

# ATARI ST

REVIEW

ISSUE 32

NOVEMBER 1994

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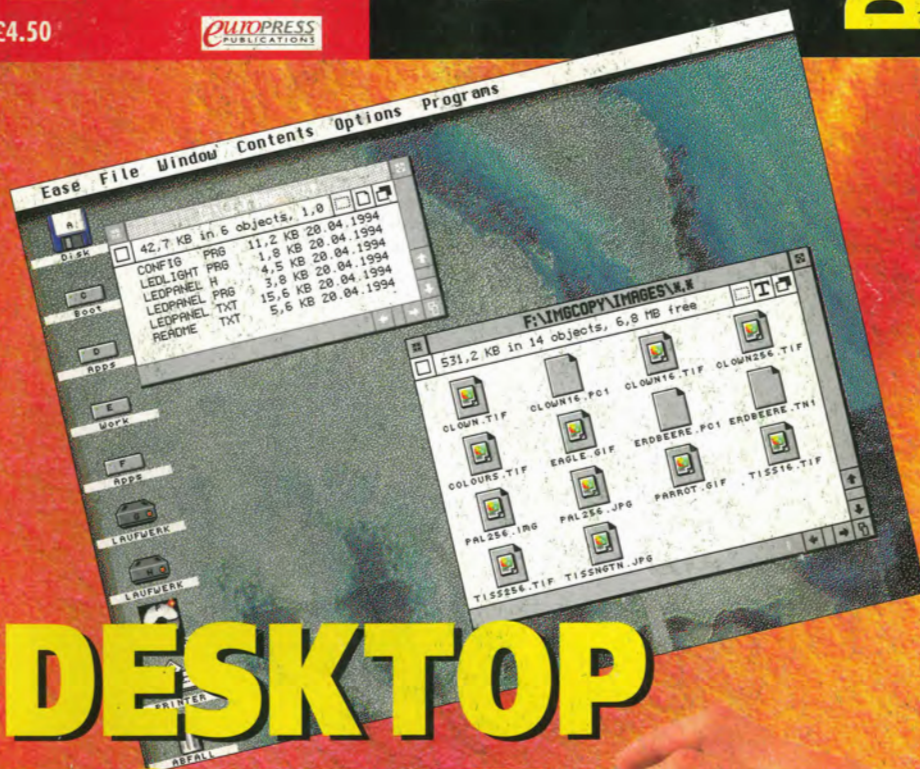
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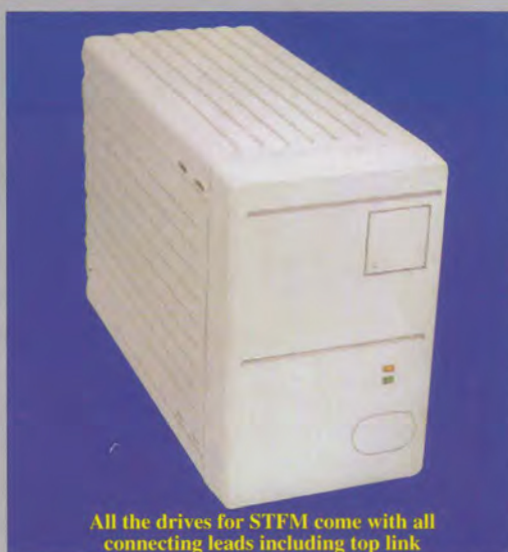
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**ST REVIEW ISSUE 32**  
**NOVEMBER 1994**



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## COVER FEATURE

### DESKTOP DOUBLE

**PAGE 16**



If there is one feature of the ST that is highly underrated, it has to be the desktop. Think about how much of your time is spent there – you launch programs, format disks, copy and trash folders and files to name just a few of the many everyday chores that keep your system ticking along.

The ST's own desktop is quite poor in terms of features which leaves you with two options: get TOS 2.06, which offers some improvements in this area, or buy a replacement desktop program.

This issue concentrates on the two commercial contenders: *NeoDesk 4* and *Ease*. How do they stand up to each other? Turn to page 16 to find out – and don't forget our cover disk demo of *NeoDesk 4*...

## ST SOURCE

... the source of all information! This is where you'll find the best tutorials, your opinions, hints 'n' tips and our answers to your questions...

### 70 ESSENTIAL EXTRAS

Would you like some of a hard drive's features without the price? Then you need a RAMdisk...

### 72 ADDRESS TUTORIAL

More help with last month's cover disk program, *Address*.

### 73 MAGIC USER REPORT

Find out what one of our readers thinks about the multi-tasking system, *MagiC*.

### 74 FROM START TO FINISH

Get into *Calligrapher* – and get some masterclass hints and tips into the bargain!

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Expert advice on what to look for when you buy a hard drive.

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### 80 C PROGRAMMING

More help on working with the GEM side of *Prospero C*.

### 82 COMMS COACHING

This month, Graeme Rutt and Mark Baines look at how to transfer files on the *Internet*.

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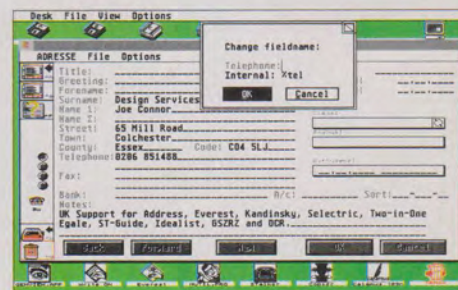
Three more pages of answers to your questions and useful hints 'n' tips from our writers and you, the readers.

### 88 LETTERS

Time to let the editor's tongue out of its cage – and find out the results to our *Virtual Reality Plastic Surgery* competition.

### 90 BACK ISSUES

Back issues are running low so fill any gaps in your collection now!



*Address Tutorial – page 72.*

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*Working with Calligrapher – page 74.*



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... and Gribnif's latest desktop offering...

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## INFORMAL

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We have kick off – read about *Premier Manager II* on page 48.

Chocks away with our flight sim round-up on page 52.



## ON THIS MONTH'S COVERDISKS

### PREMIER MANAGER II

... a playable demo of Gremlin's excellent football management program! Play the first ten weeks of the season – see page 47 to get started.

### FAMILY ROOTS

... the full program worth £25! See page 12 to get started on your family tree.

### NEODESK 4

... a useable demo of Gribnif's brand-new replacement desktop! See page 22 for our tutorial.

and more – see page 14...





## COVER DISKS...

As you will have noticed, this is the second time in three issues that **ST Review** has had two cover disks. Are we reverting back to the old EMAP days where two disks were the norm? Not quite, but a second cover disk will be utilised whenever there is a decent program, or selection of programs, to put on it. The increase in the cover price will be just 50p when this happens.



**ST Review** has been responsible for some of the best cover disk mounts over the past two years. I won't name them all – if you're a regular reader, you only need to look in your working disk box to see them! And despite what others may claim, we continue to work very hard to bring you the best disks of any **ST** magazine, bar none.

Last Christmas, our cover mount of **Timeworks II** upset a lot of you because of the "watermark" on the printouts. Without dredging up old history, suffice to say that next month's main cover disk program, **Easy Text Professional**, will not have such a restriction. Aside from removing a few of the fonts and auxiliary files for the sake of disk space, the package will be complete – another two-disk special.

Our main cover disk this month has the full version of **Family Roots**, a £25 commercial program, and a demo of **NeoDesk 4**. We're the only **ST** magazine in the UK to carry this so check it out. **NeoDesk 4** must be one of the most long-awaited upgrades of all time – more about this in our interview with Dan Wilga of Gribnif on page 32.

The second disk on this issue is a very playable demo of **Premier Manager II** where you can play the full program for the first ten weeks of the season. I'd go as far as to say that it's one of the best game demos ever, allowing you full access to all features. If you're into football, you'll love this.

I'd hate to think that you buy **ST Review** just for the cover disk programs, but I'm pragmatic enough to understand if this is true. And if this is the case, you'd better place a regular order for **ST Review** because some of the cover disk programs I have lined up are going to ensure a complete sell-out for some months to come...

V. Lennard

Vic Lennard, Editor

## WHAT A HERO!

IDS (021-459 4340) has just released **H.E.R.O.**, a brand-new arcade game for the **ST** or **STE**. Your character only has a limited amount of time to search a myriad of locations for the imprisoned human beings after which he becomes an ex-human! While searching, he also has to destroy various enemy characters and inflict lots of damage on the enemy strongholds.

Attention to detail is high with over 200 frames of animation for the main character and a succession of smoothly-scrolling screens. At an RRP of just £14.99, **H.E.R.O.** is IDS's first release – and at least another half a dozen products are planned over the next six months or so. Don't miss our full review next issue.



Jump to it – **H.E.R.O.**'s main character has over 200 frames of animation.



A close call – the small screen top-right gives you a close-up of the character's hand.

## EDUCATING EDITH

**Edith Professional**, the feature-packed text editor, is now available in the UK directly from **ST Review** contributor, Graeme Rutt. **Edith Pro**, as featured in a recent **PD** and **Shareware News Update**, comes complete with an English printed manual and a UK price of £35.

Cheques made payable to Graeme Rutt should be sent to: Edith Registrations, 4 River Terrace, Washbank Road, Eynesbury, Cambs, PE19 2TE. Full review next month.



Smart editing – check out **Edith Professional** for a text editor with more bells than Big Ben!

## GAMES WITHOUT FRONTIERS

Thanks to US firm Phylon Communications Inc., Jaguar owners can now play against each other over the telephone lines. The system consists of a voice/data modem and a headset and allows the players to talk to each other (on the same line) while playing the game. The Jaguar's stereo sound is also channelled through the headset. Surprisingly enough, there's no need to worry about your telephone line being blocked to callers when you play. If a third party call comes through to either player, the game pauses until the call has been completed! The first games that will exploit the features of the Phylon device are **Doom**, **Club Drive** and **Iron Soldier**. The unit will be released in time for Christmas in the States, although no details of price or availability have been given for the UK.

Along much the same lines as the Phylon device is a Jaguar networking package from Atari. It allows up to 32 Jaguars to be connected together so that players can compete against each other. Games that are compatible with the system may be played on several different machines which can be up to 300 feet apart. The system uses standard RJ11 telephone line cables and employs the use of differential-pair technology. **Doom** will be the first game to support the new package; others are expected soon afterwards. Once again, no details of UK price or availability are yet available.



Two into one – the forthcoming **Club Drive** will take advantage of the Phylon's networking capabilities.



# VIRTUALLY HERE

*New headsets to bring Virtual Reality into the home...*

**V**irtual Reality is just around the corner for home computer users. Three companies have announced the forthcoming availability of VR headsets while others, including toy giant Hasbro, are said to have similar devices under development.

Until now, the cost of the technology has led to VR being restricted to arcade machines, but with three "affordable" headsets due for release by Christmas, this looks set to change. None of the three require purpose-written software although existing titles have to be converted to take advantage of the headset capabilities. Two will be fairly general in their aim, so will be directly compatible with the Jaguar. The third may follow suit as the user base increases. What will make or break Virtual Reality on the Jaguar will be the number of titles converted for use with the various headsets and, indeed, the level of compatibility between the different models.

## HEADING FOR HOME

The first unit announced is the VFX1 by US-based Forte Technologies. Expected to retail at around £650, the initial release version is aimed at the PC market and was unveiled to the trade at the European Computer Trade Show (ECTS) in London earlier this month. Software is already in production to coincide with the unit's launch towards the end of the year with companies such as Ocean, Electronic Arts and ID Software (the team behind *Doom*) firmly backing the project. Jaguar compatibility is not envisaged in the short term.

The second device also hails from the States, coming from VictorMaxx, the company behind a low-cost VR headset for Nintendo and Sega machines. Their model, named CyberMaxx, is also a PC-compatible unit from launch, but a Jaguar version is due for release before Christmas. The headset weighs just one pound and features 120,000 pixels per screen display, supporting a 62 degree field of vision. CyberMaxx is expected to retail at around £499. Electronic Arts, Domark, Vertek and Mindscape are said to be supporting the device with various software conversions.

Last, but not least, is a British-made VR headset costing a more affordable £350. Manufactured by London-based Magic Media (0181-343 9933), it should be available



*Nearly there – scenes like those found on the Virtuality machines could soon be available on the Jaguar...*

throughout the UK from branches of Comet by the end of September. Once again, the unit is intended for use on a PC but requires a VGA to PAL conversion card (available as an optional extra) in order to connect it to the PC. When asked about Jaguar compatibility, Magic Media's Dean Adams told us that the device was intended for universal use and that an off-the-shelf unit would plug directly into the Jaguar. The only drawback is that none of the currently-available Jaguar titles have been converted to take advantage of the new headset. When asked if games converted for use with CyberMaxx or VFX1 would be directly compatible with their unit, he replied: "It's possible but the firms involved in this type of technology are very secretive about their products at the moment".

The Magic Media device weighs about two pounds, features a Citizen 3.8 inch colour screen with unique diffusive coating, a three-axis motion detection system and bi-aural stereo sound. It comes with easily accessible controls for use within the virtual



*Two of a kind – except that CyberMaxx (right) will have a Jaguar-specific version ready for Christmas.*

*Shoot-'em-down – will the authors of Doom take advantage of the new technology?*



environment and includes a "virtual joystick".

## OFFICIAL STATUS

The latest signs that the establishment are taking Virtual Reality seriously comes from the University of Teesside in Middlesbrough which has added a B.Sc. course in Visualisation to its curriculum. The pioneering new four-year sandwich degree course will teach students how to recreate their own virtual world in 3-D by focusing on Virtual Reality, computer graphics and animation, movie special effects and

simulations for scientific, medical and business applications. The course is being run by the University's School of Computing and Mathematics and was inspired by Teesside's one year M.Sc. in Computer Aided Graphical Technology for graduates from both Arts and Science backgrounds.

Course leader Janice Webster said: "Careers are opening up all the time for those with the ability to use software for creative graphics and scientific visualisation. Graduates are likely to be eagerly sought by hi-tech industries including the film world." As further evidence of its comprehension of Virtual Reality in practical, real life situations, the University and local hospital consultants are currently exploring the practical aspects of using medical computing and VR to train doctors in "keyhole surgery" and other surgical techniques.

The B.Sc. in Visualisation is designed to appeal to anyone with an Arts or Science background and will have a strong emphasis on design. The University is looking for students capable of expressing themselves, either by writing their own programs or from creating animations. For further information, contact Janice Webster, SCM, University of Teesside, Middlesbrough, TS1 3BA. Tel: 01642 342659; Fax: 01642 342067.





# SEEING IS BELIEVING

**T**wo new products are being released by JCA Europe (01734 452416) showing their continuing support for the ST market. The first of these is a rather unusual product called *Stereo CAD* (£29.95). Described as an "object-orientated stereogram creator", the program allows you to create 3-D pictures on your Atari and save them to disk or print them out. Degas .P11 pictures can be loaded into *Stereo CAD* for direct conversion into stereograms or as a backdrop for 3-D scenes. Alternatively, scenes can be created directly from various three-dimensional "sliced" objects supported by the package. Scalable, rotatable text can be added to your scenes and freehand drawing is also supported. Standard

transformation of shapes lets you specify the location within your scene as well as the scaling and rotation of the object.

## GAME SUPPORT

The second, *Obsession* (£25.99), is the pinball game that proved highly popular at last month's Atari Shows where contestants battled it out on a pre-release version to win a Jaguar. It



**Pinball wizard**  
- *Obsession* will be  
available shortly  
in the UK.

## STITCHED UP

Floppyshop (01224 312756) has recently taken over the distribution of *Easy Stitch* at the request of Chris Skellern, author of the program and proprietor of Emerald City PDL.

*Easy Stitch* is a cross stitch pattern generator for any Atari running in low resolution. Cross stitching is the art of creating pictures and patterns by sewing coloured thread onto a fabric base. A master pattern is used as a guide for the sewing process, complete with special symbols to represent the different colours in much the same fashion as painting by numbers. While shops and magazines can supply these, you can, of course, design your own and this is where *Easy Stitch* comes into play. It allows you to design your pattern on screen and perform repetitive tasks such as copying, rotating, reversing, enlarging and reducing of sections within the pattern.

Pictures can be imported in NeoChrome, Degas and 32K screendump formats and used as the basis for your patterns which, subject to available memory, may be any size from 10x10 to 1280x800 stitches - equivalent to a fabric size of 10 feet by 8 feet! If the screen size exceeds that of a normal low resolution display, the monitor acts as a window onto a virtual canvas, allowing you to scroll around the screen. Unlike the few competing products, *Easy Stitch* supports the more complicated back stitches and half stitches.

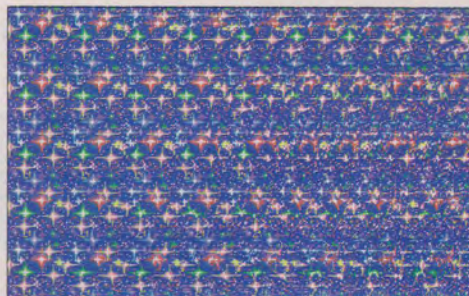
Printer support built into the program is extensive and includes both 9 and 24-pin dot matrix printers, NEC 24-pin, Canon and Star Bubblejets, HP Deskjet and Laserjet.



**Easy peasy** - import a  
standard, 16-colour  
image in one of three  
different formats...



... and let *Easy  
Stitch* do its thing!



**Can you see it?**  
*Hidden here is the  
program name...*

the STe and Falcon. Features include five-channel stereo sound at 25kHz, an expanded 336 by 260 pixel screen resolution and screen updates at 50 frames per second. In addition,

hails from Unique Development Sweden and JCA has just been appointed a licensed UK retailer for the game. *Obsession* takes advantage of the DMA stereo sound, blitter chip and hardware scrolling capabilities of

there are in excess of 32 colours on-screen when running on an STe or Falcon. Four pinball tables are included: *Balls and Bats*, *Aquatic Adventure*, *X-Ile Zone* and *Desert Run*. More about this next month.

## IN BRIEF

● Following several months of uncertainty, bids have gone to the liquidators of Commodore International Ltd for the rights to the Amiga product line and associated technology. The management of Commodore UK have lodged a bid for the company as have Samsung, although the latter are interested in Commodore's research and technology facilities rather than continuing the Amiga product line. A final decision is expected within the next few weeks.

● European MIDI User is a new user group for all MIDI musicians from the hobbyist to the professional. Membership entitles users to technical support via their bi-monthly newsletter which features hints and tips, letters, product reviews, MIDI basics, members' discounts and so on. Support is also available by telephone, fax and via CompuServe. In addition, the user group operates a disk library that features MIDI Files, sound samples and computer programs from around the world. For a free copy of their launch magazine and membership application details, contact European MIDI User, 46 Hampton Close, Herne Bay, Kent, CT6 8BZ. Tel: 01227 742790; Fax: 01227 742791; CompuServe 100136,3365.

● Dave Cobbledick of Dunces Cap Software has cancelled his agreement with Warpzone PDL. Consequently, *Stark Raving Bonkers* is now being distributed by GL-PD of Swansea along with Dave's new release *Reflex Action*. *Stark Raving Bonkers* costs £8.99 and *Reflex Action*, £6.99. For further information, contact Gareth Lovering at GL-PD on 01792 799762.

● Future Publishing has just bought MEMS (MIDI and Electronic Music Show) from Westminster Exhibitions. The event is the UK's annual showcase for the electronic music, sound and recording industry, attracting musicians from all walks of life from the amateur home computer user through to professional musicians, recording studios and broadcasting units. Chris Down, Show Manager of Future Events commented: "We are delighted with the purchase of MEMS. Future's involvement will ensure that MEMS continues to grow and evolve, capitalising on new market opportunities." MEMS '95 will take place at the Wembley Exhibition Centre from April 21 - 23, 1995.

● The All Formats Fairs continue touring the country and have now notched up over 160 events, holding a fair somewhere in the British Isles almost every weekend. They have become a bargain hunters' paradise for hardware and software for all types of computer. A number of events are to take place between now and the end of the year in Belfast, Birmingham, Brentwood, Bristol, Cardiff, Glasgow, Haydock Park, Stoneleigh, Surbiton and Washington. For further details, call 0181-856 8478.





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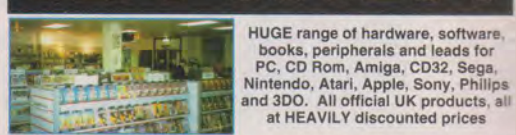
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**JUST DEDUCT £2.00 OFF THE PRICE OF ANY ONE ITEM ORDERED AS YOU JOIN FOR ONE YEAR OR MORE.**  
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# NEWS UPDATE

## COMMERCIAL

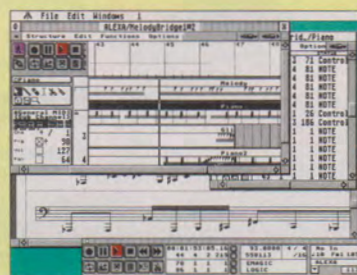
Report by Ofir Gal

Compo Software (0487 3582) is now shipping version 5.0c of *SpeedoGDOS*. This new version solves various bugs that managed to sneak into the initial release and is a free upgrade to all registered users. Contact Compo if you have not received your upgrade yet.

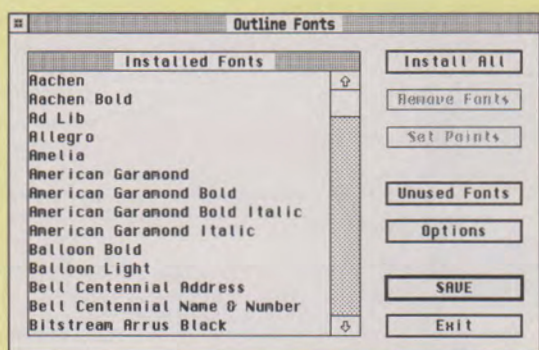
HiSoft (0525 718181) has an update for *Diamond Back* which is now at version 3.14. This offers yet another minor tweak to the SCSI routines; you only need to upgrade if you have experienced problems with the current version.

Also available from HiSoft is *Papyrus v3.55*. Among the new features here are an improved Rich Text Format (RTF) handler and new printer drivers to optimise use with the HP LaserJet 4. Various bugs have been fixed including the mysterious one that affected the spell checker and prevented it from working with words starting with the letter "V"! *Papyrus* now supports the XACC protocol on single and multi-tasking systems and its memory handling has been improved. Upgrades are available at a cost of £5.

EMagic's *Notator Logic* from Sound Technology (0462 480000) has been upgraded to version 2. This boasts enhanced MIDI Machine Control (MMC) support so allowing remote control of the Fostex RD-8 and Alesis ADAT with full control of up to 64 audio tracks. The environment faders can now receive and send SysEx messages of any length and the Score Editor has also been improved. Chord symbols are automatically transposed and multiple rests and grace notes are now also possible. *Sound Surfer* and *Sound Diver* users can now enjoy full integration with *Notator Logic* via *AutoLink* - *Logic* automatically displays the correct sound name used by the *Diver/Surfer* manager.

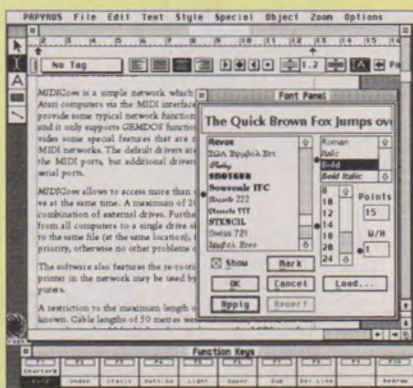


**Most logical - Notator Logic 2 is one of the most powerful MIDI sequencers available for the ST.**

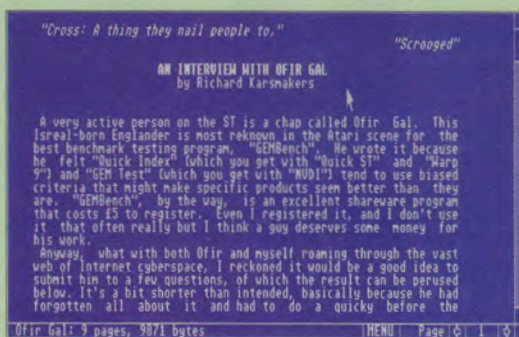


**Any type - Speedo 5 brings TrueType and PostScript fonts to the ST.**

**Walk like an Egyptian - Papyrus, arguably the best WYSIWYG word processor for the ST, has been upgraded to v3.55...**

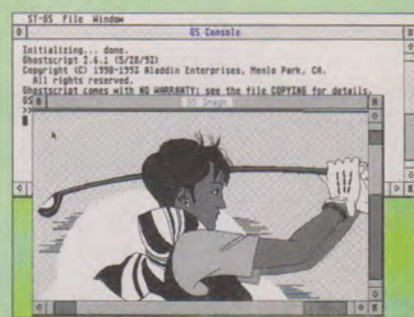


**Catch up on all the latest commercial, shareware and public domain updates...**



**Easy reading - ST News 9.2 includes adventure solutions, music reviews and plenty more besides.**

**Spooked - GhostScript 2.61 features a proper interface at last!**



## PD AND SHAREWARE

Report by Nial Grimes

There's nothing more annoying than coming across a stunning public domain book only to find that it's available solely in PS format. *GhostScript* is the solution - it's a PostScript language interpreter for the ST, and version 2.61 is beginning to appear in public domain libraries as we speak. So what's new? Well, the rather hostile TTP program has been done away with and in its place you will find a GEM shell. Support for PostScript Level 2 has also been improved and all in all, it's a very worthwhile upgrade.

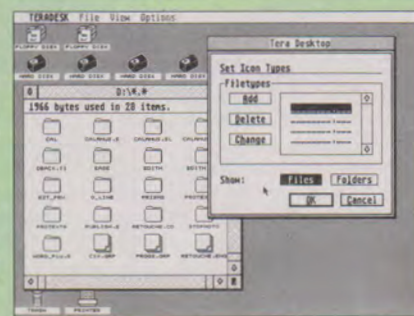
Also along graphical lines, *Speed Of Light* has raced up to version 3.5. We haven't actually managed to get hold of a copy yet, but with any luck, the bugs in the .GIF saving routines are history. *Soundlab* and *Family Tree* have been treated to minor updates as well, and both are featured in Goodman International's latest catalogue.

Fans of the ever-popular *Teradesk* will be pleased to learn that version 1.40 is now available and includes improved support for *MultiTOS* and *Geneva*. It may not be the most powerful replacement desktop on the market, but it looks pretty and is a big improvement on the standard ST offering.

On a slightly different note, Floppyshop has launched a new licenceware scheme this month called Floppyware. In addition to a range of new titles, it has also picked up a few classics from the past including *Storm '94*, *Power Cut*, *Darklyte 2* and many more besides.

And finally, if you are suffering from withdrawal symptoms in between each issue of *ST Review*, you might like to check out *ST News 9.2*. In addition to the usual selection of news and reviews from around the ST globe, it includes an interview with our very own Ofir Gal - and you wouldn't want to miss that now, would you?

**Teravision - improved compatibility with MultiTOS is just one of the perks of Teradesk 1.4.**





# System Solutions

## The Desktopper

NEW. A solid metal case to replace the plastic top of ST(FM/e) and Falcon computers. Only £69.95  
FreeKeys - separates the keyboard from the computer £39.95  
DeskTopper & FreeKeys £99.95

Please phone for more information.

## CD-Rom Systems

Falcon System: Sony CD-300+ Drive, SCSI II Cable, & ExtenDOS £289.00  
ST(FM/e) System: CD300+, Translator, & ExtenDOS £339.00  
ExtenDOS (CD-Rom Driver) £29.95

### CD Rom Disks

Lohrum Vol 1 (PD/Shareware) £29.95  
" Vol 2 (PD/Shareware) £29.95  
Gemini (Atari PD/Shareware) £24.95  
Clip Master Pro (ClipArt) £34.95  
1.9Gb Mega Archive PD&SW £24.95

## Falcon Add-Ons

Falcon Wing 0Mb £49.95  
Falcon Wing 4Mb £179.00  
Falcon Wing 14Mb £ Call  
BlowUP 030 - Software £9.99  
BlowUP 030 - Hard 1 £49.95  
BlowUP 030 - Hard 2 £69.95  
14" Monitors from £99.95  
NEW 15" & 17" IDEK Monitors £ Call  
Clarity 16 £99.95  
Cubase Audio (New V2) In Stock  
FDI - Falcon Digital Interface £229.95  
FA-8 Falcon Analog Out £349.95

## Communications

Comms Software  
CoNnect v2.4x £29.95  
Includes printed manual and registration

Fax Software (requires Fax Modem)  
Straight Fax v2.10 £79.95  
Straight Fax upgrade to v2.1 £26.00

NEW Exchangeable SyQuest Drives  
105Mb, 14.5ms Drive, inc. cart £399.00  
105Mb Cartridge £59.95  
270Mb Drive inc. Cart. £599.00

## Specials

NEW  
PC Keyboard I/F £49.95  
T28 Mhz Accelerator £179.95  
T28 STe Accelerator £199.00  
1.44Mb Floppy Drive Kit £69.95  
The Translator £69.95  
HDDriver Software £19.95  
ICD Link II In Stock £89.95  
NVDI v2.5 £29.95  
Falcon Tower Kit £159.95  
Falcon 4Mb, 32Mhz Tower £799.00  
Falcon 4Mb, 32Mhz Desktopper £759.00  
Ask for details

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System Solutions,  
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Vansittart Road, Windsor, SL4 1SE  
Fax: 01753-830344

or come to our London Showroom at:

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London, SE22 8RS  
Tel: 0181-693 3355 Fax: 0181-693 6936

All prices include VAT  
For small items, please add £3.50 P&P & OE  
Multiple or large items, please add £10 courier charge.

## NVDI v3 NEW FOR OCTOBER

NEW features: Enhanced Speedo Support, with the ability to use True Type fonts, Up to 9 times faster than Speedo GDOS v4. Works with all TOS versions on all Atari computers. Comes with 8 Speedo fonts.

Cubase and Notator compatible.

NVDI v3	with NVDI	Separate
100 TType Font Pk	£39.95	£49.95
500 Font CD-Rom	£49.95	£69.95
Update Price		Phone

## MiniS - Hard Drive System

The MiniS Hard Drive System comes with drive capacities ranging from 40Mb up to 1800Mb. This full SCSI system is hardware compatible with all Atari computers, Amiga, Mac, PC etc. They are unrivalled in size, noise, speed, and style and come with a thru port for expansion.

It is the only Hard drive awarded an **Essential Buy of 92% - Atari ST Review Christmas '93**, and a **Gold Award of 93% - ST Format Feb. '94**

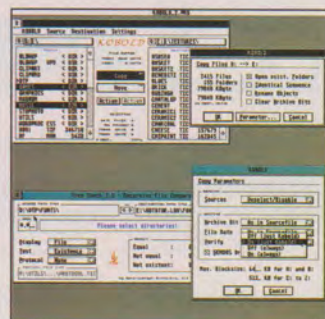
## ST Mono Monitors

The SM14 High Res. mono monitor replaces the Atari SM124/5. The 14" FST display has a crisp, sharp image. A Tilt & Swivel stand is included. It is a plug-in-and-go unit. No adaptor is required!

"Essential Buy, 90%"

ST Review, May 93

SM14	without audio	£129.95
SM14s	with audio	£149.95
OverScan ST	with SM14	£39.95



## Falcon 030 Systems - 32Mhz

The Falcon is fast becoming the preferred choice for 8 track digital recording, with powerful programs such as Cubase Audio using it to its full potential. The DSP chip opens up a whole new world of Sound and Graphics. System Solutions now supply 32Mhz Falcon 030 computers from stock.

PowerUp2 is a brand new 32Mhz accelerator for the Falcon, available now. PowerUp2 doubles the CPU

★ Quiet fan ★ Internal Power Supply 100-240v  
★ 2 Year back to base Warranty ★ Small (2.5x6x8.5")  
★ Dual SCSI Port ★ Device Number Switch  
★ Now with FREE HD-Driver

	IBM	TT/Falcon	ST(FM/e)
40Mb	-----	-----	£199
127Mb	Quantum	£229	£269
170Mb	Quantum	£259	£299
270Mb	Quantum	£329	£369
340Mb	Quantum	£359	£399
540Mb	Quantum	£399	£439
1.0Gb AV	8ms	£859	£899
1.7Gb AV	10ms	£1099	£1139

Please add £20 to ST(FM/e) if the ICD Link II is required (Excludes HD-Driver). Heavy Duty professional cases with 60W Power Supply, add £50. All Prices include VAT

## MagiC - Multitasking Operating System

"It's like running an accelerator and getting the multitasking thrown in for free."  
ST User, Feb. 1994

MagiC is a full TOS replacement, a very fast disk filing system; has accelerated serial, midi and printing routines, and is, of course, a true pre-emptive multitasking system.

MagiC Desk, a replacement Desktop and a powerful command shell have been included. MagiC runs on all ST, Mega and TT computers with 512Kb, but 2Mb is recommended for a useful

working system. The Falcon version is expected later this year.

"If you want a multitasking system that works simply and reliably, then MagiC is for you."

ST Review, June 1994.

MagiC (Intro price)	£59.95
MagiC and NVDI v2.5	£79.95
MagiC and Kobold	£99.95

NB: Excellent with Calamus SL. Compatible with Notator Logic, but not with Notator SL and not yet compatible with Cubase.

## Ease

The latest replacement desktop, developed to suit all requirements. It is aware of multitasking operating systems, giving you more control over running multiple programs. Working in colour? Ease lets you place a picture on the desktop, and comes with a colour Icon Editor. Ease integrates seamlessly with Kobold, NVDI and MagiC - Give your computer a powerful new look for 1994.

Ease v3.x £49.95

## Kobold

Kobold is a high speed file manager. It's unique handling of the Atari file system gives unrivalled speed when copying, moving and deleting files. Copies 1000 files, (10Mb) in 45sec, (GEMDOS 5:35min) Use Kobold for Backups, Formatting Floppies, Move & Copying, Updates, Timed Jobs, etc. It also includes a script learn function to automate repetitive tasks. Can be run as an .ACC or .PRG  
Kobold 2.5 (Intro Price) £49.95

## Repairs and Upgrades

All repairs are carried out by qualified personnel. If you would like a quote, please ask for an estimate. Need it back in a hurry? Then ask for our professional next-day service. Call us to discuss your upgrade requirements. We fit all quality upgrade products available. We can collect and deliver by courier.

Atari Workshop  
is Atari UK's preferred  
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Windsor Service Centre:  
off Duke Street, Windsor, SL4 1SE.  
Tel: 01753-818816

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WORKSHOP



Yes – we've covered  
mounted the only  
commercial  
genealogy program  
for the ST!  
Colin James starts  
you down the  
road...

# BACK TO YOUR ROOTS...

**W**ith the brilliant *Family Roots* program on this month's cover disk, there's no excuse for putting off creating your family tree any longer!

## GETTING STARTED

Load the program by double-clicking on *FAMILY.T.PRG*; all mouse-clicks are with the left mouse button unless otherwise stated.

After the title screen disappears, you are at the workscreen, with the file *EXAMPLE.FMT* loaded. This is the file that we are going to recreate in this tutorial, so clear it from memory and save a "blank" file under a new name.

To do this, press <P> on the keyboard (or click P in the bottom-right menu) and on the Preferences/Options screen, click Clear – the middle item of the row of options across the bottom. Name the file you are about to start work on (up to eight characters) and then click Save. Once the new file has

**With details entered for  
our first individual,  
we're on our way to the  
first chapter in a family  
saga that could run  
for years...**

saved, click Screen.Back at the workscreen, click >< repeatedly to make certain the screen zooms out to maximum. If there is no grid on-screen, press <G> to produce one.

## A FAMILY MAN...

Let's create three generations of a fictitious Cheshire family. Press <N> for New. Drag the resulting rectangle to the middle of the top row of the grid, and click.

Now click with the right button on this first element of the tree. A blank database card appears with a unique four-character code at top right. This is the individual's identification code. Don't worry if your codes don't match up with mine – I experimented with deletions when checking out the program! Enter the following details (leave unlisted fields blank – some items like Flags and user-

**You must define the  
relationship both ways  
in the Define  
Relationship form...**

definable fields will be explained next month) moving through the fields by mouse-clicking or pressing an appropriate arrow key on the keyboard:

Forename – William: Surname – Davies: Settled In – Farndon: Sex – M: Religion – Methodist: Occupation – Farmer: Born – 19/4/1865: Place – Holly Bush Farm: Parish – Farndon: District – Nantwich: Town – Chester: County – Cheshire: Died – 15/9/1930: Place – Crewe Lane Farm: Parish – Farndon: District – Nantwich: Town – Chester: County – Cheshire.

Now click on Marriage. Answer "Yes" to creating a new one and enter the following in the Marriage screen:

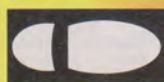
Marriage No – 1: Date of Marriage – 14/5/1890: Church/Civil/Other – Church: Place – St. Chad's Church: Parish, District, Town, County – as for William Davies: Forename – Annie: Surname – Woolham: Born – 12/5/1867: Place – Sweetbriars

Cottage: Parish – Shocklach: District, Town and County – as for William Davies: Died – 16/5/1925: Rest of death details – as for William Davies.

Click on Subject to return to William, then Screen to return to the workscreen. Let's provide William and Annie with a son. Press <N> to create a new individual, and place the rectangle in row 3 of the grid, to occupy columns 6 to 9 from the left. Click the rectangle with the right button and enter:

Forename – Walter: Born – 22/7/1895: Died – 15/3/1965.

Enter other details as per William Davies, leaving blank the same fields as before, then click Marriage, answer "Yes" to the prompt, and enter: Marriage No – 1: Date of Marriage – 12/9/1919: Church/Civil/Other – Church: Place,



## STEP BY STEP GUIDE

### MORE THAN ONE MISSUS...

Suppose one of your forebears was married several times, and had children by each marriage. How does *Family Roots* keep track of this?

**1** Place the much-married individual in the tree as per the main tutorial, click "Marriage" at the bottom of his database card. If no marriages already exist, create a new one.

**2** Type in the information for marriage number one. Fill in the divorce details if you know them. If the partner died, fields for that information appear lower down the form.

**3** Now click on "Create" and decide whether the next marriage is in front or behind the current one. Fill in details for marriage number two and repeat this step if necessary...

**4** Place the children on the tree, link her to them, specify the "Mother/Father", "Son/Daughter" relationships and choose the relevant marriage!



## MINI MANUAL

The workscreen can be zoomed to show all of a tree, or a small part of it. Across the top is the status bar, which can be toggled on and off by pressing <I>. This shows information like current mouse position and zoom level. A control menu consisting of letters and symbols at bottom right provides access to functions.

A second type of screen is used for data entry, searches and setting up preferences. Each screen of this type features a row of options across the bottom which you click on to perform actions or to take you to other data screens or back to the workscreen.

### THE CONTROL PANEL

● **Scrolling:** The left, right, up and down arrows are for scrolling the workscreen display in the direction indicated.

● **Zooming:** >> and << are for zooming in and out respectively (<Insert> and <Clr Home> perform the same actions). There are 11 levels of zoom.

● **New entry (N):** Click once to place a new person in the tree. Click on this with the right mouse button to add the person's details.

● **Block functions (B):** Draw a block around the part of the tree you wish to print, zoom to or move. To move, hold down the left mouse button with the pointer in the block and drag; to zoom, click on B in the control panel with the right mouse button.

● **Grid (G):** Toggles the grid on and off – useful when aligning rows of boxes.

● **Linking (L):** Link individuals in the tree. Pressing <L> turns the mouse pointer into a crosshair; click with the left mouse button on the rectangle representing the first person you wish to link, hold down the mouse button and drag to the second individual.

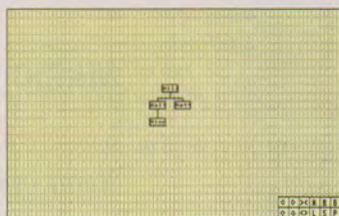
● **Search (S):** Search through the entire file in memory looking for single or multiple field matches. Say you want to search for all the subjects in the tree born in or near Chester. Press <S> and click on Subject in the Search screen. In the Town field, type "Chester" and click the right mouse button to return to the main Search screen.

The word "Subject" next to CATEGORIES is now selectable. Click this with the left mouse button, then set SEARCH AREA to All and SPEED to Slow. Click on Search and any matches found are displayed.

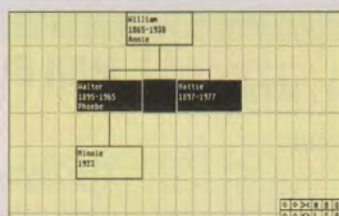
The "\*" wildcard can be used – for instance, searching for anyone whose name begins with W is achieved by typing "W\*" into the name field.

● **Preferences:** The Preferences screen gives you information about the current file and allows you to alter certain settings such as grey lettering and Field Display in Dark/Feint. If you choose lower case, the Shift keys have no effect but the results appear with initial capital letters on the workscreen.

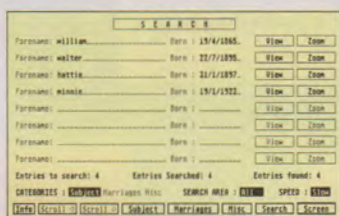
You can autoload any file you create with *Family Roots* via the Preferences screen. Set the Auto file load option to "Yes" and type in the name.



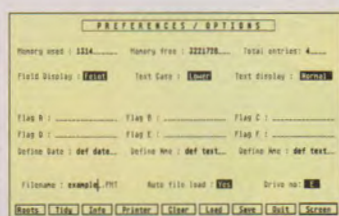
*That thing that looks like an octopus or an extended game of hangman is in fact a family tree. Zoom in for more detail...*



*Draw a block to zoom to that part, print it or move it to another location on the screen – without destroying linkages.*



*A search can be quite simple or fairly complex. You can't print the results of searches, but Family Roots II has this facility.*



*Choose feint/dark display, caps/lower case for data entries and find out useful statistics on your Family Tree from the Prefs screen.*

Parish, District, Town, County – details as for William Davies: Forename – Phoebe: Surname – Hopkins: Born – 24/11/1898: Place – Daisy Cottage: Parish – Carden: District, Town and County – details as for William Davies: Died – 27/10/1978: Rest of death details as for William/Walter Davies.

Return to the workscreen. Now let's create another child of the marriage, this time a daughter. Place another rectangle, its position mirroring that of Walter, right-click on it and enter:

Forename – Hattie: Sex – F: Occupation – Housemaid: Born – 31/1/1897: Died – 17/8/1977: Place (of death) – Poplar Cottage

Enter other details as per William, leaving blank the same fields as before. Hattie did not marry, so return directly to the workscreen.

Now we need to make links between the individuals. Press <L> in the control panel. The panel disappears, and the cursor turns into a crosshair. Click and hold down the left mouse button on William/Annie's box, then drag the crosshair to Walter/Phoebe. The Define Relationship form appears. In the top half of the form, click the Mother/Father box. In the lower half, click the Son/Daughter box – you must define the relationship both ways.

Click on "OK" – a line now connects William/Annie to Walter/Phoebe. Make the same kind of relationship between William/Annie

and Hattie. The program is clever enough to create the brother/sister relationship between Walter and Hattie automatically. The Children field in the Marriage form for William and Annie is also updated. Now let's make parents of Walter and Phoebe. Press <N> and place the rectangle so that it covers columns 5 to 8 and row 5. Click on this rectangle with the right mouse button, and fill in the details as follows:

Forename – Minnie: Surname – Davies: Sex – F: Occupation – School teacher: Born – 19/1/23

Fill in the rest of the details as per William, Walter and Hattie, with the exception of any death details, as Minnie is still very much alive!

Click on Screen to return to the workscreen. Now create a link between Walter/Phoebe and Minnie. Enter the relationship as Mother/Father, Son/Daughter, and confirm the marriage of Walter and Phoebe as the one for this link. Now have fun developing this tree in any way you wish until you feel it's time for you to tackle your own tree in earnest.

This is the beginning of an invaluable family record that can be passed down through future generations. Don't worry that there may be no STs around by then – you can print out your tree and all its attendant information to provide a permanent record of who went before in your family. In fact, we'll be showing you how to print it, and many other useful features of *Family Roots*, in next month's second tutorial!

## SAVE £10 ON FAMILY ROOTS II!

If you're enjoying our *Family Roots* cover disk, you may want to upgrade to version 2, as reviewed on page 27 in this issue. This has various advantages over the original including:

- Printed manual
- Greatly enhanced printing including support for Epson 9/24 pin, BubbleJet, DeskJet and LaserJet.
- Display of surnames on the workscreen
- Printout of Search results
- Auto-creation of a .BAK file on saving

Just send your original *ST Review* cover disk and a cheque or postal order for £19.95, made payable to Floppypshop, to:

**Floppypshop, P.O. Box 273, Aberdeen AB9 8SJ**

Please send me *Family Roots II*. I enclose my original *ST Review* cover disk and a cheque or postal order for £19.95.

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Postcode \_\_\_\_\_ Daytime phone \_\_\_\_\_



# READ ALL ABOUT IT...

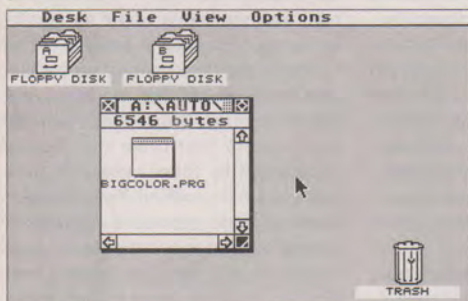
*Even with two main cover disk programs, we've still found space for half a dozen more goodies...*

## BIG COLOUR

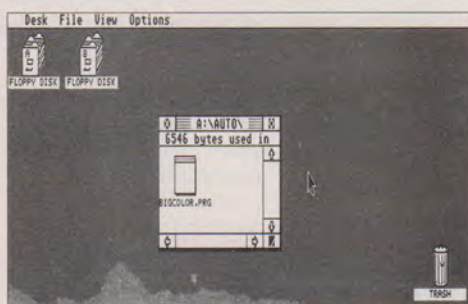
**Shareware • Jon Dalton • High Res.**

*Run colour programs on a mono monitor...*

*Big Colour* allows you to run some medium and low resolution programs on a standard high resolution monitor. Copy *BIGCOLOR.PRG* to your Auto folder – it's quite memory hungry and requires about 200Kb of RAM. At startup, choose a value between 1 and 10 (which is entered as 0): a low value means that drawing will be fast while a higher value gives



*This is "low resolution" on an SM125 mono monitor...*



*... while this is Big Colour's version of medium res.*

smoother shading. Try three or four as a good compromise.

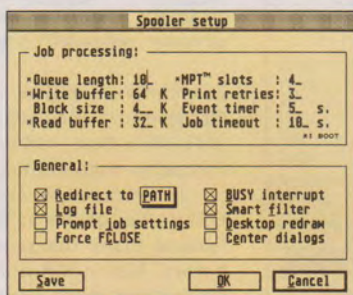
The default screen mode is low resolution, but you can change to medium from the desktop's "Set Preferences" dialogue box. The program is reset-proof so turn your ST off and back on if you want to remove it from memory.

## GEM SPOOL

**Shareware • S. Van Rossen/M. Billiet • High/Medium Res.**

*Print in the background...*

*GEM Spool* is a disk-based printer spooler, mainly for hard disk owners. It redirects all printer output to a temporary file which it then prints in the



***GEM Spool** offers a host of options...*

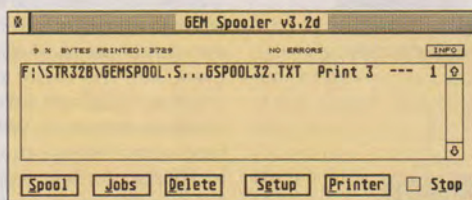
Falcon to 256-colour mode and back again on exit. Press the <spacebar> to quit.

## MAGIC COMPATIBILITY

**Document • Martin Milner**

*Read about MagiC compatibility...*

Prepared by Martin Milner to accompany his *MagiC* user report (page 73), the file lists how many programs perform under *MagiC* as well as some programming tips.



*... as well as a rather nifty info box when printing.*

background while you continue working. To install, copy *GSPPOOL.ACC* and *GSPPOOL.INF* to your boot disk and reset your system. Any program that prints using the standard TOS routines should work with *GEM Spool*. The program is extremely useful for multiple printouts and there are various parameters to optimise its operation. Read the included documentation for more info.

