

THE ARM CLUB MAGAZINE

PUBLISHED BY

The ARM Club
FREEPOST ND6573
London
N12 0BR

Tel 0171 624 9918
Fax 0181 446 3020

EDITOR

Simon Burrows

SECRETARY

Geoff Stilwell

COVER DESIGN

Simon Burrows

PRINTED BY

Hillary Press

AN

ARM
CLUB
PRODUCTION

© 1995 The ARM Club
All rights reserved



CONTENTS

Editorial	2
The New PCx86 Cards	3
Club Corner	4
Clares Composition	6
Local Group News	13
Talking Clocks	16
Math Mania	18
PC Survival Guide	20
Uniqueway Risc Disc Issue 2	23
Digital Video Editing with CineWorks	27
Textease — A Serious Package?	31
Risc PC Technical Ref Manual	34
Music of the Future	35
Writing RISC OS Modules Part2	37
The best thing since sliced.. Risc PCs	39
Pocket Book Corner	42
Thames Water Revisited	44
Well I never knew it did that!	48
Understanding fonts	49
The Eureka Magazine Disc	52
The Games Zone	54
Acorn News	63

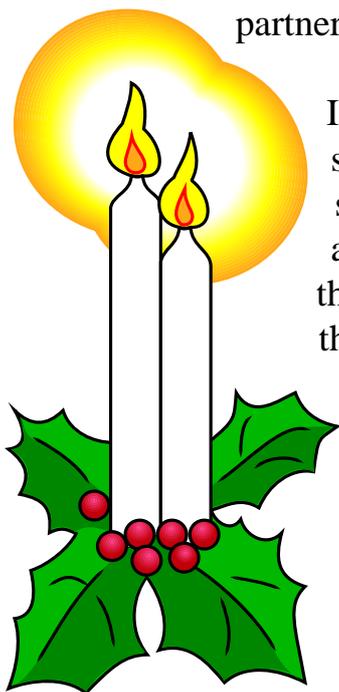
All of us on the Club Committee
would like to wish members a very
Happy Christmas & New Year

WHERE NEXT?

Welcome to the Christmas & New Year issue of Eureka, and particularly to all of our new members who joined back in the mists of time at Acorn World '95. The evenings are now long and dark, what better time to sit down and make the most of your Archimedes or Risc PC?

I'd like to be able to write here about something other than Acorn, however since the company is still at the forefront of many people's minds it does seem unavoidable.

Acorn has clearly had a very difficult year with poor financial results, several delayed products and a major restructuring of the company. However I recently attended a Press meeting at Acorn House where the feeling was particularly upbeat with many announcements waiting in the wings for the first day of the BETT '96 Show in January. Indeed Acorn claimed to be taking on new staff & contractors in anticipation of such major partnerships in 1996.



It's undeniably true that some people have considered jumping ship to another platform such as the PC, however I feel that it's still too early to write off Acorn and 1996 will be an exciting year for us all. Happy Christmas!

Simon Burrows
Eureka Editor

Editorial

1996 & BEYOND

One or two members of the Club Committee have said that, with regret, they wish to stand down at our Annual General Meeting in January due to work commitments and a desire to let some fresh faces join as members of the Committee.

Standing for election as a Committee member does not mean that you will have to commit large amounts of time to the Club and everybody involved seems to enjoy the work and find it very worthwhile.

Typically the Committee meets four times a year at the home of one of its members, with other communication taking place by telephone, email, fax and letter. Although everybody is an unpaid volunteer, any expenses incurred through being a Committee member are reimbursed. The Club itself is in a strong financial position.

If you would like more information about the Club and the various Committee positions, please give Geoff Stilwell a ring (without any obligation) on the usual Club number. It's a great way to contribute to the Acorn community as much or as little time as you wish to spend and it certainly isn't necessary to be a technical expert! What's more, Toby Smith has found a supplier of even more delicious and exotic doughnuts for our Committee meetings!

The new Acorn PCx86 Cards

Written by Simon Burrows

It came as quite a shock when the first rumours surfaced in late 1992 that future Acorn machines would include PC functionality, but as 1996 arrives it seems unavoidable and a very useful selling point.

The first generation PC486 Card for the Risc PC finally arrived in my machine in January 1995, a Texas Instruments SXL processor clocked at a mere 33MHz. This offered better functionality than its podule predecessors but still seemed slow compared with 'real' PC clones.

After many problems with the ASIC chip which interfaces between the PC and Acorn environments, Acorn has now launched its faster 486DX2/66 and 486DX4/100 cards using the second version of the ASIC, with other cards to be announced at BETT '96.

How do these new cards compare with the original 33MHz SXL card which many Risc PC users have bought? Firstly, and importantly, the processor chip is socketed which means it can be replaced with a faster alternative. However certain links need to be changed to achieve this and Acorn says that any upgrade must be performed by Aleph 1.

In terms of performance, the new cards offer a substantial increase in power over the basic SXL/33 Card. The new cards have a maths coprocessor which also helps significantly when running PC applications. The ARM Club Magazine page 3



As was mentioned earlier, Acorn will be further extending its range of PCx86 Cards at the BETT Show with several price changes as well, so go along to the Show if you want to find out the full details. In particular it is expected that there may be some special upgrade deal for owners of the 33MHz cards. The retail price of the 486DX2/66 card is £249 +VAT, the DX4/100 is £299 +VAT.

The latest version of !PCx86 is now available for £9.95 inc VAT from any Acorn dealer (with printed manual), or free-of-charge by ftp from Acorn's site on the Internet.

Simon Burrows

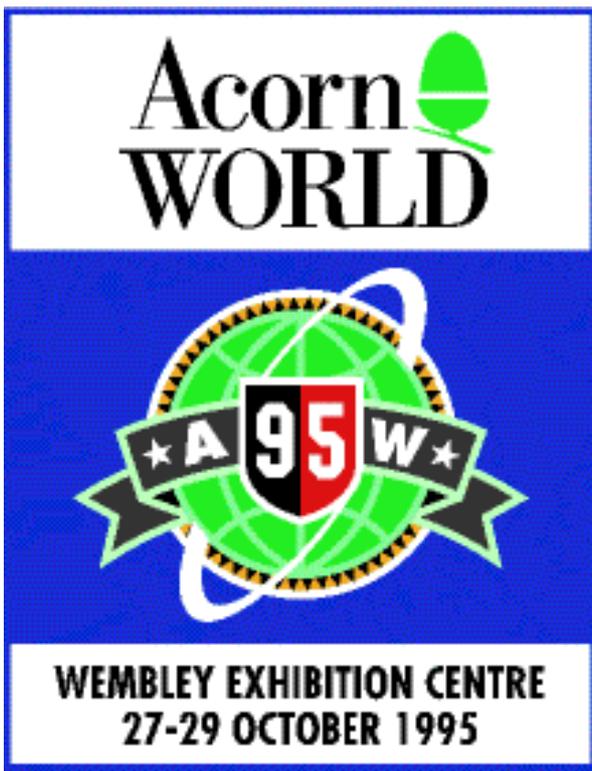


Latest ARM Club News

What's the Club been doing over the past few months?

The Acorn World Show is always the highlight of our year, this time was no exception. Although the organisers reported a slightly lower attendance than last year, the Club's stand was busier than ever with numerous people taking the opportunity to come and say hello, ask questions, join the Club, renew their memberships and buy one or two PD discs or Club products.

This year we had a larger stand than before which was very useful, making it much more possible to talk to people without being pushed around by the crowds of people queueing at the stand.



Apart from Club memberships, our two latest products produced by Club members were selling very well; the Club PD Library CD-ROM and *Game On Release 2* for Risc PC users. Our other software, *SmartCD+* and *TypeTutor* also proved popular.

It's a strange feeling to work on the stand each year, with many familiar faces turning up each day for a chat about the latest news and technical problems. This year we had many new helpers on the stand, many thanks to Phil Jones, Matthew Cook, Andrew Pinder, Martin Ebourne, Chas Mills, "Junior" Mills, Rob & Mark Whittingham, Gary Parr & Daniel Stilwell.



Club Secretary Geoff Stilwell having fun at the Acorn World Show!

The Club has also attended several dealer Open Days over the past few months, including those held by Selective Computers in Kegworth and AL Systems and Hampshire. These Open Days are really useful for meeting people, if you know of other open days taking place, please do let us know so that we can be represented if at all possible.

The Club PD Library is continuing to grow following the release of its highly successful CD-ROM which contained our entire collection at the time. The latest catalogue can be found on the accompanying disc.

Letter from the Club Chairman

There are several members of the Committee who have expressed a need for less involvement in running the Club's activities. The Committee has remained fairly stable, but Committee members like most people have need for change and progress on both a personal and work front. Therefore we are on the look out for keen, enthusiastic volunteers to help us run the Club successfully.

We need your assistance and support

As was pointed out at our last Committee meeting, 99% of all the Club's work and activities are performed by less than 1% of the membership. We would like to urge some of you to come forward at the next AGM and get involved with the Committee or even become a Committee member.

Please come and join us It can be fun!

If you have any comments or wish to help — remember **any** assistance would be helpful, please write and let us know or meet us at the AGM on Saturday 27th January..

Looking forward to seeing you.

Regards



Steve Arnold

Notice of Annual General Meeting

The ARM Club's AGM will be taking place on 27th January at our usual venue, Belmont School in Mill Hill, North London, following our Open Day described below.

All Committee positions will be available for election: Chairman, Secretary, Membership Secretary, Treasurer, Magazine Editor, Products Officer, Public Relations Officer as well as several positions without portfolio. If you are interested in standing, please let us know at least a week in advance

Even if you don't wish to stand for a Committee position, do please come along and use your votes!

Forthcoming Open Days

**Belmont School, North London
Saturday 27th January 1996**

This Open Day will take place at Belmont School, The Ridgeway, Mill Hill, London NW7 from 10am–4pm, to be followed by the Club AGM. Admission fee £1.00 or 50p for Club members. Lots to see and do with a number of companies showing off their latest products after the BETT Show. Contact: Geoff Stilwell 0171 624 9918.

**Lancing, West Sussex
Saturday 30th March 1996**

The venue will be Lancing Youth Centre, Penhill Road, Lancing, West Sussex from 10am–4pm. Admission fee £1.00 or 50p for Club members. As usual, a number of companies will be showing off their products in this new part of the country for our Open Days! We look forward to meeting you there. Contact Ralph Sillett on 01785 714535

Composition

John Bancroft gets unleashed on Clares' latest graphics creation and finds that he can't tear himself away from it!

Although I have no natural artistic ability, the use of graphics on computers has always fascinated me. They seem to bring out the latent talent that the rest of my family enjoy as a natural gift.

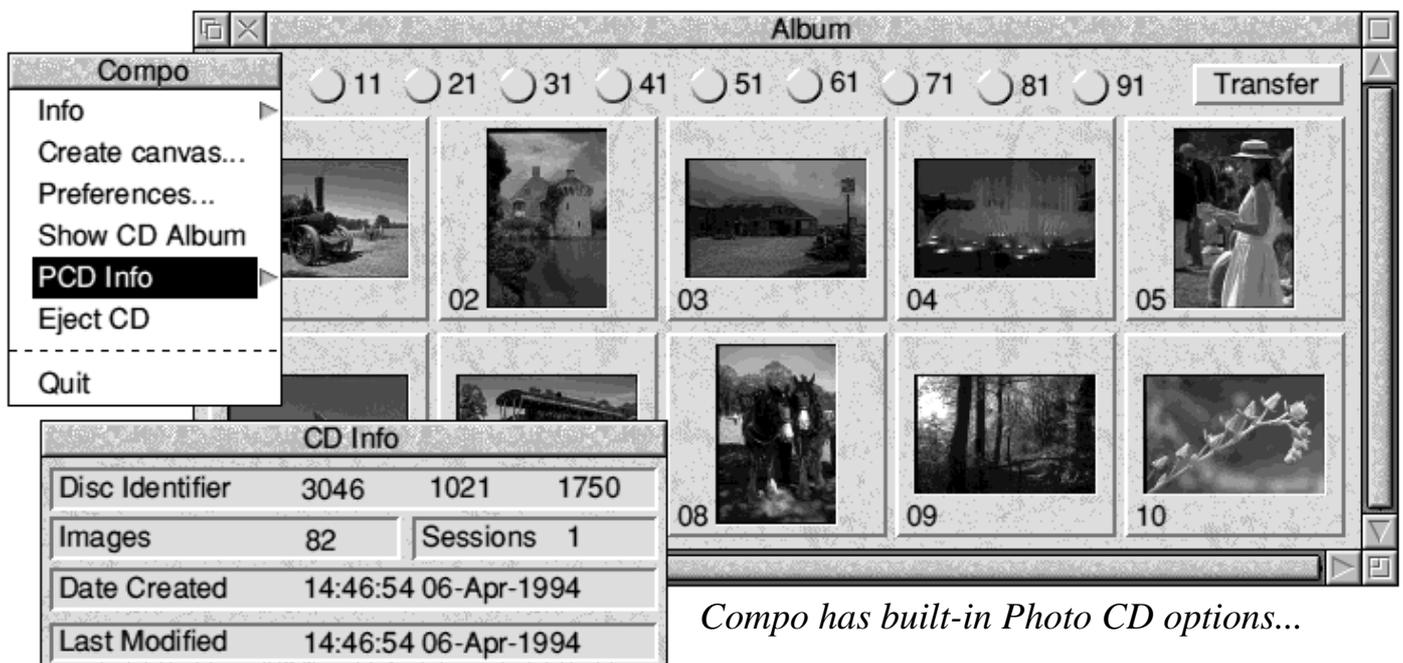
Most of the work I do involves producing posters, booklets and OHP transparencies for lectures in my work with the Fire Service. Because of the vast amount of information that is continually being passed on for firefighters to learn, we have to put this information across in as interesting a way as possible.

Multimedia is the obvious answer as it is a mixture of sound, high quality displays and video clips. All can stimulate the brain to

assimilate the information, much more than is the case reading plain text, making it very useful for my work.

Much of the data and facts are constantly being updated and so considerable editing is required. For me this is where Composition from Clares has been a great asset. I am using Composition to construct the various graphic pages for my project.

Composition was written by New Zealand programmer Rob Davison who also wrote Clares' *Titler* for the Archimedes. I spoke to Rob at some length at the Harrogate Show earlier this year. The nice thing about the Acorn market is that there are people at the end of the product who you can relate to.



Compo has built-in Photo CD options...

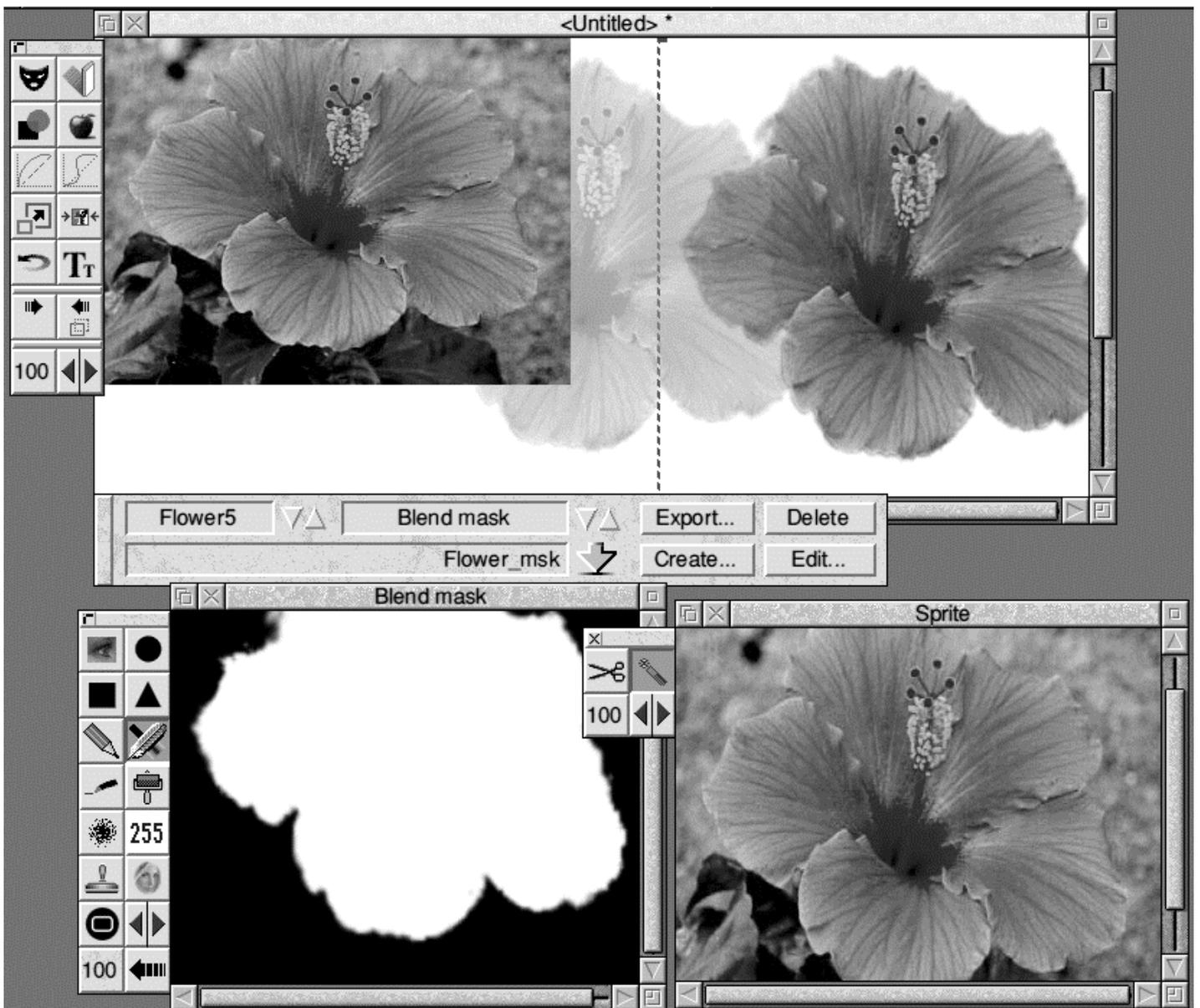
Composition is a 24 bit graphic manipulation package which allows any number of bitmap images (sprites) to be treated independently. Just like Acorn's *!Draw* it treats each object separately allowing them to be manipulated.

As well as stacking from front to back, each image can be made transparent and have other effects applied through the use of various masks.

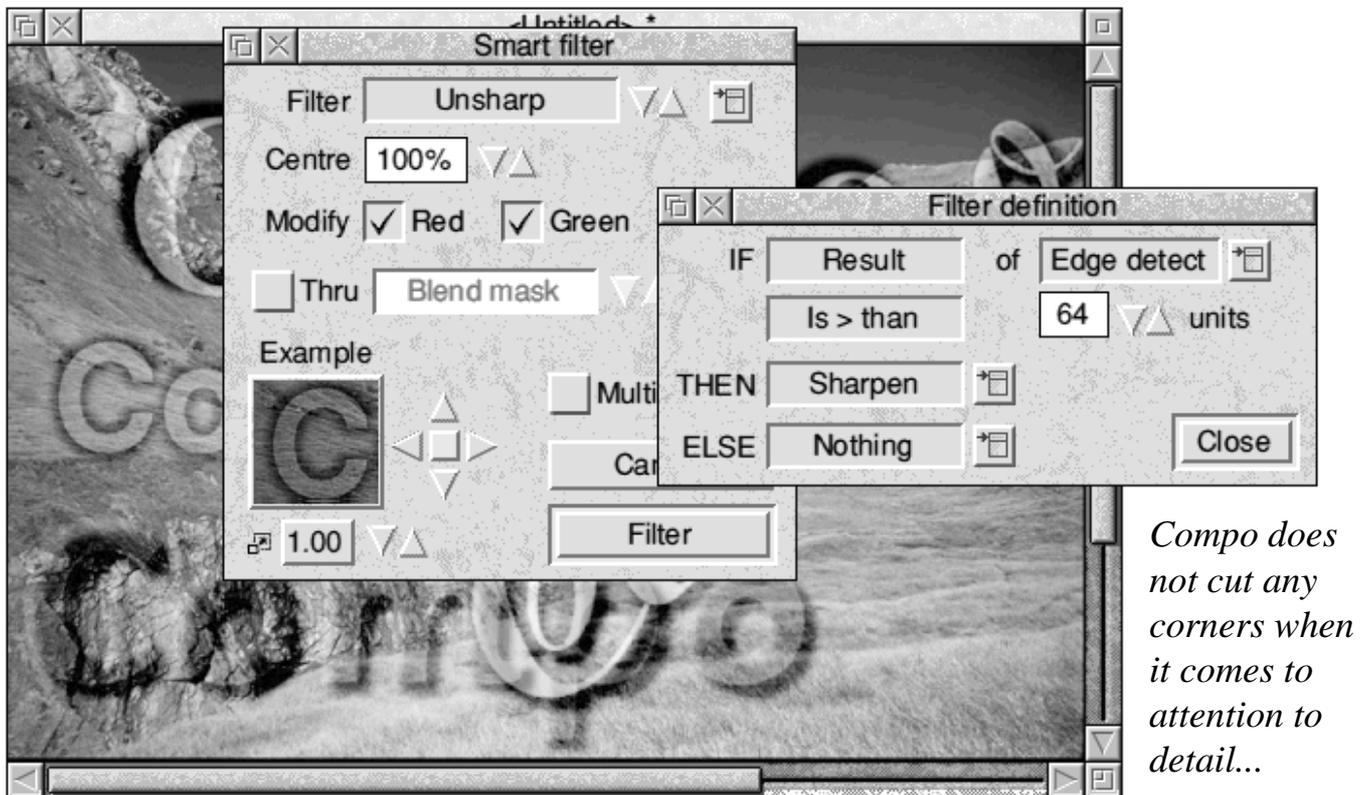
When the package arrived through my letterbox, it was clearly up to Clares' usual very high standard. A boxed ring-bound manual is covered with excellent

compositions produced with the program (why not blow your own trumpet?). Three discs are supplied in a plastic cover in the front of the manual — one contains Compo and some tutorial files. The other two are resource discs containing various files and utilities. The very good first impression is confirmed as you move across the various aspects of the package, right through to the final production of your masterpiece.

