you could find a good old fashioned pub that pulls its pints properly — the biggest bug catastrophe

was going to be if the electronic pumps stopped working at midnight!

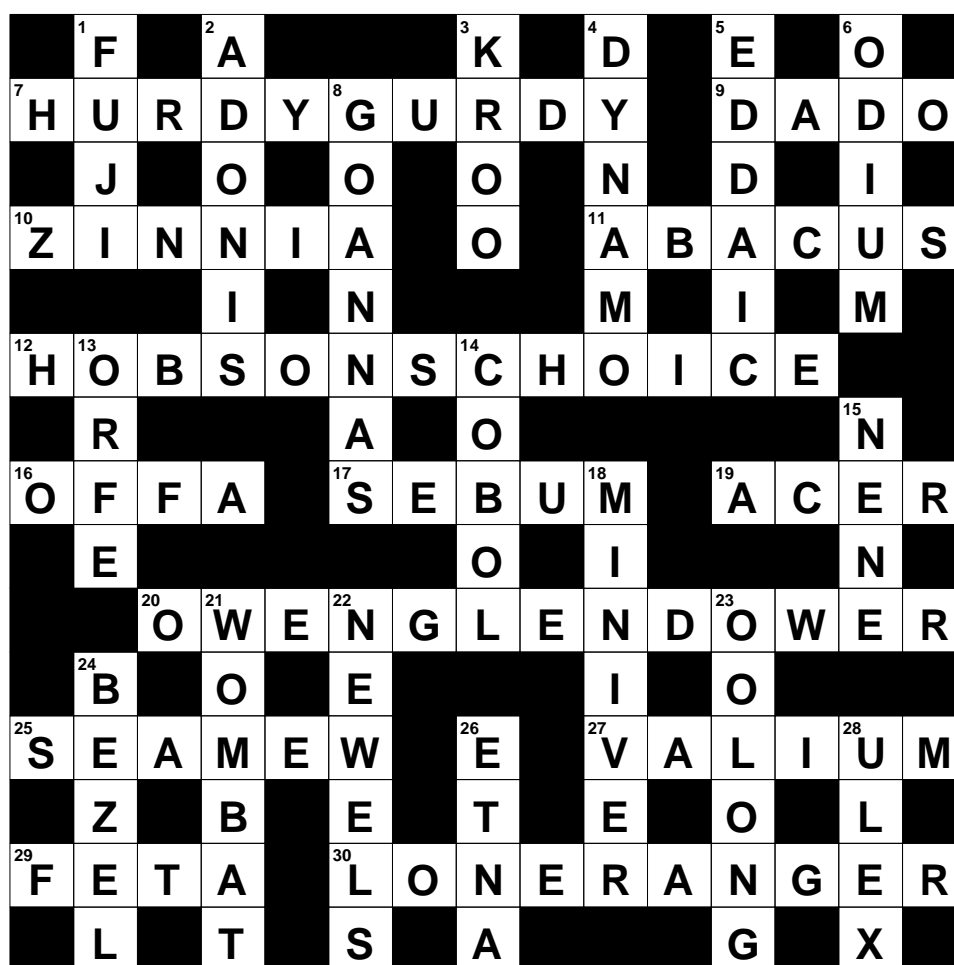
Little do most of the unsuspecting public know but, actually, it still isn't all over. There are a whole series of other dates that may cause complications. The next, approaching fast, is February 29th, as some systems may not be able to cope with the complications of a leap year, in a century year (meaning there shouldn't be one) but it's a special century year (meaning there should). I'm not sure I follow it all, so I just hope that the original programmers had at least worked that out. It's the sort of technical trivia I know most of my techie friends would have liked! Just in case I've confused you, there is a leap day this year. The one day in four years that a girl can propose to you, instead of vice versa, and you'll be stuck behind your office computer, trying to check that it's all still working efficiently. Real pity, now that I've even caught the lovely Philippa Forester referring to spods.

Ho hum. Such is the life of a bookish, dull person. Sorry.

*Cartoons by Jan Pearce*

---

### Solution to the ARM Club Crossword No. 3



© Rex Puzzles

### *Member's Ad — For Sale*

**A5000 computer** with 4MB RAM, 515MB hard disc, AKF18 monitor, manuals and an optional external 24x CD-ROM drive on an A-Ide interface from APDL, plus software including: ArcFS r/w, Ancestry, Artworks, AudioWorks, Anagram Genius, Chameleon, DrawWorks Millennium, Dr Fonty, Eureka, FontFX6, FontTools, ImageFs, Impression Style, Mr Clippy, PhotoDesk, ProCad, MacFS, Morpheus, Sibelius7, sMART, SparkFS, Speech, Talking PenDown, TypeStudio, Talking Textease, TechWriter/EasiWriter, VIVID5000. Price £275 including optional CD-ROM drive or £200 cash without it.

Telephone: John Wade (Bolton, Lancs) 01204 571836

## Club Contacts

***Email:***

General queries	info@armclub.org.uk
Membership queries	membership@armclub.org.uk
Members' technical help	support@armclub.org.uk
Product sales	sales@armclub.org.uk
Magazine	eureka@armclub.org.uk

The ARM Club, Merton Court, 38 Knoll Road  
Sidcup, Kent DA14 4QU

***Telephone (higher rates):***

General queries 07010 709849  
Technical help line 07010 708098

***Fax:*** 07020 954018

***Web site:*** <http://www.armclub.org.uk/>

### Published by The ARM Club

- Chairman: Toby Smith • Secretary: Chris Price
- Treasurer: Simon Burrows • Membership Secretary: Rilla Paterson
- Technical Help Co-ordinator: David Ruck
- Internet & Products Co-ordinator: Tom Hughes
- Open Days Advisor & Quartermaster: Ralph Sillett
- Open Days Organisation/Support: John Stonier
- Graphics Designer: Phil Jones Discount Scheme Organiser: Rob Brown
- Without portfolio: Steve Arnold John Bancroft Matthew Cook  
Martin Ebourné Gary Parr Mark Smith

Editor: Peter Jennings

© 2000 The ARM Club. All rights reserved

# Benefits of membership

*The national club for all users of 32 bit  
Acorn computers and Pocket Books*

**The ARM  
Club**

- The Club's magazine, 'Eureka', written by members, is published and sent free of charge four times a year.
- Free software to accompany articles in Eureka is available on the Club's FTP site or can be sent to members on disc.
- Free Technical Help Service. We will do our best to solve any problems which you may have, by email, letter, telephone or fax.
- Special discounts for Club members from well-known companies.
- Regional open days and shows are regularly organised by the Club. Other events can be arranged on request.
- Special offers at shows and open days.
- Regional contact lists of other members, available on request.
- Opportunities to get involved in the running of the Club itself.
- School and Affiliate Membership available on request.
- Joining pack includes an extra copy of a recent issue of the magazine and software.

*Annual membership £12 (+£3 joining pack for first year)  
Europe £16 and rest of the world £19*

The ARM Club, Merton Court, 38 Knoll Road, Sidcup, Kent DA14 4QU  
Email: [info@armclub.org.uk](mailto:info@armclub.org.uk) Tel: 07010 709849 (Flextel)