## PC-ST

**Freeware • All Resolutions**

*Make your floppies PC compatible...*

These two programs are designed to provide full compatibility between the PC and the ST. The first program *ATARI2PC.EXE* is for PCs. The second, *STTOPC.TOS* creates a PC MS-DOS-compatible boot sector on a floppy disk.

Insert a disk and run *STTOPC.TOS*. Press a key at the prompt and the program will do the business without affecting the data on the disk. Press <Control><C> to quit.

## TURBOGIF

**Freeware • Sascha Springer • Falcon Only**

*View GIFs from the desktop...*

This tiny program is the fastest .GIF image viewer for the Falcon. Drag *TURBOGIF.TTP* to the desktop and then drag and drop a .GIF file onto the icon to view it. The program automatically switches the

## MIDI BUSKER

**Two Demos • Station Records**

*Try before you buy...*

*Acoustic Busker 2* and *Beat Busker* are both reviewed on page 45 – our cover disk demos give you the chance to hear just how good the MIDI Files are!

## USING STRBAKUP.TOS

Always back up your cover disk and keep the original in a safe place. Run *STRBAKUP.TOS* and follow the on-screen instructions; the program even formats the disk for you. *STRBAKUP.TOS* is not recommended for any other use.

## GENERAL DISK PROBLEMS

In the unlikely event that your cover disk won't load or gives you any other problems, disconnect any peripherals, switch your computer off for at least 20 seconds and try again. If this doesn't solve the problem, return your disk, with a stamped addressed envelope, to:

P.C Wise Ltd,  
Dowlais Top Business Park,  
Dowlais, Merthyr Tydfil,  
Mid Glamorgan CF48 2YY.

PC Wise will test your disk and send a replacement as quickly as possible. You can contact the PC Wise Helpline with any urgent problems concerning faulty disks on 0685 350505 between 10.30 am and 12.30pm, weekdays.

Should you require technical help, call the *ST Review Helpline* on Friday afternoon between 1pm and 4pm on 0625 859766.





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Owing to the phenomenal success of our newer products, we've found ourselves over-stocked with some of our earlier titles. Here is your opportunity to obtain quality HiSoft software at rock-bottom, clearance prices...

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Access

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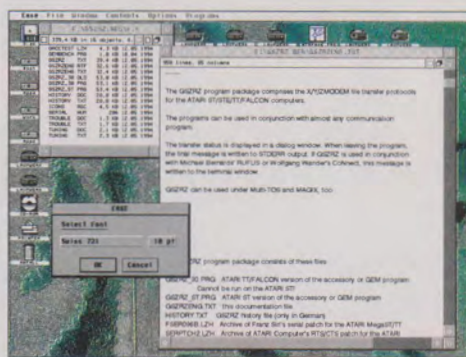
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Sold as part of the *MagiC World* package in Germany, *Ease* is the latest desktop program and features the standard German-style user interface. Bearing more than a passing resemblance to the shareware desktop *Gemini* as well as the Apple Mac desktop, it's designed with multi-tasking in mind and supports all the latest bells and whistles.



*Ease* has a built-in text viewer that handles the text inside a scrollable GEM window. Similarly, TOS programs can be run inside such a window – even on a single-tasking system.

## KEY FACTS

**Product:**  
Ease v3.1  
**Company:**  
System Solutions  
**Contact:**  
081-693 3355  
**Price:**  
£39.95 (introductory)  
**SYSTEM**  
**Minimum Memory:**  
1Mb  
**Resolution:**  
All except ST Low  
**Computer:**  
ST/TT/Falcon

## WHAT YOU GET

*Ease* comes on a single disk with a 60-page manual. Besides the main program, there are a number of utilities on the disk, most notably *Correct*, a handy hard disk analyser that automatically fixes any disk data errors including bad sectors. *Ease* is installed by making it load

automatically at boot time from the desktop. If your TOS version is either 1.00 or 1.02, a small program called *Start* is supplied to get around this. All resolutions are supported apart from ST Low but, like most programs these days, ST High or better are

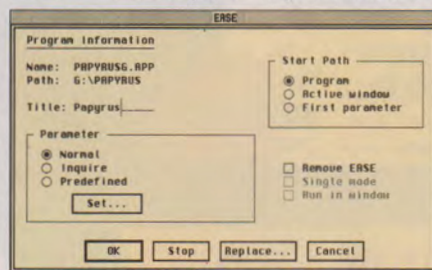
recommended. If 16 colours or more are available, *Ease* uses its optional 3-D appearance. Like all good programs, most functions are accessible via keyboard shortcuts.

All the features that have become standard since TOS 2.06 are supported. Folders, files and program icons can be dragged from windows and placed onto the desktop for easy access. Drag and drop features are also supported, but unlike the TOS desktop, you can drag more than one file at a time and drop them on a program icon.

Programs can be assigned a keyboard shortcut, but you are no longer limited to the function keys. Each program can also be assigned up to six file types that automatically run the program when double-clicked on. In addition, default parameters may be passed to a program, enabling automatic extraction of archives for example.

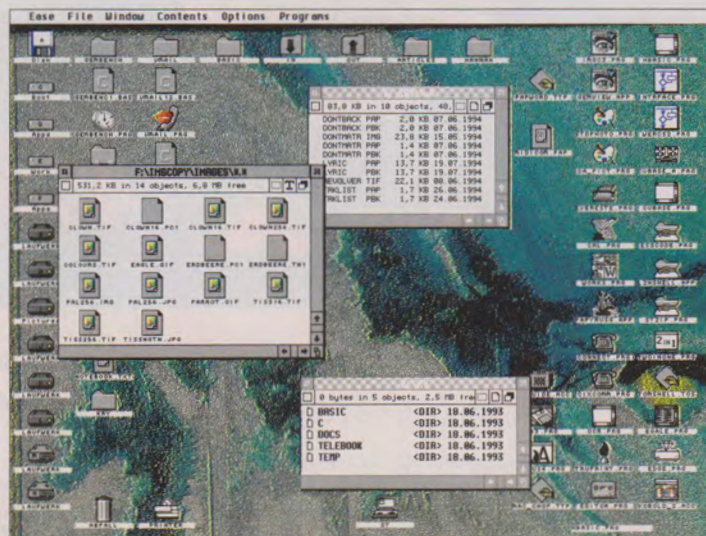
*Ease* also makes use of GDOS, if installed, to display file names in its windows. The built-in text file viewer and printing routines also utilise GDOS if enabled.

An installed program can be assigned default parameters and a directory – a double-click on a ZIP file could unpack it and place its contents in a special folder...



# THE EASY OPTION

Some of the ST's finest software has emanated from Germany. Does *Ease* continue the success story?  
Ofir Gal finds out...



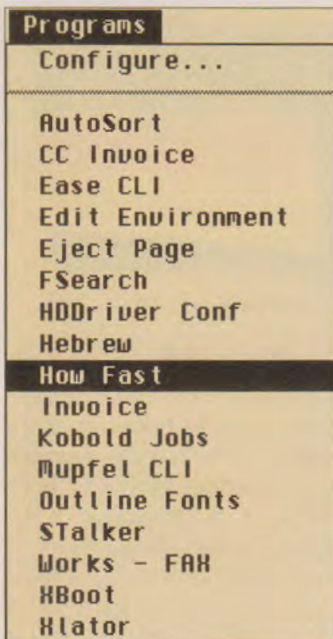
*Ease* windows are totally independent of each other so different fonts and icons can be used. Background pictures are supported but there is no tile picture facility.

## WINDOWS

Just as you'd expect, double-clicking on a drive icon opens a window displaying the contents of the disk. The display defaults to icons or text depending on the user preferences, but can be quickly toggled using one of the small icons at the top of each window. *Ease* may be set to automatically use text instead of icons if the number of files exceeds a user-defined number.

Each window has the standard scroll bars, full, resize and close buttons. Four additional buttons and an info bar are found at the top of the window. The first button closes the window while the standard close button exits folders as in the GEM desktop. The info line displays the number of files and the space they occupy as well as free disk space and write-protection status. The second button offers a size-to-fit facility, resizing the window so that all files are visible if possible. There is also a global size-to-fit option – very useful. The next button toggles the display between text and icons individually for each window. The last button simply places the top window at the bottom, making hidden windows



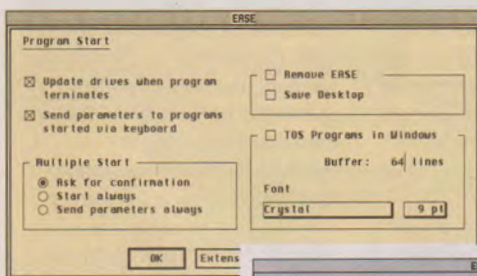


Up to 20 programs can be installed in this menu. The "Works - FAX" entry loads Atari Works and passes it my letterhead file!

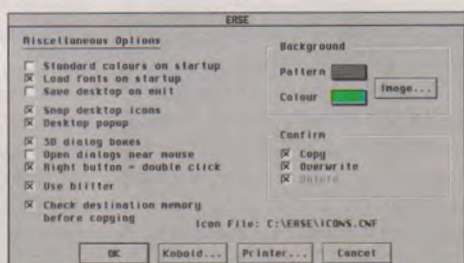
visible. A unique option is that each window setting can be stored so that whenever you open, say, C:\AUTO\, the files are displayed in text while, perhaps, F:\DOCS\ is always displayed with icons. Finally, a window can be iconised (reduced to a very small object), another very handy feature.

As with the GEM desktop, files can be sorted by name, date, size or type and there is also a mask facility, allowing you to view only files of a certain type. You can select whether *Ease* displays file size, time and date.

There are many other features that are not immediately obvious. For instance, holding down <Alternate> while double-clicking on a folder opens a new window for the contents of the folder; holding down <Control> while clicking on an icon opens a window that follows the path of the program.



The miscellaneous options dialogue box. Various settings such as background colour, Blitter state, file copy and over-write confirmation are found here.



## FILE MANAGEMENT

Copying, moving and deleting files is carried out in a similar way to the standard desktop. However, unlike the desktop, you can select files from several windows and copy, move or delete them in one action.

*Ease* is designed with *Kobold*, the super fast file utility, in mind and calls it for any file operation. This way, file copying can be performed at great speed in the background. Consequently, *Ease* has no sophisticated file manipulation functions such as batch jobs. If *Kobold* is installed, *Ease* simply passes the job on to it - why re-invent the wheel! The downside is that *Kobold* will set you back another £50.

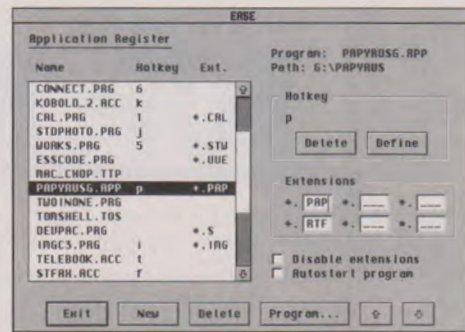
## PROGRAMS

In the handling of programs, *Ease* really excels. Programs can be installed in a variety of ways enabling you to get the most out of the GEM interface and the DOS-style parameter passing. Each application may be installed so that double-clicking on a file automatically launches it. Up to six file types are allowed per application, but if this is not enough, you can simply install the application twice! Applications can also be started by dragging and dropping files over their icons. You even have the choice of automatically expanding parameters. *ST Zip* installed with the preset parameter -x d:\newstuff\ %0 has the effect that double-clicking on a .ZIP file automatically unpacks it and places its contents in the *NEWSTUFF* folder on drive D!

The Program's menu presents another way of installing programs into a menu instead of icons. This works just like the icon method and is borrowed from System 7 on the Mac.

## VERDICT

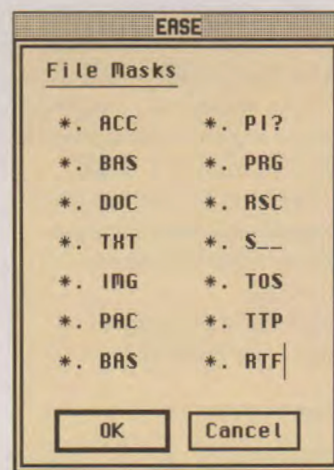
There are a few areas where improvement is possible, one of them being the limit of 20 programs in the Programs menu. Another is the lack of keyboard shortcuts in dialogue



boxes apart from <Return> and <Undo>. Enhanced copying facilities for those who don't have *Kobold* would also be well received. In terms of memory, *Ease* uses a little more than 300Kb, but can be configured to unload itself from memory so can be used on any ST system with as little as 1Mb of RAM and a hard disk.

You can probably tell that I like *Ease*. In fact, I like it so much that I

*Program Installation is handled through this dialogue box. Each application can be assigned a keyboard shortcut and up to six file types.*



A mask can be applied to the current window - choose from the 14 user-configurable ones or add a new one of your own.

have decided to use it all the time on my system. The user interface is extremely friendly and the manual is very helpful and clearly laid out. *Ease* has many original features that once used become second nature. Reliability is extremely high - I have not been able to crash it in eight weeks of constant use - and it is compatible with most utilities and accessories. It even copes well with system enhancers like *Let 'em Fly*, *WinX* and *NVDI* - a good example of a clean and well thought out design.

## SUMMARY

### GOOD POINTS:

Extremely reliable  
Compatible with almost all system software  
Very user friendly

### BAD POINTS:

No keyboard shortcuts in dialogue boxes  
File manipulation features could be improved

### FINAL WORD:

"*Ease* is a quality product that is well worth considering as a powerful alternative to the more established *NeoDesk*."

## PERFORMANCE

## OVERALL

EASE OF USE  
DOCUMENTATION  
FEATURES  
EFFECTIVENESS  
VALUE FOR MONEY

85%

## THE EXTRA PROGRAMS

*Ease* comes with a host of useful utilities that certainly deserve a mention.

- **Icon Constructor:** powerful icon editor that can be run directly from *Ease*. It features automatic mask and selected icon image generation and can import .IMG and .RSC files.
- **Command:** simple command line interface program for all you CLI fans!
- **Correct:** useful disk doctor that can check and fix most disk data corruptions. Runs as a program or desk accessory.
- **Flexdisk:** robust reset-proof RAMdisk that dynamically changes its size when you copy or delete files.



## Up in the air with the Eagle...

A couple of months ago I mentioned another Atari clone apart from the 68040-based Medusa called "Eagle". Last week, I spoke with GE-Soft's Peter Conrady about the new machine. It was planned to be ready before summer but, as so often happens, there were delays: the board had to be reworked, parts did not arrive on time and so on. But now it is close to shipping.

The Eagle is a high-power TT clone with a motherboard that has six expansion slots, expandable to nine. All of the TT interface connectors are on board, such as SCSI, MIDI, ACSI, and the memory, graphics and processor are cards. Also, the main clock is 32MHz for the entire board, not just the CPU as with the TT, so using the ST-RAM on the Eagle gives you at least the same speed as TT-

RAM on the TT. And you also have TT-RAM on the Eagle, which results in between fifty and three hundred per cent more speed. The graphics card is a TT-compatible one and, as soon as drivers are completed, cheap ET-4000 cards will be available.

Now for the good bit. As the processor is on a card, it is very easy to replace the 68030 with a 68040 or even the new 68060! As on the Medusa, some TOS patches are necessary so it will be some time before the '040 board is available, but this is a very interesting option. The other thing I like is that I can use all of my existing memory as the Eagle uses normal SIMMs while the Medusa uses expensive PS/2 SIMMs.

The price, inclusive of all cards, but without SIMMs, should be around 3,500 DM (about £1,500).

Enough of the hardware – what's new in the software world?

Most developers are busy working and get nervous if you try to ask for more information – September is the month where a lot of new products or new versions of products appear. Watch this space next month – I'll be meeting people at various Atari Shows in the next few weeks.

Do you remember the Atari UNIX project? UNIX is a very popular operating system in universities world-wide, especially as there is a shareware project called LINUX, which gives you a fast UNIX system for free. Unfortunately this was only available for computers with Intel processors, but a couple of Amiga developers have ported this to the Amiga and another group of Atari programmers have waited until the Amiga version has reached a certain point and joined the project – the first versions of the Atari LINUX is now out. Not yet complete, but the most work is done.



Source code (as with all GNU-created software) is available.

As LINUX requires a Memory Management Unit (MMU) it can work on the TT, Falcon, Medusa and any other computer with at least a 68030 processor.

Talking about Operating Systems, there is a version of MiNT available for the Apple Macintosh – you can run TOS programs on these machines. And there are rumours of more Atari-compatible items to come at the next Apple Show. We'll have to wait and see – and next month I will report on a nice new multimedia toy for the Atari...

**Manfred Bäcker is 27 years old and works in a computer shop in Cologne. He's been programming Atari computers since 1985 and is active on various bulletin boards in Germany.**



**Andrew Wright is a long-standing contributor to ST Review. He's clearly mild-mannered and tolerant in the extreme – and always ready to forgive the odd bug or three...**

## WRIGHT ISSUES

Hardly a week goes by these days without some big company falling out with its software supplier. Company A pays company B hundreds of thousands or even millions of pounds to develop some all-singing, all-dancing doobry and ends up with a white elephant that refuses to work. Either it's too slow, too hard to use or it's just too buggy. When the dust settles, companies A and B end up in court (employing companies C, D E and F in the process, but that's a different story) and somebody has a huge pile of used floppy disks.

You might think that this has nothing to do with you. OK, so maybe it doesn't. Directly. But then again neither does famine in Ethiopia, the slaughter of whales in the Antarctic or civil war in the Balkans!

It all leads somewhere though – there's no such thing as the perfect

software. All programs have faults and will fail to do things the way they should given the wrong circumstances. Now that's perfectly understandable as far as huge systems go but what about those tiny little utilities that are scarcely more than a few bytes long? It's still true. Even the tiniest little Auto folder program will meet its match one day. Perhaps it will be another Auto folder program that clashes with it, perhaps a major application that does something strange. Whatever it is, software cannot be perfect.

If banks, hospitals and government departments are finding it out the hard way, why do we complain so bitterly about tiny bugs in our Atari software? Companies like Microsoft pushed pre-release copies of Windows out to hundreds of thousands of testers – and it can still crash without warning, several years-worth of upgrades later. In a niche market like

## Just like swatting flies...

the Atari one, no company can afford to do this. The end result is release versions of software that could probably best be described as "late" beta stage.

We reviewers are as guilty as anyone. We're often accused of pointing out bugs just to prove we looked at the program. I prefer to think of it another way: in pointing out bugs, the reviewer is saying there must be many more. But even that is distorting the real situation. We have to accept bugs and react to them in a grown-up way. We have to report them, help track them down and make it easier for the developers to fix them.

My wife and daughter scream like merry hell when they see a spider. That doesn't mean we should do the same with bugs. After all, like spiders, most of them are harmless.



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- ☐ Sample issue: £2.50

Don't take our word for it, here are some unsolicited comments from happy readers: *unfailingly interesting, superbly written NWF, really excellent value GFS, invaluable service for ST users PS, consistently impressed AS, no hesitation in renewing my subscription PPK, you can read it again and again RF.* Originals of these letters available for inspection at our offices.

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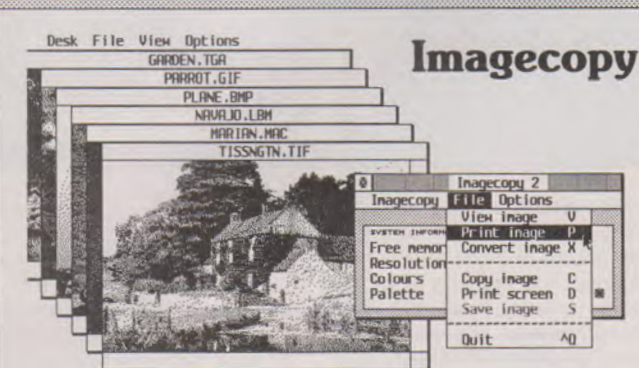
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- ☐ Atari ST Basic To C £18.45
- ☐ ST Disk Drives: Inside And Out £18.95
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\*\*\*\*\*  
"An essential Atari program ... no serious Atari user should be without", Atari ST User, Aug '94.  
"A quality product ... essential", ST Review, Sept. \*\*\*\*\*

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*NeoDesk 4 claims to be the ultimate Atari desktop, but can it stand up against the competition?*

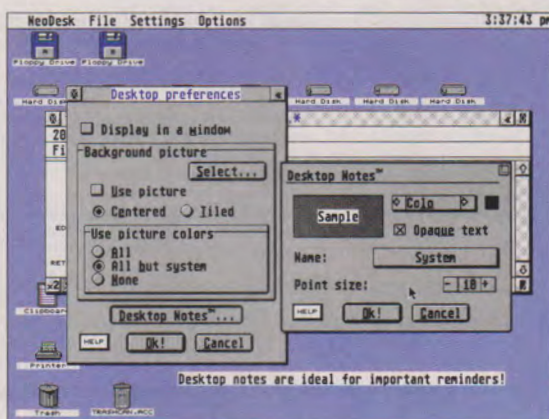
*Nial Grimes sorts out the teak from the formica...*

# NEO AND

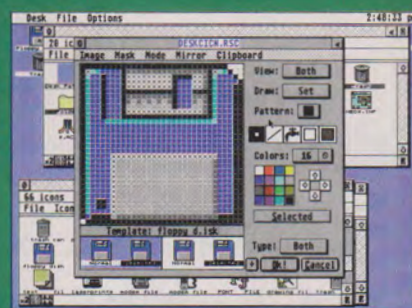
The arrival of the graphical user interface revolutionised file-management overnight. Archaic command-line interfaces flew out of the window as slick windowed desktops, such as Atari's, slid into their place. As lovable as the ST's desktop is though, it can hardly be described as hot property when it comes to features.

NeoDesk has, for years, been providing a refined alternative to the standard Atari desktop. With fresh competition on its hands from the likes of *Ease* and *Gemini 2*, it's going

Notes can be typed anywhere on the desktop by a simple double-click of the left mouse button.



The built-in icon editor is very powerful and supports a wide range of ST and PC image formats.



to face an uphill struggle. Let's see what Gribnif has done to keep its baby on top...

## SPEED KING

A double-click on the install icon is all that's needed to seat NeoDesk 4 comfortably on your hard disk. In actual fact, the whole shebang will run from a single floppy drive at a push, but many of the benefits will be wasted on such a system. NeoDesk 4 users will feel at home with this latest version in no time – the slightly quirky interface has been maintained, although it doesn't take too long to realise that everything is a lot more organised.

All of the advantages offered by

earlier versions are still alive and kicking in NeoDesk 4 and many have been improved beyond belief. For example, file copying is of the intelligent variety, reading as much data into memory as possible before writing anything to the destination disk. Copying can also take place in the background and the same goes for formatting, deletion and many other operations.

Naturally, this calls for some adjustments to the interface itself and you'll find that most dialogue boxes have been squeezed into windows; any number of these can be held on screen alongside the standard complement of eight drive windows. On a similar note, text and icon windows can also live peacefully

alongside one another on the desktop.

The font support is equally impressive. *SpeedoGDOS* fonts can be used to replace any size of the text used in windows, or on the desktop as notes. In actual fact, *SpeedoGDOS* isn't very good at supplying text this small, so you are likely to move back to the system font for clarity's sake. Other bells and whistles include a recoverable trash can and a clipboard that serves as temporary storage when copying files – it can be looked upon

## INSIDE INFO

NeoDesk is a program that inspires either love or hate in ST users

around the globe.

Considering the interface's slightly non-standard nature, NeoDesk copes remarkably well out there in the software jungle. It runs perfectly well under *MultiTOS*, loves *NVDI* and complements *Geneva* perfectly.

However, there are some casualties: the biggest problem is *WinX* – NeoDesk 4 doesn't like optimised window redraws disabled in order for NeoDesk 4 to work properly.

No amount of testing on our part can decide whether you like the NeoDesk look and feel – it's a purely subjective matter. Give the cover disk demo a thorough try out and draw your own conclusion...

Features like conditional file copying give NeoDesk 4 command line power without the hassle!



## KEY FACTS

**Product:**

NeoDesk 4

**Company:**

Compo Software

**Contact:**

0487 3582

**Price:**

£59 (Upgrades available)

**SYSTEM**

**Minimum Memory:**

0.5Mb

**Resolution:**

Any

**Computer:**

ST/TT/Falcon



# IMPROVED!

## SUMMARY

### GOOD POINTS:

Very innovative  
Potent range of features  
Full on-line help system

### BAD POINTS:

No windowed file viewer  
A few bugs  
Incompatible with some system enhancements

### FINAL WORD:

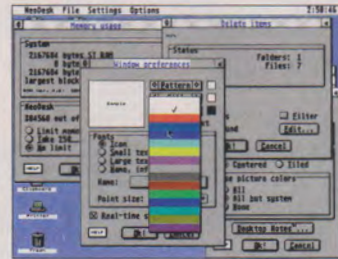
"GEM purists will probably take much delight in burning NeoDesk at the stake, but a slightly non-standard interface is a small price to pay for this type of power."

## FILTER TIPS

NeoDesk 4's ease of use is perfectly balanced with sophistication – file filtering is an ideal example. If you've ever had contact with a CLI, you'll be used to the principle: instead of weeding out files individually, you can apply certain conditions, and leave the actual selection to NeoDesk. At a basic level, all files with a .TXT extension can be copied from one folder to another.

Further conditions such as date of creation, size and attributes can also be added – most CLIs would have trouble copying all read-only .DOC files larger than 10Kb to a separate folder! A filter button is presented in many of NeoDesk 4's dialogue boxes. Copy is the obvious example, but delete and search operations can also be treated in the same way.

Beyond advanced file management, NeoDesk 4 can also streamline the way you organise your programs. Files and folders can be dragged from their windows onto the desktop, and the concept of "program groups" is introduced. In effect, this allows you



**Almost all dialogue boxes are window-based and feature trendy 3-D buttons on the Falcon.**

to store an "alias" of a program separate from all of its support files within a special folder called a "group". What's more, the names used within a group can be up to twenty characters long and case is not important.

Or better still, you can choose to place a program information file within a group. These run a specific application, but configure the system before they do so. Any number of info files can be set up to pass certain parameters to programs, or to unload NeoDesk 4 for specific applications. When you are new to the system, all of these features can seem a bit baffling, but fortunately a context-

sensitive help system is available from any dialogue box. Hypertext links make it easy to jump to related topics and the electronic help is backed up by an equally competent manual.

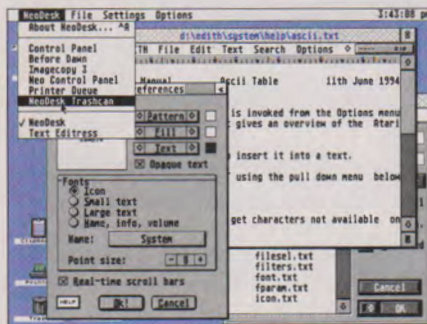
## VERDICT

It would be silly to pretend that NeoDesk 4 is perfect at the moment – there are a number of screen redraw and font handling bugs, and these are especially pronounced on the Falcon. The only truly serious problems on the ST are the "Show Information" button in the icon editor (kaboom!) and the recoverable trashcan, which doesn't seem to be 100% reliable. Other niggles include the limited amount of RAM available for macros and the fact that some features are only available through keyboard shortcuts.

Regardless of these minor problems though, NeoDesk 4 is an incredible piece of software. At £59 it is quite expensive, but for that money you get the most powerful replacement desktop on the market.

Put it this way – Compo are not going to get this copy back without a fight!

as a RAMdisk that can only be used within NeoDesk. To be truthful, NeoDesk 4 is a bit greedy when it comes to memory, but you can opt to "unload" when applications run, which neatly removes much of the overhead. Quitting the desktop when running under MultiTOS produces a similar effect.



**NeoDesk makes an excellent shell under MultiTOS – it's a lot more responsive than the Atari alternative.**

## PERFORMANCE

## OVERALL

EASE OF USE  
DOCUMENTATION  
FEATURES  
EFFECTIVENESS  
VALUE FOR MONEY

✓✓✓✓✓✓✓✓✓✓  
✓✓✓✓✓✓✓✓✓✓  
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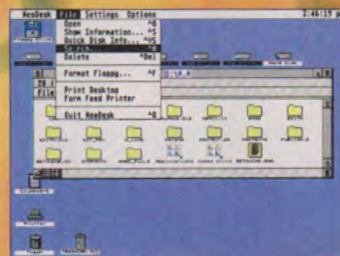
**83%**



## STEP BY STEP GUIDE

### SEARCH ME!

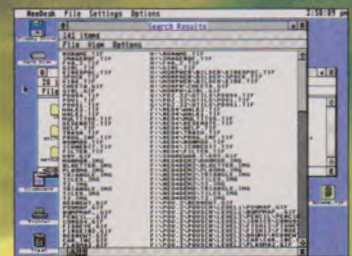
NeoDesk 4's Search facilities are far in advance of those offered by the TOS 2.06 desktop. For example, let's imagine you are looking for a particular picture, but can't remember its exact name or the format it was saved in...



**1** Kick off by selecting the folders or drives you want to examine and choose "Search" from the File menu.



**2** Now click on the "Templates" button and enter the extensions you'd like to look for, as shown above. Make sure the "Create group" button is highlighted.



**3** Wait a few seconds and all of the files that match your templates are presented in one neat group. Switch to a text view for a better idea of what's there.



Everybody has a different use for their ST, but the one piece of software that all of us need is a good desktop. *NeoDesk 4* builds on the success of its all-conquering predecessor in replacing your ST's desktop with a slick working environment.

The demo on the cover disk is fully useable and allows you to run programs, delete files, and generally sample the atmosphere. Almost everything can be tried, but very little has a permanent effect (deletion excepted!).

In order to work properly, the demo needs to run after a little utility called *JAR10*, which is best placed in an Auto folder but can be run from the desktop. So run the program and begin to explore...

## EASY PEASY!

Once up and running, *NeoDesk* is a doddle to use. It's modelled very closely on Atari's desktop, and all basic operations such as copying, deleting or moving files work in exactly the same way.

The colourful icons also make no difference to the way applications are run – just double-click and you're off. The same applies to viewing pictures in .IMG and a number of other formats.

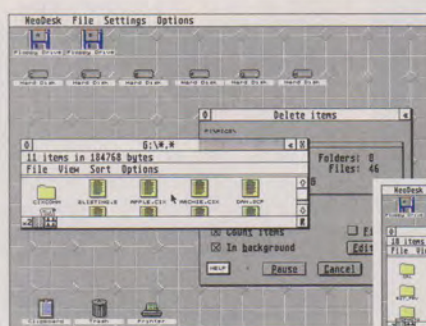
However, as you begin to use the desktop, you will notice that below a thin surface of familiarity lies a much more powerful piece of software.

For a start, the windows each contain a menu bar of their own. This allows the view to be altered without traipsing to the top of the screen – and changes only affect the current window. Put simply, icon and text windows can mix freely on the desktop. Three mini-buttons are displayed at the bottom of each window, and these allow you to select all icons, change to a text view or duplicate the current window in an instant.

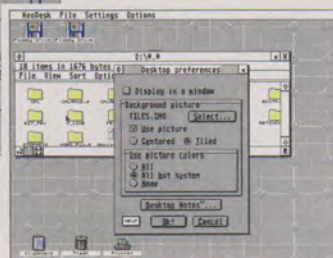
It doesn't take long to realise that *NeoDesk* tries very hard to make sure

# DESKTOP DYNAMICS

*NeoDesk 4 is the ultimate desktop replacement for your ST, and you can take it for a test-drive with our exclusive cover disk demo! Nial Grimes wades his way through virtual coffee stains to bring you a taste of file management heaven...*



**Files can be deleted in the background while you continue working with desktop windows.**



**Every single aspect of NeoDesk 4 can be adjusted through the Settings menu. You want wallpaper? You got it!**

that everything is instantly at hand. For example, when you click and drag a file, a miniature trash can appears in the bottom of the window. The tick that sits alongside the trash allows the size of a folder or file to be determined.

## EXTRA! EXTRA!

Although the demo is limited in some ways, there's still plenty of scope for testing out the advanced features. For example, you will notice that file

copying takes place in the background and conditions can be attached to each copy operation – just prod the **Filter** button and select the criteria that must be met. Before

you get too excited though, the demo does delete files after copying them.

The ratio between the amount of time spent copying and dealing with foreground operations can be adjusted through the **Settings** menu. The same goes for every other aspect of *NeoDesk* – colour schemes, memory settings, fonts and so on.

For a little bit of fun, why not add some wallpaper to the desktop? Just select an .IMG file in the **Desktop** dialogue box, highlight **tile** and click on "OK" – pretty eh?

When you've finished exploring the demo, simply click on **Quit**. The machine will reset and you will be once again forced to endure the standard desktop.

This short tutorial should have given you some idea of the power of *NeoDesk 4*. To find out what we thought of the actual product, check out the full review in this very issue...



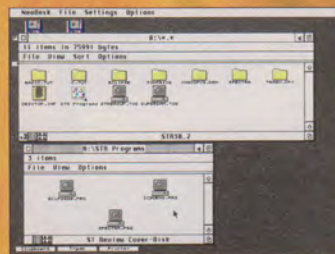
## STEP BY STEP GUIDE

### GROUP THERAPY

One of the nicest features in *NeoDesk 4* is grouping. To see just how useful it can be, let's create a group for all of the programs on last month's cover disk...



**1** Begin by opening a window for drive A and click on "New Group" (or type <Alt><G> if you find it easier). Now name the file, adjust the title as it should appear in the window and add a description.



**2** Next, double-click on the newly created group and drag all of the programs into its window the locations of the original programs don't change, you are just creating pseudo-copies of them.



**3** Finally, select all of the icons in the group window and choose "Change Item" from the Options menu. Give each program a full title and they can now all be executed from this single window.



# BEEN TO ANY GOOD ATARI SHOWS LATELY?



## WE HAVE...

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and London Shows  
were well received  
by Atari enthusiasts  
for a number of  
important reasons...*

- Over 20 new products were on view including software like *That's Write 3*, *SpeedoGDOS 5* and *Imagecopy 3*, plus hardware like the Janus ST emulator for the PC and the Medusa super-computer.
- The hands-on nature of the shows allowed you to spend as much time with products as you liked – and speak with key personnel and programmers.
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## ...AND WE'RE BACK!

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**LOOK OUT FOR FULL DETAILS IN THE NEXT ISSUE!**



*Tracker programs  
for the ST have  
finally come  
of age with  
StormTracker as  
Graeme Rutt  
discovers...*

## KEY FACTS

**Product:**  
StormTracker v1.00  
**Company:**  
Goodman International  
**Contact:**  
0782 335650  
**Price:**  
£24.95  
**SYSTEM**  
**Minimum Memory:**  
1Mb  
**Resolution:**  
Any except ST Low  
**Computer:**  
Any

Atari computers have always had a poor reputation for their own sound generation capabilities. The root of the problem is that the sound system was designed around a four-channel beep chip while the Amiga had a four-channel sample player. This led to the Amiga driven development of computer-generated songs, known as modules. On the Atari, module editors were generally awful – horrible things that only ran in low resolution.

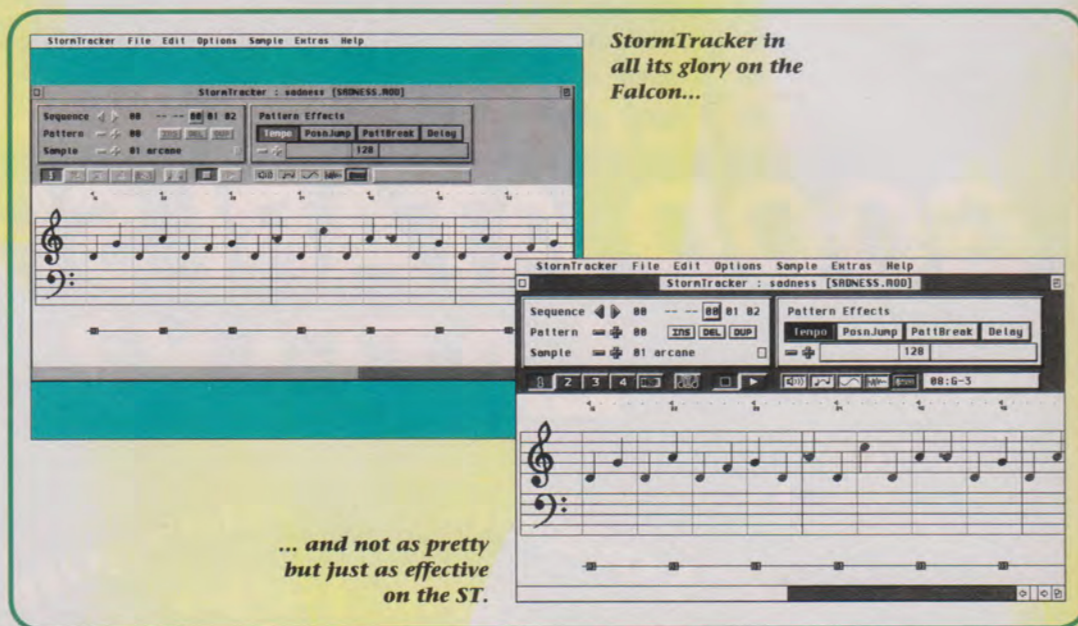
Enter *StormTracker* by ASTRAsoft (the team that wrote the shareware module player, *Desktracker*), a remarkable program that heralds a great departure from standard module editors.

## WHAT YOU GET

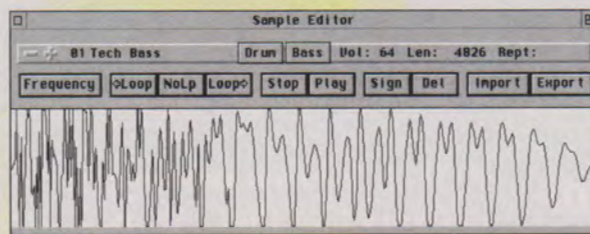
*StormTracker* is compatible with all Atari computers including the Falcon. A minimum of 1Mb of RAM is required and it will run from a floppy or hard disk. The package includes a single disk with an installation program and a 100-page ring-bound manual.

*StormTracker's* GEM interface is a huge improvement. Modules are shown in a large window: at the top are the sequence and effects panels and at the bottom, the stave. The stave box has an effect line at the top, the drum line at the bottom and the stave itself in the middle.

Other dialogue boxes also appear in windows and are amodal – you can change settings in one box and move to another without closing the first. This kind of interface is very



# BIG STORM



*The Sample Editor – one low point in an otherwise excellent product.*

much in vogue and to find it in a module editor is a great plus, making the program very attractive.

## EYE OF THE STORM

Creating a note is as simple as selecting the voice and sample and then left-clicking on the stave at the correct pitch. The same is true of the myriad of effects that *StormTracker* supports: just select one and click on the effects line. Notes can be sharpened by double-clicking and deleted by a right-click and when you play a song you can have the notes scroll along the screen or jump when a new page is required.

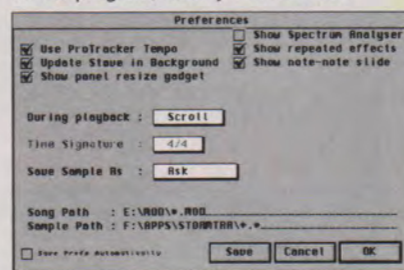
*StormTracker* also has some excellent block and pattern operations, enabling you to copy, cut, paste and delete notes, blocks of notes and whole patterns. The GEM clipboard isn't used but blocks may still be copied between songs as long as you don't quit the program.

Play-back is adequate – in fact, if you've ever used *Desktracker* you'll know what the quality is like as it uses the same routine. The play-back frequency is governed by the sound hardware in your machine and ranges from 8kHz on a standard ST

to 50kHz on a MegaSTe, TT or Falcon. In addition, *StormTracker* on a Falcon gives you access to full 16-bit samples – very tasty!

The editor is pretty basic, but allows you to change the frequency, loop, change the sign of the sample and cut out blocks. Formats covered include .AVR, Microsoft .WAV and signed/unsigned.

The manual is a well-written guide to the program, cleanly laid out and



very usable. It doesn't have the humour that I like in a manual and is obviously put together on the cheap – but I don't hold either against it!

## VERDICT

With PD products like *Protracker*, the process of stringing together a few samples and calling them a song is soured by the appalling interface and various bugs. That's not to say that *StormTracker* is perfect. It crashes very occasionally, has an incomplete sample editor and can't save compressed .MOD files. One thing the author, David Oakley, should think about is adding MIDI support so that pro-musicians can play a dummy keyboard into the program.

*StormTracker* is inexpensive, has a great interface and works well. If you want to create music, but are put off by the price of MIDI equipment then *StormTracker* is a good way to start.

*Nice interfaces aren't everything – the preferences box gives you the chance to save all that niceness depending on your personal choice...*

## PERFORMANCE

EASE OF USE  
DOCUMENTATION  
EFFECTIVENESS  
VALUE FOR MONEY



## OVERALL

80%



# NEXT MONTH

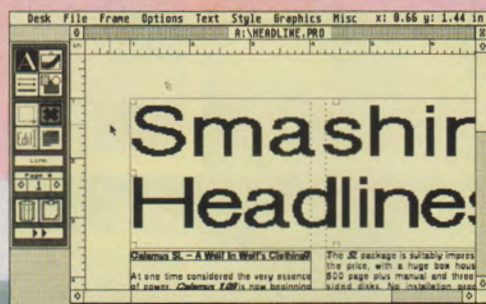
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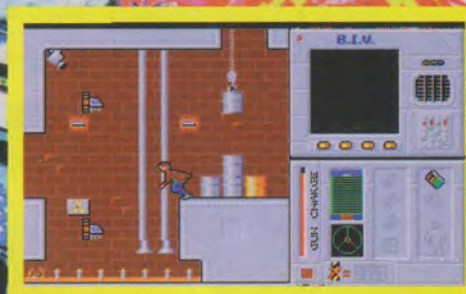
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# THE NEXT GENERATION

If you've already read and followed our *Family Roots* tutorial on page 12, you may be wondering how such a comprehensive and easy-to-use program can be made even better. So let's concentrate on the things that have changed.

## IN PRINT

First off, *Family Roots II* features revamped printing options, which now include the majority of printer types at their various resolutions. Simply clicking on the Printer field takes you through all available choices of driver, from a 9-pin dot matrix through to inkjets and lasers.

Page breaks have now been incorporated into the database print-out function to ensure each individual's record is placed on a separate sheet, a great boon for those who use the program to create a complete paper-based record. Also, a border feature has now been built in to the printing routine so that you can design and include your own graphics.

One slight source of annoyance with the original version is that the results of searches cannot be printed. This is put right in version two.

The improved printing facilities are, in fact, the major improvements in *Roots II* but its author, Chris Skellern, has been busy in many other areas to make this the genealogy program to beat them all...

## NAME GAME

Surnames, rather than just the Christian names, of your forebears and contemporaries are now displayed in the boxes on the

*The best genealogy package for the ST just got even better! Family Roots II has bags of new features as Colin James found out...*

**Revamped printing facilities provide support for the majority of printer types.**

workscreen at the highest zoom level, while middle names and surnames now appear on the Brothers/Sisters and Children listings. Horizontal scrolling of the Workscreen has been increased from 12 per cent to a more comfortable 25 per cent, and for those ST users used to pressing the

**Middle names and surnames are shown on the Brothers/Sisters and Children listings in *Family Roots II*.**

**Preferences screen now includes toggle selectors for showing or hiding grid, status bar and menu functions.**

**Surnames are now displayed on the Workscreen at the highest zoom level.**

undergone some improvements. The options are now selectable from the keyboard by first pressing <Alt> then the appropriate key, as well as by mouse clicking.

In total, the changes represent a great deal of hard work by Chris, and mostly in direct response to suggestions and requests from users of the original program.

## VERDICT

When you are dealing with priceless information about your family's history, you obviously don't want to take any chances when it comes to placing the information into a logical order and preserving the data.

You also need to be able to recall that information quickly and easily, and make it available in other forms, for reasons of convenience and security. If that is the criteria to be met by a genealogy program, then *Family Roots II* meets them all adequately and elegantly.

Finally, take a bit of advice from one who knows – the author of *Family Roots*, Chris Skellern, himself. In the printed User's Guide accompanying the latest version, he says: "I don't believe it is sensible to rely 100 per cent on computers for our data storage needs. Data can become corrupted, lost or damaged. Formats, needs and computers change, thus causing compatibility problems. Also, in the case of genealogy, it is impractical for the computer to take charge of all information storage."

*Family Roots* – whichever version you use – has been designed to work in parallel with a document filing system. With this in mind, there's an option within the program to output the entire family tree in document form, complete with coded and listed relationships, providing you with a hard copy not only for security purposes, but also so that you can show it around to members of the family.

They may not all fancy the idea of huddling around your ST for their journey back through family history, even if *Family Roots* and the ST are the perfect combination for getting the job done in the first place!

## KEY FACTS

**Product:**  
**Family Roots II**  
**Company:**  
Floppyshop  
**Contact:**  
0224 586208

**Price:**  
£29.95

### SYSTEM

**Minimum Memory:**

0.5Mb

**Resolution:**

ST High (recommended) and Medium

**Computer:**

ST/TT/Falcon (runs in

ST resolutions on TT/Falcon)

<Enter> key on the numeric keypad instead of <Return>, the former now performs exactly the same function.

When you save a file, any previous file of the same name is now renamed with a .BAK extender – a useful security measure if something goes wrong with the save. The program rechecks the disk to ensure that the new file actually exists and is of the correct size. If not, you are warned so that you can change disks and re-save the file.

The Preferences screen has also

## PERFORMANCE

## OVERALL

EASE OF USE

DOCUMENTATION

EFFECTIVENESS

VALUE FOR MONEY

✓✓✓✓✓✓✓✓✓✓  
✓✓✓✓✓✓✓✓✓✓  
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**81%**



## Andrew Wright takes a look at Flexidump 3 and tries out a few tricks with colour...

What's the first thing you do after you stagger home with your new colour printer? Plug it in and try it out of course! Unfortunately, that's when you find out that whoever designed the first technicolour dreamcoat wasn't using an ST... Like any printers, colour printers need the right drivers if they're going to reproduce those splashes of red, green and blue that you've lovingly slopped onto the screen.

Most first time printer owners spend hours, if not days, scouring PD catalogues looking for colour printer drivers – until the awful realisation dawns that each different colour-capable program needs a different driver. This can be a big disappointment. While most paint packages have rudimentary support for colour 9 and 24-pin printers, DTP programs like *Timeworks* (and most other GDOS programs) will resolutely refuse any attempts at inducing it to print in colour.

### ONE SOLUTION

The easiest way out is to opt for one of the dedicated colour printer driver utilities. These will take a file in almost any graphics format and print it out to a wide range of colour and mono printers. Being dedicated utilities, their colour handling is far more sophisticated than your average add-on printer driver, with more bells and whistles than you can ever hope to use. The list of utilities is growing all the time but the two front runners are *Imagecopy* (in all its guises) and *Flexidump*. The latter has

### KEY FACTS

#### Product:

Flexidump 3

#### Company:

Care Electronics

#### Contact:

0923 672102

#### Price:

£39.95

#### SYSTEM

#### Minimum Memory:

0.5Mb

#### Resolution:

Any

#### Computer:

ST/STe/Falcon

## LOW COST COLOUR

On the basis that the more money you pay for a printer, the better the output quality, we thought we'd test *Flexidump's* capabilities using what is claimed to be the cheapest colour printer on the market. Star Micronics kindly loaned us a Star LC100, a humble, entry-level 9-pin dot matrix colour printer with a surprising range of features and a tempting price tag. Running costs are equally low, averaging 0.3p per page according to Star.

The LC100 is capable of 180 characters per second in draft mode and 45 cps in NLQ mode or 240 dpi in graphics mode. It has eight resident fonts including Sanserif, Orator, Courier and Draft and, unusually for a budget printer, 90% of the printer's commonly-used features can be accessed directly from the control panel.

Other features include electronic dipswitches, paper parking for swapping between continuous and sheet paper, single sheet feeder and microfeed in both directions. The printer also has a quiet mode and automatic emulation changing that detects either Epson FX80/JX80 emulation or IBM Proprinter. The printer itself weighs in at just 5.2 kg and is just under 400mm long by 300mm deep and 120mm high.