The manual's introduction states the hardware requirements to get the best out of the program. A Risc PC with 2MB VRAM, 8MB main RAM and 210MB hard disc is



Compo has incredibly powerful masking options allowing for superb effects to be produced
The ARM Club Magazine page 7



their minimum system, moving up to ARM 710 processor, 64MB+ main memory, large hard disc, colour scanner and CD-ROM drive etc. In the latest version of Compo, Virtual Memory has been implemented by Clares. This means that large files can now be worked on without the need for more memory, although this is considerably slower since the hard disc is used instead.

Compo is not a graphic editing or painting package and therefore an additional program is needed to produce and alter images. Clares recommend Acorn's *!Paint* for simple editing and their own *ProArt24* to produce images. My own preference is a combination of *PhotoDesk* and *ProArt24*. Compo can be linked via OLE to your choice of image creation package.

The second part of the manual goes straight into a tutorial. Using the sample files, the reader is taken through step-by-step examples of how some of the programs effects are

achieved. I like this policy of introducing the user to the simpler functions of the program. The whole manual does not have to be read before you dare to load the program itself.

After a few hours of playing with the tutorials one returns to the manual to discover the more detailed use of the toolbar and various menus. Compo is an extremely powerful and complex program. This part of the manual is very well written with lots of illustrations — take time to read it thoroughly and you will find Compo a dream to use.

Part five of the manual has a further section on using Compo with more examples. The rest of the manual covers using PhotoCD files and more examples: How to use *Split*, a utility for putting large files on several floppy discs. Glossary of terms used. Technical issues relating to the program. A list of keyboard short cuts and lastly the index.

The Program

Before loading Compo it is advisable to load in !Tfonts, a utility that ensures fonts of any size will be anti-aliased. Incidentally this appears to work with any program that uses anti-aliased fonts.

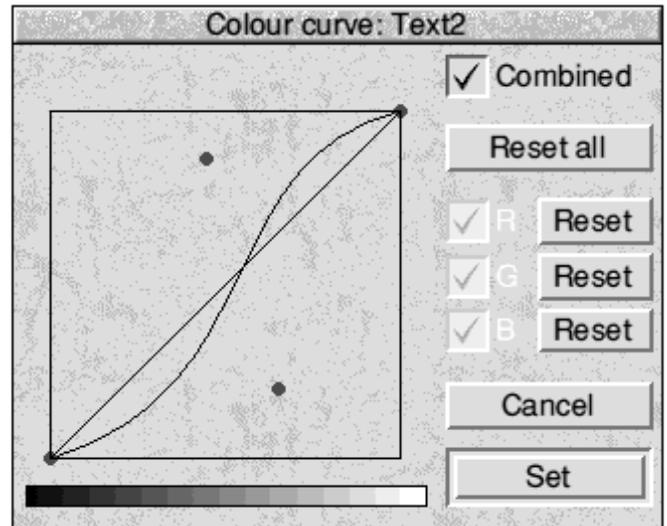
Once loaded, the Compo icon is installed on the icon bar. Pressing the menu here opens the usual program info, preference option which can be used to save your preferred settings. Also there are various options here for loading and viewing PhotoCD files.

The *Create canvas* option allows the user to set the blank canvas size for adding your various images to. There are several preset sizes or you can enter the size in a user writable field; the memory required and memory available is indicated.

If a recognisable image file is dragged to the icon then Compo will open the canvas to the full size of the image. Compo will automatically load any graphics files that Acorn's !ChangeFSI can convert, eg JPEG, TIFF, PhotoCD etc. In fact ChangeFSI is used for many of Compo's importing, scaling and rotating routines although this is transparent to the user.

Draw files and Computer Concepts *ArtWorks* files can also be imported. These are intercepted and a dialogue box opens which allows the images to be converted to a bitmap or kept as vector images. The advantage of vectors is that they can be scaled up or down with their quality being maintained, also the file size can be very small. However vectors are always brought to the top layer above all the bitmap images, masks cannot be applied to them and so they cannot be made transparent.

A quick hint: if you convert an ArtWorks file to a bitmap ensure you make a black background to the picture before converting. This will make it very easy to mask out the unwanted areas. More on masks later...



There's no shortage of options in Compo

One final point about the canvas is that it can be set to any colour or tiled with one of seven patterns. Additionally you can create your own pattern, using a colour block editor from the *Misc* menu option. Sprites can also be used to make tiles.

The next step is to load some images onto the canvas. Holding shift while dragging an image will enable it to be scaled first.

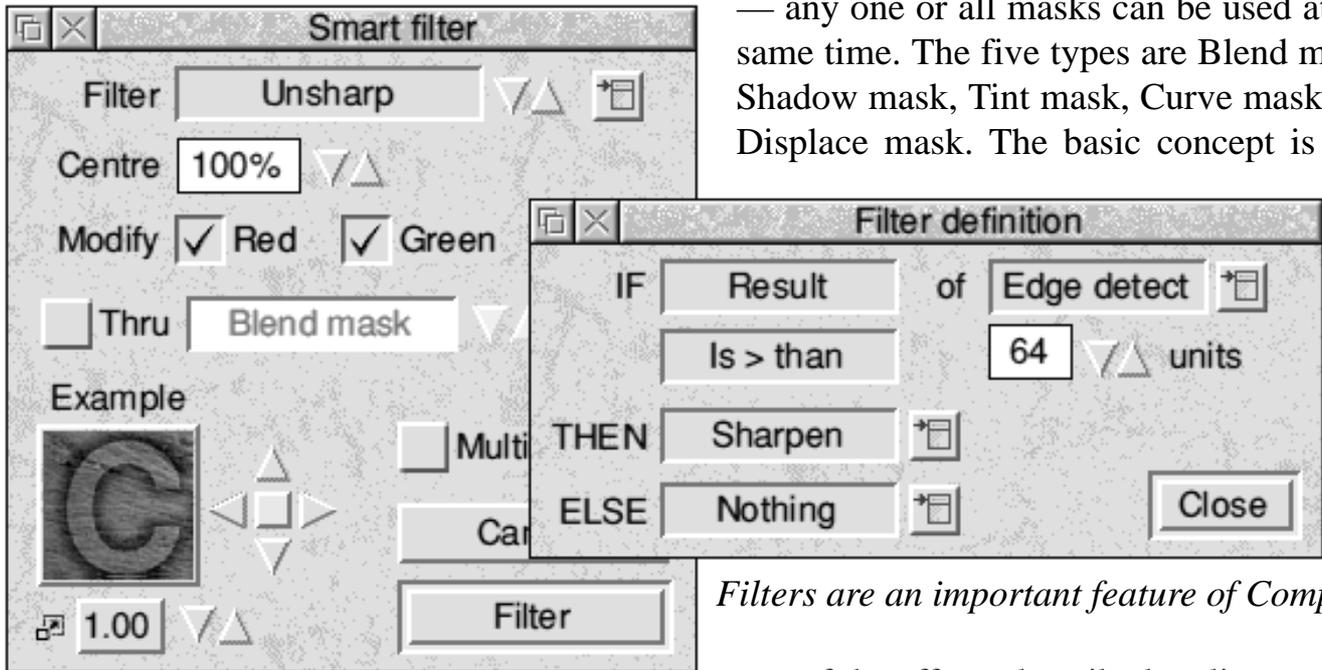
There seems to be no upper limit to the number or size of images that can be used — however memory will dictate this (or hard-disc space if using the virtual memory module). Each image is always treated as a separate item, just like objects in !Draw. Copies can be made, scaled, rotated, brought to front of stack, put to back and so on.

Other features available from Compo allow coloured tints to be applied. The transparency of an image can be set, Gamma correction and Colour Curves can be applied across the whole RGB range or to just one colour band.



The *make text from image* option is a very nice feature, this is widely used in advertising in most colour supplements today.

One of the most powerful features of Compo is the masking utility. Five types of 8 bit masks can be applied to any bitmap image — any one or all masks can be used at the same time. The five types are Blend mask, Shadow mask, Tint mask, Curve mask and Displace mask. The basic concept is that



Filters are an important feature of Compo

A trim option is also available to crop down to the required size. This reduces the amount of memory required for each image.

any of the effects described earlier, such as transparency or tinting, instead of being applied globally to the image can go through a 256 level mask.

Enhancement filters can be applied which smooth, sharpen, emboss, lighten/darken edges, or produce a vaseline effect [*what's that? Ed*]. The filter can be made smart ie it will work on one or more colour bands. It can be conditional such as IF sharp THEN blur ELSE emboss. A small thumbnail view indicates how the effect will look. The effects can be applied through a mask which will be covered shortly. Other than trimming and filters all effects can be reset.

I will explain this using the blend mask, the principle is the same for the other types of mask. The various levels are shown as 256 grey scales, black (0) in this case making the image totally transparent — in other words invisible. White (255) on the other hand makes it totally opaque, nothing underneath showing through. The levels between 0 and 255 all produce various levels of transparency. This is useful for cutting out an object from its background and various tools are provided to assist with editing the mask which has its own separate window on screen.

As there are no image editing tools other than as described, Compo has been designed to OLE with the graphics editing program of your choice (this can be defined in the preferences setup). Use standard CTRL and select to load images into your editor. OLE also works with !Draw and !Artworks files in the same way.

Various tools are available (see picture): blend mask showing tools and menu options window. Preset fade masks can be used such as horizontal, vertical, circular, fade etc. All can be further edited to give total flexibility.





Illustrating colour in black & white is tricky!

A further window can be opened that allows a magic wand to be used for quickly creating accurate masks. All the windows have zoom options to make editing easier. If this is not enough any bitmap image can be dragged to mask tool bar and will be converted to a 256 grey level sprite making very impressive masks. Masks can be saved separately and transferred to any of the other masks if required.

After a mask has been created the the various tools will work through them. The opacity tool set to *blend* normally mixes the sprite with whatever is underneath. However there are 12 other maths options to choose from which can have quite different effects.

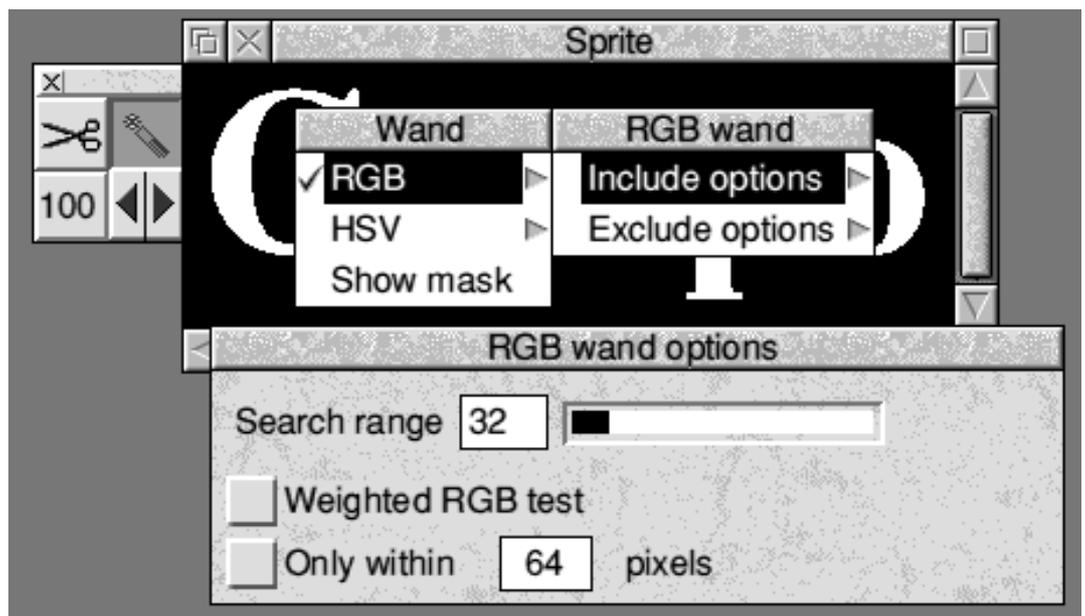
Tinting applies a colour to an image, through a mask if one is set. If tinting is selected with the shift key held down then negative colours can be applied. This can be used effectively to alter the colour balance of an over saturated image with say too much red for instance. Gamma and

Colour curve have the usual effect on images. They also operate through the mask if set. Using the colour curve the effect is seen instantly on the fly.

The Text option, although not up to word processor standards, is adequate for the purpose that is intended. Text is created line by line, the colour, style, size, angle, and if it is to be surrounded by a box can all be set. It is also possible to choose whether the text created is in draw or bit map format.

The same advantages and disadvantages apply to text as do images ie vectors cannot be made transparent or have masks applied to them. Some very fancy texts can be produced using the various tools (see example).

There are many other facilities available that make this an outstanding program — too many to mention. The end compositions would be the envy of many multimedia producers. It would be a shame if only the Acorn Risc PC user can benefit. I've yet to



Clares' windows sometimes look odd but are very functional...

see a PC package that comes anywhere close to Compo for the price.

All is not lost — the author Rob Davison has made sure that any computer user can use the final compositions by providing the following *save file type* options:

Composition's own file type preserves all of Compo's effects and the independence of each object and mask. This can be a very large file depending on the number of images and masks. There is an option here to save just the effects and positioning information with the images and masks being loaded directly from their original source on the hard disc. This works well provided these have not been moved or deleted!

Sprite. The whole composition is saved as a single 24 bit image (actually 32bit for Acorn). This is true of all the other types of file. That is they can now only be edited as a single object in Compo.

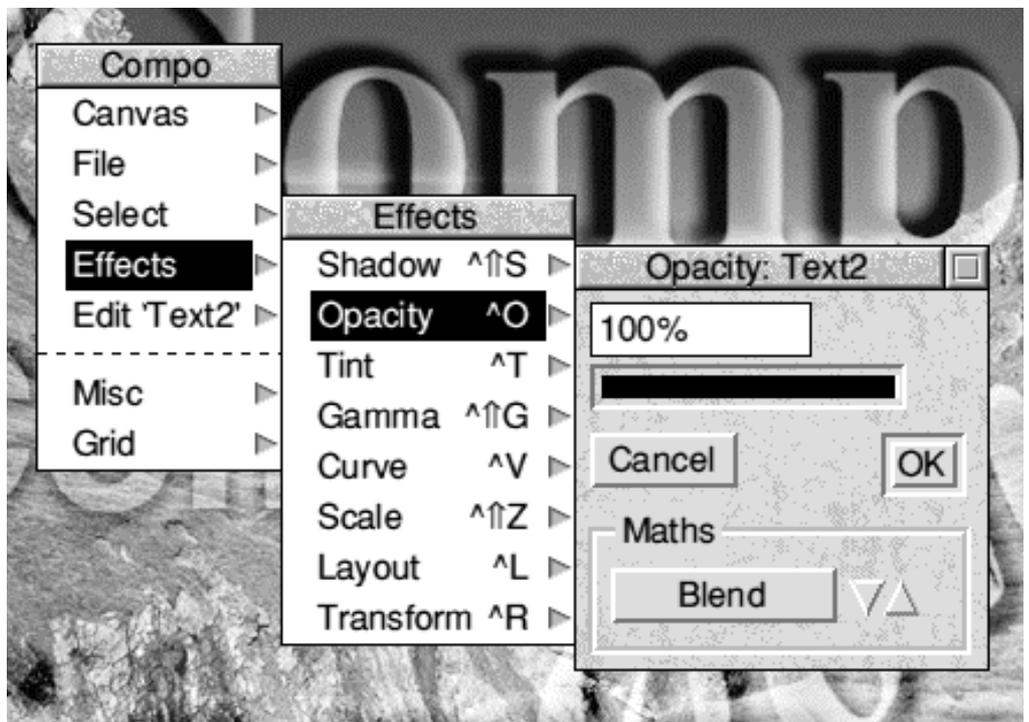
JPEG. Very highly compressed cross-platform industry file.

PBM-Plus. Unix standard p6 file.

Targa type two. Another PC standard.

PSD. Photoshop PC format.

EPS. Encapsulated Postscript file.



Amazing effects could even be achieved by your illustrious Editor!

I highly recommend Compo to everybody interested in graphics programs and those that need to produce professional presentations quickly. I've had many hours of fun just getting to know how the program works. Now it's time to go and produce some serious presentations for my work.

Clares, through Rob Davison, have produced yet another superb package. It is quite amazing what one software writer can produce! I only wonder what other masterpieces could be produced by a team of such talented writers as Rob. I know there are a few out there, if only the sales of such software could reward them justly.

John Bancroft

Compo costs £169.95 inc VAT. Owners of other Clares (or rival) graphics packages pay only £85.00 inc VAT. Phone Clares for details of special Christmas prices. Tel 01606 48511. Fax 01606 48512.

Local Group News

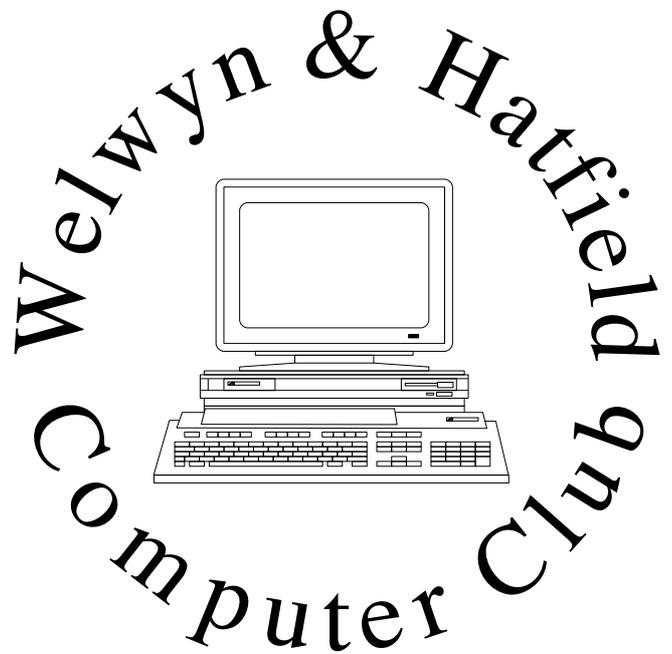
*Mark Empson gives a brief history of
The Welwyn Hatfield Computer Club*

The Welwyn Hatfield Computer Club started life in the September of 1982, organised by some young computer enthusiasts from Sir Frederic Osborn School. They found a suitable site at the Campus West library and advertised the first ever Club meeting in shop windows and by word of mouth.

A large number of people turned out for the meeting, some bringing along their micros. In those days the latest computers were the Sinclair ZX81, Sinclair Spectrum, BBC Micro, Vic 20 and the Newbrain. The meeting lasted two hours and everyone went away promising to return for the next one.

Another meeting took place, but soon afterwards part of the Committee decided to resign and a shake up took place. The Committee shrank to two people until a third member joined soon after the second meeting. After much discussion, it was decided to move the meeting away from the Campus because it was proving to be too expensive. The Committee looked for a suitable building.

Two weeks later it moved to the Panshanger Youth Club in Hens Lane, Welwyn Garden City. It was decided that Club meetings should



take place every 1st and 3rd Friday in the month. The name of the Club was changed to 'Basic User Group'. Over the next few years the number of people was steady at around 10-15 per meeting.

In 1985 the Club's name was again changed to 'Panshanger Computer Club' because it was felt that it represented the area in which the Club was situated.



The Club Computer Tent at a local summer fete

In 1987 the meeting dates were changed to every alternate Friday. The reason for this is that it would be easier to remember when the next meeting was and it meant that the time gap between meetings would be constant. Unfortunately two of the founding Committee members had to resign due to personal commitments. This was indeed a great blow but fortunately two other Club members were drafted in.

In 1989 the Club organised the first club outing to British Aerospace. It proved to be an outstanding success for all concerned and gave an insight into the use of computers being put to different uses in industry.

The following year we visited Digital computers, makers of the VAX range of main frames — again a very interesting and informative day out.

The third saw members travelling to London to visit the offices of Cambridge International Software. This gave them first hand experience of the life of a software writer. After being shown around the offices members were treated to lunch and a more informal and personal side of the men behind the programs.

As well as special trips the Club always arranges visits to the major computer shows and usually a meal afterwards.

It has been interesting to note that original membership consisted of dedicated computer enthusiasts who were mainly adults. However since moving to the Youth Club and the average age of a computer owner dropping there is a larger proportion of young people attending meetings.

Today membership stands at around 45 with attendance at meetings averaging 35, depending on the weather. Over the last year the lowest has been 8 (the night of a blizzard) to 42 last March. Throughout last year, as well as the regular members attending, we saw a total of over 130 casual visitors.

To celebrate the 10th Anniversary in October 1993, the Club held a special meeting showing off computers that were new in 1983 alongside the modern computers. A buffet was laid on and special guest of honour was the Club's founder Debi Colthorpe, then a 16 year old school girl now a Projects Manager for a multi national company and living in Berkshire. Debi whose parents still live in Welwyn Garden City, braved torrential rain to attend the anniversary meeting was presented with a bunch of flowers by the Chairman. She told members that she would not have missed the meeting for the world as it brought back so many happy memories.

The Club aims to cater for all aspects of computing and all levels of expertise. Subjects discussed range from programming to Desk Top Publishing, communications to accounting. A large number of the younger members are interested in zapping aliens and the like but games-playing is part of the computer scene that cannot be ignored.

Members attending the Club bring a number of different computers along with them and there is usually at least one of all the main makes and models at every meeting.

The Club has access to a telephone line at each meeting and communications, being the fastest growing aspect of computing, is

examined and experimented with to the full. At present the more experienced members are teaching others how to use the software to access the Internet and once logged on, how to find their way round the millions and millions of bytes of information.

The Club is very closely associated with the Digital Databank Bulletin Board (run by John Stonier) and is happy to show off and provide to everyone the Public Domain files, messages and other services on offer.

Having recently passed its 12th birthday, the Club is still as popular now as it was all those years ago. The general feel of the meetings is very informal with members and visitors dictating the content and direction of each meeting. Help and advice is available from the more experienced members but never forced on anyone. There is no requirement to attend a set number of meetings and indeed some members use our list of Club members in order to get advice,

information or just a chat with a fellow computer user via the phone or modem and bulletin board.

Outings are an integral part of the Club and our members like to get out and meet as many people as possible. The picture on the last but one page shows John Stonier, the Club chairman, with other Club members at a summer fete, next to the Club's computer demonstration tent.

The Welwyn Hatfield Computer Club welcomes new members at any of its meetings or other events.

Anybody interested in the Club can contact the Secretary, Mark Empson, on 01582 767540 or by electronic mail at the address *empo@digibank.demon.co.uk*. Alternatively leave a message on the Digital Databank BBS user #2 or Arcade BBS # 748.

