THE INFORMATIVE GUIDE FOR ALL ATARI COMPUTER OWNERS

ATARI ST REVIEW

INCORPORATING ATARI ST USER

ISSUE 34 CHRISTMAS 1994 £4.25 OVERSEAS £4.50 IDG COMMUNICATIONS

WHAT A CRACKER!

HARLEKIN II COMPLETE
OBSESSION PINBALLER
FIFTEEN UTILITIES!

BIGGEST UK ST MAGAZINE!





TRUE TYPE

NVDI 3 and Speedo 5 head to head...

XMAS CHEER

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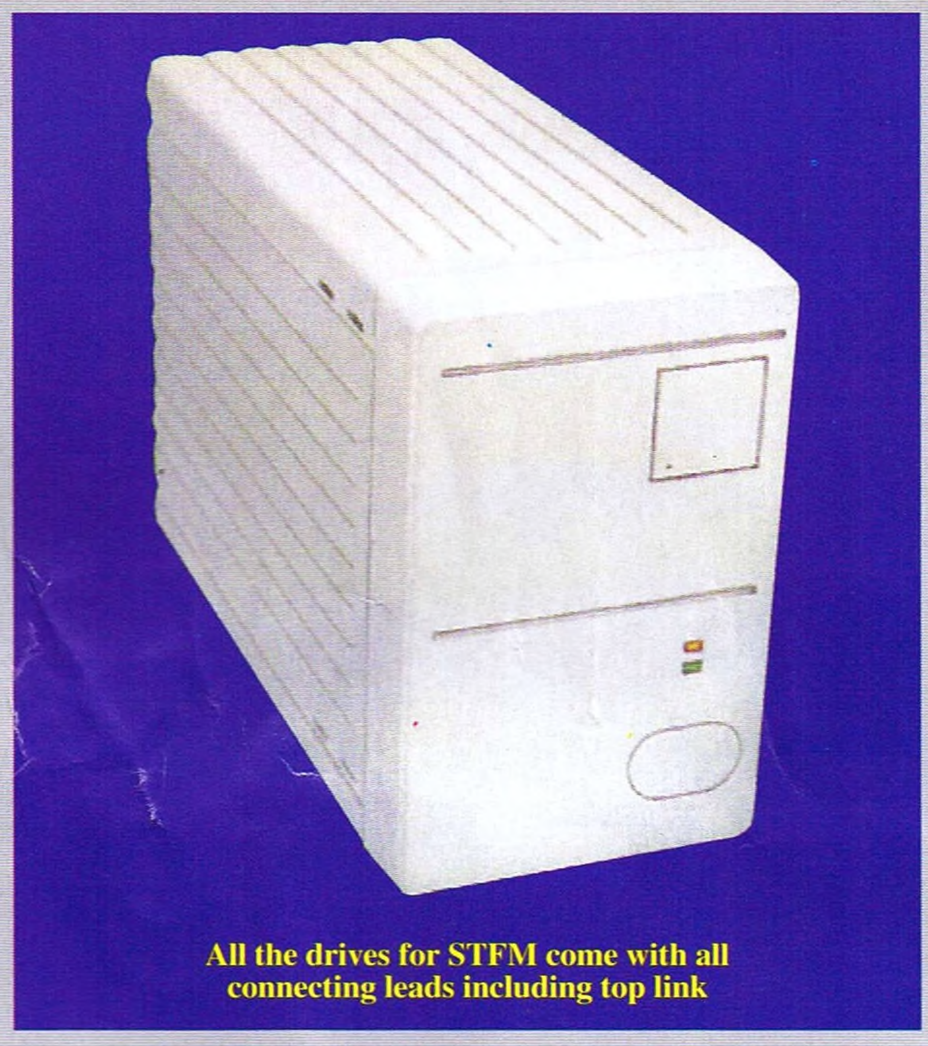
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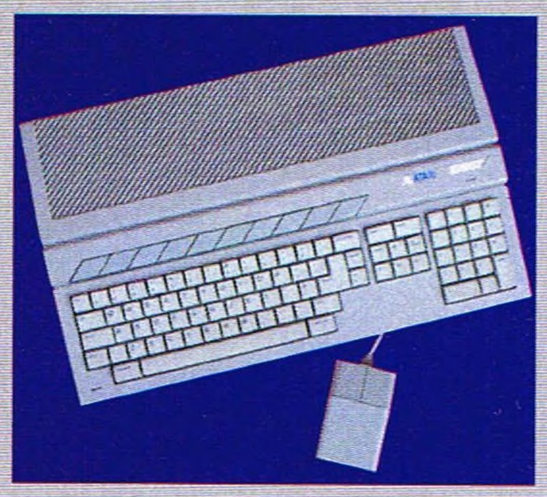
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CHRISTMAS 1994



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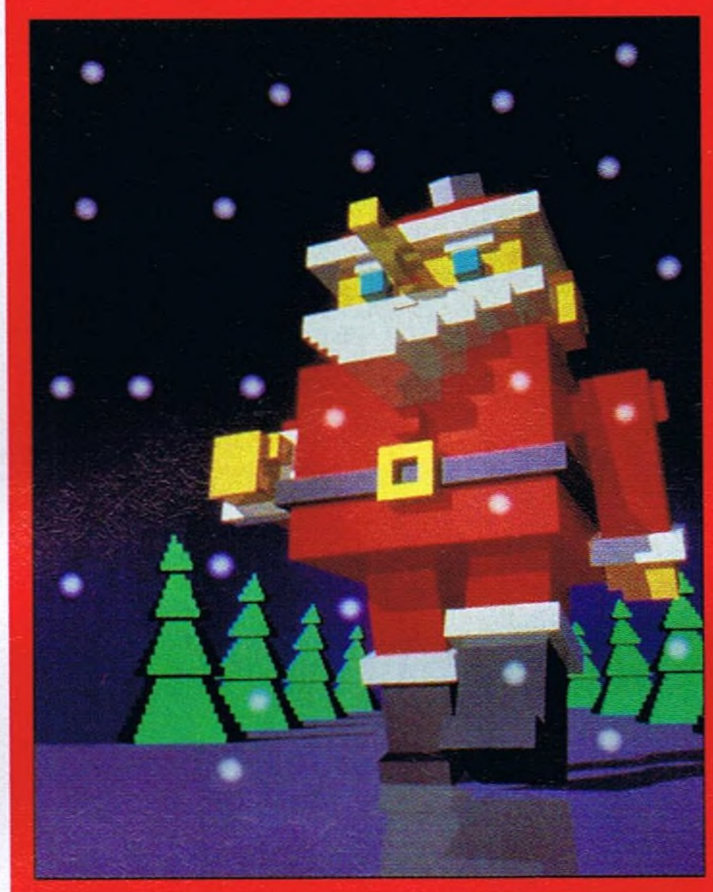
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COVER FEATURE

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TRUE TYPE



For far too long have ST users had to contend with limited fonts on a *GDOS*-based system, or proprietary varieties on specialist programs. Time for a change – and the time is now.

NVDI 3 and *SpeedoGDOS 5* both offer support for TrueType fonts, an industry standard used on the PC and Mac. Thousands of such fonts are available, many within the public domain.

But there are questions: which of the two competing systems do you go for? How well does the current generation of ST software take to the new kids on the block? Are fonts available? Find out by reading our reviews, practical guide and font feature starting on page 16...

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... 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...

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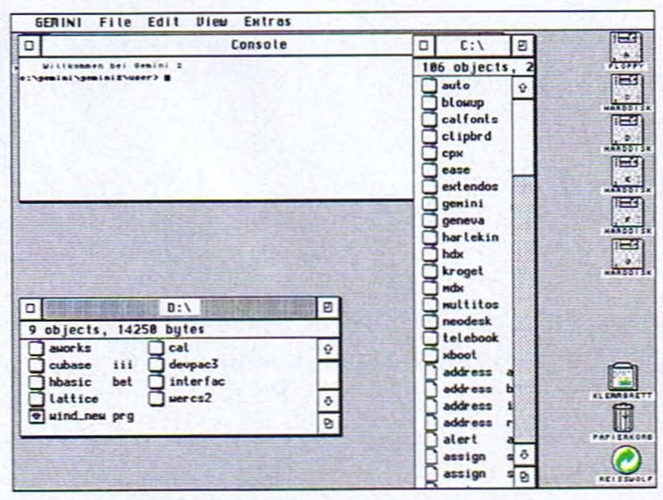
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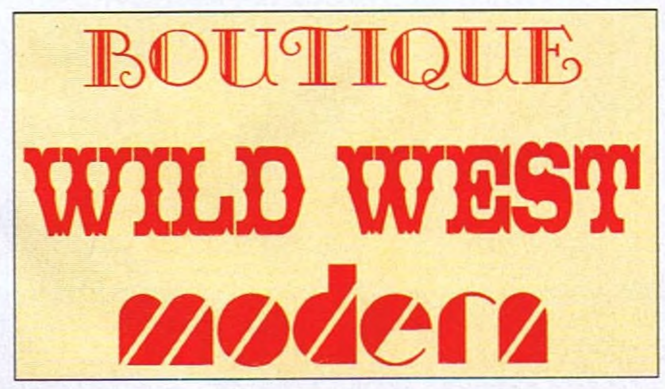
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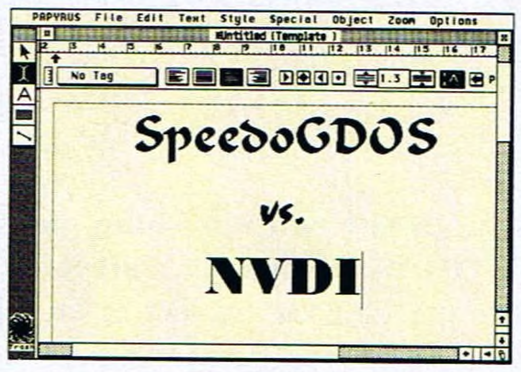
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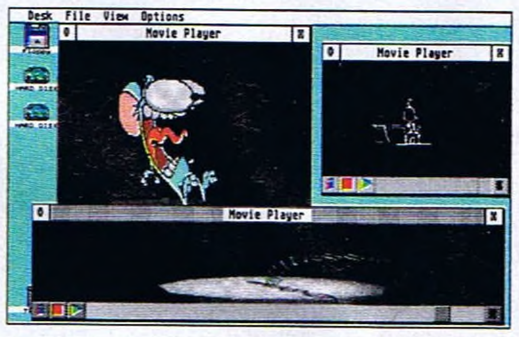
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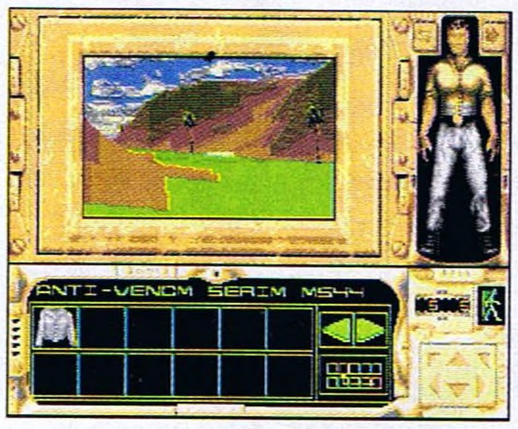
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ON THIS MONTH'S COVERDISKS

HARLEKIN II

… the jack of all trades! Over a dozen useful utilities packed into a single desk accessory

Turn to page 10 for the first in our series of tutorials.

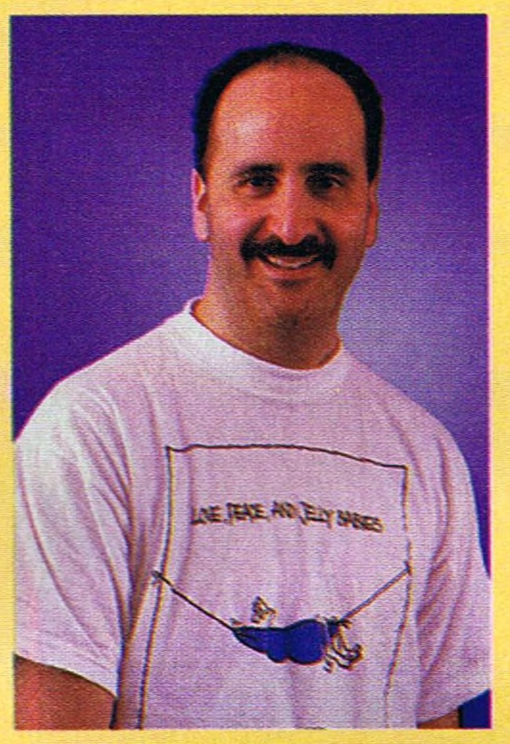
OBSESSION

… an ST Review exclusive demo of the long-awaited pinballer! Find out what's in store on page 51.

plus see page 14 for
SPEED OF LIGHT 3.5 – ace graphics utility
DESKTRACKER – desk accessory .MOD player
and 13 more utilities!



WE PROMISE – AND DELIVER



With just two remaining glossy ST titles in the UK market, it's important for readers to understand the underlying editorial rules for each mag. So let me speak for *ST Review*.

● We deliver what we promise. On becoming a Europress title, an assurance was given of 13 issues a year. This has been kept to, unlike our competition. We also recently committed ourselves to bringing you special cover promotions in the form of two cover disks whenever possible, an undertaking on which we have not reneged.

● Reviews are never based on anything other than ST software. We never review an Amiga or PC product and attempt to pass it off – unlike our competition which has just "reviewed" the Amiga version of the *Championship Manager* End Of Season Data Disk.

● The bare minimum for one of our reviews is the final software and a proof manual. Articles on unfinished programs are clearly marked as "previews" – unlike the competition which carries a "review" of a half-finished version of *H.E.R.O.* in the current issue.

● We only use UK-based reviewers who cover UK versions of products, with the very occasional exception of previews. This is essential as there is no guarantee that, say, a UK version of a German product will exhibit the same features or performance. The competition's recent review of the Janus card was based on the German product by a writer living, and working, in the German market – many of the compatibility table programs have no UK version!

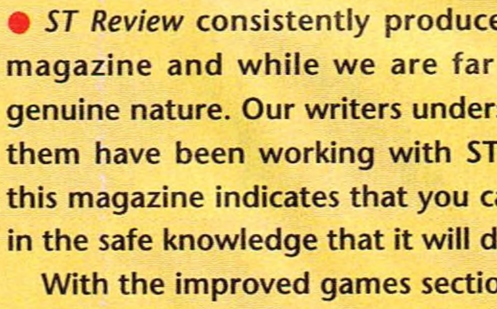
● *ST Review* understands the difference between humour and damaging flippancy. The claim that an ST-based product can "bring aeroplanes down", as in the November issue DeskTopper review, speaks volumes for our competitor.

● *ST Review* consistently produces a high quality, factually-accurate magazine and while we are far from perfect, any errors are of a genuine nature. Our writers understand the ST market because most of them have been working with STs for many years. A good review in this magazine indicates that you can go out and purchase that product in the safe knowledge that it will deliver what has been written.

With the improved games section, I honestly believe that *ST Review* is the only ST magazine an enthusiast needs to buy. We'll keep you up to date on all the new products, help you get the best from your machine, keep you interested through our features and provide you with the best cover disk programs, both serious and games.

ST Review has become difficult to find in small newsagents. If you want to ensure that you receive each issue, and find a subscription too costly, then simply place a regular order with *any* newsagent. If *ST Review's* standards fall, you can cancel such an order at a month's notice.

Tell me what you think...



Vic Lennard, Editor

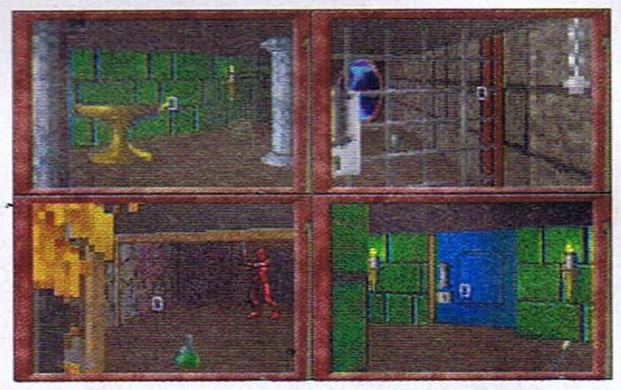
The plot continues – Towers II rolls on from where its predecessor left off...



ON HIGH

Following on from the success of *Towers* on the ST, JV Enterprises is putting the finishing touches to *Towers II – Plight Of The Stargazer*, a Falcon-only release. Like its predecessor, *Towers II* is a role-playing game much in the same vein as *Dungeon Master* on the ST and *Wolfenstein 3D* on the Jaguar. It runs in true-colour mode and is compatible with multi-tasking operating systems such as *MultiTOS* (where it runs in a window) and resolution enhancers like *BlowUp030*.

Towers II is more than three times the size of its predecessor and features real time combat scenes, smooth scrolling, 50kHz tracker music and stereo sound effects. It will be available from all good PD libraries and bulletin boards within the next few weeks. Like *Towers I*, the game as supplied will be the full version, but only a limited amount of progress can be achieved before you need the manual. This is available in the UK at a cost of £19.95 from Goodman International on 01782 335650. Also in stock is the *Towers I* manual for £15.00. *Towers II* requires 2Mb of free memory and 4Mb of hard disk space.



Rooms to move – and the geezer in the red certainly looks a bit suss...

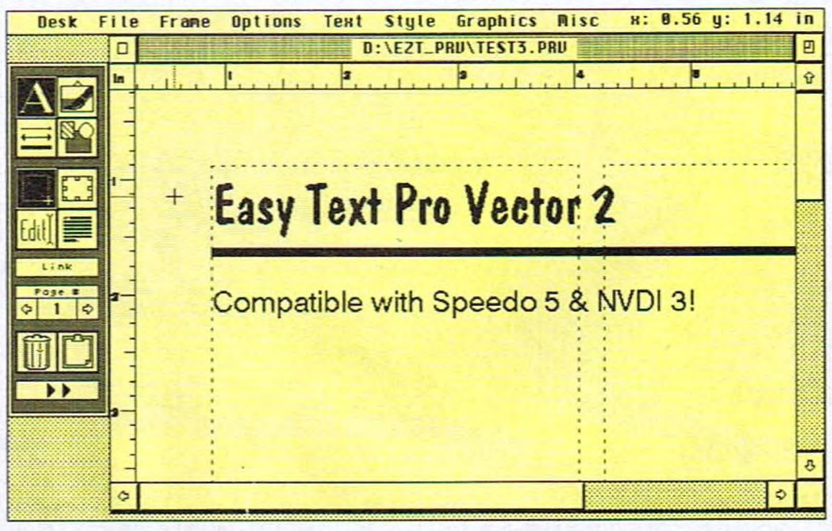
PROFESSIONAL PLUS

zzSoft (01254 386192) has just released version two of its best selling budget-priced DTP package, *Easy Text Pro Vector*. This latest upgrade is fully compatible with both *SpeedoGDOS 5* and its predecessor, *SpeedoGDOS 4*. The inclusion of *Speedo 5* support means that *Easy Text Pro Vector 2* can make use of both TrueType and Postscript Type 1 fonts as used on the PC and Apple Macintosh. *Pro Vector 2* is currently the only Atari-based *SpeedoGDOS*-compatible DTP package available – see page 20 for more details.

As a service to *Speedo 5* users, zzSoft is offering three disks of TrueType fonts at a very modest £3 each. Also available are a number of Postscript Type 1 font disks.

In addition to *SpeedoGDOS 5* compatibility, *Pro Vector 2* has also undergone a number of bug fixes and enhancements, the most notable of which is the increase in the number of fonts to 20 per document, subject to available memory. *Easy Text Pro Vector 2* costs £39.95 and runs on any Atari ST, STe, TT or Falcon with 2Mb of memory and a hard drive or 2.5Mb without a hard drive.

Existing *Easy Text Pro Vector 1* users can upgrade to the latest version by returning their master disk to zzSoft along with a £5 upgrade fee. If you also want to upgrade from *Speedo 4* to *Speedo 5* at the same time, the charge is an additional £29.99.



Moving on up – Easy Text Pro Vector 2 is the only DTP package to support Speedo 5 technology.

NEW HOME FOR IDS

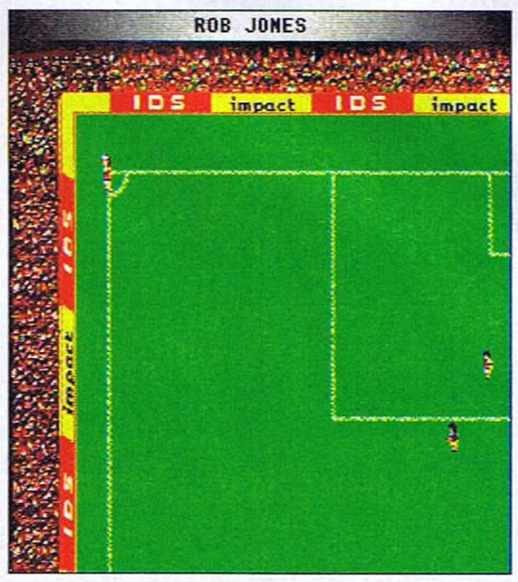
ST Handbook folds but new software safe...

In a surprise turn of events, Wright and Hayes Graphics, publishers of the *ST Handbook*, ceased trading in mid-October. Four issues of *ST Handbook* had been published, with a fifth being due at the time of the collapse. Launching the publication so late in the day, as far as the ST scene was concerned, was a brave move but the publication failed to gain sufficient support from the ST community.

In addition to *ST Handbook*, Wright and Hayes also set up an independent software company known as IDS and was working on a number of new releases (mostly games) for the ST market. Regrettably, the first title, *H.E.R.O.*, failed to appear in time to bail the company out of its financial troubles.



Out now – check out our H.E.R.O. review on page 54 of this issue.



Available soon – IDS's next release is the ST version of Team.



Still kickin' – ST Handbook may have gone but IDS lives on.

CONTINUED SUPPORT

The good news for Atari owners is that although *ST Handbook* has folded, IDS has been taken over as a going concern and most of the planned releases look likely to go ahead unhindered. Andy Fern of AWF PDL has obtained the rights to IDS in lieu of debts incurred by Wright and Hayes. Both IDS and AWF PDL are now part of Midland Software, also owned by Andy. Midland Software has moved into the old Wright and Hayes offices and will continue to use the IDS name for future releases.

When we spoke to Andy Fern, he had high hopes for the future of IDS. *H.E.R.O.* is now available with a reduced price tag of £9.95 and four more releases are scheduled to be out in time for Christmas. The ST version of *Team* is imminent and expected to be on sale towards the end of this month for £14.95. A Falcon version, which will utilise the machine's improved sound and graphics capabilities, is also being developed and is expected to be ready two or three weeks later at a not dissimilar price. Both versions of the game feature advertising banners along the edges of the pitch: any companies wishing to have their name or logo included here should contact Midland Software. Also on target for a Christmas release are *Alien Thing*, for which no details are currently available, and *Graffix*, an art tutorial package covering animation, how to create detailed human bodies and more complex subjects such as anti-aliasing.

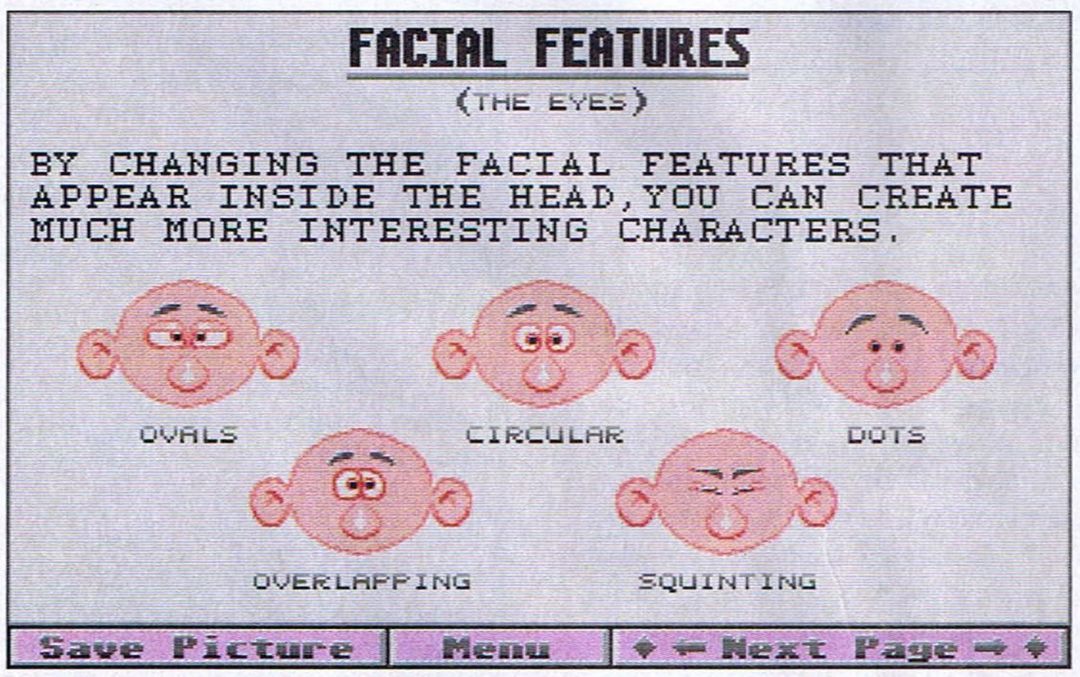
Midland Software has a number of new titles planned for the IDS label in 1995. There will be a follow-up to *H.E.R.O.* shortly into the New Year and talks are currently underway for the production of a package entitled *STOS Advanced Programmers' Guide*. This is expected to consist of a book and two disks and will be similar in concept to *A Beginner's Guide To STOS BASIC* from MT Software, but will be aimed at the user who has progressed beyond this stage. The only bad news is a delay in the release of *Spherical*, but talks are going on with Fusion, the programmers, and it is hoped that the game will still appear through IDS at a future date.



Future release – Alien Thing should see the light of day in early 1995.

PUBLIC ADVICE

For a small independent company such as IDS to survive, it is imperative that the products it creates are ones that the public actually want to buy. Andy Fern is open to suggestions – especially concerning the viability of the *STOS Advanced Programmers' Guide*. For further information on any IDS release, contact Midland Software on 0121-459 4340.



Teach me – Graffix promises to be a rather unique art tutor...

JUST CHAMPION

Domark (0181-780 2224) has just released its *Championship Manager* "End of Season Data Disk" for the ST. This allows you to update the *Championship Manager '93* master disk to take account of all the transfers and managerial changes that took place during the 1994 season. In addition, the latest promotions and relegations have been updated – yep, Crystal Palace are in the Premier Division and Swindon in the first! The End of Season Data Disk is available on its own for £13.99 or bundled with Nick Hornby's best-selling publication, *Fever Pitch*, for £15.99.



Up to date – Championship Manager '93 can now have all the correct 1994 details...

SOUND 'N' VISION

New versions of Video Supreme and StormTracker...

Goodman International (01782 335650) continues its support for the ST market with an imminent, major update to *Video Supreme*. Version 2 of the best-selling video titler incorporates several new modules and a number of other enhancements. One of these is the use of control-coded scrollers that allow you to set up the actions to be followed by your scrolling text using a sequence of predefined commands. In addition to playing sound samples alongside graphic sequences, *Video Supreme 2* can now recognise and play 19 different types of soundchip music files such as those used by Mad Max, David Whittaker and many others. Graphical on-line help explains the use of every function, another new addition.

Overscan mode is supported on both the ST and STe, and the Frame Creator module allows you to convert a standard 32,000 byte screen into an overscanned one. These can be packed using the *Ice* or *Atomic* packers and are then automatically depacked when loaded. *Video Supreme 2* supports full-screen animated effects and retains file compatibility with version one. A number of new effects for displaying screens have also been added.

The package comes on three disks, requires 1Mb of memory and costs £29.95. Existing users of version 1 can upgrade by returning their master disks to Goodman International along with a £19.95 upgrade fee to obtain *Video Supreme 2* and the new 100-page plus manual.



Fade to black – Video Supreme 2 includes an overscan option for the ST and STe.

volume, treble and bass settings on an STe, MegaSTe or TT. You can also switch the processor speed to 16MHz if running on a MegaSTe. Several other small enhancements have also been incorporated. Existing users who purchased *StormTracker* by mail order will be contacted directly about the upgrade. The full *StormTracker 2* package retails at £24.95.



Time to play – the program recognises 19 different types of soundchip music files...

STORMIN' IN

StormTracker 2 is the result of feedback from purchasers of the original version and is available as a free upgrade. The new version displays real music notes on-screen, a feature lacking from most other tracker-style programs, and allows you to alter the

FULL FAX

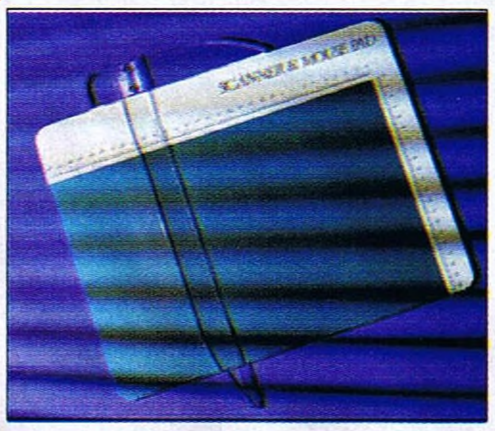
Ladbroke Computing (01772 203166) has recently launched a new Fax Modem for under £150. The new, BT approved, unit is Hayes compatible with both auto answer and auto dial, and comes with a five year warranty. When used as an ordinary modem, it has a top speed of 14,400 baud with support for V.42bis. The fax capabilities are Class 1 and 2 standard and the unit is compatible with Group 3 fax machines, offering send and receive speeds of up to 14,400 baud.

Ladbroke's Fax Modem costs £149.99 and is supplied with appropriate cables for the ST and Falcon. It also includes a copy of *Connect*, the excellent ST comms package.



No stamp needed – Ladbroke's new Fax Modem breaks the £150 barrier.

MAT 'N' PAD!



Clearly useful – the Scanner Pad includes a transparent cover for seeing through.

Fancy a cheap scan pad that doubles up as a mouse mat? Golden Image UK (0181-900 9291) has just the item. The 2-in-1 Scanner Pad and Mouse Mat has been designed to perform the same task as a scanning tray but at a much lower cost. It gives you a greater degree of accuracy than scanning by hand alone and includes a transparent cover to hold pictures in place while you scan them. In addition, larger images can be scanned in sections and merged together. Built-in ruler markings allow you to measure the size of the picture and also help you to line up images for scanning in several parts. The Scanner Pad can also be used as a mouse mat, a holder for business cards or anything else you can think of! Available now for £9.95 – and in pride of place in our *Budget Bonanza* on page 38.

IN BRIEF

● First Computer Centre has recently set up an Atari-specific file area on its bulletin board. Customers may use the BBS to place orders, download PD software and printer drivers, or ask for specialised technical support. All the usual file and mail areas are also available. The Atari support area is a recent addition and readers are encouraged to upload PD and Shareware files that are likely to be of interest to other users. The BBS runs 24 hours a day, supports speeds up to 14,400 baud and uses the standard 8N1 communications protocol. Call 0113 2 311422.

● Following on from our news item on Virtual Reality headsets in issue 32, VictorMaxx has announced that its CyberMaxx VR unit will be handled in the UK by ICE Distribution. ICE have already put together a developer pack that includes a publication detailing how to adapt your software to take advantage of the headset. Also included is a disk full of examples and free developer support. ICE may be contacted on 01453 756993.

● A record number of visitors attended the UK's only Consumer Electronics Show, *Live '94*. The six-day event, which covered all aspects of consumer electronics, attracted 182,000 people, significantly up on the previous year. The show, held at Earls Court, was perceived as a great success by all involved and the organisers already claim to have signed up most of this year's exhibitors for next year's event. *Live'95* is scheduled to run from September 19 to 24 at Earls Court 1 and 2.

● Heavenly Music and Steinberg are to join forces in a world-wide alliance that will see nine of Heavenly's popular building block programs, such as *Dr. Beat* and *Bytes 'n' Pieces*, packaged with Steinberg's products in 45 countries. Quite befitting, as all of Heavenly's products are programmed with *Cubase*.



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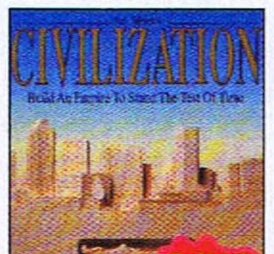
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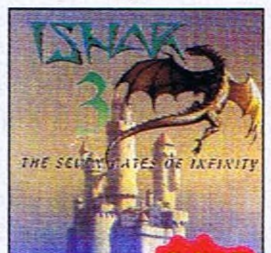
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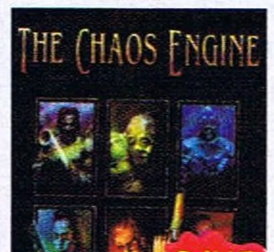
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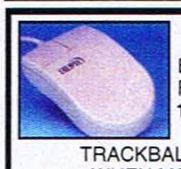
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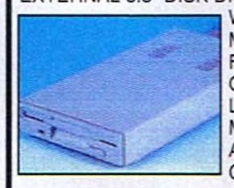
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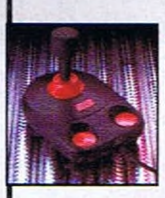
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Inter-Mediates Ltd, 2 South Block, The Maltings, Sawbridgeworth, Herts. CM21 9PG.

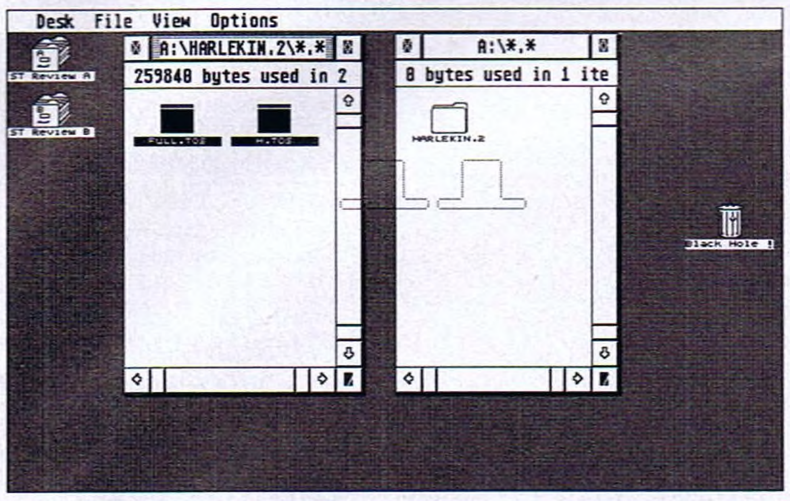
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INSTALLATION

Before you can try out all the features, you'll have to install *Harlekin II* properly.

- Use *STRBAKUP.TOS* to make a copy of the second cover disk and use this as your *Harlekin* work disk. **The rest of the installation instructions refer only to this back-up**.
- Delete all files and folders from the disk apart from the *HARLEKIN.2* folder. Double-click on this and you will find three files, all with a .TOS extender.
- You only require two of these files, depending on the amount of RAM in your computer. If you have a 520 ST with only 0.5Mb of memory, or if memory is generally tight, then delete *FULL.TOS*: if you have plenty of memory to spare then delete *SMALL.TOS*.
- Double-click on the *ST Review A* icon again and a second window will open, showing the *HARLEKIN.2* folder. Place the window on the right of the screen. Select the two .TOS files from the left window and copy them over to the right window (see screenshot).
- Delete the *HARLEKIN.2* folder. The disk should now contain the two .TOS files and nothing else. Double-click on *H.TOS* to automatically de-archive it. When extraction is complete, delete the file *H.TOS* and double-click on *FULL.TOS* (or *SMALL.TOS* on a low memory system). Then delete *FULL.TOS* from the disk and reset your system.
- If you own a hard disk, simply copy the full contents of the disk to drive C.