I didn't expect to be impressed by a budget 9-pin dot matrix but I just couldn't help it. It is undoubtedly slow at printing full colour, high quality graphics but, with a decent spooler installed, who cares if it takes all day? Indeed some of our test prints took upwards of an hour but as this involved three passes of the print head and eight shingling runs using *Flexidump*, it isn't hard to see why. As always, the proof is in the pudding and the quality of the *Flexidump/LC100* combination was remarkable. If it's this good on a 9-pin, I'd certainly like to see what a 24-pin printer can do...



The quality of *Flexidump* with a budget Star LC100 colour printer is impressive...

# FLEXIBLE FRIEND



Desk File Image Print			
Passes		Shingle	
1	2	3	8
Printer density		Ink colors	
7) 240 DPI #		4 COLOR	
WRITE ADJACENT DOTS		Color D/P mode	
Dot pattern		FULL COLOR	
HALFTONE 4X4		K C M Y	
PATTERN ROTATE		UC REMOVAL	
Aspect		TRACTOR	
UPRIGHT		Dumps across	
MIRROR		1 2 3 4 5 6 7 8	
??? HELP ???		Sample mode	
		A.A 3x3	
		RESERVED	

Most facilities are accessed from the main screen but there's no print button, oddly enough.

as well as composites so that you can use a mono printer to produce a colour picture by inserting one coloured ribbon after another. It even converts to, and prints in, greyscale.

Drivers are supplied to cover the vast majority of printers on the market, including DeskJet 500C and 550C, Epson-compatible 9 and 24-pins and bubblejets. If you can't find a suitable driver you can sit down with your printer manual and the custom driver creation utility and write your own.

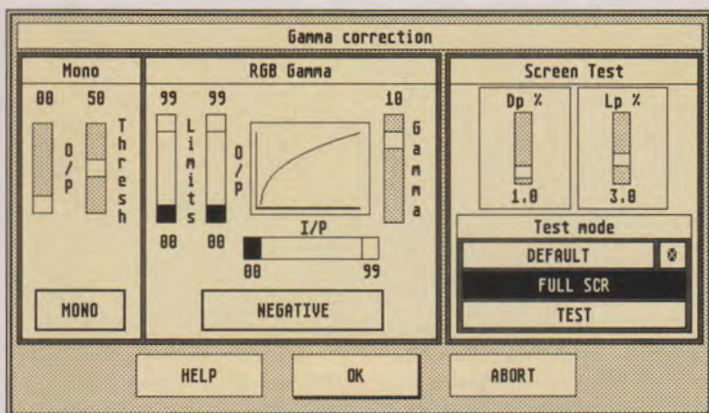
recently been upgraded to version 3 and includes some powerful features for squeezing the utmost from your colour printer.

*Flexidump's* emphasis is on total control. You can load a standard Degas, Spectrum, .IMG, .IFF, .NEO or Tiny image and print it out at any size, at any orientation on the page and with any mix of colours you choose. You can alter the gamma, ink content, brightness and contrast or even the individual colour levels to get just the right output. *Flexidump* also lets you print colour separations

Any part of an image can be selected and printed.

Screen area select			
Coords	Screen area select		Frame
Top left	0 0 0, 0 0 0		0 0
Bot right	3 1 9, 1 9 9		0 0
Width	3 2 0		RESET
Height	2 0 0		MANUAL
<div> <div>HELP</div> <div>OK</div> <div>ABORT</div> </div>			





*Flexidump even offers facilities that few of us have heard of, such as gamma correction...*

## QUALITY CONTROL

*Flexidump's* real power is in the revolutionary way that it tackles printing graphics. Most printers, whether they are of inkjet or dot matrix design, produce a certain amount of banding, especially when printing graphics and all the more noticeably when the ribbon is nearing the end of its life. The way *Flexidump* deals with this is by a process called "shingling".

This removes banding by using different jets or pins in an interlaced pattern so that errors due to faulty jets or dry areas of ribbon are much less evident. Shingling can be carried out in two, four or eight passes, with a proportional increase in output quality. The best compromise is four passes but eight passes is practically guaranteed to remove virtually all banding. Even when the test colour ribbon was virtually exhausted, the shingling with eight passes could still achieve remarkably good results.

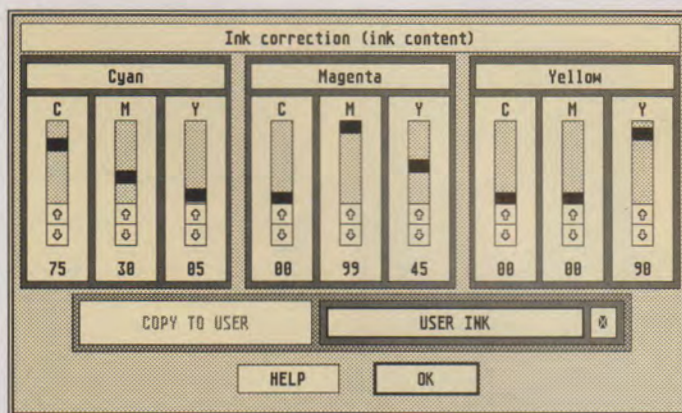
Other features include a spooler for printing off colour letterheads in bulk, an image cataloguing and printing facility, smoothing and anti-aliasing to enhance computer-generated graphics and various halftone and dot pattern settings. *Flexidump 3* runs on any Atari including the Falcon, though it looks best in monochrome. A full megabyte is recommended if you're contemplating printing larger images but it works just as well on a 520.

## VERDICT

*Flexidump* is a unique program that offers untold control over your printer, whether in colour or monochrome. While *Imagecopy* has a few other strings to its bow, such as screen grabbing, image conversion and multiple image viewing, it isn't quite as good as far as printing is concerned.

There is no printed manual, as *Flexidump* relies on its rather limited on-line help facility, and 256 colour images are limited to .IFF format only, which can be awkward. I'd like to see .GIF support added as it is

much more widely used. There were one or two spurious results, too, including odd characters at the start of a printout, which proved somewhat frustrating but on the whole *Flexidump* does as it's told. If you own a colour printer, *Flexidump* is the closest thing to essential that you're ever likely to come across...



*... and you can even correct for different ink qualities!*

## PERFORMANCE

## OVERALL

### EASE OF USE

### DOCUMENTATION

### EFFECTIVENESS

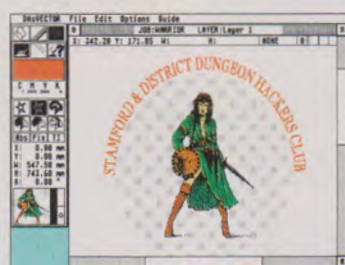
### VALUE FOR MONEY



**78%**

## WHO NEEDS PAPER!

Printing out your masterpieces on paper is all very well but once you've decorated your walls, what else can you do? One idea is to wear your favourite image on your chest – by transferring it from the paper to a plain white or pastel coloured T shirt.



**Kitting your club out with T shirts is as easy as using paint or graphics software.**

First of all you need special ink. Care Electronics supplies a range of ribbon cartridges for most makes of popular colour printer, including the Star LC10, LC20, LC100, LC200 (9 and 24-pin), LC2410, LC200-24 as well as various Epson, Seikoshia, Panasonic, Okidata and Citizen models.

Instead of ordinary ink, each one is coated with sublimation ink. Pictures can be created in the normal way, printed out onto ordinary A4 paper and then ironed onto a suitable material. This heat transfer method needs care but as long as the material is a 50% mixture of cotton and polyester, the transfer should be reasonably permanent. Inevitably the image will fade but you should get a few months wear from the right T shirt. After half a dozen washes, our test T shirts are still looking good.

Using material with less polyester content isn't a good idea as the black ink looks more like bluey-brown and the image fades very quickly. Naturally if you want to combine text and graphics into a logo design, you will need to reverse the image before you print it and the *Flexidump* software has just that feature.

The heat transfer ribbons fit into the printer in the same way as normal ones – but proof-print your picture first using the less expensive standard colour ribbon! Once you have printed out your image using the heat transfer ribbon, all you need to do is get out the iron and place a large sheet of aluminium foil over the ironing

board to protect it from the ink and heat. Then put the front of the T shirt over the board on top of the foil. Of course, if you want to print on the back, you have to reverse these instructions.

The inked sheet is then placed ink side down on the T shirt and a warm iron (set for cotton) is placed on the transfer for 30 seconds or so. The iron has to be dry – steam has rather obvious results on paper – and if it is one with holes and channels on the underside, it needs to be moved around gently to get an even heat.

Once you've added the price of T shirts into the equation, the design process isn't cheap but the fun you get from designing and wearing your own beach and nightclub wear far outweighs the cost. *Flexidump* makes light work of the job and even with a cheap 9-pin printer, you can produce spectacular results. Even if you only do it once, it's a weekend well spent.



*Any topic will do...*



*... but there's no rule that says you have to be tasteful about it!*





Nial Grimes is a freelance journalist and has been contributing to *ST Review* for far longer than we'd care to admit. He may have got to grips with the ST, but you should see him trying to program his video recorder!

## IN PUBLIC

**V**ery few people really irritate me in everyday life, but I do have a definite weakness when it comes to "computerphobics". I am on about the Joe Writers and Fred Businessmans of this world; people who could obviously benefit from using modern software, but are in mortal fear of the technology needed to run it.

You know the situation: you're in casual conversation and work (or your hobby) crops up. The word "computer" pops out and suddenly a look of awe spreads across your companion's face, the eyes glaze over and then the immortal phrase is uttered... "I wouldn't know how to switch one on...", rapidly followed by an inane grin. Why is it that seemingly intelligent people turn into piles of jelly when faced with the thought of using a computer?

This is a question that

cropped up in one of the lighter conferences on the CIX BBS recently and having thoroughly discussed the situation, none of us were any closer to understanding the problem. Sure, computers can be just a tad confusing if you've never had any experience with them, but so is driving a car and yet millions take to the roads each year.

Nobody is disputing the fact that computers also throw up some pretty tricky problems from time to time. I work with the things all of the time and yet there have been occasions where I've practically torn my hair out over persuading an ST to talk to a hard disk, or something equally silly. On the other hand, I'm quite sure that car mechanics have just as much hassle when it comes to fitting an exhaust to a 1985 Ford Sierra. The simple fact is that every avenue of life presents problems - why should

## Computerphobia...

computers be any different? And of course, the benefits always outweigh the problems (unless, of course, you choose to use a DOS PC).

Another reason people cite for being baffled by the computing world is jargon, but once again, this also applies to numerous other activities. Had you never entered a kitchen before, would you know what to call a rolling pin, a spatula or a whisk? Are "RAMdisks" and "hard drives" really that different?

When it comes down to it, most of the irrational "difficulties" with computers lie within the person who is afraid of using them. I don't know, maybe I'm overreacting, but I do get the feeling that had people's attitude been the same back in George Stephenson's day, we'd probably still be running around on penny-farthings...

## To GEM or not to GEM...

## TECH TALK

**C**urrent programs are fundamentally different from what we have been used to. The latest crop is finally catching up with the quality of applications on the Mac and possibly Windows. Programs like *Papyrus*, *CoNnect*, *Edith*, *Kobold* and many others have pushed back the boundaries of GEM and bring you a much friendlier environment to work in.

These programs have a very high degree of compatibility. They can generally run under any system, regardless of screen resolution, multi-tasking, hardware configuration, GDOS varieties and desk accessories. However, there is a price to pay. In order to work under all circumstances, these programs tend to be slower in operation, especially when it comes to screen redraws. Just compare *Papyrus* with *Protext* and you'll know what I mean. Most modern programs

require at least 1Mb of RAM, a hard disk and a high resolution display to work properly. A 520ST with a colour TV is simply not useable anymore. Even a 1Mb machine with a colour monitor is considered archaic and a growing number of programs do not support medium resolution or else add it as an afterthought. You are expected to upgrade or fall by the wayside.

It is interesting to note that most of these programs originate from Germany where the standard ST set-up consists of a 4Mb MegaST with a high resolution mono monitor and a hard disk.

In contrast, the majority of American users still have a low end set-up and as a result a different sort of program comes from the USA. The general attitude of programmers there has been to squeeze every bit of processor power to provide maximum speed. Compatibility

with graphics cards and multi-tasking was pretty rare until recently - the vast majority of American ST owners don't use them so why bother?

This is now changing. Casual users are moving over to the PC and the ST market is gradually becoming an enthusiast's scene. The people that stick with their STs tend to install *NVDI*, a multi-tasking system, graphics card and various hardware modifications, only to discover that their old software simply doesn't run on their new super ST.

Before investing any money in new software, ask yourself whether you intend to join the upgrade rush. If you do, make sure that the programs you buy will survive the never-ending upgrade path. If you are not interested in multi-tasking and just want a super-fast word processor, then *Protext* has no competition. It is a very capable and powerful program. If you intend to move into multi-task-



ing, then think again. *Protext* was not designed with multi-tasking in mind - and this is just one example as there are plenty more programs that are not multi-tasking friendly but are still superb in every other way. Being the GEM fanatic that I am, guess which program I used to write this column: *Papyrus* or *Protext*?

Ofir Gal is the technical voice of *ST Review* and has been writing for the magazine for over two years. You may be pleased to hear that his column was on time this month, nay early - a sign for the future? We'll keep you posted...



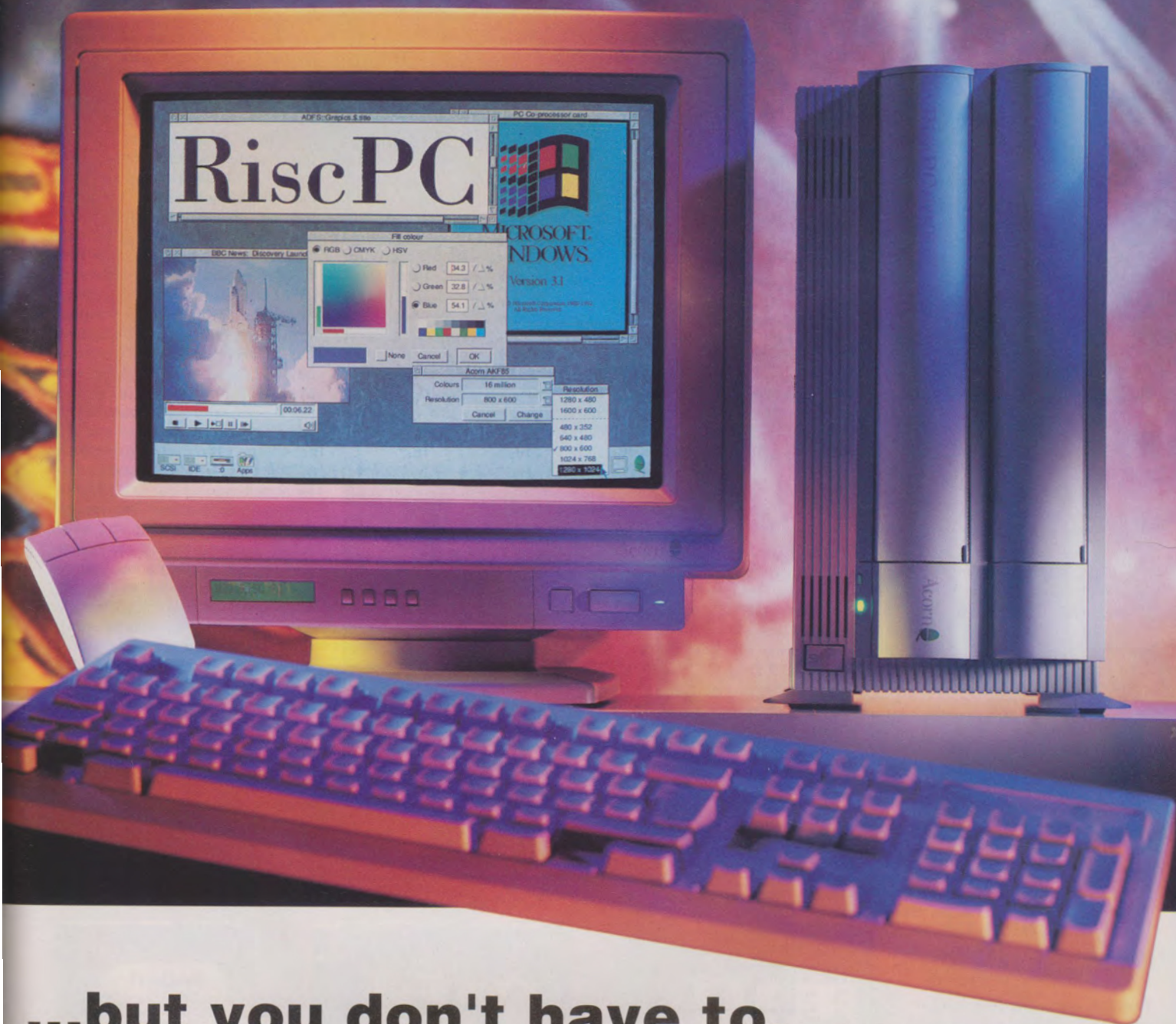
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Dan Wilga, the man behind NeoDesk and Geneva.

# DESKTOP

*Hot on the release of NeoDesk 4, Dan Wilga of Gribnif and Vic Lennard talk turkey...*

The product name of NeoDesk has to be one of the best known in the Atari industry. In terms of features, this desktop replacement has always been head and shoulders above the competition. Who is behind it? We asked Dan Wilga of Gribnif for the low-down.

"Gribnif originally consisted of three people: myself, Rick Flashman and Tricia Metcalf, who left in '92. The company started off with necessity being the mother of invention – I was very upset with the lack of capability in Atari's desktop and decided to write my own," explains Dan.

During this initial programming in 1987, Dan discovered various documented features that had been

ignored by others, hence the rather unique feel of the program. NeoDesk was born in March 1988, courtesy of Mark Williams C and marketed through The Computer Bug in Hadley, Massachusetts, a store half-owned by Rick. "In hindsight, the first manual looked like a bad newsletter," chuckles Dan.

Initial sales of several hundred were promising enough to prompt Dan, Rick and Tricia to buy the full rights to the product from the store and set up Gribnif Software on its back. Where did the company name come from? "It was a handle I had used on a local mainframe chat program." Dan lets on – but the meaning of the word remains a mystery...

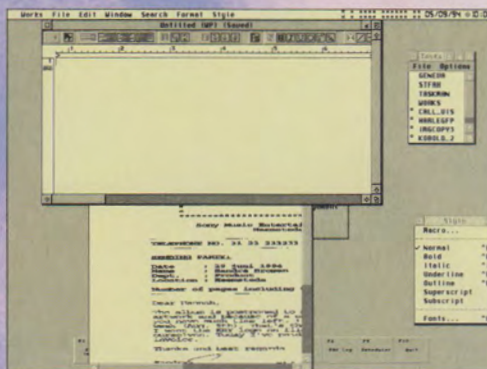
## A CLOSE SECOND

NeoDesk 2 followed in September 1988. "There were a lot of changes," Dan recalls. "The main one was the use of custom windows rather than Atari's own. That gave me a lot more flexibility in terms of window gadgets – like auto-repeating scroll bars which didn't appear until TOS 1.02 and I was still working with TOS 1.00."

Experiences in the early days helped to shape Gribnif's philosophy. "I try to maintain a very consistent user interface for NeoDesk so that a novice user doesn't have to read through a hundred pages of the manual just to discover how to use something," expands Dan.

Software testing was a luxury back in 1988. "I tested the original version by myself along with Rick and the other guys in the store," Dan admits, "while NeoDesk 2 had one beta tester!" That said, Dan spends a great deal of time checking a new feature before moving on to the next one – a practice that other, much larger companies could do with adhering to. The down side of such a procedure is that software takes a lot longer to reach the market, possibly explaining why there has been a four year gap between versions three and four of NeoDesk.

*Having started off as a way to get past the seven-window limit, Geneva will probably support MiNT in its next version so providing true pre-emptive multi-tasking...*



## STEP BY STEP GUIDE

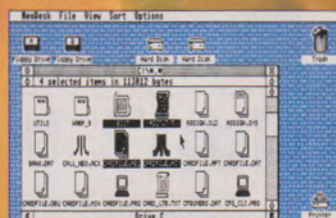
### SIX YEARS OF NEODESK

There have been four major versions of NeoDesk since 1988, along with many minor variations. Every picture tells a story...



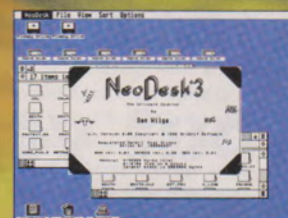
NeoDesk 1 – March 1988

Unhappy with Atari's desktop back in the bad old days of TOS 1.00, Dan Wilga decided to write his own with Mark Williams C and sell it through a local computer store.



NeoDesk 2 – September 1988

After acquiring the full rights, Dan set about improving it. Over the next two years, custom icons and support for background pictures were added and the icon editor went through major changes.



NeoDesk 3 – September 1990

With a dramatic increase in the number of users, the launch of version three led to a drastic change to the overall look and feel of the program. A new manual was also written.



# DELIVERY



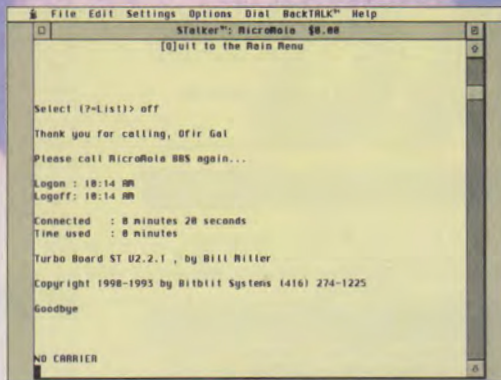
## THIRD TIME AROUND

Four interim versions between *NeoDesk 2* and *2.05* introduced various important features – such as custom icons for files, groups of files and so on. Other additions, leading up to the release of *NeoDesk 3* in September 1990, included support for background pictures and major improvements to the icon editor in terms of ease-of-use. “The icon editor went through a very major change to become an integrated module and support loads of other formats,” Dan says, with a nod of his head.

Where did the ideas for new features come from? “Ninety per cent of all changes come from people telling me what they’d like to see added. What I actually add depends on the memory consumption, the amount of time it would take to code, the ease of use and how drastic an improvement it would make to the program.”

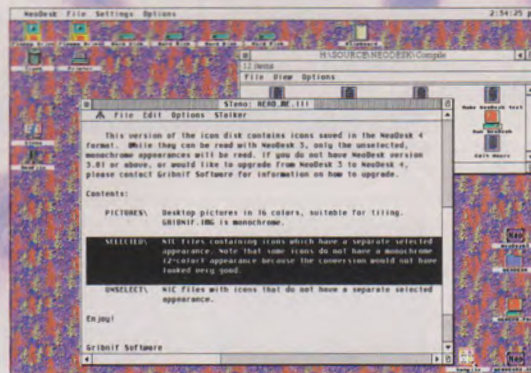
The overall look and feel of the program changed drastically with the launch of *NeoDesk 3*, coded in *Turbo C*, along with the release of a new manual.

In fact, the whole procedure was very much along more professional lines with the result that no new features were added to interim versions of *NeoDesk 3*; as compatibility issues raised their ugly heads, they were dealt with. Falcon, TT, graphics cards – Dan took all of these in his stride.



**Various programmers have approached Gribnif to publish their software, including Eric Rosenquist with the comms package, *Stalker*...**

**... and *STeno*, the text editor that runs as a desk accessory and can communicate directly with *Stalker*.**



## FOUR AND MORE

Four years on, in September 1994, *NeoDesk 4* is finally with us – and with a number of major changes as detailed in our full review of the product on page 20. “All of the dialogue boxes can be contained in windows which is very good for multi-tasking systems such as *Geneva* – file copying, deletion and disk formatting can all be done in the background,” details Dan. “Each directory window has its own menu bar and

special icons specific to that window, which cleans up the general interface. The entire desktop can also be changed into a window, useful for multi-tasking, and *NeoDesk 4* can even be run as a desk accessory.”

One nice feature is the sharing of code between *NeoDesk 4* and Gribnif’s multi-tasking system, *Geneva* which leads nicely into the latter: why did Dan code a new multi-tasking system hot on the heels of *MultiTOS*? “It started off as a way to get past the seven-window limit. I

wanted to create a system with a consistent design and better look and feel than Atari’s. I’ve also achieved a much higher degree of compatibility and avoided the speed problems that *MultiTOS* has because of *MinT*. I’ve also made changes to the AES that I’ve wanted to see for many years.”

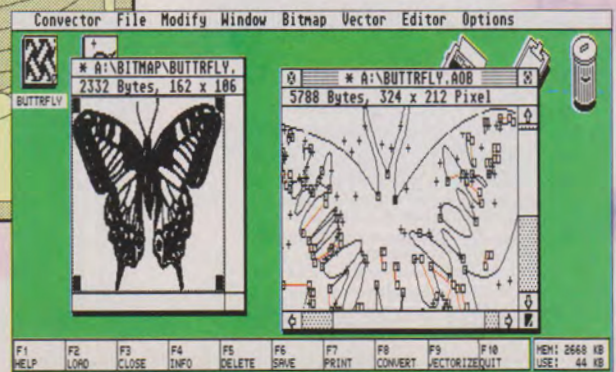
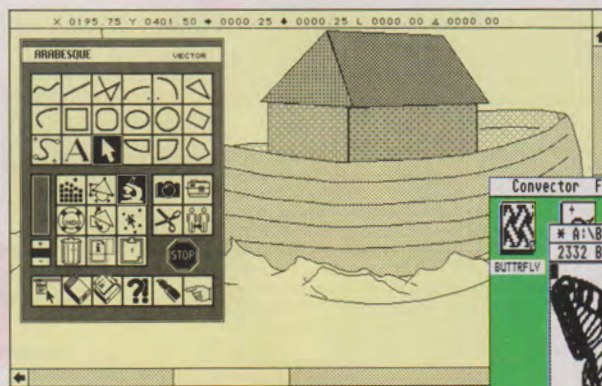
Starting in 1991, Dan coded *Geneva* in *Pure C* almost entirely from his own ideas, so explaining why this has far more in common with *MultiTOS* than *MagiC* has. But why not create a pre-emptive system that effectively takes control of the computer, rather than a co-operative one that relies on programs working together? “Mostly it’s a matter of convenience, memory usage and compatibility but pre-emptive is not out of the question – the next version of *Geneva* will probably support *MinT* for the extended file system calls,” explains Dan.

## THE FUTURE

Gribnif currently publishes various out-of-house products such as Eric Rosenquist’s *Stalker* and *STeno* as well as *Arabesque* and *Convactor*, creating and printing all documentation. Upgrades are planned for most of these, including GEM clipboard support for *STeno*. Next on the agenda is some long-overdue further development of *Geneva*.

Will Dan continue to develop Atari products? “It’s certainly what I’d like to do – I hate programming on PCs! But if the market looks like it’s not going to support ST programs over the long term then I may have no choice. I’ve certainly had numerous requests for a version of *NeoDesk* for *Windows*...”

**Gribnif also publishes two programs of German origin – *Arabesque Professional*...**



**... and *Convactor*, the vector graphics conversion package.**



NeoDesk 4 – September 1994

**The current version sports windowed dialogue boxes for use with background tasks, menu bars and special icons per window and the ability to run as a desk accessory.**



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- FALC 9 - Grotesque (Excellent), Gourd, Speeder, Plasma 30 & 50, Intel + more! (demos).
- FALC 31 - Temptation! The first disk of an EXCLUSIVE pack of JEPG pictures of gorgeous girls. Excellent quality pictures and the three disk pack contains no less than ninety pictures! Yes 90! Disks 2 & 3 on FALC 32 & 33.
- FALC 35 - NetHack 3.1.1 - 2 Meg memory+ Brilliant dungeons and dragons game.
- FALC 36 - RDE 3.1, Toswin 1.4, Uha 2.22, Zoo 2.1, Zip 2.3, Gem Bench 3.25, Good Backup 1.13, Boot Init 1.1, Fcontrol, Slibit 1.3 (utils).
- FALC 37 - Fractal Playtime, Gemview, Delapoint, Gix Gif, Binaris 2.0 + more! (art).
- FALC 52 - System Audio Manager 1.1 - assign samples to events, Digilapse 2 demo (music).
- FALC 77 - Emocs 3.11, Everest 1.5, KM Term, Atomik 3.5, X-Menu 1.3, Profile 1.43, Realcolor (run RGB shot on VGA monitor), Fullres 1.01, Swabs, Dclock 1.0, Fuzzy Clock 1.14.
- FALC 96 - When Dreams Become Reality (RGB), Warum (RGB), Inconvex (RGB) (demos).
- FALC 103 - Oxyd (excellent!), Des Losers of Des Hommes (3D shoot em up), Masters of Chaos (Dungeon Master clone), Tron, Lihor Editor, Mario Kart demo. (games).
- FALC 106 - Falcon Flight Demo - real time zooming demo over fractal landscape + great music.
- FALC 107 - Crime by the DNT crew, Magnet by Alphatech, Bobs-1. All RGB/TV only. (demos).
- FALC 109 - DMB icons - two large sets of replacement icons, Before Dawn screensaver 1.25.
- FALC 110 - Vidol - easy to use TGA viewer, Rainbow demo 0.5 - Truecolour art package.
- FALC 112 - Mahjong II - German version of this classic tile game. Disk approx 1/2 full.
- FALC 113 - Margo demo (4megs) - digitised pictures of a woman modelling a skimpy bikini!
- FALC 114 - Multi-Dialogue 1.3, Master Browse 3.2 - excellent text file viewer, T-Coche 6.0.
- FALC 115 - Octalayer 0.8 - another 8-track tracker ported from the STE + docs & source code.
- FALC 116 - Papa was a Blade Runner (4megs) new demo by EKO, very good. RGB/TV only.
- FALC 117 - POV Raytracer 2 on 2 disks, zipped & expands to nearly 5 meg! £3.50.
- FALC 119 - Moving Pixels Demo (VGA) - 4 meg+ - a mega-massive demo that requires 10 megabytes of hard drive space! From Australia, this basically shows off the Falcon itself - the sort of thing you'd see in a shop window, covering graphics, sound and productivity. Very good. Five disks - £8.00!

## GAMES

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- GAME 185 - Oxyd 2 - the sequel to the brilliant Oxyd, much harder than the original. 'H'.
- GAME 186 - Tetrix - new Tetris type game. 'H'.
- GAME 11 - A Question of Snooker, Pinball, Devastator, Roll n Nudge, Ranger.
- GAME 78 - Popeyed - a pop music game with an adult theme.
- GAME 83 - Grandad & the Holy Vest - superb animated adventure. 1 Meg+.
- GAME 104 - Blat - A very nice version of Tetris. STE ONLY.
- GAME 117 - Fast Freddy - lovely platform game with superb graphics.
- GAME 131 - Glass Buttock of Tharg - save the land from the evil buttock! 1 Meg+.
- GAME 132 - Psycho Pig - two disk platform game, very cute. £3.50.
- GAME 139 - Grandad II - the sequel to Game 83, comes on 2 disks 1 Meg+ £3.50.
- GAME 148 - Operation Blue Sunrise 3 - massive STAC adventure game. 1 Meg+.
- GAME 150 - Course Angler 1.02 - go tackle fishing on your ST!
- GAME 151 - Sim Pig! - a brilliant pig farm simulation! Like Sim City & Sim Earth.
- GAME 157 - 817 - bomb the buildings, F-16 - very good flight game, 8 missions.
- GAME 178 - Argon, Out, Codename Bomb, Pyramid, Disk Hunt, Sintel, Turbo, War Jeep, Plumber, Pricer, Planet Man, Uboat, Ypsilon - 13 games!
- GAME 179 - Asteroid, Bang 3, Bottle, Bellum, Quiz, Blaster, Chunks, Europe, Explode, Fuzzball, Gems, Invaders, Megaroids, Micro, Octapod, Othello, Pac Man, Plant, Rockfall, Taux, Tennis, Wall Street, Zappy.
- GAME 180 - Mystic Walk, Deep Lair, Football, Harris Goes Skiing, Haunted House, Invaders, Jumper, Room, Stoneage Deluxe, USA, Zyxx, Firestorm.
- GAME 181 - Utopas 1.5 - very slick STE only Oids/Gray type game, Endurance - 3D game.
- GAME 183 - Towers - a great new Dungeon Master Clone - the best yet! 2 disks (1Mb+) £3.50.
- GAME 187 - Karate Champion, Hector and the Mutilant Vampire Tomatoes - 16-bit platform.
- GAME 188 - Premier Mahjong II - excellent version of this superb tile game. 60Hz only.
- GAME 189 - Cut Lee's Quest - platform game for kids, Mindmell - roleplaying fantasy game.
- GAME 190 - Quest for Knowledge - quiz type game set in a maze arena.
- GAME 191 - Wails of Illusion - yet another Dungeon Master Clone, good one though. 1 Meg+.
- GAME 193 - World Fighting Championships - beat up opponents from all over the world.
- GAME 198 - Roll-it - ingenious puzzle game with 40 levels, a sort of ball/tile game. 1 meg+.
- GAME 199 - Skulls - A flash STE only version of Minesweeper from the PC, good. 1 meg+.
- GAME 201 - It's A Mug's Game - good overhead view boxing game with nice graphics etc.
- GAME 204 - Gone to the Dogs - bet on the races! Gray - good arcade game based on Oids.
- GAME 209 - Money Mania - collect all the money from each screen, loads of nasties etc. Good.
- GAME 210 - Ruthless, shoot em up, Spherical - good platform game, Serendipity - good puzzle.

## BUDGIE GAMES - £2.75 EACH

- BUGAM 89 - Horse Racing Simulator for 1 to 5 players. Buy/sell and bet!
- BUGAM 104 - Jetpack - another faithful clone of a classic Spacey game.
- BUGAM 113 - Football Tactician - formerly a £20 release! Excellent!
- BUGAM 121 - Super Scramble - take a trip to the 8-bit days with this shoot 'em up.

## DEMOS

- DEMO 356 - Kubo Club Culture Mix Pack 1 - 6 great bits of club music.
- DEMO 355 - The Brace Demo - nice auto-running demo from Diamond Design.
- DEMO 351 - The Edge of Panic Demo - a good STE only demo by ACCS.
- DEMO 350 - Exhaust demo - another good STE only demo by ACCS, 1 meg EXACTLY!
- DEMO 342 - Sid James Demo - clips from the films - STE only 1 meg+, 2 disks £3.50.
- DEMO 335 - Reality is a Lie - a 13 screen demo by Psychomix, very good. 1 meg+.
- DEMO 333 - Cemetery demo - a good digi-music demo.
- DEMO 330 - Beginning of the Ending - this demo actually plays in the background of a game of breakout which is played with 5 balls! Hows your concentration.

## ART & GRAPHICS

- ART 1 - A disk full of 23 miscellaneous utilities including viewgif 1.2.
- ART 51 - Crackit 1.36 - latest version of the best ST art package! 1 Meg+.
- ART 128 - Gemview - new version of this superb viewer/converter.
- ART 157 - PAD 2.4 - English version of this high res drawing package. 1 Meg+.
- ART 172 - Paintshop Plus 2.03 - A commercial quality drawing package.
- ART 187-196 - Temptation! Volume 1 - the first pack in a whole new range of top quality pictures of tempting girls! Two versions (please state which) - one for STE and one for STE which takes advantage of a 32/68 color palette! EXCLUSIVE to New Age PDL! Ten crammed disks at just £15.00!
- ART 209 - Erotic Dreams slideshow 1 - all pictures of Supermodel Cindy Crawford.
- ART 212/213 - POV Raytracer, the best raytracer around! 2 disks. £3.50.
- ART 223 - Easy Art - A nice art package with many useful features.
- ART 225 - Maskavians Girls 1 PCS Slide Show - loads of gorgeous women in full colour.

## SOUNDTRACKER MUSIC

- TRAC 129 - Four, Progfunk, Cult 2, Cult 3, Federal Force, Rave 1.
- TRAC 128 - Can, Short, House, Jewel, Spassong, Celtic 6, Rappit, A-Team, Sweet Dreams.
- TRAC 127 - More Lemmings, Backpocket, Psychic 1, Bushfire, Donna 2, Ace Base, Echoing.
- TRAC 126 - Scrambled Mind, 1+ World, Wyre It, Hope Part 2, Lotus Turbo 2, H-Metal.

## WORDPROCESSING & DTP

- WORD 1 - ST Writer Elite, EDI Text, Zap ST, ST Page, Typist, Desk Accessories. 'A'.
- WORD 4 - First Word + tools, Grammar checker demo, Spell Binder, Text Filter. 'A'.
- WORD 5 - Calamus Demo, no save function but you can print. 'H'.
- WORD 9 - Calamus Support disk - loads of utilities for Calamus and fonts etc. 'H'.
- WORD 12 - Papyrus Office Demo 2.26 - good document processor with fonts etc. 'H'.
- WORD 13 - Calamus S demo - fully functioning except save. 2 disks. £3.50. 'H' 1 Meg+.
- WORD 15 - DB Writer 1.8 - very slick wordprocessor with spellchecker. Many Features. 'A'.
- WORD 16 - Marcel 2.2 - Nice new wordprocessor with spellchecker and many functions. 'A'.

## BUSINESS

- BUSI 2 - Sheet 2.0, Dbase One, First Base 1.6, Home Budget Template. 'A'.
- BUSI 4 - Opus 2.2 - brilliant spreadsheet. 1 Meg+ 'A'.
- BUSI 6 - Double Sentry Book Keeping System, Address Book. 'A'.
- BUSI 11 - Compact Office Management Program 2.05 - for businesses, tons of features. 'A'.
- BUSI 12 - Inventory PRO - keep track of stock levels, GP Patient Care for GPs. 'H'.
- BUSI 14 - Data Techniques 1.41 - easy to use but powerful new shareware database system. 'A'.

**FREE ST CATALOGUE  
WITH  
FREE SOFTWARE  
FOR NEW CUSTOMERS  
UPON REQUEST**

## UTILITIES & APPLICATIONS

- UTIL 2 - Startegem, Head Start 1.1, DC Clock, Disk Checker, Hard Disk Utils, Ram Disks, Hack 'n' Copy, Turtle 3.2 (HD backup), Megafomat, Memory Test. 'A'.
- UTIL 4 - Pools 2.5, ST Init 3.4, Switcher - loads programs faster, 20 DC utilities. 'A'.
- UTIL 5 - F-Copy 3, DC Showit, Desk Manager, Disk Scan, Mono Emulator 5, Spool, DC Stuffer (loads 32 accs), Speech Synthesiser, Mouse Accelerator. 'A'.
- UTIL 6 - James The Butler, London Phone Codes, MenuSYS, Pinhead, Super Calendar Batch Startup, Auto Sort, Postmaster, No Bombs, E-Disk, 9 Quick Utilities. 'A'.
- UTIL 13 - German to English translator, Last Print, DC Salvage, MINT, Maccol 3.0. 'A'.
- UTIL 14 - Printer Drivers inc: Canon Bubblejet, Gume Daisywheel, Brother + Epson. 'A'.
- UTIL 16 - Chameleon - loads and unloads accessories without having to reboot, Sticker 2.0 (H), Definitive File Selector, Super Virus Killer, Benchmark. 'A'.
- UTIL 19 - Your Second Manual, Jokes, GDSOS info, Bombs info + several magazines. 'A'.
- UTIL 30 - Superboot 8.1, Build Your Own Scanner, Report Writer, Disk Cleaner. 'A'.
- UTIL 35 - Cheethah 1.1 (high speed copying util), Rainbow TOS patches, Unarj 2.2. 'A'.
- UTIL 38 - Printer Drivers inc: KXP 1124, Star LC24, NEC Pinwriter, Brother, Canon, Citizen, HP Deskjet, Oki, Gume, Taxan, Toshiba, Ritemon, Alton. 'A'.
- UTIL 40 - Loads of packers inc: Atomik 3.5, Automation 5, Dragon 3, Fire 2, Ice 2.4, Pompey 1.9, Speed Packer 2, Branch Always Packer, Multi Depacker 1.5. 'A'.
- UTIL 42 - Intro Maker - mix pictures, sprites, scrolls and music together. Colour only.
- UTIL 45 - Kaos Desk 2.01, Terra Desktop 1.36 - replacement desktops. 'A'.
- UTIL 46 - STOS Shoot em up builder kit 0.6 - colour only.
- UTIL 53 - TOS Version 1.0 - allows you to run programs that don't run on your TOS. 'A'.
- UTIL 54 - Message Scroller, Archiver Shells, Envelope Printer Demo, Mega Cracker. 'A'.
- UTIL 57 - Revenge Doc Displayer 3.0, Wordfinder 3.0, Desktop info configurator. 'A'.
- UTIL 58 - Career Themes Inventory and Personality Tester - great fun!
- UTIL 59 - Neodesk patches - upgrades 3.01 to 3.02 and 3.02 to 3.03. 'A'.
- UTIL 60 - JC Label 1.3, Jon-Dos 1.7, Flowchart Compiler, Boot Time 2.0, Multisync. 'A'.
- UTIL 62 - BJ Chrome 1.1, Desk Master, Grocery Lister, Silk Mouse, Auto Load, Blitz. 'A'.
- UTIL 66 - Nations X utility disk - over 150 programs! Everything you need to get you started! Includes disk utils, diary, virus killer, packers etc. - highly recommended! 'A'.
- UTIL 67 - Label CAD 2.2 - design cards, posters etc. Document files on UTIL 68. 'H'.
- UTIL 70 - Route Finder 1.8 - Like Autoroute - plans journeys for you, SpinED 1.3, Die UHR. 'A'.
- UTIL 74 - Award maker - easy to use program to create certificates with nice fonts, borders.
- UTIL 75 - Idealist 3.4 - file printer that saves up to 80% of paper used! 2 disks £3.50. 'A'.
- UTIL 77 - Before Dawn 1.25 - latest and biggest version of this screen saver. 2 disks £3.50.
- UTIL 79 - Spectrum Games - a disk full of games to go with the emulator on Util 55. 'A'.
- UTIL 80 - Terradisk 1.38 (latest), X-Jet 097, Curtains - protect your ST from snoopers. 'A'.
- UTIL 82 - Beropress 2.6 - create posters, banners, gift cards, letters etc. 'H'.
- UTIL 83 - Spectrum Emulator 2.07 - latest version - 2 disks + example programs. £3.50.
- UTIL 94 - OMEN 2.45 - A new Open Multi-tasking Environment for all STs. 'A'.

## MUSIC & MIDI

- MUSIC 11 - Arpeggiator, Zeppelin, MIDI Beat, Project, Jukebox, MKS-50. 'A'.
- MUSIC 12 - Henry Cash Sequencer, Composer. 'A'.
- MUSIC 16 - Yamaha PSS790 Editor, includes loads of sample voices.
- MUSIC 22 - Alchemie Junior 2.2 - sequencer with real-time, multitasking etc. 'H'.
- MUSIC 23 - Sound Merlin - good ex-commercial program, Mozart's Dice Waltz - compose music without musical knowledge. 'H'.
- MUSIC 24 - Octalayer 8-track tracker - STE only, Pitracker 2.1, YN Tracker.
- MUSIC 26 - PSS Utilities disk, loads of programs including patch editor, librarian etc. 'A'.
- MUSIC 27 - Casio CZ sounds, 32-track sequencer, Kawai K1 editor, MIDI menu. 'A'.
- MUSIC 29 - Kawai K1 synth sounds. 'A'.
- MUSIC 35 - Roland 'Dr' Series Sound Banks for DS, D10, D20, D110 and GR synths. 'A'.
- MUSIC 36 - Final Score 2.0 - score writing system, 'H', EKSEQ 1 - 100 track sequencer. 'A'.
- MUSIC 38 - 790 Dump, ST Sound 2 - record, play, compress and edit samples.
- MUSIC 39 - SSP PD Voicepack - patches for the Roland GM-70, TB12, Roland D110.
- MUSIC 45 - Noisetracker 2 - The latest version of our most popular tracker program.
- MUSIC 47 - Quartet files in A4 format, MIDI Master Drummer, sample replay. 'A'.
- MUSIC 49 - Rowland D10, D20 editor, K1-K4 converter, Busker demo. 'H'.
- MUSIC 51 - RIFF 1.32 - Simple solution to produce those awful backing tracks. 'H'.

## EDUCATION

- EDUC 1 - Kid Music, Kid Notes, Kid Piano, Kid Puzzle, Kid Graph, Rebus Writer.
- EDUC 7 - Michael's Big Adventure - colourful graphics, easy to play. Age 8+.
- EDUC 9 - Bodyshop, Computer School 2 & 3, Butterfly in the Park.
- EDUC 21 - G.C.S.E. Higher Maths Grade 2 & 3, François 3 - French Tutor.
- EDUC 22 - G.C.S.E. Chemistry Tutor - all you need to attain grade 'C' or above.
- EDUC 23-26 - CIA World Factbook - four disks - crammed with information on hundreds of countries + weights & measures and a complete chemistry reference book! £6.50.
- EDUC 39 - Mini Magic Storybook - cut down version of the successful commercial packages.
- EDUC 43 - Professor Clever 2 - teaches kids aged 5-11 about numbers, spelling and time.

## PROGRAMMING

- LANG 1/2 - Sazoban C Compiler release 2. Includes documentation, shell etc. £3.50.
- LANG 5-9 - GNU C++ Kit - Hard Drive + 2.5meg required, not for novices! 5 disks £8.00.
- LANG 13 - Professional GEM guide - 17 chapters of tutorial with C source.
- LANG 16 - STOS Tutorial and various Basic programs.
- LANG 27 - GFA Basic v.2.0 - GFA Expert - a nice GFA Basic tutorial.
- LANG 29 - STOS Tracker - adds a new set of STOS commands for Soundtracker.
- LANG 36 - STOS Extensions: Missing Link, Misty, Blitter, MIDI, STE, + 7 more!
- LANG 37 - STOS Software pack 1 - millions (almost!) of routines etc.
- LANG 41/42 - STOS 3D - brilliant extension allowing you to program in 3D. 2 disks £3.50.
- LANG 43 - A disk crammed to the brim with STOS ACBs.
- LANG 44 - STOS Adventure Creator 1.03 - write your own graphic adventures. 'C'.
- LANG 45 - Heat 'N' Serve Sazoban C - a very easy to install version of this compiler. 'A'.
- LANG 53 - STOS Extra Extension 2.01 - adds about 52 new commands to STOS. 'A'.
- STOS 17 - The latest issue of STOSSER disk magazine, tutorials, articles, reviews etc.
- BUPRO 2 - 68000 Programmers Library - hundreds of routines for games. £2.95.
- BUPRO 4 - Moving Bytes 1 - more routines for screen effects, music, scrolls. £2.95.
- BUPRO 16 - ST-68K Reference 3 - includes full data on ST internals, excellent. £2.95.

## THE ST HANDBOOK - £2.50

A brilliant new magazine dedicated to PD and Shareware with stories, articles, news, reviews, competitions, charts and lots more! Issue four is now out and this issue comes with a free cover disk full of games and utilities. New Age PDL are official stockists of the ST Handbook - order your copy now! A bargain at just £2.50. Please state which issue.

## ACCESSORIES & COMMERCIAL ALL ITEMS UK ONLY

- Easy Text Professional DTP (1 Meg+) £35.95
- Easy Text Professional Vector DTP (2 Meg+ & HD & Speedo GDOS) £36.95
- Introducing Atari ST Machine Code - book & disk £17.95
- Beginners' Guide to STOS Basic - 618 page ringbound manual £32.95
- ImpPrint, for quality mono printouts on 9 or 24 pin printers £9.95
- ImpPrint, same as above but for colour printers £13.95
- Calamus 1.09 - mono 1 meg+ £57.95
- Calamus SL - Hard Drive plus 2 meg required £188.95
- Outline Art V3.0 - Mono 2 meg required £188.95
- Mr. Smart's BIG Time - 25 commercial educational programs £24.95
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- Rainbow - great new art package for the Falcon 030 £28.95
- ST/STE Mouse £12.50
- Quickshot Joystick £6.95
- Mouse/Joystick Extension leads £4.95
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- 200 Capacity Disk Box £9.95
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- ST or Falcon dust cover £3.45
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- Mouse house £2.95
- Mouse mat £2.95
- 10 High quality blank disks £3.45
- 50 High quality blank disks £19.95
- 100 High quality blank disks with 100 cap disk box £41.95

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## ORDERING DETAILS:

All orders MUST be accompanied by payment. In the UK send a cheque or uncrossed postal order made out to 'New Age PDL'. Elsewhere any form of payment in sterling except for credit cards. Postage for PD disks as follows: UK is FREE! Europe 15p per disk, elsewhere 50p per disk. There is no minimum order.