The Harrow Computer Group

The Harrow Computer Group meets every week and caters for all types of computer including the Acorn range.

The Group is affiliated to the Harrow Arts Council and, judging from a copy of its newsletter, is very active even having social activities such as Quiz nights and Cheese & Wine Parties. A six monthly programme of scheduled talks & events is available — although PC oriented there should be much to interest any computer user. Any Wednesday evening not having a scheduled talk is a normal Club evening, starting at 8.00pm. There is an annual membership fee

of £25.00, however your first visit to a Club meeting is free of charge. A bar is available for part of the evening making for a good time!

The Harrow Computer Group meets every Wednesday evening at 8.00pm in the Kenton Room, Harrow Arts Centre, Uxbridge Road, Hatch End (next to Safeways, 2 minutes from Hatch End station).

For more information about the Group, please contact the Acorn sub-group coordinator, Derek Aulton, on 0181 958 3965.

Talking Clocks



TOPOLOGIKA

Designed by Brian Kerlake
Programmed by Tony Benesh
Graphics by Glenn Burnett

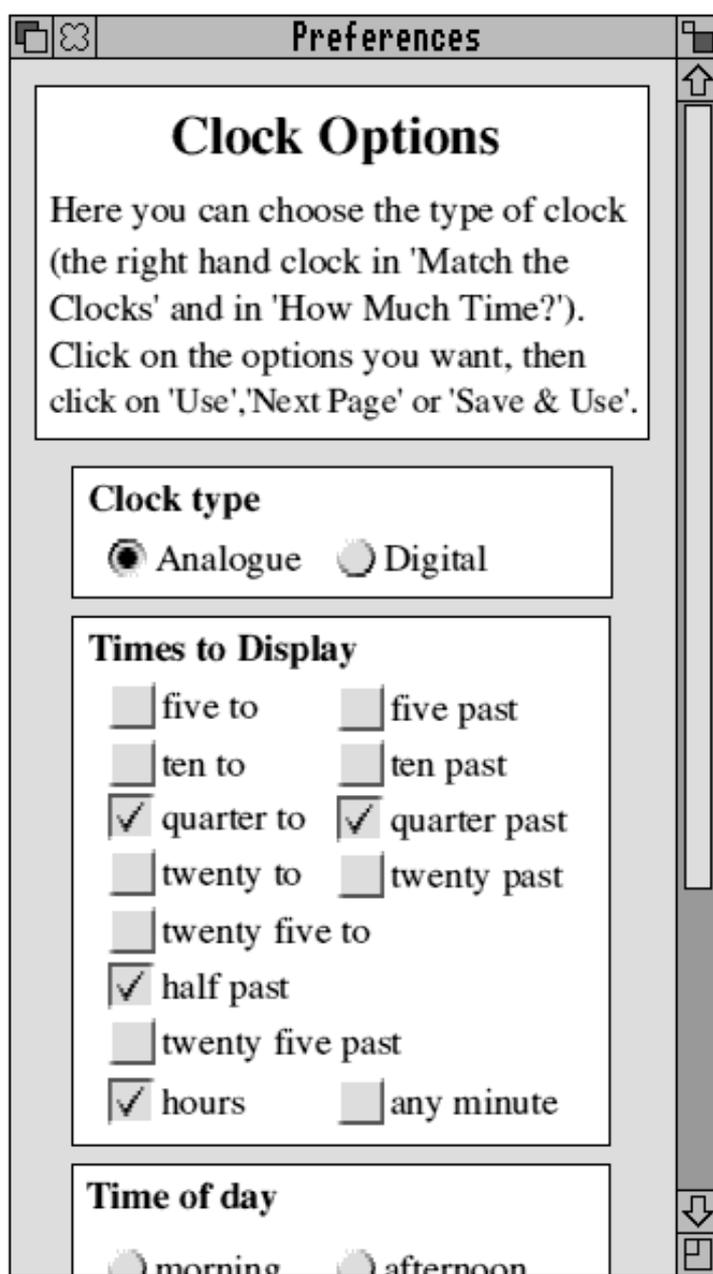
Copyright © and Published by TOPOLOGIKA SOFTWARE 1995

Geoff Stilwell finds out how the Archimedes can make learning fun even if you don't know how to read the time!

Topologika Software have been mentioned several times in articles in both the ARM Club Newsletter and here in Eureka. Topologika is a company specialising in educational software. Last month I reviewed Music Box which is, in my opinion, good educational software because it is open ended; it allows the user freedom to experiment and create music on their own terms.

This month I have been given two more of Topologika's products to review. Both of these could be described as 'Drills & Practice' software of which I'm not so keen. However, I came to use and review them with an open mind and I must say I was pleasantly surprised.

The first program is 'Talking Clocks' with the obvious aim of helping children learn the skills of telling the time. It starts up in the usual way with a front end quite reminiscent of Music Box with four colourful icons leading to the four different exercises. The four options are 'Say the time', 'Set the clock', 'Match the clocks', and 'How much time?'.



Setting the various options is the most tricky bit!

'Say the time' uses a basic clock which shows a time. The child has to click on number and word icons – such as o'clock, quarter, and past – to enter the time the clock is showing. Clicking on the clock's mouth causes him (or her) to say the time that is set while the clock is animated.

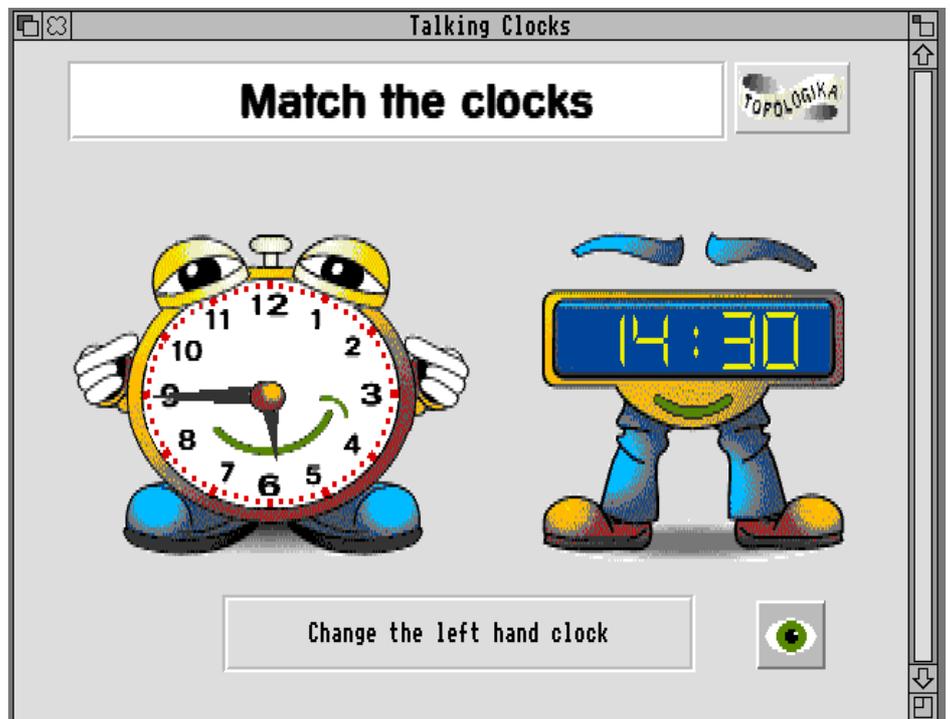
'Set the clock' works the other way round. The time is presented in words and numbers below the clock and the clock's hand can be moved to represent the correct time.

Clicking on a pair of red lips causes the time required to be sounded thus allowing the child who can't read to hear the time spoken.

'Match the clocks' presents two clocks showing different times and the child has to change one to match the other. Again the child may hear the time spoken by clicking on the mouth of either clock.

'How much time?' again presents two clocks showing different times. This time the child must use arrow icons to adjust the number of hours and/or minutes difference between the clocks' times.

We had a five-year-old member of our family visiting so I let him have a go at the program. Kristopher has the use of a PC at home so he had no trouble operating the program with the mouse. I set the program to only present o'clock times to give Kris the simplest option. Although Kris can't read he can recognise numbers and was able to work through both the 'Say the time' and 'Set the



School never used to be this much fun!

clock' options clicking on the clock's mouth and the lips to sound out the time to check whether he was right. He was able to finish up with a perfect score and was even showing his mum and grandma how to do it.

The program could be used by children of all ages. There are numerous ways of configuring the program to suit the children's ability. Either analogue or digital clocks may be displayed words or figures may be used to present the time, the number of questions for the child can be set which can be in sequence or randomly chosen by the program. The 'How much time?' option even I had to think about carefully before getting the right answers.

Teaching the time is sometimes quite difficult as children need constant practice. Talking Clocks provides the opportunity for children to practice telling the time in a colourful and entertaining way and developing this specific skill.

Talking Clocks is available from Topologika Software for £35 +VAT for a Single User Licence. Site licences are also available.

Topologika Software, Islington Wharf, PENRYN, Cornwall TR10 8AT. Contact Brian Kerlake on 01326 377771 (tel and fax)

MathMania



“When I was a lad, the most fun we had in Maths was reciting multiplication tables!

and allows the character through the barrier. A wrong answer places the little character at another random position in the maze. A number of gold bricks placed around the maze provide extra points but the key must always be found before your character can escape.

Five mathematical topics are covered, these being Number (covering the four rules), Time, Measurement, Angles and Shape & Space. One of these is chosen before starting the game by clicking on the appropriate icon. A *Lucky Dip* option can also be chosen when the computer chooses the topics.

The second Topologika program I have been trying out is called MathMania and, as the name suggests, this deals with maths. The program also fits into the ‘Edutainment’ category where the emphasis is on fun but the program hopes to reinforce mathematical skills and knowledge.

MathMania loads onto the icon bar as usual but takes over the computer when in use. The basic theme of the program is mazes. The user has to guide one of four characters out of a maze, collecting points and a key along the way. When a barrier in the maze is encountered, a mathematical question is presented. Answering correctly wins points

The questions are in two forms: the first type is a basic sum question such as $30 + 23 =$ or $12 \times 7 =$, the second type are topic based multiple choice questions with three possible answers such as “What is the simplest of all polygons? a) a rectangle b) a triangle c) a straight line”. Questions may be answered using the keyboard or the mouse (this is set up using the *Choices* options from the icon bar menu).

There are four possible difficulty levels within the program. The instruction manual suggests that levels 1 and 2 are appropriate for National Curriculum Key Stage 2 (children aged 7–11) and Levels 3 and 4 are appropriate for Key Stages 3 and 4 (children aged 11–16). There are a number of other configurable options such as specifying which arithmetical operators to use, time limits for the puzzles or whether maps for the mazes are available to the user or not.

or a puzzle, the teacher or parent can access a *Results* option from the icon bar menu which provides a Performance Indicator for that person. This would be quite a useful assessment tool giving an indication of the pupils' strengths and weaknesses. Results can be saved as a textfile for loading into another application and/or to be printed.

I did find MathMania quite challenging and I enjoyed the maze-game context; however,



children of today, who are used to much more exciting and demanding arcade games, may find this a little too tame. As I have said before, I am not wholly in favour of the 'Drills & Practice' or 'Edutainment' philosophy concerning computer software in school where resources are scarce, but many teachers believe there is still a place for it. The home computer user may find this kind of software more useful at home where the emphasis is more on entertainment.

High quality graphics are used to maintain pupils' attention

On escape from the maze one of five puzzles may be presented (these also can be switched off). The puzzles are *Sliding Block*, *Magic Squares*, *Fill It* (dealing with capacity and volume) *Towers of Hanoi* and *Coins* (the game of *Nim*). These provide a little light relief and, possibly, the stimulation for a little more open-ended investigation work away from the computer.

MathMania does what it does very well. If schools or parents feel that this kind of software is worthwhile then go for it!

Geoff Stilwell

MathMania is available from Topologika Software priced at £25 plus VAT for a Single User Licence. Site Licence prices are available on request. Topologika Software, Islington Wharf, PENRYN, Cornwall TR10 8AT. Tel & Fax Brian Kerlake on 01326 377771.

The PC Survival Guide

The first in a series of books from Beebug reviewed by James Overton

Acorn users hate “industry standard” PC clones. Right? Well, some people do, but others realise that some excellent software is only available for PC clones and wish to run such software on their Acorn machines.

Shortly after the launch of Acorn’s PC486 Card for the Risc PC earlier this year, Beebug brought out a book entitled *The PC Survival Guide* intended for the many Acorn users who know little or even nothing about PCs.

Priced at a mere £4.95 with no VAT to pay, the guide is styled the same as Acorn’s own *Welcome Guides*, perfect bound with a glossy cover. The approach is similar in that the guide aims to introduce people to the world of PCs and particular using PC software on Acorn machines.

The introduction starts with the thought provoking reminder that Acorn has a long history of making its machines DOS compatible. The humble BBC could run CP/M (forerunner to DOS), DOS itself, GEM & a variety of other systems.

Following this, there follows a useful section on *Finding the right solution* which covers the different types of PC card and software emulation, both for the Archimedes and Risc PC. The book covers both Acorn’s *PC Soft* emulation software and the less well-known *FasterPC* package written by David Lawrence and reviewed in a previous Eureka.

The guide then covers useful information such as the different types of PC memory (conventional, expanded etc), using hard drives & PC partitions, installing PC-DOS or MS-DOS and Windows, using sound, CD, mouse and video drivers, making your own PC sound cable, using Windows, Games & Multimedia and Frequently Asked Questions.

Overall, the guide has become slightly dated since improved PCx86 Cards and software have been released by Acorn and Aleph One. Nevertheless, if you do not feel confident about PCs or running PC software on your Acorn machine then this is a very worthwhile book with lots of useful tips on becoming an instant PC expert! Look out for the new companion guides on Windows 95 and accessing the Internet.

James Overton



ARNOLD'S OBSERVATIONS

Steve Arnold thinks about the past year and Acorn yet again...

"We wish you a merry Christmas. We wish you a merry Christmas. We wish you a merry Christmas and a Happy New Year."

Well, that's the Christmas cheer over with! Now let's get on with the Christmas spirit, namely anything booze-related. Needless to say, the only driving I'll be doing when I'm drinking is driving a racing car in computer game. I'll probably play with one eye closed and one eye in permanent re-adjusting focus. You know the sort of thing — like a video continually zooming in and out focus — I should last at least 40 seconds before that tragic reminder of reality —Game Over!!

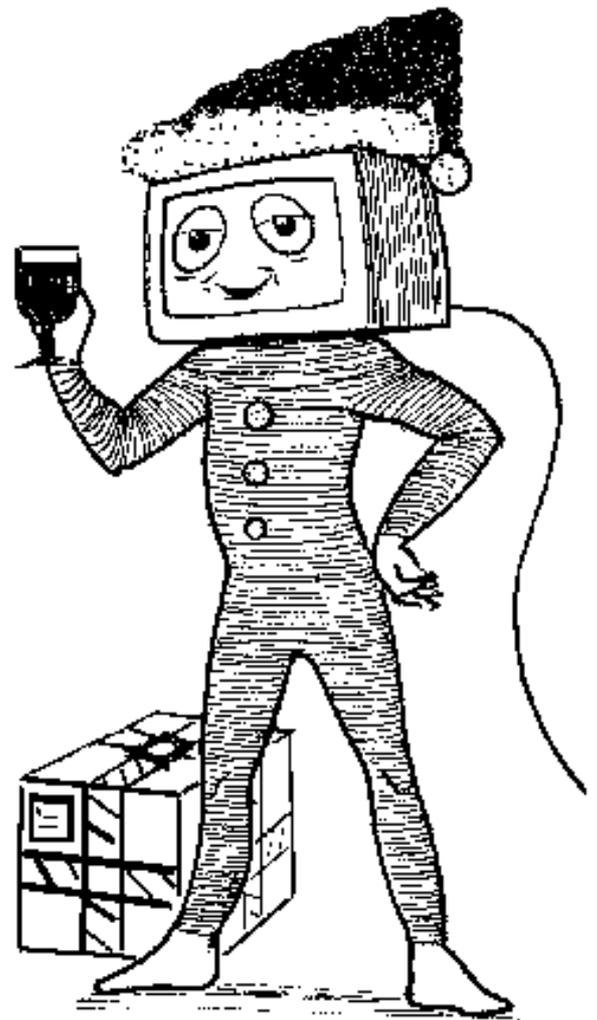
As we fade out of 1995 and launch ourselves into '96, we will be wishing everyone the season's greetings and looking back at what must be described as a traumatic year for Acorn. It will be a very interesting and exciting 1996 for all concerned.

I have settled into a new job, or is it a case of the new job settling on me?! My young children continue to grow at a rapid rate, each day learning new ways to come to terms with their parents' strange behaviour. I mean, it must be difficult for our children to accept their parents: not wanting to watch *Thomas the Tank Engine* at 4 o'clock in the morning, not wanting to eat sausage & chips with ice-cream every evening or even not wanting to tidy up at hourly intervals for a least 18 hours a day. Call me eccentric but I'm not the perfect parent; I tend to be greedy, you know, wanting more than 20 minutes of peace! Even my wife now only tolerates small periods of my computing hobby. I'm

beginning to run out of reasons to switch on the computer. She's getting to know that it doesn't really take 2 hours to format a disc. Me thinks I'm on borrowed time... Still who knows what will happen in '96?

Acorn Education & Applied Risc Technologies

Remember those open questions I aimed at Acorn in Eureka 16? They seem even more important now, given the radical changes that have taken place within Acorn (see the various comments elsewhere in this issue). I for one will be very interested to see how



Merry Christmas — Cheers everybody!

these new directions and focus will develop for the Acorn Computer Group. It is easy to criticise the changes but at least Acorn will continue to survive —and hopefully grow.

If this change had not taken place, Acorn would have slipped slowly into oblivion within a year or so. This change does allow some hope for the future although not necessarily in the direction we would once have thought. The major sadness for me is that in the change many people have ceased to be employed by Acorn. Believe me or not, it takes a special breed of person to work in the *Acorn environment*. Some of you may not understand this, but working at Acorn is like using their machines — it can take over your soul and turn you into a fanatic follower, unable to accept the ‘Bill Gates dream — Windows Ad Infinitum’. Acorn’s greatest asset has always been its people, good people, a very sad loss.

Still enough of this melancholy, I wish Acorn Education and Applied Risc Technologies every success in their respective paths. However I would like to remind them that ‘The Customer is King’ and that they must always remember customers are the ones who pay the company wages.

With this in mind, I would like to repeat the same questions as in my previous article. Wherever the word *Acorn* appeared, change it to either *Acorn Education* or *ART*: What are Acorn’s main objectives? What are Acorn’s long term plans? What is Acorn’s long term strategy? What are Acorn’s active markets? What are the effects of competi-

tion? Is there a customer focus? Is Acorn still a leading innovator? How cost effective are Acorn products?

It seems ironic that as I stated in my previous article, Acorn Computers appears to be refocussing on its core activities and markets ie education. Low and behold we have Acorn Education. I’m not too sure to what extent all the other customers will be covered under this umbrella. It seems that the advances wished for by the existing customer base will have a major dependency on the role and success of ART — Applied Risc Technologies. The potential of ART is great but until we see the realisation of some of that potential, we will just have to wait in anticipation to see what happens.

Christmas and New Year Close

Once again I’ll leave you with a little observation, taken from my almost limitless *Book of home-spun philosophy*, as we close the calendar for another year.

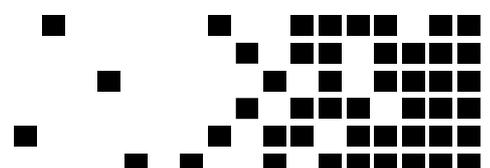
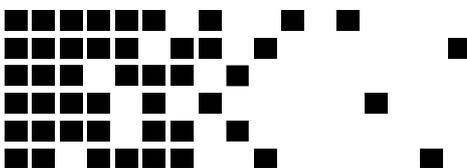
“It’s always later than you think!”

Finally, The Season’s Greetings to One and All —may you all get what you wished for!

Have fun —see ya next time!

Steve Arnold

PS Personal message to Fred Harris: Thanks for the beer at Acorn World!



Uniqueway Risc Disc 2

Phil Jones & Christopher Jarman rave about the latest non-PD CD-ROM...

why they shouldn't interest the general Acorn public as well!

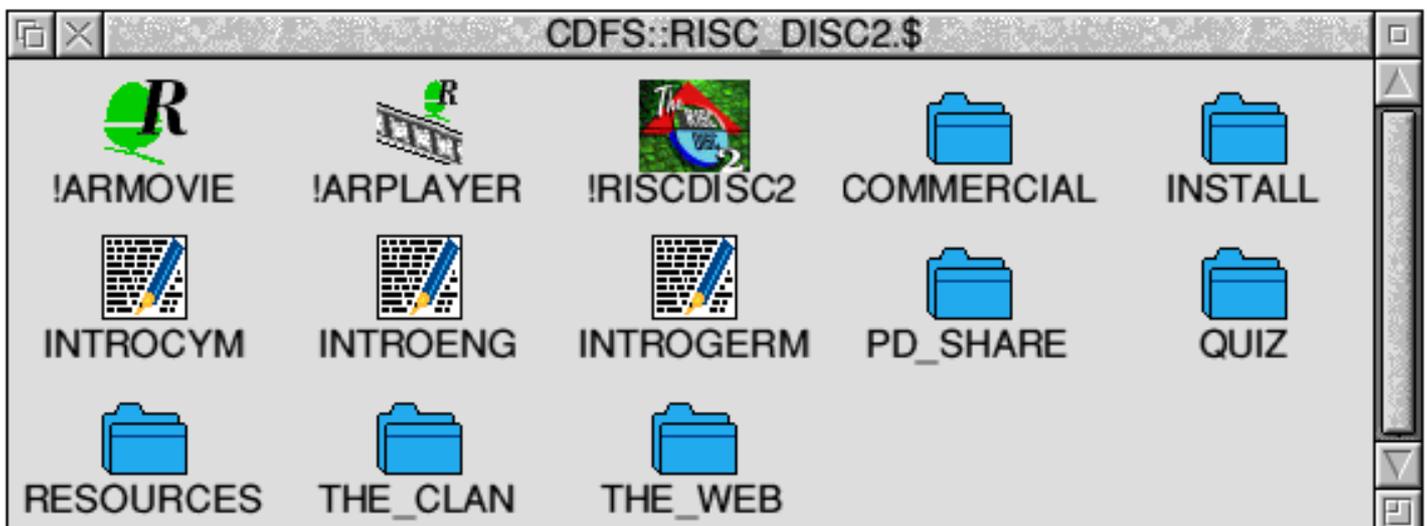
Also included on the CD is a huge chunk (over 100MB) of the World Wide Web to allow anyone without access to the Internet (like me) to get a taste of what we're missing. It even includes the Acorn WWW Site, and our brand new ARM Club Site, which I'll mention later.