Drag the two files from inside the HARLEKIN.2 folder on the left to outside of it on the right.

JACK OF

Harlekin is the ultimate desk accessory for the ST, providing you with every utility you'll ever need. It also includes a control panel to customise system settings and install a replacement system font.

Harlekin consists of 21 integrated modules, ranging from a basic calculator to a text editor and personal organiser. As *Harlekin* is a desk accessory, all modules are available even within other programs. You can always take a quick look at the personal organiser or even view a text file, all without having to leave your current program. *Harlekin* also replaces the file selector and adds facilities like a mouse accelerator and a simple screensaver to the system.

GETTING STARTED

Harlekin is accessed from the Desk menu – select it to display the main window. The display consists of several icons, each indicating a *Harlekin* module, and a click on the curved arrow at the bottom right of

WELL SELECTED

The standard file selector is a great tool, but it does lack some essential features. *Harlekin* installs a replacement file selector that offers much more. You can use it to create folders, check free disk space or search for files. All of these functions are displayed by clicking on the **Extra** button.

The **Paths** button displays a pop-up menu where ten preset paths are available. The first six are fixed while the bottom four are automatically updated as you use your ST. This is extremely useful for hard disk owners as the four most recently-used paths are automatically available. These paths can be reconfigured by holding down <Shift> while selecting the path in the pop-up menu. From the small dialogue box, enter the path you want and press <Return>. If you want a path to be updated "on-the-fly" then enter "!" (exclamation mark) instead of a path.

The ten paths are also available from the keyboard by pressing <Alternate><1> for the first path to <Alternate><0> for the last one. If you don't want to use the Harlekin file selector, you can disable it from the System Vectors module (see the *It's A Set-Up* box).

TWENTY-ONE TODAY...

Editor: flexible text editor with formatted printout and full clipboard support.

Manager: the core of Harlekin – a personal organiser that is linked to the other modules.

Terminal: log onto bulletin boards with a modem. There's an automatic dialler and built-in Xmodem and Ymodem transfer protocols.

Monitor: memory and disk viewer/editor, ideal for hacking into the system and recovering files from damaged disks.

Calculator: simple calculator with support for Hexadecimal and Binary formats.

ASCII: ASCII table that is linked to the Macro module, allowing input of the full character set in all other modules.

Panel: replacement control panel for setting the system configuration including mouse acceleration and keyboard response.

File Util: powerful file management utility for copying, moving and deleting files.

Disk Tools: format and copy disks using various standard or extended formatting schemes.

RAM Disk: reset-proof RAMdisk module that can be installed and removed at any time.

Filter: printer utility that is used to translate and remap the printer character set.

Printer: printer configuration panel with built-in spooler.

RS232: serial port control panel – sets baud rates and other figures.

Alarm: corner clock and alarm module. The Manager uses this to announce appointments and other events in the personal organiser.

Macro: keyboard macro editor – call up *Harlekin* modules via keyboard shortcuts or auto-enter a sequence of words into the editor.

Convert: *Harlekin 1* users can update their old Manager files for use with version 2.

HPG Edit: allows C and Assembler programmers to create their own *Harlekin* modules.

Language: select the language *Harlekin* uses.

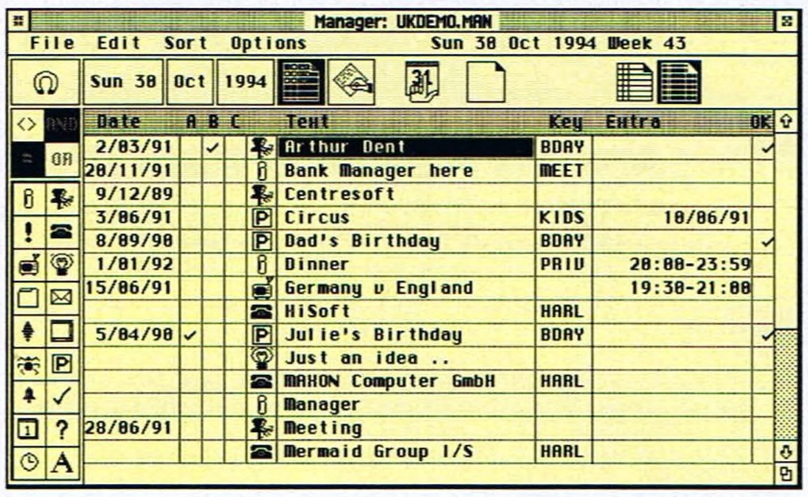
Memory: check how much memory each *Harlekin* module is currently using.

Sorting: allows you to change the way *Harlekin* sorts data in the file selector and the Manager modules.

Vectors: adjusts how *Harlekin* "hooks" into the system. Use it to remove or install the various modules.

ALL TRADES

Another ST Review exclusive – HiSoft's feature-packed Harlekin II...



The Manager module is a powerful personal organi-ser and scrapbook that stands at the centre of Harlekin. Read all about it in next month's tutorial...

the window shows the remaining ones. *Harlekin* installs a mouse accelerator by default, along with a corner clock, a screensaver and a system font, although these settings can be changed by clicking once on the control panel icon title, **PANEL**.

The System Settings dialogue box replaces the standard Atari *Control* or *XControl* panels. The keyboard and mouse response can be set: the mouse accelerator has three settings which are self-explanatory, apart from **Exp** which varies the acceleration according to your mouse actions. Move the mouse very slowly and no acceleration is used; move it faster and the acceleration increases progressively. Try all three and see which you prefer by clicking on each button and moving the mouse.

The icons at the bottom enable and disable the system beep, keyboard, colour palette, Blitter and screensaver (from left to right). When you are happy with your settings, click on the "close" button at the top left corner of the box. Most *Harlekin* dialogue boxes are closed this way.

To save the new settings, click on the paper clip icon at the bottom of the window. Click on **Save DEF file** in the dialogue box and the *Harlekin* file selector will appear. Click on "OK" to confirm the save. Other programs will now use the *Harlekin* file selector as it replaces the standard Atari one. See the *Well Selected* box for more information.

Next month we'll take a close look at the core module of *Harlekin* – the powerful personal organiser known as the Manager...

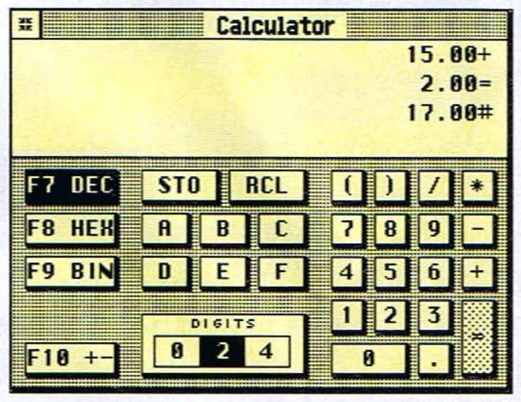
IT'S A SET-UP

Some of *Harlekin*'s features can be switched off using the **Vectors** module. This is on the second modules page so click on the curved arrow to find it.

On the left side of the Vectors dialogue box are the various modules that you can switch on or off by clicking the buttons. **Macro** allows you to call *Harlekin* modules from the keyboard. For example, <Alternate><Shift><I> opens the main *Harlekin* window while <Alternate><Shift><C> opens the calculator.

The corner clock and alarm module can be disabled as well as the screensaver and alternative file selector. You can also remove the replacement system font and disable the mouse accelerator.

There are two screen modes: Direct and VDI. Direct is faster and should be used if you don't have a screen accelerator such as *NVDI* installed.



Two-digit accuracy is on offer in the calculator – ideal for balancing your cheque book!

GET THE FULL PACKAGES!

- The full *Harlekin II* package with master disk, 150-page manual and product registration card, packed in an attractive, protective box for only **£14.95 plus £2 p&p**.

- Upgrade to *Harlekin III*, including an enhanced and restyled 170-page manual, for only **£39 plus £2 p&p** (RRP: £59.95)

Harlekin III has been completely revised and updated to work with later versions of TOS. It's fully windowed with flying dialogue boxes, coloured icons, *MultiTOS*-compatibility, high-density floppy support and much more.

Every module has been improved, including the following changes:

- The Editor can now handle four files at once.
- The Manager can sort forwards/backwards and has extremely flexible date entry/display plus external clipboard support.
- The Terminal program has been re-written to work in its own window with a host of extra features.
- There is a separate Alarm handler.
- The Memory handling is far more flexible with all modules taking memory from one central pool.
- You can customise the main *Harlekin III* window to show only the modules with which you wish to work.

HARLEKIN

☐ ***Full Harlekin II package***
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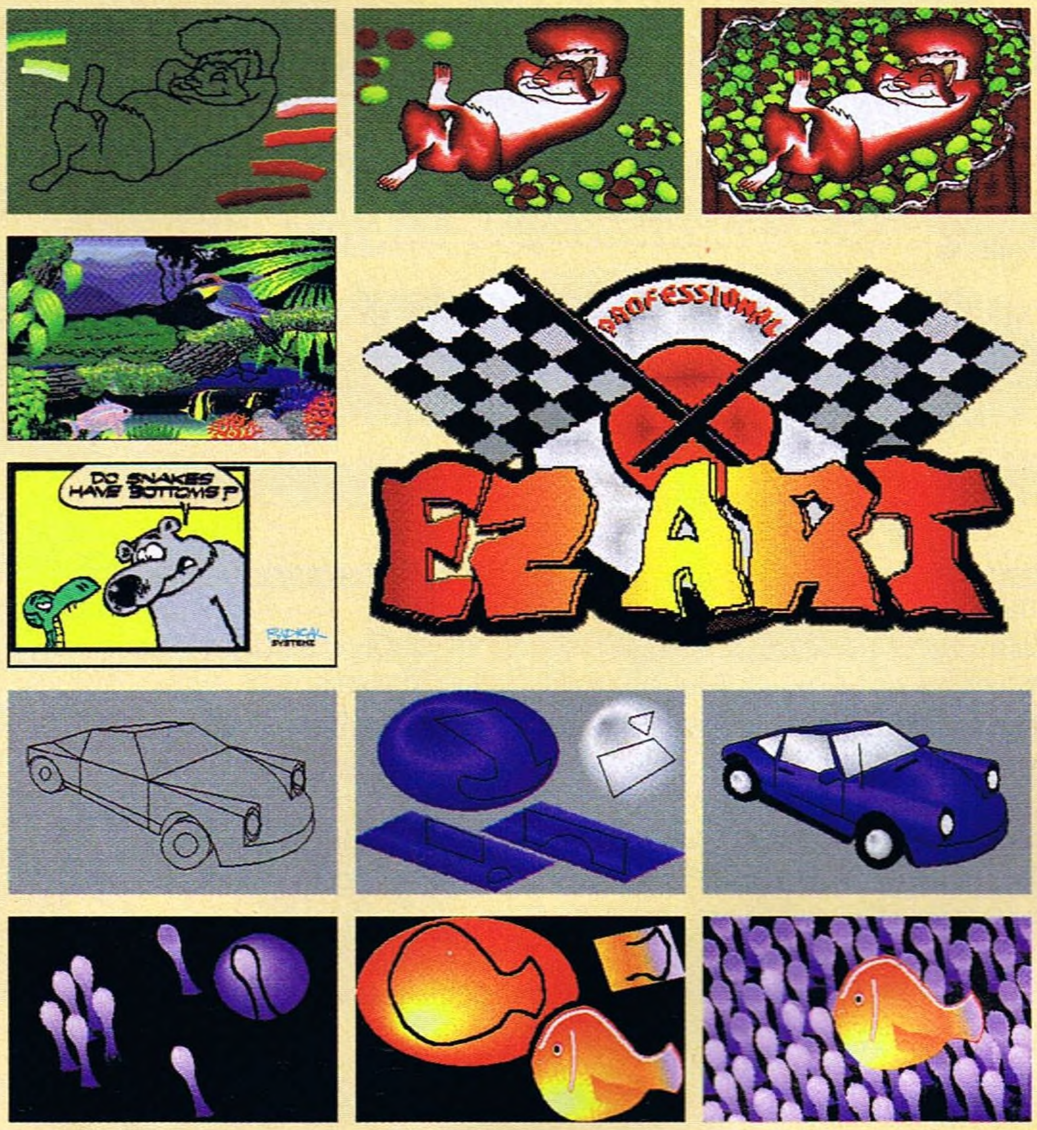
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These screenshots were created using EZ-Art Professional

EZ-Art Professional is an easy to use drawing package for all ages. In addition to creating your own original artwork using a vast range of custom written tools, digitised colour pictures can be retouched. Comes with an extensive fully illustrated 60 page manual. Here's just a few of its features:-

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* Supports pictures bigger than the 320x200 screen size
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* 256 colour pseudo palette available for most operations
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90% rating ST Review August 1994
83% rating ST Format September 1994

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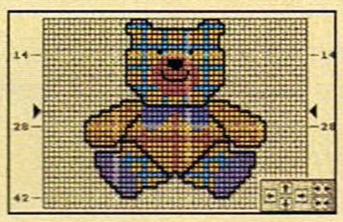
Steve Delaney & Irene Lamb



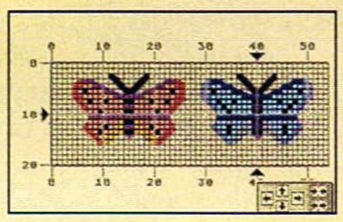
Easy Stitch

Cross Stitching On Your ST!

Easy Stitch is a cross stitch generator program. Cross stitching is the art of creating pictures and patterns by means of sewing coloured threads onto a fabric base. **Easy Stitch** is an adaptation of the traditional method of creating the cross stitch design on graph paper. With **Easy Stitch,** you can design your own patterns on screen in a way that is simply not possible using the traditional method. Blocks of the pattern may be selected for copying, rotating, reversing, enlarging or reducing, thus saving many long hours performing repetitive actions.







Easy Stitch allows pictures created by popular art packages to be used as the basis for your pattern. In addition, the program allows for the use of the more complicated back stitches and half stitches, something lacking in many other cross stitch programs. All popular printers are supported.

Easy Stitch costs only £19.95.

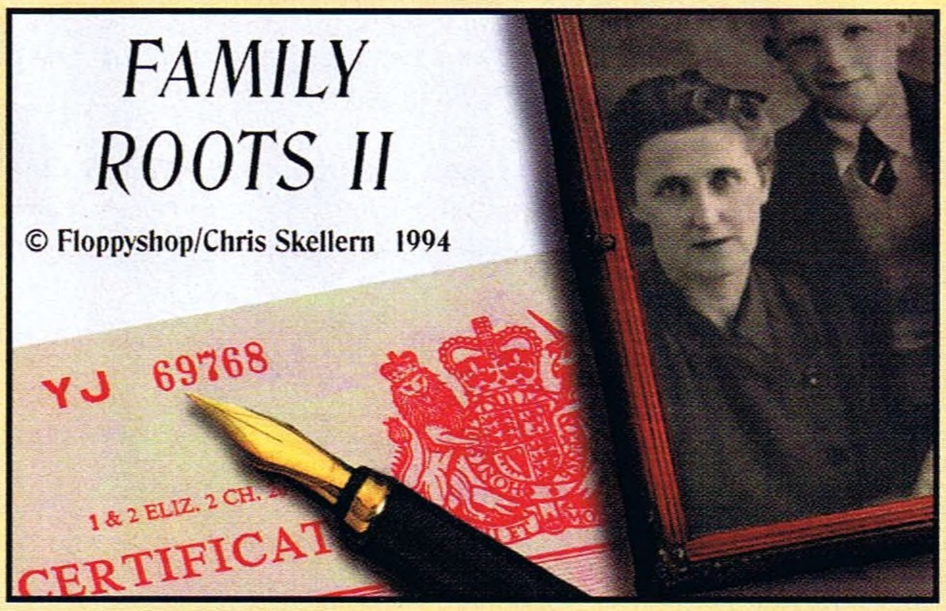
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Floppyshop's award winning **EZ-Art Professional** is the ideal companion to **Easy Stitch.** Its powerful tools allow you to create stunning designs which may be imported into **Easy Stitch** and used as the basis of your cross stitch patterns.

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Family Roots is a program designed to assist those of us who indulge in the pursuit of tracing our ancestry or 'family tree'. Unlike similar products, Family Roots is not merely a customised database. It lets the user link each individual into the family tree graphically on the workscreen, whilst allowing easy access to its integrated database. Family Roots II is out now at a cost of £29.95 and comes complete with fully illustrated manual. Postage free in UK, add £1.50 for Europe (incl Eire), or £3.00 for rest of world. Existing users of Family Roots I should contact us for details of how to upgrade.

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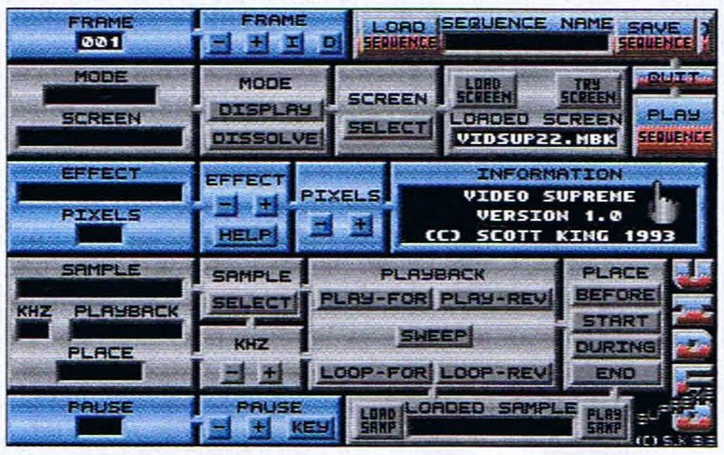
NEXT MONTH

NEW YEAR BLAST!

DOUBLE DISKS

... means twice as much software – two big exclusives and a handful of great utilities!

VIDEO SUPREME



Next month will bring you *Video Supreme*, the excellent titling software for the ST. With the full commercial editing program, you'll be able to:

- Construct amazing intros for your video tapes
- Create impressive on-disk intros for your programs
- Play sound samples along with exciting visual effects



ZERO-5

Yes – *ST Review* will have an exclusive, playable demo of *Zero-5*, possibly the greatest STe shoot-'em-up of all time! Here's the chance to fly the light fantastic on your first mission...

BIG REVIEWS

Tune in for half-a-dozen essential reviews including *Notator Logic Audio* and *Imagecopy 3.5*.

APEX MEDIA

Full review of the Falcon's incredible new graphics package. Find out whether it delivers the goods and how well it works with the ScreenEye and Exposé digitisers...

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SOMETHING FOR

MUSIC PROGRAMS

DESKTRACKER

Shareware • D. Oakley • All Res.

Powerful MOD player...

DeskTracker is one impressive program that can play .MOD files and display a spectrum analysis of the music at the same time. It runs as a desk accessory or stand-alone program by renaming *DESKTRAK.ACC* to *DESKTRAK.PRG*. We've included one .MOD file for you to try out. Run *DeskTracker* and click on the Play button. From the file selector, select *LOVELOST.MOD* and click on "OK" to play the file. Various options are hidden under the tiny **Options** button and you can display the oscilloscope and spectrum analyser by clicking on the small buttons on the right-hand side.



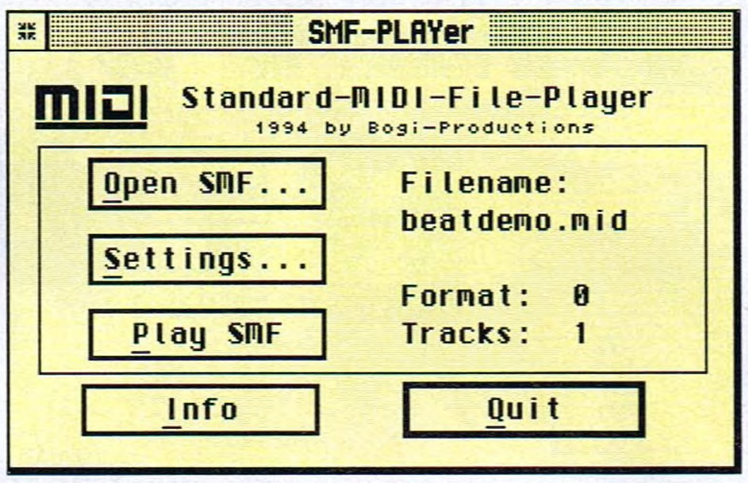
DeskTracker – an excellent MOD player that works on all Atari computers.

MUSICALC

Shareware • M. Milner • High/Med Res.

MIDI musician's calculator...

MusiCalc is an easy-to-use musical calculator that can run as a stand-alone program or a desk accessory. To install, copy *MUSICALC.ACC* and *MUSICALC.RSC* to the root directory of your boot drive and reset. This utility can calculate the delay times to match any given tempo, or the frequency range of musical instruments plus various other useful functions.



SMF Player – a desk accessory that can play MIDI Files!

SMF PLAYER

Freeware • P. Bogner • All Res.

Play your MIDI Files...

This is a stand-alone program or desk accessory – simply change the extender from .PRG to .ACC. It's designed to play Standard MIDI Files using the ST or Falcon's built-in MIDI port and an external sound module. To get started, try playing the *twiddly•beats* demo from the cover disk.

Click on the **Open SMF** (standard MIDI file) button, select *BEATDEMO.MID* from the file selector and then click on the **Play SMF** button to hear the MIDI File.

MusiCalc – a useful tool for the modern musician...

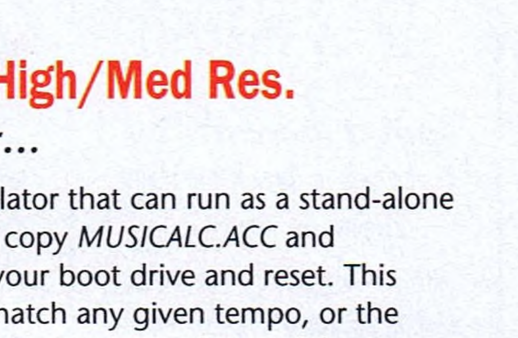
PRINTER UTILITIES

BJ300 CONTROL

Freeware • S. Munslow • High/Med Res.

Control your Canon BJ300...

BJ300 CONTROL is a straight-forward utility that can send control codes to the BJ300, switching fonts, print modes and other handy functions. To install, copy *BJ300.ACC* and *BJ300.RSC* to your boot disk and reset the system.



BJ300 Control – select print modes and fonts via a single click of the mouse button.

FRED WEST

Freeware • G. Rutt • All Res.

Speed up your printing...

This handy system patch was written by our very own Graeme Rutt and works like a dream. By replacing some slow TOS printing routines, *Fred West* can dramatically reduce print times with high resolution printers such as the DeskJet, especially when used with programs like *Calligrapher* or *TimeWorks*. Copy it over to the Auto folder on your boot disk and reset to install. There are no set-up options to worry about!

PERFSKIP

Freeware • All Res.

DeskJet perforation utility...

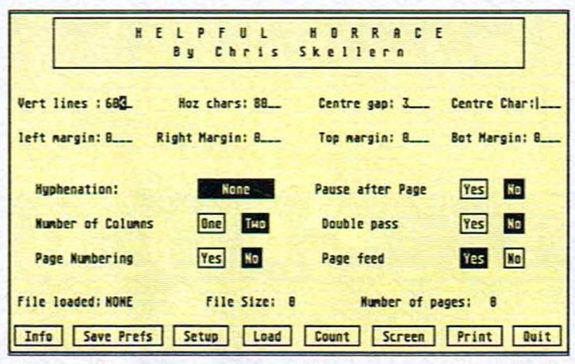
If you own a DeskJet printer, you may find this tiny desk accessory useful. It simply enables and disables perforation skip – copy it over to the root directory of your boot drive and reset.

HELPFUL HORRACE

Shareware • C. Skellern • High/Med Res.

Control your text print out...

Helpful Horrace can print out any text file in multiple columns, adding page numbers and many more useful features. The program also allows you to determine the control codes sent to the printer for maximum control. To learn more about *Helpful Horrace* run it from the desktop and click on the **Info** button. This displays several help pages which you can print out as well.



Helpful Horrace – print out all those "read.me" files, saving ink and paper.

EVERYONE!

Despite our two main cover disk programs, we've packed in 15 utilities as well...

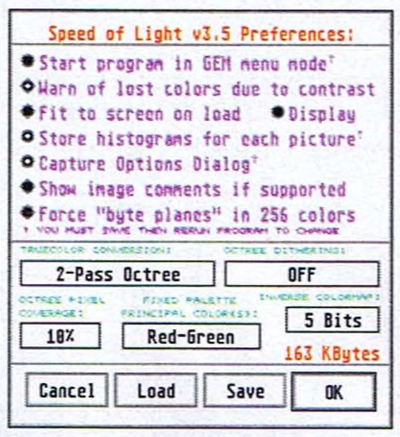
EXCLUSIVE!

SPEED OF LIGHT 3.5

Shareware • S. Denman • 16 colours minimum.

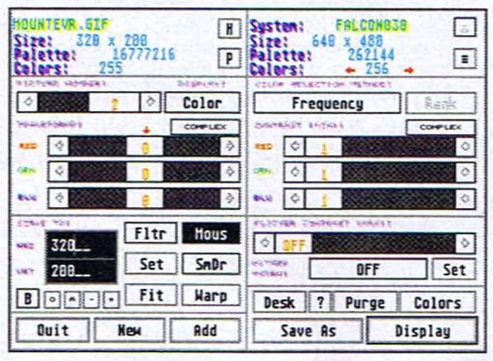
Speed Of Light is one of the best colour image viewers around. Using some clever hardware tricks, it can display 256 colour and true-colour images on a 16-colour display – this means ST low resolution!

Run *Speed Of Light* from the desktop to get started. You'll be greeted by a copyright notice that disappears with a single mouse click. Next, the registration dialogue box comes up – click on "Cancel"which brings up the main *Speed Of Light* window. Click on **Add** to load an image from the cover disk. This takes a few seconds after which you can click on the **Display** button to see it.



Some of Speed Of Light's options, which include selecting the Octree option to produce an excellent display. Other options give inferior quality but speed up the loading time of images.

While the image is displayed, you can access a large number of viewing options by clicking and holding down the left mouse button. Features like zoom in and out, inversion and more are available from this pop-up menu. Click the right mouse button to return to the main dialogue box. There is much more to *Speed Of Light*. The Histogram facility is likely to be of interest to some users – click on the "H" button at the top of the dialogue box. It is recommended that you read the included manual if you want to get the best out of the program. This program has many clever features that also allow you to manipulate images in a variety of ways, and is actively supported by the author. So if you are impressed with *Speed Of Light*, don't forget to register it to ensure the program's continued support.



The main dialogue box. From here you can load, display, transform and save images.

HARD DISK UTILITIES

ALIBI

Freeware • C. Bartholme • All Res.

An end to hard disk chaos...

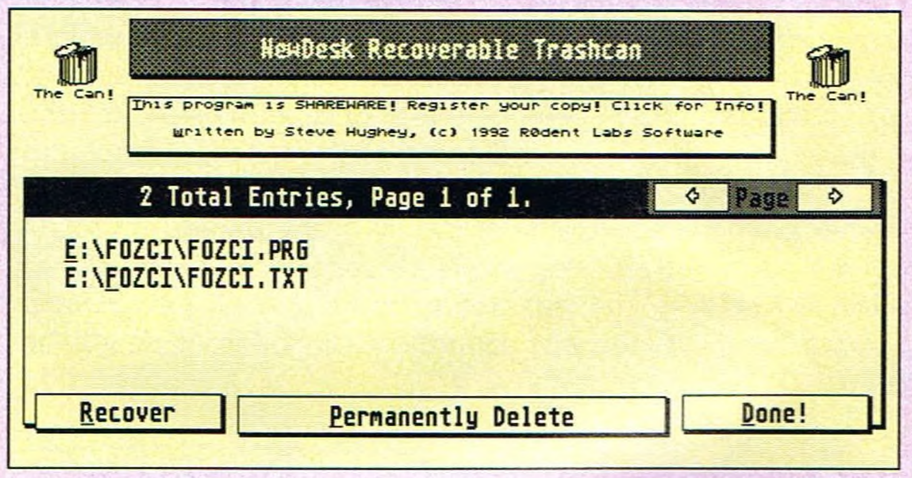
Alibi is a clever program that allows you to place all your programs in one folder using aliases. It works by creating small program loaders that only take up 656 bytes of disk space. Run the program, select English as the language and create an alias for a program by selecting it from the file selector. *Alibi* then prompts you for a location of the alias. It's best to create a folder where you can place all the aliases. A double-click on the alias then loads the program.

RECOVERABLE TRASHCAN

Shareware • S. Hughey • All Res.

Recover trash from TOS 2.06...

Place *RT.PRG*, *RT_M.RSC* and *RT_H.RSC* on the root directory of drive C. Drag the *RT.PRG* file onto the desktop and use **Install Application...** under the Options menu to set the default directory to **Top Window**. From this point, use *RT.PRG* as your trashcan, dragging files to it for deletion. If you wish to recover files or clear the trash, just double-click on the icon.



Trash back – bring your files back from the dead!

GENERAL UTILITIES

ULTIMEM

Public Domain • I. Hussain • All Res.

Limit your ST's memory...

Some old games can refuse to work after a memory upgrade. *UltiMem* is an Auto folder program that fools your ST into thinking it has less memory than it actually has!

Copy the program into your Auto folder and reboot. You can then select the desired memory configuration from the start-up screen. The program is reset-proof, so switch your ST off and on again to regain your memory.

SILKBOOT 2E

Freeware • M. Slagell • All Res.

STe/MegaSTe boot patch...

This little program has two purposes: it claims to work better than *SIMMFIX*, allowing a RAM configuration of 2.5Mb on STes and Mega STes, and also disables the boot delay and memory test on the latter.

To install, insert a floppy disk into drive A and run the program. *SilkBoot* then writes a small executable boot sector – place that floppy in the drive whenever you boot the system.

DM2WORKS

Freeware • R. Hoekstra • High/Med Res.

Convert Data Manager files...

This is a very simple to use program that converts *Data Manager* files to *AtariWorks* format – just follow the on-screen instructions.

LOADINF

Public Domain • K. Pedersen • All Res.

Load DESKTOP.INF files...

LoadInf gives a TOS 2.06 feature to older versions of TOS, allowing you to load any desktop set-up contained in the *DESKTOP.INF* at any time. Just run it and select the required .INF file from the file selector.

FOZCI

Postcardware • J. Akhtar • All Res.

A unique indicator...

FozCi is a CapsLock indicator that lights the floppy drive LED whenever the CapsLock key is pressed! To install, copy *FOZCI.PRG* to your Auto folder and reboot.

CLASH OF THE

KEY FACTS

Product:
NVDI 3 — SpeedoGDOS 5

Company:
System Solutions — Compo Software

Contact:
0181-693 3355 — 01487 773582

Price:
£49.95 — £59.95

Upgrade:
£24.95 from 2.5 — £29.95 From 4.0

SYSTEM

Minimum Memory:
1Mb, more recommended
Hard drive also recommended

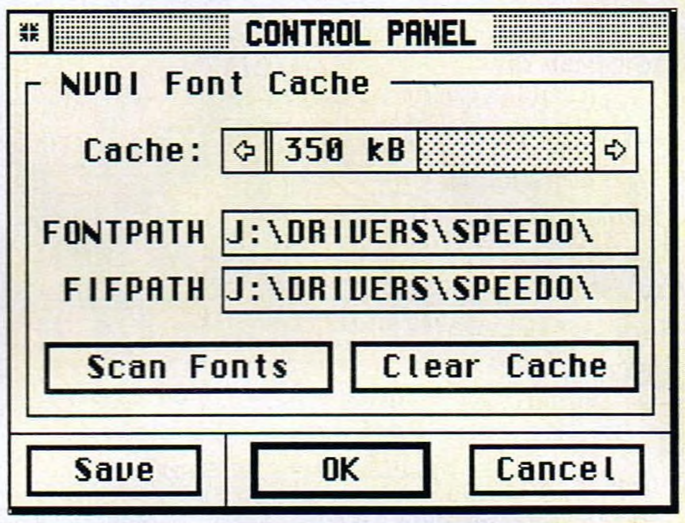
Resolution:
All ST, TT and Falcon resolutions

Computer:
Any

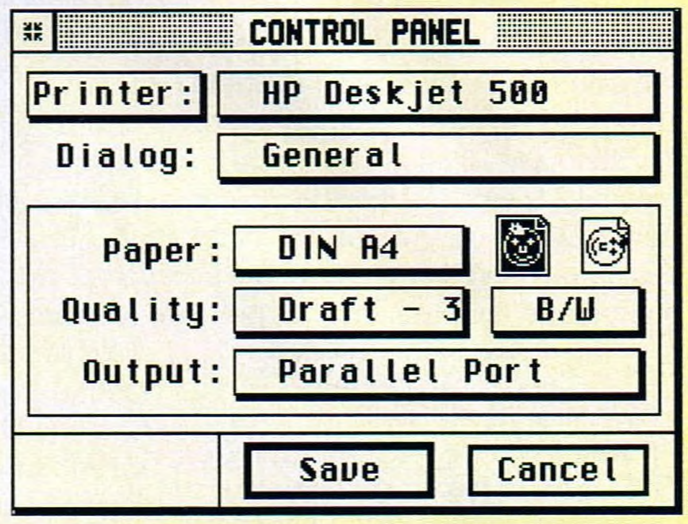
Thousands of industry-standard fonts are now accessible on the ST, but which of the two competing systems is best – NVDI 3 or SpeedoGDOS 5? Ofir Gal cuts through the hype...

GDOS was originally intended to allow all programs to use the same fonts and printer drivers, producing a WYSIWYG display on-screen. However, due to the limitations of the original versions, programs like *Calamus*, *PageStream* and *Calligrapher* opted for their own propriety font systems, effectively shutting out Atari owners from the emerging TrueType and PostScript font standards. But the times they are a-changin' – courtesy of *NVDI 3* and *SpeedoGDOS 5*.

SpeedoGDOS was initially released by Atari alongside *MultiTOS* and the Falcon. Based around *GDOS*, it boasted added support for scalable Bitstream Speedo fonts allowing *GDOS* applications to access them. Unfortunately, Speedo fonts are expensive in comparison with their TrueType cousins. Compo recently took over the development, added TrueType and PostScript font support along with colour printer drivers and some speed improvements – enter *SpeedoGDOS 5*. *NVDI*, the ultimate screen accelerator for the Atari computer range, has always had its own version of *GDOS* built-in, but the technology only supported bitmapped fonts. Now *NVDI 3* also offers TrueType support with what is claimed to be a faster and more powerful system that *SpeedoGDOS*. Are the claims valid? We put both programs to the test.



The key factor that affects the performance of both programs is the size of the font cache. NVDI 3's Font Cache CPX can be used to change the size and to add or remove fonts without a reboot.



NVDI's Printer Driver configuration CPX can be used to change the current printer driver – useful for switching between draft and letter quality modes.

PERFORMANCE

Measuring the performance of complex systems like these is almost impossible. The speed varies depending on the font cache size, whether the fonts are Speedo or TrueType, the speed of the hard disk and various other factors. In order to produce some indication of the speed, a simple test program was written that attempts to neutralise these factors.

The program performed several tests including the display of fonts at small and large sizes, and drawing *bézier* curves which are used in art programs such as *Kandinsky*. The tests clearly show that *NVDI 3* excels when displaying larger fonts, but otherwise performance is similar. All timings are in seconds.