**NEW AGE PDL (DEPT STR18), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD TEL: (01702) 480691**



*At last – a kit to speed up your modem port. Ofir Gal flies with the RSVE...*

# DASHING DATA!

The ST features an industry-standard RS232 serial port to which can be connected almost any modem. Yet this port has been plagued with problems throughout the history of TOS. Many hardware and software patches are now available – in fact, so many that you need a table to figure out which one works with your system!

The latest generation of Modems feature real-time data compression, allowing effective transfer rates of up to four times the normal Modem speed. This is known as V.42bis and most new Modems support this protocol.

In practice, on suitable files, a 14,400 baud (bits per second) Modem should be able to transfer data at an effective rate of over 40,000 bits per second on non-compressed files. However, the computer

connected to the Modem must also be able to transfer data at this rate and all ST and STe models are limited to 19,200 baud, so limiting the maximum transfer rate. If the computer cannot handle the data, there's not much the Modem can do about it!

## HARDWARE HACKS

Various hardware modifications have been published in magazines. These increase the serial port rate to 38,400 baud but usually require some technical skill to install and also fix the rate, possibly causing incompatibilities with fax software, for example.

The only safe route has been to upgrade to a MegaSTe or a Falcon – until now. The latest hardware kit to appear, RSVE, is designed with full compatibility in mind.

## INSTALLATION

RSVE is a tiny board, measuring just 2cm square, that can be placed anywhere on the ST motherboard. There are only four wires that need to be soldered: two of these supply voltage and earth while the other two are soldered to the MFP chip. One of the pins on the MFP has to be cut and the installation is complete. If you trust yourself with a soldering iron, then the RSVE installation is fairly

easy. An LED is used to indicate when RSVE is active – rather odd, as it is not visible once the ST is assembled, but it's useful for checking the installation. This LED lights only when the new serial speeds are being used.

RSVE relies on the excellent *HS Modem* patch for software installation. This is extremely difficult to set up and System Solutions supply a pre-configured version comprising of two small programs that have to be copied to your Auto folder.

Accessing the new speeds depends on the comms programs you use. Up-to-date programs like *CoNnect* automatically detect RSVE and allow you to select the three new speeds directly – 38,400, 57,600 and 115,200. With older programs, the system uses a simple trick. The obsolete speeds of 110, 134 and 150 are automatically remapped to the new higher speeds so if you want to get 38,400 baud using *Uniterm*, simply select 110 baud instead!

## PERFORMANCE

On a standard, non-accelerated ST or STe, only the 38,400 baud speed will function – the ST is simply unable to cope with anything faster. At this rate, using a 14,400 baud Modem, you should be able to send and receive data at around 2,800 characters per second. The higher rates are usable if you have a 16MHz or faster processor installed.

The board can also be used to speed up the MODEM1 port of the MegaSTe and TT and could prove useful when used with serial networking software.

## VERDICT

If you are a comms fan with a fast Modem, you should seriously consider RSVE. It's a tried and tested board that pushes the ST as far as it will go.

It works well and suffice to say that all System Solutions employees have installed RSVE in their STs!

## KEY FACTS

### Product:

RSVE

### Company:

System Solutions

### Contact:

081-693 3355

### Price:

£39.95

### SYSTEM

### Minimum Memory:

0.5Mb

### Resolution:

Any

### Computer:

All except Falcon

## PERFORMANCE

### INSTALLATION

### EFFECTIVENESS

### VALUE FOR MONEY



## OVERALL

**87%**



## STEP BY STEP GUIDE

### IT'S A FIT UP!

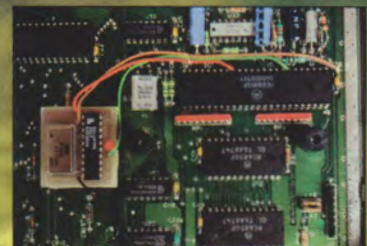
Just follow one of our famed step-by-steps to see how to fit the RSVE board...



**1** The RSVE board can be placed anywhere in the computer and secured into position using the supplied double-sided sticky pad.



**2** The installation involves the soldering of four wires. Two of these are soldered to pins 7 and 16 of the MFP chip while the other two are connected to the main board.



**3** The final part requires you to gently cut the connection between pins 7/10 and 16. Install *HS Modem*, log on to your favourite BBS and sit back in wonder!



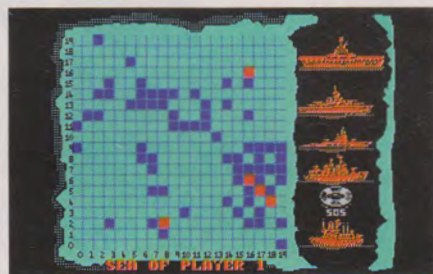
**D**o the names *Manic Miner*, *Uridium*, *Lords Of Midnight* and *Alien 8* ring any bells? They should do, if you ever owned a Spectrum, because ten or so years ago these were some of the best games around. Far from being dead and forgotten, these games are still being played today. Not on the Spectrum though, but on STs and Falcons.

The technology behind this feat is emulation: the modelling of one computer system by another. The ST has always been well-provided for in this area. For serious users there are Mac and PC emulators that allow useful work to be carried out by using applications not available for the ST. On the more frivolous side, the public domain contains emulators for the Spectrum, ZX81, Commodore 64 and Atari 400, giving access to a wealth of classic games from the early eighties.

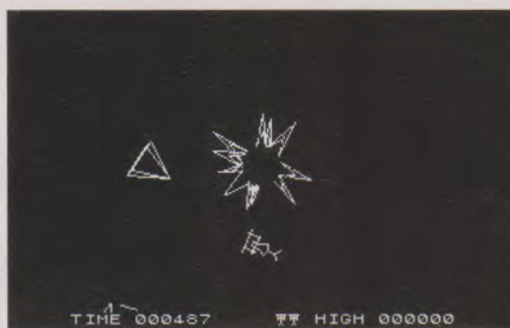
## SPECCI

The Spectrum emulator, *Specci*, by Christian Gandler is an excellent example of the genre. Now in version 2, the highly polished package provides a complete emulation of the Sinclair machine, including the optional add-ons Interface 1 and 2. *Specci* runs on all machines of the ST range with at least 1Mb of RAM, including the Falcon, in either high or low resolution modes. The real

*Not just arcade games, but also computerised versions of traditional games we usually play on paper – Battleships without the pencils!*



*Just in case you thought all the old games were good, Schizoid had no colours, rotten sound and no gameplay...*



*Good computers never die – they just get emulated on others! Jon Ellis investigates a trend at one end of the spectrum...*

# PURE SPECULATION

*To jog your memory of the multi-functional, spongy rubber keyboard, the package includes some hints...*



quality of the package lies in the accuracy of the emulation. As the documentation discusses, the modelling of the Spectrum is not absolutely complete, but the loopholes are very small indeed. Every piece of software tried worked perfectly, from games to application programs.

As testament to this, all screen shots in this feature were taken from a Falcon. Finally, and best of all, the emulator is completely free as the author has released it into the public domain.

## GETTING GOING

If all of this has filled you with the desire to have just one more game of *Manic Miner*, here is how to turn your ST into a Spectrum. The first task is to get hold of a copy of the emulator itself.

This should be available from your favourite PD library or bulletin board. Make sure you get hold of the latest version (v2.07) as its most widespread predecessor (v1.2) had some awkward bugs.

Setting up the emulator is made simple through the supplied installation program. This asks which parts of the package you wish to install, and then unpacks the relevant files and copies them to a named directory. TT and Falcon owners have the luxury of their very own version of the emulator, specially compiled for 68030 machines.

A 29-page English documentation file gives full details of the various emulator options and the supplementary programs that form part of the package.

These include utilities to jog your memory of the Spectrum's keyboard layout, display Spectrum screen images and others.

*Specci, the excellent Spectrum emulator, has even more features at version 2.*



*Some arcade classics are being reborn on the latest hardware – Tempest 2000 on the Jaguar, for example.*





## SOFTWARE

Once the emulator is installed and working, it's time to find some software. The emulator archive includes some games, but these are probably not the ones that most people will want to play. A small amount of Spectrum software is available from ST public domain libraries, usually in the form of companion disks for the emulator. Also, the emulator can read the file format used by Spectrum emulators on other machines, such as the PC, so it might be worth trawling through non-ST PD library catalogues too.

It is possible to transfer your own Spectrum software onto the ST, but the process is not straightforward. The basic problem is the incompatibility of the storage systems. Spectrum software is most usually stored on either cassette tape or on the marvellous Microdrives, neither of which the ST can cope with directly. Spectrums fitted with Interface 1 have a standard serial port that can be used to communicate with the ST, though this needs suitable software at both ends of the link.

As an alternative, Warzone PDL



*Polishing up those skills – you never really forget how to do each level once you've wandered around the caverns of Manic Miner...*

(0272 553758) sells a complete kit called the the **Speculator**. This includes the emulator itself, some games, a cable to connect the ST printer port to a tape recorder and some software to read Spectrum tape files. Apparently this can be made to work well, though it is a little fiddly to set up, and the software is not too happy on a Falcon. Check that the kit includes the latest version of the emulator.

Finally, and easiest, if you have access to the Internet, there is a vast archive of Spectrum software available for anonymous FTP from <ftp.ijs.si> in the directory `/pub/zx/snapshots`. If none of this means anything to you, check out the September and October *Comms Coaching* pieces and all will become clear.

## WHY BOTHER?

Why would anyone want to revisit the old Spectrum games? In a nutshell: playability. For all the pretty graphics and sampled sound expected from modern ST software,



*Alien 8 formed part of a series of puzzle games with 3-D graphics and cute animation.*

playability is still the key to success. If a game is too simple, too complex or too pointless, it rapidly becomes boring.

With low resolution graphics (256 by 176 pixels), only eight colours and the sound quality of an egg-timer, the Spectrum was hardly at the cutting edge of technology for its day. However, it was cheap and popular, making it a large market for games publishers. To produce a best-seller in such a competitive environment, the pressure was on programmers to push the machine to the limits and on designers to come up with

## TALKING TECHNICAL

## HOW DO EMULATORS WORK?

An emulator is a program that attempts to copy the behaviour of another machine. If this is done well enough, original software can be run. The most obvious aspect of emulation is interpreting the old microprocessor's machine code. This is a relatively easy task – it is the modelling of the rest of the hardware that is hard. Each peripheral, from the disk drive to the screen, from the printer to the modem, has to be represented accurately for the emulator to be useful. Serious emulators, such as Spectre-GCR or AT-Speed, use add-on hardware to help in this task. Of course, a computer is much more than simply the hardware: there is also the operating system to take into account. Some emulators include this as part of the package.

## WHY DO THE GAMES SEEM SLOWER?

It's not your memory playing tricks on you – the software probably is running more slowly under emulation. The reason for this is simply the amount of work the emulator has to do. On the Spectrum, a single machine-code instruction might be processed in under a microsecond. On the ST, although it has a more powerful microprocessor running at over double the speed of the Spectrum's Z80, each Spectrum instruction has to be modelled by

several 68000 instructions. Since the ST has to emulate all the hardware features of the Spectrum too, it is not surprising that things are a little slower. In fact, even a Falcon has trouble making the games run at full speed, though a PowerUp 2-accelerated machine seems just about right. Of course, a bit more time is no bad thing if your reflexes have slowed a little over the last decade!

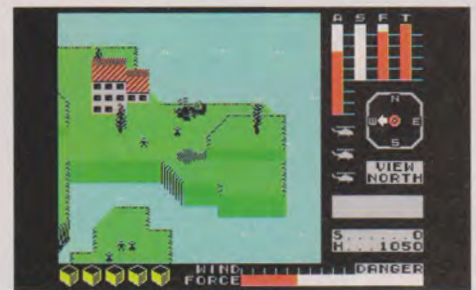
## WHY ARE SPECTRUM GAMES SO SMALL?

It comes as quite a shock after being used to 200Kb and 300Kb ST games to realise that the Spectrum only had 48Kb of memory, and some games ran in 16Kb! ST games are bigger for two main reasons. Most importantly, exploiting the more advanced sound and video systems of the ST requires lots of memory. The basic ST screen eats 32Kb on its own; running at 640 by 480 pixels in 256 colours on a Falcon costs a whopping 307Kb. Large multicoloured sprites for such video modes occupy much more space than the 8 by 16 pixel images on the Spectrum screen. Add in ten seconds or so of sampled sound, and the memory bill mounts rapidly.

The second contribution comes from a difference between the machine codes of the two computers. Many Z80 instructions occupy a single byte of memory, whereas the minimum size for a 68000 instruction is two bytes, and many are four, six or even eight bytes long.



*OK, I give up – where did I put that ancient old Speccy magazine which had the infinite lives cheat for Jet Set Willy?*



*One of the most inventive, non-violent games for the Spectrum, Cyclone has you rescuing islanders from the oncoming storm.*

addictive, playable games. Naturally, not every game made the grade, but enough did to create a substantial legacy of software with lasting appeal.

Looking ahead, emulation gives old machines the opportunity to live

on – not as lumps of plastic and silicon, but as software running on the latest high-performance systems. Perhaps in a couple of years, keen DTPers will still be running *Calamus*, though not on an Atari but on a fast PowerPC-based ST emulator!

## COPYRIGHT

**One unresolved issue raised by the emulator is that of copyright. There are two aspects to this: the rights to the Spectrum operating system itself, a version of which is included as part of the emulator package; the ownership of the individual software titles.**

**The Spectrum was bought by Amstrad, which therefore owns the operating system. Strictly speaking, the operating system file should not be distributed without their permission. Commercial emulator products avoid any problems in this area either by licensing the operating system for distribution as part of the package, or by requiring the user to source their own legal copy of the software.**

**The status of the games programs is rather less certain. In many cases, the original publishers are no longer in existence so it is hard to know who owns the copyright. A thorny area, with no easy answers.**



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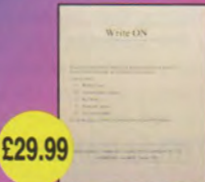
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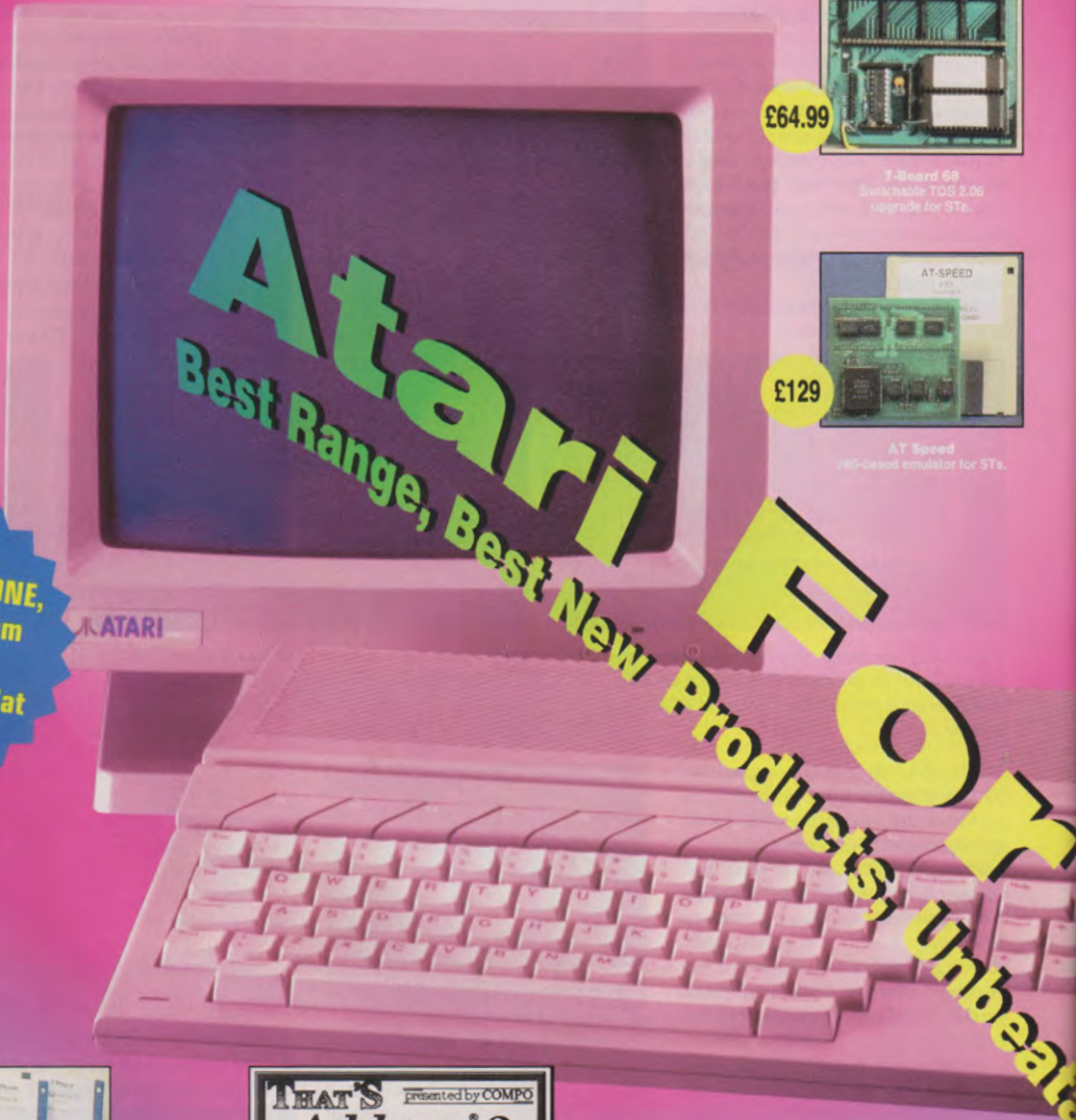
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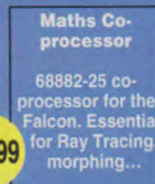
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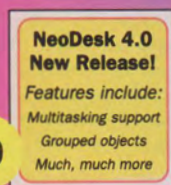
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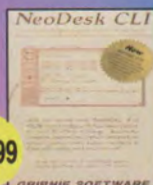
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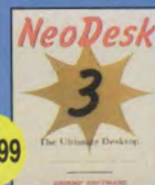
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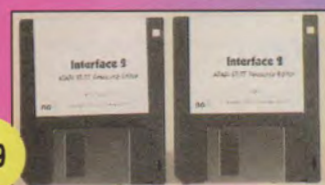
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
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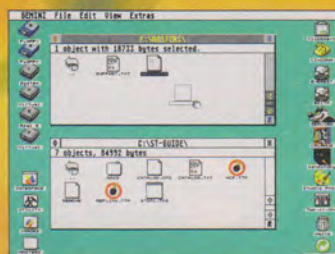
## STEP BY STEP GUIDE

### HELP AT HAND

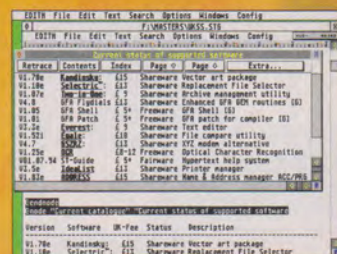
You've read the hype – now here's the help!



**1** Create your basic ASCII text file and organise it into a series of topics with a table of contents (TOC) at the start. Add @node "<TOC entry here>" and @endnode commands between each topic.



**2** Create a folder called GUIDES on C:, or in a RAMdisk on a floppy system, and then drag your file onto HCP.TTP. Edit and repeat if errors are reported. After compilation you'll find your hypertext in the GUIDES folder.



**3** Call the viewer and test your .HYP file. Make any necessary changes to the source file and recompile. Congratulations – you've created your first hypertext, everything that follows is just icing on the cake!

You'd be forgiven for having never heard the word "hypertext". It's a document with cross references in the form of Links that are used to jump around the running text, so moving between related topics. Using a hypertext viewer, links are highlighted, usually in a different typestyle, and can be selected to roam around the document. Depending on your computer and the particular hypertext system, the links can access other documents, menus, images, sound and video clips.

# GUIDE TO

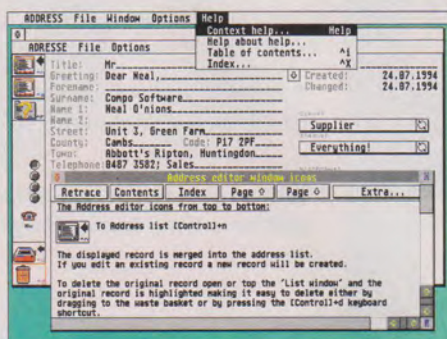
How would you like your favourite programs to have on-line help? Joe Connor introduces one possible solution – the ST Guide hypertext system...

### WHAT USE IS HYPERTEXT?

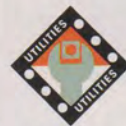
If you've seen or played with a CD-ROM-based encyclopaedia such as *Microsoft Encarta*, you've already used a state-of-the-art hypertext. The reader interacts using a slick point-and-click interface and can be fluently browsing related topics within minutes – only the most ardent bookworm would enjoy such an action when confronted with a row of printed encyclopaedias!

A popular use for hypertexts is to provide context-sensitive on-line help within software programs. Here they offer positive advantages over the traditional printed instruction manual. Selecting Help displays the relevant page in the hypertext viewer along with tools to help you locate the exact topic you're interested in. Wading through a hefty manual is more suited to sitting in an armchair with your feet up during a winter evening but this is the '90s! If you want a quick result, a hypertext system is your best bet.

Another benefit that isn't immediately obvious concerns the development cycle for any software project. At some point, a version has to be frozen and used as the basis for the printed manual but you can bet that the programmer will add some



It's easy to include images in your hypertext – here they're used to good effect in Address



desirable new features which either have to be held over for a future version or consigned to a *readme* file on the disk. Either way, the printed manual is out of date before it's even printed!

By contrast a hypertext is a "living" document. It may start life as a notepad used by the programmer to log changes and then be distributed

to beta testers before finally being polished up with images and typestyles for general release. After release it can carry on evolving – a new version could be released at any time with the added benefit that a new hypertext release is a complete new reference source whereas a printed manual addendum leaves you to flip the pages and distinguish between

the outdated and the current features.

In an ideal world, most of us would like both but in the niche Atari marketplace, full commercial releases are less frequent – and many companies cite the cost of producing the manual as a reason to shelve new products.

Shareware authors have traditionally been criticised for the lack of documentation and consequently they have realised the potential of hypertext manuals. Most of the recent shareware featured on *ST Review* cover disks offers on-line help for registered users. Perhaps if commercial developers produced hypertext manuals, a few of the products deemed uneconomic could be released...

There's already a healthy level of support for *ST-Guide* so it looks like the Atari platform is taking another small step closer to the so-called "Multimedia revolution"; if all goes well, I'll meet you on the other side!

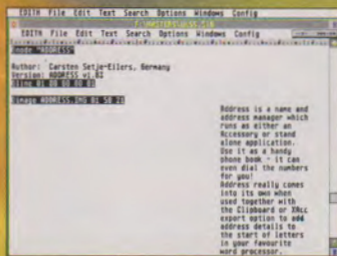
## ST-GUIDE SUPPORT

As *ST-Guide* may be freely distributed, you should be able to obtain a copy from your friendly PD library. If you'd like to register your copy and receive a master disk containing the latest release along with a collection of .HYP files, then send a cheque or postal order for £6.00 (£5.00 registration and £1.00 to cover master disk and postage) to: **Joe Connor, 65 Mill Road, Colchester, Essex CO4 5LJ.**

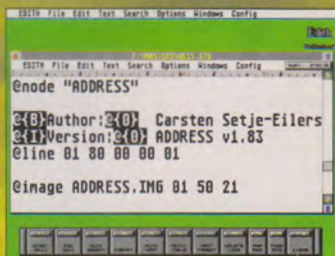
### WHAT IS ST-GUIDE?

At the heart of the *ST-Guide* hypertext system lies the viewer which can be installed on all Atari models as a desktop accessory or run as a stand-alone program. Installed as an

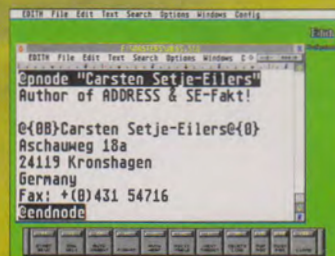




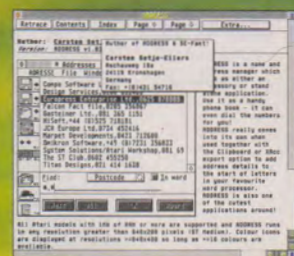
**4** To include images, add the line: `@image <Filename>` `<Start column>` where you want the image to appear. Leave space in the text unless you want the image to overlay the text. Notice I've also added an 80 character long `@line`.



**5** Adding timesteps is easy with the addition of a few control characters: **B** for bold, **G** for grey, **I** for italics and so on. Surround them with `@(<Letter>)` as shown and use `@{0}` to turn all text attributes off again.



**6** Pop-up nodes are the ideal way to display small amounts of information. Up to 12 text lines can follow the `@pnode` command: when you click on a `@pnode`, the text appears in a pop-up as shown...



**7** ... here. All the options combine to create an impressive overall effect. There are hundreds of German hypertexts, from cocktail databases to dictionaries – what can *ST-Review* readers come up with!

# THE FUTURE

accessory, or used within a multi-tasking environment, *ST-Guide* springs into action whenever you select the *Help* command in an application that supports the system. The viewer is automatically opened inside a re-sizeable GEM window containing the correct hypertext and, if context-sensitive help is implemented, opened at the appropriate page.

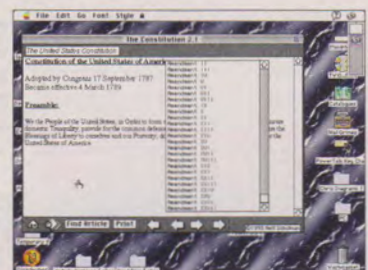
A Button bar across the top of the window can be used along with any links to navigate the hypertext; if you make a wrong selection, the *Retrace* button steps back through the pages you've already viewed in reverse order. Bold, underlined text is used to denote links and selecting any of these moves you to another page, calls another hypertext or displays a pop-up dialogue box.

The *Extras* button contains options that enable the hypertext to talk to the outside world using either the Clipboard or Printer options. There's also an option to load any GDOS screen font – a smaller font can be used to reduce the size of the

## BACK IN TIME

The term "hypertext" was first coined by Theodor H. Nelson back in the '70s to describe the non-linear properties of his *Xanadu* database. Two Apple developers, Bill Atkinson and Dan Winkler, subsequently developed the concept resulting in the release of *HyperCard* on the Mac. It was massively hyped as "The people's programming language" but never really took over from "real" programming.

Meanwhile Microsoft quietly implemented its own "Windows help system" bringing similar benefits to PC users. Recently, Atari users have come in from the cold with the release of *1st-Guide* in Germany. This quickly established itself as a file viewer, but its hypertext features have never been fully exploited. *ST-Guide*, with its straightforward hypertext commands, looks set to establish itself as the *de facto* hypertext system for the Atari platform.



From the beginning – *HyperCard* on the Mac started the ball rolling in terms of hypertext...

window, ideal if screen space is at a premium. Unfortunately images in the current release don't scale properly but this should be fixed by the time you read this. There's also a global *Find* utility, with wildcard support, to search all your hypertexts for any text string. In addition to viewing

hypertexts, the *ST-Guide* viewer can be used to display any ASCII-format text files so it's always a handy tool to have around.

For creating *ST-Guide* format hypertexts, the most important tool is *HCP.TTP* (Hypertext Compiler). *HCP* takes ASCII source files along with any images you wish to include and compresses them into a .HYP file ready for *ST-Guide* to view. The compression is based on the popular LHArc system (used to create .LZH archives) and the format is available to other developers should they wish to develop an alternative system.

There are a whole range of utilities for converting files from earlier Atari hypertext wannabes but since these never really took off in the UK, you're not likely to make much use of them. Suffice to say that if you find a

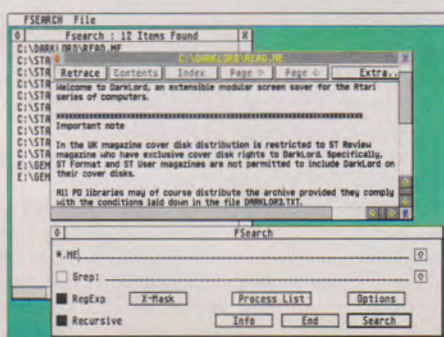
hypertext in a different format, it's very likely that there's a suitable *ST-Guide* converter!

## THE FUTURE

Plenty of new developments are in the pipeline including colour image handling and sound support, but these depend on a healthy level of registrations from users. *ST-Guide* is Fairware which means that it can be freely distributed, even with commercial applications, but regular users are expected to contribute a minimum of five pounds to the author to ensure continued development.

Such a small sum could help to ensure that one of the most worthwhile software additions to the ST doesn't die an unfortunate death...

In addition to using *ST-Guide* for on-line help, *FSEARCH* uses the viewer to read text files.





# KEEPING TRAK COM

*Heard about the  
direct-to-disk  
Falcon program  
with ten tracks  
of digital audio?  
Ian Waugh takes  
TrakCom for  
a spin...*

## KEY FACTS

**Product:**  
TrakCom  
**Company:**  
Compo Software  
**Contact:**  
0487 3582  
**Price:**  
£79.00  
**SYSTEM**  
**Minimum Memory:**  
1Mb  
**Resolution:**  
640 by 400 pixels minimum  
**Computer:**  
Falcon only

*TrakCom's Song  
Editor – you don't  
need a lot of  
samples to create  
a heap of music!*

**T**rakCom is essentially a tracker program for the Falcon. Trackers are very popular on all computers including the ST, PC, Mac, Amiga and Archimedes as they offer an alternative way of making music to MIDI through the use of samples.

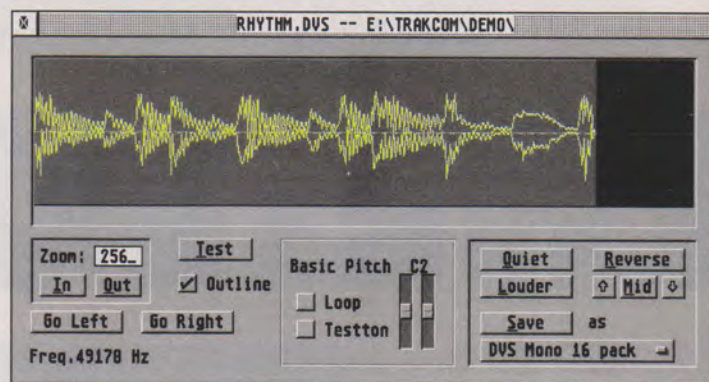
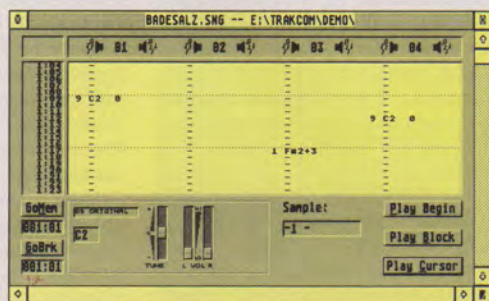
These can contain instrument or vocal sounds, and even complete bass and drum loops so you don't have to be a master musician to put a piece of music together.

TrakCom uses the Falcon's DSP chip which means it can handle 16-bit, high quality samples. It supports the standard eight Falcon sample rates between 8kHz and 49.1kHz along with 44.1 and 48kHz which will give you CD quality sound although you need special hardware for this. However, even at 33kHz, the results are excellent.

You can play the music through

Samples		
0	SILENCE	
01	RHYTHM	243k
02	HIP	36k
03	DA	40k
04	RUN	49k
05	NER	60k
06	VOM	58k
07	DEM	70k
08	HAUS	86k
09	ORIGINAL	95k
10	ORIGINA2	181k
11	ORIGINA3	94k
12	MEGABEIT	123k
13		
14		
15		
16		

*The Sample List can hold up to 100 samples and you can select the first 20 via the Function keys.*



*You can edit samples and set up loop points in the Sample Editor.*

the Falcon's internal speaker but to hear the high quality the program is capable of producing, you should use the headphone output and a decent set of headphones or connect it to a hi-fi system or active speakers.

## SAMPLE TYPES

As with all programs that use the DSP chip, there is a trade-off between the quality of the audio and the number of tracks that can play back at any one time. At the highest rate of 49.1kHz, the program may struggle to play more than six tracks. At 33kHz you should get away with seven tracks and at 25kHz, eight tracks. Another thing to consider is that the higher the quality of the samples, the larger they will be and the more disk space and RAM they will use.

TrakCom supports three sample types – .AVR, .SND and both normal and packed .DVS. A packed sample uses only half the disk space and loads in half the time with only a minimal, and generally acceptable, loss of audio quality. However, it expands to full size when loaded, so ultimately the size of the song is limited by the amount of RAM in your Falcon. Even if you have 8Mb or more, that's something to bear in mind should you want to give your music to others.

## SUMMARY

### GOOD POINTS:

Intuitive user interface  
Very easy to get into  
Supports 10 tracks

### BAD POINTS:

No support for .MOD files  
A little pricey

### FINAL WORD:

*"TrakCom is easy to use and sports several nice features but its success ultimately depends on whether it offers substantially more than the various PD and shareware programs."*

## WINDOWS

TrakCom has four main windows – Sample List, Sample Editor, Song Parameters and Song Editor. The Sample List acts as a central library for the various sounds and can hold up to 100 samples, RAM permitting. Loading and deleting samples from the list is very easy.

Double-clicking on a sample opens the Sample Editor which shows the sample in a traditional waveform format. You can mask the beginning and end of the sample to isolate just the section you want to play and can save this selection to disk.

A loop point can be set up, but this must be done manually. It would be much better if the program offered the ability to butt the end of the sample up to the start so you could see exactly how the two sections of waveform match.

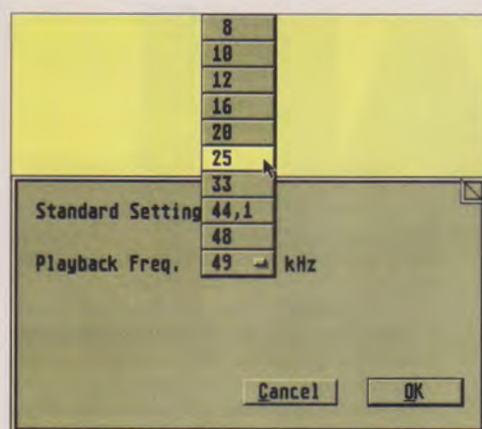
You can play the sample from the Editor, and alter the basic pitch, and make it louder or quieter although you may lose some quality when doing so.

## PARAMETERS

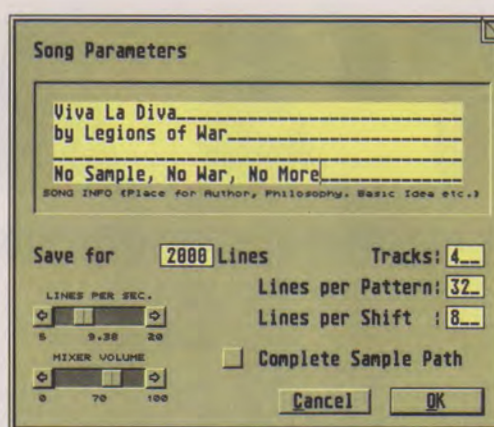
Before you start on your song, visit the Song Parameters window to enter your name and some details about the song.

This is saved in the file. Set the number of tracks you want to use





**TrakCom**  
supports 10  
sample rates  
and, with a  
digital interface,  
can record  
directly to DAT.



**You can store the song name and author and set the number of tracks in the Song Parameters window.**

and the mixer volume. You may have to reduce the overall volume if the Falcon's output distorts.

Here you also set the number of Lines per Pattern. Each Line in each track holds a sample so you need an idea of how long your song will be. The default of 2,048 should be more than enough for most projects!

You can also select the number of Lines per Shift and Lines per Pattern. These are the equivalent of beats in a bar and ticks per beat in musical terms and are there simply to assist you and act as a timing reference. In the Song Editor, holding down the <Shift> key and pressing the Up/Down arrows moves the cursor by the number of Lines per Shift.

The tempo of your piece is set from here too, not in beats per minute but in Lines per Second. You need to get this right pretty early on in the composition process because if you change it later, the samples will finish playing too soon or else not have enough time to complete.

Finally, you can save the path to the samples you are using. This is useful if you have all your samples in one folder but don't use it when saving the file to give to someone else. In this case, the samples must be in a single folder.

Before you start your composition, you need to set the play-back frequency. This will usually be the same as the frequency used to record the samples but you can change it if you wish. Using 44.1 or 48kHz with a digital interface will let you save the music direct to a DAT recorder.

## SONG EDITOR

And so to the Song Editor which is where song construction takes place. *TrakCom* supports a maximum of 100 tracks which appear vertically in the window. When you start, each line position shows a dash. To select a sample, you simply click on one in the Sample List. If the window is behind the Song Editor – as it will usually be – you can select a sample by clicking on it with the right mouse button. Great! You can also select the first 20 samples using a combination of <Shift> and <Function> keys which is another good feature.

Once selected, you enter a sample by moving the cursor to the required slot and pressing a key on the Falcon's keyboard to select the pitch. This is very easy and a fairly intuitive way of working because if you're not a musician in the strictest sense of the word, you can work out the pitch with a little trial and error.

## PITCH IN

The Falcon's QWERTY keys are arranged like a piano keyboard so that Q, 2, W, 3, E and R play C, C#, D, D#, E and F respectively. However, the pitches don't quite follow through. Continuing the above example, you'd expect Y to play A but it plays D an octave lower! I'm not sure if this is a bug or simply the way the pitches are mapped. The key assignments in the manual are wrong too, although the screen displays the pitches when you press a key so you can't get totally lost.

To help you navigate your way

around the piece, you can place a Marker in the left column and go to it by clicking on the GoMem button. You can select a Block by clicking and dragging on the tracks and perform cut, copy and paste operations. You can also loop play-back around a Block and change its tuning and volume.

Lines can be inserted and deleted which may be necessary to make the timing of a sample correct. If you do this, the song is automatically renumbered to help preserve the format.

The pitch of a sample can be fine-tuned by plus or minus a semitone and you can increase the volumes of the left and right channels. Be careful with this – it's quite easy to make the sound distort.

The program doesn't support stereo samples – if you load them, *TrakCom* converts them to mono. You can, however, create pieces in stereo by recording the left and right channels separately and using the two samples in two separate tracks.

## SAMPLE YOUR OWN

There are thousands of samples in all sorts of sample formats available commercially and from Public Domain libraries and Bulletin Boards. However, once the music bug bites you may well want to record your own. Any sound recorder program will do from the shareware *WinRec* to commercial programs. Compo obviously recommends its own, *MUSICOM 2*, which we reviewed in our September issue. If you use a digital interface such as Steinberg's FDI or Compo's equivalent, you can record (with suitable software) and play back CD and DAT samples at professional quality. But you don't have to do that to get good results.

TrakCom users may want some programs to help them with their

work. Seek out 525 which converts between .DVS, .AVR, .SND, .WAV (the standard digital audio file format of PC Windows programs) and raw data formats. Check with Floppypshop (0224 312756) for the latest list of sample and digital audio processing programs.

# MANUAL

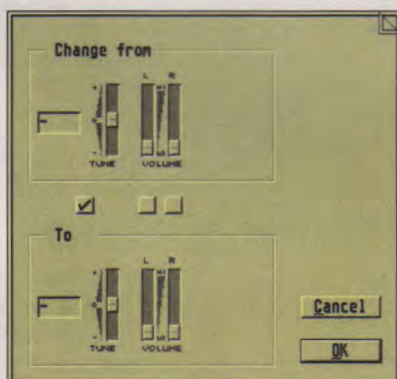
The manual is brief, being only 20 pages long, and was knocked into shape by Vic Lennard, *ST Review's* very own Editor. Not a man to use two words where one will do – he obviously wasn't paid by the word! However, Vic's text is succinct and to the point and very much in a tutorial vein. An index would be nice, though, and perhaps at least one worked example.

## VERDICT

TrakCom saves music in its own file format. Unfortunately, it doesn't support .MOD files which are the *de facto* standard for Tracker programs. Most are cross-computer compatible and there are thousands of .MOD files in the Public Domain.

More to the point, there are also various PD and shareware Trackers such as *Stormtracker*, which uses music notation, and *Octalyser*, which supports eight tracks.

In its favour, *TrakCom* supports up to ten tracks, it's easy to use and has several nice features. But are its benefits sufficient to encourage buyers to dig their hands into their pockets? Unfortunately, I suspect not which is a great shame as Compo has done a lot to bring quality software and affordable recording to the Falcon. However, market forces will likely come to bear and if the alternatives are seen wanting, no doubt *TrakCom* will prove a success.



**Select a Block and you can change the tuning and volume of the samples it contains.**

## PERFORMANCE

**OVERALL**

## EASE OF USE

## DOCUMENTATION

## EFFECTIVENESS

## VALUE FOR MONEY

71%



# IT'S A RAP!

This month, Ian Waugh highlights the basics of Rap rhythms...



Figure 1: constant hi-hat and snare patterns plus a fairly standard rock bass drum line.

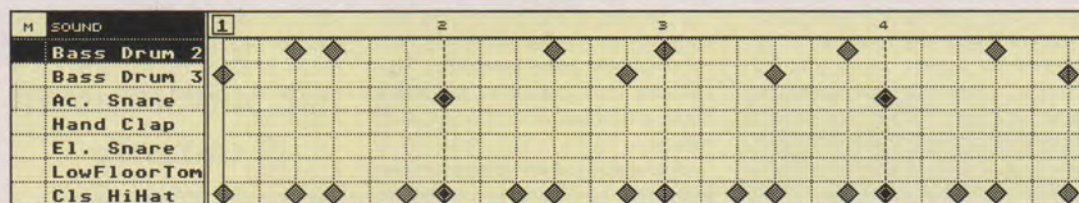


Figure 2: make the bass drum line more syncopated or spread out – it's your choice!



## TOP RAP TIPS

● Because Rap patterns can be quite intricate, you may find it easier to program them in step-time. If you do record them in real-time you may feel you need to tidy them up with some quantisation. Fine – Rap is a very precise rhythm, partly derived as we have said from the precision of the drum machine. However, you can't beat (sorry!) a little human feel so before you apply a full quantisation, work towards it using partial quantisation first.

● The vocal singing or chanting in Rap is quite busy so as far as the drum rhythm is concerned, in many cases the more open and sparse the pattern, the better. Fill it out a bit for the instrumental section.

● Most Rap rhythms are quite crisp so go easy on the reverb.

Rap is a relatively recent rhythm to feature on chart material although it has its roots in swing and shuffle rhythms that go back several decades. It was also heavily influenced by the jazz rock of the seventies but, and this is the interesting thing, it owes much of its existence to the drum machine. Many Rap rhythms are physically impossible for a drummer to play so you could say it is a true son of modern music technology!

Whereas most shuffle patterns divide the beat into three, creating a triplet rhythm, Rap divides the beat into six which gives much more scope for rhythmic complexities. Note that we're working with a grid resolution of 24, or 1/16th note triplets for those more musically inclined of you.

The common factor in all of these rhythms is the shuffle pattern on the hi-hat and most of the variations are provided by the bass drum. Note, also, that the snare always falls on the second and fourth beats and these two beats are accented throughout

the pattern. Those two drums seem to form most of the pattern but you'll see how much variation you can introduce by changing the bass drum.

## OPEN THE RAPPER

Figure 1 shows the constant hi-hat and snare patterns plus a fairly standard rock bass drum line. The darker the hits, the higher the velocity.

Bass drum 2 in figure 2 features a syncopated bass drum line which demonstrates some of the subtlety of Rap. Bass drum 3 is more spread out and makes the pattern very funky.

Bass drum 4 in figure 3 is slightly busier and makes another good funky pattern. Bass drum 5 is more busy still with many of the hits falling well off the beat, so creating a stutter effect – in fact, beat four almost sounds as if it arrives too late.

Notice the four consecutive bass drum hits – two at the end of the bar that lead into the two at the start. Coupled with the other "off

the beat" hits, it's doubtful if even a very accomplished drummer could play this line and even more unlikely that they could sustain it accurately for a whole song. This is where sequencers come into their own. It's not unusual for a drum unit to provide the basic rhythm and for a human drummer to provide fills over the top.

Figure 4 shows several toppings that you can use with any of the basic rhythms. You can use the hi and lo bongo line as a fill in or simply to embellish a chorus or lead break, for example. The cowbell adds another sound to the basic pattern with hits that are squarely on the beat so as not to disturb whatever else is going on.

The hand clap is on beats two and four which reinforces these two beats as foundations of the rhythm. Hand claps are quite common in Rap so feel free to add a few more.

## FINAL WORD

Each of these patterns is quite complex in itself but you can add more variety to your Rap track by stringing two together to make a two-bar pattern. For example, bass drum 2 followed by bass drum 1 sounds good. Bass drum 3 followed by 4 is also effective if you prefer your Rap to be a little more funky.

You can experiment further by adding ethnic percussion, cowbell, toms or bongos to a pattern. You could even take one of the bass drum lines, say number four, program it on a Latin instrument and add it to the first pattern. This works because of the sparseness of the instrument. The important thing is to maintain the accents on beats two and four.

Next month we'll look at Reggae which seems to be making quite a comeback...

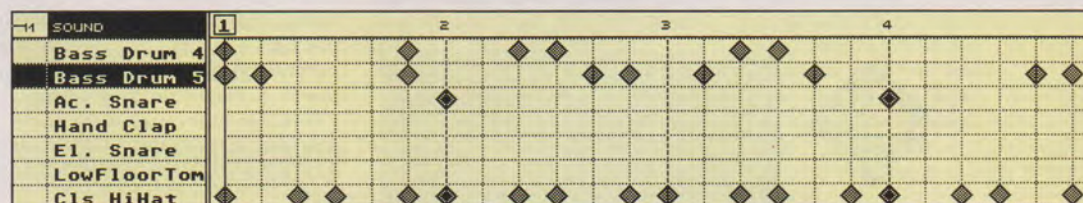


Figure 3: bass drum four is funky while five has a stutter effect – try getting a real drummer to play this...

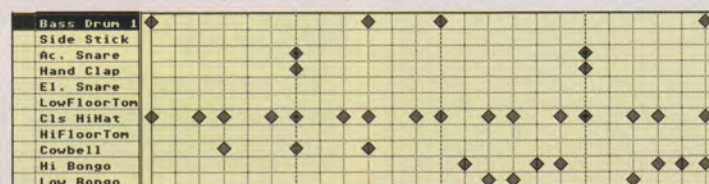


Figure 4: use various toppings to embellish or reinforce the basic pattern.



## BYTES & PIECES

Heavenly Music • £24.95 •  
0255 434217

Heavenly Music was one of the pioneers of MIDI building block files. *Dr. Beat* started it all and the company has gone from strength to strength thanks to the unquestionable expertise of its programmers.

*Bytes & Pieces* is Heavenly Music's latest release, a collection of 91 files each containing several patterns, the "fairy dust" that helps make a piece of music sound professional. Shades of *twiddly•bits* (reviewed in our August issue), you may think, but *Bytes* falls more into the groove category than *'bits* which contains shorter "killer" riffs, many only a bar long or less.

Most *Byte* grooves are several bars long and designed to form part of a backing track on which you can build a song. The files are divided into 10 categories: Bass, Percussion Bits, Beat 'n' Bass-ish, Grooves, Guitar, Intros, Keyboards, Rhythms, Setups and Other. There is some excellent material here as you would expect from HM. You'll find some great bass and solo percussion patterns (put these on top of your rhythm track) and the guitar riffs are

excellent – you couldn't duplicate these with a keyboard. There are brass stabs, rises, falls and crescendos within a single note, plus flute trills and frills, harp glissandos, pizzicato strings, saxophone riffs and bends, and timpani patterns and rolls.