The desktop front end is easy to use, and to say it looks stunning would be an understatement. It basically provides access to a great deal of the 610MB of data on the CD and makes searching through it all a tad easier. If you happen to use a Risc PC with 1 or 2 MB VRAM then the front end will load 16bpp or 24bpp sprites depending on the current mode. It also gives German and



In only January we reviewed the first Risc Disc from Uniqueway, and now that the CD-ROM format has taken a firm hold on our platform Uniqueway have release the Risc Disc Volume 2.

Much like the first disc, it contains a selection of commercial demos, very useful PD & Shareware, Resources files (including graphics, movies, samples, music, etc) and also a group of files which Uniqueway say will be "of interest to Clan Members — Risc PC Data sheets, FAQ lists, Acorn Press Releases", although I don't see any reason



Welsh users the option to have the text displayed in their own language.

The public domain and shareware software on the CD is by no means put there to fill up the space, in fact some of it seems just the type of software Acorn User could consider for their PD Software of the year awards.

There are a large number of so-called "resources" files consisting of vector and bitmap images, JPEGs, MPEG, Replay, Quick-time and FLI movies, a selection of samples, and a large number of music files in Symphony, ProTracker and STracker format. The artwork provided is mostly high quality, and there are some very large movies made of the Apollo Moon Land-

ings, and various other NASA missions. The MPEGs provided can be displayed with MPEG decoders provided, or can be played back using Computer Concepts' MPEG Decoder Card, hooked up to a separate monitor.

The Web Directory on the CD contains the Internet data, which can be viewed as if coming from a modem using the *Webster* or *ArcWeb* software provided. Perhaps the most useful bit of the Web included is the complete Acorn Web site which is made up of many separate branches, namely Acorn Education, ARM Ltd, Applied Risc Technologies, Online Media and Olivetti Telemedia. The FTP is found on the Acorn Education home page,

(nicknamed 'The Store'), but I think Acorn went a little OTT, let alone FTP, when they put their 'Acorn International Airlines' in the Acorn Village which gives access to a list of international dealers! However, as said earlier, the best part has to be the ARM Club home page, which shows how prominent the ARM Club is in the world of CyberNautics.



Although the Risc Disc 2 is priced at £25.00, which is more than the original Risc Disc when that was first released, I still think it is incredible value for money, and it will be at the top of my CD-ROM collection for a long time to come. If you have a CD-ROM drive, you'll probably want this CD to go in it. If you haven't got a CD-ROM drive, you'll probably want this CD for when you have. It's that good.

Of course, as with any decent piece of soft/hardware, I could think of lots of things to go on to a CD like this, which haven't been included, but as Tom Smith said for the first Risc Disc, 'this would be impossible on a single CD'.



With the added incentive of a free Risc PC if you find all the Clues which Uniqueway have hidden on the CD, which they think will take you 3-4 months to find, I suggest you go and buy this CD today!

Phil Jones

Christopher Jarman writes:

There are now almost too many PD-CDs available for the Acorn. I think I have them all, but it is significant that I can't quite remember, because such a lot of the contents have been duplicated.

The Risc Disc Volume 2 was launched at the Acorn October 95 show at almost the same time as our own ARM Club PD Library CD-ROM and Datafile's third CD so we have been fairly overwhelmed.

[I would argue that the Risc Disc series is rather different to the various PD CD-ROMs as much of the software is non-public domain with the PD content included as a bonus rather than being the main raison d' être of the CD — Ed].

Risc Disc 2 compares very well with all the rest and perhaps comes out a little ahead in two main respects. Firstly, it does use a very good front end design which is Uniqueway's personal construction and is the best in the business. Nevertheless, I object slightly having to load yet another font to my personal collection just to view it! While I still find Datafile's printed manuals the most useful, I would say that navigating around the Risc Discs is easier on screen.

(And to be frank I am not happy with the ARM Club CD's use of PipeDream, as I find it unattractive and clumsy for this purpose, The ARM Club Magazine page 25

especially as like many people, I am totally unfamiliar with PipeDream anyway.

Secondly, Risc Disc 2 contains over 100MB of World Wide Web pages which enables you to browse around the Web and get familiar with it in a most realistic way without having to have a modem or actually to be connected to the real Internet! It is like an Internet Simulator and a very good idea. What is more, if you *are* connected then you can jump directly from any of the pages on Risc Disc 2 to its genuine page on the Net — excellent.

There have been one or two comments by programmers that some of their work has been used without their permission, but Simon Middleton of Uniqueway has explained publicly that this was not deliberate and made a handsome apology that has been an exemplary piece of PR for Acorn related companies to copy.

I confess that the first files that I turn to on any CD are always the artwork and images. This one has a good quality collection of Artworks files, some of which repay close study if you want to learn how to do it. One small tip for contributors though. Why not



'Make shapes' of all your text as not everyone will have the same fonts as you, so Artworks will replace them with characters that do not suit your design?

For the other images JPEGs GIFs etc I liked the *ImageBank* system whereby you can very quickly browse through a large selection and copy them quickly. But surely I am not the only person who has seen enough pictures of the Earth from space and the shuttle take off. Could we give these a rest now?

Uniqueway has a flourishing German market and so don't be surprised to find a number of German applications and files on this disc. All good stuff and it gives you something to get you teeth into when accessing a Bavarian Help File. It's good to see that their Welsh customers have not been overlooked either, and so the main Acorn Apps like !Paint and !Draw etc are available in Welsh.

As with Risc Disc 1 you will find some informative commercial demos and they do all work on the Risc PC. With two good PD

CDs like these, it is probably time that Uniqueway rested on their laurels and turned to something different. Well it seems that they have; and next year will see a brand new disc entirely devoted to education. There are some first-rate educational CD-ROMs on the Acorn platform but still not very many in total, so that is good news.

Overall I would say that no-one buying this disc would feel they had wasted their money. There is enough substance and variation to please most users. For £25 incl VAT and P&P you get 600MB of goodies plus a chance to solve the puzzle and win a Risc PC.

By the way, I was pretty pleased to find tucked away in a corner and almost missed them, the Bible, the Koran, The Complete works of Shakespeare and the Canterbury Tales. Now that's good value!

Christopher Jarman



The Risc Disc 2 costs £25.00 inc VAT, or £23.00 to Clan Members, from Uniqueway Ltd., 42 Crwys Road, Cardiff, CF2 4NN. Tel. 01222 644611. Fax 01222 644622. Email sales@uniqway.celtic.co.uk.



Digital Video Editing with Cineworks

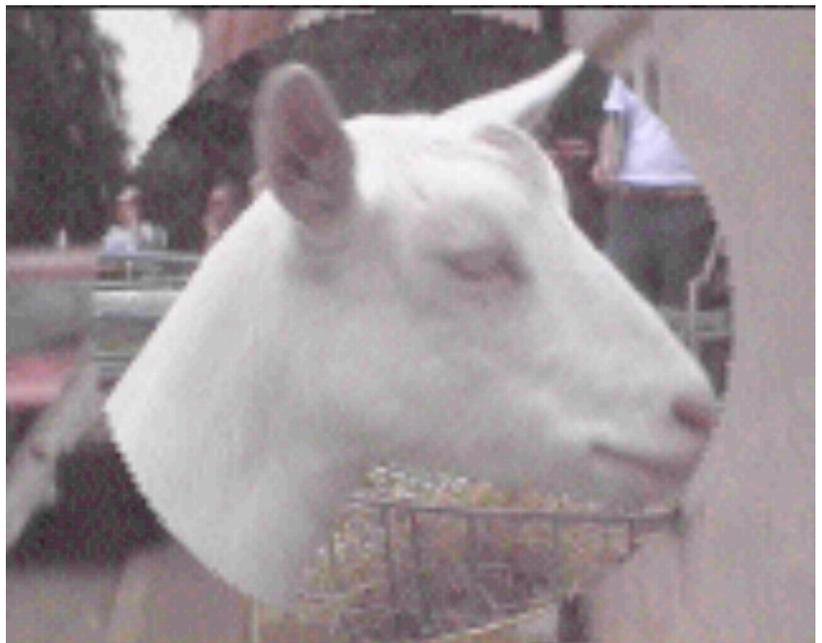
A first glance at Digital Video Editing (DVE) by Ed Bedell using Cineworks v1.04

My first article! Do I spend half an hour planning, laying out the objective, description, analysis and discussion as taught by school masters and college lecturers? No, I think I will just sit down, coffee in hand, gather inspiration by running a Cineworks armovie and scribe away on the DVE experience. Cineworks is primarily designed to create digital movie material for multimedia. However my main interest is in DVE and that will be the emphasis of this article.

I started learning about video editing with analogue equipment but found this approach restrictive, or expensive if extra equipment was needed. This led me to think of a digital solution and soon realised that the combination of video and computing offered tremendous potential. So I set about building up an 'affordable' digital editing system. Having looked at a number of machines, I decided that the Acorn option provided excellent hardware and software at a very affordable price, especially with the advent of the Risc PC and it is great fun to use.

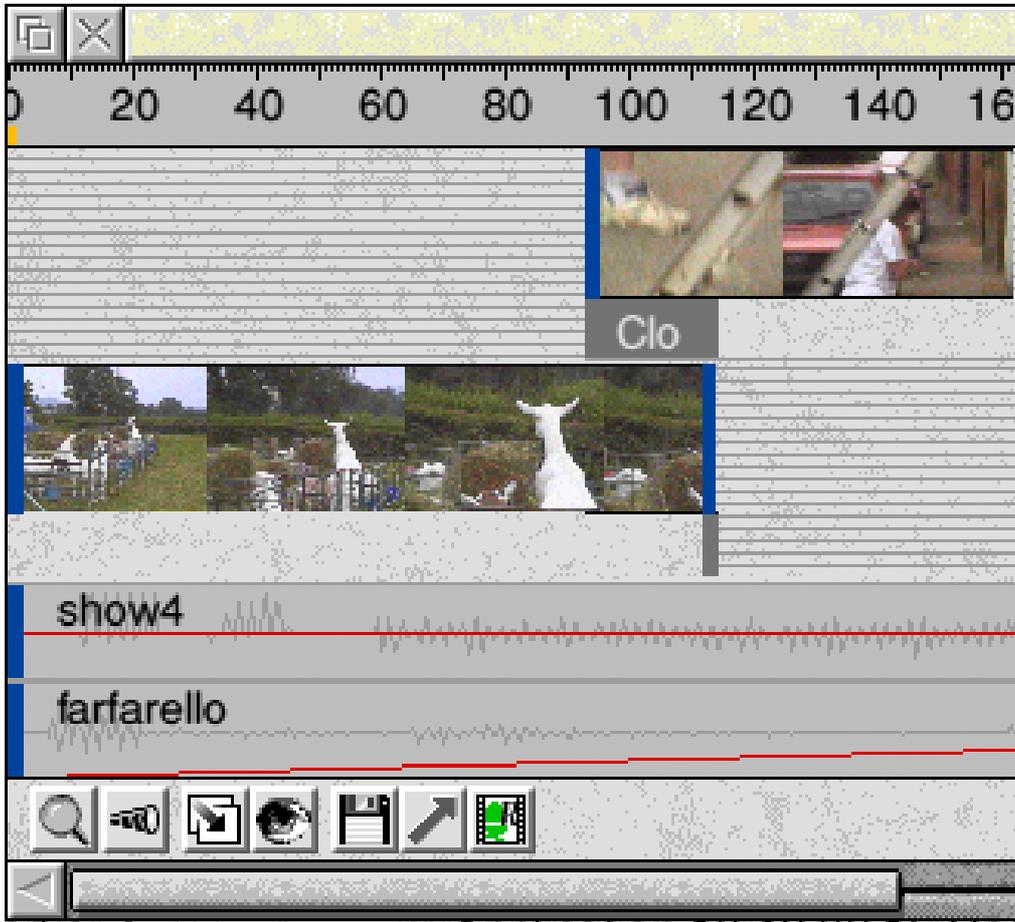
Digital recording and playback on the Acorn platform is achieved by converting analogue signals into digital data, usually in the form of *Replay* files. This is a mid-quality format designed to play back without specialised hardware. Equivalent software formats on the PC and Mac are AVI and Quicktime respectively.

Higher quality digital playback can be achieved using the industry standard MPEG and Computer Concepts' *Movie Magic* expansion card. Cineworks is essentially a Replay file editor but allows the import and export of non Replay files such as MPEG, Quicktime and AVI. If you intend to encode MPEG via Cineworks, be prepared to have a good night's rest while it is happening (it is a very computationally intensive process!). From a software perspective the design of Cineworks is excellent in being modular, thereby making the application very extendable. Well done Oregon!



A good likeness with the Eureka Editor or a demonstration of the capabilities of Cineworks?

The main concept within Cineworks is the *timeline*. This is the area where you put and arrange Replay clips to create your final edit. In video jargon, Cineworks is a non linear editor which can be used in an offline



Video Track 2

Video Track 1

Audio Track 1

Audio Track 2

manner (since it can produce an Edit Decision List *EDL*) or in an online manner with the use of a PAL encoder. The latter option is restricted by hardware capability since this process is very demanding. However top-end systems such as *AVID* and *Lightworks* do this in real time using and producing broadcast quality video, but you will need many tens of thousands of pounds to buy these so I will happily stay with Cineworks!

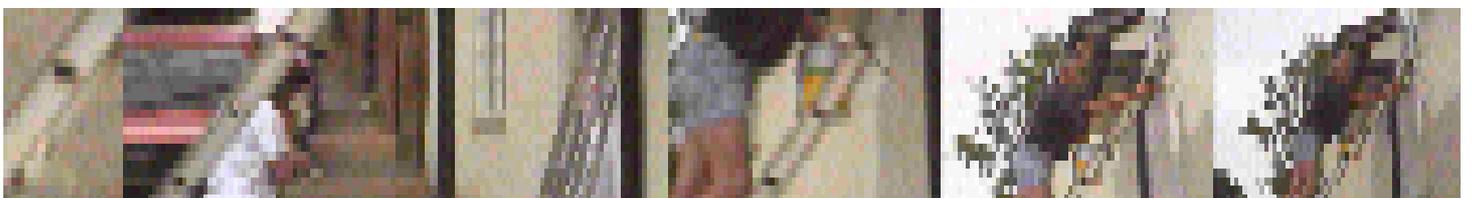
The non linear approach is actually very flexible, enabling delete, insert and overlay edits with ease. Cineworks provides thirty two video tracks and sixteen audio tracks. Each video track is numbered with the higher numbers having precedence over the lower numbers. Therefore a clip placed on track two

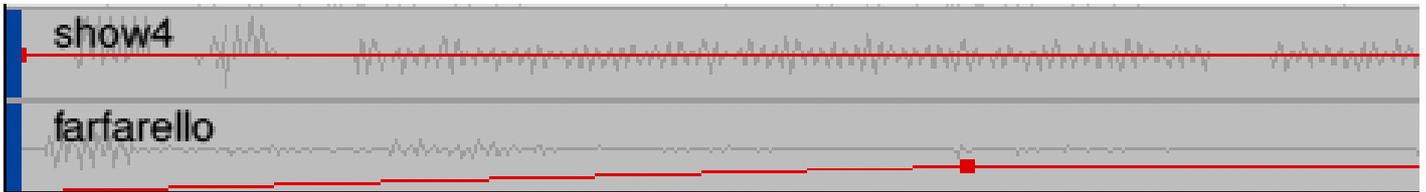
will play instead of track one.

The above timeline display will provide the final edit shown at the bottom of this page.

The audio tracks are located under the video tracks (see above). However the combination of audio tracks results in a mixing effect where one can alter the volume of each track & also when it fades in and out, by dragging the volume line up and down. The screenshot opposite shows the volume line & how it has been altered to fade in the *Farfarello* track.

I do like the timeline approach as it gives a good visual overview of the movie, is very flexible and therefore encourages creativity. All Replay clips are stored in a library facil-





ity, but on loading are converted to a special low resolution *thumbnail* representation. These so-called ‘cached’ clips are then used for editing and previewing. However Cineworks stores away the pathnames of the original clips and edit information as a Cineworks file. The information stored in this file can then be used to render the movie to Replay quality complete with special effects and audio mixes.

So on to creating a real movie. My story is about a sleepy rural town in Shropshire on Show day. The stars are a goat, a shire horse and the town wall painter! After sorting out some ideas in my head, I went off camcorder in hand to capture the evidence. I then previewed the material on my VCR to identify the relevant clips to be used in my extravaganza. This is where a frame accurate jog shuttle is very useful. I then digitised a *Show* clip and a *town* clip, using the 24i16 Irlam card at 25fps with 22kHz 8 bit log stereo sound at 160x128 resolution. One word of warning here, digitising video material uses up a lot of disc space. For example a one minute 160 x 128 resolution, 25 frames per second Replay file with a 22kHz 8bit log sound sample requires 61MB of space. In addition a very large amount of data is being transferred during this process and you are likely to hit the bandwidth problem if recording at 25fps. This effectively means there is a bottleneck in the system. This is either at the disc level or at the processor level. Usually you will encounter disc bottleneck first. I upgraded from the standard IDE (1.5 MB/s) hard disc

to a SCSI-2 (3MB/s) A/V optimised Quantum *Maverick* hard disc. I then hit the system bandwidth limit, which means my processor was too slow, so I upgraded my Risc PC to an ARM710 processor. This is better but still not quick enough, so I look forward to the introduction of the ARM810 and StrongARM chips. Incidentally the 24i16 can sample sound up to 16 bit linear with a frequency of 48KHz, but when combined with 25fps video can cause playback problems. So keep things simple to start with, and be more ambitious later.



A transition from the final movie

This is where the real excitement begins. I had a good idea of the story, but little idea of how the clips should be arranged. Cineworks really helped here. I loaded in both clips in the library which involved a little wait as the Reply clips were converted to the Cineworks cached clips. I then built up my movie on the timeline by arranging different video clips on different video tracks. If you want to see only a subset of the clip then Cineworks allows you set *in*

cue points and *out* cue points. This is very accurate and allows only selected frames to be shown in a clip. Where there was a cut, I inserted a transition by simply dragging the chosen one from the *transitions* windows. Available transitions include wipe to centre, wipe from centre, wipe, venetian blinds, mosaic and dissolve to name a few.



It's very rewarding to edit your own movies

Your completed video component can then be previewed in real time using the lower resolution cached clips. Having constructed the video part, I proceeded to construct the audio mix which was comprised of the original video soundtrack on audio track 1 with a fiddle music sample on audio track 2. I then set the volume of audio track 2 to be 80% and faded it in over about 10 frames. This mix emphasised the speech while

providing some atmospheric country music in the background. Rendering the final Replay is very straight forward, but it does takes a while, for my 1 minute 20 second (1750 frame) example took about 15 minutes.

Some transitions from the final movie are shown throughout this article.

I have only touched the tip of the Cineworks functional iceberg. It has some very good effects such as picture within picture which I have not detailed here. A tutorial section in the user guide would be very useful to show new users the main main features and principles as quickly as possible. In conclusion it is a great product which is really good fun to use. I hope that it will grow & grow and take advantage of new compression / decompression systems and hardware. I have mainly concentrated on DVE because that is my main interest, but Cineworks is also very good at producing material for multimedia products where Replay quality is very acceptable.

Ed Bedell

Cineworks costs £159.95 inc VAT from Oregon Developments, 36 Grosvenor Avenue, Streetly, Sutton Coldfield B74 3PE.

Club Software Products

ARM Club PD Library CD-ROM
(over 500MB of compressed PD)
£17.50

Game On! Release 2
(makes old games run on Risc PC)
£13.50

SmartCD+
(audio CD player front end)
£9.00

TypeTutor
(desktop typing tutor)
£9.00

These are all special members' prices (including postage & packing in the UK only)

Textease — A Serious Package?

Creating the ARM Club Newsletter using Textease by Geoff Stilwell

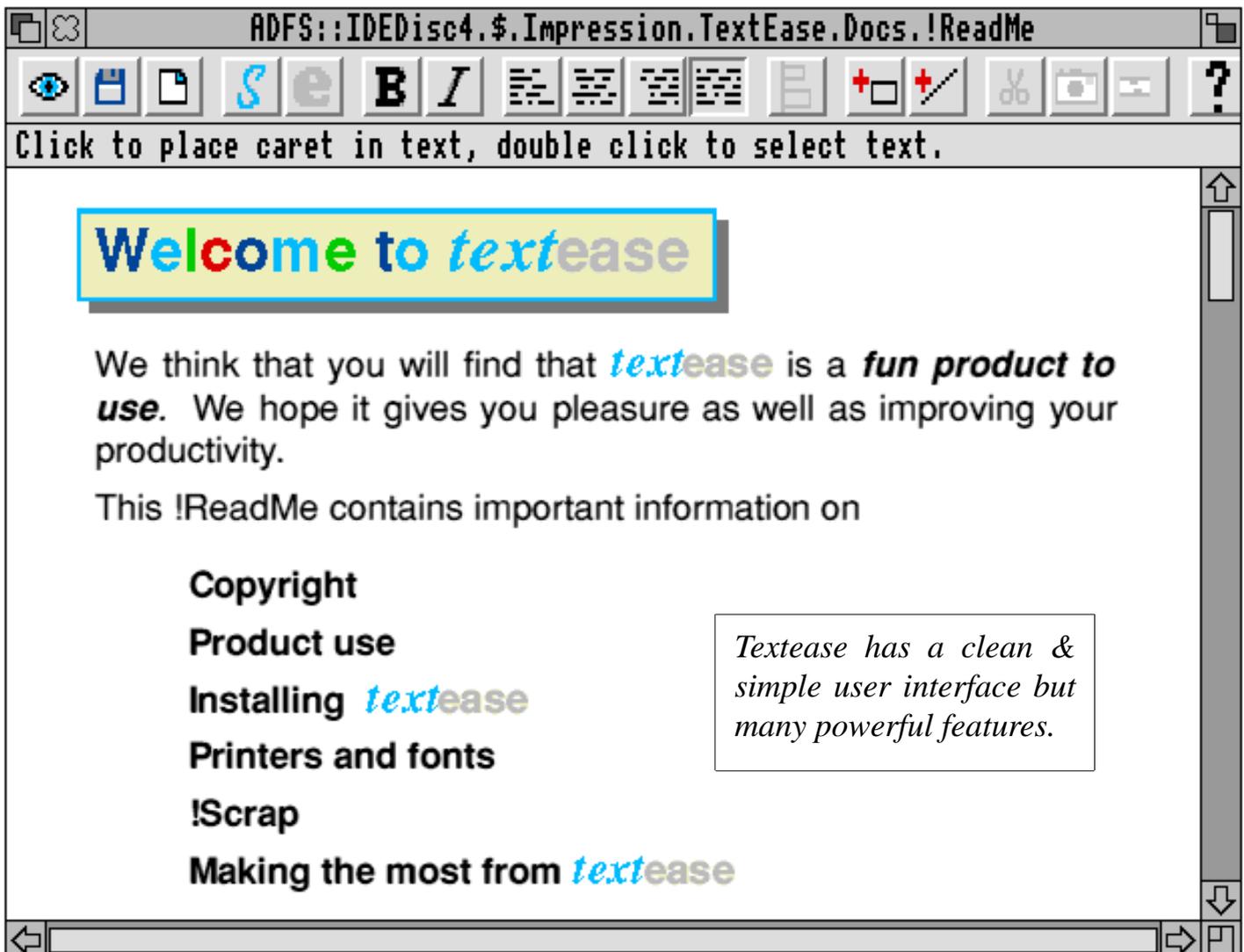
The idea began when Geoff Titmuss, the programmer of Textease and proprietor of Softease, the company that produces *Textease*, spoke to me at the Harrogate Show in April. “How about creating your newsletter with Textease,” he challenged.