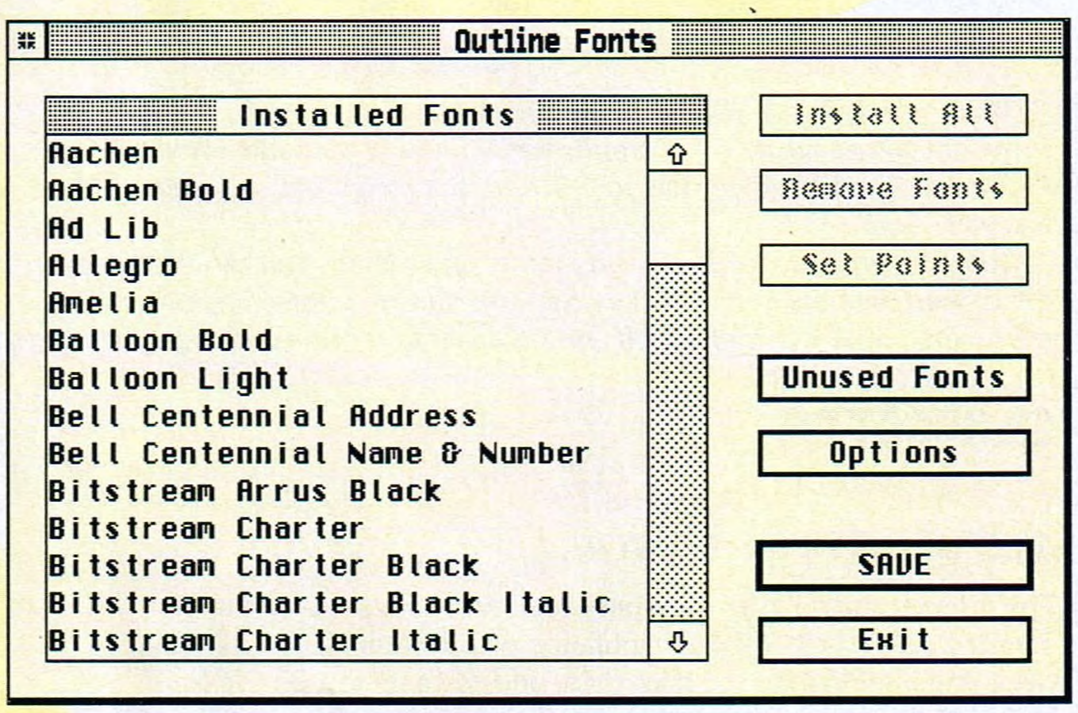
Test	NVDI 3	SpeedoGDOS 5	SpeedoGDOS 5/NVDI 2.5
Small text	62	66	65
Large text	27	63	60
Bézier curves	57	70	57

Both *SpeedoGDOS 5* and *NVDI 3* work very well but the latter has the edge when it comes to speed. In general, TrueType fonts are slower in use than the Speedo variety, but the difference with *NVDI 3* is less noticeable and the display speed of body text is slightly faster. *NVDI 3*'s speed difference is clearly visible when displaying large point size fonts or .GEM files in programs like *Papyrus* and *Kandinsky*. *NVDI 3* is also a little faster than *SpeedoGDOS 5* when displaying TrueType fonts.

Printing with *NVDI 3* is faster with most modern printers. Thanks to data compression, print times are greatly reduced if your printer supports this method of transferring data.

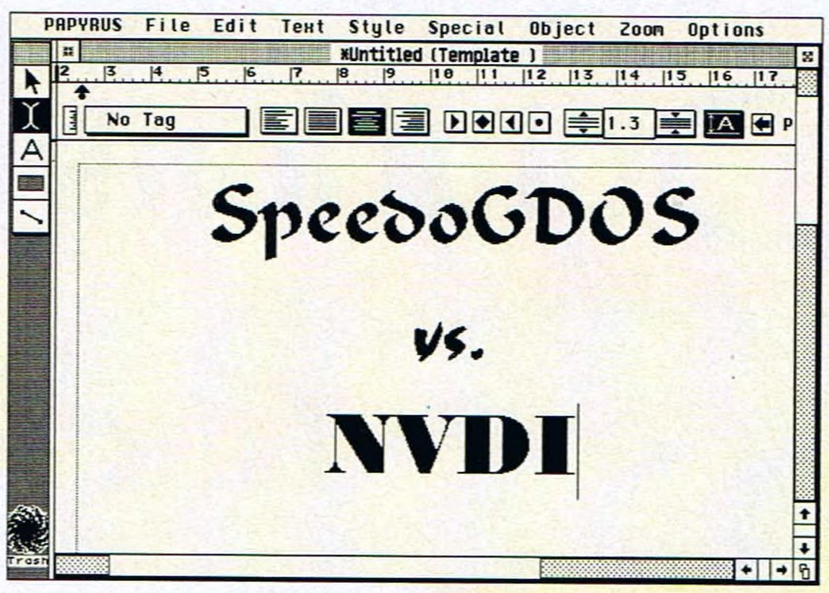
Test	NVDI 3	SpeedoGDOS 5
STraight FAX!	90	108
Papyrus	58	82
AtariWorks	50	78

Times are in seconds for printing a single page in letter quality on a DeskJet 500 with *Fred West*, the printer accelerator on this month's cover disk, installed. The DeskJet supports data compression.



SpeedoGDOS fonts are installed via the Outline desk accessory. This utility is also used to adjust the cache size and set the paths for the various fonts and drivers.

TITANS



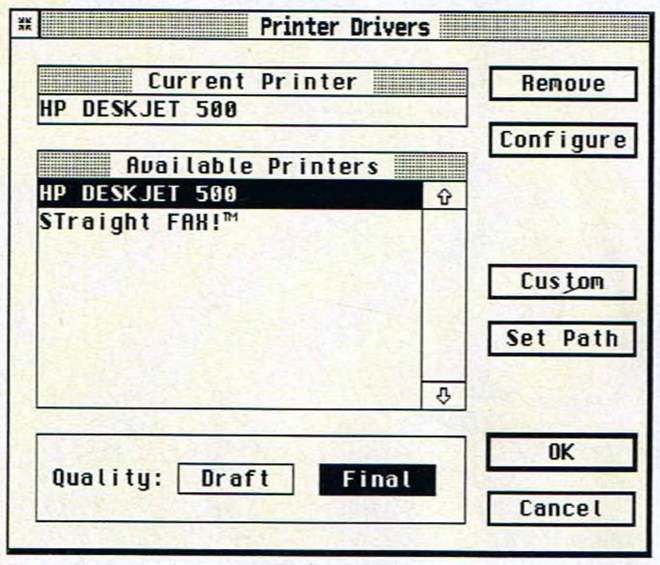
Papyrus supports both SpeedoGDOS and NVDI 3 – the next version will include support of pair kerning which improves the alignment of adjacent letters.

FLY BY LIGHT

NVDI is better known as the market-leading screen accelerator. It works by replacing inefficient TOS screen display routines with highly optimised code, resulting in a phenomenal increase in the display speed of text and graphics.

NVDI completely replaces the VDI part of GEM which is responsible for almost everything you see on your computer screen. _NVDI_ has always included an optimised version of _GDOS_, allowing the use of fixed size bit-mapped fonts, and is partly responsible for the revival of _GDOS_-based applications, especially in Germany. The new version simply extends this to scalable Speedo and TrueType fonts.

The net result is that text and graphics are displayed between three and nine times faster than before – scrolling through documents, displaying images and opening dialogue boxes are all visibly faster, even on the most basic ST set-up.



The Drivers accessory is used to install printer drivers under SpeedoGDOS. Various options such as paper size and print quality can also be set.

INSTALLATION

SpeedoGDOS 5 is installed by copying the various files onto hard disk. The program goes in the Auto folder while the two set-up desk accessories are copied to the root directory of drive C. Folders with the fonts and printer drivers are then copied to any convenient location. The two set-up accessories are used to set the paths for the fonts and drivers along with cache sizes.

NVDI 3 comes with an installation program: simply select the drive you wish to install to and click on "Install". Also included are five CPX modules for customising the set-up, selecting the printer driver and setting the font caches.

FEATURES

SpeedoGDOS 5 has similar features to its previous incarnation, allowing any correctly-written application to benefit from high-quality scalable fonts, alongside the old *GDOS* variety. *SpeedoGDOS 5* supports the three main font formats: Bitstream Speedo, TrueType and PostScript Type 1.

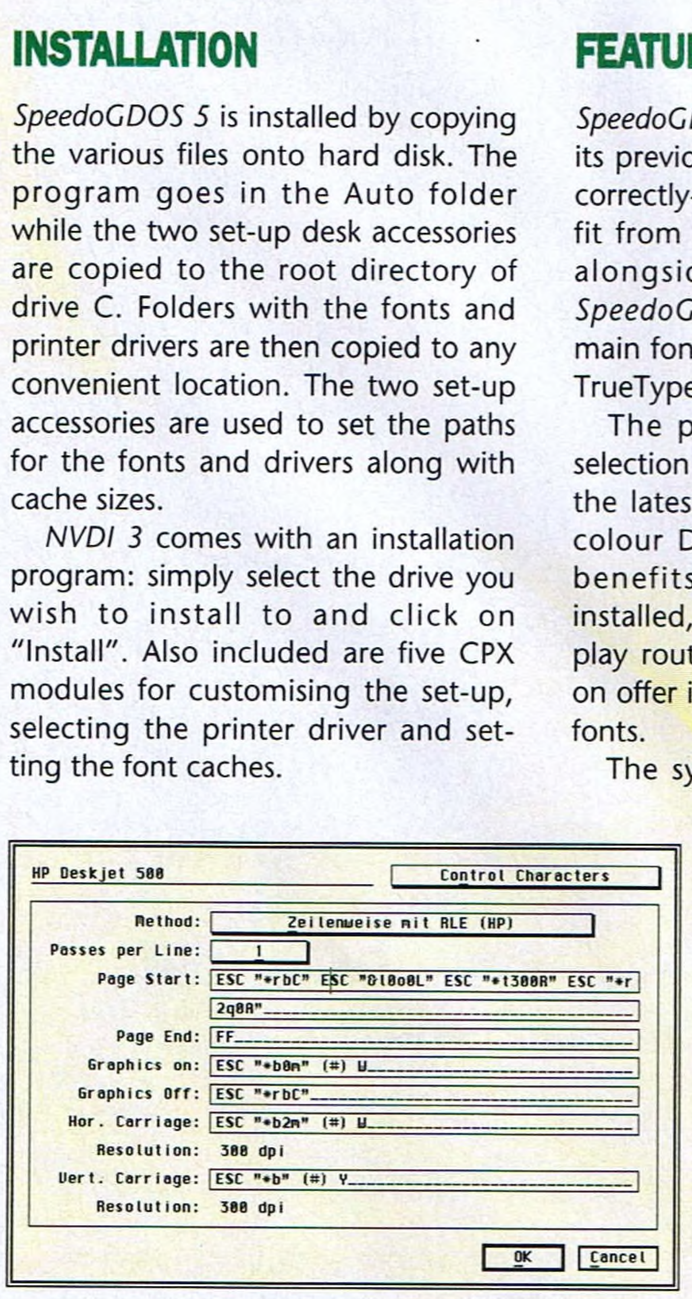
The package possesses a large selection of printer drivers, including the latest Hewlett-Packard laser and colour DeskJets. The program also benefits if you have *NVDI 2.5* installed, diverting some screen display routines for greater speed. Also on offer is a selection of eight Speedo fonts.

The system is supplied with two desk accessories that can also run as stand-alone programs. The first installs the printer drivers and allows you to configure the paper size and print resolution while the second installs or removes fonts as well as setting the font cache size – somewhat of a black art that requires quite a bit of experimentation if you are short of memory.

NVDI 3 takes a completely new approach and, as a result, is much faster and requires less memory to run. It supports both Speedo and TrueType fonts and is supplied with a collection of eight of the former. Since *NVDI 3* is a complete re-write of the print and display routines, the authors have been able to reduce both size and memory requirement of printer drivers from a typical 60Kb down to just 10Kb.

The package includes a number of CPX modules, two of which are dedicated to the font engine part of *NVDI 3*. The *Font Cache* CPX is used to change the font cache size and font paths. You can also install additional fonts without the need for a reset. The second CPX gives you control over the printer drivers and can switch between letter and draft modes or even change printer resolution. *NVDI* has a built-in IMG driver that creates colour or monochrome .IMG files at any resolution between 72 and 2,540 dpi! It can also output to the serial port if you ever need to.

If you can't find a suitable driver for your printer, *NVDI* comes with a simple utility that lets you create your own. This is simpler than it sounds as you usually start with an existing driver and modify it. Uniquely, *NVDI 3* drivers support data compression which greatly improves print time on printers that support it such as the Epson Stylus and later Hewlett-Packard models.



NVDI 3 comes with a printer driver creator – existing drivers can be modified and new ones created.

VERDICT

While *SpeedoGDOS 5* works very well, it is very difficult to recommend it unless PostScript font support is crucial. *NVDI 3* provides a much faster solution, uses less memory and is more configurable.

As *SpeedoGDOS 5* is closer in design to *GDOS*, compatibility problems are less likely than with *NVDI 3* but, in reality, both systems appear to be compatible with programs that support *GDOS*. Considering the added bonus of the screen acceleration, *NVDI 3* comes out a clear winner on almost every consideration.

SUMMARY

NDVI 3:
A fast and reliable font system
Includes the industry-standard screen accelerator
User-configurable printer drivers

SpeedoGDOS 5:
A direct continuation of the GDOS system
Supports PostScript Type 1 fonts
Generally slower than the opposition

FINAL WORD:
"While SpeedoGDOS 5 exhibits satisfactory performance, NVDI 3 is without a doubt superior in almost every way."

PERFORMANCE

	OVERALL
SPEEDOGDOS 5	
EASE OF USE ✔✔✔✔✔✔✔✔✔✓	76%
DOCUMENTATION ✔✔✔✔✔✔✔✓✓✓	
EFFECTIVENESS ✔✔✔✔✔✔✔✔✓✓	
VFM ✔✔✔✔✔✔✓✓✓✓	
NVDI 3	
EASE OF USE ✔✔✔✔✔✔✔✔✔✓	91%
DOCUMENTATION ✔✔✔✔✔✔✔✔✓✓	
EFFECTIVENESS ✔✔✔✔✔✔✔✔✔✓	
VFM ✔✔✔✔✔✔✔✔✔✔	

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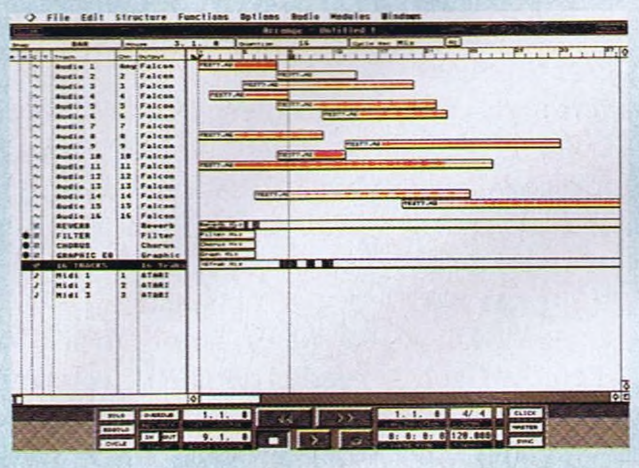
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1994 the Year 1

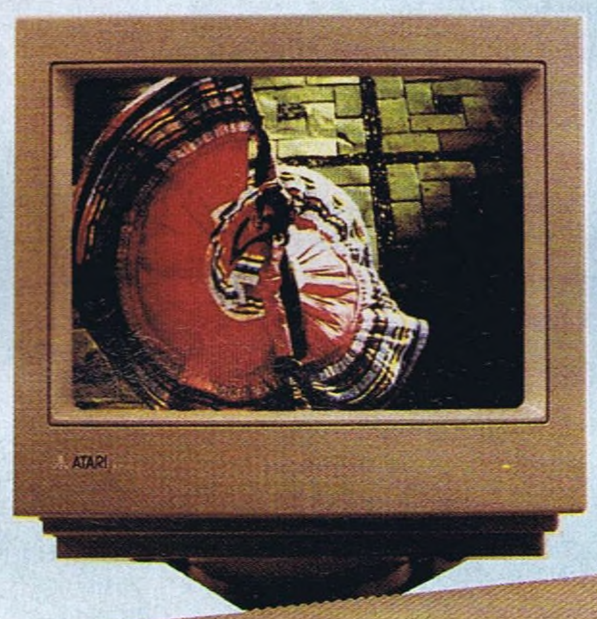
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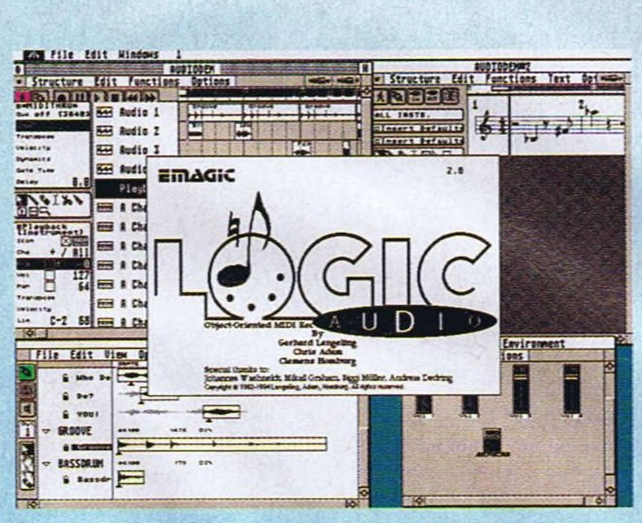
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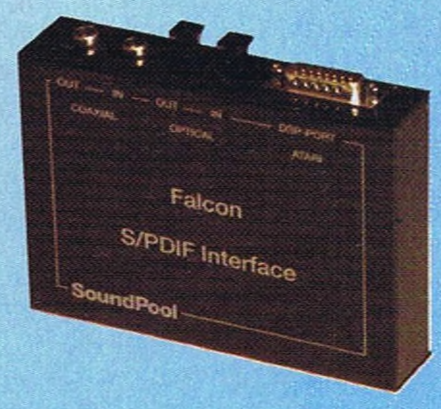




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MagiC

"If you want á multitasking system that works simply and realiably, then MagiC is for you."
ST Review, June 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 are 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.

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

MagiC	(RRP £69.95)	**Intro Price £59.95**
MagiC and Ease		**£99.95**
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NB: Excellent with Calamus SL. Compatible with Notator Logic, but not with Notator SL and not yet compatible with Cubase.

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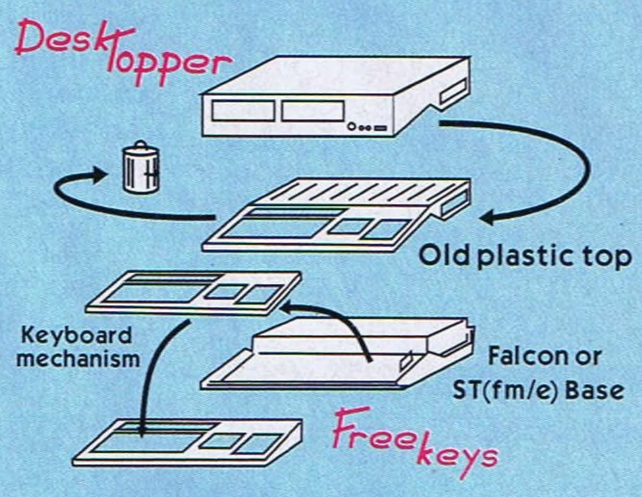
Kobold 2.5 (RRP £59.95) **Intro Price £49.95**

Ease

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Merry Christmas to all our customers

TRUE TO FORM

SpeedoGDOS 5 and NVDI 3 promise fonts galore at bargain prices, but how well do they cope with current applications? Nial Grimes investigates...

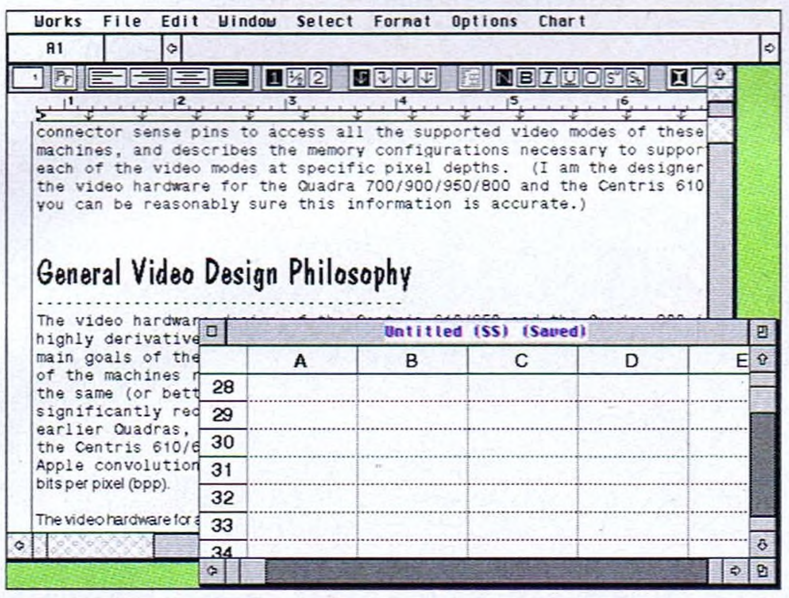
The amount of progress that font systems have made on the ST over the past two years is staggering. *SpeedoGDOS* from Atari sparked a minor revolution in software terms and with the help of applications like *Papyrus* and *AtariWorks*, the ST can hold its head high alongside the Macintosh and PC.

As fast as Bitstream Speedo fonts are though, they're simply not as popular or plentiful as the TrueType and PostScript alternatives used on other machines. *SpeedoGDOS 5* and *NVDI 3* put an end to the torture of limited typefaces – both allow you to use industry-standard fonts from within your favourite *GDOS* applications. However, the success of any font system rests on its compatibility, so let's take a look at how the new kids on the block cope with the software packages we all know and love.

BIG GUNS

Papyrus is one of the most impressive pieces of software ever to grace the ST and it's a program that relies quite heavily on *GDOS*. Both of the new font systems cope admirably well and Speedo, TrueType and PostScript fonts (in the case of *SpeedoGDOS 5*) can be mixed easily on screen. There's a swift burst of disk activity as different typefaces are selected, but with sufficiently large caches – and some form of screen accelerator – installed, the updates are lively.

In common with its predecessor, *SpeedoGDOS 5* allows Bitstream fonts to be installed and removed as and when you need them, but the system needs to be rebooted when it comes to TrueTypes. *NVDI* is a little more flexible in this regard, allowing new fonts to be added at will. The *Papyrus* "Read Me" file does warn of problems should you try to use too many fonts under *SpeedoGDOS 5*, but a bug-fixed version of the latter has since been released.



AtariWorks performs faultlessly under NVDI 3 and the black page bug should be remedied in the next release of SpeedoGDOS 5.

It's output that separates the men from the boys and in this department *NVDI 3* slips into the lead. Background printing works perfectly in both cases, but you get the results a little quicker courtesy of *NVDI 3*. To give you some idea, the two-page "read me" document printed at 600dpi takes four minutes on a Falcon under *NVDI 3*, with *SpeedoGDOS*'s output dashing through the door just over thirty seconds later. For some reason, the "light" text style doesn't seem to work in either case, but the fact that the documents print at all is testament to the compatibility of the new 600dpi printer drivers.

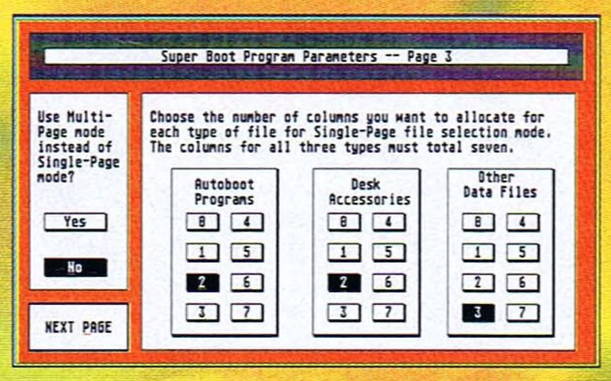
SPANNER IN THE WORKS!

AtariWorks is also popular among the ST fraternity and makes very good use of both programs. Once again, there are no serious on-screen compatibility problems to report – all of the different font varieties pop up as expected – but when it comes to print time you might face some problems. Put simply, all output to certain printers via *SpeedoGDOS 5* is totally black – a huge waste of toner! This is a known *AtariWorks* bug, but Compo promises that the next version will include a work-around. *NVDI 3* must have the necessary code in place already, because it manages to print without any hassle whatsoever. Another thing you do have

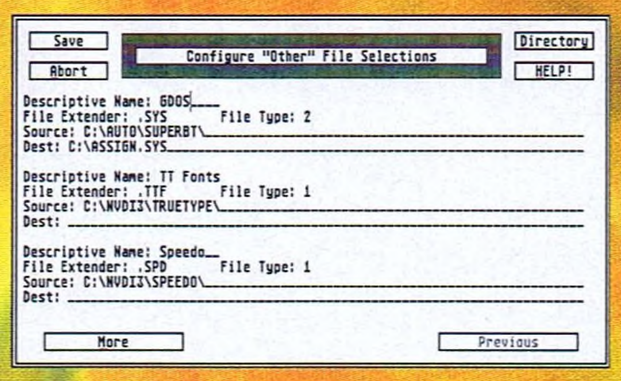
STEP BY STEP GUIDE

SUPER DOOPER!

***NVDI 3* and *Easy Text Pro Vector 2* – a marriage made in heaven! But only if you don't mind limiting the number of fonts. *Superboot* makes this chore one whole lot easier...**



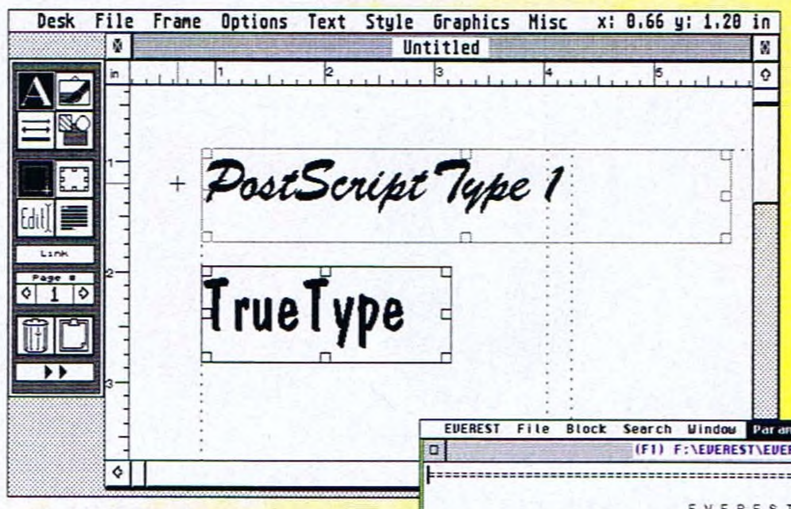
1 The first step is to make some space for fonts on Superboot's selection screen, so load up the Construction Set and enter the "Program configuration" section. On the third page, increase the "Other data files" setting to three columns. Save the state of play and return to the main menu.



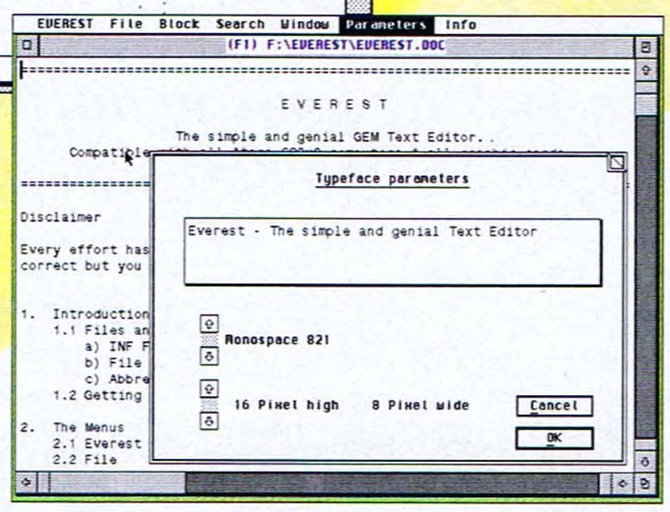
2 Next, choose the "Configure other file selections" button and add entries for "TT Fonts" (.TTF files) and "Speedo" (.SPD files). Both are type 1 entries, because more than one file can be selected at once. The paths may differ slightly on your system, but the above grab should give you a basic idea.



3 Reboot the ST and you will be able to deselect fonts by simply prodding the space bar. Your standard range of set-ups can be tagged to function keys, so removing large amounts of manual labour.



SpeedoGDOS 5 allows Speedo, TrueType and PostScript Type 1 fonts to be mixed freely within the same Easy Text Pro Vector 2 document.



Everest can make use of any mono-spaced scalable font for display purposes.

to watch out for when using *SpeedoGDOS 5* is font names. For some reason it doesn't get on with filenames containing too many underline characters and can simply ignore these fonts. The solution is just to choose a more straight-forward name.

PROS AND CONS

Font systems as powerful as these are begging to be used in a desktop publisher and *Easy Text Pro Vector 2* fits the bill nicely. Version 2 is more of a compatibility fix than anything and you can now use all of those juicy TrueType fonts without any complications, or at least that's the theory. Unfortunately, there's still a limitation on the number of typefaces that can be installed and this can be a bit of problem when using *NVDI 3*, which lacks an easy way of disabling fonts. By using a boot manager, you can sort this problem out and the exact method is given in the walk-through on these pages.

Aside from this minor inconvenience, everything works swimmingly well. TrueType fonts do take a little longer to render than the Bitstream alternatives, but that's the case in all applications. 600dpi printers aren't supported, but it's not a major problem considering the level of the package. As long as you make sure the right set of fonts is loaded, all of your older documents can be used and the upgrade only costs a fiver, which shouldn't add to the burden of buying *NVDI 3* or *SpeedoGDOS 5* too much.

REMAINS OF THE DAY...

Of course, we've only covered the main Speedo-compatible packages here – there are dozens more that can use scalable fonts on-screen and others that can exploit printer output too. *Edith Professional* is an ideal example and looks a lot more classy using Monospace 821 than the dull old system font. As for printed output, give *Idealist* a whirl under *NVDI 3* – the output will blow you away! Even some older applications, such as *WordFlair 2* are willing to make an effort.

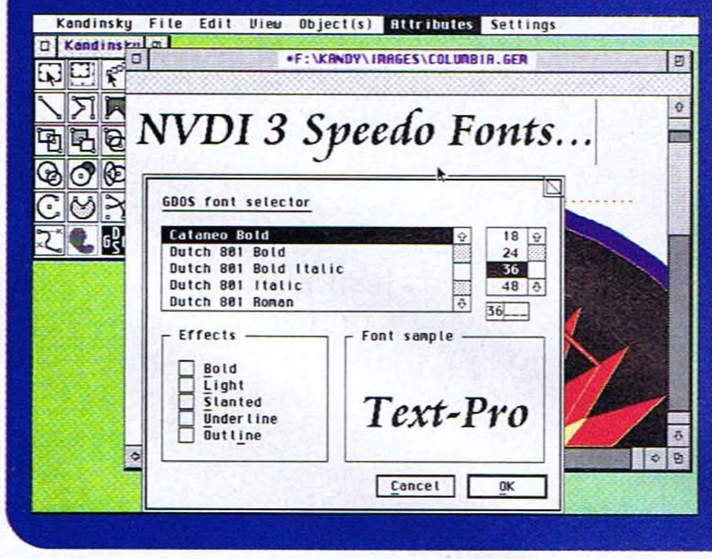
Of course, the big question is: "do I need to upgrade to *NVDI 3* or *SpeedoGDOS 5*?" Well, if you want access to the vast majority of fonts on the market, the answer has to be a resounding yes! Suddenly, *GDOS* applications inherit the flexibility usually associated with *Calamus* and the compatibility level with major applications is surprisingly good.

NVDI 3 does have the edge in terms of stability and compatibility, but both systems offer you a whole new world of fonts for less than the price of a couple of good games...

KANDI COME HOME

Plenty of public domain and shareware programs also make good use of *GDOS*, and even these show a reasonable degree of compatibility with the new systems. *Kandinsky* is happy to display and print any variety of font you happen to have installed and *Everest* can also use non-proportional fonts for display. Mind you, there have been some reports of problems with the *SpeedoGDOS 5/Kandinsky* combination, so be sure to confirm compatibility before ordering.

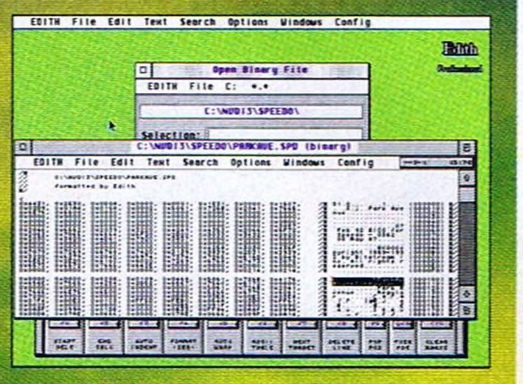
There are also a whole host of other smaller utilities that you can brighten up with scalable fonts too – *LHarc* and *Rufus*, for example. As you'd expect, there are some programs that simply don't want to know but as a loose rule, most things that work under the original *SpeedoGDOS* probably won't object to either of the two newcomers.



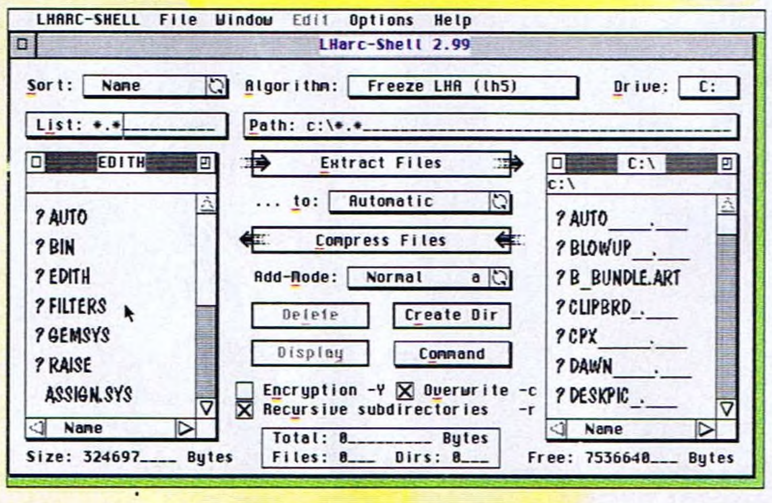
Shareware packages such as Kandinsky revel in the new-found typefaces provided by NVDI or SpeedoGDOS.

NVDI 3 and Papyrus make a stunning couple – oodles of fonts and plenty of speed as well!

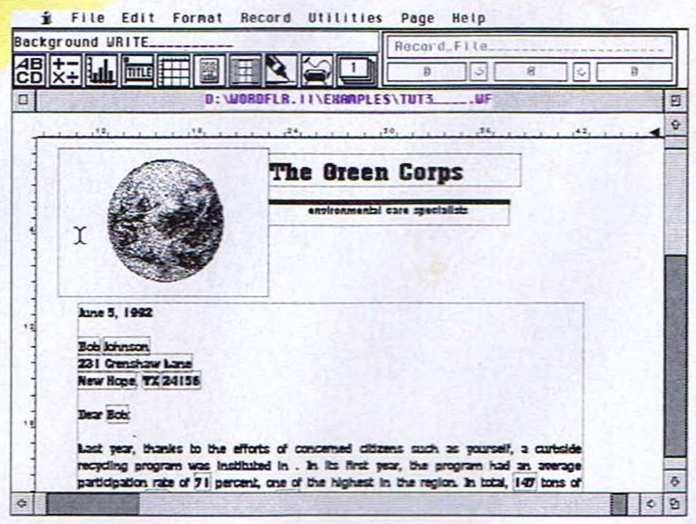
SpeedoGDOS 5 and Papyrus also get along just fine...



4 ***The final step is to give the Speedo fonts some proper filenames (let's face it – BX000003 doesn't tell you a lot). The full title is found in the first few bytes of the file and can be uncovered with any binary editor. The desktop must now be used to change the filenames – for example, BX000003 becomes SWISS.***



Most clean GDOS applications will work with both Speedo 5 and NVDI 3, Wordflair 2 included.



Many public domain utilities, including LHarc, benefit from the addition of a proper font system.