The Intros folder includes a New Age groove although perhaps "float" is more descriptive. In complete contrast, *Tense* sounds like the intro to a horror movie until it launches into a couple of bars of funk.

The disk also contains lots of drum patterns. There is extensive on-disk documentation which lists the file lengths and positions at which they can be cut to separate each pattern – well worth printing out. There's also the usual HM license agreement which says that you must obtain another license if you want to use the files commercially.

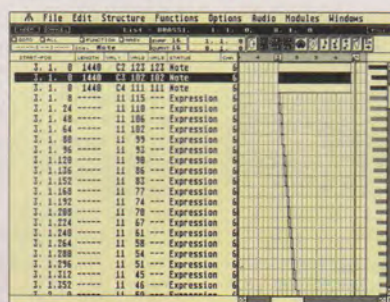
*Bytes & Pieces* has the dubious distinction of currently being the most expensive MIDI building block disk on the market and if you already have a collection of drum patterns, you may wish that this collection had fewer drums and more instrumental bits – even though they are good.

**ST REVIEW COMMENT:** "A good all-in-one collection if you have no drum tracks but a tad pricey."

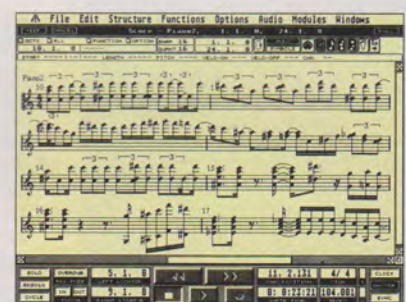
★★★★



Part of the *Tense* Intro groove.



Creating a brass swell using Expression.



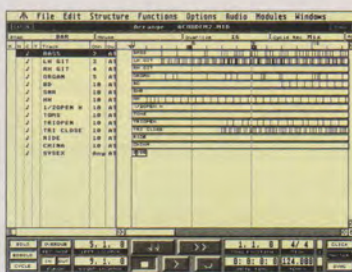
A keyboard category extract

## MIDI BUSKER ACOUSTIC TWO & BEAT BUSKER

Station Records • £14.95 each •  
0787 311500

*MIDI Busker Acoustic Two* contains acoustic guitar patterns recorded using a MIDI guitar. There are 34 files divided into two sections: common chords such as major, minor and sevenths, and more complex chords including major ninths, suspended, minor sixth and diminished chords.

The chords have been strummed and picked in various ways and there's no question that they sound incredibly realistic. Copy a few riffs, transpose them and drop them into your music for an authentic guitar accompaniment. The major niggle – in fact the only one – is that the strums aren't particularly exciting or varied although they are ideal for middle of the road material, ballads, easy rock and so on. The disk includes comprehensive



The Acoustic demo shows how well the guitar riffs work with other instruments.

on-disk documentation including hints and tips on how to get the best out of the files. Check out our cover disk demo...

**ST REVIEW COMMENT:** "Excellent, authentic guitar strums which will easily drop into your backing tracks, although there could be variation in rhythm."

★★★★

*Beat Busker* contains 124 drum patterns recorded using a MIDI drum kit. They are divided into 10 categories: Basic, Dance, Detroit, Funk, Groove, Pop, Reggae, Rock, Synth and World. Can't complain about variety here – it's excellent. Whatever your taste in music you should be able to find a file here to suit.

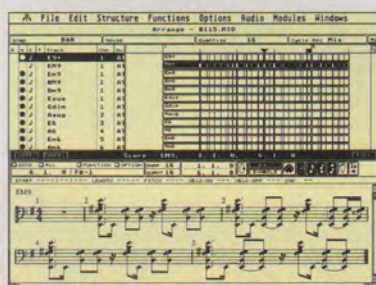
The patterns are all 32 bars long and as they were recorded live, there are rhythmic and volume variations between the bars which you don't always get in programmed patterns.

It's interesting to compare them with programmed rhythms which generally tend to be very busy. As a real drummer only has two hands and two legs – well, most of them – they can't hit more than four drums at once so these patterns do have an ambience about them. Of course, there's nothing to stop you adding fillers over the top. In fact, it's an excellent way of combining live and programmed patterns; many records use both.

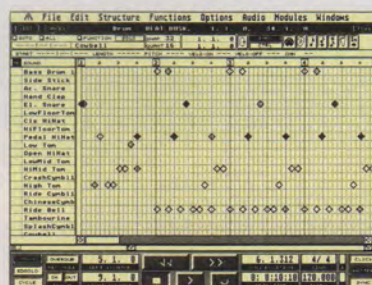
As with *Acoustic Two*, comprehensive on-disk documentation is included.

**ST REVIEW COMMENT:** "There's no easier way to add a live drum feel to your songs – and there's lots of patterns to choose from."

★★★★



Auditioning a minor ninth chord played in a finger strum fashion in Cubase's Score editor.



One of the World Latin patterns in *Beat Busker* as it appears in the Cubase Drum Editor.



# ASCIILUM PDL

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BUS 6: 600 different business letters categorised into separate files for accounting, employment, legal, orders and miscellaneous.  
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DEMO 31: Pure as Water megademo.  
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POWER 16: One of the best issues of one of the most widely read and popular disk mags currently running. Must get it. Highly recommended.

ADV 11: STOS ADVENTURE CREATOR. Excellent program which allows you to create your own text adventure.

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GAM 38: FLOYD THE DROID – good

space shoot 'em up. INTUITION – check out your intuition level. ASTROPANIC – simple disk filler. HI TECH TRIVIA – trivia quiz that talks to you. MASTER BREAK-OUT – German clone of the classic game. ROBOTZ – an old personal favourite.

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ODDS 4/5/6/7: CIA World Fact Book – a 4-disk set with masses of information about the countries of the world, elements and metals.

### ST HANDBOOK £2.50

Brilliant new mag dedicated to PD and Shareware. Articles, reviews, info plus great cover disk.

ODDS 14: Startrek. One for the Trekkies, lots of info with slideshow.

ODDS 23: The Invisible World, a slideshow with a little information about the bugs that live with us.

ODDS 27: Ponds and Watergardens. Charming program on how to make your own.

ODDS 29: Assistant Chef. Super program with 125 recipes.

UTL 16: Packers Delight. 24 packers to save disk space.

UTL 18: ST Writer Elite. Plus a host of other useful utilities.

UTL 25: Masses of accessories, too many to mention.

UTL 27: Bootblock, Pack Ice, Hard Up, Cheetah and lots more.

UTL 30: Archive Madness. Approx. 18 versions of archivers.

UTL 34: Copiers Galore. Nine versions of copiers plus two virus killers.

UTL 38: Pools Predictor plus ST Sheet (a spreadsheet) and a host of accessories.

# 34 Earlswood Gardens, Clayhall, Ilford, Essex IG5 0DF



# WE HAVE KICK OFF!

*Fly into the football season with our Premier Manager 2 cover disk demo from Gremlin...*

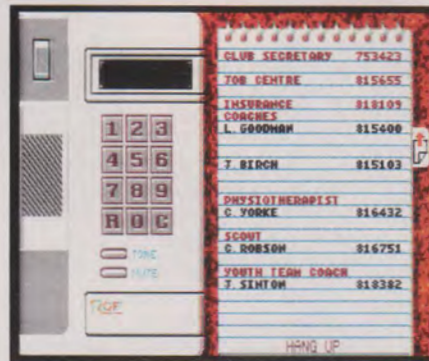


**Make a bid to apply for a player...**

**P**remier Manager 2 is here at last! Gremlin's predecessor set the standard for a top quality, in-depth and realistic football management sim. And things are set to get even better with the sequel. Check out our review on page 48 or get straight into the action with our cover disk.

This demo allows you to play around ten computer weeks' worth of matches in either one or two-player mode (alternate between players by pressing the <spacebar>) without the option of saving part-way through. You start at the top, choosing to manage one of the Premier League teams rather than those of the Vauxhall Conference in the full game.

First off, enter your name and choose your team. Clicking on the



**Click on the number you wish to 'phone.**

arrow icons will scroll through those available. Press <Return> when you're done and you will be greeted with the main Options screen. From here you can issue all your high-powered managerial instructions. Most screens are self-explanatory and actions are

mainly carried out by clicking with the mouse – check out our box for a brief description of the various options.

That's it – stick the disk in your drive, turn your computer on and get playing!

## WHAT THE ICONS MEAN...

- 1 Ground Improvement – modernise your ground by clicking on the improvement you want to carry out followed by the Build icon. The panel in the bottom right corner shows which part of the ground is being improved.
- 2 Transfer Market – new players come into the market all the time so keep an eye out. Make a bid for a player by clicking on the Buy icon. Offer a fee to the club, player's wage and contract. The magnifying glass icon shows the attributes of individual players – but only if you have employed a scout to find this out!
- 3 Manager History – gives you a breakdown of career record by club or competition.
- 4 Save/Load Game – disabled on this demo.
- 5 Game Options – turn match reports on or off for any game in the competition by simply clicking on them.
- 6 The Cups – gives you all the info for upcoming Cup matches. The icons are represented by their appropriate trophy.
- 7 Sponsorships – find out available sponsors, how much they will pay and for how many weeks they wish to advertise. Click on the sponsor and the name appears on the board. The corner panel states which part of the ground the board is on and how many boards are available. For example, the board facing the home fans will be more desirable...
- 8 Squad Selection – shows squad members, their strengths and weaknesses: HN- Handling, TK-Tackling, PS-Passing, SH-Shooting, CR-Control, FT-Fitness. Ratings are between 1 and 99 – any player in the 90s is brilliant! From here, you decide formations, tactics and opponents. To make substitutions and change the team, click on the player you want to take out and then on the player you wish to replace him with.
- 9 Telephone – use this to keep in contact with your staff. By clicking on the Job Centre you can find out your current staff and those available for work. From here you can access the players' contract information and training details. Ring your coaches to allocate training to your players. 'Phone the Insurance company if you wish to insure your



players against injury. You can also contact your physiotherapist to decide how to treat injured players or employ a Scout to look for new players.

- 10 League Tables – look at info concerning your team's current league performance or highlight another team to find out its statistics. There are charts and graphs to show a team's performance, other grounds, top goal scorers and referees in the division. Press <F1> for Premier League teams and <F2> for Division One teams.
- 11 Club Finances – keep up-to-date with the financial status of your club. Daily and yearly bank statements detail all of your transactions. You'll also be able to apply for a loan, compare player's wages and set ticket prices.
- 12 Play Match – when you are ready to play, click on the Whistle. The actual match events are shown in the central panel. The top section shows the position of the ball; when a player takes a shot, an animated sequence appears showing the outcome. Make substitutions when you wish by clicking on the Sub icon. You get a breakdown of each player's performance – click on a name and then the player you wish to replace him with.
- 13 Fax Machine – find out all the current information you need such as grants, fines and injuries. If you receive a Fax then you can ring the sender on the appropriate number.



# GAMEPLAY

*Football fever is still rife and the trend is set to continue with Gremlin's sequel to its excellent Premier Manager. Over to your commentator, Tina Hackett...*

## KEY FACTS

**Product:**  
Premier Manager 2

**Company:**

Gremlin

**Contact:**  
0742 753423

**Price:**  
£25.99

**SYSTEM**

**Minimum Memory:**

1Mb

**Resolution:**

Low

**Computer:**

ST/STe

It seems to be a time for sequel mania at the moment and Gremlin is following suit with its latest instalment of *Premier Manager*. Already one of the finest football management games on the market, it's a tough act to better. So what could Gremlin possibly add to an already brilliant game?

Well, there's a whole host of new features but despite this, the game is still instantly playable and easy to get into. The options panels are as clear and simple to use as ever, allowing you to take control of the game from the first moment. Those of you who already have the original will be asking: "Is this new version worth buying?" I can quite happily report back that it definitely is – there are a darn sight more features this time round and the challenge is completely different, incorporating many more aspects of the real game.

## SEE THE CHANGES

Before we get on to all the millions of jobs you'll have to do as manager, let's see how the look of the game has changed. For starters, in-match animated sequences have been included so you get a bit more of the real game atmosphere. The action appears on a scoreboard-like device and shows the goalkeeper making saves or the referee giving out cards and the like.

The screen also displays a running commentary and various match statistics. The match can be watched at one of six speeds from the very slow, enabling you to assess your strategy, to Ultra if you want to rush through.

And so to the game itself. To start off, you (and a friend if you select the two-player mode) take control of a struggling Vauxhall Conference side of your choice. The aim is to lead them up through the divisions and ultimately to victory in Europe. To

STALYBRIDGE CLTC 17th CONFERENCE			
WEEK 1 OF 1994			
CLUB	RATING	COUNTRY	LEAGUE
CHALSEA	SUPERB	PREMIER	LEAGUE
IPSWICH TOWN	SUPERB	PREMIER	LEAGUE
MANCHESTER UTD	OUTSTANDING	PREMIER	LEAGUE
OLDHAM ATHLETIC	V. GOOD	*****	PREMIER LEAGUE
SHEFFIELD UTD	SUPERB	*****	PREMIER LEAGUE
WIMBLEDON	V. GOOD	*****	PREMIER LEAGUE
BARNLEY	V. GOOD	***	DIVISION ONE
BIRMINGHAM CITY	V. GOOD	***	DIVISION ONE
BRISTOL CITY	V. GOOD	***	DIVISION ONE
CHARLTON ATHLETIC	V. GOOD	***	DIVISION ONE
CRYSTAL PALACE	SUPERB	*****	DIVISION ONE
DERBY COUNTY	V. GOOD	***	DIVISION ONE
HIDLESBOROUGH	V. GOOD	***	DIVISION ONE
PETERBOROUGH UTD	V. GOOD	***	DIVISION ONE
PORTSMOUTH	V. GOOD	***	DIVISION ONE
SOUTHEND UNITED	V. GOOD	***	DIVISION ONE

*Start the right way by arranging a few pre-season friendlies.*

# PREMIER

*You can always call the Club Secretary for your managerial rating, but be prepared to click on the "Resignation" sheet...*



acquaint yourself (and your players of course!) with the game, you can play a few pre-season friendlies. This gives you the opportunity to see how your side is shaping up and how to improve them before the season begins.

## TEAM SPIRIT

The players are one of the main priorities of your job and should be considered carefully. By accessing the Squad Selection Screen, you get a breakdown of your squad including their strengths and weaknesses. Each is rated between 1 and 99 for their skills. Scores are awarded for things like Handling, Tackling, Passing, Shooting, Control and Fitness, so allowing you to create a top notch squad by making the most of the players' abilities and hiding their weaknesses. Players at full fitness will play to the maximum of their ability so it's worth keeping an eye on this score, especially when players are recovering from injuries. Your

physiotherapist will be able to treat some of the injuries and the higher his rating, the more effective his treatment will be.

Don't despair if you end up with a duff squad, as coaches are on hand to improve the situation (once you've hired them from the Job Centre – but more about that later). They can train players in various skills or help them generally. You can also choose how hard to train them, remembering though that players can still pick up training ground injuries.

If the squad is still not up to scratch, you can instruct your scout to look for particular players with certain skills. These players aren't actually on the market, so a club may ask twice their value to sell them to you.

The transfer market is another way of buying or selling players. You can find out which players are currently on offer and make a bid, as well as negotiating their contracts and wages – then wait to see if your offer has been accepted.

*The main menu is clearly laid out with individual icons for each feature...*





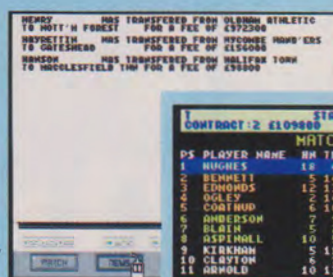
STALBRIDGE CLIC 17 CONFERENCE									
MONDAY 1 OF 1994									
PLAYER	HM	TK	PS	SN	CR	FT	TRAINING	INTENSE	
HUGHES	18	4	16	3	25	10	HOME	LOH	
BLANCHETT	5	12	5	3	22	13	HOME	LOH	
EDMONDS	12	13	5	6	16	34	HOME	LOH	
OGLEY	2	14	2	13	71	91	HOME	LOH	
CORRIE	6	10	12	6	13	83	HOME	LOH	
ANDERSON	7	3	12	2	25	34	HOME	LOH	
BLAIR	6	2	20	8	20	13	HOME	LOH	
ASPINALL	10	5	15	12	3	32	HOME	LOH	
KIRKMAN	5	11	4	13	9	87	HOME	LOH	
CLAYTON	6	7	12	11	71	88	HOME	LOH	
OSWALD	10	13	10	11	25	32	HOME	LOH	
KIRKMAN	6	6	3	15	3	32	HOME	LOH	
TYSON	20	3	7	7	11	15	HOME	LOH	
BRONN	7	12	7	6	3	34	HOME	LOH	
LEICESTER	7	11	17	2	18	26	HOME	LOH	
FILSON	10	12	10	6	24	31	HOME	LOH	
COVIN	12	15	6	6	69	31	HOME	LOH	
PIREST	5	12	7	13	34	34	HOME	LOH	

You can choose how hard you wish to train your players.



Select your squad by comparing players' abilities.

Sponsors can raise extra money for new players.



The fax machine keeps you up to date with the latest news.

STALBRIDGE CLIC 17 CONFERENCE									
MONDAY 1 OF 1994									
PS	PLAYER	HM	TK	PS	SN	CR	FT	INFO	FOR PLAYER
1	HUGHES	18	4	16	3	25	10	HOME	LOH
2	BLANCHETT	5	12	5	3	22	13	HOME	LOH
3	EDMONDS	12	13	5	6	16	34	HOME	LOH
4	OGLEY	2	14	2	13	71	91	HOME	LOH
5	CORRIE	6	10	12	6	13	83	HOME	LOH
6	ANDERSON	7	3	12	2	25	34	HOME	LOH
7	BLAIR	6	2	20	8	20	13	HOME	LOH
8	ASPINALL	10	5	15	12	3	32	HOME	LOH
9	KIRKMAN	5	11	4	13	9	87	HOME	LOH
10	CLAYTON	6	7	12	11	71	88	HOME	LOH
11	OSWALD	10	13	10	11	25	32	HOME	LOH

Match day tactics need to be worked out carefully...

# MANAGER 2

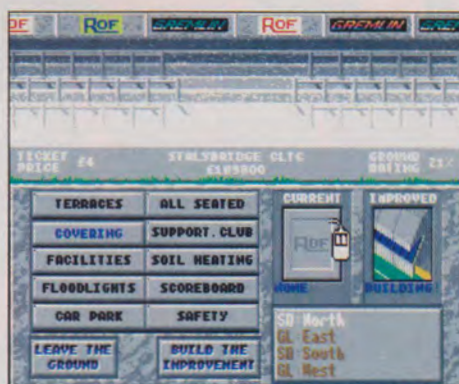
## TACTICS

Tactics and playing styles are down to you and it is a good idea to plan a counter strategy by comparing your next opponent's tactics. You can even find out who the referee is going to be and whether he has a reputation for being strict, allowing you to decide whether to risk those harsh tackles or not!

As well as the usual League matches, you also play in the FA Cup, and the European Cup among others – it's a hectic schedule for a new up-and-coming manager. If you're a good all-rounder, you'll also be able to plan a successful financial strategy. From the Finances screen you can compare yearly bank statements, or keep up to date with the daily statement giving all the details of the day's transactions.

A good supply of cash is needed, so drumming up revenue is essential. This can be done in various ways, such as finding sponsors to advertise on the hoardings around the ground. Choose sponsors by comparing how they will pay. For example, if you need cash quickly then take the ones who are offering a one-off lump payment. However, those that offer weekly instalments will pay higher and provide a steady source of cash.

You'll also get the opportunity to set ticket prices, allowing you to raise revenue this way. Prices can be changed for cup games if it looks like you're in for a decent run. Extra cash can be used for ground improvements which helps the club indirectly. Soil heating, for example, will mean that matches don't get postponed over the winter so saving you



money; extra car parking makes your ground more accessible and increases attendance. Your ground will also receive a percentage rating – the higher the percentage, the better the ground.

Bank loans are available if you get into financial trouble, but you will have to make that repayment eventually – plus interest! You have to budget for this and it's by no means the easy option.

## OFFICE MATTERS

Back at the office you can access the Fax machine and get news updates and information on grants or transfers. You can get a breakdown of your last match, showing all the statistics you need to know to judge the effectiveness of your team.

While in the office, you have the opportunity to make those all-important telephone calls. Ring the Club Secretary to find out your current ratings with the fans and the board, and your own rating as a manager. If it's all getting too much, then you

can resign here too. By the telephone you'll find a pad containing all of your players' telephone numbers, allowing you to call them and offer incentive bonuses. If you're feeling nasty, just sack those who aren't up to standard! From here you also contact the Job Centre to find coaches, physios and even another job for yourself. If you are continually turned down, even your own directors will lose confidence in you!

## VERDICT

*Premier Manager 2* retains all the playability of the original and adds even more features – it really does throw you into the managerial role.

## SUMMARY

**GOOD POINTS:**  
Good, in-depth simulation  
Well set out Options screen

**BAD POINTS:**  
Sound effects are sparse and poor quality

**FINAL WORD:**  
"Thoroughly engrossing and addictive management simulation that promises to last and last."

It's a realistic simulation that excels at making football management as authentic as possible. Each aspect of the game is nicely presented: well set out charts, graphs and tables give you every possible piece of information that you need to know.

The many new features added definitely make it a worthwhile buy, even for those who have the original. And if you prefer games that require some thinking then *Premier Manager 2* fits the bill brilliantly.

It's a new and very addictive challenge – and once you've tested your talents in the English Leagues you can have a crack at the Data Disks with Germany, France, Italy, Scotland and Spain...

## PERFORMANCE

GRAPHICS  
SOUND  
VFM  
PLAYABILITY



## OVERALL

81%



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# GAMES GALORE!

*Tina Hackett takes to the skies and explores the dizzy heights of flight games...*

**F**light simulations have always been popular with gamers who prefer their poison to be of a more demanding nature mentally. Unfortunately, the dauntingly thick manuals and complicated control panels that accompany this kind of game may have a tendency to put some people off. This is a great shame because once you've actually got the hang of a flight sim, it can be tremendous fun.

But there's more to flying games than just sussing out your instrument panel from your elbow, as many of them incorporate much more than simple flying. For instance, there are combat games that enable you to take charge of a World War 2 bomber or those whose setting is the more recent war scenario in the Gulf.

Whatever the backdrop, all give you the opportunity to take to the skies and seek and destroy the enemy – not exactly the most politically correct of games but great fun never the less!

Alternatively, if you've always fancied being a dashing young pilot of a civilian plane, taking passengers to and fro to exotic locations, then the software is there for the taking – yes, even on the ST.

So, whatever your particular inclination, whether you fancy your chances as the Tom Cruise type in a Top Gun encounter or a Biggles "chocks away" sort in a WW1 battle, the choice is yours... simply grab your flying jacket and goggles and take a look at our guide.

In this round up we take a look at not only the best flight simulations but any game that has you up, up and away...

## FALCON

Arguably the most popular and realistic flight sim of all time, *Falcon* has been a favourite among flight sim fanatics – and considering its age this is not to be sniffed at! Although one of the oldest games around, it still retains its appeal not least because of the marvellous attention to detail.

*Falcon* puts you in the cockpit of the F16 Fighting Falcon with 12 challenging missions to complete. Five skill levels are available from Lieutenant to Colonel.

This classic game from Spectrum Holobyte excels in the graphics department, with a clear cockpit instrumentation display, and the smooth movement really is something. Sound effects add atmosphere to the game and the digitised speech, such as the warnings, brings a certain degree of realism.

A head-to-head dogfight mode is possible via a computer link and modem cable. And if all this wasn't enough, there are a number of data disks available.

For machines with 1Mb of memory, the graphics and sound can be enhanced and the black box feature used. This records your manoeuvres, so allows you to replay the action.

Available at a budget price, *Falcon* is definitely among the top flight games for the ST.

**Overall Rating: 90%**



*Gentlemen, choose your weapons please...*

*Switch views of your plane at will.*



## KNIGHTS OF THE SKY



*Choose from a number of planes for your dogfight...*



World War 1 is the setting here and you can choose to fly in every major fighter – that's around 20 planes! There are four different situations you can choose to play in, from basic training to Dogfight encounters where you choose an opponent to fight.

But the main game, *World War 1*, is where you'll find most of the action. You can compete against 16 historical German aces for the title of "Ace of Aces" and play a number of missions, mainly encountering only the minor enemy pilots and the occasional ace. After each mission you'll receive information about your rivals and you can then go after them and track them down.

All you get to do battle in is a draughty bi-plane and you have to complete such missions as escorting a bomber plane to its target and back or interceptions – you need to stop enemy planes from penetrating Allied territory.

The game looks authentic and conveys the WW1 setting admirably. Many different viewpoints are available and let you keep track of the game well. From the tactical view you see your plane and the enemy fighter – great for the dogfighting situations.

A brilliant fun game, and the WW1 scenario makes a nice change.

**Overall Rating: 83%**

*The detailed graphics set the WW1 scene nicely.*



## F-19 STEALTH FIGHTER



Get accustomed with the cockpit...

Microprose, renowned for its excellent simulation software, brings us this combat flying game. There are millions of missions to get to grips with, using four regions throughout the world: Libya, the Persian Gulf, North Cape and Central Europe.

Graphics-wise, it's detailed and fairly realistic but where *F19* really does excel is in its playability. This is definitely one of the most action-packed flight sims around. Missions must be planned and involve a fair bit of tactics. To help in this, four maps are supplied with the game allowing you to plan your routes. These must be thought out carefully in order to avoid radar installations and the like.

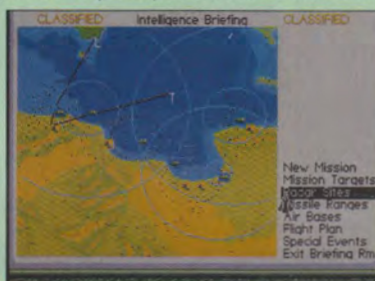
There are stacks of weapons to play with, many of which are necessary due to the variety of missions involved – air to air missiles and air to ground missiles are a staple diet.

Don't let the hefty manual put you off – especially as it contains tonnes of information on flying techniques.

*F-19* is a fine mixture of flight, combat and tactics and a worthy addition to anyone's classic collection.

**Overall Rating: 83%**

Pay close attention to the Intelligence Briefing.



## THE ANCIENT ART OF WAR IN THE SKIES

Yes, you read it correctly! And while it isn't a flight simulator, this is a round-up of all games that involve some kind of flying. And besides, this is just such an enjoyable game that it had to be included.

It's a World War 1 strategy and action game that allows you to take to the skies for either dogfights or bombing raids. Most of the time you're issuing instructions from your base and directing the planes, setting the exact courses they follow, their cruising speed and altitude.

Once a dogfight is about to take place, you take over the role of the pilot. A side-view appears of your plane and the enemy plane that is trying to shoot you down – avoid the bullets and take it out! Bombing targets on the ground is quite challenging to say the least and you'll

have to avoid fire from below as well.

The graphics are nicely done and the dogfight situations

work well. There is plenty here to entertain and for those of you who prefer a little more to their flying games, this is definitely for you. A well thought out and varied game.

**Overall Rating: 78%**

Simply shoot your opponent down before he shoots you...



It's "chocks away old bean" for some training!

## BUYER'S GUIDE

## YOUR CHOICE...

Still can't make up your mind? Then take a peak at our at-a-glance guide to the definitive flying games...

Game	Company	Contact	Price	Machine	Memory	Graphics	Sound	VFM	Playability	Overall
Falcon	Action 16	0276 684959	£14.99	ST/STe	0.5Mb	9	9	9	9	90%
Knights Of The Sky	Kixx XL	021-625 3311	£16.99	ST/STe	1Mb	9	7	8	9	83%
Ancient Art Of War In The Skies	Microprose	0454 326532	£34.99	ST	1Mb	9	6	7	9	78%
F-19	Kixx XL	021-625 3311	£16.99	ST	0.5Mb	8	8	8	9	83%

## THE BEST OF THE REST

There's certainly an abundance of games that involve aspects of flying – so many that it's hard to list all of the best.

That said, here's a selection of some of the more traditional flight sims available...

### F-15 STRIKE EAGLE 2 • KIXX XL

Another Microprose sim that is based around blasting the bad guys rather than actual flying – still a great game for you trigger-happy sorts.

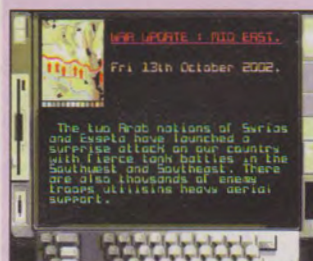
### A320 AIRBUS • THALION

For a highly realistic civil simulator, *A320 Airbus* is the one to go for. It even provides navigation charts to help you find your destination.

The correct procedure for take off and other technical matters must be followed – it really does act like the real thing!

### F29 RETALIATOR • HIT SQUAD

Brought to us courtesy of Digital Image Design, *F29 Retaliator* is now available at a budget price from Hit Squad. If you want to get straight down to the business of combat without all the detailed fiddly bits then this is for you.



Updates provide important information in *F29*...

... and here you are, all set for take off!



### B17-FLYING FORTRESS • MICROPROSE

Yes, another Microprose classic! This time you're at the controls of the legendary US bomber and your task is to command raids in occupied territory. Instead of just controlling the pilot you also get to control the whole crew (egotistical or what!... Ed).



*Dave "I'm not that fussy really" Jones does the business on another couple of budget buys...*



*Clicking on objects in the office accesses the main actions.*

## MERCHANT COLONY

**IMPRESSIONS • £7.99 • 071-351 2133**

**IN BRIEF:** Fancy your chances as an 18th Century merchant? See yourself exploring far and distant lands? Well if by some strange quirk you do have such a bizarre fetish, then take a look at this budget release from Impressions.

The aim is to buy ships, load them with people and cargo and sail to far-away lands. At your destination it is up to you to develop the area, firstly by setting up a port and then by exploring for the particular riches of the region. When you've got yourself a potential profit-maker you can ship it around the world.

Ah – but if only life was this simple! Unfortunately there are other ambitious young entrepreneurs who want to make their fortunes so you have to watch out for rivals and native uprisings!

Most of the action takes place with you issuing instructions via the Office screen. By clicking on the various objects on the desk you can operate certain functions. For example, the globe brings up a world map which you can then use to focus on a close-up area of the land you are interested in.

You also have to choose which types of people you need to set up your colony – from soldiers necessary to protect colonies, to explorers who can wander round looking for minerals.

**ST REVIEW COMMENT:** Considering the age of this game it has fared pretty well and although it runs rather slowly, it is still playable enough. There is plenty to do and the rather basic graphics have a nice, cartoony quality. Sound effects are rather sparse and on the whole it is certainly not up to the standard of some of today's strategy games, especially considering the fiddly controls.

If up-to-the-minute graphics and technical brilliance are high on your list of priorities then *Merchant Colony* isn't for you, but if you like strategy games then this is quite a reasonable offering.

☹☹

*Scan the World Map for a suitable place to colonise...*



## THE FINAL CONFLICT

**IMPRESSIONS • £7.99 • 071-351 2133**

**IN BRIEF:** The manual begins: "Your worst nightmare has just begun..." and this hits the nail right on the head – yep, you're about to play *The Final Conflict*, a simulation of power politics and global warfare.

You are Premier of a country that has a war to win with armed forces, espionage and nuclear missiles at your disposal. You have to command tanks, infantry and naval units while keeping an eye on the country's resources. Other countries will



*The arcade section of the game doesn't provide much variety.*

start to take sides and it is important to use good diplomacy to win allies while remembering that senseless killing may turn nations against you.

There are five different scenarios to choose from, namely the Cold War, Middle East, Far East, Falklands and North East and you can play either side of each one or customise your own scenario.

The game is played from a map of the world: highlighting a certain area brings up a number of available options – blow 'em up or deploy Spy or Diplomacy Units. Spies, for example, will try to locate targets for your missiles and find out what forces are available to the enemy. Once you've located a target you can launch a missile. Hitting a tank factory reduces the enemy's supply of tanks while destroying a power station reduces energy.

As world events occur, you are told about them through the information panel and can act accordingly.

**ST REVIEW COMMENT:** You'll be able to think of far more interesting things to do than play this dated drivel. In fact, clipping your toenails or counting spikes on a hedgehog hold a lot more appeal! The word "dismal" comes to mind and the only control worth using is the "abort game" key!

Why is it so bad? Well the graphics are primitive to say the least and the screens uninteresting. The icons are fiddly to use and as for the awkward control system...

The many scenarios make little difference and the game lacks any variation. An arcade sub-game, which involves shooting down incoming missiles, does little to improve things and is a poor attempt to provide variety to this dull and uninspired title.

☹

*You're kept informed of world events so that you can plan your tactics accordingly...*





# PD SCREEN SCENE

*If money's a bit on the tight side at the moment, just leave it to Nial Grimes to find some unbelievable bargains...*

*Prensorium is beautifully presented and very slick, although the blue colour scheme can become a bit monotonous after a while.*



## PRENSORIUM

**FLOPPYSHOP • DISK NO: GAM.4519C • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

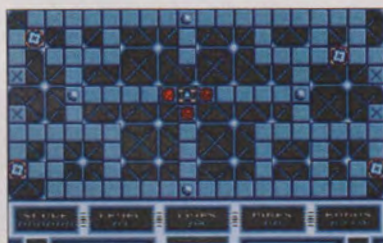
**IN BRIEF:** *Prensorium* is another example of that rare breed, the public puzzle game. The basic idea is simply to waste aliens but don't worry, the little space vehicle provided to accomplish this task doesn't actually carry any weapons, so you need to lure the little beasties onto traps instead – hence the puzzle element. The play area is tiled and lying on top of the light blue squares you will find a number of special-purpose icons. At a basic level there are lava pits to destroy aliens, blockers that send the baddies bouncing off in the opposite direction and shields that provide a limited period of invulnerability. There are nineteen of these icons in all and they are introduced gradually over the first few levels so as not to blow your mind.

To make matters worse, a time limit is enforced on each level and it's all too easy to go charging off the edge of the play-area in the heat of the action. Mind you, at least each stage is coded, so you needn't battle your way through dozens of previously conquered levels – essential, considering that there are fifty to master. The game is joystick controlled and it plays very well. As hackneyed as the gameplay may sound, it's actually quite original. Whereas most games force you to spend half your life avoiding the bad guys, *Prensorium* actually encourages pursuit – after all, how else are you going to tempt them into a red hot lava pit?

Considering that *Prensorium* was written as a first project in assembly language, it is incredibly well presented. All of the animation is silky smooth and the metallic graphics set the atmosphere perfectly. I suppose the blue colour scheme used throughout could be described as a little bit bland, but it may well change in later levels (yes, it's that hard!).

**ST REVIEW COMMENT:** “*Prensorium* adds yet more weight to the argument that the best puzzlers are available in the public domain. Every part of this title is superbly produced and the gameplay will keep you coming back for more and more. It can be just a bit frustrating at times, but you've got to expect that from any game of this genre.”

\*\*\*\*\*



*The idea of the first level is to tempt the bad guys into the red lava pits in the middle of the screen, taking care not to get trapped.*

## SLATRIS

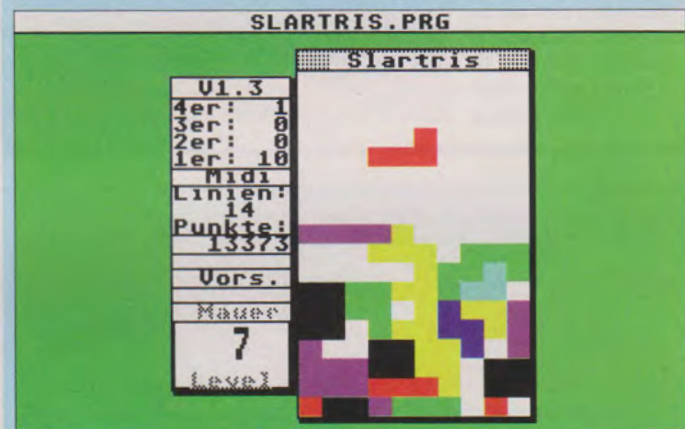
**FLOPPYSHOP • DISK NO: GAM.4423C • £2.00 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE**

**IN BRIEF:** OK, so we've all seen far too many *Tetris* clones already, but deep down everybody still enjoys a quick game, even if it is only to prove that you haven't lost the knack. *Slattris* doesn't make any attempt at originality in the gameplay department, but it is the only *Tetris* clone that will run happily as a GEM application. In simple terms, it can be held as a well-behaved task under *MultiTOS* and brought to the foreground whenever you feel like a break (or when the boss isn't looking).

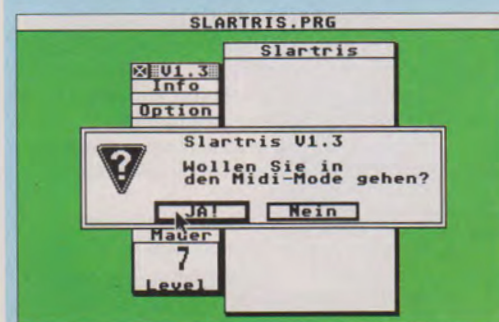
The blocks are cursor controlled and colour is used, resolution permitting. Numerous little adjustments can be made to the gameplay and there's also an intriguing “midi” button which looks as though it might have something to do with linking machines together. Sadly though, the documentation and prompts are all in German, so it's just a case of experimenting.

**ST REVIEW COMMENT:** “As you've probably already guessed, *Slattris* is not wildly original. On the other hand, it's a lot more convenient to play than many of its contemporaries simply because it is GEM-compliant. It's *Tetris* – what more is there to say?”

\*\*\*



*Slattris makes no attempt to jazz up the Tetris concept, but does have the advantage of running as a GEM application.*



*The head-to-head MIDI mode looks interesting – it's a pity the instructions are all in German...*



## KILLING TIME

**FLOPPYSHOP • DISK NO: GAM.4291C • £2.00 •  
MEMORY: 1MB • PUBLIC DOMAIN**

**IN BRIEF:** *Killing Time* is a twist on the *Operation Wolf* theme. It's the modern day equivalent of a fairground shooting gallery and the idea is to guide the cross-hair around the screen, zapping anything that moves.

The game is set over five periods in history. The first is Stone Age, and following closely behind are High Saloon, GI Guy, Dirty Magnum and Zap To The Future (laugh? I nearly bought a PC... Ed). Naturally, your weapon changes through these ages – a rock is all you'll get in Stone Age, but this is rapidly replaced with a six-shooter in High Saloon, and so it goes on.

While the authors have obviously put considerable effort into designing a reasonably original game, sadly the gameplay just doesn't match up to *Operation Wolf*. For a start, each scene is totally static and only one baddie appears at a time – fast-paced, it is not! Add to that the slightly lacklustre graphics and you're left feeling just a little bit let down.

**ST REVIEW COMMENT:** "*Killing Time* isn't all bad, but it just lacks the speed and excitement of the coin-ops it bases itself on (albeit loosely). All in all, it is fun for a few minutes, but it's debatable whether you will want to plough through all of the levels."

☆☆



*Killing Time tries hard to improve on the Operation Wolf theme, but at the end of the day, it severely lacks action.*



*Rocks are your only weapon early on in the game, but this is quickly replaced by a pistol in the High Saloon level.*

## PUNT II

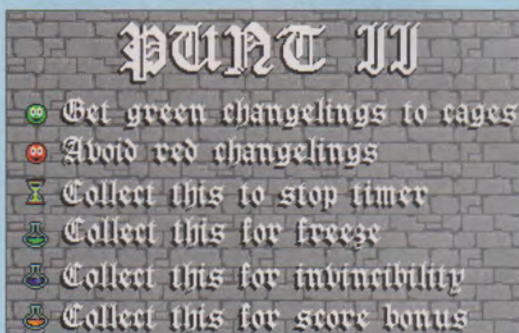
**FLOPPYSHOP • DISK NO: GAM.4291C • £2.00 •  
MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-  
COMPATIBLE (BUT FAST!)**

**IN BRIEF:** Very few games, public domain or otherwise, can claim to capture the atmosphere of a cartoon but *Punt II* is an exception. The plot is extremely simple – our rather stupid friend Lotherin, the sorcerer's apprentice, has accidentally released his master's collection of changelings and it's your job to help him to get them back into their cages before all hell breaks loose.

The game is set in the magician's lab and cages are scattered over a number of platforms. The only "move" you have at your disposal is a kick, which sends changelings up by one level and as soon as they bump into a cage, they're history. It's important that changelings don't fall too far, otherwise they become bruised and dangerous to touch. Although the gameplay is quite simple, the graphics make *Punt* special. When standing still for example, Lotherin pops out his tongue and stands there cross-eyed until instructed to move again – priceless! The audio side of the game consists of a nice bouncy tune on the title screen and a few spot effects.

**ST REVIEW COMMENT:** "*Punt II* is a rare treat in terms of graphical presentation, but the gameplay is a little weak. With the addition of just a bit more variety and maybe one or two bonus levels, it could have been so much better. Still, well worth playing."

☆☆☆☆



*Just kick the changelings into a cage and it's on to the next level – easier said than done with 45 million of the damn things on screen!*

## FIRST DOMINOES

**GOODMAN INTERNATIONAL • DISK NO: GBU.105  
• £2.95 • MEMORY: 0.5MB • LICENCEWARE •  
FALCON-COMPATIBLE**

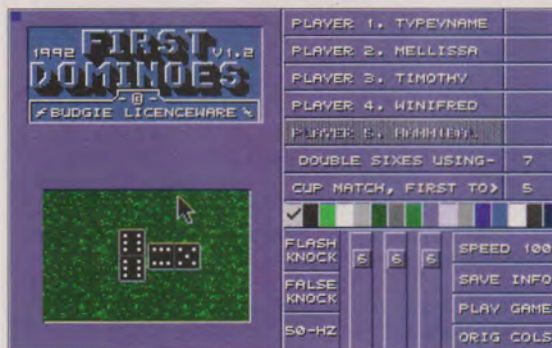
**IN BRIEF:** Despite its rather old-fashioned image, dominoes can be quite enjoyable given a sufficient number of players. The trouble is, getting a few players together when you fancy a quick game can be easier said than done. Enter *First Dominoes*, which turns your ST into a ready-made team.

The game allows up to five players, although only one human can take part – the others are taken care of by the computer. Once play begins, you are presented with a green background and the computer players take it in turns to lay pieces on the table. When your turn comes around, a window appears and it's just a case of clicking on the piece to use, or "knocking" if none of them fit. It all looks very good on screen, although the the play window regularly sprawls itself all over the dominoes themselves.

The colour scheme, speed of the players and all sorts of other things can be adjusted to suit your taste, and the whole game is impressively fast.

**ST REVIEW COMMENT:** "*First Dominoes* is a good introduction to the game and it's fairly well presented. The way the window pops up in front of the play area at every available opportunity is a tad annoying, but you soon get used to closing and opening it when necessary."

☆☆☆☆



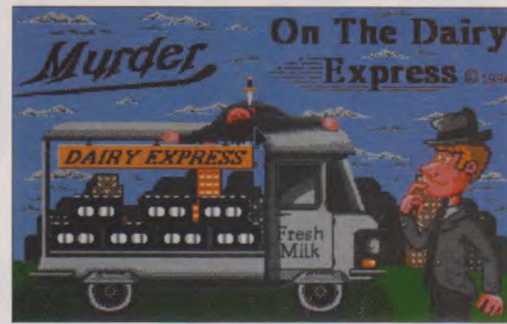
*First Dominoes is a great debut to the game, featuring multiple players and a variable speed play.*

*The play window is well-designed, but why on earth does it pop up right in front of the dominoes themselves?*





*Granny's Garden is an impressive display of the capabilities of the STOS Graphic Adventure Creator and the visuals are superb.*



*Murder On The Dairy Express is probably the best game in the Silly collection, but be prepared to battle with a text-only interface!*

## SILLY GAMES PACK

**MERLIN PD • DISK NO: SS.003 • £3.00 •  
MEMORY: 0.5MB • LICENCEWARE**

**IN BRIEF:** The second you put the *Silly Games* disk in the drive, you just know you are in for something a little bit unusual. Up pops the introductory screen, featuring Major Bumsore And His Incredible Dancing Teeth, and basically, things get weirder from here on.

The collection consists of three games. First up is *Silly Reels*, a fruit machine simulator and probably the sanest title on the disk. It features all of the usual bells and whistles, including gamble and hold, although the nudge buttons are inoperative in this version. All the same, it is quite enjoyable to play, although perhaps just a shade on the easy side.

The remaining two games are both adventures. The first is written using a new version of the *STOS Graphic Adventure Creator* and is entitled *Granny's*



*The show starts with a display from Major Bumsore and His Incredible Dancing Teeth – yep, it's silly alright!*



*Silly Reels is not bad as fruit-'em-ups (oh come on... Ed) go, but sadly the nudge buttons haven't been implemented yet.*

*Garden.* It's entirely mouse controlled and the visuals are excellent, having been drawn by the same artist who produced *Mobster City*. In terms of gameplay it's a little bit weak, but it is a good demonstration of SGAC for those interested in using the system.

But *Murder On The Dairy Express* is the star of the show. Apparently, there's been a homicide aboard a milk float and as D.S. Silly, it's your job to find the perpetrator. In order to do that, you will need to uncover some evidence and interview a host of shady characters. And that's just the beginning. The plot is twisted, involves plenty of gerbils and basically makes very little sense at all – but in this case, that's a compliment! *Murder On The Dairy Express* is a STAC game and a parody on every single text adventure ever written. Basically, if you are into warped humour, it's worth the price of the disk on its own.

**ST REVIEW COMMENT:** "The only game really worth getting excited about on this disk is *Murder On The Dairy Express*. If you look on this as the main title and take the others as they come, then the collection is certainly worth getting hold of. On the other hand, if you are not a fan of text adventures, it's probably worth checking out *Mobster City* before getting involved with this offering."

★★★★

## ACTION BUGHUNT

**FLOPPYSHOP • DISK NO: GAM.4423C • £2.00 •  
MEMORY: 0.5MB • SHAREWARE**

**IN BRIEF:** *Action Bughunt* is a prequel to *Bughunt 2*, which we covered some time back. The game is very similar to look at – overhead perspective, muscle-clad hero and one terminal alien infestation. The objective is simply to free the world from the bad guys, using anything you can find to do so. Grenades and assorted other weapons have been left lying

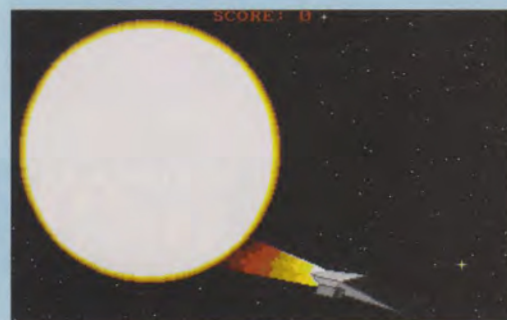
around the complex and basically it's just a case of finding enough ammo to keep our hero alive and clearing each complex as it arrives.

In common with its successor, *Bughunt's* scrolling is in quite large chunks and does lack fluidity. However, the all-important gameplay factor is approaching perfection and the sound effects manage to add some atmosphere.

**ST REVIEW COMMENT:** "*Action Bughunt* is fast, furious and thoroughly satisfying once you get involved. It's not in quite the same league as *Storm '94*, but must rank highly in the PD blast-'em-up stakes. The arcade adventure atmosphere of its successor is missing, but many people would view that as a plus point."