“Will it cope?” I asked, wondering if this budget DTP program would be able to manage all the different aspects of the newsletter that were quite easy to produce in Impression Style; the pamphlet printing, linked columns, styles, etc. Geoff was confident that, although Textease did not have the sophistication of Impression Style it would certainly do the job.

“I’ll give you all the help you need,” he offered. So I agreed to take up the challenge.

As usual I forgot all about the newsletter until a couple of weeks before it was due [*a couple of weeks? What a luxury! Ed*]. Even then I had to chase up other Club members who had promised material (especially Committee members!) — eventually it all arrived. I normally develop my articles separately in a text editor, these had all been prepared ready to drop into the document.

I did try to set up a template using Textease but after a couple of attempts I realised that I

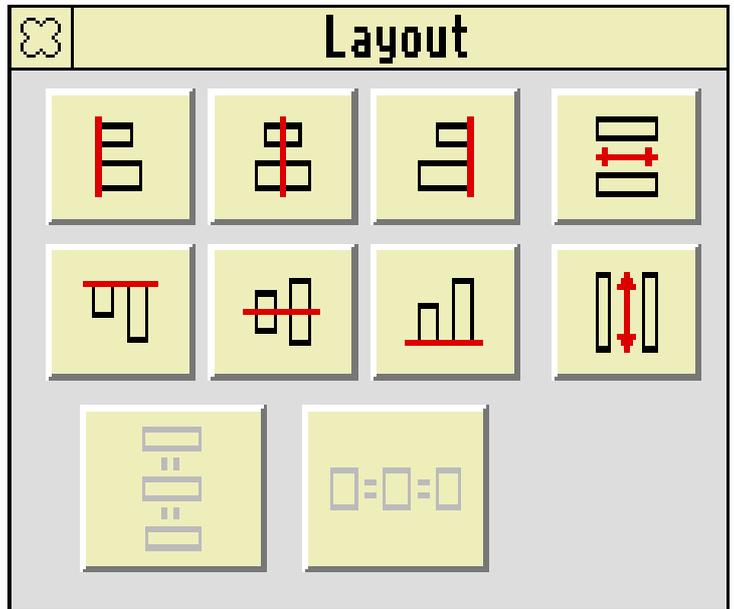


was not as familiar with the program as I needed to be and it was time to keep Geoff to his promise to help. Geoff was really pleased to hear from me. He rang me back (saving my phone bill) and we started work setting up the pages.

Now creating the template in Textease was quite different from creating consecutive pages from one master page in Style and then printing the whole affair as a pamphlet. We started with an A4 landscape page and placed an unprintable line down the centre of each page for our reference purposes and made this a header (or footer) so it repeated on each page. Then we created the elements that would actually repeat on each printed page. The line separating the columns of text, the line marking the bottom of the page and finally the footer itself, including the page number.

From the *Insert page number* menu item a dialogue box is opened from which it was very simple to choose the pamphlet format of page numbering.

I typed a small amount of text to create one column of text. The rest were created by using the *Add flow* menu item. Choosing the

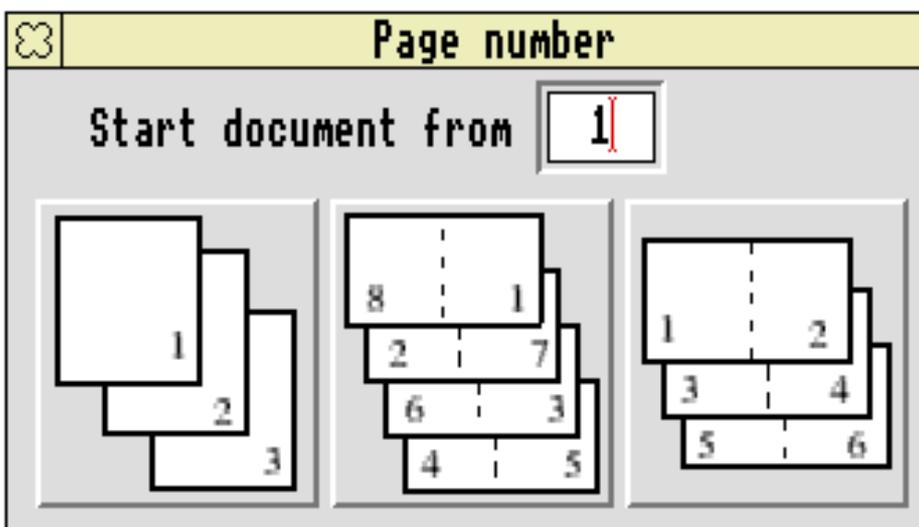


Shade flows item made it very easy to place and size the 16 columns accurately on the 4 pages of the document.

The *Layout* function came in very handy here. With two or more elements selected it requires only a mouse click on the required option button to justify, size or space out the elements. All selected elements are sized or justified based on the first element selected. This function is extremely useful and one that is conspicuous by its absence from the Impression programs.

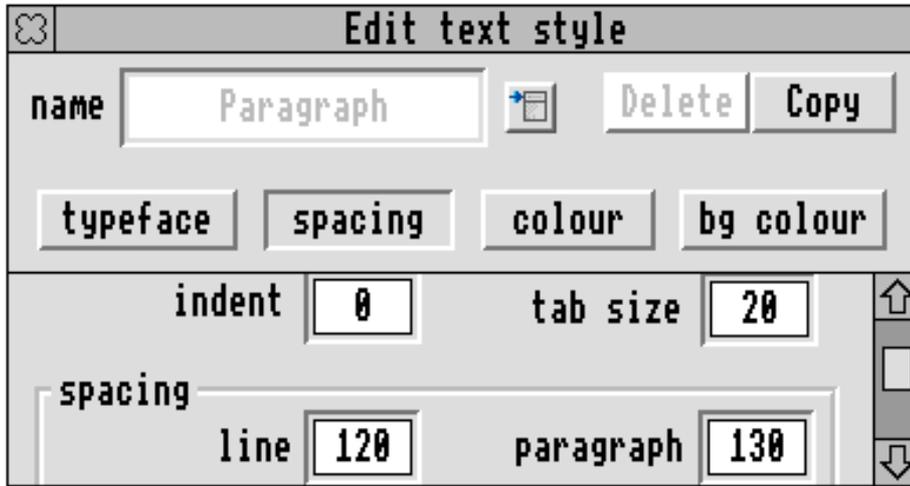
Another function I mentioned to Geoff Titmuss that I had found useful when using

QuarkXPress was being able to nudge elements around on the screen using the arrow keys. He tells me that this has now been incorporated in the latest version of Textease along with several bug fixes that came to light as I was developing the Newsletter. This is something users could take note of. If you discover strange bugs in your programs do give feedback to the developers. How can they



TextEase is designed to be easy to use

fix the problems when they often don't even know they are there? My input helped Geoff solve several problems that had not previously emerged in Textease and it made me feel as if I was part of the development process.



Once the basic layout was complete it was saved as a template, one of the four options from the Save box. From here I just had to drag and drop the text files into the text columns in the right order. The text flowed through the document beautifully. Graphics were dropped into place in the same way.

Where I wanted to include a graphic or a table between sections I had to leave a space by pressing Return a few times. To make everything fit I had to move articles around, cutting and pasting them from one place to another. This obviously left the graphics where they were and they subsequently had to be moved. Currently graphics cannot be embedded with the text but it is something Geoff is planning for a future release.

Although Textease has quite a sophisticated way of creating and applying styles to frames and text it was unfortunately not possible to apply more than one style to the text flowing through all the linked columns. The sub-headings' different typeface and size had to

be applied individually as effects. Applying styles to paragraphs is something else that Geoff is planning for a future release of Textease.

The optional spell checker highlights suspect words which made proofreading and amending simple (these highlights can even be printed out for children's redrafting purposes). Printing the whole Newsletter was transparent, I clicked on the correct buttons and away it went. As many of you will have seen, the Newsletter turned out very well (any failings are due to taste and my lack of design skills).

Textease was originally intended to be a budget application providing user-friendly DTP facilities for school and home use. Because Geoff Titmuss has used Object Oriented Programming techniques (see Geoff's article in the June issue of *RISC User*) it is relatively easy to add on other modules. In the year or so since its release last October, Textease has become a tool worthy of the challenge of the relatively complex ARM Club Newsletter. I predict that we will hear a lot more from the small but developing company called Softease.

Geoff Stilwell

Textease Version 2 can be obtained from Softease Ltd., The Old Courthouse, St Peters Church Yard, Derby DE1 1NN Tel: 01332 204911. Price £49.00 plus VAT. Talking Textease has speech capability and costs £65.00 plus VAT.

The Risc PC Technical Reference Manual

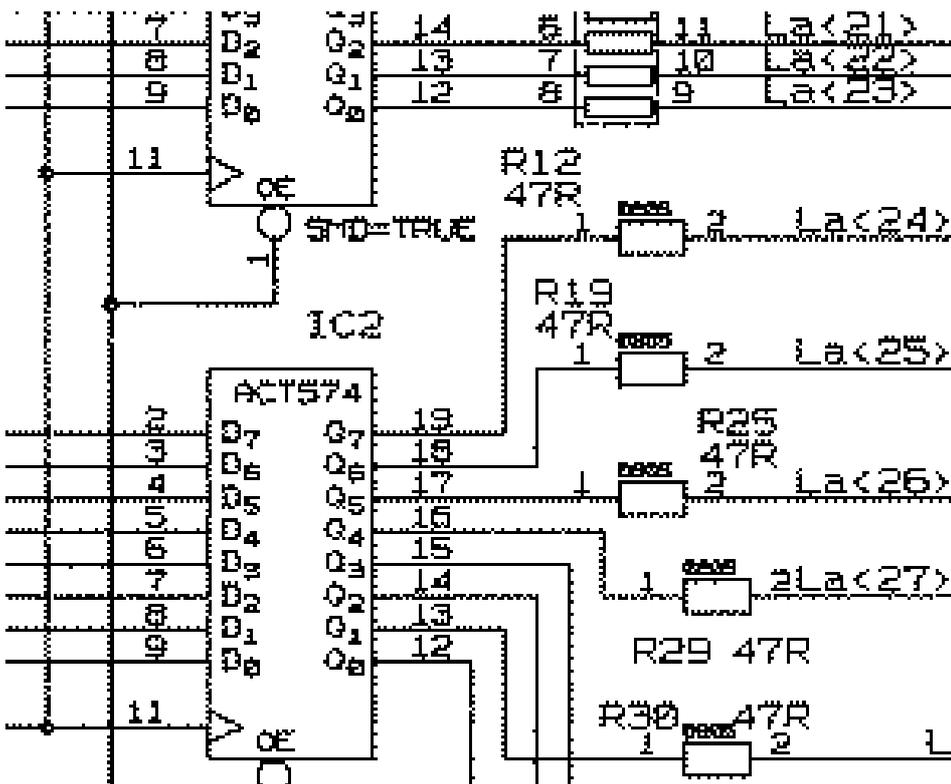
Mark Smith gets his teeth into the ultimate enthusiast book

For the really technically minded, Acorn have a series of Technical Reference Manuals. Earlier this year, the series was extended with one for Risc PC owners.

The manual comes as an A4 ring binder with a set of lose leaf documentation. This consists of the Risc PC Technical Reference Manual, the Acorn Enhanced Expansion Card Specification, the Network Card Mk II Interface Specification, safety test guidelines and a set of circuit diagrams, PCB assembly and mechanical drawings. The Risc PC TRM

this information, you will have to contact ARM and SMC for the relevant data sheets. Its unfortunate that Acorn could not include copies of these, probably because they cannot be seen to be selling them.

That aside, the TRM is pretty comprehensive, providing a system overview, details about IOMD including DMA, the IOMD registers, the memory system and I/O, an overview of the video and audio system and information about expansion and network card signals.



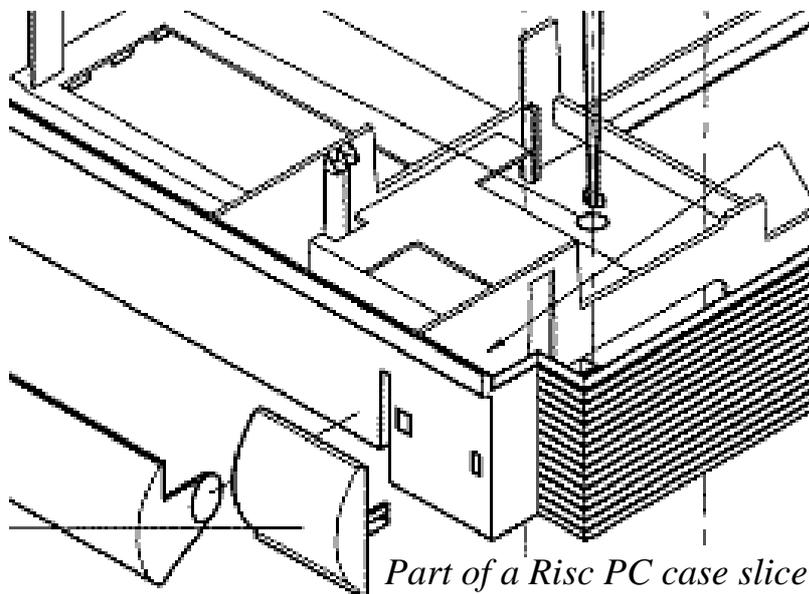
Part of a Risc PC circuit diagram – exciting bedtime reading!

This is followed by interface specifications of just about every connector you are likely to want to connect anything to from processor card slots to the mouse port, a series of parts lists and a set of appendices which cover the Power On Self Test, monitor cables, the list of engineering drawings supplied with the TRM, chipset pinouts and miscellaneous mechanical and electrical data.

contains most of the information that you are likely to need for low level programming and hardware design, although the VIDC20, ARM and peripheral controller data sheets are not included, nor is most of the information that you would expect to find in them. If you need

The TRM will be useful to anyone who wishes to design and build hardware (such as DEBI expansion cards) and also to those who need write very low level software such as Operating System ports, hardware drivers and applications like *Game On!* where RISC OS calls cannot be used to achieve the desired effects.

The Risc PC TRM represents very good value for money to anyone who is likely to want very low level programming information, wants to experiment with some hardware design or is just interested in finding out more about how their computer works.



The manual does assume that you have a basic understanding of how a computer works and that you are familiar with at least the more common technical jargon, but more basic information is provided in the Risc PC welcome guide.

Mark Smith

The Risc PC TRM costs £29.95 from any Acorn dealer, product code ACJ12.



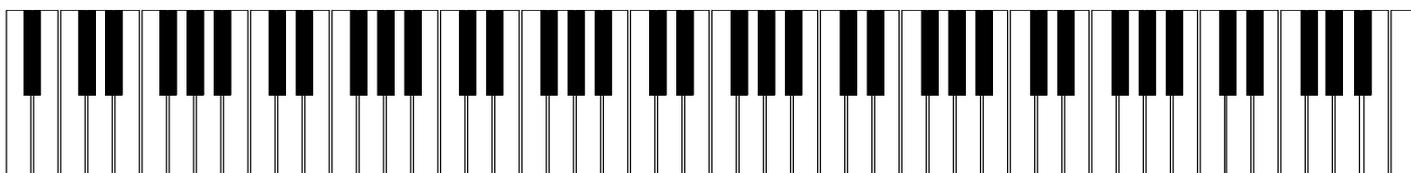
Music of the Future

written by Rilla Paterson

When our local secondary school ran an Open Evening in the Autumn of 1990 to introduce parents to the computers they were using, little did I know that it would lead to a consuming enthusiasm for music composition. The evening was designed to offer encouragement to parents who knew nothing about computers, a description which fitted my situation admirably. The school uses Acorns and a local dealer was in attendance with a special offer on an A3000 package. I fell for it and I have never regretted the purchase.

The elementary music program *Maestro* soon proved inadequate and a month later, on the school's recommendation, I bought *Rhapsody*. It took no time at all to learn to use it, and I was intrigued by the fact that the computer,

unlike myself, was able to play fluently whatever I had written. I started by transferring some elementary attempts at song-writing onto *Rhapsody* and playing them back through my Casio keyboard, which just happened to be equipped with a MIDI interface, a feature for which I was sure I would never have any use at the time I bought it but which now became indispensable. The Casio, however, was not multitimbral. This meant that it would only play one "voice" at a time (for example piano, harpsichord, vibraphone, organ). I learned that if I wanted to hear one stave played as a piano and another as, say, a flute, I would need a tone generator. I invested in a Yamaha TG55. This became a great liberator. At the time, I was reading a book by the



environmentalist Jonathon Porritt entitled "Where On Earth Are We Going?", and some of the ideas in it took shape in my mind in the form of an environmental musical play entitled *Child of the Future* (see inset overleaf).

I had bought the computer in October 1990, and by Christmas the outlines of all the songs were written. The speed with which this took shape is a tribute to the ease with which this remarkable piece of technology could be used. In two months I had changed from a completely computer-illiterate housewife, struggling with a very limited knowledge of music theory and unable to play an instrument to any reasonable standard, into someone who could write tunes and print them out for other people to play.

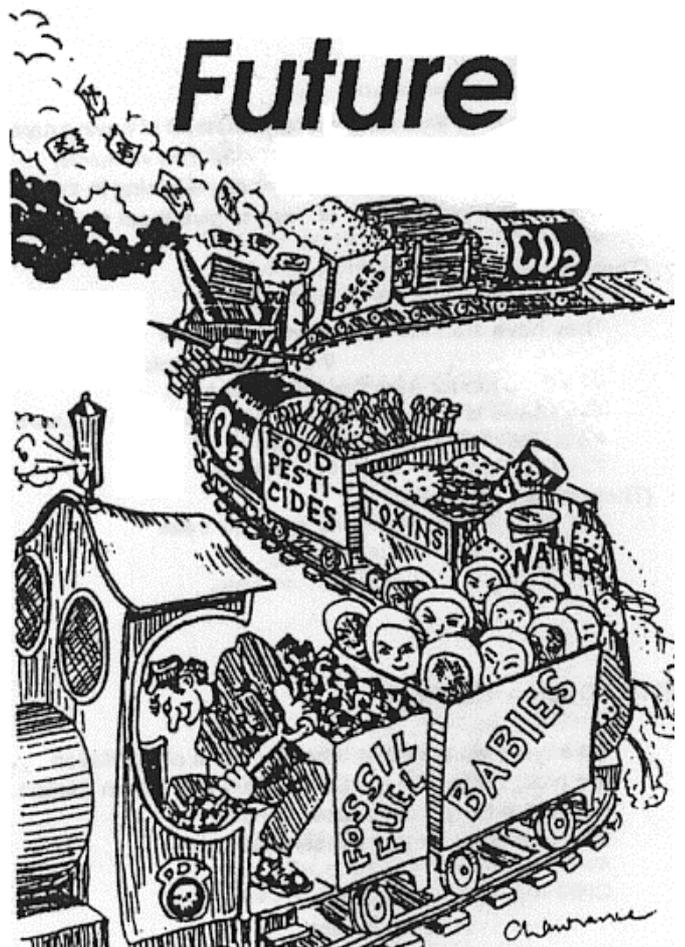
I took advice from a musical friend, who helped me with some of the harmonies, inversions and instrumentation. The Head teacher of my local junior school, which had a budding school orchestra, took an interest and he and his staff agreed to perform the musical in the summer, even before having seen the completed work. I spent February writing the script and March orchestrating the parts. In April we cast it, rehearsed in May, and performed to the parents in June 1991. The performance featured every child in the school, either in the chorus, on the stage, or in a special chorus of 20 strong voices who could lead the singing. An orchestra of 32 children accompanied the play. Only two adults appeared in the whole show — myself conducting and my musical pianist friend who had helped with the harmonies.

I then produced a synthesised score by setting different staves of the music to different MIDI channels. Two weeks later I took my

computer, keyboard and tone generator, along with 20 hysterically excited schoolchildren, to another friend who is a sound recording engineer with his own studio (I am lucky with my friends!). We recorded the work and the resulting cassette tape has been very well received.

I sent tapes and an information sheet to every music adviser in the UK, of which there are only 150. Response to this has

Child of the Future



been small, perhaps because music teachers and advisers have not the time for such things, or because the technological penny is slow to drop. Now and again someone rings me up wanting a tape and they seem to like what they hear. Accordingly, I think the time has come to throw the offer open via outlets

such as this article. I ask no royalties, only that anyone performing it sends a donation to an environmental charity of their choice.

I have now embarked on other musical pursuits — carols, anthems, music copying for others. My only regret is that I wish that I knew more about MIDI. Music shops do not seem to know much about computers, and

computer shops don't seem to know much about music. There must be someone capable of running a MIDI evening class out there somewhere. I shall keep looking, and in the meantime I invite fellow dabblers to contact me on 01923 245338.

Rilla Paterson.