FONTS 'R' US

Andrew Wright takes a look at some mouth-watering font bundles from Compo Software...

The demand for good quality fonts for Atari programs has gone through the roof in the last year or so but the good news is that the cost of commercial typefaces has dropped considerably. With some careful shopping around, you can pick up more fonts than you'll ever need and all for less than you'd think! Compo Software has been first off the mark with a number of exciting new font packs for *That's Write 3*, *SpeedoGDOS 5* and the forthcoming *NVDI 3*.

SPEEDOGDOS GOLD PACK

First out of the bag comes a handy collection of 100 Bitstream Speedo-format fonts in 45 different typeface families. The collection is supplied as 12 disks, shrink-wrapped in plastic, with a thin piece of card listing all the included fonts. There is also a text file on the first disk with a list of which font is on which disk and another easing you into installations for both *SpeedoGDOS* and *That's Write 3*. If you're using other non-Compo programs, you'll have to work things out for yourself.

The fonts take up 11 of the double-density disks with the twelfth containing a nice bonus: *Studio Convert*, the highly under-rated image conversion utility that usually retails at £9.99. The fonts are present as files with the usual .SPD and .TDF extenders, but there are also ready-made .PF files for *That's Write* users which makes installation a lot easier.

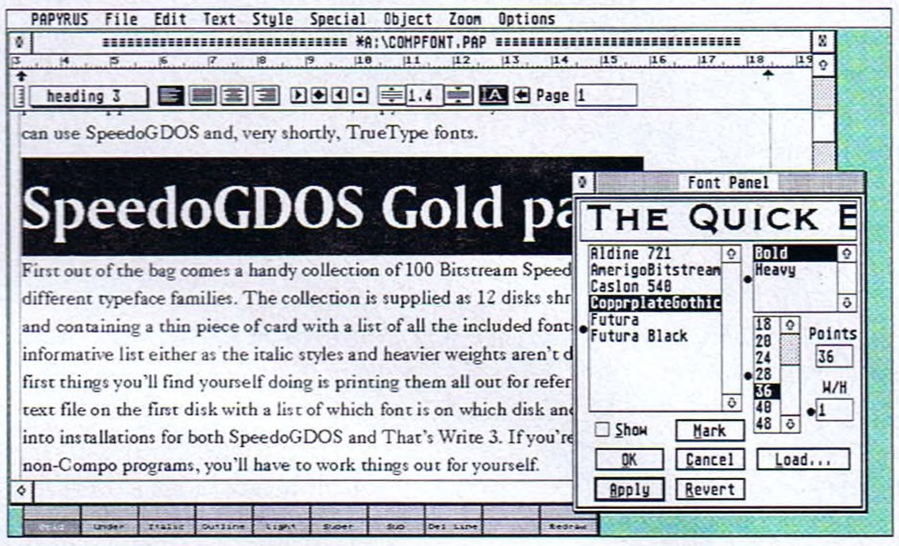
The Gold pack consists mainly of display and script-style fonts, making it less useful for certain tasks like newsletters as there are very few good headline fonts but it is a great choice if you want to design more exotic pages. However, the inclusion of some good serif body text fonts makes it useful for those wanting to produce reports, letters and other business-oriented documents.

When designing documents it is important to have a wide variety of typefaces from a single family so that headings, captions and body text don't clash. The Gold collection includes good selections of Cooper (from Light to Black Italic Headline), Goudy Old Style and Bitstream's version of Optima. The one oddity is the inclusion of two very similar versions of Bodoni.

SPEEDOGDOS OFFICE PACK

The Office pack consists of a completely different set of fonts, again a hundred in number, but this time split over just nine disks and a tenth with *Studio Convert*. The accent here is on formal and newsletter-style documents with fewer flippant display and script-style fonts.

Highlights include no less than 17 different typefaces in the Futura family and some stylish serif body text fonts. The latter include three variants on the classic face Caslon and Bitstream equivalents of two other well-respected types: Plantin and Bembo. There is also a good 11-strong set of Humanist 521 (better known as Gill Sans) and some trendier, but no less useful, fonts like Bernhard Modern and Copperplate Gothic. The big problem with



Fonts from the Office pack being used with Papyrus.

Bitstream fonts is that the files are numbered and not named but, as with the Gold pack, there is a text file on the first disk that matches the file number with the name of the font. Full marks to Compo for adding this.



For starters – 40 TrueType fonts.

BITSTREAM TRUETYPE FONT PACK

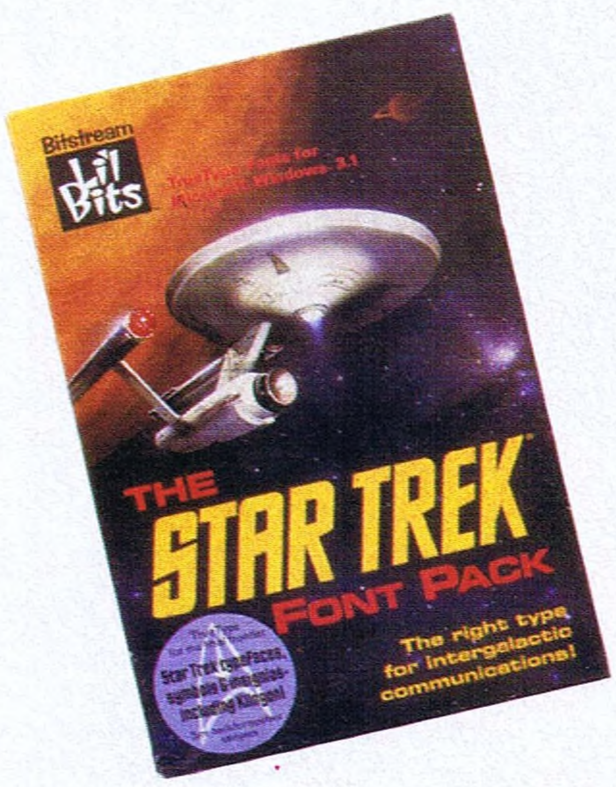
Thanks to the huge market created by Microsoft *Windows*, TrueType fonts tend to be much cheaper than the Speedo variety so if you're on a tight budget and plan on using *SpeedoGDOS 5* or *NVDI 3*, take a look at the Bitstream TrueType pack.

This contains a balanced collection of 40 good quality TrueType outlines supplied on three double-density disks. Although both .TTF and .TDF files are included, there are no Atari-specific instructions so it's to be hoped you know how to install them. Unfortunately there's no text file on disk either. The two serif fonts supplied, Revival and Imperial, aren't widely used for body text but will do the job, and there is a handy slab serif face (Square Slabserif 711) and no less than four good quality sans serif faces to make up for it. Best of the sans serif faces is Geometric 706, a great looking typeface in four useful weights, along with Humanist 777 (Frutiger) but display faces like Incised 901 Nord, Poster Bodoni and Bitstream Oz Handicraft are well worth acquiring.

STAR TREK FONT PACK

The Star Trek font pack sounds like a bit of a joke, unless you happen to be a Trekkie, of course. The series might be awash with ham acting and daft plots but the typefaces aren't actually that bad!

Six typefaces are included, ranging from authentic screen title fonts like Star Trek and Star Trek Film to



Star Trekkin' across the milky page...



Serious selection – Gold and Office each offer 100 Speedo fonts.

Starfleet Bold Extended (used on the outside of the spaceships) and a symbol font with a dozen or so badge symbols and Klingon characters. Also thrown in are Venetian 301 (Centaur), a lovely serif typeface but with only the roman supplied, and Square 721 Condensed, a mediocre, rather inflexible sans serif. As far as informal documents like menus and invitations go, the Star Trek pack is good value for money, especially if the modern look is important and you want to boldy go (*split infinitives 'n' all... Ed*) where no designer has gone before...

Twelve of the best. In the left hand column, from the top, are University Roman, Bauer Bodoni, Bernhard Modern, Zapf Humanist 601 (Optima), Caslon and Geometric Slabserif 712 (Rockwell). On the right are Geometric 706, Futura Medium, Copperplate Gothic, Humanist (Gill Sans) Extra Bold, Cooper Black Italic and Incised 901 Nord (Antique Olive).

ST Review
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There's Klingons on the starboard bow
USS ENTERPRISE

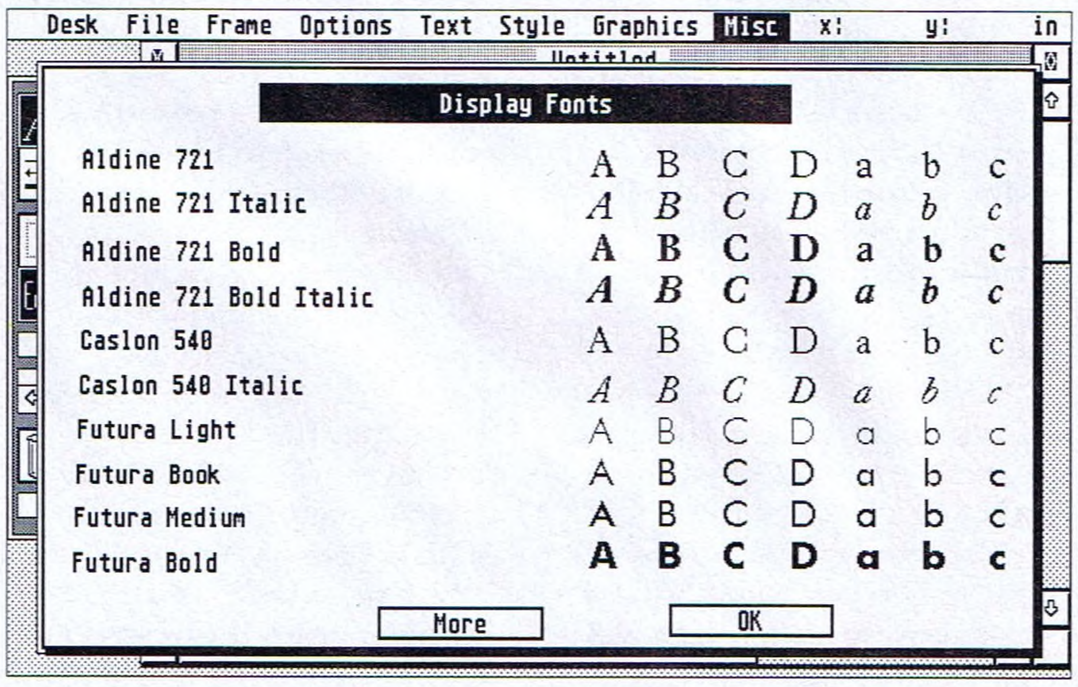
Not just for Trekkies...

BITSTREAM 500 FONT CD

If ever there was a good reason for buying a CD-ROM drive, this has to be it. No less than five hundred delicious fonts are present on the Bitstream CD in both TrueType and PostScript Type 1 formats. This works out at around 160 typeface families with a good spread of serif and sans serif fonts for serious work and some good display and script fonts. If that wasn't enough, you also get the cheering thought that, at 10p each, the fonts are a fifth of the price of those in the Speedo packs and a third of the price of the ones in the TrueType pack. The CD is enclosed in a standard jewel case and is in ISO9660 format so it can be read by virtually any CD-ROM drive and driver in use on the Atari platform, including *ExtenDOS* and the *ICD XFS* driver.

The fonts in the collection include almost all of those supplied in the TrueType and Speedo packs, with a single obvious exception in that the Futura family is missing. In terms of body text fonts there is Goudy Old Style, Lapidary 333 (Perpetua), Cheltenham, Bodoni, and various flavours of Garamond, while there are complete families of typefaces like Incised 901, Humanist 521 (Gill Sans), Swiss and Zurich. To make choosing easier, there is also a printed chart with samples of each font.

What else can I say about a collection this big? Most desktop publishers would give their eye teeth for a crack at this lot and I have to say they wouldn't be disappointed. It's a CD worth killing for...



Easy Text Professional Vector v2.0 supports TrueType, PostScript and Speedo format fonts through SpeedoGDOS 5 and NVDI 3.



All in one – 500 font CD-ROM...

All the products on this page are available from Compo Software on 01487 773582.



Typeface Family: **a collection of related typefaces with the same basic characteristics. The Gill Sans family, for instance, comprises 15 individual typefaces ranging from Gill Sans Light to Gill Sans Bold Extra Condensed.**

Font: **strictly speaking, the term font refers to a typeface at a particular size, such as 16-point Gill Sans Bold, but in modern usage it can be interchangeable with the word typeface.**



THE WHOLE STORY

Need to know how many of each kind of font are available at a glance? Then check out our guide...

Pack	Fonts	Serif	Sans Serif	Display	Script	Slab Serif	Symbol	Informal	Formal	Newsletter	Price
Gold	100	7	2	18	16	2	0	✪✪✪✪	✪✪✪✪	✪✪	£49.00
Office	100	9	5	8	3	1	0	✪	✪✪✪✪	✪✪✪✪✪	£49.00
TrueType	40	2	4	9	6	1	0	✪✪	✪✪	✪✪✪	£12.99
Star Trek	6	1	1	3	0	0	1	✪✪✪	✪	✪	£12.99
CD	500	36	15	60	42	5	6	✪✪✪✪✪	✪✪✪✪✪	✪✪✪✪✪	£49.99

The Fonts column shows the total number of fonts in the pack. The columns headed Serif, Sans Serif, Display, Script, Slab Serif and Symbol show the number of typeface families falling into each category. For a fuller description, see this month's *True to Type* on page 83. Symbol fonts include clip art or symbolic characters rather than alphanumeric ones.

The next three columns are marks out of five denoting the suitability of the pack for use in three different types of document. Informal documents are design-intensive ones like cards, menus and ads while formal ones are mainly for business or education – reports, theses and letters. Newsletters get a category of their own because they need a good cross-section of serif and sans serif fonts

All you need is a little market pressure...

TOP MARK



The German Atari scene is getting busy. Last month the Atari dealers, clubs and the German magazine *ST-Computer* asked their customers, members and readers to send a pre-printed postcard to WDR3, a German TV station that can be seen via the German cable TV network or the Astra satellite. This has a show, *WDR Computerclub*, and the postcard asked for the presenters to concentrate more on Atari computers. After a couple of thousand cards arrived, they offered to dedicate 20 minutes of the show to the Atari Falcon and DSP-based software. So *ST-Computer*, Compo, Steinberg and a representative from the German Atari dealers were invited to talk about the Falcon and its typical user. During the program, the Compo voice mail system was demonstrated as was *Apex Media*, the Falcon-specific graphics program, which carried out some impressive, fast morphing. Steinberg demonstrated *Cubase Audio* and explained that the Falcon still has advantages over PC-based hard disk recording systems. For instance, most PC sound cards only handle 44.1kHz recording rather than the 48kHz needed for DAT. Also, even the fastest PCs have problems with data transfer to the hard disk while recording. Atari-compatible machines such as the new Eagle and the Medusa were also mentioned.

I recently had a chance to see a working Eagle with a demonstration from the developer – and most impressive it was too. The Eagle 68040 board is almost finished and first shipments are expected in early December.

Two more new Atari products will soon be on the market here in Germany: Media-Link and noRemote. Both are infra-red remote control interfaces. Though developed by two different companies, they use the same software which can be handled easily by any programmer. What is the difference? Media-Link has standard features and can send commands to any TV, VCR, satellite receiver, stereo, CD, light switch and the like. The interface is connected via the ST's serial port. The noLink Interface has similar facilities but can also receive, decode and synthesise any infra-red command.

This means that it can be used to control Atari functions and software via your existing TV remote control! Just think of your CD-ROM/Audio player being remote controlled, or starting programs from the desktop via remote. The noLink uses the MIDI ports and standard MIDI commands – infra-red commands can be embedded into existing MIDI systems. OverScan's *Overlay* will be one of the first applications to support these new interfaces, allowing you to control a VCR or CD player from a Multi-media presentation.

NVDI 3 is now shipping in Germany and there are even a couple of new products for the ST-Book! Trifolium is offering 3Mb and 4Mb RAM upgrades, Eickmann Computer has high-power rechargeable batteries while Team Computer is selling external Disk-Drives.

Finally, Catch Computer has announced PowerUp TT, a board that increases the TT's clock rate to 48MHz.

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



WRIGHT ISSUES

If it ain't sinking, don't leave it...

Do you know something? I'm tired of hearing stories about Atari users deserting to the PC and jibes about rats leaving sinking ships. To be quite frank, I can't understand what the fuss is about. Of course the modern PC is faster, more powerful and has a wider range of better business software. There's absolutely no point in getting defensive about it. On the other hand, Ataris are simpler to use, easier to live with and much more fun. So what's the problem?

We don't hear stories about Ford drivers deserting to Mercedes or Vauxhall drivers deciding to switch to BMW, do we? People choose the car they can afford and the one that does the job they want it to do. Metaphorically speaking, your average PC is equivalent to a two-litre four-door family saloon while your average Atari is, I suppose, a three-door super-mini. The PC is the business machine, a motorway cruiser that projects the right image for reps and executives. The Atari is the runaround: cheap and economical but quite happy to mix it with the company cars on the motorway if necessary. If you've seen my wife whizzing around in her little 106, and lived to tell the tale, you'll know what I mean (*how to start a domestic war – lesson one... Ed*).

Quite a few families have two cars – and more often than not they have a big saloon and a runaround. Why shouldn't a computer-loving family do the same? Apart from anything else, the two machines more or less share the same disk format and can share the same printers and even other peripherals like CD-ROM drives. The PC can run those hefty spreadsheets while the Atari runs the fun stuff, the paint programs, the games and the cheap music software. There will still be an Atari market in five year's time because of one rarely considered fact – Ataris are unbelievably reliable machines that need very little maintenance and cost next to nothing to repair. As a result there will be a new crop of ST owners around this Christmas who've bought, or been given, second or even third-hand machines. They are a new generation of home computer owner and will get all the help they need from the pages of this magazine.

Some of you will undoubtedly move on to other platforms as their needs change but we have to stop looking furtively over our shoulders. Those turbo-charged PCs with "go faster" stripes will always look nice in the showrooms but, in day-to-day use, they can't do anything more than the little three-door hatchback...

Andrew Wright has been writing for the magazine since day one. It's rumoured that he's been car-hunting this month – I wonder what he'll end up with?

SILICA ARE NOW IN 18 BRANCHES OF DEBENHAMS
SEE BOTTOM PANEL FOR DETAILS

ST OWNER OFFERS

Great offers on a selected range of software, peripherals and accessories. Plus, if you are thinking of upgrading to a Falcon, these are the lowest prices ever seen from Silica!

14" HIGH RES MONO MONITOR FOR THE ATARI ST & FALCON

TATUNG



- *14" HI-RESOLUTION MONO MONITOR*
- *WORKS IN ST HI-RES MODE (640X400) WITH ATARI ST AND FALCON RANGES*
- *STEREO SOUND AVAILABLE THROUGH OPTIONAL SCREENBEAT SPEAKERS (REF: SPK 7260 - SILICA PRICE: £14.99)*
- *VLMF LOW RADIATION • SMALL FOOTPRINT*
- *SUPPLIED WITH TILT & SWIVEL BASE*
- *EASY ACCESS TO CONTROLS*
- *INCLUDES CABLE FOR ATARI ST-E - THE FALCON REQUIRES AN EXTRA ADAPTOR REF: CAB 5772 - £9*

SAVE OVER £20!
Previously ~~£149.95~~
£129 INC VAT - MON 3144

12" GREYSCALE MONITOR FOR THE ATARI ST & FALCON



ViewTek

- *12" GREYSCALE MONITOR*
- *UNLIMITED SHADES OF GREY*
- *RESOLUTIONS*

ST-FM & ST-E	FALCON
LOW (320 x 200)	LOW (320 x 200)
MEDIUM (640 x 200)	MEDIUM (640 x 200)
HIGH (640 x 400) WITH FREE SOFTWARE INCLUDED	TRUE COLOUR (440 x 400)

- *STEREO SPEAKERS BUILT-IN*
- *VOLUME, BRIGHTNESS, CONTRAST CONTROLS*
- *TILT & SWIVEL BASE AVAILABLE*

SAVE £20! Previously ~~£69~~

Requires cable - £9.95 each
Atari ST/FM - ref: CAB 5912
Atari ST-E/Falcon ref: CAB 5920
The Falcon requires an extra adaptor ref: CAB 5772 - £9

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FALCON FROM ONLY £399!

£100 OFF! PREVIOUS SILICA PRICE

14Mb POWER USER MODEL AVAILABLE



MONITOR OPTIONAL EXTRA

System Architecture:
- **CPU:** Motorola 68030 operating at 16MHz
- **BUS:** 32-bit data; 32-bit address
- **FPU:** Optional Motorola 68881/2 - 16MHz
- **RAM:** 1, 4, 14Mb configurations
- **ROM:** 512K

Digital Signal Processor:
- Motorola 56001 DSP running at 32MHz
- 16MIPS performance at 32MHz
- 32K 16-bit Static RAM

Interfaces, Ports & Expansion Slots:
- Internal direct processor slot
- SCSI-2 Port with Direct Memory Access
- High-speed LocalTalk/AppleTalk compatible LAN port
- Connector for VGA, composite video, RF (cable supplied), or broadcast analogue RGB (monitor output requires adaptor) - see below*
- Bi-directional parallel printer port
- Cartridge port (128K), MIDI - IN / MIDI - OUT
- Stereo mic. input/Stereo audio out - 35mm
- Two 9-pin joystick connectors
- Two 15-pin enhanced digital/analog connectors

Data Storage:
- 1.44Mb Floppy Disk Drive
- Internal IDE Hard Drive Option (127 or 209Mb HD versions available)
- MS-DOS format compatibility

Graphics:
- VGA: 640 x 480 256 colour
- True colour 16-bit mode: display up to 65,536 colours from a 262,144 palette
- Accepts ext. video sync signal for genlocking - up to 65,536 possible colours from a palette of 262,144
- Hardware-assisted horizontal fine scrolling
- BLiTTER graphics processor

Sound:
- Eight 16-bit digital audio DMA record and playback channels (up to 50KHz sampling)
- Stereo 16-bit DMA input & output
- SDMA sound/DMA co-processor

System Software:
- Multiple window user interface with icons and dropdown menus
- Icon-based graphics user interface with self-explanatory command functions
- Multi-tasking operating system with inter-process communication (MultiTOS)
- On-line help
- NewDesk desktop and extensible-control panel allows customisation

INCREDIBLE POWER
At the centre of the Falcon 030 lie two powerful hearts: the super fast 68030 processor which runs 4 million instructions per second and the Motorola DSP 5601 processor. Working together, they give processing speeds up to 10 times quicker than any other multimedia system at a comparable price. The Falcon 030 also boasts an impressive array of interfaces for linking peripherals.

THE IMPACT OF COLOUR
The Falcon 030 produces images indistinguishable from a real picture displayed on your TV. Every pixel on screen can be shown in a different colour and 65,536 colours can be displayed at once, from a palette of 262,144, producing a true colour display of the highest quality.

SUPERB VIDEO
The Falcon can be used to create special effects, overlay pictures, lighten any that are too dark, even get rid of the unfocussed bits. Video editing and special effect, techniques are both easy and affordable.

CD QUALITY AUDIO
The Falcon 030 comes complete with a stereo input into which can be plugged a microphone, a Walkman, or a hi-fi system. To reproduce the sound, a convertor mixes the eight 16-bit channels, then outputs crystal clear stereo sound at a sampling frequency of up to 50khz, better than CD quality. The Digital Signal Processor with direct-to-disk capability, means that the Falcon can store sound samples, including the human voice, on hard disk and play them back in real time.

2 PROCESSORS
Motorola 68030, 16MHz, 32-bit Processor + Unique 32MHz DSP (Digital Signal Processor)

CD QUALITY STEREO SOUND
8 x 16-bit Digital Audio DMA Channels
Stereo 16-bit DMA Audio Input/Output

BRILLIANT GRAPHICS LIKE REAL PICTURES ON TV
VGA Graphics & 16-bit Colour, 640 x 480 in 256 Colours

FULL RANGE OF INTERFACES
SCSI-2, LAN & MIDI Interfaces

1Mb RAM 0Mb HD	4Mb RAM 0Mb HD	4Mb RAM 127Mb HD	4Mb RAM 209Mb HD	14Mb RAM 209Mb HD
PREVIOUS PRICE ~~£499~~ INC VAT	PREVIOUS PRICE ~~£699~~ INC VAT	PREVIOUS PRICE ~~£899~~ INC VAT	PREVIOUS PRICE ~~£999~~ INC VAT	PREVIOUS PRICE ~~£1499~~ INC VAT
£399	**£599**	**£799**	**£899**	**£1399**
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MONITOR CABLE ADAPTORS: • VGA CAB 5770 • ATARI CAB 5772 • COMPOSITE CAB 5774 • £9 INC VAT EACH

ST SOFTWARE + PERIPHERAL OFFERS!

		PREV PRICE	OFFER PRICE
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IN PUBLIC

Danger, Will Robinson!

I wonder whether we will be reading warnings like: "Caution – computers kill!" on the boxes of Falcons, Macs or PCs in years to come? With news of fresh computer-related maladies springing up every other second, things certainly seem to be heading in that direction. There are the obvious problems like repetitive strain injury (RSI) and the electro-magnetic radiation pumped out by monitors, but books like *Total Health At The Computer* point out dozens of maladies that are (or could be) related to computer use: eye strain, headaches, tension, sore wrists, neck ache, back ache – you name it! No doubt you have been afflicted by several of these conditions, but are our beloved machines really such a health hazard and if so, what can we do about it?

It seems to me that the whole computer health issue can be squeezed into three categories. The first is ye olde "scare story" and there are plenty of these around. Most are blown up out of all proportion and given the "plague" treatment by the tabloid press, while others are just down to misinformation – I'm sure we've all been asked whether computer viruses can infect humans at some time or another!

The second slightly more worrying area is the "mystery". The effects of VLF (very low frequency) and ELF (go figure!) radiation on the human body simply aren't known. It's a fact that some types of electro-magnetism are very dangerous, while others pose absolutely no health risk whatsoever (radio waves for example). Opinion seems to be divided on where VDUs slot into this scale.

And the final group contains the bona fide problems – RSI, eye strain and so on. The good news is that almost all of these problems can be avoided by changing your working practice. Simply putting your VDU in front of a window and glancing out every few minutes is said to relieve blurry vision and eye-strain. Many other problems can be reduced by making sure your computer desk is the right height or that light doesn't reflect from the screen. The fact is that everything is a danger until you learn to use it properly, and the information for using a computer in a safe fashion usually isn't included in the manual. Legislation dictates that computers in the workplace must meet certain specifications, but very few people seem to be aware of safety issues at all!

It's in every computer user's interests to find out how they can work safely with their machine. Most of the serious problems are best tackled before they occur and you'll be surprised at just how simple it can be to improve your working environment. Until manufacturers realise that it's in their interests to tell us how to use their machines safely, we are just going to have to find out for ourselves...

Nial Grimes is a freelance journalist and ardent biker. He keeps his ST locked in a lead-lined casket and sits a clear twenty feet from the monitor – just in case!

TECH TALK

Absolutely MagiC...



The most exciting news I have heard this month is that a number of programmers have teamed up in Germany to produce *MagiC* for the Apple Mac. Disappointed with Atari's failure to produce a hi-spec Falcon, the authors of *MagiC* and various others are now working on a solution. If Atari can't do it, they will!

Many of you out there have been reluctant to invest in a Falcon so far. There are also many Falcon owners craving for a more powerful system. The only options for a top system are a TT, PAK68/3 board with a graphics card or a Medusa. These solutions are rather expensive.

The TT is equipped with a 68030 processor clocked at 32MHz while the Medusa has the more powerful 68040 double-clocked at 64MHz. The faster processor makes the Medusa three times faster than a TT and about five times faster than a Falcon.

The Apple Mac range has developed at a lightning rate and even the bottom of the range LC475 has an 68040 processor running at 25MHz, making it faster than a TT. The Macs have evolved in this way partly due to demand but also because the Mac operating system, unlike TOS or *MagiC*, simply requires that power.

Surprisingly, the Mac will now become an upgrade path for those of you who wish to continue using your existing ST software. You will immediately benefit from a huge speed increase alongside *MagiC*'s pre-emptive multi-tasking. At the same time, you'll also be able to explore Mac programs and hardware.

An LC475 with 4Mb of RAM, an 80Mb hard disk and a 14" colour monitor will currently set you back just over £800 – and a 15" display will not add much to the final cost. A similarly equipped Falcon costs about the same. The LC475 can display up to 16-bit colour and is at least twice as fast as a Falcon and probably four or five times faster than an ST. The next model up is the Performa 630 which boasts a 68040 double-clocked at 64MHz. A full system with 8Mb of RAM costs £1350, still good value for money compared with a Medusa.

The Mac does lack the audio and DSP capability and there are bound to be various incompatibility problems, especially with older software. Applications like Falcon voice mail or digital audio recording systems will not work, but most well-behaved GEM programs should. Programs that use the cartridge port will not work either because the Mac has no cartridge port! These are factors that will have to be considered by anyone thinking about this upgrade path.

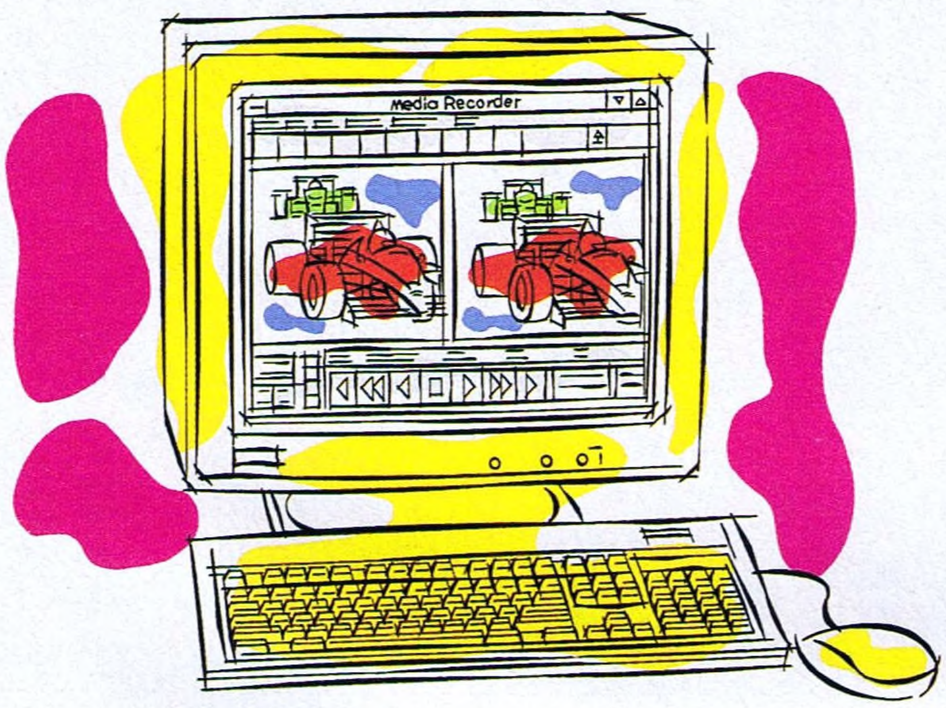
The only question left now is: how long before *Mac MagiC* appears...

Ofir Gal has been *ST Review*'s technical voice for over two years. He's been heartened to find out that one of the first programs working under *Mac MagiC* is his GEMBench test program...

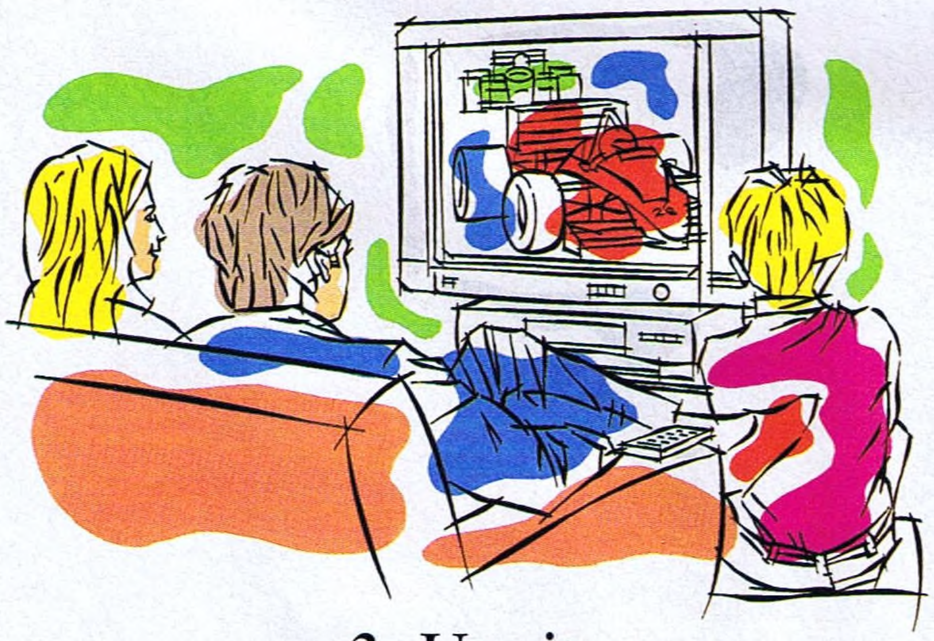
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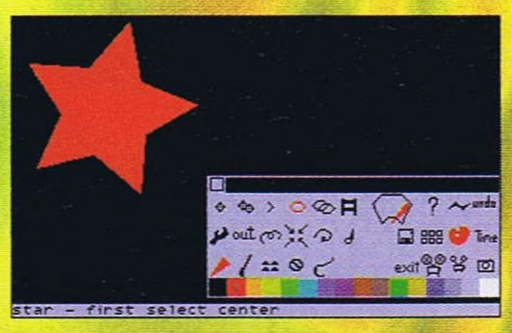
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Good computer animation isn't half as hard as you think. Andrew Wright points the way...

STEP BY STEP GUIDE

ANIMATION ST

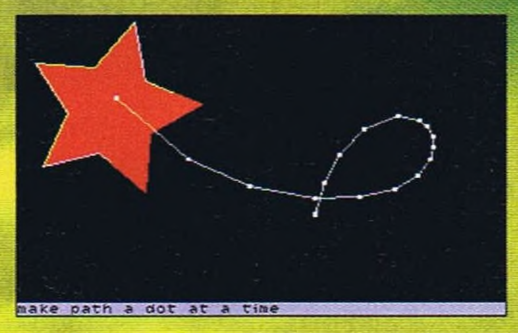
Follow our step-by-step guide to see how an animation is created with AniST...



1 *The first step is to place an object on the screen. AniST has literally dozens of animation options, from changing colour to changing size...*



2 *... so in this case we'll define a path for the star to move along. The path is created by simply clicking with the left mouse button.*



3 *When the animation is played, the star moves in a loop. Where the path points are close together, the object appears to slow down; if the points are far apart, the speed of movement increases.*

LET'S ANIMATE

Animation must be one of the most misunderstood computer art forms. The myth still persists that you need to bury yourself in your room for a week just to get a twenty frame animation, but this simply isn't true. Even some older programs like *AniST* can make light work of simple sequences, whatever your level of artistic skill.

But why bother? Because animation is fun! You can spend an hour or two retouching an image or painting a picture but adding motion makes a big difference. If you want to get a sales point home or simply create a rolling demonstration to advertise your services, an animated sequence will leave a lasting impression. Professional animators can command huge salaries especially in corporate presentations, TV and advertising – and everybody has to start somewhere!

A 16-colour animation looks much better than a 16-colour image. Most STs can only display 16 colours in low resolution, but as the colours in an animated sequence are changing fairly swiftly, the eye perceives shades in-between that aren't really there.

JARGON JOGGER

A "frame" is a bitmap image, a number of which make up an animated sequence. A "sprite" is like an actor in a play: it's a character that moves around the screen and is composed of a bitmap image that is considerably smaller than the background. Sprites are often mini-animations themselves, with their own set movements such as walking or jumping.