★★★★

*Bughunt's overhead perspective works well and the scrolling is fast, if a little jerky.*



*Well, the aliens got the better of the Earth and it's all your fault – I hope you are pleased with yourself!*



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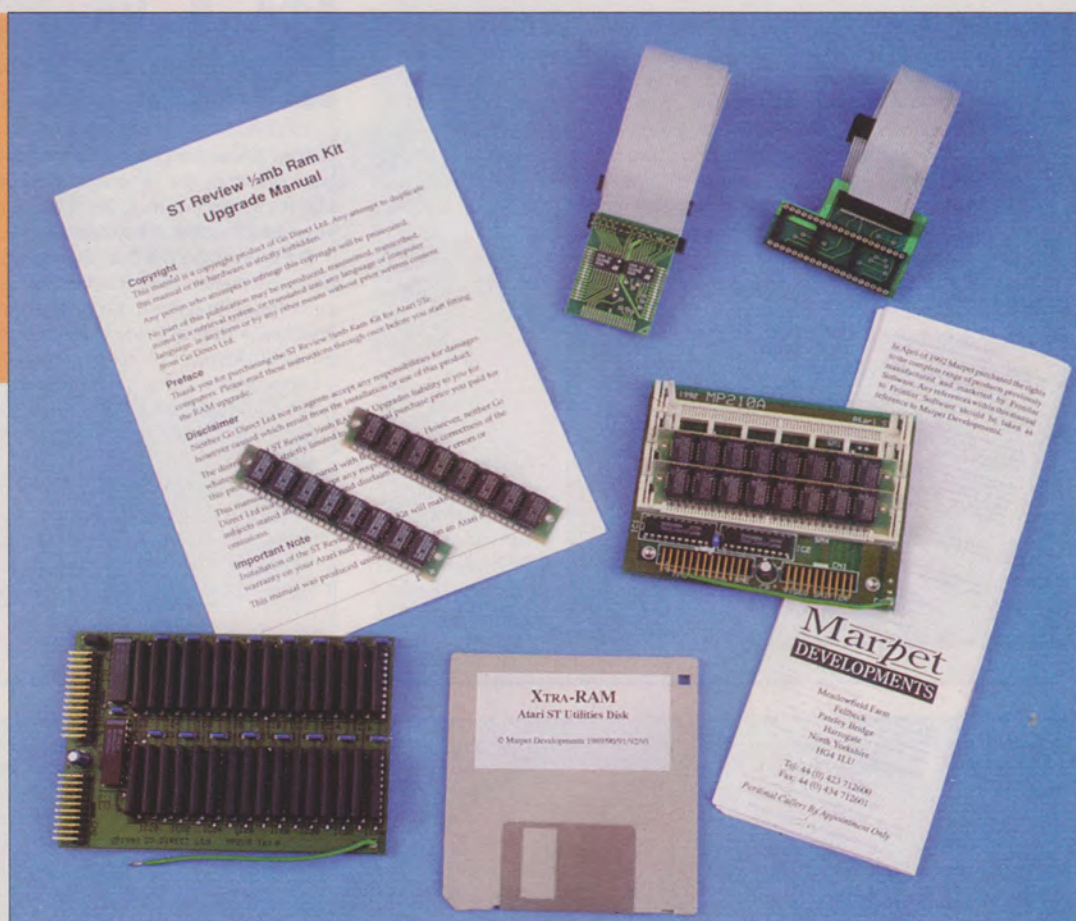
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## UPGRADING AN STE

A 520 STe is usually supplied with two 256K SIMMs and has sockets to plug in two more – it's that easy! A few do not have sockets, in which case you will need a pair of adaptors. These may need soldering; if this is the case, we will supply the sockets at no extra cost – that's service!

A 1040 STe will usually have four 256K SIMMs. In order to upgrade you need to replace these to give either 2 or 4 megabytes of memory.

## UPGRADING AN STFM

In over 90% of all STFMs the upgrade plugs straight in. There are possible problems if either the video shifter chip or the MMU chip in your computer are not in sockets.

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*Atari ST Review continues its campaign to get every ST owner to upgrade the memory of their machine to at least 1Mb and to have all those useful utilities – at the right prices!*



# ST UPGRADE

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Each memory upgrade comes with a free disk including memory test software, RAM disk, print spooler and disk copier, all to ensure you can make the most of your new memory upgrade...

## TIME FOR A SPOT OF MURDER...

For some years now, I have recovered data from corrupted disks as part of a two-man team called "MIDIHelp". My partner, Eric Northwood, has now emigrated to Australia, where he is carrying out the same work, but he and I nearly always found that floppy disk recovery on the ST was down to one of two factors: people using High Density disks in the ST's standard Double Density drive or the existence of a virus in the boot sector.



What is a virus? It's a small program that has been written to damage your data in one way or another. Many strip out the directory and File Allocation Tables (FAT), so rendering the disk useless, while others simply make your computer behave in an odd way – like reversing the direction of the mouse cursor, for instance.

The Signum virus is without doubt the most common of its type on our machines; an estimated 1.5 million disks world-wide suffer from this malaise. Various articles have been written on viruses and most mention how harmless this particular boot sector virus is – don't believe them! Eric and I worked our way through over 100 disks with this virus and all of them exhibited the same characteristics: scrambled FAT and damage to the on-disk data. Perhaps this was coincidental, but I certainly wouldn't want to take the chance!

There are two types of situation for which I personally wouldn't use a public domain or shareware program: hard disk back-up and protection against viruses. I've used UVK for a long time and have always been impressed with the frequent updates and the professional nature of the program. It now reports on every known ST virus, gives a thorough evaluation of your system and can repair over 700 boot sectors. All for just £9.99...

**FREE  
DELIVERY!**

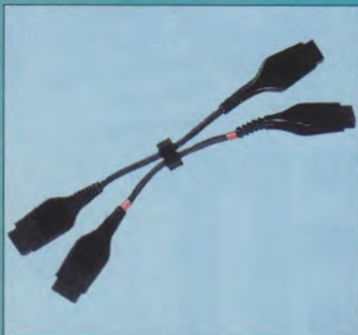
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from  
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## MOUSE

The ST may be a great computer but the mouse that comes with it simply is not up to scratch. The ST Review mouse is a major enhancement because it uses micro-switches for the buttons, making it much lighter and easier to click. Our mouse also has a much higher resolution – 280 dots per inch which means you need far less desk space and get much finer control.

## CLOCK CARTRIDGE

Who sets the time each time they switch on their ST? If like many thousands of ST owners you don't, then you are missing out. Every time you save a file it gets stamped with the time and date – invaluable when you are hunting for a file. Get a clock cartridge and the time will be set automatically each time you switch on your ST.



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Everyone knows about viruses, but far too many ST owners think it can't happen to them – it can! Despite the fact that you never get disks from "friends" and only buy commercial software, a virus could still infect you. And when the gremlins get at your disks, life becomes an absolute misery. Don't

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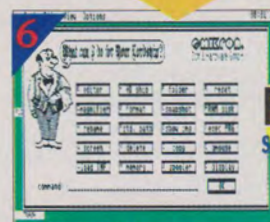
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# PD ZONE

## WHAT'S IT ALL ABOUT, PD?

The public domain is a huge – and often confusing – place, but when you get down to the nitty gritty there are basically three forms of freely distributable software. The easiest to understand is plain ol' **Public Domain**, which has no restrictions on distribution whatsoever – you are free to copy, alter, mangle or feed to your pet Adder any public domain program and the author really couldn't care less (*although the RSPCA might... Ed*). The **Freeware** system runs along similar lines, but in this case the programmer retains the copyright and you are not allowed to alter his work without permission.

The fastest growing form of software distribution available today is **Shareware** which relies on payment from you, the user. Typically you are given 30-90 days to try out a package, after which you must "register" and usually pay a fee to continue using it. The shareware system is all about honesty: if you don't pay the fee, the author is hardly likely to send round de boyz, but on the other hand you won't get any of the benefits of registering and you certainly won't get that warm cuddly feeling inside that comes as part and parcel of being honest. All clear? Well let's move on to this month's category...

### CATEGORY OF THE MONTH: SEND-AN-ELECTRONIC-XMAS-CARD-WARE

This is one of the wackier forms of software registration – if you use the program in question, just jot off an E-Mail to the programmer at Xmas time. Sadly, there doesn't seem to be any Send-An-Electronic-Xmas-Card-Ware available for the ST just yet, but I'm sure programmers will pick up on the trend before too long...

## RECIPE BOX

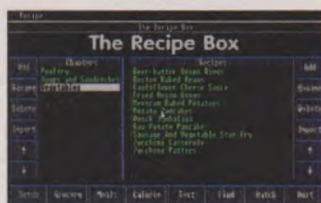
**GOODMAN INTERNATIONAL • DISK NO: GD.2255**  
**• MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

**IN BRIEF:** Having streamlined your shopping schedule with the help of *Grocery Lister* (reviewed last month) isn't it about time your ST got involved with the cooking as well? Well, somebody obviously thinks so, because here we have a program that is tailor-made to take care of all of your gourmet grumbles!

Deep down, *Recipe Box* is basically a glorified database. It stores ingredients alongside a method of cooking and has all of the usual search facilities. Beyond the basics, there's a calorie reference chart, a simple grocery manager and plenty more to keep you busy. The interface is a little reminiscent of the *Freeze Dried Terminal* and it works well for the application. There are a few size limitations in the shareware release, but more than enough is included to give you a taster of what's to come...

**ST REVIEW COMMENT:** "Everything about *Recipe Box* feels "right" – you can really see it coming in handy in the kitchen. The only thing it would be nice to see is a little more interaction between the various sections; for example, why can't the "calorie" button provide a total for a recipe, instead of just listing every single food under the sun?"

★★★★



*The Recipe Box interface is slick and very easy to read thanks to an effective colour scheme.*

## DATABLAZE

**GOODMAN INTERNATIONAL • DISK NO: GD.2268**  
**• £1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE**

**IN BRIEF:** E-Mail is a truly wonderful thing, but the designers of the *Internet* clearly didn't have humans in mind when they devised the addressing system. Most of us have enough trouble remembering conventional addresses, let alone cryptic letter combinations like *spotty@zits.co.nl*.

As you've probably already sussed, *Datablaze* is a software solution to a runny brain. It works as a desk accessory, so can be used alongside your comms software or off-line reader and simply stores a list of names and E-Mail addresses. A search button allows you to recall a particular address in less than an instant and to top it all, the crafty little thing will even type the addresses in if you ask nicely!

**ST REVIEW COMMENT:** "Simple ideas are often the best and *Datablaze* is proof of that. It's handy to have all of your E-Mail addresses instantly on hand, and it's just a pity that it doesn't run in colour screen resolutions."

★★★★



*Datablaze runs as a desk accessory and can be called upon to type an E-Mail address at any time.*

## BORGANIZE

**GOODMAN INTERNATIONAL • DISK NO: GD.2268**  
**• £1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN**

**IN BRIEF:** If you've visited your local library recently, you'll know just how useful a decent database can be for digging out the right title. *Borganize* is a program that brings the same flexibility to the ST, and you can see it being very useful in a bookshop setting.

Everything you need is presented on a single screen. Mouse control is the order of the day and skipping from record to record is made simple by a panel of browser icons. The program doesn't store too much information on each title; all of the basics are there including title, author, number of pages, plus a few lines for comments. When it comes to actually searching through the book list, you can instruct *Borganize* to limit itself to certain fields or scan through everything for a key phrase. On a 4Mb system, 6673 records are available for use which should be enough for most purposes.

**ST REVIEW COMMENT:** "If you've ever used a library computer system, you'll know pretty much what to expect from *Borganize*. It doesn't store a huge amount of information on each title, but it's very efficient at searching out the work of a particular author, or all books that have a certain word in the title. Capable, but unexciting."

★★★★



*Okay, okay, so it's not that interesting, but there are only two screens in Borganize and this is the other one!*



## ADDRESS BOOK 5

**GOODMAN INTERNATIONAL • DISK NO: GD.2268  
• £1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN**

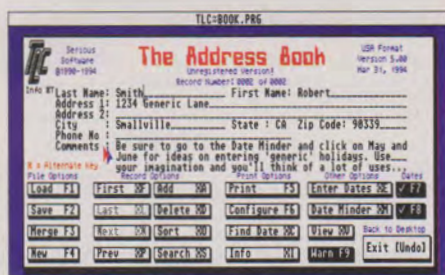
**IN BRIEF:** As dull as digital address books may be, you'd be hard pushed to find a more useful application. Once you are used to the convenience of having everybody's name, address and telephone number instantly at hand, it's almost impossible to return to ye olde filofax.

*Address Book 5* is another standard-issue address database program. Perhaps the best aspect of the whole affair is its interface which is very clear and laden with keyboard shortcuts. The usual range of search facilities are all present and correct, and to give the program its fair due, they do seem to be very fast indeed. Also nice is the ability to load a certain file automatically at boot-up.

The twist – or perhaps it could be described as a “kink” – in *Address Book's* tail is its “date reminder” feature. This stores all details of anniversaries and birthdays in a family and reminds you of the occasion when it arrives; it'll even print address labels if you want them!

**ST REVIEW COMMENT:** “*Address Book* is certainly not hot stuff, but it could probably be described as “tepid”. It's actually quite powerful, but the “date reminder” feature is more of a gimmick than anything. If an accessory version was available, it could be a totally different story. Love the Star Trek-style mouse pointer though.”

□□□□



Everything you need  
is available through  
this single dialogue  
box and all buttons  
have a keyboard  
shortcut.

## MINI CREATE-A-BASE

**MERLIN PD • DISK NO: LS.001A & LS.001B •  
£6.00 • MEMORY: 1MB • LICENCEWARE •  
FALCON-COMPATIBLE**

**IN BRIEF:** Custom databases are fine up to a point, but there comes a time when something a little more flexible is needed and *Mini Create-a-Base* slips neatly into that category. In actual fact, the application is made up of four programs, all held together by a central shell. The first allows you to construct a database, while the others have been written with editing and viewing in mind. In terms of power, it's not a heavy-weight, but a *Zest* interface has been used and the whole affair looks very classy.

There's a distinct lack of documentation on the disk, and the problem is that the program just isn't intuitive enough to cope with that. For example, once you've started to enter records, there's no way of knowing how to stop, and no way of finding out!

**ST REVIEW COMMENT:** “By fiddling around with *Create-a-Base*, it is possible to come up with a reasonably satisfactory system. The program is also very nice to look at, but at the end of the day, you expect (and deserve) to get a full manual with a £6 licenceware program.”

□□□□



A slick front-end allows swift  
access to any of the four  
programs that make up  
*Create-a-Base*.

## TOP TEN DATABASE PROGRAMS

**1 RECIPE BOX • GOODMAN INTERNATIONAL • DISK NO: GD.2255 •  
MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

Organise your kitchen the easy way with *Recipe Box*. It keeps track of ingredients, methods of cooking and can also double as a shopping aid. The shareware version is limited in the number of recipes it can hold, but the registration weighs in at a reasonable \$35.

**2 LUCKY-LOTTO NUMBERS • FLOPPYSHOP • DISK NO: UTL.4539 •  
£2.00 • MEMORY: 0.5MB • FREWARE • FALCON-COMPATIBLE  
(NOT 100%)**

With Britain's national lottery almost on-line, this program from the States might just come in handy. It was written to handle the Texas Lotto, but the documentation seems to think that it will work pretty well with most systems. The author really ought to think about supplying a free anorak with this one!

**3 BORGANIZE • GOODMAN INTERNATIONAL • DISK NO: GD.2268 •  
£1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN**

If your library of books or magazines is beginning to get out of hand, why not catalogue them with *Borganize*? The system has a lot in common with the programs used by most libraries, although the interface is much easier to use. Full search facilities are included.

**4 EASYDAT • FLOPPYSHOP • DISK NO: UTL.4539 • £2.00 •  
MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

A swish looking database from Germany that could really do with English documentation. The interface is a good example of GEM programming and ASCII files can be imported through a separate utility that is also included on this disk.

**5 ADDRESS BOOK 5 • GOODMAN INTERNATIONAL • DISK NO:  
GD.2268 • £1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN**

A solid, but predictable address database program that has the ability to link dates to information cards. The keyboard shortcuts make it extremely easy for experienced users to dash from button to button and it's admirably fast in most areas, searching included.

**6 DATABLAZE • GOODMAN INTERNATIONAL • DISK NO: GD.2268 •  
£1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-  
COMPATIBLE**

*Datablaze* commits your complete E-Mail address book to disk and can recall any name in the blink of an eye. Simple search facilities are included and as a desk accessory, it can even attempt to type the address in for you.

**7 HIGH SCORE TERMINAL UTILITY • GOODMAN INTERNATIONAL •  
DISK NO: GD.2161 • £1.95 • MEMORY: 0.5MB • SHAREWARE**

It's soul destroying to battle your way through hordes of aliens only to find that a game doesn't even bother to save your world-beating score to disk. The *High Score Terminal Utility* is a mini-database specifically designed to store high score files along with the game title and your own name. Now doesn't that make you feel better?

**8 MINI CREATE-A-BASE • MERLIN PD • DISK NO: LS.001A & LS.001B  
• £6.00 • MEMORY: 1MB • LICENCEWARE • FALCON-COMPATIBLE**

A general purpose database that is let down by a lack of instructions. The *Zest* interface makes the whole thing look very good, and the feature set isn't all bad either – just a little more intuitive and we would be looking at a winner.

**9 FONTLIST • THE ST CLUB • DISK NO: DMG.41 • £2.25 •  
MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE**

Cataloguing your collection of *Calamus* fonts is a nightmare at the best of times, but *Fontlist* makes the process just a little more bearable. Just point it towards the right directory and out will pop a perfectly formed list of file and font names that can be imported into a database or *Calamus* directly.

**10 NO FRILLS • GOODMAN INTERNATIONAL • DISK NO: GD.2268 •  
£1.95 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-  
COMPATIBLE**

*No Frills* is a simple labelling program. Mouse control is out of the window (pun intended) and it's back to MS-DOS-style keystrokes. On the bright side, it is pretty nippy, runs in any screen resolution and occupies very little memory – the whole program weighs in at just 35Kb.



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MPD2120 - **ST Beermat** - An excellent disk magazine with lots of articles **£1.25**

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NARC	DIZZY PANIC	MINDFINDER	QUADREL (Puzzle game)
PREMIER MANAGER	GRAHAM SOUNESS	SNOWSTRIKE	DAILY DOUBLE HORSE
PUB TRIVIA	SOCCER MANAGER	MANIX	RACING
POPEYE 2	PETER BEARDSLEY	RESOLUTION 101	MANCHESTER UNITED
SKATEWARS	OUTLANDS	XYBOTS	SPACE CRUSADE
SPORTING TRIANGLES	ROCK STAR ATE MY	GEM X	COUNT DUCKULA 2
THOMAS THE TANK	HAMSTER	HOVERSPRINT	CHESS SIM
SUN CROSSWORDS	SUPER SEYMOUR	TOP BANANA	COLOSSUS CHESS
TIMES CROSSWORDS	WORLD SOCCER	NITRO	INT. TRUCK RACING
TERMINATOR 2	KENNY DALGLISH	STRIP POKER	
THUNDERBIRDS	VENUS FLYTRAP	ACTION SERVICE	

## COMPILATIONS

<b>BOARD GENIUS</b>	<b>HIGH ENERGY</b>
CLUEDO, SCRABBLE, RISK .....	NORTH & SOUTH, TINTIN ON THE MOON, FIRE & FORCE, TEENAGE QUEEN, HOSTAGES .....
<b>THE GREATEST</b>	<b>QUATRO ARCADE</b>
JIMMY WHITE, LURE OF THE TEMPTRESS, SHUTTLE .....	PRO POWERBOAT, NITRO BOOST, SAS COMBAT, PUB TRIVIA .....
<b>KIDS PACK</b>	<b>QUATRO FIGHTERS</b>
POSTMAN PAT, THE MUNSTERS, COUNT DRACULA .....	SAS COMBAT, MIG 29, KAMIKAZE, GUARDIAN ANGELS .....
<b>16 BIT MACHINE</b>	<b>CARTOON COLLECTION</b>
SUPER CARS, SKIDZ, SWITCHBLADE, AXEL'S MAGIC HAMMER .....	TREASURE ISLAND DIZZY, CJ'S ELEPHANT ANTICS, SLIGHTLY MAGIC, SPIKE IN TRANSYLVANIA, SEYMOUR GOES TO HOLLYWOOD .....
<b>COMPUTER HITS 2</b>	<b>MAX</b>
TETRIS, TRACKER, JOE BLADE, TAU CETI .....	TURRICAN II, ST DRAGON, SWIV, NIGHT SHIFT .....
<b>BIG BOX</b>	<b>KIDS RULE OK</b>
TEENAGE QUEEN, CAPTAIN BLOOD, KRYPTO 'N' EGG, BOBO, SARARI GUNS, BUBBLE+, TINTIN, PURPLE SATURN DAY, JUMPING JACKSON, HOSTAGES .....	POSTMAN PAT 3, POPEYE 2, SOOTY & SWEEP .....
<b>SPORTS COLLECTION</b>	<b>ACTION MASTERS</b>
PRO TENNIS, WORLD CUP SOCCER, RUN THE GAUNTLET .....	F16, TURBO OUTFRIN, DOUBLE DRAGON 2, ITALY 1990, WELLTRIS .....

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```
Thinking about the job
Thinking about the job
Thinking about the job
Thinking about the job
Which of the 1 sheets do you want to print?
Enter 2 for ALL
```

Although it is nothing to look at, Booker simplifies the construction of A5 booklets beyond belief.

## BOOKER

**FLOPPYSHOP • DISK NO: UTL.4536 • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

**IN BRIEF:** Collating booklets must rank alongside wallpaper stripping as the most soul-destroying task ever devised by man. But here to rescue you from the depths of despair, and make your life slightly more fulfilling is *Booker* – the software solution to this age-old problem.

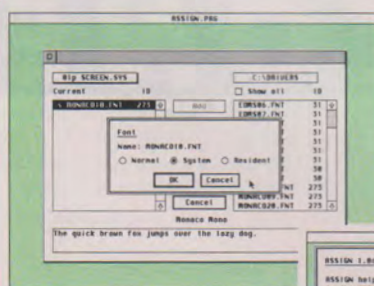
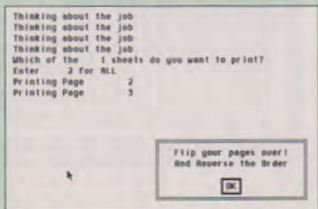
*Booker* is probably the simplest program you will ever use in your entire life. Just select a file, wait for a few seconds and out pops the first "landscape" page of your booklet. The only slightly tricky part is remembering which way to flip the paper when it comes to printing on the other side.

As for printer support, *Booker* was programmed with the LaserJet II in mind, but the DeskJet also seems perfectly happy to cooperate. The only real downer is the fact that it refuses to deal with anything other than ASCII text. Oh, and *Wallpaper Stripper Pro* is due for release from the same author within the next month...

**ST REVIEW COMMENT:** "*Booker* is extremely efficient and does its job perfectly. There's no interface as such, but then again, it's hard to see a reason for needing one – just double click on the file you want to use and away it goes! Support for a few more text formats would be handy though."

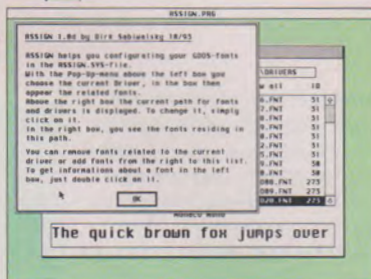
★★★★

Working out which way to flip the pages can be a little tricky at first, but you soon get the hang of it.



A clear GEM interface and NVDI compatibility make Assign-Ed by far the best GDOS editor.

The on-line help system helps to make up for the lack of English documentation.



## ASSIGN-ED

**FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

**IN BRIEF:** The arrival of *SpeedoGDOS* almost put an end to the nightmare of editing *ASSIGN.SYS* files manually, but there are still odd times when you need to get your hands dirty: installing *NVDI*'s screen fonts is an ideal example. This and many other similar chores can be performed quickly and easily with the help of *Assign-Ed*.

The whole program is controlled through one large dialogue box. Resident fonts are shown on the left, while those that are uninstalled are shown on the right. Usage is as simple as selecting a name and clicking on Add or Remove as necessary. By default the program edits *ASSIGN.SYS* on drive C, but it can also be instructed to load any other .SYS file, which is useful for *SuperBoot* users. On-line help is available in case you get stuck, which is just as well, because the documentation is in German!

**ST REVIEW COMMENT:** "*Assign-Ed* is an ideal companion to any version of *GDOS*. It's a lot easier to use than most *ASSIGN.SYS* managers and copes admirably with *NVDI*'s screen fonts and other slight abnormalities. All *GDOS* users owe it to themselves to see how things should have been done in the first place."

★★★★

## P6-EMULATOR

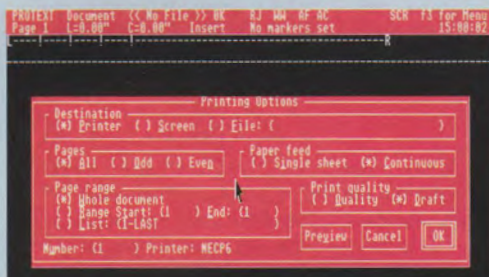
**FLOPPYSHOP • DISK NO: UTL.4536 • £2.00 • MEMORY: 0.5MB • SHAREWARE**

**IN BRIEF:** The DeskJet is a very popular printer these days, but even so, you often come across programs that simply don't have the necessary driver. This is particularly true of public domain software and even some older commercial applications.

As the name suggests, the *P6-Emulator* will kid your DeskJet into thinking it's an NEC P6 – a loosely Epson-compatible device. Once the emulator is safely seated in your Auto folder, all of this trickery is performed transparently. There's very little quality penalty to pay for using the emulator either, because the P6 is a 24-pin printer. Compatibility is the big thorn in the program's side though – most applications just seem to ignore the fact that the printer is there at all. Even *Protex*, which supports the P6 specifically, just prints into thin air.

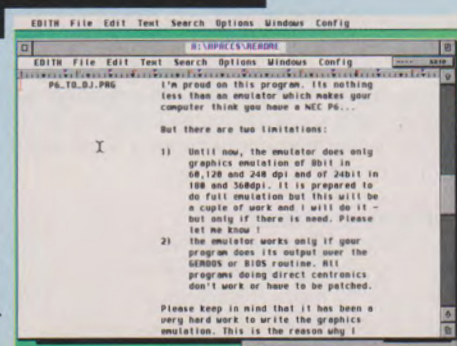
**ST REVIEW COMMENT:** "The *P6-Emulator* is a nice idea, but in practice it's too flaky for words. It's hard to recommend it in any way, but I suppose there is a small possibility that it could increase your options when it comes to tricky PD software."

★



Compatibility is the main problem with the P6 Emulator: Protex is just one of the many programs it refuses to deal with.

The emulator can deal with graphics right up to 360dpi, so the quality of output is very good.





# PD ZONE

## LITTLE COPIER

**MERLIN PD • DISK NO: ESE.066 • £1.25 •  
MEMORY: 0.5MB • PUBLIC DOMAIN**

**IN BRIEF:** Take a look through the ST public domain and you will find literally dozens of formatters and copiers. The Falcon on the other hand would have trouble raising a small posse of programs that can deal properly with its high density disks. *Little Copier* has been written to solve this very problem and for what it's worth, also runs happily on the ST (yep, another one)...

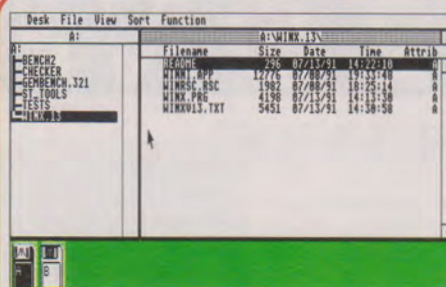
It certainly scores in terms of looks. A beautiful, grey interface is used and all of the buttons have a trendy bass-relief look. It rates quite well alongside the likes of *FastCopy* in terms of speed too, a full HD copy taking a shade under two minutes from start to finish. And as if that wasn't enough (and believe me, it wasn't) disks can be formatted and erased in similarly startling times.

**ST REVIEW COMMENT:** "Little Copier has a fair turn of speed, sufficient features and it looks rather cute too. It's certainly not as powerful as

*FastCopy Pro*, but on the other hand, costs nothing and is leaps and bounds ahead of Atari's own offering."

□□□□

*In addition to basic duplication, the program can also provide comprehensive information of the source disk.*



*ST Tools is very straightforward to use, but it does lack the brute force of its commercial counterparts.*

## ST TOOLS

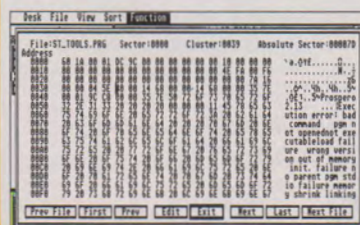
**MERLIN PD • DISK NO: ESE.074 • £1.25 •  
MEMORY: 0.5MB • SHAREWARE**

**IN BRIEF:** Programs like *Diamond Edge* are useful to a degree, but there are times when you need to get right in there and edit a disk directly. *ST Tools* is a utility that will allow you to do just that and can be looked upon as the shareware equivalent of *Knife*.

The interface is GEM-based and straightforward to use. A directory window sits towards the left of the screen, while files are listed on the right – it's simply a case of clicking on the name you want and then choosing an appropriate menu option. Files or sectors can be edited directly and there's also a useful search facility; it may not be quick, but it works predictably well. "Simple but effective" is the phrase that springs to mind.

**ST REVIEW COMMENT:** "While it's not as powerful as *Knife*, *ST Tools* is competent in most departments and the interface is very easy to use. At the end of the day though, you can still do a lot of damage by editing disks directly, so make sure you have a back-up of any disk you work with. You have been warned!"

□□□□



*Files or sectors can be edited directly and the ASCII search facilities are handy if you're in the translation business.*

## POV RAYTRACER 2

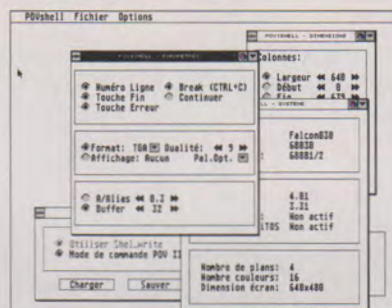
**FLOPPYSHOP • DISK NO: BY NAME • £4.50 •  
MEMORY: 1MB • PUBLIC DOMAIN • FALCON-  
ENHANCED • HARD DISK RECOMMENDED**

**IN BRIEF:** Raytracing is becoming more and more popular these days, largely thanks to the numerous television programmes and pop videos that rely on the technique. *POV 2* brings a taste of that power to your ST. To create a "scene", all you need to do is write a text description and run it through the program itself.

A beautiful looking GEM shell is supplied with *POV*, but it doesn't seem to work too well and we ended up reverting to the command line – mind you, the French prompts might have had something to do with it. The version covered here is specifically for the TT/Falcon: an ST version is also available, but costs a little more due to the extra disks needed – contact Floppyshop for more details.

**ST REVIEW COMMENT:** "POV is as complex as ever, but at the end of the day, it still churns out the most impressive pictures you are likely to see on an ST. The increased speed is great news for fans of earlier versions and when using the maths coprocessor version, it's largely bearable. All in all, it's got to be a winner!"

□□□□



*The Binaris POV shell looks great, but setting it up could be difficult as all of the prompts and instructions are in French.*

*A number of sample scenes are supplied, but be prepared to wait for pictures of this quality.*







All of the PowerDOS settings can be adjusted through this simple GEM utility.

## POWERDOS

**THE ST CLUB • DISK NO: DMG.41 • £2.25 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

**IN BRIEF:** Replacing parts of Atari's operating system is big business these days. Perhaps the most popular example is *NVDI* which, as the name suggests, steps into the shoes of the Virtual Device Interface and provides a much faster screen display. *PowerDOS* is a replacement for *GEMDOS*, the ST's disk operating system. The routines it provides are many times faster than the Atari equivalents and also more reliable.

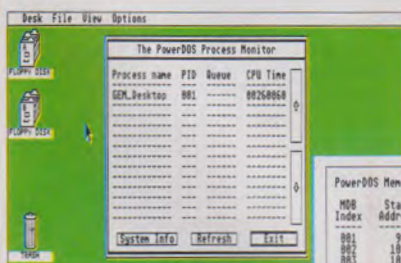
In use, *PowerDOS* improves all disk operations dramatically, and the effects are especially noticeable if you use a hard drive. *GEMView* has searched for (and found) all of its modules before you can blink an eye and many other applications show similar increases in speed – just try *Autosort*! Some of this is no doubt due to the in-built caching routines, but you'll be surprised at just how much it can affect the timings on file copies and such like too.

Installation is a simple affair. Just pop the program in your Auto folder and everything else will be taken care of. A GEM utility is supplied to tweak the set-up, or the configuration file can be edited manually if you are in favour of the hands-on approach. Sadly there is a downside to *PowerDOS*, and that's compatibility. It seems to run almost all applications without any trouble at all, but the big bone of contention is the fact that it's incompatible with *NVDI*. This is a shame, because the version supplied with *Ladbroke's MIDI-Net* has no problem in this regard.

Over and above the speed aspect, *PowerDOS* also adds several features not found within Atari's own *GEMDOS*. To kick off with, you can assign drive letters to a path – or in other words, create an *Alias*. Any number of environmental variables can be assigned in the configuration file and the amount of memory stolen by applications can also be controlled. *PowerDOS* even manages to remove many of the bugs in *GEMDOS* – both *FOLDERXXX* and *FatSpeed* become redundant.

**ST REVIEW COMMENT:** "PowerDOS has an awful lot going for it, and the speed increase is immediately noticeable on a hard disk system. In general, compatibility is good, but the *NVDI* problem is going to put many prospective users off. Faced with the choice of accelerated disk access or turbo-charged screen redraws, I think most people will opt for the latter."

0000



A list of current tasks in memory can be displayed through the Process Manager.

PowerDOS Memory Status version 1.0

MOB Index	Start Address	Block Length	Owner PID	Owner Name	Owner Link
001	98474	3980	--	System	000
002	102382	338	--	System	001
003	102720	4	--	System	002
004	102724	14	01	GEM_Desktop	003
005	102730	256	01	GEM_Desktop	004
006	102794	1024	01	GEM_Desktop	005
007	104810	16036	01	GEM_Desktop	006
008	120854	14	01	GEM_Desktop	007
009	120868	7904	01	GEM_Desktop	008
010	120872	14	02	MEM_STAT.TTP	009
011	120876	13538	02	MEM_STAT.TTP	010
012	142390	11112	01	GEM_Desktop	011
013	142398	38212	01	GEM_Desktop	012
014	102580	512	01	GEM_Desktop	013
015	106792	92	01	GEM_Desktop	014
016	107744	4076	01	GEM_Desktop	015
017	191968	3969576	--	Free	000

-More-

Several utilities are supplied with the PowerDOS package, including *Mem-Stat*, which provides a breakdown of memory usage.

## TOP TEN UTILITIES

**1 BOOKER • FLOPPYSHOP • DISK NO: UTL.4536 • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

Anybody who has ever tried to collate a catalogue by hand will appreciate just what an incredible task *Booker* performs. It will take any ASCII text file and turn it into a perfectly-formed A5 booklet in a matter of seconds. Just remember to flip the paper in the right direction at the halfway stage and you're laughing.

**2 POV RAYTRACER 2 • FLOPPYSHOP • DISK NO: BY NAME • £4.50 • MEMORY: 1MB • PUBLIC DOMAIN • FALCON-ENHANCED • HARD DISK RECOMMENDED**

For impressive computer-generated images, the *Persistence of Vision* Raytracer cannot be beaten. The pseudo-programming language it uses may look complicated, but experiment for a while and you'll find that a detailed scene need only take a few hours to put together. A classic.

**3 POWERDOS • THE ST CLUB • DISK NO: DMG.41 • £2.25 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

*PowerDOS* is the most effective way of turbo-charging disk operations on your ST. It completely replaces Atari's *GEMDOS*, removing a number of bugs along the way, and even manages to add a few tricks of its own, including drive aliases. The only spanner in the works is its severe dislike of *NVDI*.

**4 COPY MUL • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • PUBLIC DOMAIN**

Nothing is more annoying than waiting for a disk to copy when you could be using the computer to perform a more important task. *Copy Mul* is an accessory that blitzes this problem by allowing disks to be copied in the background. A constant report of the progress is given in the menu bar.

**5 LITTLE COPIER • MERLIN PD • DISK NO: ESE.066 • £1.25 • MEMORY: 0.5MB • PUBLIC DOMAIN**

A colourful little copier and formatter that happily deals with high density disks on the Falcon. It also manages to work well on the ST and the copy timings are respectably low when compared with *FastCopy Pro*. Now if only it ran as a desk accessory...

**6 ASSIGN-ED • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE**

Install *Assign-Ed* and cease battling with *ASSIGN.SYS* files forever! A few simple mouse clicks are enough to add or remove new fonts and it even manages to cope with *NVDI* well. It works with all versions of *GDOS*, right up to *SpeedoGDOS* and English language help is available on-line.

**7 THE C-64 EMULATOR • INTERNET • MICROS.HENSA.AC.UK • £FREE • MEMORY: 1MB • SHAREWARE**

Commodore 64 fans unite – this program turns your ST into a fully functional C-64 clone. Sadly there doesn't seem to be any way to load the game snapshots available for the PC C-64 emulator, but the German documentation seems to suggest that it does handle disk access in some form or another. Translation please, Mr. Author!

**8 ST TOOLS • MERLIN PD • DISK NO: ESE.074 • £1.25 • MEMORY: 0.5MB • SHAREWARE**

If you're looking for a means to edit disks at sector level but can't afford *Knife*, *ST Tools* is the program to go for. The interface is blissfully easy to use, being fully GEM-based, and mixed in is an adequate range of search and editing facilities. A nice program.

**9 DISK CHECKER • MERLIN PD • DISK NO: ESE.074 • £1.25 • MEMORY: 0.5MB • SHAREWARE**

When important data is at stake, it pays to test a floppy disk's integrity and *Disk Checker* will do just that. Although the process does take time – up to six minutes in some cases – you can at least be reasonably sure that the floppy is secure.

**10 JET EMU • FLOPPYSHOP • DISK NO: UTL.4536 • £2.00 • MEMORY: 1MB RECOMMENDED • PUBLIC DOMAIN • FALCON-COMPATIBLE**

*Jet Emu* is a software interpreter for PCL-III files, or in other words, the output from *DeskJet* and compatible printers. Any file spooled to disk can be loaded up and displayed in a GEM window, although quite where this comes in handy is a mystery!



# PD ZONE

## BACKWARD 2.52

**GOODMAN INTERNATIONAL • DISK NO: GF.79 • £1.95 • MEMORY: 1MB • SHAREWARE • FALCON ONLY**

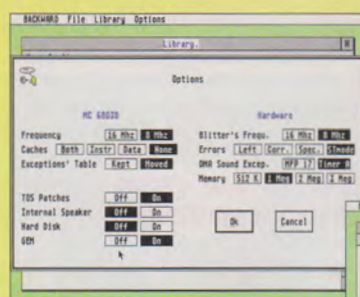


**IN BRIEF:** *Backward* has been around for well over a year now, but this latest release is a huge improvement to an already impressive utility. Put simply, it is designed to make your Falcon more ST-compatible. Run the program from your hard disk, make a few configuration changes and suddenly a whole host of previously incompatible games are brought back to life.

The enhancements offered by this version are many. To begin with, the configuration can now be adjusted "live" through the numeric keypad and GEM itself can also be disabled. Obviously, the desktop can't be used while this option is in force, so instead *Backward* has its own "minidesk" that can be used to launch programs after a reboot. In common with earlier versions, the only restriction is a limit on the number of disks that can be programmed into the main, library window.

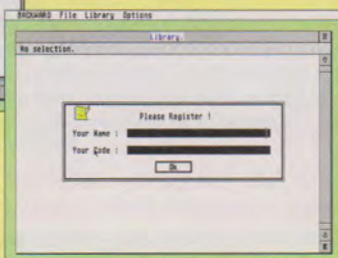
**ST REVIEW COMMENT:** "There are a number of ST emulators for the Falcon, but *Backward* is by far the best. It scores in terms of compatibility, ease of use and features. The documentation also includes a wealth of information to help you work out the right configuration."

\*\*\*\*\*

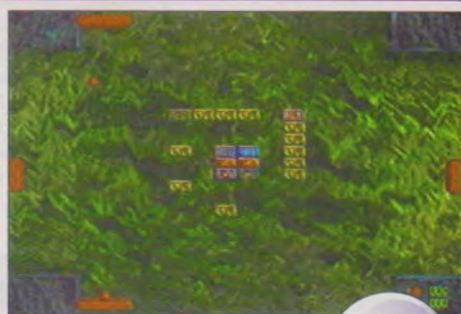


*Backward turns your Falcon into an almost perfect ST clone – it can even disable GEM for that extra little bit of compatibility.*

*New for version 2.52 is the registration dialogue box – a keycode is all that's needed to unlock the full potential of the program.*



*Multi-Briques is probably the best shareware Falcon game to date – both the music and graphics are outstanding.*



*Presentation is the key to the game's success – "atmospheric" is an understatement!*



## MULTI-BRIQUES

**FLOPPYSHOP • DISK NO: F.4553 • £2.50 • MEMORY: 4MB • SHAREWARE • FALCON ONLY**

**IN BRIEF:** *Breakout* is one of the most enduring game concepts ever devised – the original Atari idea has been cloned and improved hundreds of times and yet, it remains as playable as ever. If you want a bad example of *Breakout*, just dig out your Falcon system disks, but if you're looking for something a little more inspiring, you need *Multi-Briques*!

The first thing you notice about the game is that there are four paddles: one for each side of the screen. In solo mode, these are controlled in two sets, but extra players can be allocated through the extended joystick ports. The only shareware restriction appears to be a slight lack of levels. Warning: *Multi-Briques* fiddles about with the monitor sync rate during its introductory sequence. Multisync monitors shouldn't have any problems handling this, but if you are using a standard VGA display, keep your finger on the reset button, just in case.

**ST REVIEW COMMENT:** "Ooh – a real Falcon game! *Multi-Briques* is visually stunning and backed up by some top-quality music. The gameplay is solid and the only criticism you can make is about the control methods – a joystick simply can't offer the same fine level of control as a mouse."

\*\*\*\*\*

## YUPPIES

**GOODMAN INTERNATIONAL • DISK NO: GF.79 • £2.50 • MEMORY: 4MB • PUBLIC DOMAIN • FALCON ONLY**

**IN BRIEF:** When the Falcon was first released, Atari had high hopes for it as a games machine. Previews of forthcoming titles abounded and *Yuppies* appears to be one of these demos. It's a platform game and you take the role of a cutesy-wutesy bunny wabbit. The

*Fast scrolling and cutesy graphics are let down by a complete lack of gameplay.*

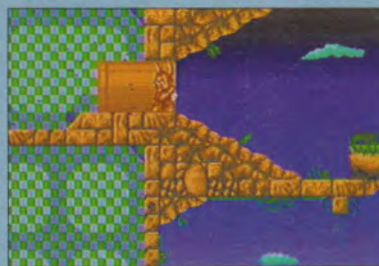


scenery is very reminiscent of *Sonic* and so colourful it makes your eyes sting. You are free to move the character around the landscape by using the joystick and the scrolling is impressively smooth. There are one or two glitches in the graphics, but it's clear that this is a very early version.

The only other problem is that there's not really anything to do – once you've cavorted around the large play area once or twice, the whole thing tends to lose its appeal. Oh well, it was fun while it lasted...

**ST REVIEW COMMENT:** "*Yuppies* looks very impressive, but at the end of the day, it's just a demo and there's not an awful lot to do once the scenery has been thoroughly explored. On the other hand, it's a lot more entertaining than many dedicated Falcon demos."

oo



*Yuppies is a testament to the Falcon's gaming potential – it's just a pity that the programmer didn't get round to finishing it!*



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Mike Robinson  
looks at the  
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# ESSENTIAL EXTRAS

## RAMDISKS

Unless you actively use one, you'd be forgiven for wondering what all the fuss is about when it comes to RAMdisks. Yet depending on the amount of free memory in your system, a RAMdisk can be used to speed up disk copying, archive extractions, printing, spell checking and programming, to name just a few examples.

### WHAT IS A RAMDISK?

A RAMdisk sounds like a contradiction in terms, and in a way it is. The need for RAMdisks arose when hard disks were prohibitively expensive, yet memory chips were quite affordable. The idea is quite simple: a RAMdisk program grabs a portion of the ST's memory and fools TOS into thinking that this section is, in fact, a disk. But why bother?

Well RAM is many times faster than a floppy or even a hard disk. Data is read from a floppy disk at around 20Kb per second – a 100Kb file will take about five seconds to

read. A hard disk can be up to 100 times faster, typically capable of reading data at a rate of 1,000Kb a second or more. A RAMdisk can be as fast as 3,000 to 10,000Kb per second, depending on the computer.

The most typical use of a RAMdisk is as a residing place for often-used files. A programmer might place all the auxiliary "include" files on a RAMdisk; with a word processor like *Protext*, you could place the spell checker dictionary there for quicker access. *Calligrapher* could be partially installed onto a RAMdisk by placing the printer drivers there, so speeding up output time and removing the need to swap disks when printing.

### SURVIVAL

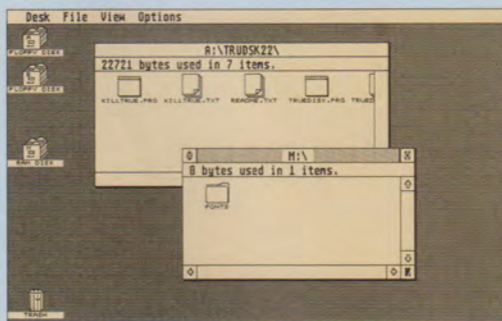
Finding a good, reliable RAMdisk is difficult, and not because of limited choice. On the contrary – there are far too many RAMdisks around.

RAMdisks can be broadly categorised into reset-proof and non

reset-proof types. A reset-proof RAMdisk maintains its contents even after a warm reset or system crash. It usually has the side effect of causing a reset when first run and would typically be placed at the top of the Auto

folder to load first. Some RAMdisks, like *MaxiDisk*, can also perform batch commands at boot-up. You can, for example, instruct it to copy various file from floppy to the RAMdisk automatically. *RDE* takes this even

To access a RAMdisk, you'll need to install a drive icon on the desktop. This must be done manually on TOS versions before 2.0x – remember to save the desktop once the icon is installed.



### TRUEDISK

*TrueDisk is very simple to configure – run it from the desktop holding down the <Alternate> key and enter the required settings.*



This is by far the most compatible RAMdisk program on the market. It is German (*surprise, surprise... Ed*), but comes with a short and simple English *readme* file. The program doesn't sport many features and is configured by running it while holding down <Alternate>. Only two options are available: the drive letter and the size of the RAMdisk. TT users can also determine whether the RAMdisk uses FastRAM or not.

Two other utilities are supplied, one to remove the RAMdisk from memory, effectively returning the memory to the system. The other program is simply used to quickly wipe the contents of the disk.

The size of the RAMdisk can be changed at any time, but this causes a cold reset and loss of all data. *TrueDisk* does warn you before such an action.

*TrueDisk* is reset-proof but, unlike other RAMdisks, does not cause a reset when installed. It can be run from the desktop with no ill effects and even runs perfectly under *MagiC*. While it doesn't offer any fancy features, it appears to be reliable and most of its shortcomings can be addressed by using additional utilities.

### BUYER'S GUIDE

### UNDER THE SPOTLIGHT...

The nitty-gritty on our three main RAMdisk contenders...

	GEM Interface?	Bootable?	Save with contents?	Compression?	Reset-proof?
TrueDisk	×	×	×	×	✓
RDE	✓	✓	✓	×	✓
MaxiDisk	×	×	×	✓	✓



## MAXIDISK

*MaxiDisk* has always been popular thanks to its ability to compress files in real time. This means that you can typically store about 700Kb of data in a 500Kb RAMdisk! The compression occurs transparently in the background and is only noticeable through a slight slowdown in the access speed of the RAMdisk. Even with the extra work of compression and de-compression, *MaxiDisk* is fast enough – much faster than any hard disk.

The program is configured through a simple ASCII file that can be edited in any text editor. The first line sets the size and drive, so "500 D", for example, will create a 500Kb RAMdisk as drive D.

A rather useful feature of *MaxiDisk* is its ability to run TOS and TTP programs as part of the boot sequence. A simple program called *COPY.TTP* is supplied to automatically copy any files to *MaxiDisk* during the boot process. A line such as "COPY.TTP A:\STUFF D:\\" in the *MAXIDISK.INF* file copies all the files in the folder STUFF to the RAMdisk. Another supplied utility sets the system clock which, again, *MaxiDisk* can run at boot time.

*MaxiDisk* is an old program and incompatible with the Falcon or any multi-tasking systems, but for a standard ST or STe it may well be the ideal choice, especially if memory is tight.

**MaxiDisk can be configured by running it from the desktop, although the best way is through its .INF file...**