Writing RISC OS Modules Part 2



Mark Smith presents the second article in his series on writing relocatable modules for RISC OS computers

In Eureka 16, I gave two example programs showing how a module's initialisation and finalisation entry points are called. Most modules need to claim some memory for workspace and this can be claimed from the RMA (Relocatable Module Area) by using the SWI "OS_Module". This SWI provides a number of module related facilities which include RMA memory allocation. To specify which operation you actually want to perform, a reason code is passed to the SWI in R0. The reason codes we are particularly interested in at the moment are:

6 — Claim a block from RMA space

On entry, R3 contains the required size. On exit, R2 points to the claimed block if successful, otherwise an error is returned (V set and R0 points to an error block)

7 — Free a claimed block

On entry, R2 points to the block to free.

Example 3 shows the source code for a module which claims a 1K block of memory

on initialisation and frees it again on finalisation. Note the use of the module's "Private word". Every module has one word of memory allocated to it by default and every module entry point is called with R12 pointing to this word. Usually the private word is used to store a pointer to a claimed block of workspace, but it can be used for something else if you don't need more than one word of workspace memory.

Also, note that if the workspace can't be claimed, the module won't initialise. This is because any error returned from OS_Module will be returned by the initialisation routine (the LDMFD R13!,{pc } instruction has no ^ to restore the processor flags). Normally, if you can't claim required workspace memory, the module can't do anything useful.

Conversely, any errors returned from OS_Module in the finalisation routine are ignored as we don't want a situation where the module becomes impossible to kill because the claimed workspace can't be freed.



Now we have some memory to work with, we can do something useful with it. Example 4 takes provides two * commands. One stores some text in the claimed workspace and the other displays the text that is stored.

Example 4 uses a 'Help and command keyword table' to provide the two * commands. The header entry points to a series of entries as follows:

- String to match, i.e. the command name (null terminated).
- Align to the next 32 bit word boundary (ALIGN in BASIC Assembler).
- Offset of code to run when command is executed (from start of module).
- Information word (described below).
- Offset of invalid syntax message (from start of module).
- Offset of help text (from start of module).

The above is repeated for each command. The table is terminated by a 0 byte in place of the next command name.

The information word contains various bits of information about the command. For now, we are only really interested in the first (least significant) and third bytes (remember words are stored least significant byte first under RISC OS) which give the minimum and maximum number of parameters respectively. If there are too few or too many parameters, the Syntax message will be reported to remind the user of the command's syntax.

In our example, the command *StoreText must have one parameter (the text to be stored) and so the information word is &00 01 00 01. The command *DisplayText takes no parameters and so the information word is &00 00 00 00.

The help text is displayed when *Help command is entered, this allows the user to find out what a command does.

Example 3

```

REM >Example3
REM
DIM space% 1024
REM Claim some memory to assemble the
program
start=0:init=0:final=0:service=0:table=0
REM Set any undefined header entries to 0
FOR A%=4 TO 6 STEP 2
  P%=0
  O%=space%
  [OPT A%
  \_____
  .base
  EQUd start
  EQUd init
  EQUd final
  EQUd service
  EQUd title
  EQUd help
  EQUd table
  \_____
  .init
  STMFD R13!,{r14 }
  \ First store return address held in R14 on
  stack.
  \ R14 is corrupted when a SWI is called from
  svc mode.
  MOV R0,#6
  \ Claim reason code
  MOV R3,#1024
  \ Claim 1K (pass size in R3)
  SWI "XOS_Module"
  \ Execute SWI to claim the block
  STRVC R2,[R12]

```

This example is continued on the Eureka disc, where the other example programs can be found due to lack of space here.

Mark Smith

The best thing since sliced... Risc PCs?

Christopher 'Quilljar' Jarman lets himself loose on the Internet, aided and abetted by the new Voyager software and connection provided by Argonet

When I first read the advert for *Voyager* in *Acorn User* I had been trying to log on to various sites and make some sense of what the Internet was all about for some five months. Using *Hearsay*, which I found to say the least, user unfriendly, with other software, I had very little success. It may have been partly my own fault I admit, as I hate typing anything in and I cannot understand any system which even pongs slightly of DOS (the backslash dot bumfluff approach as my son calls it).

The advert implied that this suite, which is a compilation of a number of PD programs put together by those clever people in Chichester and their mates, would be Acorn user friendly and practically work itself. For £59, if you already had a modem, they would give you an email address and pre-configure the whole package to fit your particular setup, computer and modem etc.

Unfortunately the advert came out about a month too early and Vti were not ready for the rush. They had indeed identified a vast market out there consisting of us unhappy anoraks who wanted to surf the Internet, just as everyone else was supposed to be doing, but couldn't get our minds or mice around the way to achieve it. This meant that after the statutory 28 days I got a bit miffed as nothing had come through the post. I began my usual round of moaning faxes and letters from 'Disgusted of Winchester' and so on, but it was another two weeks when *half* a Voyager package arrived with an email address of my very own but no way of working it yet. A letter said 'Sorry this is late, but have a go with the World Wide Web for free while we try and complete the Suite'. This was better than nothing and indeed I must say that my first attempt to read a Web page worked immediately. Just point and click and wait, which is the most advanced thing I am able to do on a computer anyway.



Don't know your POP3s from your NNTPs? Voyager makes the Internet a lot easier!

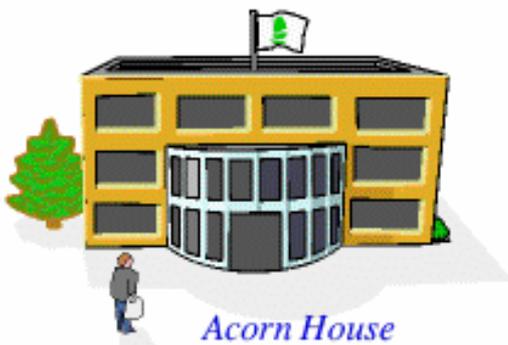
After waiting another two or three weeks the Wembley Show date arrived and I went along to the Vti desk to chat to them and see how things were coming along. I was offered an update which was all five parts of the suite and a 32 page photocopied manual.

The five parts of Voyager are: 1. The World Wide Web Fetcher/Browser. 2. The Mail Fetcher/Sender. 3. The News Fetcher/Sender. 4. The Telnet System and 5. The FTP or *File Transfer Protocol* System. The manual describes and explains all these very well and concisely. I say this because although I had read many articles and a book about the Internet, it wasn't until I read this manual in conjunction with trying out the Voyager

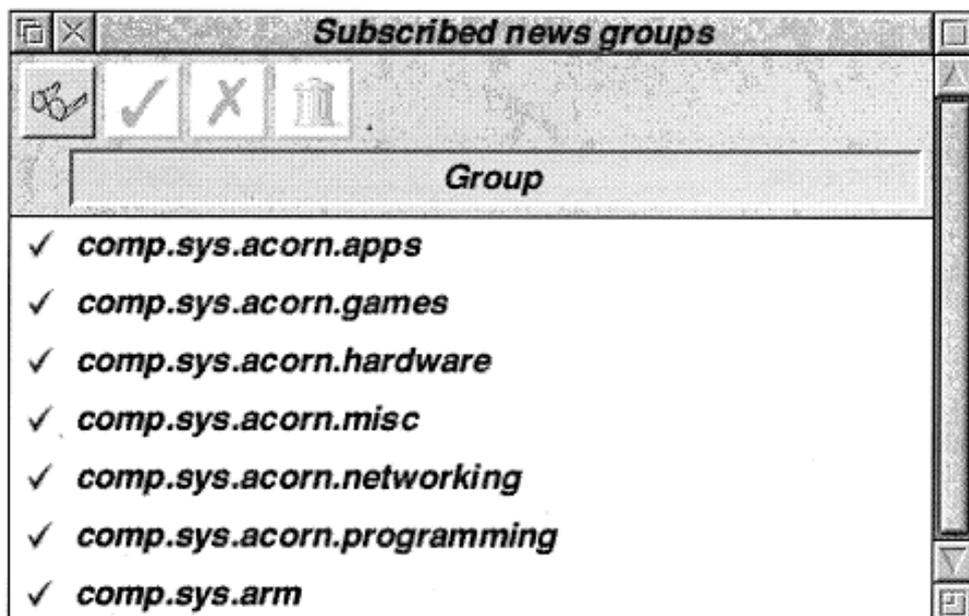
system that I eventually got some idea of what it was all about.

When installed on the icon bar in the usual way, Voyager is represented by a little green telephone.

Clicking on menu brings up a whole list of preferences which have largely been preset for you according to the application form details that you would have filled in for your order. The most important of these is the *Connect* configuration which at the moment has 52 town or city names for the ArgoNet sites available. I chose Southampton as my nearest, only a local phone call away.



Acorn' s own World Wide Web pages contain stacks of useful information, news & programs



Megabytes of news are available daily on the Internet

Another preference is *User* which shows your real name and your email address all preconfigured for you. There is a facility for you to change the *signature* which is automatically added to all your email and news postings. This is worth editing to your own design and is only a textfile. When I sent my first mailing I got a ticking off from my recipient for inadvertently advertising Argonet in my signature. You will see what he meant if you look at the default signature [*Serious Internet users sometimes get rather wound up about signature files, they are very much optional and many people do without one — Ed*]. Apparently this is considered bad form by many Internet users! Anyway, I just erased the ArgoNet advert and put my own in instead!

When you click on the bar icon you get a very attractive window at the top of your screen with six icons and a row of green lights. The buttons are self evident, the first being *connect/disconnect*. On clicking *connect* you are told to switch your modem on if you have forgotten, and then it all starts. In a few seconds you are told that you are

connected and you can select whichever one of the systems you require. With the manual to guide you and only a local phone call being charged, it is incredibly easy to find your way about the suite. You will be shooting off emails to New Zealand and downloading the latest upgrades for your Acorn software in a matter of minutes.

The local call cost with BT is 5 pence minimum charge,

so it is a good idea to stay online for up to 5 minutes at weekends or for about 3 minutes in the evening or off-peak times. You won't save money by keeping your call down to 30 seconds! [*The BT minimum charge is reduced if you subscribe to certain discount packages on offer — Ed*].

This minimum charge means that if you have several email shots to send it is better to stack them up and send them altogether under one 5p charge. When you write an email anyway, you do it slowly and take as long as you like because you do it off-line. Then it is stored in the Voyager memory until you re-connect and it is automatically sent. If you want to know what is happening, you can just press adjust on the iconbar icon and a window log gives you a running commentary of events. Also, the little green lights on the main window indicate activity too, so that you know when all your news and mail has arrived and gone so that you can disconnect.

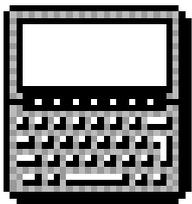
Free upgrades are now due, with a glossy manual I am told, on the way. I am very



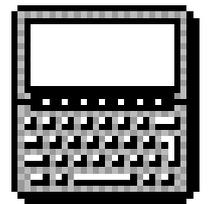
happy with Voyager so far, and I like the helpful and customer friendly attitude of ArgoNet. There is a free helpline too which is all you could wish for. This is a real beginner's introduction to it all.

Christopher Jarman
quilljar@argonet.co.uk

Various Internet packages are available from ArgoNet, starting at £59 for the basic software. The monthly service charge through ArgoNet (a Unipalm PIPEX service reseller) is £12.50 plus VAT. ArgoNet can be contacted on 0500 585586 or by post at Unit 1, The Shopwhyke Center Shopwhyke Rd Chichester West Sussex PO20 6GD. Special offers are available through Acorn User magazine until 31st December 1995.



Pocket Book Corner



Toby doesn't have the excuse of not being near a computer so has to write this column quickly before Simon shouts!

Welcome to yet another edition of the original column for the smallest but best computer!

ARM Club PD Library

A welcome change over the summer has been the complete reorganisation of the Pocket Book section of the Club's PD library. There is now an easily accessible wealth of software for the Pocket Book available. The software covers all types of arenas, from the obscure to the amazing. A copy of the catalogue can be found included on the magazine disc, together with the rest of the PD Library catalogue.

In future I intend to do a series of quick recommendations in this column. Anyone who has used any good Pocket Book or Psion PD is welcome to contribute.

Of Pocket Books and Psions

As some of you may know, the Acorn Pocket Book range is based around the extremely popular Series 3 computers by Psion. Psion are also a British computer company, with much success in the hand held arena. In fact, the Psion and Acorn versions of the computer

are absolutely identical, apart from facial badges, a little bit of renaming and some software specification changes — on the whole you get more in the Acorn!

At the moment there is much speculation about the features of the forthcoming Psion 4 (which will presumably gain a Pocket Book brother) Many sources suggest that the machine will use an ARM chip, possibly the ARM7500 due to the computing power & battery power available from ARM chips.

[Note from Simon: The ARM7500 was actually designed to Acorn's specification so Psion would require a licensing arrangement with Acorn to make use of it.

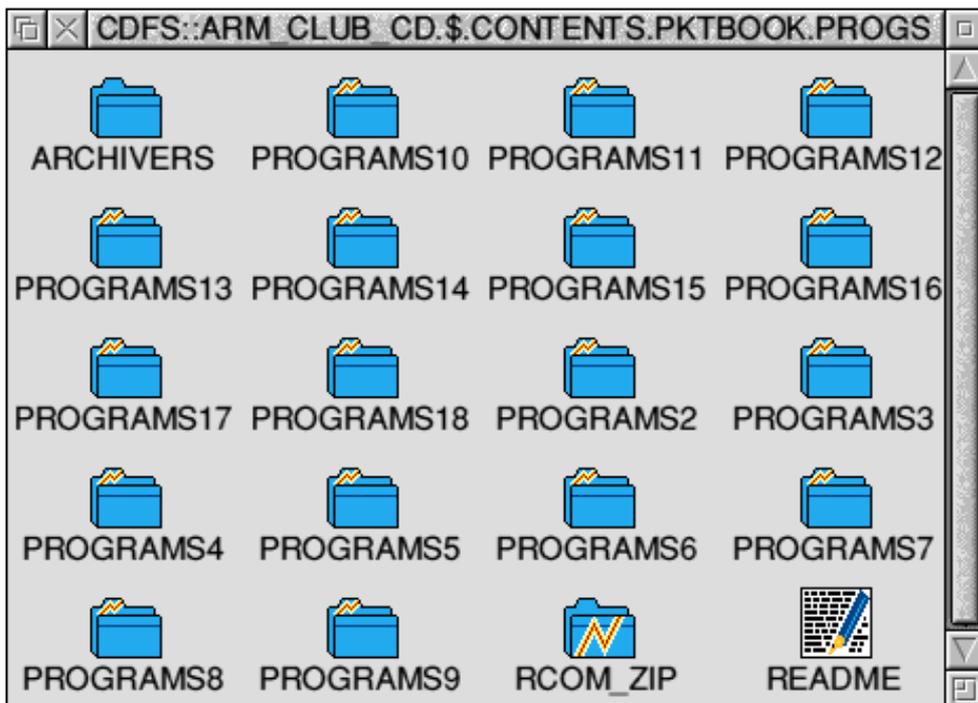
However ARM has just announced a new processor called the ARM7100 which, amongst other things, features the functionality of an ARM710 processor, Liquid Crystal Display driver, Infrared comms support and extremely low power consumption when driven by a 32KHz watch crystal. Ho hum!]

Other suggested features include a colour screen, 2MB of internal memory as standard (already available on the top of the range Psion 3a) and much improvement in the applications. Speculation also centres around the communications mechanisms to be used. Psion are already quite interested in comms techniques: the 'serial' port on the side of the machine is actually a high speed special protocol port — for the A-Link the 'pod' contains conversion chips. Many believe that Psion may replace this with an infrared system [see ARM7100 specification! —Ed].

New Pocket Book options

Acorn have announced the arrival of a much expected Pocket Book II 1MB version, based on the Psion 3a 1MB. This will be identical to current versions, but with more memory available on the internal drive.

The Pocket Book 2 1M will be priced at £285 + VAT (£334.88). The price of the 256K PBII has fallen to £205 + VAT (£240.88) and the 512K has been discontinued in favour of the 1MB version. Special education prices will apply when bought direct from Acorn.



The Club PD Library CD-ROM contains over 10MB of compressed Pocket Book software! That's rather a lot...

Acorn have also announced 2 new bulk packs. The School Pack consists of 100 PBII's and includes 10 free parallel links, A-Links and mains adaptors. (£20,000 + VAT for 256K models). The Site Pack contains 1,000 Pocket Books and 100 of the accessories for £192,500 + VAT (256K). It will be interesting to see how many sell! [I hope that anybody who manages to sell one of these packs receives a substantial bonus from Acorn! Ed].

Acorn-1

That's all this time folks! Happy Pocket-Booking, and keep those letters flooding into the usual address — Pocket Book Corner at the Freepost address and email messages to pbc@nucleus.demon.co.uk.



Toby Smith

Please send in details of your favourite Pocket Book software.

Back in Eureka 14 I previewed a suite of applications developed by SkillsWare in collaboration with Thames Water (and we've all passed a lot of water since then).

At Harrogate this year children and adults were actually playing with the 'James Pond Underwater Agent' game and trying the 'Running Water' simulation in the 'Little Acorns' enclosure.

game itself (such as having an animated game of football on top of a service reservoir) but mostly through screens of textual information which the children need to read carefully to be able to answer the questions James Pond asks at the end of each section. It isn't necessary to read the information to be able to play the game, there are some sections where it would help, but the score at the end would suffer.

Thames Water Revisited

Geoff Stilwell discusses the novel educational suite from SkillsWare

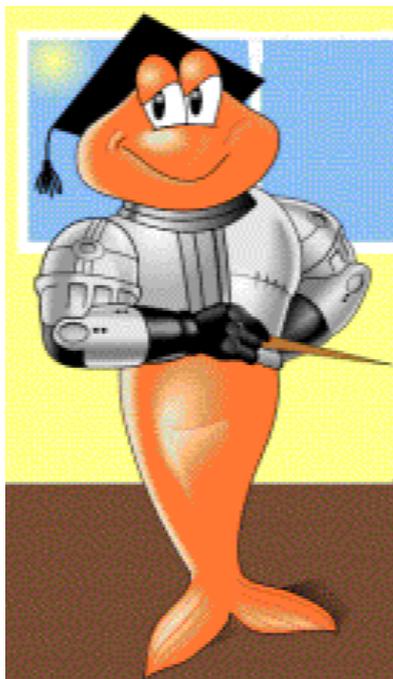
I finally got my hands on the package and let some of the children in my friendly primary school have a go.

James Pond Underwater Agent

This is the part of the suite which is aimed at the primary school, key stages 1 and 2. It aims to provide 'edutainment' or a game with educational intentions or outcomes. Thus the well know arcade game character leads children through the processes that water has to negotiate in getting from the rain cloud to the domestic tap.

Children control James Pond, accompanied by Ronnie Raindrop, using changeable keys on the keyboard or a joystick to guide them through pipes, treatment work's filters, the London Ring Main and finally into the goldfish bowl.

An enormous amount of information is conveyed, partially by visual clues in the



I'm afraid that the game play itself is quite tricky. James Pond has to deal with the devious and insidious underwater currents that I felt were a bit excessive in the game. At the same time there is very little for the player to actually do in the game apart from move from one place to another. Some of the children who played the game became very frustrated trying to negotiate pipes that squirted James Pond out with no apparent reason or in mazes that

just slow you down with no purpose.

My favourite part of the game was travelling through the London Ring Main. The graphics depicting landmarks that would be above ground at each location are quite entertaining.

The part that annoyed me the most was that James Pond can run out of energy or lives and the player is sent back to the beginning. Some of James's energy is lost by bumping into fish because the excessive underwater



currents) whereas older children will not find the game challenging enough.

I personally am not sure about the concept of edu-tainment. Yes I believe education must be interesting and well presented but I feel there is a danger with this kind of game that trivialises the educational aims.

Running Water

I was not able to see this half of the package when

How well do you know the geography of London?

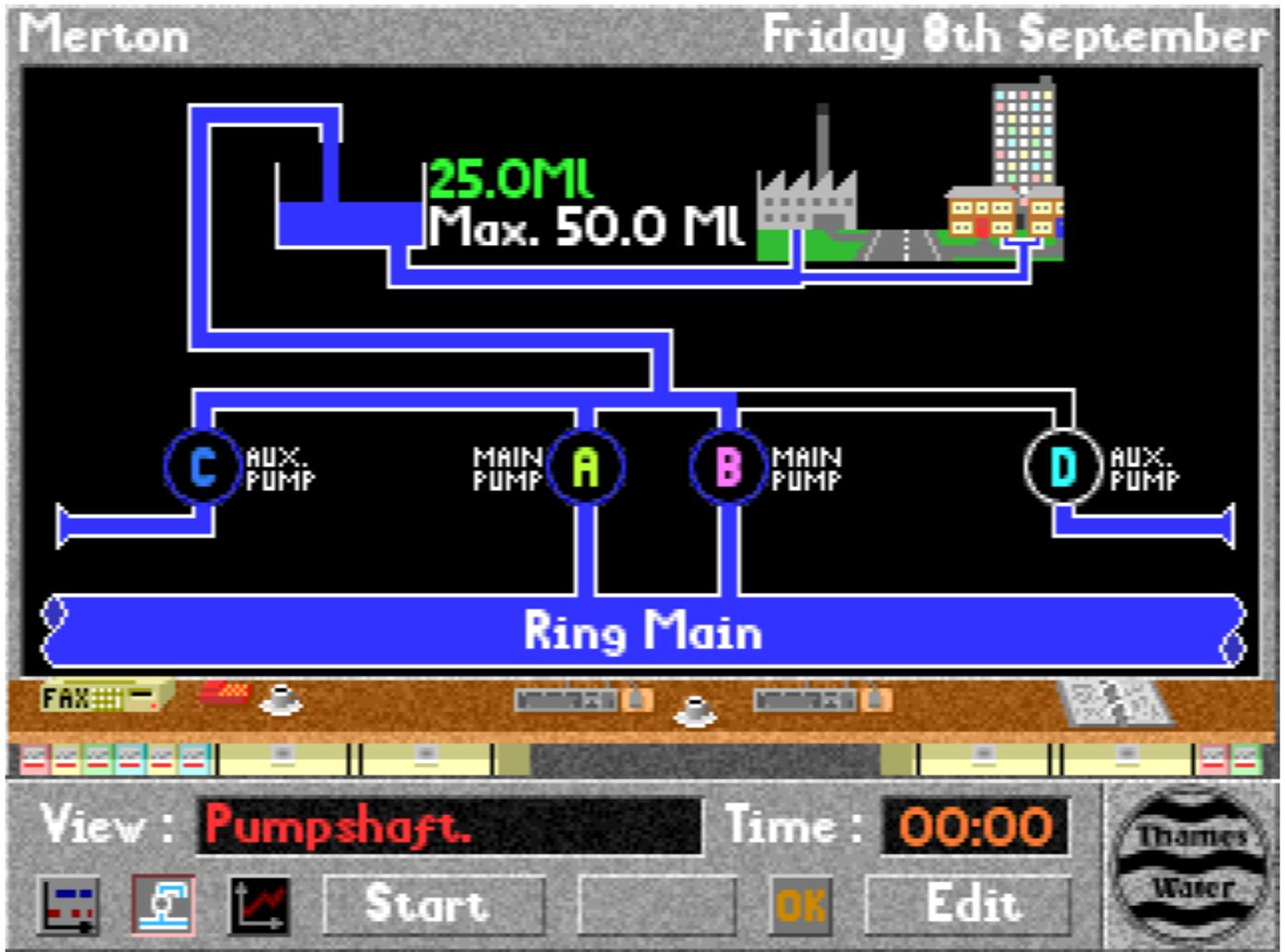
currents are moving him about. This really should not happen. A better method would be to reduce the final score accordingly not to make the child do the whole thing again.