"Digitising" is converting live video into a digital computer format such as a series of bitmap frames. Special hardware is required such as HiSoft's VideoMaster.

WAYS AND MEANS

Animation means different things to different programs. The classic art package, *Degas Elite*, had an animation feature that consisted entirely of cycling colours. It worked well for creating flaming fires and cascading waterfalls but that was about it.

By most definitions, animation is a series of images displayed in rapid sequence to give the appearance of real movement. You have to create a slideshow of carefully drawn images and display them one after the other, or display a fixed background and move a smaller picture, known as a sprite, in front.



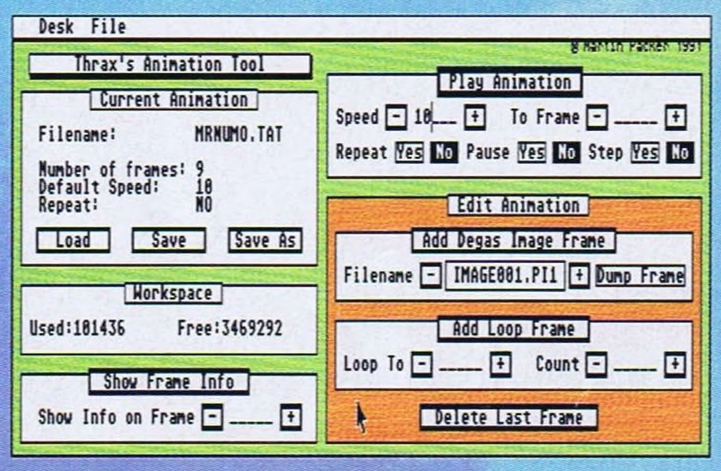
MovieMaster combines sound and an intuitive interface.

The slideshow method is used by programs like *TruePaint* in which the images are stored in memory and displayed quickly in sequence. *Animtool* is a useful shareware program that takes such a series of low resolution images and turns them into a single animation file for distribution among friends.

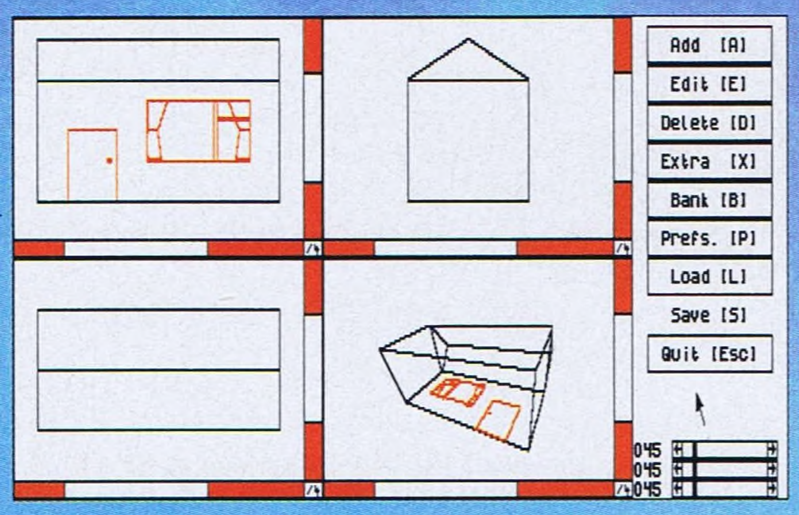
Another good way of generating slideshow sequences is to use a raytracing or morphing program. You could create a series of raytraced images, slightly moving or rotating an object each time. The sequence can then be played as an animation. Most morphing programs, such as *Metamorphosis 24*, reviewed last month, automatically create such sequences.

Using sprites is far more flexible as you can make changes more quickly and even add or remove sprites without having to alter each frame. *SpriteMaster* and *MovieMaster* are excellent examples, one being used to create the sprites and the other to arrange them on-screen in the "movie". *MovieMaster* even supports sound: you can achieve some stunning cartoony sequences without too much effort.

Anyone who has seen the film *Who Framed Roger Rabbit* will know just how much fun it can be to mix real live characters and cartoons. HiSoft's superb *VideoMaster* package lets you do just that. All you need is a video camera or player and the *VideoMaster*



Animtool is ideal for stringing individual frames together into a stand-alone movie.



Polyfilm lets you create quite complex objects and view them in 3-D.

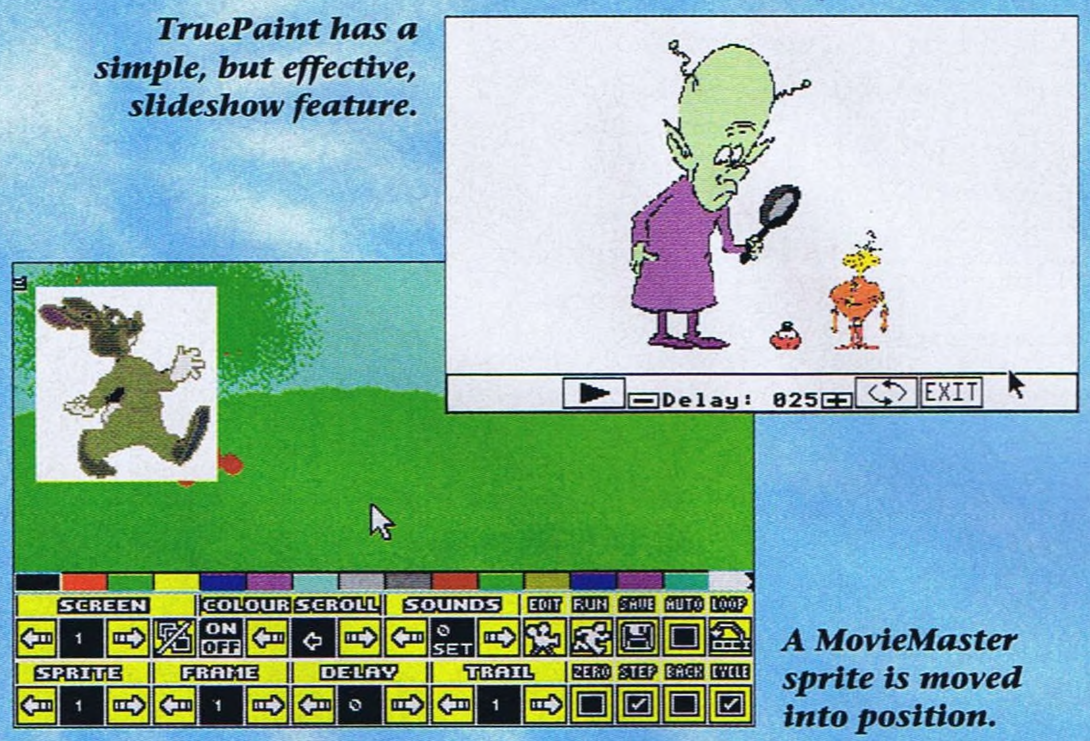
hardware. You can then grab whole sequences of film up to the limit of your machine's memory. Better still, you can edit each digitised frame by exporting them as a 16-colour, 160 by 100 pixel image and loading them into an art program to alter features or superimpose sprites. Another trick is to use a camcorder to film inanimate objects being moved about, grab the sequence in *VideoMaster* and then remove the frames where your hands are visible.

THE TWEENIES

Computers may have revolutionised animation but many of the basic techniques remain the same. The first cartoons that appeared in the '40s heralded an entertainment technique that has never palled, even with adults. Disney's latest blockbuster, *The Lion King*, may demonstrate how animation has improved over the years but Tom and Jerry cartoons are just as popular as they ever were!

Early cartoons were created by filming storyboard sequences composed of individually drawn cartoon pictures. However, even a five minute cartoon might have taken several thousand drawings and would have taken months – if not years – to be produced by one person. To get around this, a team technique of frame by frame animation was developed. The best animators drew the main frames to illustrate the story line and then an army of less skilled artists created the in-between frames, or "tweenies", using the start and end frames as a guide.

In the more sophisticated computer animation programs, the computer takes on the role of the "tweeners" by extrapolating the frames in between those you define. Programs like *AniST* and *DA's Vector* use a similar technique, with vector graphics making the process easier.



TruePaint has a simple, but effective, slideshow feature.

A MovieMaster sprite is moved into position.

TRICKS OF THE TRADE

Remember the squash and stretch principle – characters and objects should move and behave like forms that have volume and mass, rather than just being a series of connected lines. For example, a ball changes shape as it hits a wall.

Anticipation is the technique of using preparatory movements to underline actions. For example, a character about to jump will crouch slightly beforehand. Remember to use follow-through too. A running person coming quickly to a halt will bend forward slightly once the feet have stopped, and then recover.

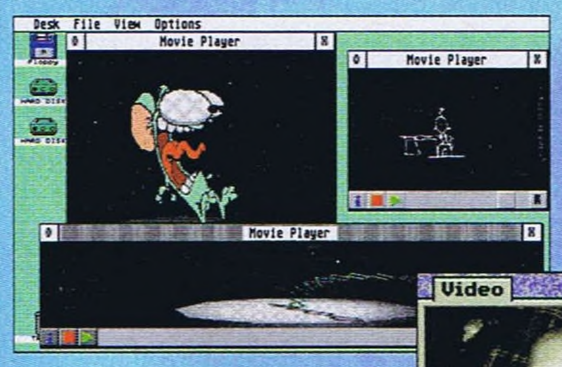
Rather than use straight paths for moving characters or body parts, try using arcs to give a more fluid, realistic motion. When a human walks, his head inevitably bobs up and down, and this is best represented by using an arc to draw the head in the between frames.

Put some thought into the use of the foreground and background elements and remember that characters or objects moving towards the viewer should grow larger and vice versa. This simple technique of increasing and decreasing size can be used very effectively in animations.

FALCON FLICKS

There is very little in the way of animation software specifically for the Falcon, with the single exception of *Apex Media*. On the other hand, most ST-developed animation software runs perfectly well in ST-compatible modes, though you're restricted to 16 colours. If you're thinking of putting together a sequence of images, perhaps output from a morphing or ray-tracing program, there's always the option to use 256-colour mode or even true colour.

There's a Falcon-specific version of *VideoMaster* that offers 64 grey scales rather than 16 and which includes a copy of *TruePaint*. There is also a 68030 version of the Brainstorm movie player, *Movie 100*, which displays FLI animations in 256 colours. These FLIs can be sourced from PD libraries or PC CD-ROMs.



Movie 100 can play several animations at once...



VideoMaster Falcon is a superb example of fun software.

CONTACTS

All shareware/freeware products were supplied by Goodman International (0782 335650). *VideoMaster* and *TruePaint* are available from HiSoft (0525 718181).

BUYER'S GUIDE

ON THE CHEAP...

The *ST Review* guide to public domain animation programs...

Name	Description	Computer	Power Rating	*ST Review* Fun Rating
Animtool	Turns sequences of images into stand-alone animations	Any Atari	3	3
Polyfilm	3D modeller with animated viewing	Any Atari	3	2
Kozmic 4	Psychedelic screen creator	ST/STe/1Mb	4	4
AniST	Simple but effective animator	ST/STe	4	5
MovieMaster	Create movies with sprites/sound	Any Atari	3	5
Movie 100	Basic FLI animation player	Any Atari	2	4

SOUNDING OFF!

Have you ever wanted to give your ST a personality? Nial Grimes steps in with some "sound" advice on brightening up your computing life...

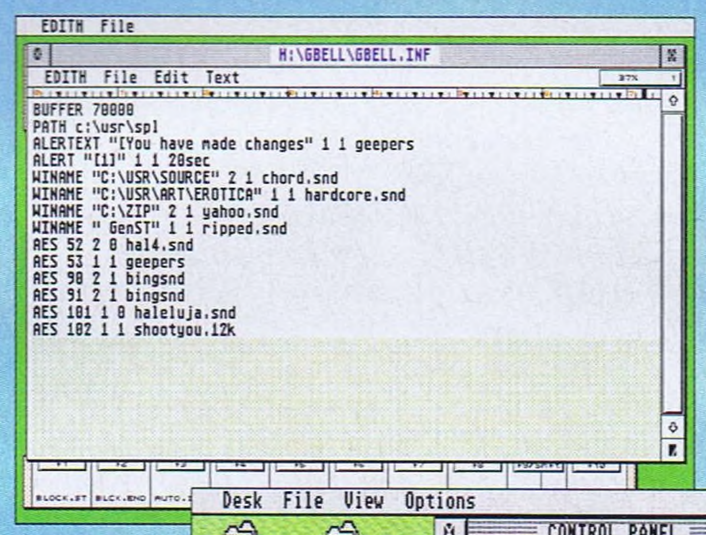
JARGON JOGGER

A "sample" is simply a snatch of real world sound in a format that can be played back by a computer. Samples are stored as digital information in memory and the quality is defined by the "frequency" (or number of "samples" per second). The higher the frequency, the clearer the sample – and the more memory it takes up. STes, TTs and Falcons can play sampled sound without placing any load on the central processor, whereas the poor old ST has to work a little bit harder.

The device needed to turn analogue sounds into digital information is, naturally enough, known as a "sampler". If you really can't make do with the many sounds available in the public domain, a brand new MasterSound cartridge will set you back about £20.

Computer manufacturers are brilliant at designing machines that get the job done, but when it comes to more basic needs, such as giving their creations a personality, they are at a complete loss. Let's face it, priorities are all wrong at the moment – what good is it if you can adjust the colour of the desktop, but can't use a Monty Python sample instead of the system bell!

But the public domain plugs this gap nicely, stepping in with dozens of entertaining, but essentially useless, programs to lift your ST out of the depths of anorakdom. Think of it this way – just as an XR2 is incomplete without a set of fluffy dice hanging from the rear-view mirror, your ST is not being used to its full potential unless it has at least two of the following programs installed...

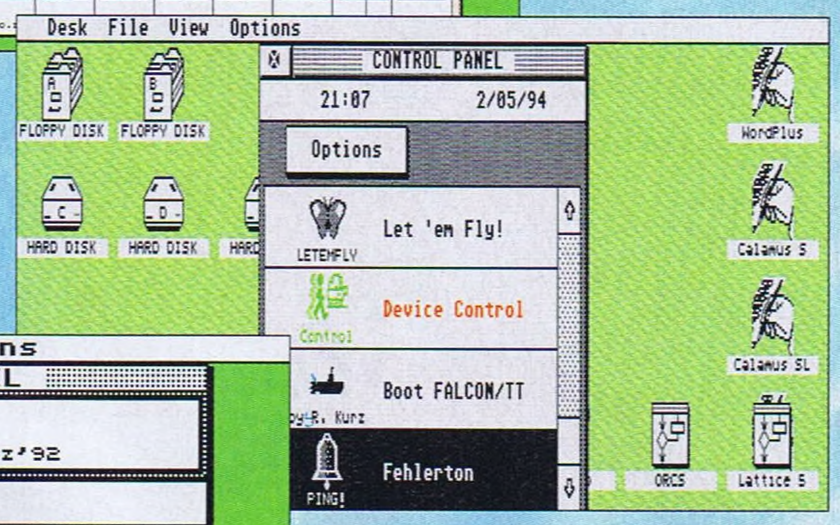


A GOOD TRACK RECORD

The ST has come a long way in terms of music replay over the last few years and the public domain is crawling with programs specifically designed to play music from the desktop. Most are fronted up by a CD-style control panel and use *Soundtracker* modules, the quality of which is quite remarkable. The tunes available on these disks range from contemporary classics such as *Axel-F* to original compositions – look out for *DEMONS.MOD* by the Red Sector.

Arguably the best tracker player is simply called *DeskTracker*. On this month's cover disk, it runs as an accessory, works on everything from the humble ST right up to the Falcon and packs a range of features that any top-of-the-range CD player would be proud of. Complete

Awkward to set up, GBell is one of the most entertaining utilities you will ever install on your machine.



The sound sample used by Ping! can be adjusted "on-the-fly" through a neat little CPX module.

Ping! only replaces the system bell, but hey – it's better than nothing, right!

BUYER'S GUIDE

ON THE CHEAP...

The *ST Review* guide to what, where and just how good...

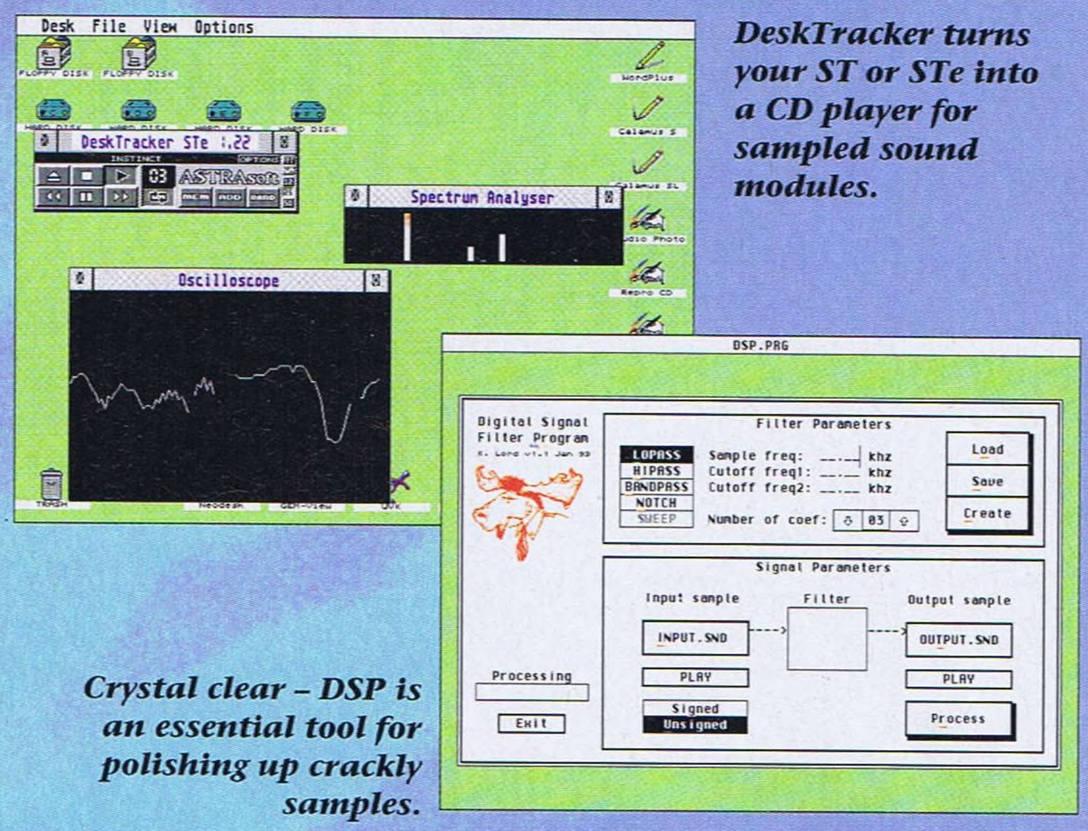
Name	Supplied By	Tel. No.	Computer	Power Rating	*ST Review* Fun Rating
DeskTracker	Floppyshop	0224 586208	Any Atari	5	4
Ping!	The ST Club	0602 455250	ST/STe	3	4
GBell	Floppyshop	0224 586208	STe/Falcon/TT	3	5
DSP	Floppyshop	0224 586208	Any Atari	4	2
SAM	Atari	0753 533444	Falcon	5	5
Fortune	Floppyshop	0224 586208	Falcon	3	4
D2D	Atari	0753 533444	Falcon	4	4

THE SOUND MASTER

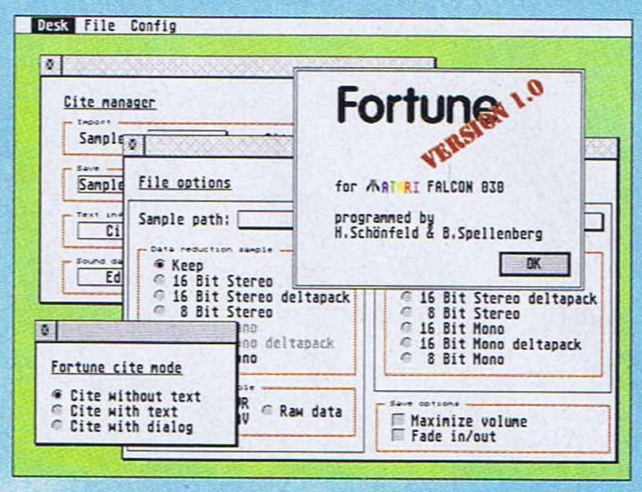
The Falcon was designed as a sound-oriented machine and as such features a huge selection of entertaining audio utilities. Atari themselves kick off the show right away by bundling the *System Audio Manager (SAM)* in the box. This wonderful utility allows samples to be added to a wide variety of system events in much the same way as GBell, and the supplied sounds are just superb.

If you can't be bothered with *SAM*, *Fortune* is a nice, simple alternative. It doesn't replace every single GEM event, but instead concentrates on playing a sound at start-up. It can be instructed to play a specified "cite" every time the machine is switched on or allowed to use its own discretion – much more fun! Once again, a good selection of examples – or should I say samples – are supplied to get you started.

If you own a Falcon, you don't even need to bother with a sound sampler because all of the necessary circuitry is built into the machine. Just plug a microphone into the back, load up *Falcon D2D* and start recording!



Crystal clear – DSP is an essential tool for polishing up crackly samples.



Your Falcon is not complete without a copy of Fortune – there's nothing like a good Blackadder quote to kick off a computing session!

sequences of modules can be programmed into its memory or you can just provide a file path and let *DeskTracker* play DJ! The *Ultimate Tracker* is another good example of a music player although it does need a machine with DMA hardware to run.

If you prefer to keep your ST's full attention on the task in hand, Auto folder tunes are worth consideration. These lack the quality of tracker modules, but steal very little precious processor time.

BRIGHTON BELL

One of the most entertaining aspects of the Apple Macintosh is its ability to attach sampled sounds to various system events. A hideous cackle whenever a nasty dialogue box appears on screen or a "I'll be back" quote whenever a quit button is pressed can do wonders for the "fun rating" of a machine. Of course, the ST is capable of carrying out this simple task with the right software, and the degree of customisation that can be added depends much on the machine you own. For the standard ST, there's a nice little CPX module that sits inside *X-Control* and replaces the ultra-dull system bell with a sound sample of your choice. With *Ping!* safely installed, the ST's sign of protest ceases to be an annoyance and actually becomes quite an enjoyable experience.

If you've got an STe or a TT, you can lift your machine to an even higher audio dimension. *GBell* is a little box of tricks that can add sounds to almost any system event, be it sizing a window, cancelling a dialogue box or calling the file selector. It can even watch out for certain window names and play a "hallelujah" sample whenever you open the *GAMES* folder for instance! The only real problem that *GBell* puts forward is a seriously bad attitude towards configuration. Instead of providing a nice little customisation accessory, the author expects you to get your fingers all dirty with a text editor. There's also the added problem that Atari didn't follow the rules when they wrote the Desktop. All of the samples work perfectly from the NewDesk under *MultiTOS* (by which time Atari had seen the error of their ways) but only applications are affected when it comes to standard TOS. At the end of the day, it's certainly worth persevering with *GBell* – from the very moment the first *Blackadder* or *Monty Python* quote booms forth from the speaker you will be hooked!

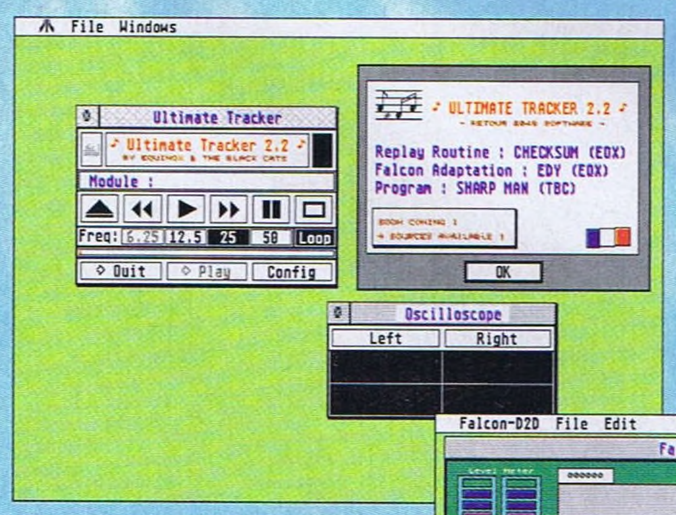
GET DIGITAL!

The down side of using any sampled sound is that it eats its way through mountains of processor time. The standard ST has no way to play samples under its own hardware steam and as a result the bulk of the work is left to the central processor – bad news when it comes to speed. The lower the frequency of the sound, the less time the processor has to play it, but the flip side of the coin is a reduction in quality.

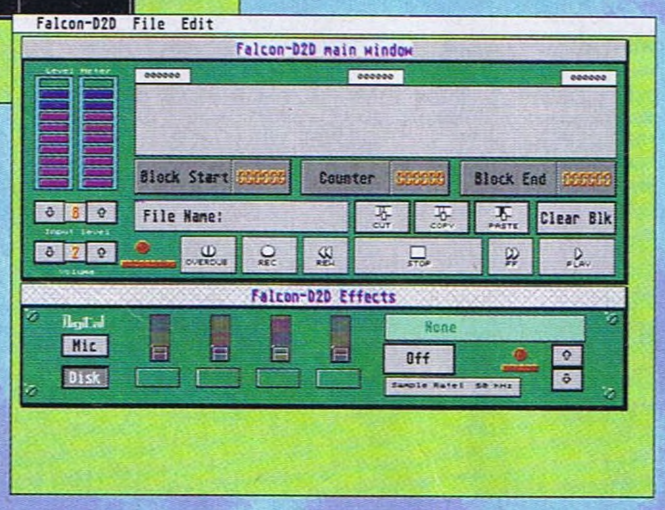
DSP is a halfway solution to this problem. It takes any scratchy sample and attempts to remove as much of the noise as possible through software. Unlike the Falcon's hardware DSP, it can't do this "on-the-fly", but it accomplishes much the same task in the long term.

Cleaning up samples is a two-stage process. Firstly you need to create a filter, which takes around a minute, then the sample is loaded and cleaned up. Once a good filter has been developed it can be saved to disk and used again instantly.

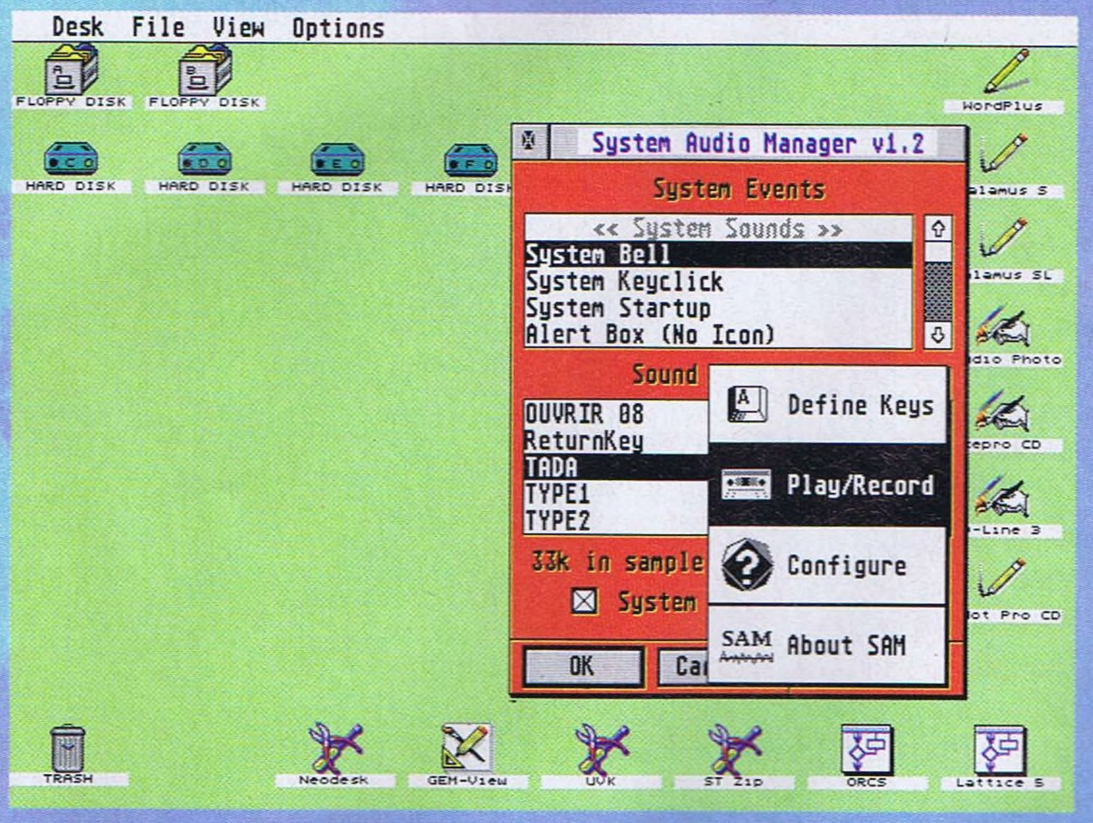
DSP can also improve the quality of samples on the STe – after all, the better the sample before it has been sent to a hardware filter, the more impressive it will sound at the end of the day. I know it all sounds horribly complex, but believe me, having persuaded your ST to use sound at every available opportunity, you owe it to yourself to make sure that the samples are as clear as possible.



The Ultimate Tracker is a good choice for STe owners seeking desktop entertainment...



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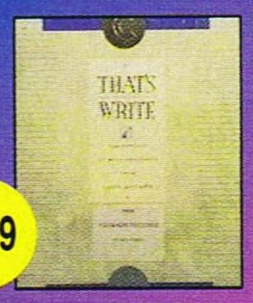
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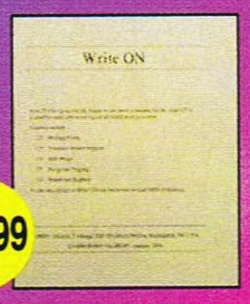
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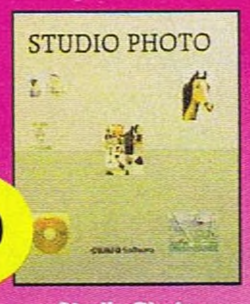
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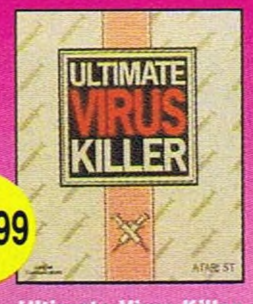
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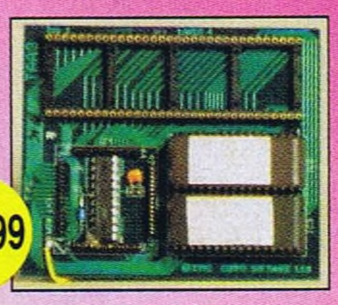
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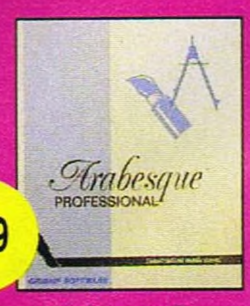
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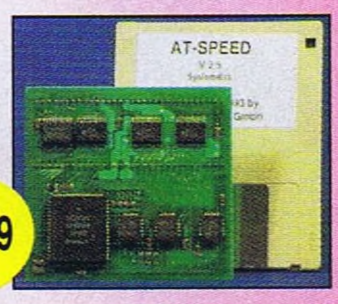
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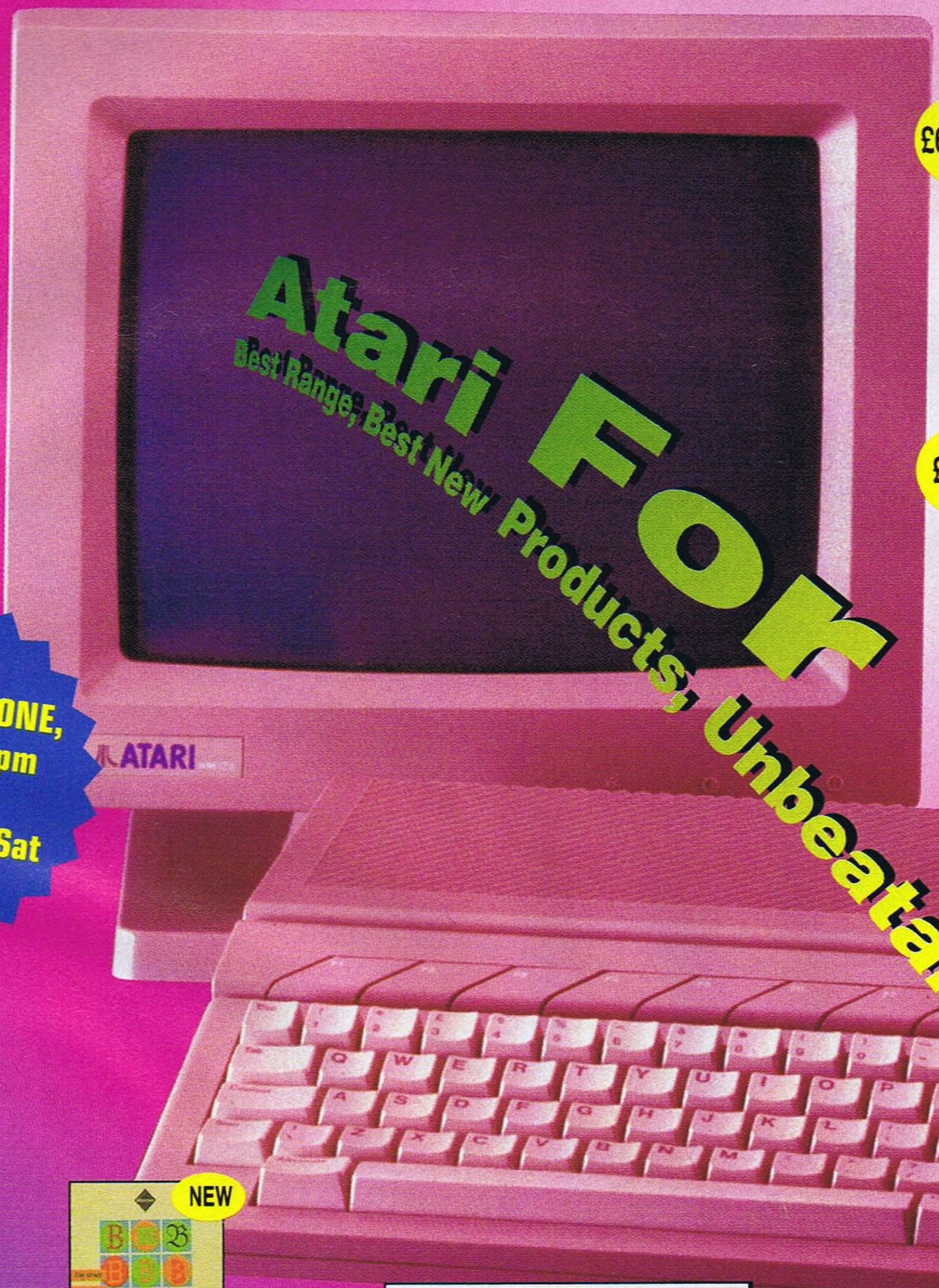
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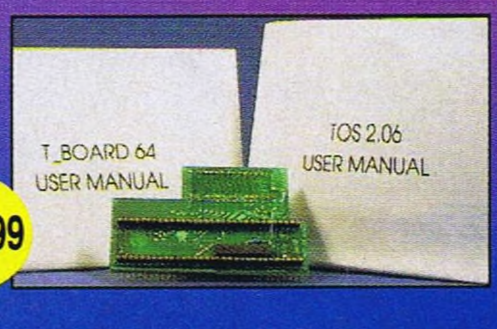
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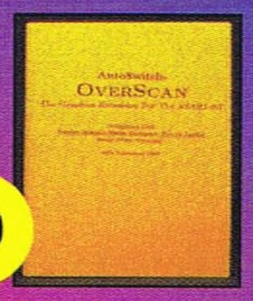
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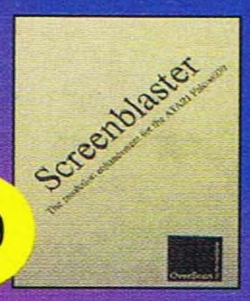
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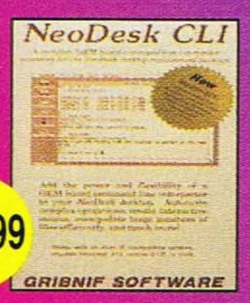
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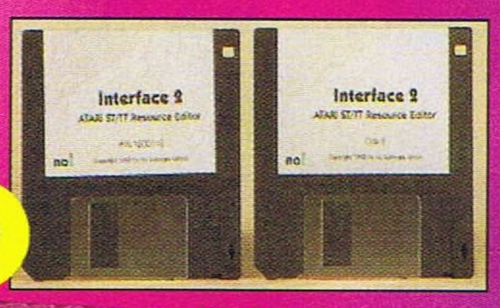
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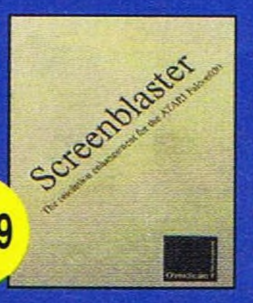




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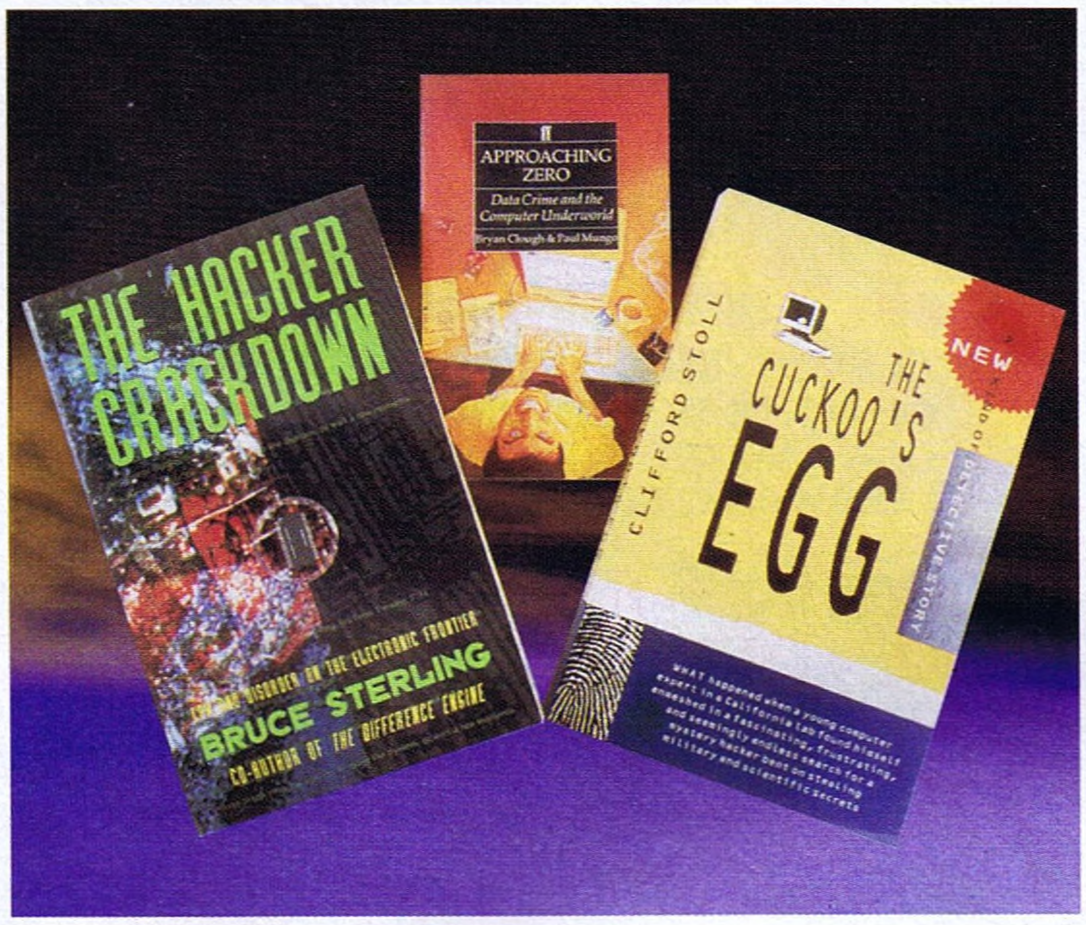
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THE HACKER CRACKDOWN

Bruce Sterling

The author will be familiar to some of you for his science fiction works, in particular co-author of the excellent *The Difference Engine* and editor of *Mirrorshades* anthology. This book is a factual study of the hacking community on the electronic communications networks in the US and the crackdown by the various law enforcement agencies in the late '80s.