```
*** Public domain software *** (C) Max Böhm 08.08.1987
This is a resetproof randisk that stores more than you would imagine...
Revised Version 2.2: XDR protocols & improved compatibility
*** Public domain software *** (C) Ulf Ronald Andersson 21.05.1992
Free Memory ==> 3859520 Bytes
Use how many KB ? 128
Which partition ? 6
```

further by allowing you to save the RAMdisk along with its contents as an Auto program file. Running the program at boot time not only installs the disk but also its contents.

### VERDICT

The three RAMdisks mentioned here are just examples of the different types and the functions they provide. All do their basic job pretty well and

choosing one is more a case of looking at the features you require. If memory is tight then *MaxiDisk* will be helpful due to its automatic compression.

If absolute compatibility with multi-tasking is important then *TrueDisk* is a serious contender. *RDE*, on the other hand, provides some very useful functions that can almost replace a hard disk if you have enough memory...

## OTHER TAKERS

The choice of RAMdisk is truly overwhelming. Most are public domain and a few are shareware, including *Eternal RAMdisk* and *RAM Baby* which also includes a disk spooler and runs as a desk accessory. *Turbo RAMdisk*, *EDisk* and *VDisk* are also available in the public domain.

There are some commercial offerings, usually as part of a larger package. *Harlekin* comes with a flexible RAMdisk and *Ease*, the replacement desktop, has one that expands and shrinks dynamically as files are stored or removed. The *HiSoft BASIC* and *Lattice C* compilers are also accompanied by a flexible offering.

Most PD libraries have a large selection of RAMdisk programs for you to choose from – some even offer a collection of RAMdisks on a single floppy...

Enter Randisk Size (in Kbytes)

500 kbytes

OK

**RDE provides a friendly GEM installation program. Enter the required size in the first dialogue box and select the drive letter in the next one.**

Select a drive & click 'OK'

C: D: E: F: G: H: I:

J: K: L: M: N: O: P:

OK

## RDE

*RDE* incorporates a GEM installation program and some unique features such as being able to save the disk with its contents. *RDE* is reset-proof and causes a reset when installed.

Thanks to the GEM interface, installation and other options are quite easy to use. With *RDE* you can install several RAMdisks and give each a different drive letter. One of the drives can even be set as the boot drive, so you can make use of that if you hate having to wait for your system to reboot from a floppy.

To create a booting RAMdisk, use *RDE* to create a RAMdisk as drive C. Next, copy all your Auto programs and accessories to it. Then use the *RDE* installer to back up the RAMdisk and save it into the Auto folder of an empty floppy disk. *RDE* then creates a program that you can name *RDE-BOOT.PRG*. The resulting program is quite large, so the boot process can be speeded up by packing it with a program packer such as *PFXPAK*. The first boot will take about half the time it used to, because the contents of the RAMdisk are loaded from the floppy disk, but from then on every warm reset or system crash will be followed by the fastest boot sequence you have ever seen!

Do you want to be able to boot the system from this RAM disk? (Only one boot disk allowed per system.)

NO

YES

OK

**RDE RAMdisks can be bootable, a handy feature for those of you who can't bare waiting for your system to reboot after a reset!**

Save RAM disk P

into file A:\RDE\_V5\rdedisk.prg



YES

NO

**You can use RDE to save the disk with its contents by returning to the installation program and selecting the "Backup RAM Disk" menu item.**

Removable?

Batch file?

Effectiveness

Documentation

Ease of Use

Overall

✓

×

8

7

9

80%

✓

×

9

7

9

84%

×

✓

8

6

8

74%



# INS AND OUTS

**A**ddress communicates with the outside world through its import/export option. Unfortunately, this uses a command line (the **data format string**) and the key to understanding this lies buried inside the editor window. Open the Address editor window, double-click on any field title and the keyword for that field is revealed. It is these keywords that are used in the data format string to move your data around and they're listed in our **Keyword box**.

To successfully import your data into Address you'll need to find out how it's formatted. Most databases export (or "report") readable ASCII files so you can simply load it into any text editor and have a look. If you're confronted by gibberish, try a different export option.

If your data is formatted a field to a line like this:

ST Review  
Macclesfield  
SK10 4NP

then using a data string customised to these fields, the example above would look like this:

%NAM%n%STA%n%PLZ%n

The %n keywords tell Address to look out for the hidden Line Feed characters present at the end of each line and move to the next field each time it finds one. Alternatively your data may use separator character(s) between the fields like this:

ST Review|Macclesfield|SK10 4NP or  
"ST Review","Macclesfield","SK10 4NP"

*Joe Connor unravels the mysteries of the import and export options from last month's Address cover disk program...*



Double-click on any field title to change its name or reveal its internal keyword.

%VOR,%NAM normally results in Joe,Connor but %VOR;%NAM gives Joe Connor.

[<number here>]: Brackets can be added after any keyword to set a fixed length for the field – useful for exporting tables.

If you're still experiencing problems, why not use the coupon in last month's issue to get hold of the full version which features a comprehensive ST-Guide on-line help and UK support...

## KEYWORDS

Keyword	Field
%ANR	Title
%AN1	Greeting
%VOR	Forename
%NAM	Surname
%NA1	Name 1
%NA2	Name 2
%STR	Street
%LAN	County
%PLZ	Postcode
%STA	Town
%TEL	Telephone
%TE1	Other Tel.
%FAX	Fax
%FA1	Other Fax
%KNR	Ref. No.
%TYP	Class
%STU	Status
%BAN	Bank Name
%KTO	Account No.
%BLZ	Sort Code
%BE1	Comment 1
%BE2	Comment 2
%BE3	Comment 3
%n	Line Feed

These are added directly into the string:

%NAMI%STAI%PLZ%n or  
"%NAM","%STA","%PLZ"%n

## PERSONAL MAKE-UP

Your import data format string can also be used to export the data but for most tasks you'll need to create a different string specifying the fields you're interested in. Several additional formatting characters are available; experiment with these as you wish by using the **Test Output** button to send the results to the Report window.

%t: This keyword replaces any text and/or other formatting character(s)

in the exported data. For example, %t set as Name:%n (enter this in the bottom left line of the import/export dialogue box) and a data format string of %t;%NAM generates a headed list:

Name:  
ST Review  
Name:  
Joe Connor

%r: Adds a Carriage Return giving the same result as pressing the <Return> key. Changing the %n to %r in the previous example adds an extra blank line between the heading and the data.

%: Can be used to replace field separators with space characters:



## STEP BY STEP GUIDE

### LET ME IN!

Follow this step-by-step guide to import a database into Address...



**1** Load your exported file (or EASYBASE.EXP from the TUTORIAL folder) into a text editor to check for problems. Make minor adjustments as necessary – look for obvious mistakes such as missing lines, fields split over two lines...



**2** Open the Import/Export dialogue box and enter your keywords and formatting characters (or load EASYBASE from the FORMATS folder). Then select the import button and load your ASCII file (or EASYBASE.EXP)



**3** Check the data and change the field names if desired. If the fields don't match up first time, go back to the first step and try again. Check and revise your data format string for more serious problems...



# TASK MASTER

*So how useful are all of the new multi-tasking systems? In the first of a short series, Martin Milner gives his opinion of MagiC...*

I bought my Atari 1040STe in 1992 for sequencing, the built-in MIDI ports making it the obvious choice, but it soon replaced my ageing Apricot Portable for word processing and other jobs. In mid-1993, I upgraded the machine to 2.5Mb and purchased a second-hand, 45Mb Supra hard drive which revolutionised the way I worked – I could now have all my files and programs easily accessible. But there were numerous occasions when I needed to use the sample editor or a word processor while the sequencer was loaded. Save work, exit sequencer, load the next one, do the work, save, exit, reload and so on...

Multi-tasking! That was what I needed. *MagiC* received excellent reviews and was faster than TOS for single applications. As I had also considered buying *NVDI* to speed up screen operations, *MagiC* seemed to be the answer. A call to System Solutions and 24 hours later I was the proud owner of *MagiC*. Installation was a matter of running the install program, following the instructions in the manual and rebooting.

## FIRST IMPRESSIONS

At first sight, *MagiC*Desk was a bit disappointing, being in mono and visually primitive. After a look at the manual, I used a text editor to edit the *MAGX.INF* file to call *Teradesk*, my normal desktop, in medium resolution. After rebooting, I was back to a familiar screen but with the option of multi-tasking still available.

There is a drawback to using a desktop not designed for use with *MagiC*: programs started from the desktop run one at a time so you cannot switch back to the desktop. To run other programs in parallel, you have to use the Start Program option in the *MagiC* pop-up menu, presumably not the case with *Ease* which has been written with multi-tasking in mind.

## DAY TO DAY

Some programs grab all available memory when loaded and although running *LIMITMEM.TTP*, issued with *MagiC*, limits the amount of memory a program can use, it isn't always successful.

Programs that register their own desktops, such as *Everest*, make life a bit confusing. Others, such as *Opus*, have windows that cannot be hidden and have to be reduced in size so that they don't get in the way.

The likes of *1st Word Plus* have a screen design where open desktop windows are left visible. The Others Hide option from the *MagiC* pop-up menu can often be used to hide them. Similarly, the Tidy Up option helps when the screen does not redraw properly on quitting a program.

At least one program will not work at all. Trying to print from *Easy Text Plus* crashes with a "memory block destroyed" message while loading the *GDOS* printer fonts. Also, the mouse and joystick don't always work in *STOS BASIC*, hardly a surprising occurrence!

Although I can run my sequencer, *Breakthru 2* (loaded first) and the *Replay 16 Editor* at the same time (after limiting the memory requirement of *Breakthru*), both programs effectively replace the blank desktop with graphical displays containing buttons.

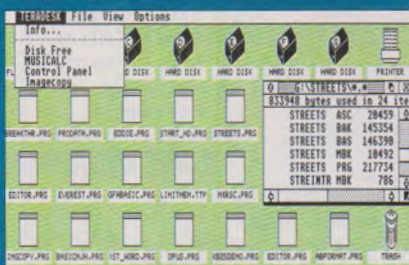
This means that you can only see those for the first loaded program if those for the second are in a similar position, so restricting me to the menu bar functions of the Editor. There appears to be no way around this problem.

Although desk accessories are no longer necessary, I still use them so that they don't take up on-screen space when not in use.

There is a facility to "bottom" windows, but the more programs running at once, the more windows

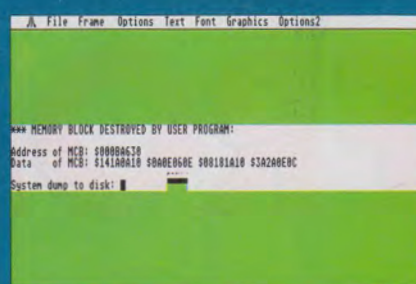
## COMPATIBILITY

Although *MagiC* has been written to be as compatible as possible with TOS, many older programs were obviously not written with multi-tasking in mind. I have tested a great number of programs, after disabling any unnecessary Auto programs and desk accessories, and have compiled a text file of the results (*MAGICCMP.TXT* on this month's cover disk). A number of hints and tips are also included.

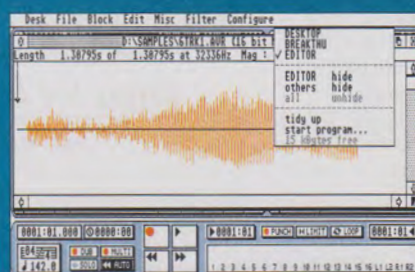


*MagiC in use with Teradesk, my replacement desktop.*

*Trying to print with Easy Text Plus under MagiC...*



*Breakthru and Replay 16 running side by side, but with the Editor buttons still hidden...*



*The MagiC pop-up menu showing the various applications.*



there are to cycle through or choose from. One of the ways of switching between programs is to click on an unused portion of the menu bar, but programs such as *Breakthru* seem to prevent this method from being used: time for the <Control><Alternate><Tab> keys.

There's the facility to autostart several applications in parallel before the desktop starts but I have had "memory allocation" problems with some programs.

However, if you have one or two main applications that you use most of the time, this facility can be very useful.

## FINAL WORD

Despite some compatibility problems, and most of these are probably down to the programs I use, *MagiC* has been a worthwhile buy. Screen redraws are much faster than with TOS – windows are drawn almost instantaneously, especially with Smart Redraw on and Grow Shrink off. Just try going back to TOS for a time! The ability to start a new program without leaving the current one is also very useful.

I would recommend *MagiC*, even just as an alternative to a TOS upgrade...



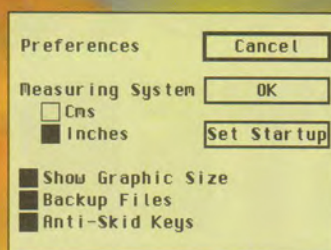


## STEP BY STEP GUIDE

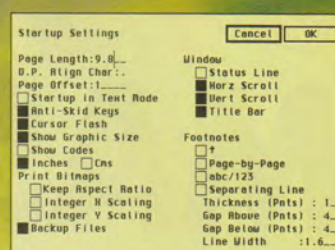
### CONFIGURING CALLIGRAPHER

The default settings of Calligrapher are well hidden and automatically saved when you quit the program...

- 1 To get to the start-up preferences, select Preferences from the Miscs menu.



- 2 The first dialogue box only applies to the current document. Click on Set Start-up to get to the real start-up dialogue box.



- 3 The configuration dialogue box. Make your selections (one I always advise is to enable backups), click on "OK" and then quit Calligrapher.

# FROM START...

Calligrapher is without a doubt a powerful document processor capable of producing professional-looking documents with relative ease. Being somewhere between a word processor and a fully-fledged desktop publisher, it is ideal for creating attractive letters, brochures and newsletters. The real problem is getting the best out of the program – so let's start with the very basics.

### METHOD ACTING

The most important principal when learning how to use Calligrapher, or any other program, is to be patient. You can't expect the program to guess what you want, and you can't expect the programmer to have the same ideas as you! Calligrapher can be a little difficult sometimes as some options are found in less than obvious places.

Take things slowly. There's no point in opening all the dialogue boxes and pressing buttons to see what they do, because the effects of some options depend on others. You can end up clicking on every button

*Still having problems getting started with our Calligrapher cover disk? Then let Ofir Gal set you on your way...*

in the program and still not know what any of them do.

Another crucial factor in succeeding with any computer program is to try and understand why a problem occurs. Once you do, it's normally quite easy to find a way around it. Here are some hints I picked up while using Calligrapher as my main word processor...

### PRINTING PROBLEMS

A program like Calligrapher is best run from a hard disk as it requires access to fonts and printer files. If run on a floppy system, the screen fonts and main program are normally installed on one disk and the printing items on a second.

You may have come across the "black triangle" syndrome. When

Calligrapher prints, it builds up an image of the page in memory; if it runs out of memory it starts using the floppy disk to temporarily store this data. The problems really start when this disk fills up, which is very likely to happen if you are using a high resolution printer. Calligrapher then gets confused and prints a large black triangle or perhaps nothing at all. The solution is to keep the printer disk clean of any unnecessary files. In addition, you can copy the contents of the printer disk to another one which is formatted via FastCopy or the like to 10 sectors per track, so extending the capacity to 800Kb.

### CONFIGURING CALLIGRAPHER

Calligrapher has a slightly awkward configuration scheme that has probably confused many of you. The main configuration parameters are found by selecting Preferences from the Miscs menu. This opens a small dialogue box: click on the Set Start-up button.

The Start-up Settings dialogue box can be intimidating, but let's look at the most important settings. Page Length is the paper area for printing to – it is not the physical

length of the page. In effect, it sets the top and bottom margins. To set the default physical paper size, go to Set Paper Size in the File menu. Start-up in Text Mode is explained on our next page; Anti-Skip Keys is an option that prevents Calligrapher from registering key repeats accidentally.

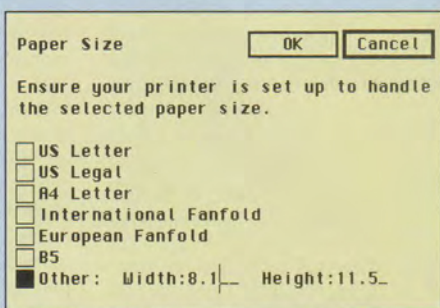
The Print Bitmaps option can prevent distortion, and by selecting Integer X and Y Scaling, you can avoid the background moiré patterns that often occur when printing images. The Window settings allow you to remove the various window elements such as the horizontal scroll bar and so gain another line of text on-screen.

### SET-UP PROBLEMS

Calligrapher lacks the obvious Save Defaults option from its menus. In fact Calligrapher saves its settings whenever you quit the program. This is carried out automatically on a hard disk system; on floppies, you are prompted for the program disk.

Auto-saving like this can be annoying on a hard disk system, because there are times when you do not want the current settings to be saved. The solution is rather simple: once you have your preferred set-up configured, quit Calligrapher, which then saves them into the file CAL.OPT, select the file from the desktop and set its status to Read Only! The next time you quit Calligrapher, the program will complain but you can safely ignore the warning.

This dialogue box sets the size of the paper you use. Although A4 should work most of the time, it may be necessary to set the paper size manually as shown here.







## STEP BY STEP GUIDE

### HIGH AND LOW

To set up two different print resolutions, you must have the correct drivers installed via the CALSETUP program...

**1** First copy the driver files into the CALFONTS folder. Its path is shown at the bottom of the Setup program. You can then select the printer drivers by clicking on the Set... buttons.

**2** Now when you print, select the correct driver from the Printer Options dialogue box.

# TO FINISH

Even the most advanced of you will always find a feature that you haven't been able to use. Essential features tend to get used while the more complex ones are avoided! Here's some help with some of these features.

### DRAFT PRINTING

Not the most obvious of features, but one I'm sure some will find useful, is the ability to print in draft mode on high resolution printers such as the NEC P6 or Canon Bubblejet. This has the advantage of almost halving print time at a loss of some quality. The idea is rather simple – Calligrapher can have two printer drivers installed and most high resolution printers have a compatible low resolution driver to use.

CALSETUP.PRG allows you to define two drivers. Make sure the driver files you require (all have the .SYS extension and are found on the master disks) are in the same place as your

### Need some useful hints and tips? Ofir Gal to the rescue...

current printer driver. Use the Setup program to select the two drivers. For the Canon Bubblejet, choose between the BJ10 driver that prints at 360 by 360, the NECP6 one at 360 by 180 and the NB15 at 180 by 180 dpi. LaserJet owners have a choice between 300 by 300 and 150 by 150 dpi drivers. Click on "OK" when done. The next time you print, choose the driver you want from the Print dialogue box.

### TEMPLATES

Calligrapher supports the concept of templates, useful if you want to start with a default document. I use one for letters, with my name and address at the top and a variable date below. You can have several such documents for this purpose.

Calligrapher templates are created just like any other document, but when you save them, use .CAT as the file extension instead of the usual .CAL one.

In addition, one template can be loaded automatically each time you start Calligrapher. The trick is to save it with the name DEFAULT.CAT into the same folder as CAL.PRG. Note that the default document over-rides some of the start-up preferences.

### VROOM, VROOM

Calligrapher can be slow, especially on a non-accelerated system, but there are several ways in which you can improve this. The first is the text-only mode, selected from the Format menu. This makes Calligrapher revert to a simple word

### Display Options...

#### Underlining:

- ☒ Exclude Spaces
- ☐ Exclude Numbers
- ☐ Exclude Punctuation

#### Intra-Word Justification:

- ☐ Allowed
- ☒ Allowed When Needed
- ☐ Not Allowed

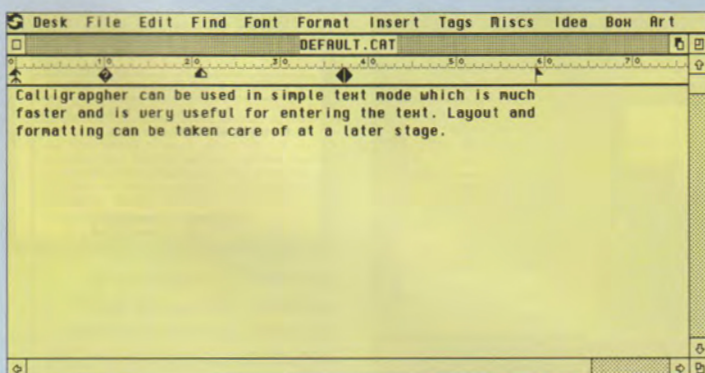
#### Scaled Font:

- ☒ Quick Scale
- ☐ Full Scale

OK

Cancel

*You can speed up the display a little when using large point sizes by enabling Quick Scale in this dialogue box. The screen display may be a little jagged, but this has no effect on the final printout.*



*Calligrapher can be used in plain text mode (spelling mistakes and all!) which is faster than the standard graphic mode.*

processor with very limited style control – very much like 1st Word Plus. The effect is to remove the overheads involved with the font display and the difference in speed is quite noticeable. Another option is to limit yourself to the default point sizes, at least while entering text. These are normally 10, 12, 18 and 24. Another option, for hard disk users, is to disable the on-screen vector fonts by selecting Quick Scale from the Display Options dialogue box.

Finally, a printer accelerator such as FPrint or SPrint can reduce print time considerably and is highly recommended.



# BUYING A... HARD DRIVE

*Our last survey showed that a hard drive is top of your "wish" list. Paul Rossiter lends a hand...*



**Access Time:** the average time taken to retrieve data from a hard drive, usually quoted in milliseconds – the lower the number (typically 10 to 25ms), the faster the drive.

**Cache:** high speed memory built into the hard drive – the bigger, the better.

**Host Adapter:** converts between SCSI and the format used by the ST.

**IDE:** stands for Integrated Drive Electronics. Common on PCs and used in the Falcon – cheap, but not particularly good.

**MFM:** the type of data transfer used on SH204-type drives.

**Parity:** a system where an extra bit of information is sent to check for any errors that may occur.

**RLL:** similar to MFM but allows for more data to be stored on a drive.

**SCSI:** Small Computer Systems Interface (pronounced "scuzzy"). A versatile high-speed interface that allows multiple devices to be connected to a computer (CD-ROM, hard disks, scanners and so on).

**SCSI II:** an enhancement to the older SCSI port. Allows faster data transfer but remains totally compatible with older SCSI peripherals.

**SH204:** a style of hard drive used on old PCs but now obsolete.

The most desirable peripheral for an ST has to be a hard drive. While such a unit used to be very expensive, so out of the reach of all but the most dedicated users, the march of progress has seen prices tumble. To anyone still on floppies, imagine loading a large program such as *Calamus* or *Cubase* in just a few seconds instead of minutes – and not getting RSI from floppy juggling!

The history of Atari hard drives goes back to the mid '80s. The first ones were Supra drives and the Atari SH204 with its old-fashioned mechanism – notoriously noisy and unreliable. The Atari Megafiles replaced these, usually with 30 or 60Mb capacity. Competition then arrived, with Protar drives being particularly popular for a time. Now all of the big Atari specialists (Gasteiner, Ladbroke's, Power, System Solutions and so on) have their own brands. How do you choose? Here's some advice...

- **Price.** As with all things, buying on price alone can be a mistake. Look for quality and a degree of "future proofing". The MiniS drives from System Solutions are versatile in that they can be used on STs, Falcons, Macs and PCs.

- **Size.** Whoever said that size wasn't important obviously wasn't referring to hard drives! There is an unwritten law that a user's space requirements expand to fit his hard drive. In reality, however, unless space is required for enormous colour scans or complex music then 60Mb is fine, 100Mb is nice and anything over this is a luxury. If the drive is likely to be used on another computer in the future then buy a large one – anything less than 250Mb on a PC is virtually useless.

- **Performance.** All hard drive mechanisms are not created equal – they vary due to the speed of the disk, the size of the cache



*Small is beautiful – as the current hard drives from System Solutions (above) and Gasteiner prove...*



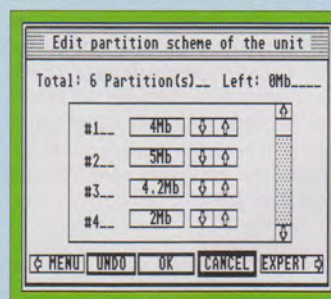
and the efficiency of the electronics. Most drives are perfectly acceptable on an ST, only high speed direct-to-disk recording needs the ultimate in speed. Interestingly, the so-called "access time" of a hard drive often bears little relationship to a drive's real life performance.

- **Interface.** All modern drives use SCSI mechanisms. To convert the

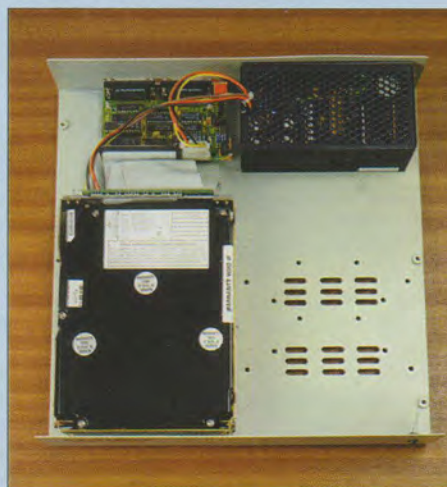
SCSI signals into a format that the ST can understand, an interface unit is needed. Look to use either an ICD host adapter or an ICD Link II unit. These are the best around and can handle almost any modern drive unit (including ones with permanently enabled parity which was previously a problem). The ICD programs are the Rolls Royce of hard disk software.

- **Second-hand** The cost-conscious user can pick up a real bargain with a second-hand drive. Due to their fragile nature, look for a single, careful owner and run a formatting program on the disk to check that there are no bad sectors. Also, listen for any strange noises and remember that the quoted typical life of a hard drive is five years.

- **DIY.** Those more ambitious among you can fairly easily assemble your own hard drive. All that is needed is a mechanism, an interface, fan, case and power supply. However, unless a very cheap mechanism can be sourced, the total cost of all the bits can come very close to buying a ready-made drive in a nice case and with a guarantee...



*Atari's AHDI software in use partitioning a 20Mb disk.*



*From the inside – a DIY drive consisting of a SCSI hard disk, power supply and host adapter.*



*RateHD, one of the ICD utilities, testing an old Megafile 30 with the truly appalling access time of 73 milliseconds!*



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  - Stereo 16-bit DMA input & output
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- System Software:**
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Surname: \_\_\_\_\_

Company (if applicable): \_\_\_\_\_

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Tel (Home): \_\_\_\_\_

Tel (Work): \_\_\_\_\_

Which computer(s), if any, do you own? \_\_\_\_\_



# FILE TO VIEW

*In the second part of our GEM file viewer project, Ofir Gal shows you how to load a text file and display it inside a window....*

If you followed last month's tutorial, you'll know how to open and close a window so it's time to move on to actually displaying some text. Our future tutorials will also

teach you how the AES window messages work to perform scrolling, redrawing and other window-related tasks. But first, let's start with the task of loading in a text file.

## LISTING 1

```
'text file loading routine
'must include GEMDOS and AES libraries

'set buffer for text, maximum of 1001 lines
DIM txt$(1000)

DEF FNFileSelect$
  SHARED fspath$,fname$,cleanpath$
  STATIC ok,i,ch
  IF fspath$="" THEN 'if was not called before
    fspath$=CHR$(FNDgetdrv+65)+":\*.*)" 'obtain the current drive
  END IF
  fsel_input fspath$,fname$,ok 'call the AES file selector
  IF ok THEN 'if user selected OK then
    i=LEN(fspath$) 'parse the path and file name
    DO
      ch=ASC(MID$(fspath$,i,1))
      IF ch=""% OR ch=":"% THEN EXIT LOOP
      IF i=1 THEN EXIT LOOP
      DECR i
    LOOP
    cleanpath$=LEFT$(fspath$,i)
    FNFileSelect$=cleanpath$+fname$
  ELSE
    FNFileSelect$=""
  END IF
END DEF

SUB LoadTextFile(VAL fi$)
  STATIC i
  SHARED txt$(1),no_of_lines
  OPEN fi$ FOR INPUT AS #1
  i=0
  WHILE NOT EOF(1)
    LINE INPUT #1,txt$(i)
    INCR i
  WEND
  CLOSE #1
  no_of_lines=i-1 'this will be used later
END SUB

'example call which will display the file
'selector and load in the file
fi$= FNFileSelect$
IF fi$<>"" THEN LoadTextFile
```

## LISTING 2

```
'drawing the text
'you must include the VDI library

SUB DisplayText(VAL x,VAL y,VAL w,VAL h)
  SHARED txt$(1),cellw,cellh
  STATIC lines_per_page,i
  lines_per_page=h\cellh
  FOR i=1 TO lines_per_page
    v_gtext x,y+cellh*i,txt$(i-1)
  NEXT i
END SUB

'sample code to view a file

WINDOW GET 2,0,winx,winy,winw,winh
CALL FontSize

fi$= FNFileSelect$
IF fi$<>"" THEN
  LoadTextFile
  DisplayText winx,winy,winw,winh
END IF
```

## TEXT IN WINDOWS

Last month I started demonstrating how text is displayed inside a window.

First you have to check the available window coordinates and dimensions, then get some information about the font size and finally display the text using the VDI. The routine *FontSize*, supplied on this month's cover disk, can be used to work out the character cell width and height and so help you place the text correctly.

Loading in the text is very simple – use *LINE INPUT* and place the text into an array. You could use any of the *readme* files from the cover disk to test this out.

Listing 1 includes a routine for displaying the file selector and loading in a text file although the sample code does not include any error trapping and will crash if you try to load a file that is too long or one that simply doesn't exist. Fool proofing the code will be looked into at a later stage.

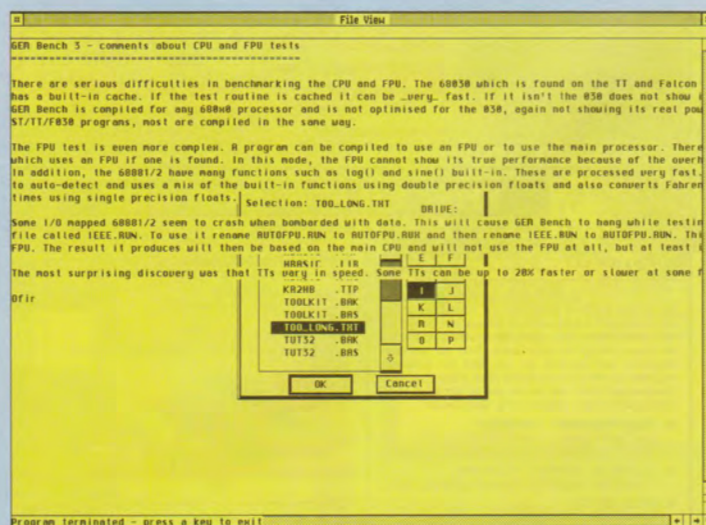
## TEXT DISPLAY

Once you have the text in an array, it's fairly easy to display it in a window. Get the usable area of the window as described last month and work out how many lines can be displayed by dividing the window height by the character cell height. Then the text is drawn line by line as shown last month; listing 2 is the relevant portion of code. The values for the variables *cellw* and *cellh* are obtained by calling *FontSize* as covered last month.

## CLEANING WINDOWS

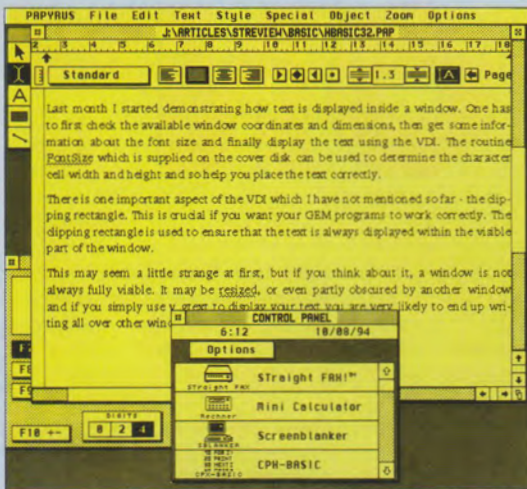
The program may be constructed into a loop – you can load a number of files one after the other and wait for a keypress to exit. Simply writing the new text over the old is not enough as the file selector remains on screen with some of the text obscuring it – a rather ugly sight!

The fix is to draw a white rectangle that erases the contents of the window, before placing text in it.



**What a mess! Simply drawing text is not enough to clear the file selector or the previous contents of the window.**





**GEM windows are not always fully visible. The VDI provides a clipping facility in the form of vs\_clip.**

`vr_rectl x,y,x+w-1,y+h-1`. The modified routine is shown in listing 3.

## CLIPPING RECTANGLES

There is one important aspect of the VDI that has not been mentioned so far – the clipping rectangle. This is used to ensure that text is always displayed within the visible part of the window and is crucial if you want your GEM program to work correctly.

This may seem a little strange at first, but if you think about it, a window is not always fully visible. It may be resized, or even partly obscured by another window. If you simply use `v_gtext` to display your text you are likely to end up writing all over other windows. Instead of having to calculate which text should be displayed, a complex procedure if you need to display parts of words of even half characters, simply draw the full text

but use the VDI clipping facilities to limit the text that is actually displayed.

After this rather complex explanation, the VDI clipping facilities are surprisingly simple to use. The clipping rectangle is set by calling `vs_clip` which takes five parameters: a flag (if set to 1 then clipping is enabled while 0, the default, disables clipping) and the coordinates in the VDI `x1,y1,x2,y2` format. The normal way of using the clipping rectangle is shown in listing 4. Make sure you insert the `vs_clip` call below the `WINDOW GET` call in the main program. You won't notice any visible effects at the moment but you can rest assured that you are following the GEM programming guidelines and that you are *en route* to creating a clean and multi-tasking friendly application. An example program is included on the cover disk...

The VDI provides a very fast way of doing this in the form of `vr_rectl` which takes four parameters: the `x` and `y` coordinates of the top left corner and the same for the bottom right corner.

Notice that the VDI and AES coordinate parameters are different: the AES calls always take the width and height of rectangles while the VDI requires explicit bottom right coordinates. To convert between the

two, use `x+w-1` for the right `x` coordinate and `y+h-1` for the bottom one.

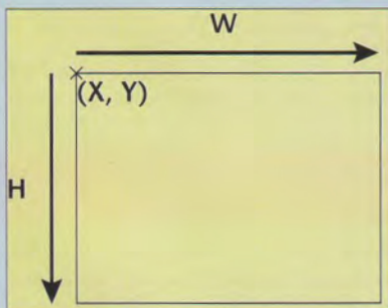
The reason for this strange TOS behaviour is probably because the VDI and AES were written by different companies at different times.

If you have a window `x,y,w,h` coordinate set and want to paint it white, set the VDI fill colour to white by using the `vsf_color 0` call and then draw the rectangle by using

### LISTING 4

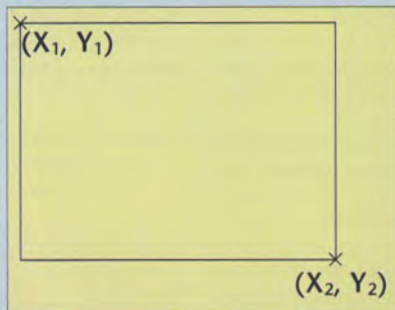
'calling procedure of the VDI clip

```
WINDOW GET 2,0,winx,winy,winw,winh
vs_clip 1,winx,winy,winx+winw-1,winy+winh-1
```



**AES coordinates are specified in terms of a top left corner, width and height. The `x` coordinate is the distance of the top left corner from the left edge of the screen; `y` is the distance of the corner from the top of the screen.**

**Unlike the AES, VDI coordinates are specified as two `x` and `y` pairs. The first pair describes the location of the top left corner of the rectangle while the second pair represents the lower right corner.**



### LISTING 3

'a modified text routine that clears the screen  
'before drawing the text

```
SUB DisplayText(VAL x,VAL y,VAL w,VAL h)
  SHARED txt$( ),cellw,cellh
  STATIC lines_per_page,i
  vsf_color 0 'set VDI fill colour to white
  vr_rectl x,y,x+w-1,y+h-1
  lines_per_page=h/cellh
  FOR i=1 TO lines_per_page
    v_gtext x,y+cellh*i,txt$(i-1)
  NEXT i
END SUB
```

## NEW COMMANDS

**FNgetdrv:** a GEMDOS call that obtains the current drive. This is used to ensure that valid parameters are passed to the file selector. The return value is 0 for drive A, 1 for drive B and so on.

**fsel\_input:** the AES file selector call. It takes three parameters which are all modified by the call: the initial path, file name to be displayed in the file selector and a flag. If the user exits the file selector by clicking on "OK", the flag is set to 1 otherwise it's 0.

**vsf\_color:** sets the VDI fill colour which is used by a number of VDI drawing routines. This call takes a single parameter, the colour code – 0 for white, 1 for black and so on.

**vr\_rectl:** a VDI routine that draws a filled rectangle using the current fill attribute. It takes four parameters which are the coordinates of the rectangle specified as `x1,y1,x2,y2`.

**vs\_clip:** this VDI call is used to limit the output of the VDI to a specified rectangle. The first parameter is a flag: 1 enables clipping, 0 disables it. The other four parameters are the coordinates of the clipping rectangle in the VDI format.

## MISSED THE FEBRUARY ISSUE COVER DISK WITH K-RESOURCE?

**No problem – just turn to page 90 for information on how to order back issues.**





# WRITE ON

## Jon Ellis continues his look at file handling with Propero C...

In last issue's tutorial we discovered the basics of file handling by exploring how to read disk files. Of course, reading is only half the story – we also need to be able to write data.

This is not too hard: first open the file for writing by using either **wa** or **wb** (see the *Real World Confusion* box) as mode strings in the **fopen()** call.

Next we need some functions to write data to an open file. The most useful of these is **fprintf()** which works just like **printf()**, except that it has an extra argument at the head of the argument list:

```
fprintf(ofp,"Three times
eight is %d\n",24);
```

writes the text to the file addressed by the file pointer variable **ofp**. All the conversion formats supported by **printf()** (%d, %u, %l, %s and so on) are also available for **fprintf()**.

For printing strings, there is also a specialised function, **fputs()** which writes a whole string in one go:

```
fputs("This text goes to a
file",ofp);
```

Finally, for single characters, there is a function complementary to **fgetc()** that we met in the last column – **fputc()**:

```
fputc('A',ofp);
```

Remember that the first argument to **fputc()** is a *character* not a string (hence single quotes, not double quotes). Get this wrong, and your file will contain junk!

After the writing is done, we *must* close the file, using **fclose()**. The reason for stressing this point is that standard C input and output is *buffered*: the system waits until a reasonable number of characters have been written before actually sending them to the destination file.

Until that time, they are held in a temporary area, or buffer. This procedure improves efficiency, as accessing devices like disk drives is slow. The last few characters do not get written out until **fclose()** is called. In fact, all open files get **closed** automatically

when **main()** ends, but it is good practice to **fclose()** them as soon as they are finished with.

## DEVICES

One of the points made in the last column was that all input and output is treated in much the same way in C. One aspect of this theme concerns the use of devices like printers and serial ports.

These are given special "magic" filenames which are used in the **fopen()** call as though they were disk files. The printer port is designated by the string **PRN:**, and the serial port is accessed using **AUX:**. The filing system knows that these are not normal filenames because they do not fit the normal pattern of a single drive letter before a colon.

So, to send output to the printer from within a C program, you simply open up the printer:

```
outfp = fopen("PRN:", "w");
```

and then send output to this stream by citing the file pointer in calls to

## LAST MONTH'S SOLUTION...

Last time we parted with yet another programming exercise – to use what you have learnt so far about file handling to write a program that counts the frequency of each letter in a text file. The code fragment below shows how this might be done:

```
for (f=0; f<26; f++)
    letters[f] = 0;
infp = fopen(argv[1],"r");
if (infp != NULL)
{
    while ((c = fgetc(infp)) != EOF)
    {
        if (c >= 'A' && c <= 'Z')
            index = c - 'A';
        else if (c >= 'a' && c <= 'z')
            index = c - 'a';
        else continue;
        letters[index]++;
    }
    printf("Letter frequencies in file
%s:\n",argv[1]);
    for (f=0; f<26; f++)
        printf("Number of %cs:
%d\n",f+'A',letters[f]);
    fclose(infp);
}
```

A full version of the program appears in the tutorial folder as **LCOUNT.C**. The operation of the code is based around a 26-element array, "letters", that

is used to hold the running counts for each letter. The first task is to initialise the elements to 0. This is necessary because "letters" is an automatic variable (see the tutorial in issue 21 for an explanation of this), so starts life with a junk value.

Forgetting to initialise an auto variable is a common mistake, and can be quite difficult to track down, as the variable could start with a different value each time the program is run.

The file to be counted is opened for reading using **fopen()**. Characters are read one at a time, and tested to see if they are part of the normal alphabet. If so, they are converted into a number from 0 to 25 by subtracting the ASCII value of A, and the result is then used as an index in the "letters" array. Lower-case letters are handled in a similar fashion, except that the code for lower-case A is used to create the index. Non-alphabetic characters are ignored. This process goes on until the file is exhausted, when it is closed.

The results of the program are printed out by a simple for loop. The loop counter runs from 0 to 25 to index the array. To make the display intelligible, the value of the loop counter is converted back into a letter for printing. This is done by adding the ASCII value of "A" (bringing the range to "A" to "Z"), and then printing the character with that ASCII code using the %c format in **printf()**.

As always, there are improvements that can be made. The test as to whether the character is alphabetic can be done using a library function: **isalpha()**. This returns zero if the character is not

part of the alphabet, or non-zero if it is. Also, another library function, **tolower()**, allows automatic conversion to lower-case text. See the *Is It Or Isn't It* box for more details on these and other similar functions.

Using these library functions, we could rewrite the main loop of the program in three lines:

```
while ((c = fgetc(infp)) != EOF)
    if (isalpha(c))
        letters[tolower(c)-'a']++;
```

### Letter frequencies in file LCOUNT.C:

```
Number of As: 31
Number of Bs: 3
Number of Cs: 27
Number of Ds: 18
Number of Es: 68
Number of Fs: 39
Number of Gs: 13
Number of Hs: 12
Number of Is: 44
Number of Js: 1
Number of Ks: 1
Number of Ls: 25
Number of Ms: 18
Number of Ns: 48
Number of Os: 20
Number of Ps: 16
Number of Qs: 1
Number of Rs: 46
Number of Ss: 30
Number of Ts: 51
Number of Us: 15
Number of Vs: 5
Number of Ws: 3
Number of Xs: 6
Number of Ys: 1
Number of Zs: 2
Press RETURN to exit:
```

*The letter  
counter in  
action...*



## REAL WORLD CONFUSION

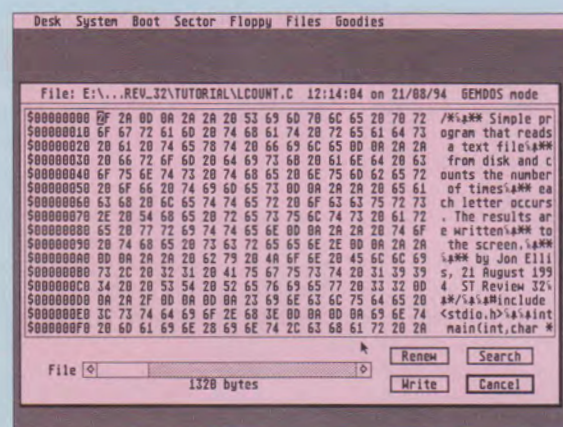
When is a carriage-return not a carriage-return? No joke – this is actually a real issue. The problem lies in a difference between the UNIX environment (which is the world the C file handling functions would really like to live in) and the world of TOS (which is what they have to cope with).

When a text file, like a piece of C source code, is saved to disk, the end of each line is marked by a new-line signal. For TOS files, this signal consists of two characters: carriage-return (character 13) and line-feed (character 10). UNIX uses a single line-feed character for this purpose. The C file functions expect a single line-feed character at the end of each line too. We have already met this in the guise of the new-line symbolised by “\n”.

To allow C programs to work properly, code far in the depths of the standard library performs a conversion. When a TOS text file is read, the incoming characters are monitored, and whenever a carriage-return/line-feed pair is seen, the carriage-return is stripped out. When a file is written, the opposite process is required: all “\n” characters are converted to carriage-return/line-feed doublets.

So far, so good – the complications are handled by sleight of hand in the library code. The time that we need to worry about the process is when we want to be able to process non-text data like programs or picture files. These do not have new-lines, so do not need conversion. To have the library code modify the data at all would be disastrous; it would be a corruption of the file. To allow C programs to process such files, **fopen()** provides a “raw” mode, where the programmer has access to uncooked data. This is engaged by **fopening** the file with the mode string “rb” (for reading) or “wb” for writing.

Mixing up **fopen** modes and file types is an excellent way to produce



*Looking at new-lines, TOS-style. This is a dump of the LCOUNT.C source code on the cover disk using a program that displays each byte on the disk as it really is. The carriage-return/line-feed pair can be seen between each line of code (0D 0A in the hex window, and CR followed by a bell-like character in the ASCII window).*

puzzling bugs. If the uncooked mode is used for text strings, string-processing code will get confused; new-line conversion of binary data will corrupt it. An easy way to remember is that “ra” is for reading ASCII (text) files, and “rb” is for reading Binary files.

## IS IT OR ISN'T IT?

The standard ANSI library contains a whole array of useful character manipulation functions. To gain access to these, the source code must `#include <ctype.h>`. All functions in this group have the same format: they take a single integer argument, and return zero if the function fails, or non-zero if it succeeds. The functions available in this group are:

**isalnum(ch):** Returns TRUE if “ch” is an alphanumeric (a letter or a decimal digit).

**isalpha(ch):** Returns TRUE if “ch” is a letter.

**isascii(ch):** Returns TRUE if “ch” is part of the standard 7-bit ASCII character set (its ASCII code is less than 128). **isascii()** is not an ANSI function, though it is provided by most ANSI compiler libraries.

**isctrl(ch):** Returns TRUE if “ch” is a control character like control-C or control-Z.

**isdigit(ch):** Returns TRUE if “ch” is a decimal digit (0-9).

**isgraph(ch):** Returns TRUE if “ch” is a non-printing character like tab or space.

**islower(ch):** Returns TRUE if “ch” is a lower-case letter.

**isprint(ch):** Returns TRUE if “ch” is a printable character. Printable characters have ASCII codes between 32 (space) and 126 inclusive.

**ispunct(ch):** Returns TRUE if “ch” is a punctuation character. These are taken to be all printable characters that are not alphanumeric, except space.

**isspace(ch):** Returns TRUE if “ch” is one of the white space characters (space, tab, newline, carriage return, form feed or vertical tab). These are represented in C as the following characters: “ ”, “\t”, “\n”, “\r”, “\f” and “\v” respectively.

**isupper(ch):** Returns TRUE if “ch” is an upper-case letter.

**isxdigit(ch):** Returns TRUE if “ch” is a hexadecimal digit.

Another useful pair of functions also available when `ctype.h` is included are **tolower()** and **toupper()**. Both functions take an integer argument, again representing a single character. **tolower()** checks to see if the character is an upper-case letter, and if so, converts it to the equivalent lower-case letter. Non-upper-case inputs are returned unprocessed. **toupper()** works in a similar fashion, capitalising lower-case inputs.

**fputs()**, **fprintf()** and the like. Remember to close the file to ensure that all the data is written.

Being physical devices rather than disk files does impose certain restrictions.

For example, printers are not very productive when opened for input! Also, though this method of accessing devices is portable between most DOS-like operating systems, it is not optimised for speed.

A dedicated printing program would achieve better results by tapping in to low-level operating

system calls, a subject earmarked for a future tutorial column.

## UNTIL NEXT MONTH...

Work time once again! Write a program called **UCPRINT** that reads in a text file, converts it to upper-case text and then outputs it to the printer. Base it on **CAT.C** from the last tutorial.

You want a hint? Fair enough – there is no problem having two files open at once, you just need two file pointer variables. What a give away!

## SEPTEMBER '93 ISSUE IS SOLD OUT...

... but we still have some of the cover disks! If you missed out on **Prospero C** and would like a copy of the disk along with the first tutorial, send £2.50 (payable to Europress Publications) to: **Prospero C Disk, ST Review, Europa House, Adlington Park, Macclesfield SK10 4NP.**





*This month,  
Graeme Rutt and  
Mark Baines get  
to grips with  
transferring files  
in the big, wide  
world of the  
Internet...*

One of the many reasons you might think of buying a modem is the vast pool of file resources available via the telephone line. While bulletin boards can provide you with an excellent selection of programs and data files, they cannot compete with the 'net when it comes to depth of coverage – universities, research bodies and even commercial sites put aside large areas of storage for anonymous file access to which anyone can log on to upload and download files.

## FILE TRANSFER PROTOCOL (FTP)

Site connection to transfer files is handled by a protocol known as ftp – file transfer protocol. It's available from both CIX and Demon but is handled in slightly different ways. Take a look at the *FTP Sites* box for a list of sites.

A connection to an FTP site is like using a command line interface, with the added complication of upload and download commands. In fact, for the technically minded, you have a direct connection with the UNIX operating system and are using it just like a direct connect terminal.

When you connect with ftp [site-name], you are asked for your login name and a password. If the site allows anonymous ftp, your login name is ftp and your password should be your whole e-mail address. For example, I would type in sabbath@cix.compulink.co.uk as my password.

## COMMON COMMANDS

Certain basic commands need to be used for ftp'ing with any site:

- **dir:** gives you a list of everything in your current directory. The

*Moving up the  
tree with "cd".  
Note that you  
can put more  
than one  
directory on  
the cd line,  
separated  
by the  
"/" character.*