I went to Hampton earlier in the year (see Eureka 14 for full details). Running water is the simulation of which the engineers at Hampton spoke so highly.

The main problem with the game is that the children don't really want to go through it again. Once it's been done once there is nothing that will make the children want to come back to it. I feel the game is not fully able to appeal to the age range it's aimed at. The amount of reading involved places a constraint on the younger children to whom the games play aspects will appeal (despite the awkward



It is rather frustrating to be swept away by hidden currents



Running Water was spoken of very highly by people who run the real thing every day!

Like James Pond it takes over the whole computer. The user controls all aspects with the mouse, selecting an area to control or dragging with select or adjust to switch pumps on and off over a time period.

The user can access weather reports and information about water usage and population for an area from the program's built in database based on real information from Hampton's Control Centre computers. Random elements such as burst pipes or freak weather conditions add verisimilitude.

Once the reservoirs are chosen and the pumps set the simulation can be started. This shows an animated sequence of the water being pumped into the service reservoir from

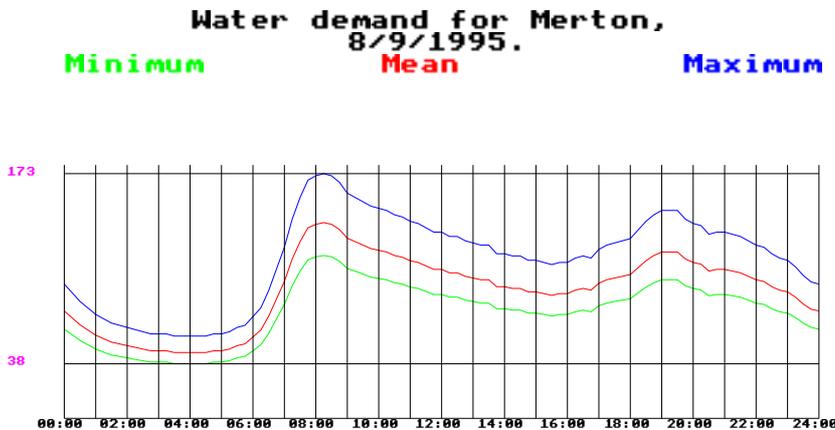
the Ring Main and then used by the consumer in their house or factory. Alternatively you can watch a graph of the water usage being developed over the same 24 hour period.

Immediately following the simulation you are presented with your score based on a list of costings for choice of reservoir, pumping costs and penalties for, amongst other things, not leaving the reservoir with the same amount of water that it had the day before.

Despite not doing very well with my control of the water to the Merton area (where my mum lives), I enjoyed using the simulation. I think I would have preferred being able to use the program on the desktop and be able to access other applications (such as a calculator

perhaps). The program is easy to use although it is helpful to read the Resource Booklet, supplied with the package, so that your efforts are not just trial and error.

allows the user to export much of the information acquired during the simulation and the results of the settings of the pumps. These are exported as text, drawfiles and CSV files, which the user could import into a wordprocessor or DTP package to produce a report of their efforts or the CSV files ported into a spreadsheet for some complex analysis and further graphing.



There is still a lot of information to read from the screen (not as much as in the James Pond Running Water program though) but this part of the package is aimed at secondary pupils, Key Stage 3. Having said that I feel that the top years of a junior school would get a great deal from the simulation (perhaps after having quickly gone through James Pond Underwater Agent).

The Resource Booklet provides a tutorial for the two programs and is also an excellent teachers resource on the wider subject of water. There are a number of activities suggested for work away-from-the-computer (where I believe much of the most useful 'computing' work is done).

When the main part of the program is exited the iconbar icon leads to a menu where the present position can be saved. The menu also

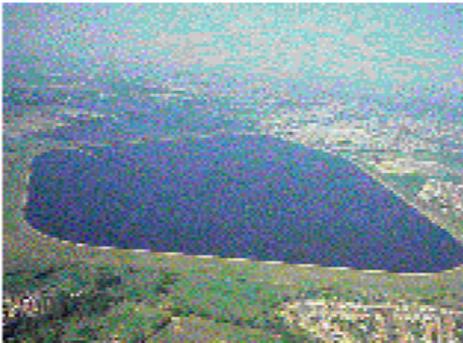
In the primary school the two applications could be used effectively together when studying water. In the secondary school I don't think many of the children will want to be bothered with James Pond but it's part of the package anyway. Running Water really does make up for where James Pond is lacking and is an excellent way for pupils to experience the complexities of supplying water economically to London.

Daily News

Troubled Waters

"Keep dogs and children away from the reservoirs", say scientists from Thames Water. A population explosion, or 'bloom' of blue green algae means that the water is unsafe to drink or swim in.

"Yes, some of the algae can be poisonous, but there is no risk to the Capital's water supply", said a spokesman from Thames Water. "The algae are removed by our filters. The only problem is that the filters block up quickly under these conditions, and the amount of water we can pump out of the works



Geoff Stilwell

The Thames Water suite costs £?? for a single user licence.

A Primary Licence can be obtained for £50 extra and a Secondary Licence for £90 extra, from Skillsware, Worthy House, High Street, Hamble, Hants SO31 4HA.

Well I never knew it did that!

Geoff Lane starts a new page of useful hints & tips for all Acorn users

Hello folks, welcome to a new section within the incredibly interesting Eureka magazine, well, it's not entirely new as it has appeared spasmodically.

"What is he going on about?" I can sense you all saying. Well, I have owned my Acorn A3000 for 4 years now and still I get occasions when I suddenly think "I never knew it did that". I would like to encourage you all to share your "I never knew it did that" experiences with us fellow Acorn users. Hints, tips, ideas, call it what you like but if it is useful or perhaps just interesting send it in and I will print it. Just a word of warning, I tend to find that computer users explain as though every other person understands exactly what they are talking about,

IT'S ENGLISH JIM, BUT NOT AS WE KNOW IT

quite the contrary is usually the case, keep the explanations simple to understand, try them out on some computer illiterate friends, if they understand what you are going on about then it could be useful to the many users who use the machines but don't understand the jargon.

Here's a few to be getting on with

Within a *Draw* window if you keep the select (left) mouse button pressed you can then move the pointer via the cursor arrows for more accuracy.

Within *Paint*, if you open a *Draw* window and make sure the title bar is highlighted (yellow) you can move the pointer via the

cursor arrows in the same manner as previously described, the *Draw* window can be sent to the back provided the title bar remains highlighted. (Thanks to Gareth Jones of Mill Hill School for that tip).

When opening sub directories if the Adjust (right) mouse button is used instead of select then when the new directory window opens the previous one closes, the reverse happens if you use the same method to close the windows. Helps to keep the screen tidy.

If you press shift and then using the select (left) mouse button to drag a file icon from one directory window to another, instead of copying the file it will move it from one directory to the other.

If interest is maintained in this section I will repeat the tips every so often as new people are being introduced to computing all the time. Send me anything, useful, interesting or fascinating, OS_Word functions for example, or any modules that can be safely *UNPLUGGED to increase memory.

Geoff Lane

If you have any tips for Geoff to include in his page next time, please send them to him c/o the Club FREEPOST address or by email at the address:

hints@nucleus.demon.co.uk

The Club will offer small prizes to people who send in the most useful hints & tips.

Understanding

*Giving your written work that edge of class
with help from Toby Smith!*

Fonts

There are 4 main types of font:

- Those that are embellished with “serifs” on the ends of the letters, for example Trinity.
- Those without serifs, eg Homerton.
- Display based fonts, which are unfit for body text and are meant to be used in graphics.
- Symbol fonts, such as Selwyn (☆☞✍️✎➡)

Serifed Fonts

Serifs are designed to pull the eye along a line of text, making reading less strenuous. Serifed fonts are suitable for all types of document and are the best choice for body text (hence this text uses Trinity.Medium).

Sans Serif fonts

Sans Serif fonts are plainer in style and have an angular, uniform look. They are of use in areas other than body text, where information needs to be expressed clearly eg graph and diagram labels, and tables of data.

Serifs

T f y

Sans-Serif

T f y

Display Fonts

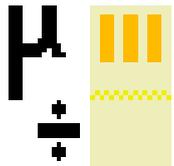
Display fonts are intended for creating a special effect on posters and other graphics. Some have only an upper case set of letters.

Symbol Fonts

Symbol fonts form a useful “addition” to the other types of fonts providing extra alphabets or useful symbols (such as *MathsPhys* $\angle \neq \pm \Sigma \Delta \emptyset$) or a selection of bullets for heading lists, and other useful symbols, like *Selwyn* (☆☞✍️✎➡).

Name	English	Maths	French	Computing	Total
Arnold S	82	45	64	100	291
Bancroft J	49	68	48	100	265
Burrows S	68	67	59	100	294
Flower A	58	58	67	100	283
Smith M	73	72	28	100	273
Smith T	94	91	71	100	356
Stilwell G	76	45	37	100	258

When picking a symbol to use from the selection contained in a symbol font, it is often useful to have a translation list between the symbols and what you must type to get them (for example, # in Selwyn is $\#$). This can be either as a pre-prepared printed list for each font, or via use of *!Chars* in the *Apps* directory which displays a window containing all the characters in a font and allows the font to be changed via a menu system from this window.



Hence, from a display of the relevant font you can pick a suitable character, place the caret (red typing bar) where you want this symbol to appear and just click over the desired symbol in the *!Chars* window to have it inserted at the caret position.

Body Text

On most pages, the majority of the text will be in one font, often referred to as the base font or body text font. This needs to be of an ordinary, non fussy variety, with bold & italic variants available should they be needed. The most popular and universal font for this is Trinity (or close relative) and 95% of documents are best done with this as the body text.

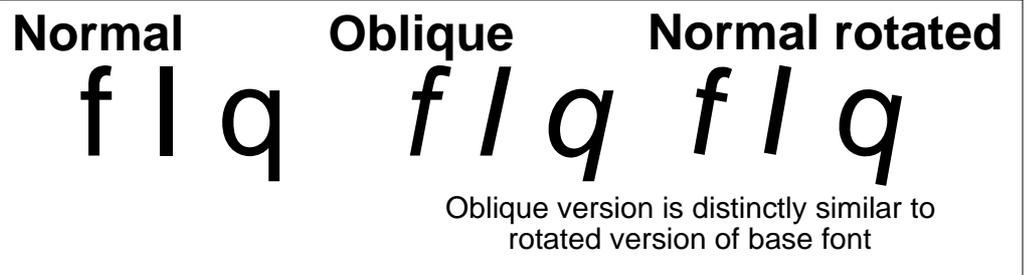
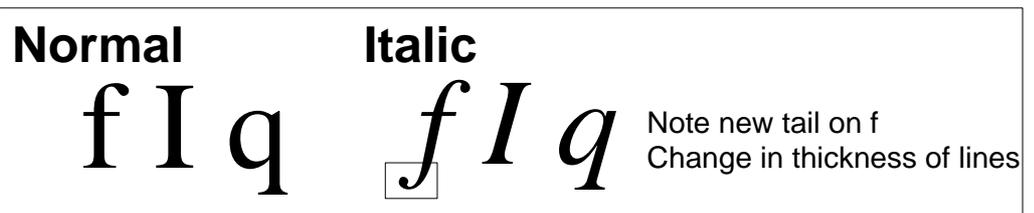
Display type fonts are almost never suitable.

Sans-Serif fonts, such as Homerton, can be used as body text and this does create quite a nice effect which you may feel more suits your personal style & image. Sans-Serif is also of use as body text on posters, as somehow it takes to larger font sizes better.

Italics & Bold

Italic and Bold variants should **never** be used as body text themselves, these enhancements are of far more use to mark something as different from the main text. Bold and italic variants can be used to place emphasis on parts of your work, and are the replacements for underlining words, and typing in capitals.

In English speaking countries, **Bold** is generally used, by convention, for emphasising a word, with *italics* being reserved for names, sometimes for foreign language words, items in speech marks and so on. You don't have to conform to these, but whatever you do, be consistent throughout the document! It is worth noting that other nations use different methods of emphasis: certain continental nations use expanded tracking (space between letters) and so on.



Italics are also good for marking certain sections of text as different. A quick study of magazines will yield many examples of picture captions in italics. Some magazines, including our own Eureka, use italics paragraphs at the end of articles to credit the author, provide pricing information and so on. In this case, italics are used to signify a change from the actual article (in body text).

As well as the normal Bold & Italics variants, many fonts have other variants which, at first glance, appear to be no different. The best example of this is Oblique and Italic. An Oblique version of a font is one where the normal version has been simply tilted, whereas an Italic font occasionally has extra alterations, such as tails on letters and so on.

Font Size

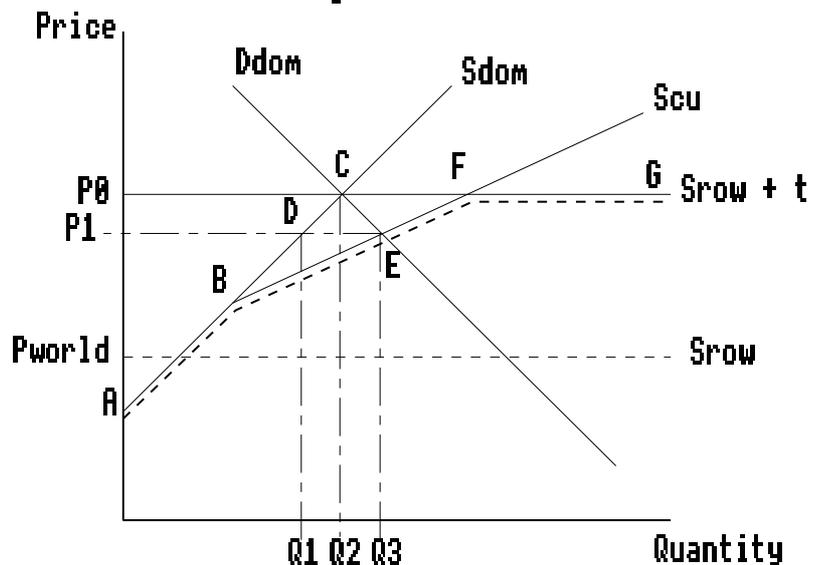
Fonts can be displayed in many different sizes, but only a relatively small number are of much use. Most typing is done in 12pt, some in 10pt but any size below this rarely comes out well. On larger sizes, variations on 37pt go fairly well. However, what ever size you use, try to keep the aspect ratio (X:Y) correct, as stretched and shrunk fonts look awful. Always set font size through the menu, rather than dragging to change size as is possible in *Draw* and similar programs.

Diagrams & Pictures

Diagrams need a great deal of pictorial clarity, particularly if the subject matter of the diagram is complex. For this reason, it is often useful to stick to Sans-Serif fonts such as Homerton for all text, and Corpus (capitals) for labels.

Note in the example at the top of this page the use of System font, which looks awful, particularly as it is too big, and the expanded title at the top is ugly.

Trade Creation :Joining a Customs Union



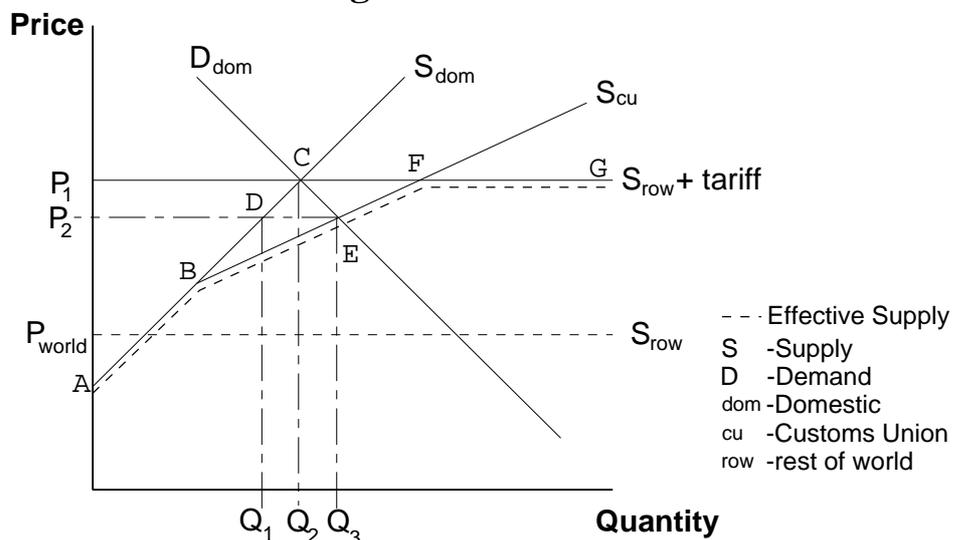
However, as shown below a more careful use of fonts produces an altogether nicer effect.

Note the use of smaller sized text for the subscripts (8pt against 10pt), the use of bold to make the axes labels different, alternative text for the labels A-G, and for the title.

Kerning

A feature added to the font manager under RISC OS 3 is kerning data. Kerning (or tracking) is moving letters to fit in with their neighbours and is an advancement of the principle of proportional fonts over monospaced. Whereas on typewriters, all

Trade Creation :Joining a Customs Union



characters were the same width, computers often used variable width characters (proportional) and now they can fit under each other (kerning)!

AW Trial

AW Trial

Note the overlap on the top AW and how almost half of the R hides under the T.

Many programs updated for RISC OS 3, take note of this kerning information, and automatically perform the kerning for you. Some DTP programs allow the user direct

control over the kerning. Only fonts released for RISC OS 3 have the necessary kerning data to use this facility, but as this includes the three standard Acorn families (Trinity, Homerton, Corpus) then most eventualities are covered. Separate programs are available to add kerning data to fonts that don't have it.

Next in the series: Setting up your computer for efficient use of fonts — configuration and storage.

Toby Smith

In a later article in this series, I intend to copy an idea and perform a couple of 'make-overs' of documents. If you have any DTP work you would like to submit for this treatment, please send it in.

The Eureka Disc

Nick Evans contemplates the meaning of life & disc duplicators...

The ARM Club PD CD-ROM is now available and did seem to sell quite well at the Acorn World Show. The CD contains all of our PD Library as at 1st September 1995 and some more programs and clipart besides. Unlike other PD CD-ROMs the programs are all compressed when they are archived. You may think that other CD-ROMs are also compressed, but you will usually find that most of the programs have been put in ArcFS directories to overcome the unsightly (at least to us Acorn users) vision of applications all

being in capital letters. However most of the programs have NOT been compressed. As a result I feel that our Club CD-ROM gives by far the best value for money, certainly in the bytes per penny ratio, and everyone will find something of use on the disc.

The price is £19.50 with a £2.00 discount for members, but please don't try to pay by credit card as the Club does not have facilities to accept them.

Now that the advertising is out of the way we come to this issue's magazine disc. With this disc I have put on applications that have been requested over the past couple of months even though they have not necessarily been written by Club members. Many have been requested through the technical help service

Some of the programs on the disc may not run from an archive. You should, wherever possible, de-archive the programs onto a floppy or hard disc before running them.

This month's magazine disc contains:

The latest news about The ARM Club discounts scheme.

Calendar is an updated version of next years calendar from Aneurin Griffiths. There are a couple of Draw files and an Ovation version.

Draw2Spr by Iain McLaren is a Shareware program which converts Dra files to Sprites. Although this can be done by grabbing a screenshot using *Paint* a lot of people have asked for a less messy way.

DungDragon by Mark Watts, a one time Treasurer of the Club, is a set of Impression format character sheets for D&D RMP's. Also included are two PD outline fonts to produce the right feel to the document.

FSCK is a suite of Shareware programs from Sergio Monesi that are able to analyse and fix E-Format discs — both floppy and hard.

Judith is a window iconiser from Andrew Brooks that helps manage the Pinboard by placing all the iconised windows into a single window.

Kanji is a Shareware utility from Mike Williams at MEWSOft for reading 2-byte encoded Japanese email messages and news postings. Simply drag the text file onto the icon on the icon bar and it will be displayed in Kanji, Hiragana and Katakana.

QwikCD by Chris Jackson is a small, simple Audio CD player with the minimum of features and taking up the minimum of RAM space.

Nick Evans

If your copy of the Eureka 17 disc proves to be faulty, please return it to the Freepost address for a free replacement. We are always on the lookout for software to include on the disc, if you have written something special, please send it to Nick Evans at the usual Club address.

North West London Computer Club

The North West London Computer Club meets monthly in West Hampstead on the third Thursday of each month, starting at 7.30pm. The venue for the meetings is the Sidings Community Centre, Brasseley Road, The ARM Club Magazine page 53

West Hampstead, London NW6. The first meeting after Christmas is on Thursday 18th January. For more information about the Club or its meetings, please get in touch with Geoff Stilwell on 0171 624 9918.

COVER

The Christmas Games Zone

The Acorn World Show didn't feel the same without the traditional games arcade — while the Cyber Café was interesting, it didn't quite have the same appeal for younger visitors to the Show who ended up watching the entertainers and blocking the aisles!

It has been suggested that the reason was simply the lack of new games available for Acorn machines... While at the time I thought this to be true, a quick check through the pile of press releases on my desk reveals quite a number of recently or soon-to-be-released games: Alone in the Dark, FistLore, Spobbleoid Fancy, Global Effect, StereoWorld, Proposal, Cobalt Seed, The Last Cybermoch, Rick Dangerous, Detritus, High Risc Racing, Jigsaw, Sorcery, Anagram Genius, Darkwood, Revolver, Dune II CD. Not forgetting the BBC and Spectrum games which can be played using the new emulators from Warm Silence Software.