The book is divided into four parts. *Crashing the System* takes a historical look at the events in the hacker underground that led to the eventual crackdown. The descriptions of the workings of the telephone system are particularly absorbing. *The Digital Underground* concentrates on the hackers: the personalities, the culture. Here we get to the truth – the weirdos, the sad, psychologically inadequate teenagers, the thieves, the pimps.

Law and Order does much the same on the law enforcement agencies. Again, individual personalities are given the third degree but Sterling is defensive and supportive on the whole. *The Civil Libertarians* traces the emergence of the Electronic Frontier Foundation and other groups worried about the strong arm tactics of the law, the infringement of rights to privacy and freedom of speech. The book ends on a positive and encouraging note.

Other books have tended to be one-sided, dealing with the colour and supposedly "glamorous" world of hackers, leaving a bad taste in the mouth concerning the law enforcement agencies. The content, despite being founded entirely in the US, cannot be faulted. Sterling's style, however, takes some getting used to, lacking order and restraint, although this is my only criticism of an otherwise excellent read. The text is also available on the *Internet* free.

★★★★

Paperback (Penguin): £6.99
Hardback (Viking): £16.99
ISBN: 0-670-84900-6

HACK ATTACK!

Mark Baines looks at three books that explore the world of the hackers and their crackers...

APPROACHING ZERO

Bryan Clough/Paul Mungo

There is a great deal of similarity between this book and the first half of Sterling's, both released at the same time. However, the parallel ends there.

Clough has a wide experience of computer viruses and security and is a consultant for New Scotland Yard. Mungo is the journalist. As you might expect, this description of hackers and their crimes is more international and includes the Prestel hacks and other UK hacker stories. They have obviously put a lot of research into this book, much of it first-hand, but there are also some glaring errors and misconceptions typical of those with limited experience. For instance, all the dates of the Prestel hack and subsequent court cases don't agree with my comms log notes from the events as they happened and from the parties concerned. The supposed threats of viruses, logic bombs and trojan horses is entirely exaggerated. It's not hard to work out why they take this stance. Computer techies will find errors throughout the book.

Their style isn't romantic – you have no doubt what Clough and Mungo think of hackers and their activities – but the book is one-sided. Out of the 230 pages, only 28 deal with law enforcement.

I don't see much point in reading both Sterling's book and this. However, bearing in mind the cheaper price *Approaching Zero* is worth a look.

★★★

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ISBN: 0-571-16813-2

THE CUCKOO'S EGG

ESSENTIAL BUY

Cliff Stoll

A surplus to requirements astronomer, reassigned to the computer department at Lawrence Berkeley Laboratory in California, starts his new job by examining the UNIX accounting system where the previous month's bill has a small discrepancy of 75 cents, a few seconds of computer time someone didn't pay for.

Cliff was a budding software wizard and finding the supposed bug was the ideal task to make Cliff familiar with the networking system and get some experience under his belt. "*First-degree robbery, huh?*" Cliff responded. "*Figure it out, Cliff, and you'll amaze everyone*," Dave said – and little did the department's UNIX guru know how prophetic his words were.

This is the story of how Clifford Stoll tracked down the cause of the missing 75 cents, the hacker behind it (bent on stealing military and scientific secrets) and the frustrations of dealing with authorities that didn't seem to care. It's a detective story of the best kind, fascinating and entirely gripping. Stoll has an uncomplicated, readable style putting the technical aspects over with ease so that even computer illiterate readers will not get lost in the detail. As a bonus, there is an excellent chocolate cookies recipe!

If you enjoy the frustrated private eye against all the odds genre and are interested in computers, then I'd go so far as to say that this book is a must. I thoroughly enjoyed it.

★★★★★

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- 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.

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.

"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.

Data Pulse + 260Mb	**£240**
Data Pulse + 353Mb	**£270**
Data Pulse + 532Mb	**£340**
Data Pulse + 1Gb	**£610**
D/P + 230Mb R/W Optical	**£890**

Phone for further details on CD ROM
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

ICD LINK 2	**£89.99**
SCSI Cable (Falcon)	**£29.99**
230Mb R/W Optical disk	**£39.99**
ICD PRO Utilities	**£39.99**

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	**£149.99**

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"

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	**£389.99**
FALCON 4Mb No HD	**£589.99**
FALCON 4Mb 64Mb HD	**£689.99**
FALCON 4Mb 127Mb HD	**£789.99**
FALCON 4Mb 209Mb HD	**£889.99**

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	**£4.99**
2MB SIMM'S	**£49.99**
4MB SIMM'S	**£99.99**

Midistudio Master

240 PPQ Midi Standard file format compatible. 100 tracks. Phrase arrangement. Very easy to use.

£9.99

Atari Jaguar Console

Jaguar with Cybermorph	**£219**
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.

Minimum repair charge	**£35.25**
Same day service	**£15.00**
STFM(E) PSU	**£34.99**
1Mb internal drive	**£39.99**
TOS 2.06 + Switch STFM	**£65.00**
Courier Pickup	**£11.00**
Courier Return	**£7.00**

PC Emulators

- Check configuration before ordering

PC Speed STFM or STE (XT)	**£49.99**
AT Speed STFM (8MHz)	**£139.99**

IT'S SHOW TIME!

London Glasgow

THE 1994 ATARI ST REVIEW SHOWS

Birmingham Leeds

If you're an Atari owner, the only shows worth visiting are the ST Review shows...

WHY?

Because people who visit our shows return time and again – they're the only opportunity for you to meet the top ST companies, see the latest new releases for Atari computers and buy at special show prices. Exhibitors at our shows go to the trouble of demonstrating their products – not just piling them high behind a counter. With four events in the UK before Christmas, these shows are truly nationwide. All venues are conveniently located near to main roads and rail/tube links which means that everyone can attend.

WHAT'S ON SHOW?

While you *can* buy games at our shows, these are not games shows. They are for the Atari user who does more than just zap aliens! Top companies like Atari Workshop/Systems Solutions, CGS, Compo Software, Titan Designs and 16/32 Systems will be at both of these shows, as well as *ST Review* of course. Now's the time for you to experience an *ST Review* show.

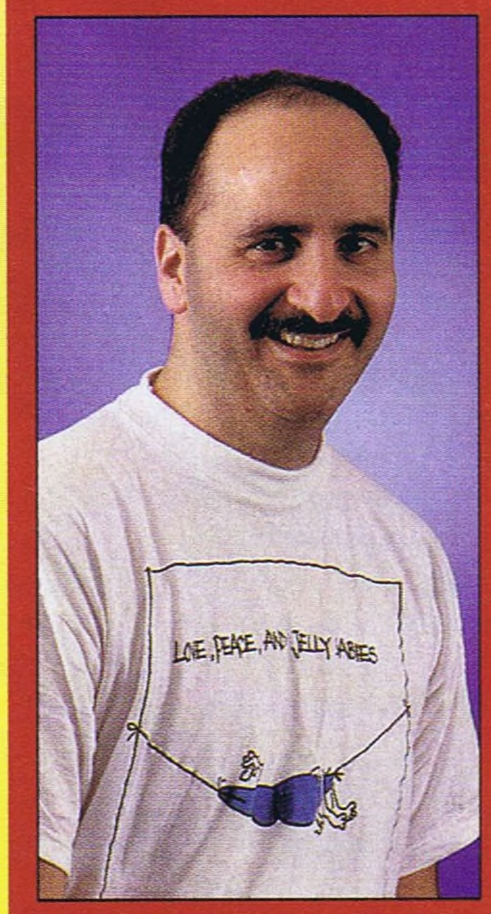
VISITORS MEAN PRIZES

Yes – if you visit the show you could win one of our prize draws. £100 of prize vouchers must be won in our prize draws at each Show. Anyone who attends can win!

FIXING AND FITTING SERVICE

Any hardware you buy from any stand can be fitted to your computer for a small fee at the Compo Software stand. What's more, if you are bringing your ST in for an upgrade or a repair, you get into the show for free!

QUESTIONS 'N' ANSWERS



On a personal level, I'll be at both of these shows so be sure to wander along to the Go Direct stand for a chat. But even better than that, there will be an Open Forum at the London Show on Sunday, December 11, at 2.30 pm where you will be able to throw questions at a panel comprising of myself and various members of the *ST Review* editorial team. Don't miss this chance to get answers from people in the know...

☎ FOR MORE INFORMAT

HOW TO GET THERE

BIRMINGHAM SHOW – NATIONAL MOTORCYCLE MUSEUM (0675 443311), COVENTRY ROAD, BICKENHILL, SOLIHULL, WEST MIDLANDS B92 0EJ. SATURDAY DECEMBER 10, 10AM TO 5PM.

BY ROAD:

- **Turn off junction 6 of the M42**
- **Follow the directions towards Birmingham along the A45.**
- **The Museum is located on the next roundabout.**

BY RAIL:

- **Go to Birmingham International**
- **Take the 900 bus (to Coventry) for about a mile.**

BY BUS:

- **Take the 900 bus from Birmingham or Coventry. Service runs every 20 minutes.**

LONDON SHOW – NOVOTEL (081-741 1555), 1 SHORTLANDS, HAMMERSMITH, WEST LONDON W6 8DR. SUNDAY DECEMBER 11, 10AM TO 5PM.

BY RAIL:

- **Go to a main London terminal and take either the District, Metropolitan or Piccadilly underground lines to Hammersmith.**

BY ROAD:

- **Aim for Hammersmith Broadway and follow the signs for Novotel. Integral car park holds 250 cars.**

Whether you want to buy at the keenest price, evaluate the latest products or just see what's happening on the Atari scene, these shows are for you!

BACK ISSUES

If you've been following a series and missed the last one, or have been looking forward to the next issue but can't find it at the newsagents, you'll know just how disappointing it is to miss out on an issue. Well, never fear! You'll find various back issues of *Atari ST Review* and *Atari ST User* on sale at bargain prices at the show.

Organised by David Encil, Neal O'Nions and Ray Cross

Tickets

- **All tickets on the door – no advance bookings.**
- **Tickets cost £5, £3 after 2pm.**
- **Children under 16 are free when accompanied by an adult.**
- **Free admission if you bring your computer along for fitting or fixing at the Compo Software stand.**

THE LATEST MAGAZINE

Make a bee-line for the Go Direct stand as soon as you walk in the door. You'll be able to pick up the latest issue of *Atari ST Review* at both of these shows!

ION, CALL 0487 773582

Yes – it's ST Review's annual guide to a pocketful of goodies at less than a tenner each...

BUDGET

1 Classic War Games
Compo Software

Armada and *Borodino* are two of the best war games ever released on the ST and this presentation pack from Compo comprises both. The games are set over a 3-D landscape and £7.99 will buy you this slice of British and French history.

2 STe Upgrade
Ladbroke Computing

Just £4.99 will buy a memory upgrade for your struggling 520STe. Fitting is as simple as slotting the two cards into place and a whole world of software opens up the instant you slip the casing back into position.

3 Plonker!
Dunce's Cap Software

Plonker! is a rework of the classic Mix 'n' Match concept. It includes five different methods of play, bonus rounds galore and is beautifully presented. Persecute your brain for £9.99!

4 Auto Joystick Switch
Golden Image

Putting the joystick ports on the underside of the ST certainly wasn't one of Atari's better ideas, but this gadget completely removes the cable-swapping nightmare. Switching is automatic – the cost is £9.95.

5 Scanner Pad
Golden Image

Keeping your hand scanner moving in a straight line is a constant struggle, but this T-square and pad combination from Golden Image makes the job an awful lot easier. What's more, it doubles as a high-quality mouse mat and will set you back the princely sum of £9.95.

6 Tecnoplus Mouse
Ladbroke Computing

Let's face it – the original Atari mouse is probably the most useless piece of technology since the ZX81! The vastly superior Tecnoplus rodent features micro-switched buttons and costs a paltry £9.99.

7 Superbase Personal
Compo Software

Superbase Personal is the ideal way to keep track of addresses, telephone numbers, and all sorts of other information. It's "relational", meaning that one database can be linked to another – superb value at just £9.99.

8 100 Capacity Disk Box
Ladbroke Computing

Take a look at that huge, wobbly heap of disks over on the corner of your desk and think how much nicer they would look in a smart box. £7.99 is a small price to pay for a safe and tidy disk collection...

9 Backgammon
Compo Software

What could be more relaxing than a game of Backgammon? This classic version from Atari runs in both colour or monochrome and is guaranteed to be more entertaining than the Queen's speech – and for just £5.99!

10 DegasArt
Goodman International

Brush up your artistic skills with a little help from *DegasArt*. This two-disk set contains some excellent advice on making the most of *Degas Elite* and on the principles of computer art in general – yours for £7.95.

11 Studio Convert
Compo Software

At £9.95, this has to be one of the most useful utilities a DTP fanatic can get his hands on. It takes graphics files in a huge variety of formats and converts them to mono using a screening pattern of your choice.

12 C-Font 2
Compo Software

How many times have you browsed through a PD catalogue, wishing that you could convert *Calamus* fonts for use with *Timeworks* or *That's Write*? Well, pick up a copy of *C-Font 2* for just £9.99 and you can!

13 Club Dominoes
Goodman International

This game is the be all and end all of domino simulations. It offers lots of styles of play and the manual includes a complete history of the game. Sadly you can't give up and start building houses with the pieces though. At £9.95, it's cheaper than a decent set of dominoes too!

14 Video Supreme
Goodman International

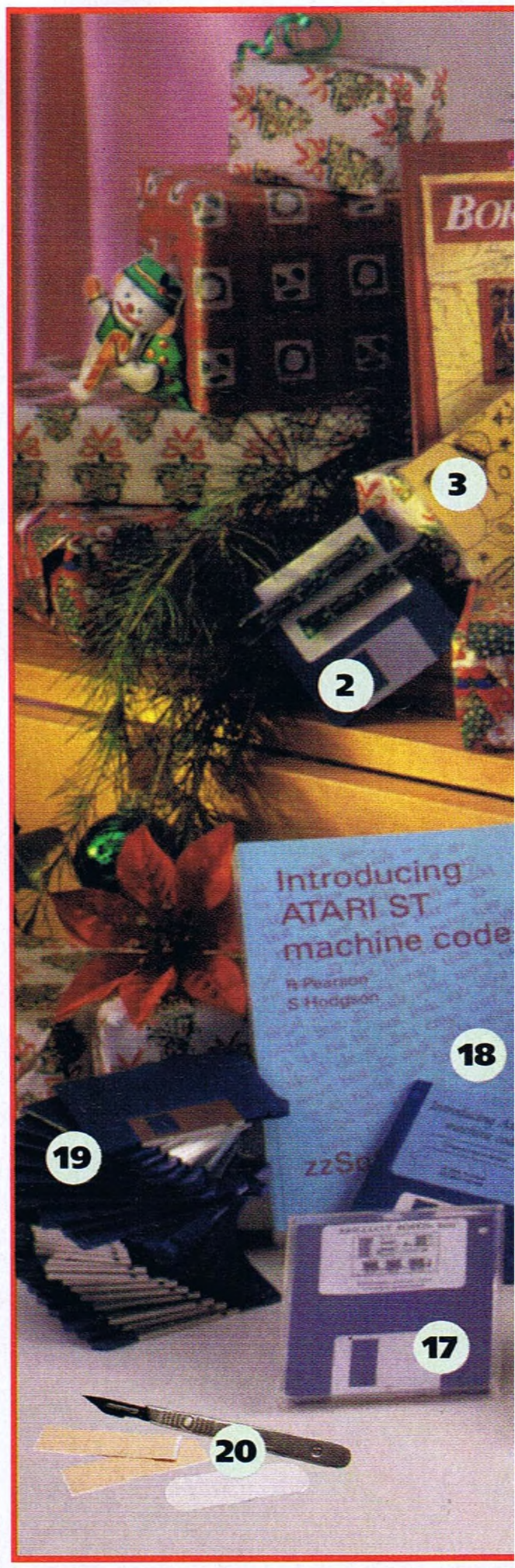
Adding titles to your home videos is a piece of cake with *Video Supreme*. For £9.95 you get the titling software itself plus full instructions on how to hook up your ST to a VCR.

15 Blow-Up 030 Software
System Solutions

Have you ever wished that your Falcon's desktop was larger, or that you could see more of a document in *Calamus*? In that case you need Blow-Up – the première Falcon VGA screen enhancer. The software-only version will set you back just £9.99.

16 The Monulator
Goodman International

Need to run mono programs on your colour system? Then you need *The Monulator*, a minor software miracle that tricks your ST into displaying high resolution on a standard colour display. It offers a number of advantages over public domain alternatives at a cost of just £9.95.



CONTACTS

Our undying gratitude goes to the following companies for supplying the goods on this page:

Compo Software: 01487 773582
Dunce's Cap Software: 01670 850629
Golden Image: 0181 900 9291
Goodman International: 01782 335650
Ladbroke Computing: 01772 203166
System Solutions: 0181 693 1919
zzSoft: 01254 386192

BONANZA!

MERRY CHRISTMAS AND A HAPPY NEW YEAR FROM THE ST REVIEW TEAM

17 Brilliant Boffin Brothers

Goodman International

MicroMagic has got this educational software thing down to a tee. *Boffin Brothers* is a rather neat question and answer game – and at a cost of just £3.95, it's well worth considering for those long afternoons after the Christmas turkey...

18 Introducing Atari ST Machine Code

zzSoft

Assembly language offers unrivalled speed when it comes to programming the ST and this £9.95 book offers a good introduction to the art of battling with your machine at a hardware level.

19 Blank Disks

Goodman International

No matter what you use your ST for, blank disks are an absolutely essential purchase. They can be used to back up cover disks, save game positions or to store valuable data from your word processor. Goodman's disks are made in the UK and the special offer price is just £9.95 for 25!

20 Cover Disk Removal Kit

Boots The Chemist

It has taken years for *ST Review* to perfect the industrial strength glue used to weld the cover disk to the front of the magazine. This kit contains a scalpel to hack your way through the tape – and a free box of Band Aid to mop up the blood!



SECOND ANNUAL ATARI ST REVIEW AWARDS

The votes are in for the 1994 awards...

Welcome to the second set of *Atari ST Review* award results – grab a cuppa, put your feet up and read! Where necessary, products have been grouped: *Timeworks* includes *Timeworks* 1 and 2 while *Calamus* includes the three different versions. And most of you obviously hate to be negative – the "worst" columns on your entries were generally left unfilled, hence the lack of results here.

Bearing in mind their product ranges, it comes as no surprise to see System Solutions and HiSoft taking four awards each. The former's MiniS hard drive actually polled more votes than any other single item.

Our cover disk offerings have gone down well over the year with *GEMView* and *Everest* scooping the Shareware section, while *Imagecopy* has gone from *best cheap 'n' cheerful* product last year to winning the Graphics award. Various of this year's newcomers have taken awards, including *EZ Art Pro*, *AtariWorks* and Hewlett-Packard's excellent DeskJet 560C. *Papyrus* has also left its mark, dead-heating with *Protext* in the Word Processor section.

***Frontier Elite II* is clearly the game of the year, but *Tempest 2000* came runner-up in the Games section for Best Sound – and yet it's a Jaguar game!**

The greatest no-show was a one-horse race – *Chromastudio 24* won by a street. And as for the poor old Atari mouse, the less said, the better...



SERIOUS SOFTWARE

WORD PROCESSOR
PROTEXT, PAPYRUS

Runner-up: *That's Write!*; **Previous winner:** *Protext*

DESKTOP PUBLISHING
CALAMUS

Runner-up: *Timeworks*; **Previous winner:** *Timeworks*

BUSINESS
ATARIWORKS

Runner-up: *Home Accounts*; **Previous winner:** *Home Accounts*

ART
EZ ART PRO

Runner-up: *Crack Art*; **Previous winner:** *TruePaint*

GRAPHICS
IMAGECOPY

Runner-up: *DA's Vector*; **Previous winner:** *DA's Vector*

MUSIC
CUBASE AUDIO

Runner-up: *Cubase*; **Previous winner:** *Cubase*

UTILITY
FASTCOPY

Runner-up: *Ultimate Virus Killer*; **Previous winner:** *Fastcopy*

PD/SHAREWARE
GEMVIEW

Runner-up: *Everest*; **Previous winner:** *Crack Art*

AUTO FOLDER
NVDI

Runner-up: *Superboot*; **Previous winner:** *Superboot*

DESK ACCESSORY
HARLEKIN 3

Runner-up: *XControl*; **Previous winner:** *Harlekin 2*

HARDWARE

HARD DRIVE
SYSTEM SOLUTIONS' MINIS

Runner-up: *Gasteiner;* **Previous winner:** *Gasteiner*

MONITOR
PHILIPS CM8833-II

Runner-up: *Atari SM124/5;* **Previous winner:** *Philips CM8833-II*

PRINTER
HP DESKJET 560C

Runner-up: *Canon BJ10sx;* **Previous winner:** *HP DeskJet 550C*

SCANNER
ALFA DATA

Runner-up: *Migraph;* **Previous winner:** *Golden Image*

SYNTHESISER
YAMAHA SY85

Runner-up: *Korg M1;* **Previous winner:** *Korg M1*

UPGRADES

HARDWARE
TOS 2.06

Runner-up: *XtraRAM Deluxe;* **Previous winner:** *TOS 2.06*

SOFTWARE
NVDI

Runner-up: *MagiC;* **Previous winner:** *NVDI*

GAMES

BEST GRAPHICS
FRONTIER ELITE 2

Runner-up: *Ishar III;* **Previous winner:** *F1 Grand Prix*

BEST SOUND
CHAOS ENGINE

Runner-up: *Tempest 2000;* **Previous winner:** *Chaos Engine*

PLAYABILITY
FRONTIER ELITE 2

Runner-up: *Cannon Fodder;* **Previous winner:** *Lemmings 2*

VALUE FOR MONEY
FRONTIER ELITE 2

Runner-up: *Cannon Fodder;* **Previous winner:** *Civilization*

BEST OVERALL

PRODUCT OF THE YEAR
JAGUAR

Runner-up: *Falcon030;* **Previous winner:** *Falcon030*

COMPANY OF THE YEAR
SYSTEM SOLUTIONS

Runner-up: *HiSoft;* **Previous winner:** *HiSoft*

GAME OF THE YEAR
FRONTIER ELITE II

Runner-up: *Cannon Fodder;* **Previous winner:** *Civilization*

SOFTWARE HOUSE OF THE YEAR
HISOFT

Runner-up: *Caspian Software;* **Previous winner:** *Microprose*

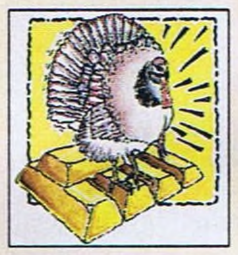
BBS OF THE YEAR
CIX

Runner-up: *Magic Castle;* **Previous winner:** *CIX*

SPECIAL AWARDS

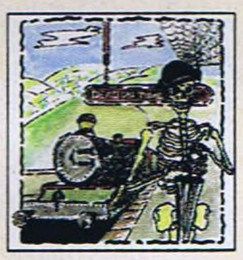
WORST ST PRODUCT
ATARI MOUSE

Runner-up: *Goal!;* **Previous winner:** *Atari Mouse*



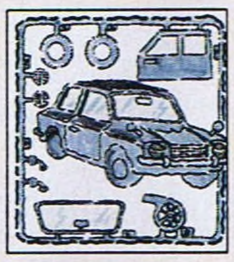
GREATEST NO-SHOW
CHROMASTUDIO 24

Runner-up: *Jaguar in UK;* **Previous winner:** *Falcon030*



BEST CHEAP 'N' CHEERFUL PRODUCT
MOUSE/JOYSTICK EXTENSION

Runner-up: *ST Review;* **Previous winner:** *Imagecopy*



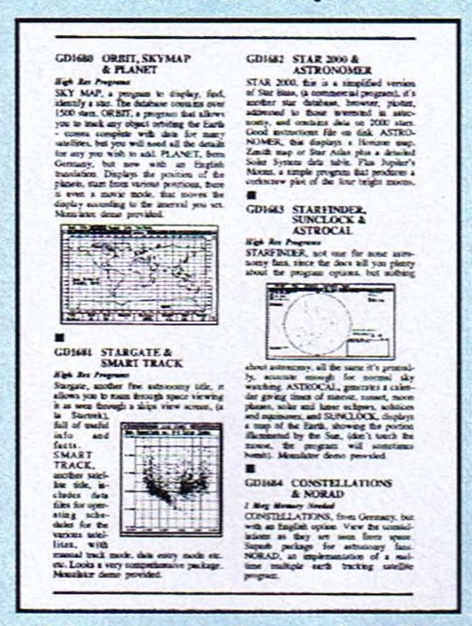
AND THE WINNER...

... of the Jaguar is Lloyd Hannis, 15 Darwin Close, Walsgrave, Coventry, West Midlands CV2 2BZ. Thanks to everyone who voted – see you all again next year!

GOODMAN'S Supplying Atari Users For Over Eight Years

Association of Shareware Professionals Approved

Our catalogue is not a simple ABC list of programs, but is over 220 pages of information, with screen shots and descriptions for hundreds of disks of the very best in ST/STE & Falcon P.D. and Shareware.



GD1680 ORBIT, SKYMAP & PLANET

High Res Programs

SKY MAP, a program to display, find, identify a star. The database contains over 1500 stars. ORBIT, a program that allows you to track any object orbiting the Earth - comes complete with data for many satellites, but you will need all the details for any you wish to add. PLANET, from Germany, but now with an English translation. Displays the position of the planets, stars from various positions, there is even a starry mode. Star known the display according to the interval you set. Many more details provided.

GD1681 STARGATE & SMART TRACK

High Res Programs

Stargate, another free astronomy title, it allows you to roam through space viewing it as seen through a ships view screen, (a la Startrek), full of useful info and facts. SMART TRACK, another satellite title, includes data files for operating schedules for the various satellites, with manual track mode, data entry mode etc. etc. Looks a very comprehensive package. Monochrome demo provided.

GD1682 STAR 2000 & ASTRONOMER

STAR 2000, this is a simplified version of Star Base, (a commercial program), it's another star database, browser, plotter, addressed to those interested in astronomy, and contains data on 2000 stars. Good instructions file on disk. ASTRONOMER, this displays a Horizon map, Zenith map or Star Atlas plus a detailed Solar System data table. Plus Jupiter's Moons, a simple program that produces a stylised view of the four bright moons.

GD1683 STARFINDER, SUNCLOCK & ASTROCAL

High Res Programs

STARFINDER, not one for some astronomy fans, since the docs tell you plenty about the program options, but nothing about astronomy, all the same it's reasonably accurate enough for normal sky watching. ASTROCAL, generates a calendar giving times of sunrise, sunset, moon phases, solar and lunar eclipses, solstices and equinoxes, and SUNCLOCK, displays a map of the Earth, showing the portion illuminated by the Sun, (don't touch the mouse, the program will sometimes bomb). Monochrome demo provided.

GD1684 CONSTELLATIONS & NORAD

1 Meg Memory Needed

CONSTELLATIONS, from Germany, but with an English option. View the constellations as they are seen from your location, package for astronomy fans. NORAD, an implementation of a real-time multiple earth tracking satellite program.

Discover why thousands of ST users worldwide have, for over eight years, chosen Goodman's for all their Public Domain and Shareware needs.

- **Loose Leaf Format For Easy Updating**
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Order any 5 disks from the list below for only £9.95 inclusive, and receive a copy of our Shareware Guide FREE!!!

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GD2170 DAVE MUNSIE GAMES
GD2178 TOWERS (2 Disks)
GD2256 WALLS OF ILLUSION
GD2253 TRIYAHOO
GD2267 BLOX
GD2276 SNACMAN
GD2275 DCS Compilation
GD2284 PACMAN ON 'E's
GD2290 MEDIEVAL CHESS
GD2315 STARBALL & PAINTER
GD2352 DARTS
GD2357 FRANTICK (2 Disks)

EDUCATION
GD1883 WEATHER TIME
GD1884 PLAYTIME
GD1888 ALGEBRA
GD2184 ADVANCED FRANGLAIS
GD2248 CLOCKTIME
GD2283 ST GLOBE
GD2176 PICTS TO PARL' 3
GD2293 PICTS TO PARL' 4
GD2296 ROMAN EMPIRE
GD2299 LABORANT PRO
GD2273 KV PHONIC

HOME & OFFICE
GD1601 IDEALIST
GD1672 DB WRITER
GD1673 DB WRITER EXTRAS
GD2064 ROUTE FINDER
GD2175 INVOICE MASTER
GD2255 RECIPE BOX
GD2198 MARCEL WORD PRO
GD2295 HEBREW WORD PRO
GD2291 CAL MUSIC FONT
GD2209 SUPERCARD 3
GD2254 O.C.R.
GD2318 GROCERY LISTER
GD2347 ADDRESS MANAGER
GD2317 EVEREST & GRAMMAR

STOS
STOSSER DISK MAGAZINE
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GD1380 MORSE CODE
GD1853 GERMAN TRANSLATE 3
GD2187 FAMILY TREE
GD2251 R.A.E. TUTOR DEMO
GD2271 BATTERY EXPERT
GD2203 ZX81 EMULATOR
GD2205 SPECTRUM EMULATOR
GD2331 ST NEWS 9.1
GD2355 ST NEWS 9.2
GD2250 DATACHESS 2 (2 Disks)
GD2278 CREATIVE TITLES 2
GD2338 BIORHYTHM

UTILITIES
GD2065 LET THEM FLY (English)
GD2120 TERRA DESK 1.40
GD2280 MASTER BROWSE 4.5
GD2129 TWO IN ONE (English)
GD2173 ST ZIP 2.6 & LZH 3.1
GD2188 MOUSE KA MANIA
GD2326 ICON JUGGLER
GD2406 ZORG V1.39

TRACKER
GD2259 STORMTRACKER DEMO
GD2286 OCTALYSER STE

GRAPHICS
GD1347 PRINTING PRESS (English)
GD1348 PRINTING PRESS Support
GD2020 CRACKART (English)
GD2035 GEMVIEW 3.05
GD2038 KOZMIC 4
GD2055 KADINSKY
GD2277 ART FOR KIDS DEMO
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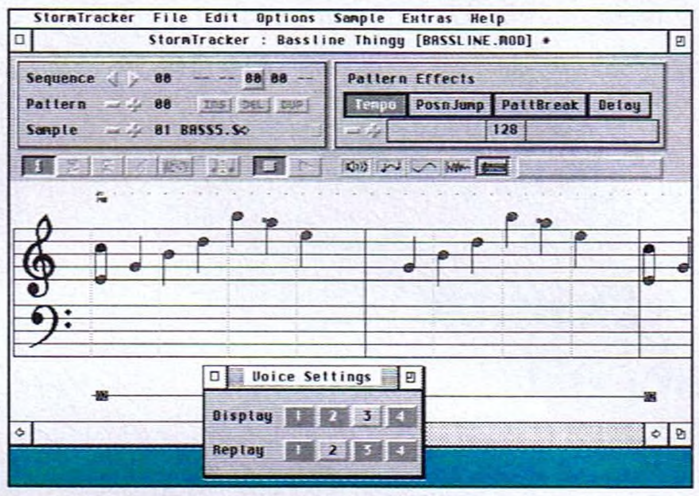
Programmers: For maximum circulation, forward your work direct to Goodman's for inclusion on future catalogue updates.