```

Terminal Setup Risc **** 00:01:30 #01.44 / 00.23 DR
R024 C006 17:30 OFF ONL REPL NUR

230- Please read the README files for more information (e.g. what a .gz file
230- is, extensions to ftp, etc). Note that if ftp hangs or dies, try
230- putting a hyphen at the start of your password. Another useful feature
230- is the ls -sf:package command which does a quick scan of the
230- Archive looking for something called 'package'. Finally please note
230- that *ALL* transfers are logged and any abuse will be acted upon.
230- Please email suggestions and questions to uizards@doc.ic.ac.uk
230-
230-NOW FIXED!!!!
230- Our good friends at Sun have worked their magic and all the networking
230- problems previously affecting this machine have been fixed!
230-
230-Please read the file README
230- it was last modified on Tue Jul 12 16:29:01 1994 - 58 days ago
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> cd packages/atari
250 CWD command successful.
ftp>

```

# SHARING FILES

## BATCHFTP

The CIX-style two-stage FTP process is a little long-winded but until CIX gets some Demon-esque direct connection ports, you're stuck with it. Fortunately, CIX has furnished us with a nice little function called batchftp.

To use it, type a line like this at the ip> prompt: batchftp [site name]/[directory path]/[file name]. Every twenty minutes or so, CIX will go away and run your batchftp command(s) and try to transfer the file(s) you've asked for into your ip directory. If there are problems, read the batchftp.rep file it returns to see what went wrong – just type view batchftp.rep at the ip> prompt.

*Connecting  
with the  
FTP site at  
Imperial  
College,  
London.*

```

CIX
Terminal Setup Risc **** 00:00:52 #01.23 / 00.23 DR
R024 C010 17:37 OFF ONL REPL NUR

Nickname? (Enter 'neu' for new user) sabbath
Password:
You have 3 file(s) in your private subdir.
Disc space occupied = 755k.
You have 1 mail message(s) in your in-basket.
You are a member of 50 conference(s).
CIX now configured ready for CixCom
M:run Internet
Last login: Wed Aug 31 10:30:01 from gonzales.coepuli

Hello sabbath, welcome to the CIX Internet Gateway version 2.7
Note: we log each user of IP so any complaints will be passed on

Type: ? for command list.
HELP for list of all help files.
HELP <command> for in depth help on a command or subject.

ip> ftp src.doc.ic.ac.uk
Connected to phoenix.doc.ic.ac.uk.
220 phoenix.doc.ic.ac.uk FTP server (Version uu-2.4.6) Tue Apr 26 22:15:14 BST 1
994 ready.
Name (src.doc.ic.ac.uk:cixip): ftp
331 Guest login ok, send your complete e-mail address as password.
Password:

```

a site to your host. This is where CIX and Demon differ: files transferred via Demon end up straight on your hard disk while files from CIX end up in your ip directory. To transfer a file from this to your machine, go to the ip> prompt and type get [filename] again – it's a two-stage process.

- **send [filename]:** uploads a file from your host to a site. It works just like get in all other respects. So, to upload from CIX you must have already sent a file to your ip> prompt using receive [filename].

- **quit:** drops connection with your site. On CIX you will find yourself back at the ip> prompt; on Demon, you will be back at the NOS> prompt. With these six commands you should be able to do all the FTPing you'll ever require. However, many more are available – for a complete list see the *FTP Commands* box to the right.

That's it for this month. Next issue we'll be continuing the series with a look at another important Internet command...

# INTO THE

characters at the left of any directory list describe the file type, the most important character being the first one. If it's a minus sign then it's a file; a character signifies a directory.

- **pager nn:** turns on page mode. The screen display is halted after nn lines; hit a character to continue scrolling down the screen. This will only work on Demon – use a comms terminal on CIX with a scrollbar facility.

- **cd [directory]:** changes your current directory. This is a tree-based command – you can only get to a directory that's inside your current one. You can climb up the tree by typing cd .. or go to the root directory via cd /.\*

- **get [filename]:** transfers a file from

```

CIX
Terminal Setup Risc **** 00:02:22 #01.64 / 00.23 DR
R024 C006 17:30 OFF ONL REPL NUR

-rw-r--r-- 1 root root 1494 Aug 3 04:05 OREHOME_ALL_UPLOADERS
-rw-r--r-- 1 root root 114402 Aug 27 16:49 Accupind.gz
-rw-r--r-- 1 root root 1308 Apr 26 16:30 theip.gz
-rw-r--r-- 1 root root 363080 Aug 27 16:49 Bindex
-rw-r--r-- 1 root root 94930 Aug 27 16:51 ole-kr.gz
-rw-r--r-- 1 root root 33613 Aug 27 16:52 ole-kr.gz
-rw-r--r-- 1 root root 351 Aug 27 23:36 Oneud.gz
-rw-r--r-- 1 root root 1407 Aug 26 23:06 Oneu1.gz
-rw-r--r-- 1 root root 883 Aug 19 23:06 Oneu2.gz
-rw-r--r-- 1 root root 555 Aug 10 23:06 Oneu3.gz
-rw-r--r-- 1 root root 4680 Aug 25 21:25 Sbl1
-rw-r--r-- 1 root root 512 Aug 20 00:34 Applications
-rw-r--r-- 1 root root 2560 Jul 21 04:00 Archivars
-rw-r--r-- 1 root root 1824 Jun 13 01:41 CII
-rw-r--r-- 1 root root 12 Sep 30 1993 bc -> Utilities/Dc
-rw-r--r-- 1 root root 5120 Aug 25 21:24 Denos
-rw-r--r-- 1 root root 6144 Aug 27 00:51 Diskutils
-rw-r--r-- 1 root root 1824 Aug 25 21:33 Editors
-rw-r--r-- 1 root root 512 Jul 20 02:54 Emulators
-rw-r--r-- 1 root root 3504 Aug 25 21:26 Falcon
-rw-r--r-- 1 root root 3216 Aug 20 00:34 Games
-rw-r--r-- 1 root root 512 Aug 27 10:57 Gueststuff
-rw-r--r-- 1 root root 5632 Aug 25 21:28 Graphics
-rw-r--r-- 1 root root 512 Aug 25 21:28 Info

```

*Part of a  
directory  
listing of the  
atari.archive  
mirror.*

## FTP SITES

The following is a brief list of FTP sites, and the directory you'll find Atari-specific files in:

**atari.archive.umich.edu:** cd atari

The largest, most complete Atari FTP site in the world...

**athene.uni-paderborn.de:** cd atari

A smallish German site that often gets German software first.

**wuarchive.wustl.edu:** cd systems/atari

Contains programs and source listings from the Atari Usenet newsgroups.

**micros.hensa.ac.uk:** cd micros/atari

A growing site, run by Denesh Bhabuta who won't be happy until the site's as big as the atari.archive!

**src.doc.ic.ac.uk:** cd packages/atari

A mirror site for the atari.archive and Paderborn – and very much easier to get on to.



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# Ladbroke Computing



**33 Ormskirk Rd,  
Preston, Lancs,  
PR1 2QP**

Ladbroke Computing International are one of

the longest established home computer dealers in the U.K. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch to ensure that goods arrive in working order, offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup.

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## How to Pay

You can order by mail Cheques/Postal Orders made payable to Ladbroke Computing. Or give your credit card details over the phone.

## Delivery

Postal delivery is available on small items under £40 (Normally £3, phone for details). Add £7 for courier delivery. Next working day delivery on mainland UK subject to stock (£20 for Saturday delivery).

Open Mon-Sat 9.30am to 5.00pm.  
Ladbroke Computing Ltd trading as  
Ladbroke Computing International.

**Fax: (0772) 561071**

**Tel: 9.00am-5.30pm (5 Lines)**

**(0772) 203166**



**Star SJ144 £369.99**  
The Star SJ144 is a Colour/Mono thermal wax transfer printer which gives glossy colour output on normal paper.

- 360 dpi resolution
- Emulates Epson LQ 860, IBM Printrouter & NEC graphics

## Star

**Star LC100 Colour £119.99**  
**Star LC24/30 Colour £209.99**  
**Starjet SJ48 Bubblejet £210**  
**SJ48 Ink Cartridge £19**

## Citizen

**Citizen Swift 240 Colour £250**  
**Citizen ABC 24 pin Colour £179.99**

## Hewlett Packard

**HP Deskjet 520 £259.99**  
**HP Deskjet 310 £229.99**  
**P DJ500 Colour ink cart £26**

## Lasers

**Ricoh LP1200 £599**  
**Panasonic KX-P4400 Laser £499.99**  
**Seikosha OP104 £479.99**  
**New Star Laser (phone for details) £459.99**

Add £3 for cable. Add £7 for delivery

# Data Pulse Plus

- Very quiet, no fan necessary
- Dual SCSI port
- Internal Power Supply
- Device Number Selector
- 2Mb PD software free
- Free HD Turbokit

The Data Pulse Plus range of drives features a full metal case with integral PSU ideal as a monitor stand.

All Data Pulse Plus Drives now come configured with industry standard 50 way SCSI Centronics sockets which allows connection of the ICD LINK (no clock) for use on the ST or a SCSI II cable for use on the Falcon etc.

## Monitors/TV's

**Dataview Mono ST £109.99**  
**Screen Beat Speakers £12.99**

Quality Mono monitor with Sound Limited Offer

The Dataview Monochrome monitor comes complete with our custom designed adaptor. The adaptor incorporates a small beeper and also a 2.5mm output for better sound reproduction. The monitor/adaptor combination is fully compatible with all ST high resolution programmes and includes a tilt/swivel stand.

## Multisync Monitor

**Microvitec 1438 £289.99**  
**ST Switch Box £19.99**  
**Falcon VGA adaptor £9.99**

The Microvitec 1438 is a multisync monitor compatible with both the Atari ST and the Falcon. Utilising the ST switch box it is possible to display all three ST resolutions on the same monitor. Also compatible with screen blaster for the FALCON.

**Dataview .28 SVGA £209.99**

This high quality SVGA colour monitor comes complete with Falcon adaptor. The .28 dot pitch gives the highest quality picture (Falcon will only display 256 colours in high resolutions).

**ST-SVGA adaptor £19.99**  
**Falcon-Composite £9.99**  
**Falcon Scart £9.99**  
**Falcon-ST Mon adaptor £9.99**  
**SCART STE cable £9.99**  
**SCART STFM cable £9.99**

## Modems

**14400 Baud Trust Fax Modem £169.99**  
**14400 Baud Modem, Auto Dial, Auto answer, 5 year warranty, Fully BT approved, MNP 2-4 error correction, MNP 5 data compression, S/R Class 1 & Class 2 commands, Group 3 S/R fax modem (compatible with Straight FAX™)**

"With reduced call rates there's never been a better time to invest in Communications"

To ensure the highest possible reliability, the drives are tested at every stage of assembly by skilled technicians.

All drives are ready to 'Plug in and Go' when you receive them. When you first boot up your hard drive you will find a wealth of Public Domain Utilities which have been selected by our support staff.

All Data Pulse Plus Drives include 12 months warranty and free phone advice and support by genuine Data Pulse Plus users.

The low power consumption of these Autoparking Autobooting mechanisms means that they can operate well within their safe operational temperature ranges without the need for fan cooling. This coupled with the design of the case results in probably the quietest Hard Drive range available for the ST.

## Falcon 030

- 16MHz 32 bit 68030 Central Processor, 16MHz Blitter, 32MHz 56001 Digital Signal Processor
  - 1.44Mb 3.5" Floppy, up to 14Mb RAM. Displays 65536 colours from 262144 palette at 768 x 480 resolution
  - 8 Channel 16 bit, high quality. Stereo sound sampling
- FALCON 1Mb RAM No HD £499**  
**FALCON 4Mb No HD £699**  
**FALCON 4Mb 64Mb HD £799**  
**FALCON 4Mb 127Mb HD £899**  
**FALCON 4Mb 209Mb HD £999**

## Legend Trakball

Ergonomically designed Trak Ball. 320Dpi resolution, 2 microswitched buttons. The Legend Trak Ball is very easy to use. Unlike normal Trak balls the LEGEND is operated with the thumb freeing the fingers to click buttons

**ONLY £24.99**

## 3.5" External Drive

Zydec 3.5" External Floppy drive. Includes own external power supply.

**£57.99**

## ST Mouse

High quality 290 dpi mouse with microswitched buttons ST/AM.

**£9.99**

## Marpet Upgrades

Marpet upgrades for the ST are "plug in" and require no soldering. They are compatible with most motherboard layouts and come with full fitting instructions. These boards accept SIMM boards and are upgradeable at a later date. Please check that MMU and Shifter are "socketed" before ordering.

**Unpopulated Marpet Board £24.00**  
See SIMM prices below  
**Forget Me Clock II £13.99**  
**512K SIMM'S £7.99**  
**2MB SIMM'S £54.99**  
**4MB SIMM'S £109.99**

## Midistudio Master

240 PPQ Midi Standard file format compatible. 100 tracks. Phrase arrangement. Very easy to use.

**£9.99**

"Data Pulse is astonishingly fast" -  
Andrew Wright, ST User

Re-writeable Optical Drives offer staggering density with hard drive speed. Each 3.5" optical disk stores 128Mb with access time of 30ms and a data transfer rate of 600K per second.

<b>Data Pulse + 260Mb</b>	<b>£260</b>
<b>Data Pulse + 353Mb</b>	<b>£310</b>
<b>Data Pulse + 532Mb</b>	<b>£420</b>
<b>Data Pulse + 1Gb</b>	<b>£670</b>
<b>D/P + 230Mb R/W Optical</b>	<b>£890</b>
<i>Phone for further details on CD ROM</i>	
<i>Please note all prices quoted are for main drive unit only. Add ICD LINK for use with ST or SCSI cable for use with FALCON</i>	
<b>ICD LINK 2</b>	<b>£89.99</b>
<b>SCSI Cable (Falcon)</b>	<b>£29.99</b>
<b>230Mb R/W Optical disk</b>	<b>£39.99</b>
<b>ICD PRO Utilities</b>	<b>£39.99</b>

## Atari STE Packs

**1040 STE Curriculum £199.99**  
**2Mb 1040 STE £254.99**  
**4Mb 1040 STE £309.99**

## Atari Jaguar Console

**Jaguar with Cybermorph £249.99**  
Phone for games cartridges

## Repair Services

### The Only ATARI Authorised Repair Centre in the UK

Our Atari trained technicians can repair ST's at competitive rates. We can arrange for fully insured, courier pickup and return delivery of your machine to ensure its safety. We even have a same day service which will ensure your machine is given priority and subject to fault, completed the same day.

We offer a Quotation service for £15 for which we will examine your machine and report back with an exact price for repair. If you do not wish to go ahead with the repairs then just pay the £15. However if you do go ahead then the charge is included in the minimum charge.

Please note: The minimum charge covers labour, any extra parts are chargeable.

<b>Minimum repair charge</b>	<b>£35.25</b>
<b>Same day service</b>	<b>£15.00</b>
<b>STFM(E) PSU</b>	<b>£34.99</b>
<b>1Mb internal drive</b>	<b>£39.99</b>
<b>TOS 2.06 + Switch STFM</b>	<b>£65.00</b>
<b>Courier Pickup</b>	<b>£11.00</b>
<b>Courier Return</b>	<b>£7.00</b>

## PC Emulators

- Check configuration before ordering
- PC Speed STFM or STE (XT) £49.99**  
**AT Speed STFM (8MHz) £139.99**



# ASK THE EXPERTS

*The ST Review panel are out in force again – and don't forget to send in your hints 'n' tips to get a fresh £10 winging its way to you...*

## FAULTY FLOPPY?

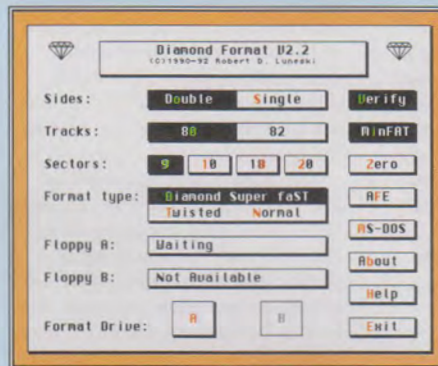


Recently, I was looking at a game disk and noticed that it seemed to have more than 720Kb of data on it. In fact, it seemed to have over 800Kb! Is this possible or do I have a faulty disk?

Joe Granger, W. Yorks

If your game loads OK, the disk is probably fine. While the ST's built-in disk formatting routines can only format a disk to 720Kb, a disk can be formatted to hold much more information. There are many PD programs such as the excellent Diformat that allow you to format a disk in a special way so that it holds more data.

How is this possible? Well, when you format a disk, it is divided up into tracks and sectors. Imagine an onion cut in half with lots of concentric circles; those are like



*Absolute Diamond – Diformat allows you to format your disks beyond the usual 720Kb...*

tracks. If you then take one of those circles and cut it up like a cake, you get the sectors.

Normally, a disk is formatted with 80 tracks and 9 sectors per track. The various formatting programs allow you to format extra tracks and sectors, normally up to a maximum of 82 tracks and 10 sectors. Some programs let you format to 11 sectors per track but this is often unreliable and not recommended.

A standard disk has a capacity of 80 tracks x 9 sectors x 1,024 bytes per sector = 737,280 bytes. Taking account of the fact that there are nine special, reserved sectors, this gives you 728,064 available bytes. So if you format a disk to 10 sectors per track and 81 tracks, you'll get 1,024 x 10 x 81 bytes = 829,440 bytes in total, 820,224 of which are usable!

An added bonus is that these formatting programs also allow you to use special tricks such as sector skewing which allows your ST to read disks almost twice as fast as standard. Iain Laskey

Immediately after I reboot, everything is fine and I can access the various CPXs by double-clicking. But after a while I get a "File Not Found" warning and I can't use XControl anymore unless I reboot again. What is the problem? Have I installed XControl incorrectly? My set-up is a 2Mb STe with a monochrome monitor but no hard drive as yet.

Colin Porker, Swindon

You can rest assured that you have installed XControl correctly and the problem is simpler than you think. XControl has some features you may have missed so let's have a quick look at how CPXs actually work.

When you boot up, XControl loads all the CPX modules it finds inside the CPX folder. Some modules, such as the General Setup CPX, set up the mouse and keyboard response, but to save on memory, XControl only loads a small portion of the module – the part that is required to display the module name and implement the settings. The main part of the module remains on disk.

As each module uses only a tiny amount of memory, you can use as many CPXs as you wish. When you double-click on one of the modules, it loads from disk. Since you don't have a hard disk, the module is loaded from the floppy instead. If you change the floppy disk in the drive, XControl can't find the relevant CPX leading to the "File Not Found" message. There are two

## THE ORACLE

*This month, Graeme Rutt gives his sweeping hardware tips...*



- Buy a hard disk, the single most important piece of hardware you can buy for your computer. A hard disk doesn't just give you fast, large-scale storage: it also changes the way you work. Gone are the laborious disk changes, no longer do you have to keep your data files spread over several hundred floppies – your working environment is improved a thousand-fold overnight!

- Upgrade TOS. The difference that adding a few numbers to your TOS version will bring to your computer is amazing. Depending on your current TOS version, you can expect better disk performance, faster display and a much better desktop. Try to go for TOS 2.06, by far the best available to any ST owner.

- Memory – as we found out from our survey, most of you have already upgraded your memory to 1Mb. Try to take it higher, to 2 or even 4Mb. You can squeeze many more Auto programs and desk accessories into your boot-up sequence, use your current software much more efficiently and think about using some of the real memory hogs.

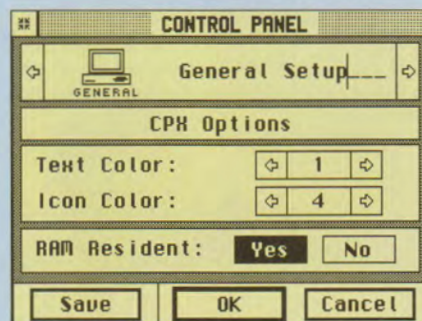
- Get On-Line – a modem is becoming an absolutely essential computer accessory. You'll be amazed at how many useful PD and shareware utilities you can pick at the end of a telephone line! If your budget stretches to it, join CIX. When you come on-line you'll find an enthusiastic, knowledgeable and – above all – friendly group of Atari users.

- Get Flying – buy a Falcon. Disregard the moaning whingers, ignore the lies about incompatibility and buy a machine with speed, power and some devastating software. Coupled with an SVGA monitor you get a working environment second to none – I think I'd give up computing if I had to go back to an ST!

## NO CONTROL



I have tried to install XControl and the various CPX modules you gave away on a recent cover disk. After much trial and error I have managed to get the whole thing working – or so I thought.

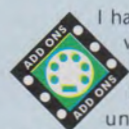


*In Control – the Configure CPX allows you to customise the individual settings of each CPX module. You can change its name and colours, but most importantly, make it RAM-resident.*



← solutions to this problem. The first one is to get a hard disk and install XControl on drive C. The modules will always be found and also loaded very quickly. But the cheapest solution is to use the Configure CPX (CONFIG.CPX). This allows you to set each CPX so that it is RAM resident – in other words, the whole module is loaded at boot time and remains in memory. This way it can be used even if the boot disk is no longer in the floppy drive. It also has the advantage that CPXs open much quicker when you double-click on them. The trade-off is that XControl will occupy more RAM and will take a little longer to load. Ofir Gal

## BIG INTERNAL



I have an Atari ST Mega 4 with TOS 2.06, T Board, external B drive and colour monitor. I understand that it is possible to upgrade the internal A drive to a 1.44Mb unit as per the IBM PC.

Can you tell me if the data written on such a drive could also be read/written to on the IBM PC and then read by the ST? If so what is involved in such an upgrade: cost, source of components and technical expertise required.

I believe that hard drives for the ST, such as the MiniS, use a SCSI interface. Would it be possible for such a hard drive to be connected to the ST and a PC using this interface so information could be shared by both systems? The information I have in mind would be ASCII files from word processors.

P. Horton, West Midlands

*The Mega ST can be easily upgraded to accept 1.44Mb high-density floppy drives, but first ask the question why? A modern PC will read 720Kb disks directly, especially if formatted under TOS 2.06. In fact, I took an image saved in Imagecopy 3 and imported it directly into PhotoShop on a PC which loaded and displayed it without problems. Similarly with*

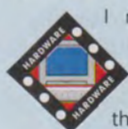
a word processor file, ASCII or RTF being the best options to use.

The only real need for a 1.44Mb drive is if files are too large to fit onto one disk. If this is the case, you can buy the parts from System Solutions (081-693 3355); the full kit costs around £90. Installation does involve some soldering and is not really suitable for a novice. Also, while cheaper PC 1.44Mb drives are available, they may not work on your ST – use one supported by an ST dealer.

The MiniS drives will work on any SCSI-equipped system (ST, Mac or PC) but not at the same time! While ST and PC formatting is similar, the more modern versions of DOS do not allow the same disk format across both machines. Also, most PCs do not have a SCSI port as standard; the cost of fitting one (about £100) would probably be better spent on a GEMulator board which would allow you to run ST software directly on a PC.

If all you want to do is transfer ASCII text files, then consider using floppy disks or a serial link (RS-232 and null modem) with a comms program. Paul Rossiter

## SIMPLE SWITCH?

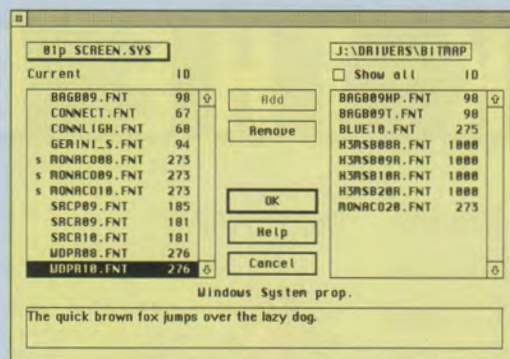


I recently decided to upgrade my STFM to an STe and have had very little luck since all the shops I've been to say that Atari isn't making them any more.

My question is: can I remove the STFM motherboard from my machine and replace it with an STe motherboard while retaining the disk drive, keyboard and the like, so turning my machine into an STe?

Pramod Kumar, Leicester

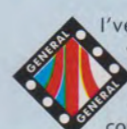
*The simple answer to this question is "no" I'm afraid. To begin with, the shielding design is different in the STe (mainly to accommodate the memory modules) and room for the extra ports must also be considered. And that's before you even think about getting hold of a motherboard in the first place – I don't know whether the situation*



has changed, but at one time it was actually more expensive to buy a replacement motherboard for the ST than it was to buy a whole new machine!

Your best bet is probably to sell your STFM and pick up a second-hand STe through the local paper or a magazine such as Micro Computer Mart. A number of reconditioned machines are also beginning to appear on the market, so it might be worth calling some of our advertisers to see if they have stock. Niall Grimes

## ONE MEG MISERY



I've had my 1Mb Falcon with TOS 4.04 for about six months now and I was wondering if you could help me with a few queries I have:

- Will you be offering Falcon memory upgrades in your Offers pages in the near future? If so, will they be any cheaper than the upgrades currently available elsewhere? I want to move up to 4Mb as I am starting to realise what a handicap having only 1Mb is!
- Are there any Calligrapher fonts in the public domain, or is there a program to convert other fonts into Calligrapher format? If not, will you be putting any additional fonts onto future cover disks?
- I am having trouble with GDOS. I get as far as the "GDOS installed" message, and just when I think the desktop is about to appear, it doesn't! I first came across this problem with Wordflair but I put that down to me probably making an error while editing the ASSIGN.SYS file, even though I did follow the instructions provided.

Events took a dramatic turn recently when I got Easy Text Plus. I followed the installation procedure and when I tried to boot the disk the same thing happened. This time, however, I didn't have to edit ASSIGN.SYS file. Can you think what the problem might be?

- I don't suppose there's any chance of you getting programs such as NVDI, DataLite or TruePaint onto your cover disks in the near future, is there?

Michael Cumpton, St. Ives

*GDOS grunger – Assign is a clever utility designed for painless editing of the dreaded ASSIGN.SYS file...*

A Falcon with 1Mb of RAM is indeed a crippled beast. Unlike other systems, Atari computers use the main memory pool for both normal memory requirements and the video hardware. This means that if you run in ST high resolution, about 32Kb of RAM is used by the screen while the remaining memory is available for running programs. In contrast, running in 640 by 480 pixels in 256 colours uses 300Kb, leaving you very little RAM for programs. PCs and Macs require a separate memory board for the display. I highly recommend that you expand the RAM to 4Mb as soon as you can. ST Review does not have any plans to include Falcon memory upgrades in the Readers' Offers pages at this stage.

There are no public domain Calligrapher fonts available. Calligrapher uses a propriety font format and the exact details have never been made available to programmers. Until this happens, there is no way to produce the fonts. Since the current selection of fonts constitute copyright material, we cannot place any of them on a cover disk.

As for your GDOS problems, you are not alone! We get many 'phone calls and letters regarding GDOS installation problems which is why we dedicated several pages in issue 31 to this subject. We also included an excellent ASSIGN.SYS editor on the cover disk. I hope the articles and the program will help you solve your problems; if not, please try our telephone helpline for more assistance.

And yes, you're right – programs like NVDI, DataLite and TruePaint will not appear on any cover disk in the near future... Ofir Gal

## ON THE MOVE



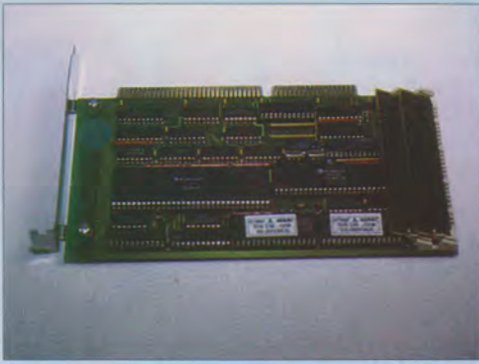
I have been an Atari user now for 18 months and a reader of your magazine for the same period of time.

My system comprises a 1040STe, second floppy drive, Philips colour monitor and Epson LQ-100 printer. Software includes Digita Systems' System 3 and Day By Day, Master Plan, Easy Money, Write On and Route Finder. My problem is this. As a free-



*Two into one – you can use a System Solutions' MiniS drive with an ST and SCSI-equipped PC, but not at the same time!*





**All on-board – the Janus card sports TOS 2.06 ROMs along with its own RAM to make it the ultimate ST emulator for the PC...**

lance technician in the entertainment business I am constantly on the move, and carting around all the hardware can be a bit of a problem.

Are there any Atari-compatible laptops available? I know that the Stacy was discontinued sometime ago – are there no stocks lying in a warehouse somewhere gathering dust? I know there was a problem with battery life but computing on the move is not what I am after.

Alternatively, is there an ST emulator available for a laptop PC or am I going to have to resign myself to either travelling my system or defecting to either a laptop PC or Mac PowerBook!

I cannot imagine I am the only Atari user with this problem and would welcome any helpful suggestion.

**Steve Wollington, Basildon**

**We're not aware of any stocks of Stacy's gathering dust but you can still pick them up second-hand. There are two excellent Atari emulators for the PC called Gemulator and Janus and both hold out the promise of portable Atari computing.**

**Both designs feature hardware cards that plug into standard expansion slots found inside all desktop PCs. Unfortunately, most modern PC notebooks and laptops use miniature expansion connectors so there's no easy way to plug in an emulator. Some of the early "luggable" PC models did use standard expansion connectors but they're outdated and underpowered so not really fast enough to support useable Atari emulation.**

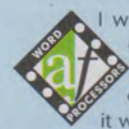
**Currently the only way to use either emulator with a notebook is to track down one of the "docking stations" which accepts standard PC expansion cards. These connect notebooks to desktop resources such as large monitors and printers but this certainly isn't mobile Atari computing – and it's an expensive option.**

**There's clearly a gap to be filled here. The Gemulator's hardware card carries the TOS ROMs so theoretically a software only version could be produced with Atari's permission. The Janus developers already produce alternative expansion connectors**

**and I'm sure they're aware of the potential sales if they can come up with a workable solution.**

**Joe Connor**

## NOT IMPRESSED



I was very impressed by *Calligrapher* which you gave away on your cover disk, so I decided it was just what I was looking for. I sent off my £35 for the upgrade kit – and that's when I got unimpressed.

The installation procedure has been changed since the instruction manual was written, so it's no good trying to install to two floppy drives, which is what I wanted to do. The cover disk version can use two floppies, so why not the upgrade? There is a small *read.me* file on disk which tells you of the changes, but it does not tell you that you can't use two floppies.

I 'phoned the help line and they suggested I install 3 disks to drive A and then install 3 more disks to drive B and then swap them around, but of course that did not work. I wrote to the supplier asking for help but as yet I have not had a reply.

I like the program and had intended to add to it, but if it doesn't do what the manual says it should do, and I'm unable to overcome this problem, then I may have to send it back. In the meantime it's back to the cover disk version.

I take your magazine every issue and have been reading the problem pages to see if other people have been having the same trouble, but it seems that everyone seems to be content to install to a single floppy, which is quite easy.

**C. P. Casey, West Midlands**

**Unfortunately, the installation program for the latest version of Calligrapher does not include a two-floppy option. This is because the cover disk installer and the full installer were written by different people at different times.**

**However, you could try to get around the problem by copying files from the full package to the installed cover disk version. If you want to add fonts for example, first install the font as usual, then copy the resulting screen fonts to**

## READERS' HINTS

*Every hint wins a tenner – all you have to do is share a little of your knowledge...*



Here's a tip for all STOS BASIC users with a twin floppy system. By using a small public domain program called *Tandem*, it's possible to load further extensions to the language from drive B. The instructions to do this are as follows:

- Put the *TANDEM.PR*G in the Auto folder of your STOS boot disk. To make it run before BASIC, delete the BASIC file, copy *TANDEM.PR*G to the Auto folder and then copy BASIC from a back-up copy of STOS back to the Auto folder.

- Format a fresh disk and create two folders STOS and COMPILER. Copy all your extensions to these folders. All extensions ending with a file name of .EX? must be copied to the STOS folder and all extensions ending with .EC? must be copied to the COMPILER folder. Make sure you do not repeat the same extension on both boot and second disk as the programs will crash. Also, don't use the extension letter "B" (like *MISTY.EXB*) as this will also make the computer crash.

- Reboot your computer with STOS in drive A and the second extension disk in drive B. It is possible for you to have up to 25 extensions in total (memory permitting).

**Ijaz Hussain, Birmingham**

In your *Ask The Experts* column of April 1994, Ofir Gal stated that the function keys could not be read using *INKEY\$*.

In the case of normal ASCII characters, only the low byte contains a value, but when pressing keys such as the cursor keys or function keys, the low byte can be ignored and the high byte contains the important information. So here is a fragment of code to show you how it is done:

```
'Get a keypress
DO
  a$ = INKEY$

' If it is an exotic keypress then make a$ equal
' the high byte and set keyval to value of a$

IF LEN(a$)>1 THEN
  a$ = MID$(a$,2)
  Keyval = ASC(a$)
END IF

'
'
'
LOOP
```

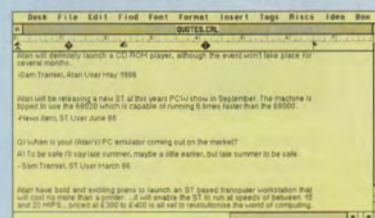
Keyval now contains the appropriate value, which in the case of the function keys would be:

<F1> – <F10> (unshifted): 59 – 68

<F1> – <F10> (shifted): 84 – 93

**Peter Ives, Essex**

**the CALFONTS folder on the program disk and the printer fonts to the printer disk. To install the spell checker, copy the file CAL.DCT to the CAL folder on the program disk. Install the Thesaurus by copying THESUK.CPK to the CAL folder on the program disk and create a second disk with the file**



**CALUK.THS in its root directory, outside any folders. By this sort of trickery you may be able to get a full Calligrapher installation working on a two-floppy system. The simplest, but more costly, solution is to get a hard disk. Such a beast will speed up the operation of Calligrapher as well as almost any other program you use.**

**Ofir Gal**

**Two to go – Calligrapher can be installed on a two-floppy system but, unfortunately, not via the standard installation program.**





# LETTERS

## MORE MIDI

It is not usually my style to write to magazines but I feel that I have a few valid points to make.

First, I want to thank you for editing a top class publication: it is by far the best Atari magazine available. Secondly, could someone explain why there has been a reduction in the number of pages dedicated to MIDI? The number of ST and Falcon owners that have specifically bought their machines for music must account for a large percentage of your readers. There seems to be a large number of pages dedicated to Art and DTP packages, but to be honest, I think that the number

of people who use an ST for professional use in this area must be small. People who want to get into DTP will probably buy a Mac or PC.

Many professional musicians actually bought an ST primarily for MIDI sequencing and notation so how about a few more pages on relevant hardware such as new keyboards, sound modules, drum machines and samplers as well as all the new MIDI software to keep us ST musicians happy!

I know magazines such as *Sound On Sound* exist but they do not really cater for the ST musician. So how about it Mr. Lennard – could you accommodate the needs of the musicians as well as the artists and the PD enthusiasts (come on, is eight pages for PD software really justified?). And how about photos of all your writers accompanying the articles – it would make it much more personal!

Thanks for taking time to listen to your readers and I look forward to reading your reply in a forthcoming letters page.

J. Moore, Essex

*When I initially joined ST Review back at issue #3, I brought with me a reputation for being a*

*technical musician. MIDI Monthly was created and boasted five pages or so at a time when the number of new budget synths was on the increase.*

*On joining Europress, I reappraised the situation. There has been very little new music software over the past year or so outside of MIDI Files and Falcon-specific offerings.*

*Consequently, I took the decision to slim down MIDI Monthly to just a couple of pages, a decision that was then justified by the poor showing for this section in our recent survey. Out of 1,000 readers, almost 600 actively dislike MIDI Monthly while almost the same number actively like PD Zone.*

*That said, MIDI Monthly fluctuates between two and five pages per issue depending on what new products are available. There is a ceiling price limit for products, which explains why we've never reviewed Cubase, Notator Logic or any of the expensive synths. If you feel that the dedicated music mags do not properly cater for ST owners, why don't you write to them and put your point forward, exactly as you have done here? As*

*for photos, do you really want to see the motley crew I employ...*

## GRIMES AGAINST HUMANITY

The terminally-interesting Nial Grimes attacks "terminal dissatisfaction" in his column (*In Public*, issue 31), as if folk upgrade computers for no real reason other than a desire to go faster. But our needs change too. OK, a writer could still simply get by with an Amstrad PCW – I used to have one. But I developed an interest in DTP and there was no way that the PCW programs could do a professional job. So I bought a Mega ST. But again, in the year that I have had it, my graphical needs have changed.

I want hardware/software that will properly handle things like video grabs, colour graphics formats, and be industry standard. The Mega ST as it stands will not cope: one must either spend on all sorts of hardware/software add-ons or go for a more reliable platform.

For example, the Mac Quadra 660AV has a 68040 processor, a DSP and maths coprocessor plus video ports, 8Mb of RAM, a 250Mb hard



## GOT SOMETHING TO SAY?

*ST Review* is your magazine and putting pen to paper gives you direct contact with us. As editor, I read every letter that you send and carefully select the ones for publication. I receive far more letters than can be printed, so make yours interesting if you want to see it in these pages.

It may simply be that you have a constructive criticism about an article in *ST Review*, or that one of our columnists has inflamed you with his honesty. Whatever the reason, drop a line to me, Vic Lennard, at:

Point Of View,  
Atari ST Review,  
Europa House,  
Adlington Park,  
Macclesfield SK10 4NP.

Please do not send stamped addressed envelopes; personal replies cannot be entered into. All mail received is considered for publication unless otherwise stated and we reserve the right to edit letters where necessary without altering the context.

## VIRTUAL REALITY PLASTIC SURGERY

Do you remember our competition back in issue 30, the one where we supplied you with a head and shoulders shot of me and then gave you *Eclipse* to do the image processing business on it? And foolishly offered £25 for the best pic? You do? I thought so!

Many looked like the surface of the moon –

perhaps some of them were! – but the best three are printed here. The £25 goes to Noel Wallace for his pic of *Vic after a day at Sellafield* and, just to show how generous we at *ST Review* are, a tenner is also on its way to the two runners up, Vincent Pettit and Christopher House.



*No you misunderstood – I said I'm the boss, not embossed!*



*Did you hear the one about the ST owner who thought that Pinhead was a utility...*



£25

*Ooh-er, all this attention is definitely making my head swell...*



disk and a CD-ROM. And it can be (expensively) upgraded to a PowerPC.

Yet it costs £999 (plus VAT) today, around half its price a few months ago. Then, of course, there is the new Mac 630 range with CD-ROM and TV-in-a-window option for a similar price.

With bargains like that about, of course people will think of upgrading – and who is going to want to buy a Falcon or TT?

**Paul Sutherland, via CIX BBS**

**Mac prices have certainly plummeted and the current machines certainly offer all sorts of goodies as standard – but you still have to buy the software to run on them! Take the scenario of someone with a Falcon who has Calamus SL, Truelmage, Papyrus and various other programs that are used on a day-to-day basis.**

**Buying Quark XPress, Adobe Photoshop and Microsoft Word alone will set them back over £1,200 – and that just replaces their basic needs. What about the megabytes of PD and shareware gathered over the years, much of which has no equivalent on the Mac? Perhaps this answers your final question – users who have dedicated a great deal of time on moving up the Atari computer learning curve are likely to carefully consider buying a Falcon when the time comes to purchase a new machine.**

**The decision of when to jump on the technology band-wagon is never an easy one...**



**True to form – a Mac equivalent of HiSoft's TrueImage will set you back at least five times as much dosh...**

## HONEY, BUNNY

Please could you let your readers know of a new Public Domain library which started on August 1, 1994.

If anyone would like a catalogue, please send either a blank disk and first class stamp or 50p (stuck to a piece of cardboard) and a first class stamp to the following address:

BUNN PD, 30 Albany Road, Newport, Isle of Wight, PO30 5JA.

**Keith Hunnybun, Isle of Wight**

**No sooner said than done...**

## THE FALCON AT HOME

I am delighted with the way you are moving the magazine forward in such a positive way. Like many people, I have become attached to my Atari and I share the hope that the brand will continue to have a place for many years to come. Your magazine's approach is trying hard to make this happen, and I wish you well.

I have never been really interested in the games element of home computing, and I am therefore pleased to see its highly successful metamorphosis into fodder for dedicated games machines. I hope that Atari's move into that market with the Jaguar is not too late, and that their manufacturing deal with IBM will help when it comes to the all-important matter of marketing clout at product launch. The games market is tough and although Jaguar may be the top spec. at the moment, the market's big boys are not going to sit on their hands while Atari make their play.

From a marketing view, it will be interesting to monitor the damage limitation advertising and promotions of Nintendo and Sega in particular as Atari flexes its muscles. It won't be the first time that market rivals have blotted out a newcomer's entry into the market with heavy and simultaneous promotions of their own. The greater the attempt to blot out, the greater the threat appears to be. Maybe one of your colleagues or correspondents in the US could give us an update as the launch of Jaguar moves into its roll out phase.

Success for Atari will heighten the corporate identity, which hopefully will improve the image of and interest in Falcon. But if they are really interested in staying in the home computer market they must get Falcon out of its antiquated STe case as soon as possible. Let's get away from any STe sentiment and get the machine looking like the PC at work so that it will have a chance of being taken seriously!

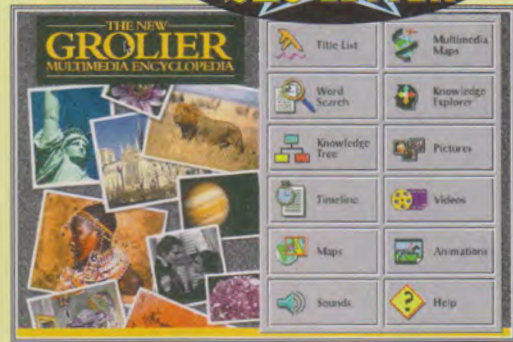
I would like to see the marketing men focus the Falcon as a serious home computer specialising in Education, Music and Graphics, with multimedia aspirations in the near future. For sure, the next major development in the PC market will be in CD. It's happening already. Atari doesn't need a dedicated CD – an industry standard will do fine – but some CD-based educational software like an encyclopaedia disk and the like are needed to run on Falcon. Giving the salesman at the sharp end the same sort of exciting presentation currently on offer on PCs will be a big incentive to push sales.

So let all Atari fans pray that Jaguar is the success it deserves to be, for everything else Atari flows from that!  
**Reg Chiswell, Edinburgh**

**ST Review has always tried to be the "non-techie techie mag" that covers all technical aspects of the ST in as down-to-earth a fashion as possible. In some respects this is impossible – topics such as programming have a certain inherent level of difficulty – but that is our aim. It is for this reason that we use such a large pool of freelancers, to be able to draw on the practical experiences of many people.**

**There is little doubt that the Falcon broke new ground when it appeared, mainly due to the inclusion of its DSP, a decision that was taken much later than the original brief for the machine. But as the past two years have shown, the Falcon appeared at much too high a price point and with far too little dedicated software. We are still awaiting various "killer" pieces of software, such as a video editing suite of programs that are worthy of such a title. Market forces dictate; by all accounts, less than 20,000 Falcons have been sold world-wide against over 1.5 million STs which is why many software publishers have converted programs to run on the Falcon, but have stopped short of spending vast sums of money in research and development of new, Falcon-only titles. Outside of direct-to-disk digital**

**£25 STAR LETTER**



**All in one – will we ever see the likes of Groliers Encyclopædia on an Atari CD-ROM?**

**audio applications, I would question whether there are more than three or four Falcon-specific, mainstream programs.**

**I believe that the interminable pleas for a new Falcon case are unfounded. As you are probably aware, Atari itself has not manufactured machines for some years, preferring to place this job into the hands of third parties. The same is also true of the Jaguar. Consequently, it was certainly much cheaper to continue with the moulds for the ST rather than design and set into production a new casing. There are, of course, drawbacks to such a decision, especially where expansion is concerned. The Falcon cannot take on board a graphics card, accelerator and emulator, say, in the way that a PC and Mac can.**

**But third-party supporters never stopped a similar scenario with the ST from preventing them from pushing the ST in its various guises to heights that were clearly not imagined at the drawing board stage. System Solutions' DeskTopper is a perfect example of a manufacturer working around the Falcon's limitations. As long as this continues, there is little point in a new case design – unless a third party takes a licence for the Falcon and continues development towards a Falcon 2 with improvements in certain areas.**

**The Jaguar is currently the best games console on the market and, despite the best attempts of Sega and Nintendo to muddy the waters, has now passed 100,000 sales in the States. With the likes of Rumbelows now bringing the machine to our high streets, the Jaguar is set to sell very well in the UK and the games support is most impressive. Will there be a Jaguar 2, a multimedia-based machine? We'll have to wait and see.**

**As for the future of the Falcon, a dramatic price fall is needed – and now! I bought a Falcon some eighteen months ago and have continued to be impressed with it. An Apple CD-300 CD-ROM player is shared between my Mac and the Falcon but while there are now quite a few Atari-specific CD titles, no-one has yet taken a standard PC or Mac title and written an Atari front end for it. Again, this is due to market forces – I'd love to see the likes of Groliers Encyclopædia and Microsoft Bookshelf available on the Atari platform but how many copies would be sold? You only have to look at the decline in sales of all Atari magazines to appreciate that we are entering an enthusiast-only situation – and such a scenario is unlikely to lead to ground-breaking new products for our machines.**

**But let's not end on a doom and gloom note. Our machines give us a flexibility that many PC and Mac owners would die for.**

**Just try getting a 16-track direct-to-disk system on either of these computers for the cost of Cubase Audio on the Falcon...**



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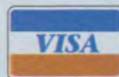
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Phone between 9am and 7pm Monday to Friday to order using your Mastercard, Access, Visa, Switch, Connect etc. card. We will quote you a firm delivery date which will be no longer than 28 days and usually within 5 days. For goods in stock we can offer a next day delivery service for £6.



### Competitive upgrades

Users of Timeworks Publisher 2, Calligrapher, Calligrapher Gold or Wordflair 2 can upgrade to Papyrus Gold for only £89.95! Just send us your master disk(s) for any one of these packages (which we will return) together with the completed order form below to receive Papyrus Gold at a stunning price.  
*Cover disks not accepted.*

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## Order Form

Please rush me Papyrus Gold for my Atari computer (with at least 2Mb memory)

- ☐ Papyrus Gold @ £129.95 + £3 p&p
- ☐ Competitive upgrade (see above) @ £89.95 + £3 p&p
- ☐ SpeedoGDOS @ £30 if ordered with Papyrus

Signed: \_\_\_\_\_

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days for delivery*

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\_\_\_\_\_  
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Card No: \_\_\_\_\_

Expiry and Issue #: \_\_\_\_\_