Happy Christmas everyone, and don't wear out your keyboard zapping aliens over the festive period!

• The Games Zone • FREEPOST ND6573 •
• London • N12 0BR •

High Risc Racing

Matthew Cook sits behind the wheel of the latest racing game for Acorn machines

A couple of months ago whilst looking around the Digital Databank Bulletin Board I came across Modus Software and their new game *High Risc Racing*. Even before releasing this, their first Acorn game, they were a Scottish National Finalist at the 1995



LiveWire awards, where they were recognised for their technical expertise, business acumen and original ideas.

I was very impressed by the blurb given about the game:

- 9 other competitors.
- Over 40 levels and 20 tracks.
- 32-way pixel-perfect scrolling.
- Stunning 256 colour graphics.
- Sampled Sound FX.
- Selection of excellent racing tunes.

But for the ultimate test how did it play? Well installing the two discs on to my hard drive was easy, just a matter of copying the application directories off the discs. When loading from hard disc you are requested to insert disc one, this is for copy protection purposes then within a few seconds you are ready to start.

A click on the icon sweeps you into the introduction where you are adorned by swish bitmap graphics. At this stage you notice this is more than a run off the mill game in terms of presentation. The screen zooms though the title screen into the credits and back again and then to the main menu.

Off the main menu is the Car Showroom, Garage, High Score Table, Player information and the all important ‘Play the Game’.

Apart from actually playing the game you’ll spend a good deal of time in the Garage. Here you can purchase fuel, repairs can be carried out and add ons purchased such as Faster Braking (which is certainly useful on many levels) and even missiles (unfortunately only one can be carried at a time)!

The main game area is nearly a full screen with a small border including the track name at the top and down the left hand side, plus indicators to show how well you are doing.



Looks simple, but is very addictive to play!

The game play is very good, the scrolling is very smooth (even on an ageing ARM2 A310) and although the cars are slightly ‘blocky’ this goes out the window when you get going as you spend most of your time trying to stay on the track and nudge past the car in front. This is quite a difficult task as you start on the lowest spec. car, the ‘Strata XS’ with £5000 in cash. Also the road is not kept in perfect condition with potholes and oil slicks to look out for. These just add to the fun. You can not just keep the accelerator on all the time either, you’ll have to break and take the corners slowly.

It will take a while for you to get a hang of the controls, it took me quite a few tracks coming in last place before I got the hang of it. Then the challenge starts with the daunting task of 40 levels ahead. The levels offer different track layouts some of which are quite challenging and others need just pure

speed. It would have been nice to more varied tracks with jumps, gates and other obstacles. I remember an old Atari Game "Super Cars" which even had railway tracks to cross and moving barriers.

car, the greater chance of winning and the more money you'll win.

One of the other good features of the game is the excellent music and sound effects, the tyre squealing got annoying at times but that was probably because of my bad driving. The music was particularly good played by the "Queue the Music" tracker player. Many games have awful repetitive music, usually many gamers turn it off and play their own, Myself included normally, however this time the sound track was suited to the game and it was left on throughout the hours of playing through all 40 levels. And to top it off there is not one but six of them!



No expense spared when it comes to graphics

After you have completed the track, if you come in the top three you progress onto the next level whereas if you do not, you get no prize money and still have the repairs to pay for before having to race the same track again. Coming 1st, 2nd & 3rd gets you a cash prize as well which will pay for the all important repairs, upgrades and ultimately a new car.

The music, key settings and the option to save your game are available from the icon bar, and believe me, the save game option will be used many a time! High Risc

The repairs are essential so your car does not conk out in the middle of the race, but you have little money so you will have to strike the correct balance as the more money you spend on your

Mercury E10		INFO
PRICE	£582000	
TRADE-IN	£070257	
MONEY	£075257	

Racing is an excellent game and in my opinion joins my all time greats, the likes of Elite, Chocks Away, Stunt Racer 2000 and StarFighter 3000.

It is a game for those who like a challenge, a good game with a bit of thinking involved too. The only faults I can find are the lack of a two player option (I would have liked to have raced against other mere mortals), more variety in the tracks, jumps etc and also more tracks. I am under the impression that there is an extra tracks disc in the pipeline at the moment, however there are plenty of levels to keep even the hardy game wizard playing late into the night.



The garage seems to crop up in all racing games!

will find a special Modus Software area with information about the latest developments.

High Risc Racing Costs £25 inclusive of P&P, but ARM Club members can obtain a 10% discount by quoting your membership number. High Risc Racing is an excellent game that should be on everyone's 'Christmas List' and I look forward to the next piece of software from Modus — in the mean time I strongly recommend 'High Risc Racing!'

Matthew Cook

*Modus Software can be contacted at :
Modus Software, 90 Telford Road,
Lenziemill Industrial Estate,
Cumbernauld, Glasgow, G67 2NJ.
Tel: 01236 722202. Email:
Modus@Digibank.demon.co.uk*



If you think you are up to the challenge you can obtain a demo disc from Modus at the address below by sending an SAE and a DS/DD disc, or you can download a copy from The Digital Databank Bulletin Board (on 01707 323531 or 01707 329306) where you



Alone in the Dark

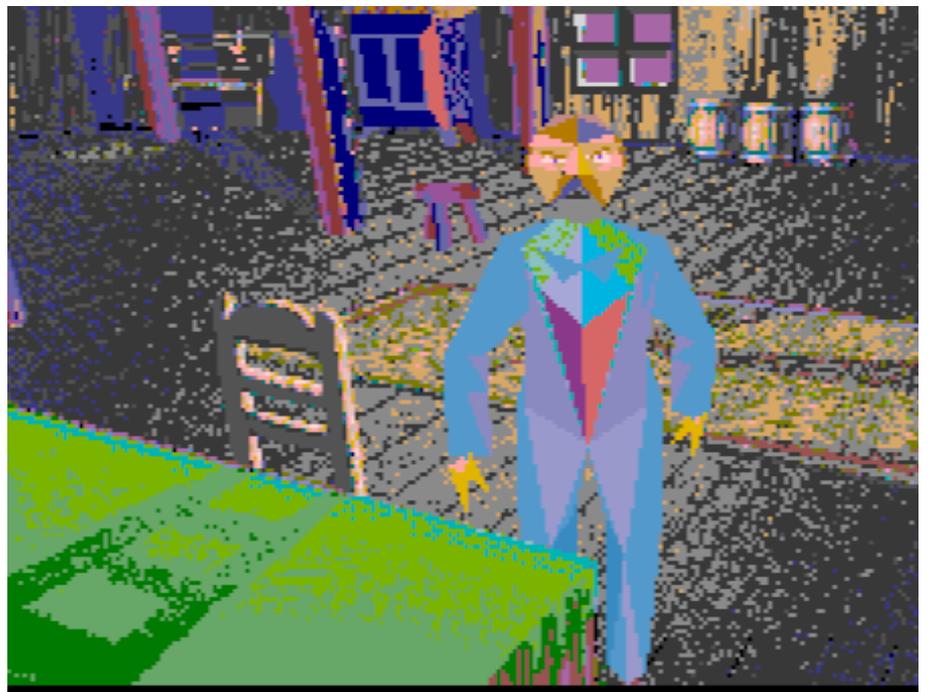
James Moore takes fright at bumps in the middle of the night...

I always feel much happier about a game if on the back of the box are screenshots rather than artists' impressions of what the screen shots **should** look like. Well, in the case of *Alone in the Dark* there might as well be artists' impressions on the box as the game would easily match them, in essence these graphics are incredible.

Krisalis has been very quiet over the past year and now it is easy to see why, they must have spent all their time converting this game! Obviously to spend so much time converting a game from the PC must mean that this game is reckoned to do well and in that respect I wholly agree with Krisalis.

The box which the game comes in is standard PC size (ie each box requires a whole tree to make it) and contains the discs (all eight of them), the manual and a fake newspaper just to get you into the swing of the game. The plot is that there was once this bloke called Jeremy Hartwood who was quite rich; owning a mansion, having butlers etc etc. Anyway he thought his house was haunted and slowly went mad and eventually committed suicide — or so everyone thought.

In the game you play either Jeremy's niece or a private detective snooping round the house trying to ascertain what really happened to Mr Hartwood.



I wouldn't want to meet this chap in a dark house...

So, after a long plot, you finally get to load the game, you are presented with a menu asking if you want to begin a new game, load an old game, or return to the desktop. You then get the game protection screen. Now in the box you are provided with a **little** book (41x52x8mm for techies). In this book are little pictures which the game asks you for relating to page numbers. The only snag is if you lose the little book, so be warned!

Finally you start the game, now the control for this game **may** annoy some people because your direction is controlled by arrow keys. This is the system used for many PC games and my first thoughts were of dismay because there is no re-define keys option (tut, tut!) but fortunately these keys actually work very well.

pressing return which gives you your status screen (hopefully there should be a screen shot of this). This tells you how much life force you have left and what items/weaponry you are carrying and what action is currently selected. From this screen you can select an item to use or select one of the bodily functions above.



Walk around any corner & meet the unexpected...

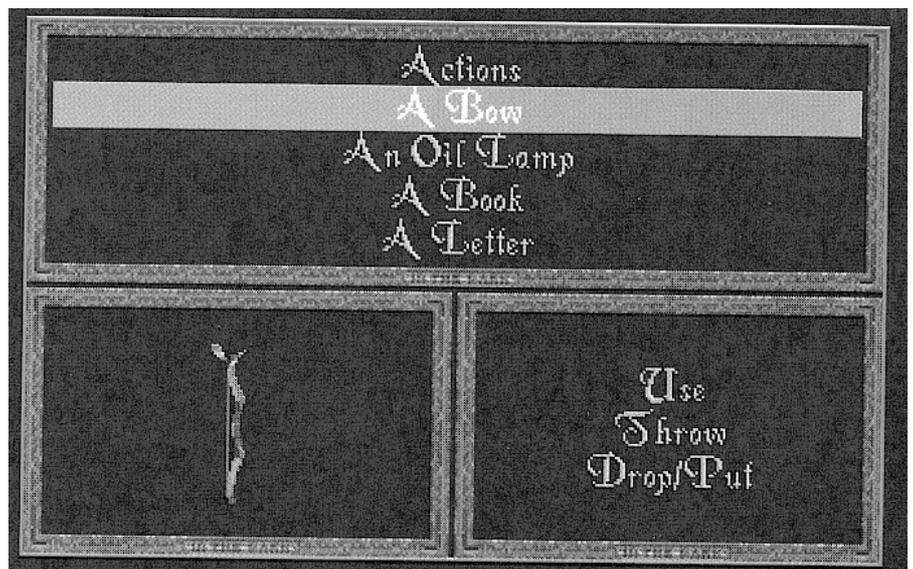
Another thing which is different from standard games like this is that the different cameras situated around the room you are in always provide a close up view of you from different angles (you have no influence over this); this can be slightly disorientating but on the whole it works very well.

You start off in the loft of this haunted house and as you walk round you are allowed to get used to the keys for a few seconds before some weird cross between a rottweiler and skippy the kangaroo comes smashing through one of the upstairs windows. Apart from walking around you can also fight, open/search, push and close. These operations are activated by

If you select fight then when you return to the game press space and use the arrow keys. Left and right arrows throw punches, up makes you do an uppercut and down makes you kick them. You have to hold the arrow down the whole time while he/she completes an action otherwise he/she just stops.

Searching the loft after battling Rottskippy produces your first weapon — a sawn off shotgun

(lovely!) You only have four bullets but if carefully used it could just save your life. The most frequently encountered enemy are the zombies, who, with a voice sounding remarkably like a certain Prime Minister, try to hit you with their incredibly long arms.



Which of these do you want to use next?

One very annoying problem I found was that once you are hit, it takes too long for your character to be able to carry out a punch/kick and so you are hit again. I suppose this adds to the challenge but it is exceedingly annoying when you are just exploring a new place. The enemies that you come across are very varied: there is the knight at the bottom of the stairs which no haunted house can ever be without, there are rats in the cellar which bite you and there is a huge vacuum cleaner outside the front door which sucks you up (seriously!).

Alone in the Dark is primarily a puzzle solving game which could be compared with *Haunted House* (Fourth Dimension), the puzzles start off fairly easy but unfortunately after the easy puzzles you can explore the whole house and then get stuck on some of the harder ones without anywhere else to explore. This could lead to some players getting bored if they cannot crack the puzzles but this should only include a minority.

To sum up, the atmosphere created by *Alone in the Dark* is absolutely brilliant. With the combination of the graphics, digitised sound effects and brief bursts of orchestral music, playing in a dark room is definitely not for the faint hearted. *Alone in the Dark* does seem to be aimed at the older player as some of the puzzles involve reading through manuscripts and books which younger players may find boring. *Alone in the Dark* combines stunning graphics, excellent sound effects (although slightly spoilt by lack of music), and incredible gameplay, producing a game which many people would really enjoy. It must surely go down in the Acorn game history books as one of the forefronts of games to come!

James Moore

Alone in the Dark costs £34.99 inc VAT from Krisalis Software, Teque House, Mason' s Yard, Downs Row, Moorgate, Rotherham S60 2HD. Tel 01709 372290.



Graphical Text Adventure Creator

Steve Arnold devises some fiendish traps for lost adventurers...

At the Acorn World Show I was presented with a disc by a gentleman called Andrea Gallo. He asked me whether the Club would be interested in reviewing his program **GTAC** — Graphic Text Adventure Creator. (Yes, I know it's not the most stimulating name for a program, but does generally give one the idea of what the program is about!)

At first I was none too sure, but after chatting with him for about 15 minutes, I found myself being carried away with his

enthusiasm for the program. I intently listened to what he was saying and he seemed to know what he was on about, so I agreed to review it.

Adventure Games

My first experience with adventure games takes me back to those good ole'days when computers took up so much room, they literally took up the room! Games (no more than logic puzzles) were on punch cards, We quickly progressed up to a digital PDP-11
The ARM Club Magazine page 60

and started to play the definitive article 'The Adventure Game'.



GTAC Control Panel

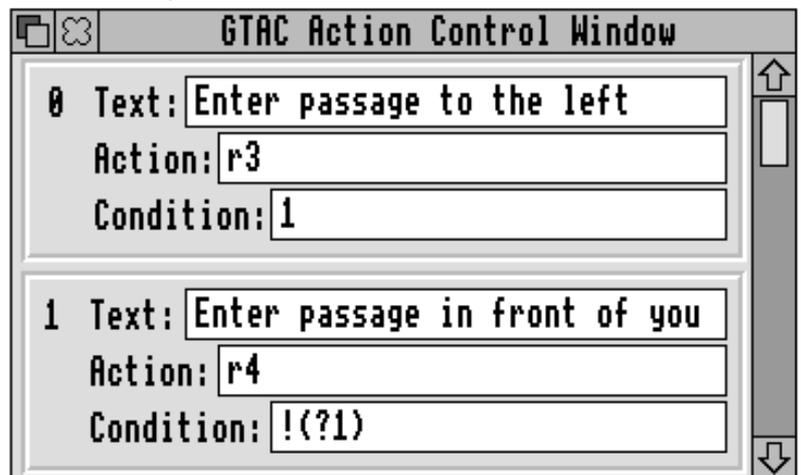
I remember how I hated those mazes of twisty little passages! Old times eh?! Anyway enough of that — what we have here is so far removed from those original games as to be whole eons of evolution away in terms of sophistication but whose foundation still has the basic room/action/logic format. The GTAC adventure development program simply allows you to create a complete and dependent on your creativeness, an enjoyable adventure game for all to play within the Desktop.

Now onto the program itself. The version I received was the Shareware version. This is basically the same as the full version except that there are two missing features which are only available in the full registered version: firstly your adventures cannot be 'closed', so they are open to general invasion and hacking by anyone who plays your masterpiece, and secondly the variables window is not available to assist you in testing and debugging your adventure.

On the disc are two programs, !GTAC, the creator program and !Project, an example adventure game.

The GTAC program allows the user to create

some text and have actions associated with that text. The outcomes are dependent on the different conditional requirements being met. In the game itself, this will mean that each action that can be performed by the user is displayed on the screen. The user can then choose which option to take by selecting it with a click of the mouse. Some actions will not be always available to the user; the user may need to be carrying some objects with him. For example a locked door can't be opened if the user does not possess the exact key, therefore the "Unlock door" action will only be displayed as an option if the user can really unlock it, ie the necessary conditions being met.



Setting conditional actions

Drawfiles and sound samples can be actioned on conditional statements being met. This adds a whole different dimension to the game, allowing the user to create a fully multi-faceted game. Drawfiles have been chosen because of their general smaller memory size and that you can display sprites within drawfiles as well.

There are some limits to the game which are game dependant — these can be seen from the list below:

- maximum number of rooms = 999
- maximum number of conditional flags = 999
- maximum number of variables = 999



maximum number of pictures = 999
 maximum number of inventory
 within a window = 20
 maximum number of status variables = 9
 maximum number of sound samples = 76
 maximum length of a name = 10



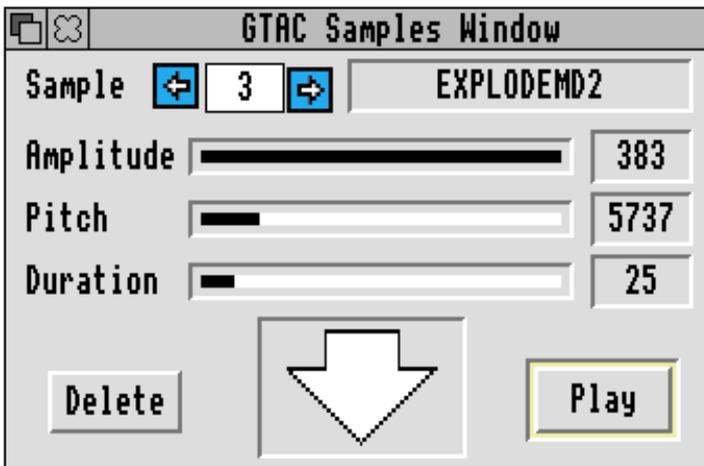
GTAC Control Panel



The Items Generator

This still allows you room to create quite an adventure! But be warned like with most things, to be any good a lot of planning for your game should be carried out before you even switch on the computer.

When you register, you get the full version which as I mentioned earlier, allows access to two features that are not available in the shareware version, plus you will receive a bound 23-page A5 manual with full step-by-step tutorial. Additionally on the Registered GTAC disc you will also find several example adventures related to the tutorial, plus sound samples for your use in



The GTAC Samples Window

developing your own adventure. All this for the princely sum of £7 (which includes your postage and packaging). Great Value!

The only minor gripes I would have about the program are that some of the control icons are not strictly correct, for example a sprite icon is displayed for a picture which is a Drawfile — could be confusing for some. The icons could do with a touch of creativity to brighten things up a bit.

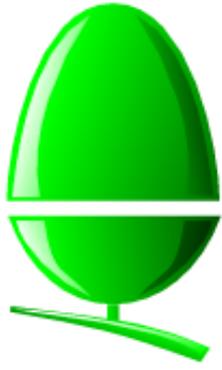
The conditional logic and macro areas are not simple and do require some understanding of the rules of logic. This area could do with a simple look up table of explanations to help the user. However taking all this into account, it does work and is remarkably solid and besides that, it's quite good fun to play with!

I would rate this program as excellent value for money. It functions in all aspects tested and is fairly simple to use once you grasp the logic rules. Although this product has room for improvement, these should not be seen as flaws of GTAC but rather as a wish to see this product develop. If you've ever wanted to write an adventure game then give this a try —it's good fun and it works.

Steve Arnold

GTAC is available for £7.00 from Andrea Gallo, 27 Viale Cortina d' Ampezzo, 00135 ROMA, Italy. Tel/Fax +39 6 35 50 6014. Email andrea.gallo@st.com.





Recent News from Acorn

The Club Newsletter published in mid-October contained a lot of Acorn news, this page is intended to give an update on the latest news from Acorn Education and Applied RISC Technologies.

Acorn will be using the BETT Show in early January to launch a number of new products and announce revised prices for existing products. Unfortunately Acorn is keeping the details under wraps until the Show, however it will definitely be worth going along.

The major news at BETT is bound to include the range of new PC clones which Acorn promised to launch at the beginning of 1996. Obviously these will have important implications for the Acorn market place, however Acorn remains adamant that the clones will only be targeted at those customers who would not contemplate buying traditional Acorn equipment.

Acorn has sold its remaining stocks of the A3010 computer to Beebug and the remaining stocks of the A3020 to Tesco for its 1996 *Computers for Schools* scheme. These computers and the A4000 will no longer be sold by Acorn in 1996. New versions of the A7000 are to be launched in the near future, including faster clock speed.

Acorn's share price rose significantly at the beginning of December on rumours of a new network computing device called *NetSurfer*. Acorn is keeping very tight-lipped on this subject, only confirming that it is working

with several partners and will be making announcements on this subject during 1996. Basically, the rumoured device is a very cheap dedicated terminal for connecting to the Internet, a cross between the A7000 and an Online Media Set Top Box.

With very little publicity, the second generation PCx86 Card was launched at Acorn World. There are currently two new variants, the 486DX2/66 and 486DX4/100. The new PCx86 software (shown below) is available for £9.95 inc VAT from any Acorn dealer or free of charge by ftp from Acorn.

Acorn released *!Printers 1.52* at the Acorn World Show, much to the distress of Computer Concepts whose TurboDriver software is incompatible with it. The new *Printers* disc is available from the Club PD Library for £2.00 including postage.

The Registered Developer Scheme is set to continue in 1996, Acorn is currently finalising details of the revamped scheme.

The AKF86 17" monitor is being replaced in January by the AKF90. Apparently Acorn has nearly sold out of the popular AKF85.

Acorn's latest glossy catalogue contains numerous items of third party software and peripherals. Increasingly Acorn Education is aiming to become a one-stop shop supplier

More of the latest news from Acorn can be found on the Eureka magazine disc.

SIMON BURROWS



**A Merry Christmas
&
Happy New Year
to all members**



Competition time! The above Christmas Greeting has been used before in Eureka, but what was the issue number? You' lneed lots of back issues to answer this one. Send the issue number and page number on a postcard to the Freepost address before 31st January 1996 to be entered into a prize draw to win some useful software worth at least £20.