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Wouldn't it be nice if someone turned the Falcon into a full-blown sound module – Vic Lennard gets a sneak preview of just such a program...

BIG SOUND

Take a look at that General MIDI sound module sitting next to you. How many megabytes of ROM do you think the sounds take up – 2Mb? 4Mb? And what kind of processing power does it possess? The equivalent of a 68000? Probably. Now take a close look at the Falcon. The standard internal hard disk offers 60Mb or 80Mb of storage and the partnership of the 68030 main processor and 65551 digital signal processor is powerful enough to blow most sound modules away. Four megabytes of memory, built-in MIDI connections, stereo audio outputs... the list lends itself to an audio workstation. Enter *TDSM*...

MIDI GENERAL

Martin Griffiths may not mean much to the average reader, but "Griff" might. Martin is responsible for the *ProTracker Replay* software, converted *ProTracker* for the Falcon and has also created some of the Falcon's best demos such as *Things Not To Do*. He's currently working as a researcher into video compression at Kent University, hence his latest Falcon offering, *MPEG Player*.

In conjunction with System Solutions, Martin is working on a project to make the Falcon behave as a General MIDI sound module. The working title of *The Digital Sound Module*, or *TDSM* for short, may be less than awe-inspiring but the idea certainly is. Essentially, the program offers the front-end screen for the 128 basic General MIDI sounds which are stored on hard disk and accessed as and when required.

The General MIDI specification allows for two possible configurations: 24 voices or eight dedicated drum voices and 16 dynamically allocated for the other instruments. Martin has chosen the latter, and for a very good reason: the eight-channel DMA sound chip handles the drums so reducing the overall load on the main 68030 processor.

The current beta-test sound set is made up of 128 16-bit mono samples, recorded at 50kHz. While the necessary storage for this is 18Mb of hard disk space, the final product will probably be supplied on six high-density disks and uses a compression technique that does not affect audio quality.

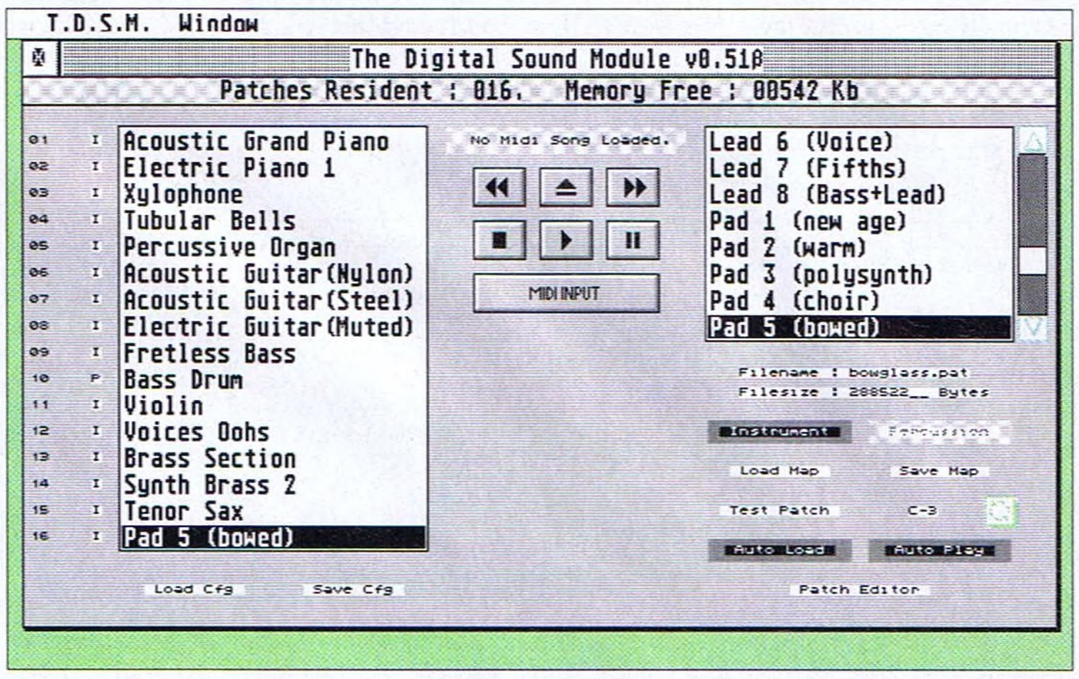
SOUND DECISIONS

With the drums offloaded to the DMA chip, the main processor handles the general program while the DSP deals with the various sound aspects: pitch-shifting for play-back, panning for stereo position, volume level, smoothing and mixing. The final audio then exits via the stereo mini-jack socket on the Falcon's rear.

The synthesis side is yet to be finalised but Martin is currently experimenting with linear interpolation, a smoothing method that improves basic audio quality. All voices will have custom Attack, Decay, Sustain and Release (ADSR) envelopes and sound will be click-free on note release courtesy of a very tail off. If the 16-voice limit is exceeded, there's a clever algorithm for deciding which voice to steal.

UP TO DATE

Just compare *Papyrus* with *1st Word Plus* and you'll see the changes that have taken place in user interface design. *TDSM* is certainly a modern-looking piece of software with non-modal (moveable) dialogue boxes and keyboard shortcuts. Enhanced GEM has been used, including the 3-D "look" from version 3.4 of the AES, and drag and drop has been implemented.

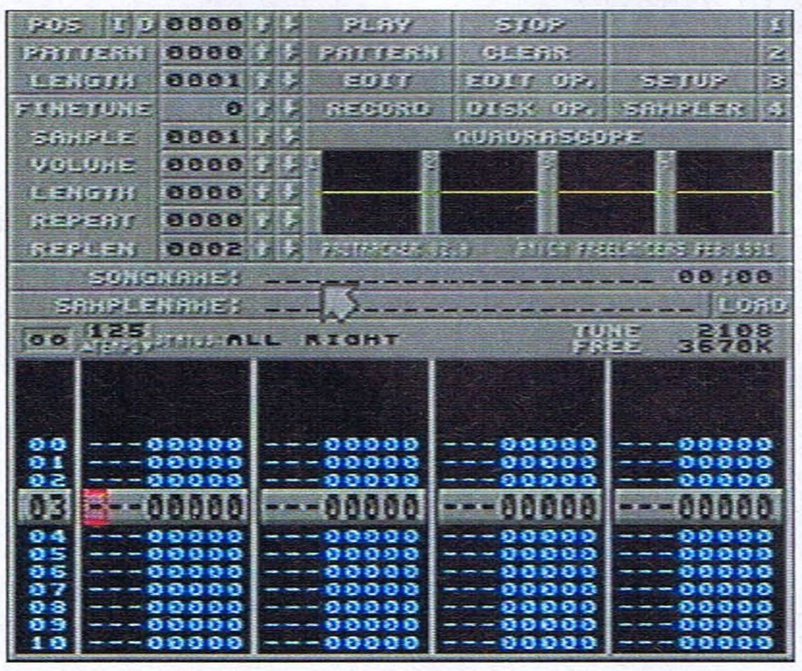


TDSM's main window. Even with 16 sounds loaded, there's still 542Kb of free memory.

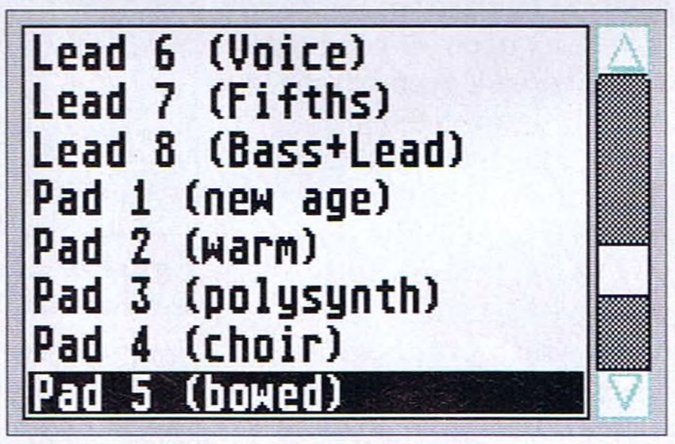
TDSM can accept input from a MIDI keyboard or plays MIDI File formats 0 and 1 – and impressively well. While the current test sound set is a bit rough in places, the multi-sampled standard acoustic piano is very good. In fact, an average of six samples have been used per sound, so accounting for the necessary hard disk space requirement.

Each MIDI channel will have a filter set, much like the input filters on a MIDI sequencer, and sounds can be remapped to program change numbers for non-General MIDI uses. And even though the supplied sound set is very much at the test stage, I could still load a full 16-part's worth of sounds into a standard 4Mb Falcon. You never know: perhaps there will be enough memory left to load your favourite sequencer and use *TDSM* as an on-board sound module – a true music workstation!

The price should be around £60 which is impressive for a product of this nature. Contact System Solutions (0181-693 3355) for more information.

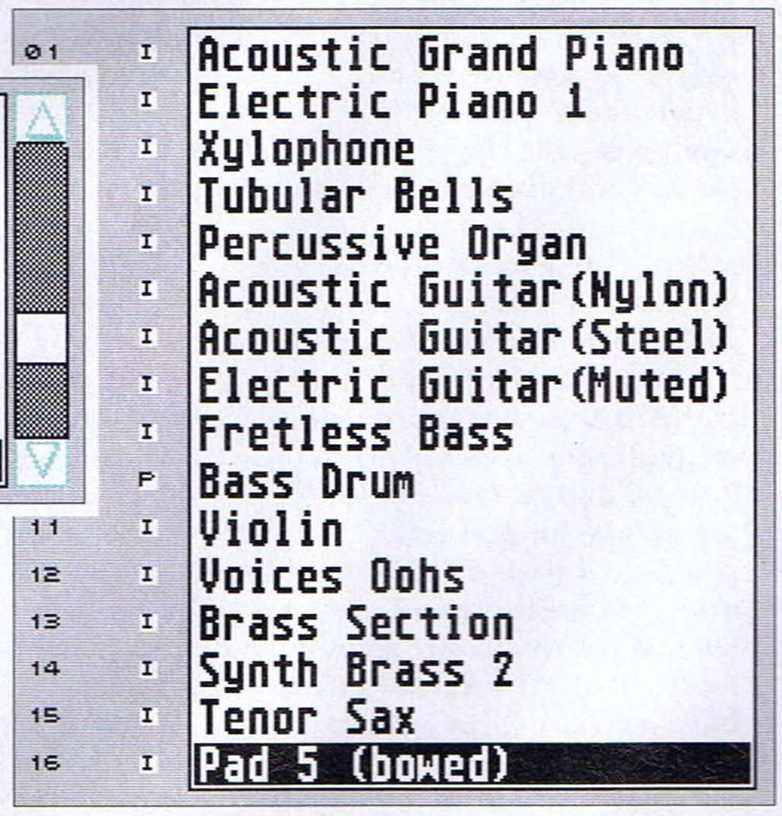


TDSM's author is responsible for the ProTracker conversion on the Falcon.



The Voice Selector allows you to choose from the 128 General MIDI sounds by name...

...and then place them in the relevant part. Note the "I" and "P" next to each part number for Instrument or Percussion.



Time to put the pedal to the metal with Ian Waugh...

LET'S GET

Heavy Metal is a relatively recent term which basically refers to ultra-loud rock music! Apart from increased amplitude, Heavy Metal is similar to other types of rock but it's also characterised by increased activity at the low end, principally the bass drum or drums.

Louis Bellson pioneered the use of double bass drums in the '40s although it was the late '60s before it found its way into popular music which, at the time, was referred to as Underground. Great names of that era include Jimmy Hendrix (who made much use of guitar FX and distortion popular with today's Heavy Metal music), Eric Clapton, Jeff Beck and The Yardbirds.

As usual, we're using the *Cubase* drum editor to illustrate the patterns. Each pattern is one bar long and the darker the hit, the greater the velocity. The darker hits mean that the beat should be accented – experiment a little with your own system to discover the best velocity settings for each drum.

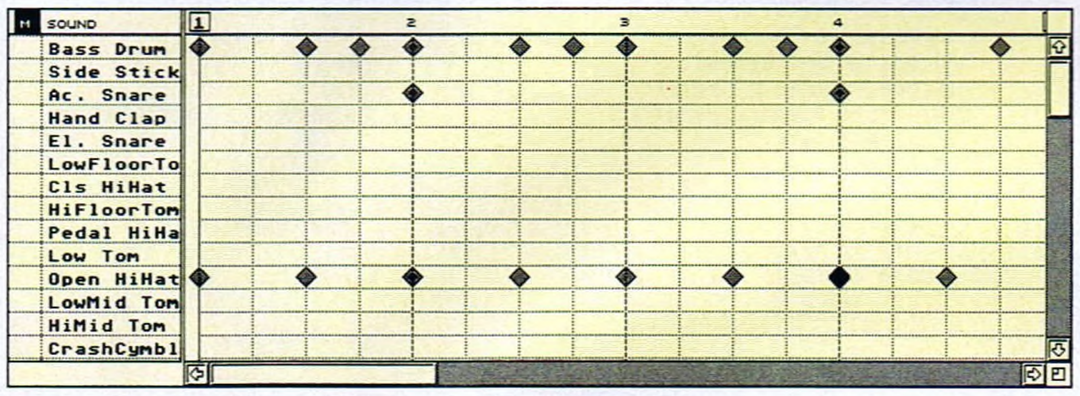


Figure 1: a typical Heavy Metal rhythm with open hi-hats. The main rhythmic pulse is provided by the bass drum.

TOP HM TIPS

● Wear a T shirt and a leather jacket, grow your hair long and learn some power chords. It won't help you play better HM music, but at least you'll look the part!

● Many HM drum tracks feature a deeper bass drum than is commonly used with more standard rock patterns. Modern drum units seem to have a clicky bass drum, more suited to disco than HM. If yours is one, program a low tom alongside it.

● Can you have too much reverb on a Heavy Metal drum track? Ooh, difficult one, that – hit the reverb button and use your ears!

● What are Power chords? Versions that are neither major or minor, consisting of the root and the fifth of the chord. A D power chord, for example, contains only the notes D and A. This sounds incredibly, er, powerful, when used with a "big" distorted guitar sound. Spread the chord out across a couple of octaves and you'll have a terrific Heavy Metal sound.

HARD HITTING

Figure 1 is a typical Heavy Metal rhythm with open hi-hats. Notice that the main rhythmic pulse is provided by the bass drum. The heavy accents on beats two and four are as much a part of Heavy Metal as they are of standard Rock.

Figure 2 is another common HM rhythm. If you're a drummer, it's also a good way to lose weight! The offset second snare and accent add interest to the rhythm. Figure 3 is an interesting pattern which leans towards jazz – the cymbal rhythm seems to play across the bass and snare.

Figure 4 proves that you don't have to have calf muscles like Fatima Whitbread to play good HM tracks. This one is rather more open but the snare and bass rhythm in the middle of the bar give it a great HM offbeat feel. Try this pattern with the hi-hat and cymbal lines used in the other patterns.

A lot of Heavy Metal is based on rock shuffles which are in triplet timing. Figure 5 is a typical HM pattern in which the bass drum provides the shuffle feel rather than the hi-hat as would be the case in jazz or rock. The open hi-hat is preferred to the closed variety; beats two and four are accented.

Figure 6 without the cowbell is a more open triplet rhythm, the equivalent of the sixteenth pattern in figure 4. You could try adding a slightly busier hi-hat or cymbal line too. The cowbell is a slight whimsy. It's not an instrument you normally associate with Heavy Metal but the offset cowbell in the middle of beat three adds a special kind of interest to a pattern. It may sound better if you have a low-pitched cowbell and you might like to play this rhythm using other drum sounds such as toms. Try it with the HM pattern in figure 5 or with any other triplet pattern you create. Also, try adding it when you want the song to get a bit more busy.

We'll loosen up a bit next month and check out some funky stuff...

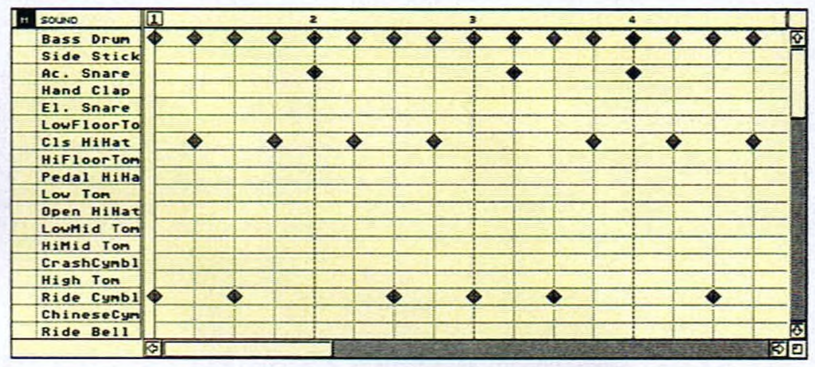
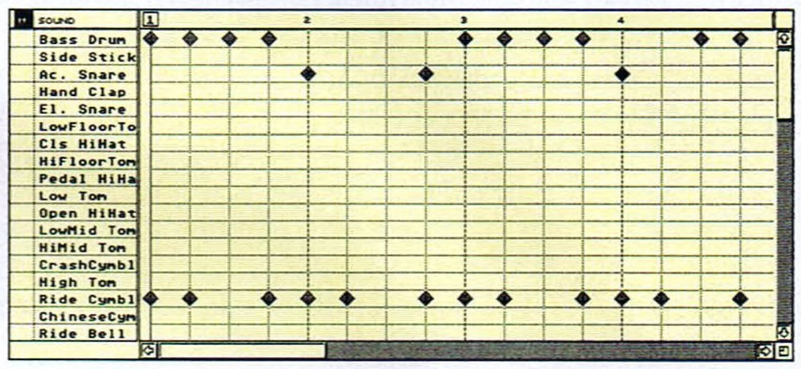


Figure 2: another common HM rhythm – the offset second snare and accent add interest.

Figure 3: this leans towards jazz – the cymbal rhythm seems to play across the bass and snare.



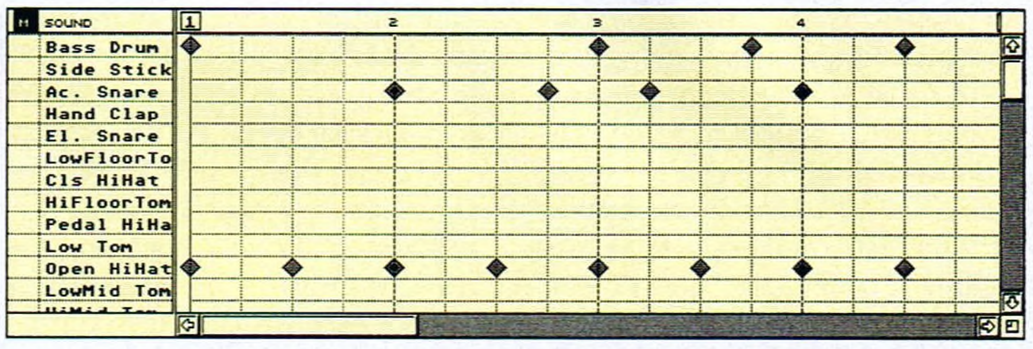


Figure 4: a more open rhythm, but the snare and bass drum in the middle of the bar give it a great HM offbeat feel.

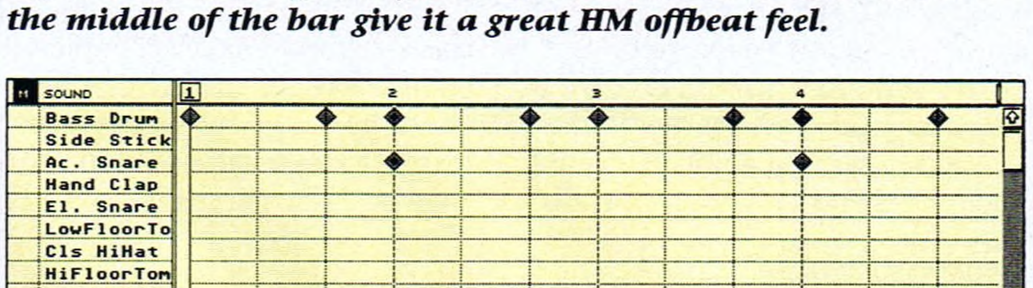


Figure 5: the bass drum gives the shuffle feel rather than the hi-hat. Open hi-hats are used and beats two and four accented.

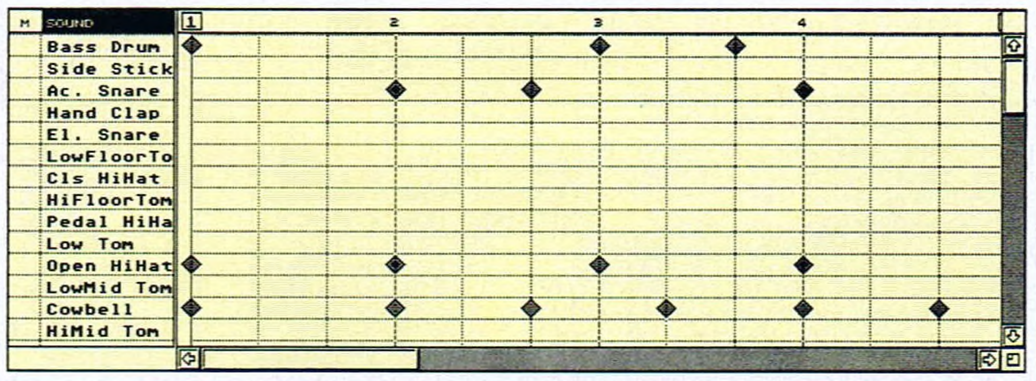


Figure 6: the offset cowbell in the middle of beat three adds a special kind of interest – use a low-pitched cowbell or toms.

HEAVY!

TWIDDLY•BEATS WORLD SERIES: BRAZILIAN RHYTHMS

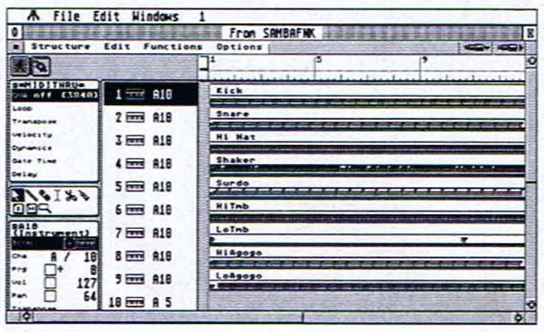
Keyfax Software • £21.95 inc. p&p • 0491 579645

This is the latest MIDI File disk from Keyfax Software whose policy is to use live musicians, real instruments and little or no quantisation. It was apparently recorded at the foot of Corcovado mountain near Rio de Janeiro by a top Brazilian drummer and you can't get much more authentic than that!

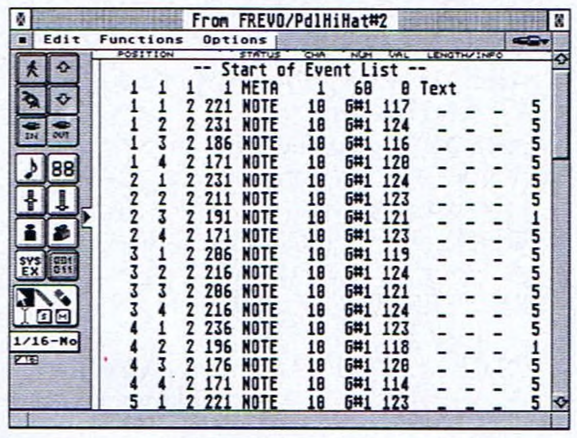
The disk contains 72 files. There are 18 major patterns looped around 16 bars plus lots of fills. Some patterns are duplicated – one has the drums on separate tracks, the other puts all the drums on one track for more editing flexibility.

If you're an expert on Brazilian rhythms you'll recognise patterns such as Afoxe, Baiao, Escola, Frevo and Ijexa. Even if you're not, you'll recognise Samba and Bossa Nova. In any event, think exotic Latin and you won't be far wrong.

There are some extremely interesting patterns here although I do confess a penchant for Latin and Ethnic percussion. The Frevo is characterised by snare drum rolls, a little reminiscent of the theme from *The Avengers* TV series.



One of the Funky Samba patterns. It's quite complex, being constructed from nine drums parts.



The hi-hat in this Frevo pattern is apparently in eighth notes. You can see the offset in the editor but it still sounds spot on!

There are slightly rocky, jazzy and funky versions of various patterns which wouldn't be out of place in a contemporary song.

A characteristic of Brazilian rhythms is that many of them are rather loose (that is, not quantised) and if you look at these patterns in an editor you can see how "off the beat" they actually are. And they sound terrific.

The patterns are mapped to General MIDI although some use drums not normally found in a GM drum set such as Pandeiro and Surdo. However, the manual gives you substitutions you can use. And unlike the manuals for the *twiddly•bits* disks, this one is the size of a CD insert and you *can* read it.

Unlike the other disks too, this is the first to include a license agreement. The files are sold for non-commercial applications only. Keyfax says this is principally to prevent anyone reselling the patterns as commercial MIDI Files or, heaven forbid, karaoke tracks but the agreement does state that they are not for general release recordings.

Check out the demo on this month's cover disk...

ST REVIEW COMMENT: "If you like Latin, you'll love this. An outstanding set of original rhythms for the rhythm connoisseur."

★★★★

GUIT-BOX GROOVES

Scott's Dots • £15 • 0291 629212

It's nice to welcome a newcomer to the MIDI File production world. Scott's Dots is run by Mike Scott who makes a living producing backing tracks for cabaret artistes.

Guit-Box Grooves is a collection of guitar patterns recorded with a MIDI guitar. The disk contains 43 MIDI Files grouped into pairs, the odd one out being a demo file. One contains just the guitar riffs while the other has some drum and bass tracks so you can hear the patterns in context. There's little variation between backing tracks and they do become a little wearing after listening to them 24 times! And, sorry to say, the backings are the worst part of the files with lots of very high velocity levels and little subtlety.

The guitar parts, however, are much better constructed, although a few still have too many high velocities (some even hit 127) for my personal preference. I do like a little room to manoeuvre although I suppose it's no hardship using a global function to reduce the velocities.

But don't let the backings put you off this disk. The guitar riffs are quite varied ranging from a whole collection of strums and shuffles to various pick styles. There are also some ending strums.

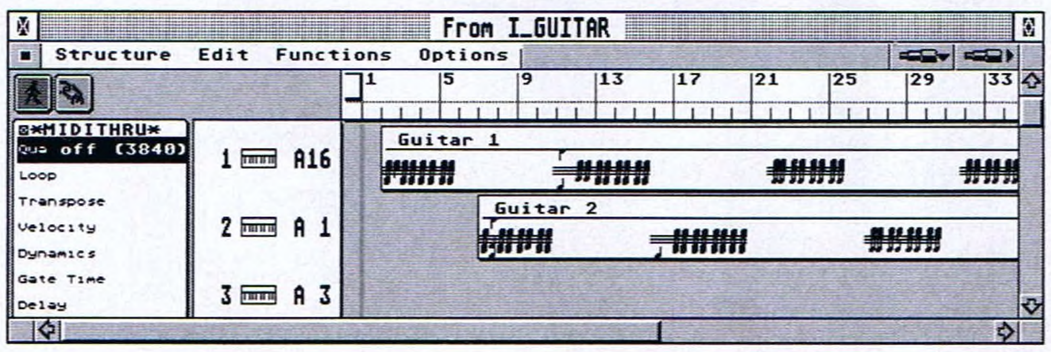
Each pattern is played using major, minor, seventh and minor seventh chords. To use them in your own material, first isolate the required pattern. This is easy as the riffs alternate between two tracks. You then transpose it to the required chord, copy it the required number of times and drop it into your song.

You get a couple of sheets of printed documentation, telling you how to create more complex chords such as major sevenths and ninths by changing or adding more notes to the chord.

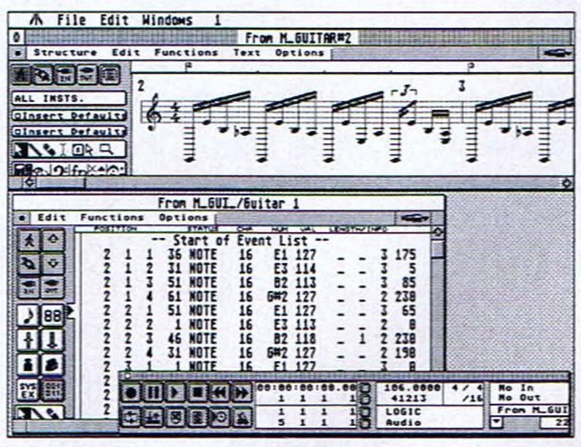
However, this isn't totally satisfactory as the timing of these notes is crucial and it could take a while to get it right – after all, that's why you buy files like these...

ST REVIEW COMMENT: "A solid, well-constructed set of guitar riffs, easy to use and eminently usable, although without any of the more complex chords."

★★★



The riffs alternate between two tracks so it's easy to select and copy the chord type you want.



One of the Pick styles as it appears in Logic's score and event editors.

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"Builds on its predecessor's impeccable reputation" ST REVIEW, Oct 1994 (90% overall)

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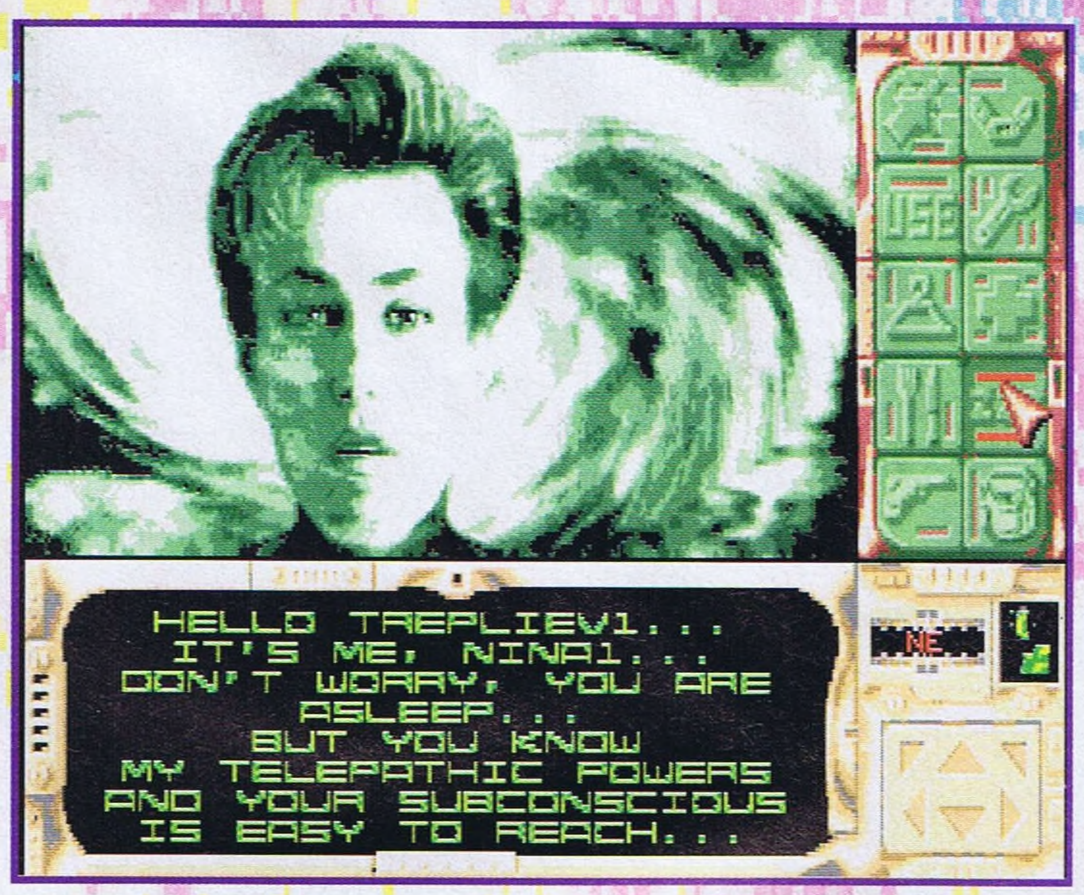
ST ACTION

CHRISTMAS 1994

INSIDE

- Obsession cover disk
- Robinson's Requiem
- H.E.R.O.
- Plonker!
- Team preview
- PD Action – five reviews
- Feature on Impact Software, creators of Team







JAGGED EDGE

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Tina Hackett rehearses her footy chants and sets off on the trail of Impact Software's brand new soccer sim...

MAKING AN IMPACT

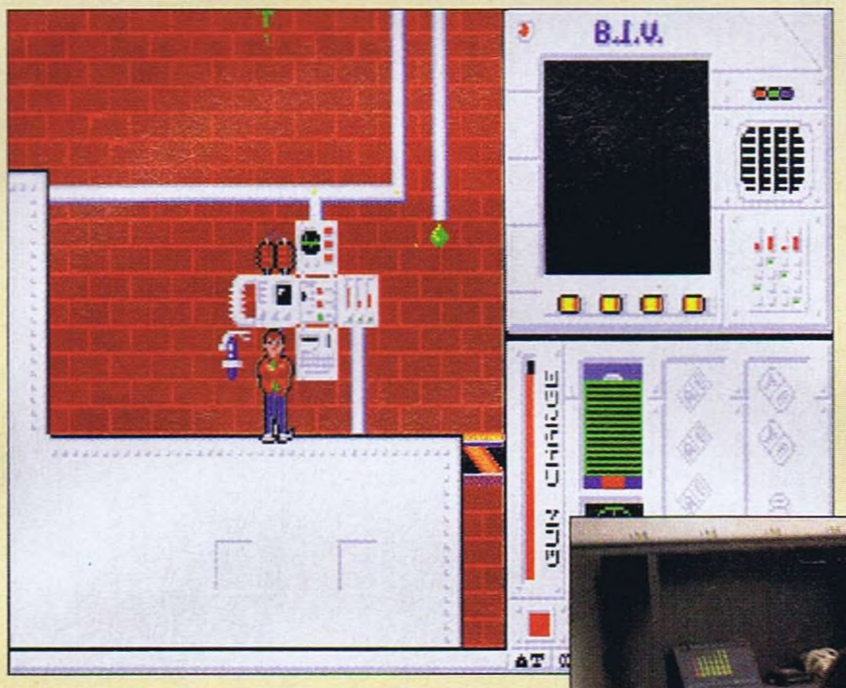
Independent software developers seem to be leading the current revival of the ST games scene. With the likes of Caspian Software and Unique Development Sweden, it seems that there will soon be a wealth of top quality games for the ST and, in particular, the STe.

Many developers have realised that the STe's hardware affords the opportunity for more creative and advanced games. Through using its blitter chip and improved colour palette and DMA sound, the quality of software is now reaching new standards.

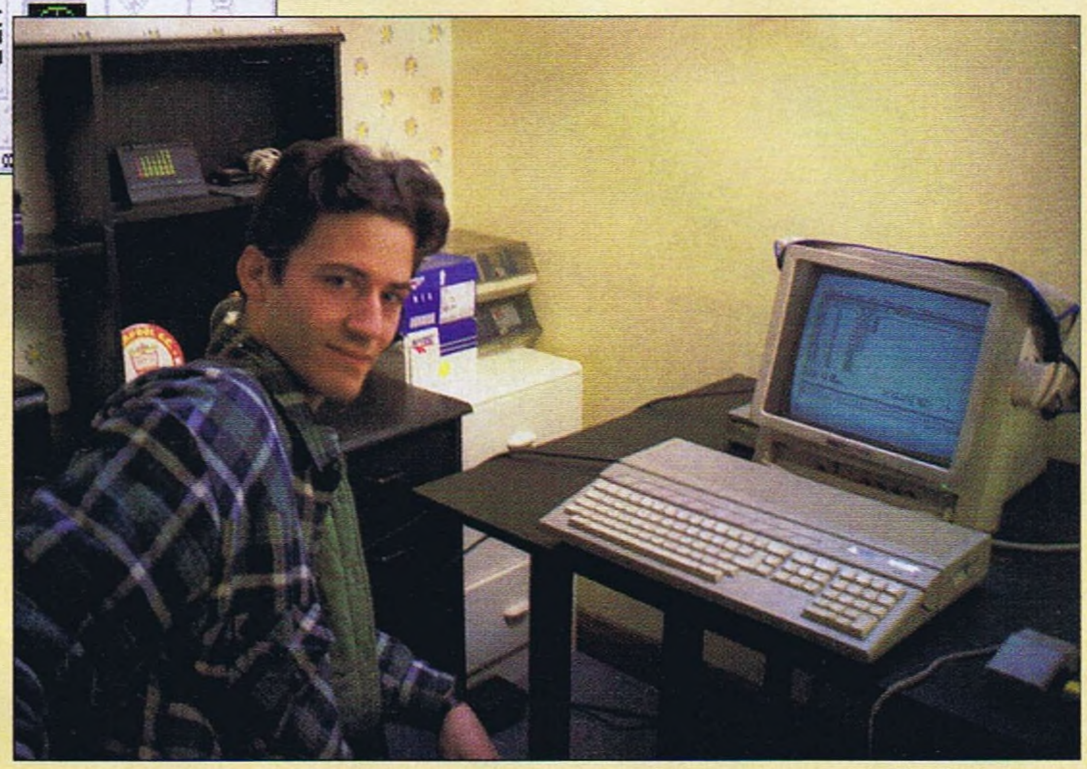
LEADING FROM THE FRONT

One such developer is Impact Software. Having made a name for itself with *Snacman*, the shareware game, Impact is about to make its move into the commercial market with a new football simulation, *Team*. So after glimpsing a sneak preview of the game at a recent Atari show, *ST Review* rushed down to Northamptonshire to get the lowdown on this up-and-coming new company.

In the unlikely setting of Syresham, a tiny village in the middle of the Northants countryside, we found the brains behind this latest game. After seeing some of the software I was slightly startled, to say the least, to find out that the team consists of a rather unlikely crew. Programming is by 19-year-old Ralph Lovesy, a part-time student in Philosophy and Politics at Oxford while the graphics are courtesy of Jocelyne Dave-Vienne, better known for her work on canvas than on the computer. The musician in the team is Greg Lovesy, currently still at school doing his GCSEs. At this point, you could be forgiven for being a touch cynical. But after playing the game for myself and having the theory behind *Team* explained, all doubts were cast aside.



Greg Lovesy, musician for the Team project, is also responsible for the music in H.E.R.O.



Ralph Lovesy, programmer, explains how the game will push the STe's hardware to its limits...

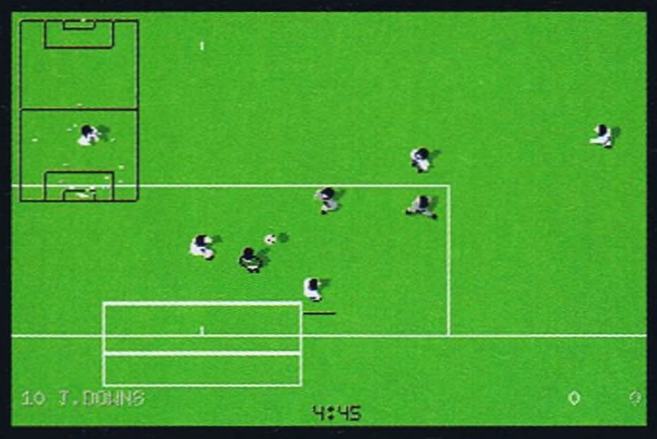
STEP BY STEP GUIDE

IN THE BEGINNING...

The ST footy sim has evolved somewhat since the days of slow, jerky-scrolling, stick-men graphics – and all the playability of a broken hula hoop! The genre seems to have gone through significant stages in development and with *Team* we appear to be on the verge of yet another new era. So it seems pertinent now to take a look at the history of the game. Tina "Jimmy Hill" Hackett reminisces...



1 *Kick Off – the one that started the renaissance of footy games. Dino Dini's classic set new standards with its great gameplay and excellent graphics – at the time...*



2 *Kick Off 2 – a vast improvement on the original. It retained Kick Off's great playability, tweaking it with aftertouch and sporting enhanced graphics.*



3 *Manchester United, the corker from Krisalis. Although arguably not the best playability-wise, it offered a different, highly detailed graphical style.*



Snacman – an early offering from a talented team...

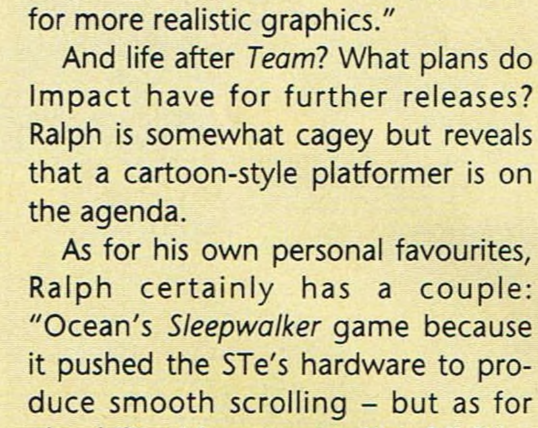
ON THE OTHER FOOT

With the ST market awash with football games, what made Impact choose to create yet another? Ralph explains. "The football games around are pretty sub-standard and suffer badly from jerky scrolling. Besides, no one has ever written an STe-specific one. We wanted to do a game that would squeeze the STe for all it was worth!"

Having a good game alone though is sometimes not enough in this business. How will Impact convince the cynical gamesplayer that they need another football game? Ralph, not looking even slightly perturbed by this predicament replies: "It's going to be everything you've ever wanted from a football game and more!" He goes on to expound on this confident statement. "It will have loads of new features from a hi-tech replay system to more realistic 3-D players. *Team* will be STe-specific, making use of the blitter chip for smoother scrolling and the 32-colour palette for more realistic graphics."

And life after *Team*? What plans do Impact have for further releases? Ralph is somewhat cagey but reveals that a cartoon-style platformer is on the agenda.

As for his own personal favourites, Ralph certainly has a couple: "Ocean's *Sleepwalker* game because it pushed the STe's hardware to produce smooth scrolling – but as for playability, it's got to be *Kick Off 2*!"



4 ***Sensible Soccer – the "mini sprites" changed the face of footy games. Gone were the animated, realistic players – here were the diddy blokes! But what it lacked graphically, it made up for in sheer playability.***

TEAM SPIRIT!

So what can we expect from this hot new footy game? Jane Plessey takes a sneak look...

FIRST IMPRESSIONS

Impact has gone all out to make *Team* push the STe by using the hardware to its fullest. It will need 1Mb to run in and looking at the game, it's easy to see why they've opted to make it STe only.

Silky-smooth scrolling is ensured by clever use of the blitter chip, and some nifty programming enables the game to flow with ease. There's no sign of any jerky scrolling found in various other footy sims.

One of the most innovative parts of the game is the 3-D realism. In previous games, you often found yourself walking through another player resulting in an annoying merge of colours. Now, thanks to a complicated masking technique, the players are solid and three dimensional. So, for example, when you tackle one of the opposition you really have to run around the player. This also happens with other objects like the corner flag or goal posts. If the ball hits them, it makes a realistic rebound.

This is further enhanced by the ball acting under real forces of friction so if it hits the top of the net, its motion is cushioned to some extent. A crash into an advertising hoarding has it bouncing off with quite a force.

Graphics-wise, *Team* promises to be rather impressive. The STe's 32-colour palette enables the stadium to look more realistic, even down to the pitch graphics. For example, four shades of green have been used to create the look of grass on the field rather than the usually restrictive crude couple of shades. The crowd will be quite detailed and have animations such as scarves and hats flying into the air when the teams score, providing the game with that all-important match atmosphere.

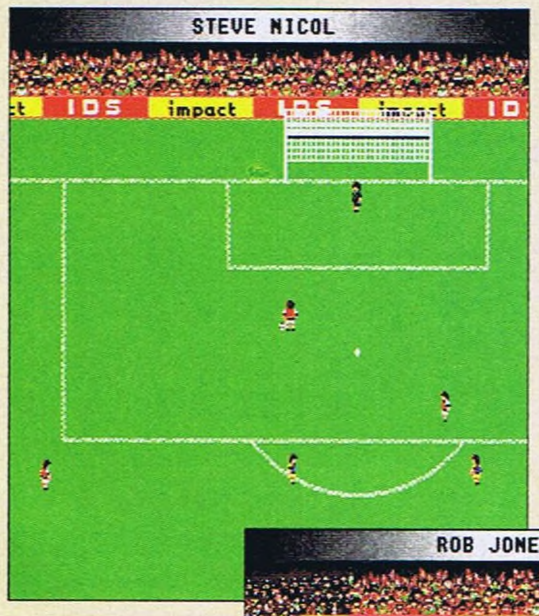
Music from the game comes courtesy of Greg Lovesy, whose work can also be heard on the soundtrack of *H.E.R.O.*. Impact boasts that it will be the best music ever heard on an STe. Written with the music program *ProTracker 2*, it uses 50kHz DMA sound.

One of the most important factors is gameplay and Impact has carefully considered this. Ralph doesn't want to include "aftertouch" and has incorporated a more realistic method of directing the ball. "I believe it is better to have a predetermined shot and know where it's going to go rather than taking the shot and then steering it in the direction you want – it's hardly realistic!", Ralph explains.

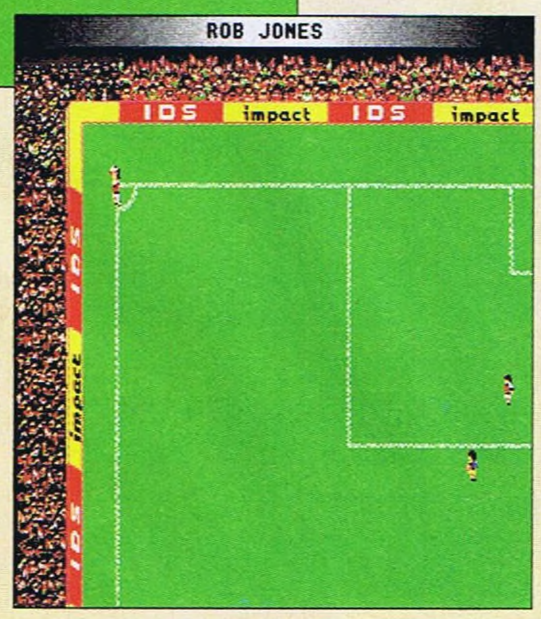
The game will include a comprehensive range of options with different pitch conditions to affect the play. You'll also be able to change all the players' names, hair and skin colour. *Team* uses all the sides from the USA '94 World Cup plus all current members of the English Premier League. The actual viewpoint for the match will use an overscan mode – no need for a radar – and all the action will be clearly shown.

In developing a football game, a lot of thought has to go into sprite size: will it be the much-loved miniatures of *Sensible Soccer* or the larger, animated ones in *Manchester United*? Impact has opted for a mixture of the two, using sprites that are 1.3 times larger than those in *Sensible Soccer*. All of the players will have their own individual skills, so providing a tactical element to the game. Control is by the usual joystick method but you can also play with a joypad or use the keyboard.

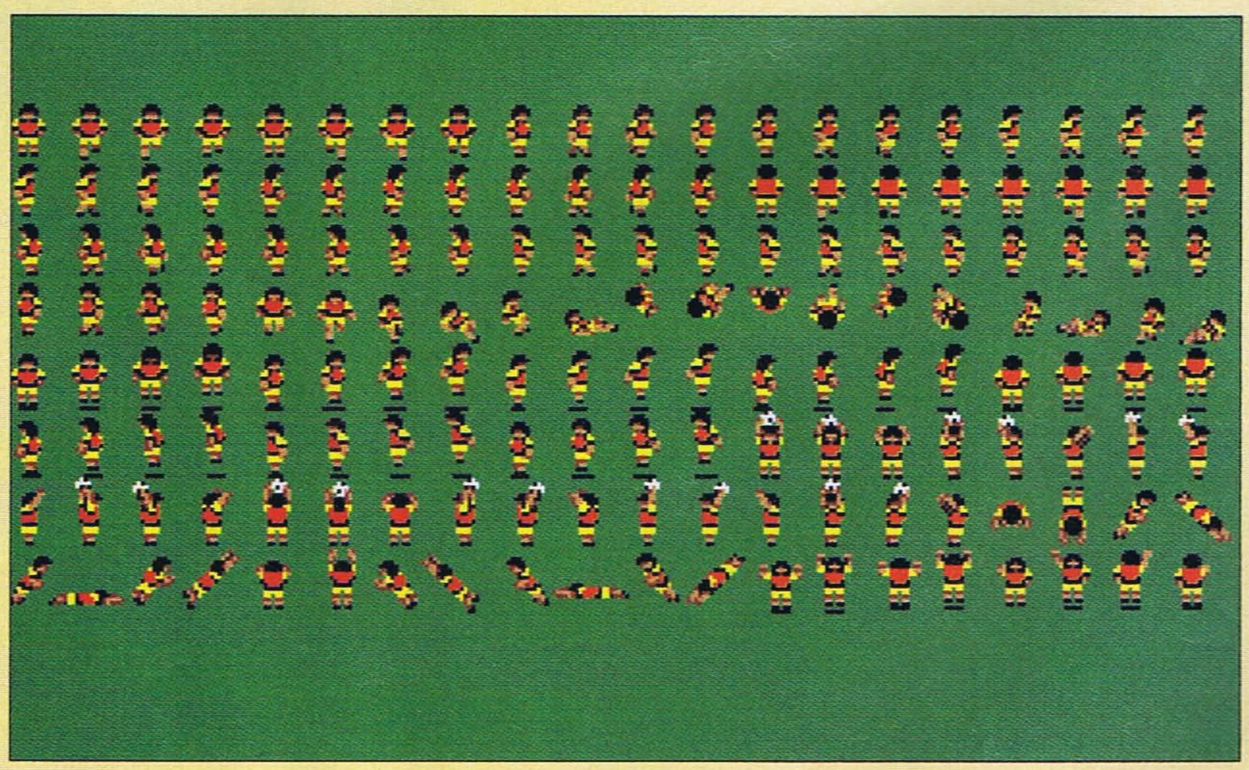
If all of the promised features are well implemented, and from what we've seen already this is highly likely, then we are promised one jaw-dropper of a game!



The ball acts under the forces of friction for that touch of added realism when it hits the top of the net!



Crowd animations will add a great deal to the match atmosphere.



A lot of attention has been paid to creating the solid and 3-D aspects of the sprites.

£1.25 a Disk

MERLIN

£1.25 a Disk

Commercial Software

OBSESSION

The amazing pinball game is HERE. Order it for only £24.95.

(1Meg STE or Falcon only)

Stark Raving Bonkers

This game features 8 games and at £8.99 is great value for all ages.

Plonker

This game has over 70 levels of fast paced gameplay. Teaches children to learn and digest information quickly.
£9.99

Reflex Action

This game features incredibly fast gameplay and quick reactions are a must.
£6.99

ZERO - 5

The new game from Caspian Software. This ultrasmooth 3-D shoot'em up is made for the STE and FALCON030. This game also has realistic 3D landscapes for you to fly through.

COTUS £7.99

A brilliant new adventure game which features a complete graphical interface and arcade battle sequences. Runs on any machine.

Rock and Roll Clams £14.95

This is a fast game with many levels. Guide Caspar the Clam through to discover stardom at the end of the game.

UVK 6.0 £12.95

The Ultimate Virus Killer is available from Merlin. Kills all but three of the ST Viruses and allows hard disks and floppy disks to be protected.

PD and Shareware

All disks are £1.25 each

MPD1895 Startrek ST^e only
Brilliant Startrek simulation from Erictronics.

MPD1684 Snowball Fight
Excellent snowball gamefeatures excellent sound samples. Great for a snowless Christmas.

ECD Essential Christmas Disk
Specially written for Christmas, featuring Christmas tunes, from the programming team behind Obsession.

MPD2144 STOS Patch
Upgrade your STOS programs to run on a machine with TOS 2.06 or above.

MPD1058 Fast Freddy
Help find Freddy's speed again.

MPD0921 Violence
Violence is extremely addictive and looks similar to Xenon 2.

MPD0344 Img Clipart
Over 70 images of everything and anything. Great for DTP.

MPD2099 German Translate
Translate your German documents into English with this 27,000 word translator.

MPD1129 Sargrotan
Probably the best PD Virus killer in the world. Destroy, Destroy.

Licenceware

Price as Shown

RE003 Conquest 2 £3.00
The new game from Ralph Effemey following on from Conquest. Conquer the lands to survive.

DCS Collections 1 - 4 £3.00
Dunces Cap's new licenceware range. Phone for further details.

Our phone number is:-
0831 700389 (mobile)

Please Send me the following:

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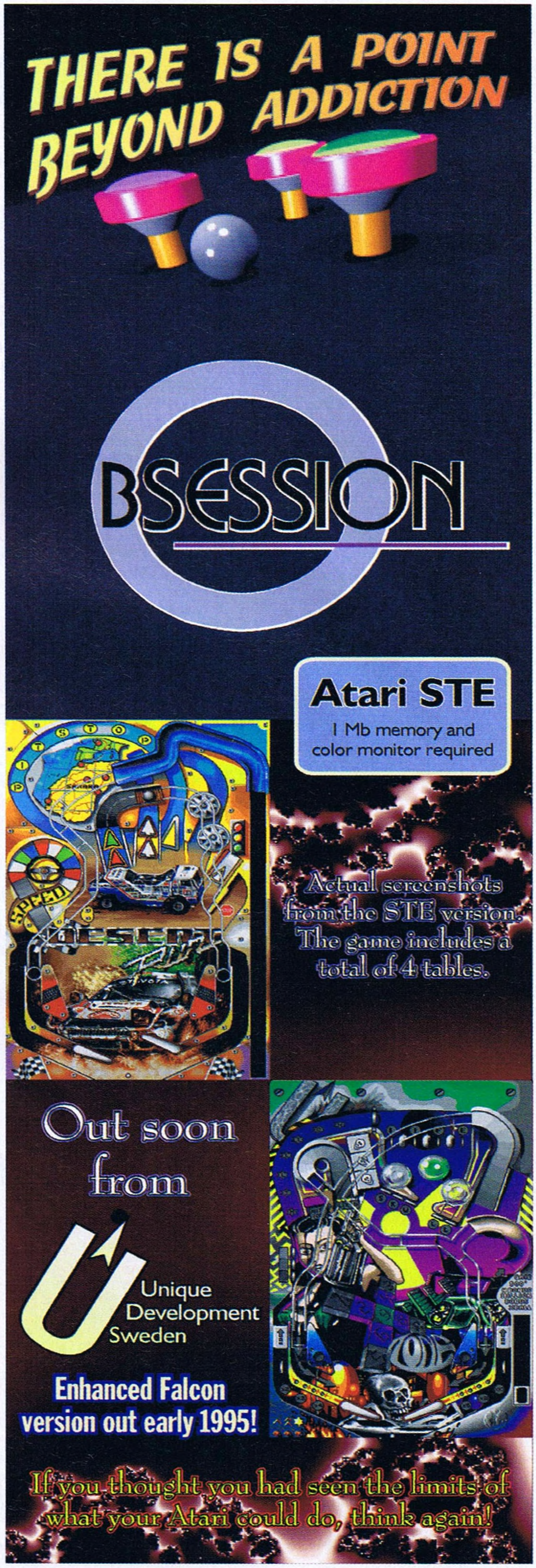
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TOTALLY OBSESSED!

Obsession could well be the best STe game ever! But don't take our word for it – play and find out...

If last month's preview of *Obsession* and the feature on Unique Development Sweden whet your appetite, then this month's exclusive cover disk demo will make you positively drool!

The team in Sweden has prepared a doozie of a demo, just for *ST Review* readers. This runs on any STe or Falcon with a colour monitor and 1Mb of RAM. If you're working with a hard drive, just transfer the complete *OBSESSION* folder.

WE HAVE LIFT OFF!

Our demo consists of one of the *Obsession* pinball tables without the final product's extra missions. You get three balls per game; after three games, *Obsession* quits to a "reminder" screen for the full game and then to the desktop. A simple double-click on the program has you up and flipping again!

To get started, double-click on *OBSESSED.PRG*. When the UDS logo appears, hit the <spacebar>. You'll probably want to play the game immediately rather than read the scrolling info, so hit the <spacebar> again, but check out the facts 'n' figures at a later date.

Keyboard controls couldn't be easier: the downward arrow recoils the spring to launch the ball, the two <shift> keys act as the flippers and the <spacebar> "nudges" the table. Take care though – too many nudges and *Obsession* tilts, losing the current ball in the process.

BUBBLING UNDER

The story-line goes something like this. Bobby Bubble has escaped from Captain Notpolite's secret dungeons and is now heading towards the Sitnalta archipelago to find hidden treasure courtesy of the Captain's treasure map.

The map leads to a strange and uninhabited island surrounded by the "Shark's Nest" coral reef.

Bobby dons his diving gear and heads into the warm, but deadly, water. However, Captain Notpolite is watching him from his stealth submarine 137 and, through your performance, Bobby either finds the treasure or ends up as a shark snack!

A look at our annotated pic will give you some clues on where to aim the ball.

As for the full game, you'll have to wait for next month's review to find out just how good it is...

RAMPING IT UP



The Aquatic Adventure table consists of a number of different ramps and passages...

1 On the left side is the **Deep** ramp, leading to a spring at the bottom left of the table. A visit to this ramp makes Bobby ascend deeper into the coral reef and gives you 50,000 bonus points. Visiting it more often gives you the chance to activate Kickback, gain 2,000,000 points and be rewarded with a safe or extra ball.

2 If you manage to spell **D**, **I**, **V** and **E**, you have the chance to increase your bonus multiplier corresponding to the lights at the bottom – **x2**, **x3** and so on. Shooting the ball into the left passage, where an arrow with "IB" is flashing, increases your bonus. When a Bonus Multiplier is lit, you receive the multiplied bonus after the ball is lost.

3 The Starfish ball trap gives random awards from 25,000 points to an extra ball. Light up **S**, **E** and **A** to increase your chances of a big bonus.

4 Light up **P**, **E**, **A**, **R** and **L** in the seashell to get to the Million Hunt, where you can gain three or, on a second occasion, six million points! Each letter gives you 100,000 points.

5 When lighting up **H** and **B** on the right side of the table, you get a chance to activate **Hold Bonus** which means that the current Bonus Multiplier remains intact after the ball is lost.

Finally, a few tips:

- **When you launch a ball, aim for the flashing S, E or A to get a "skill shot". Then flip the ball up the right passage for a possible 2,000,000 point bonus!**
- **If a ball looks like it's going to drop between the two flippers, let it bounce back off the bumper behind them.**
- **If a ball passes straight through the table without being "flippered", you get the chance to "shoot again".**

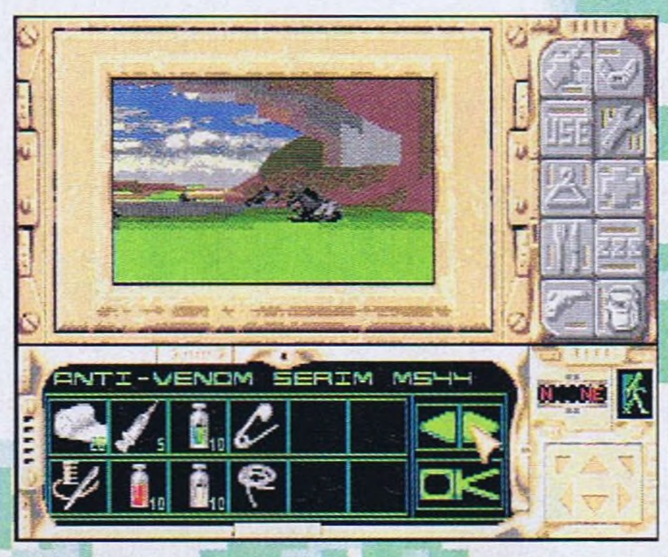
BIG SCORE

Fancy letting your friends know your best high score? Then drop *ST Review* a line and we'll print the top ten!

On a planet many eons away, Tina Hackett exercises her survival skills in Silmarils' latest blockbuster...

Every so often a game comes along that really is a breath of fresh air, something so original that it even makes the most cynical of games-players sit up and take notice.

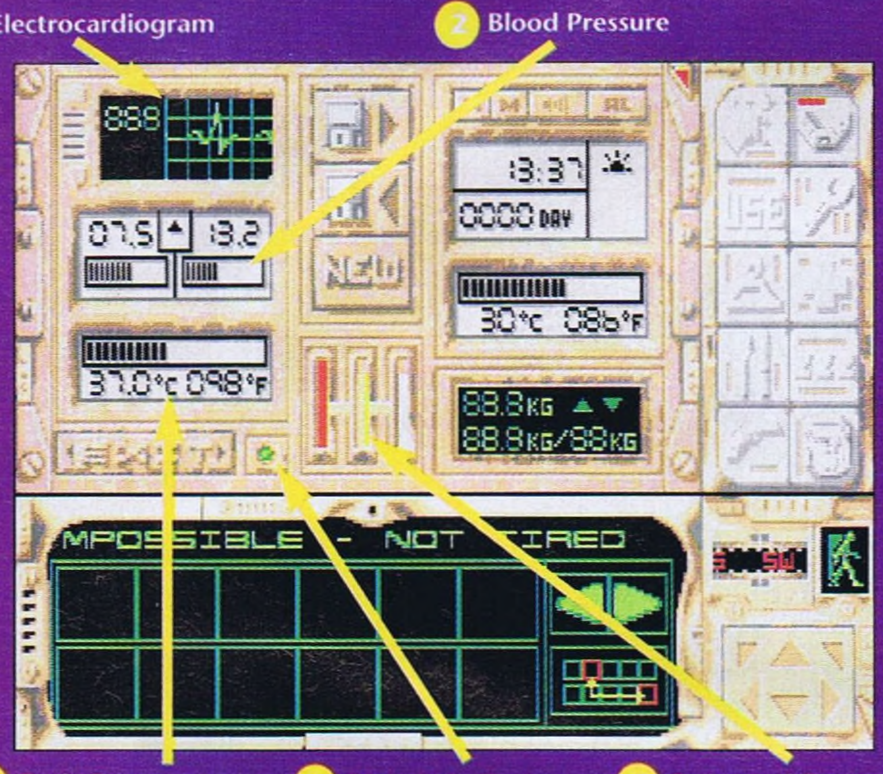
Robinson's Requiem is just such a game – in fact, I've had to drag myself away from the computer to write this review! And that's only because I've broken my arm, gone down with food poisoning and eventually died of dehydration. Well, perhaps I'd better explain...



Search the ruins of your ship for useful equipment.

ROBINSON'S

OPEN SESAME!



You are well advised to keep checking your personal computer while you are travelling around. Called the "Sesame", it is worn on the abdomen and is shockproof and waterproof to 100m – very useful for wandering around a hostile planet!

1 **This is your Electrocardiogram which displays the number of beats per minute. If you have a fever and your temperature is up by one degree, say, then it will raise the heart rate by 18 beats.**

2 **Keep a check on your blood pressure. This can drop if you are short of water or tired, for example, and you may faint.**

3 **Body temperature. Watch this carefully. The normal average is 37.0°C. Try to keep your temperature constant and avoid sunstroke by making a hat out of leaves. Beware of icy water!**

4 **Malaria indicator: Green – healthy subject; Orange – presence of a virus; Red – danger. The symptoms are intermittent bouts of fever causing violent trembling but it can be treated with quinine.**

5 **Estimated resources: blood, energy and water. On average, three litres of water is lost a day but as much as 12 litres in heat or with exercise. You should also eat more if you have lost a lot of blood.**

CONVINCING PLOT

It all started just under 200 years into the future ago (*do what? Ed*) when I was a young, naïve Robinson candidate. Having been recruited from one of the best military academies, after extensive training, I was placed on various missions to explore unknown planets. After these explorations, my crew members and I were promised a golden retirement on earth.

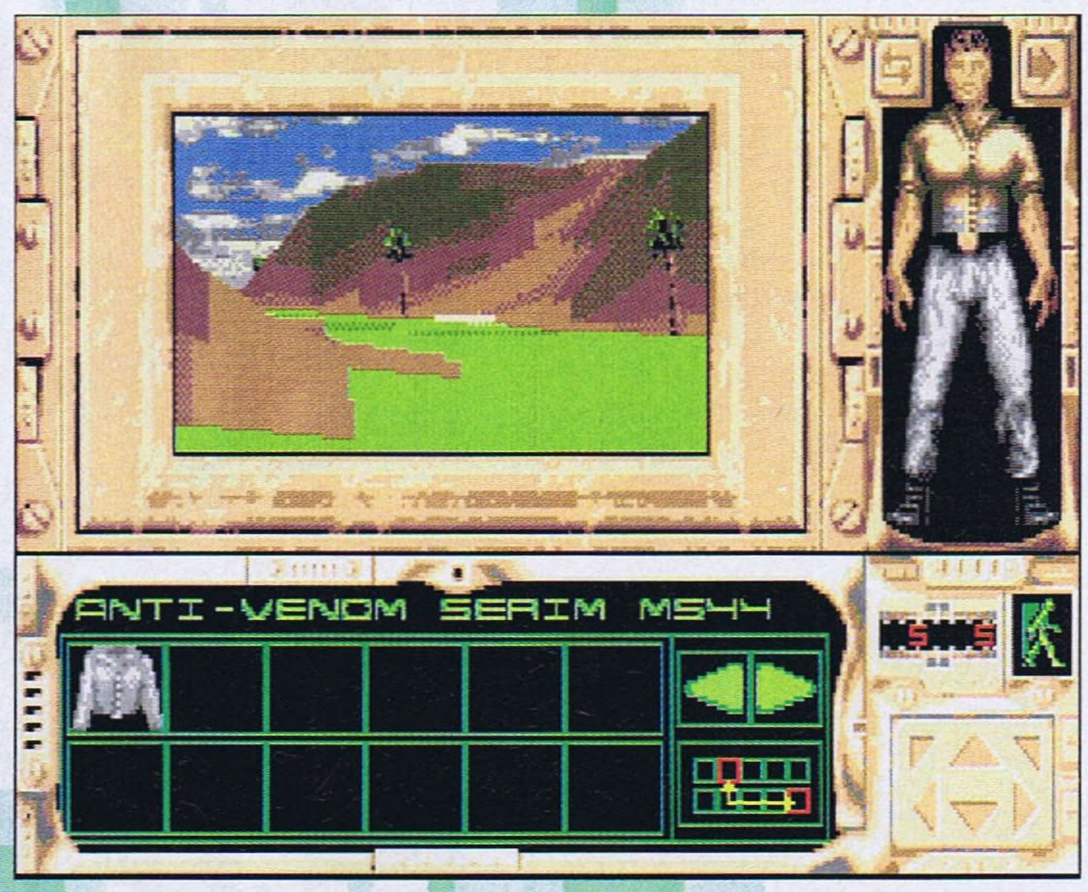
However, I found out the shocking truth just before my last mission on the planet Zarathustra. The Secret Intelligence agency have chosen to banish us because we may have come into contact with unknown viruses on our travels. They've sent us to a planet with magnetic shields around it and have made the ship crash. We are now in a hostile environment and must learn to survive.

Oh sorry, I seem to be getting off the track here but I am finding it rather hard to adjust to normality. You see, *Robinson's Requiem* is one of those games that really does take you over. As you've probably realised, this is a survival game and you need to draw upon all your resources (which

KEY FACTS

Product:
Robinson's Requiem
Company:
Daze Marketing
Contact:
071-372 7435
Price:
£29.99

SYSTEM
Minimum Memory:
1Mb
Resolution:
Low
Computer:
ST/STe



Keep your body temperature constant by wearing the appropriate clothing.

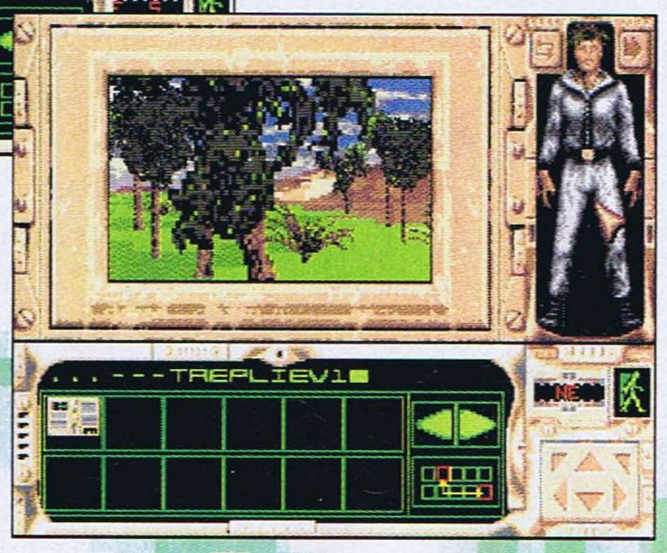


It's kill or be killed! Other inhabitants can provide you with handy objects.



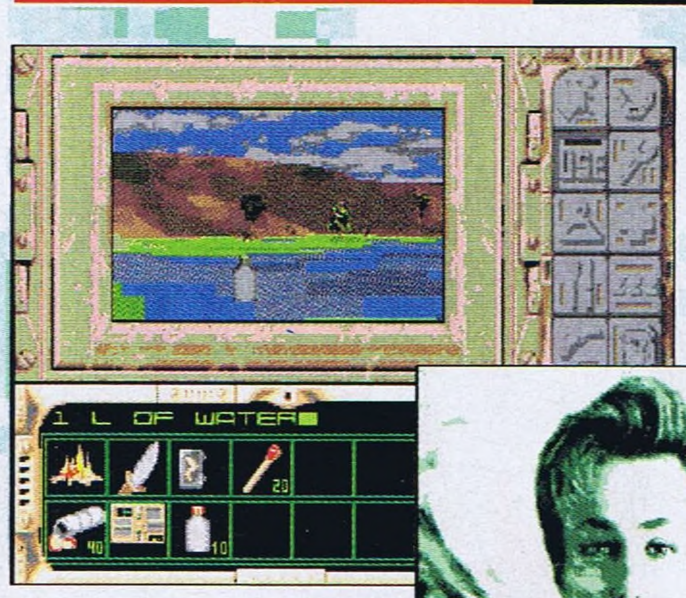
Think carefully about how to use items from your inventory on the scenery.

REQUIEM



Despite the excellent gameplay, the graphics look rather unclear close-up.

GAME PLAY



Don't be tempted to drink the water without sterilising it first!



Strange messages from your comrades interrupt your dreams.

are rather limited at first) to survive. The game has a great deal of depth so, before you read on, if you're the type who prefers a quick, relaxing platformer or frustration-letting shoot-'em-up then avoid this the plague – a rather appropriate pun! And another word of warning – it is rather slow to play.

But despite this, you tend to get totally hooked once you start playing. For instance, you may be wandering around the jungle terrain with nothing much happening when suddenly you come across a fellow crew member.

But remembering that it is every man for himself, you need to kill him and take certain items from him. Yes, I know it sounds a bit sick but it's all about survival of the fittest and it is *only* a game after all – and a lot of fun at that!

DROP-DEAD FEATURES!

You need to use all your expert knowledge, especially in matters of health, to check your own fitness. Your personal computer tells you whether you are at maximum health or if you're about to drop dead from hypothermia, gangrene or malaria.

Yes, it may sound like an exotic episode of *The Young Doctors* but this is real, hard-hitting stuff. One minute you're exploring the land, watching your footing in case you fall and break some bones, while the next you realise your temperature is above average. You panic and wonder what medicine should you take? After a rummage through your medical kit and a quick peek at the AWE (Alien World Exploration) student booklet, you find a match for the symptoms and dig out the necessaries to cure your fever. A close call... this time! You also need to use your knowledge of which foods can be found in these hostile surroundings and remember that water is not the fresh mountain spring variety either – grab the disinfection tablets. Animals have to be hunted down for food while their hides make good clothing.

Survival is not the only goal. An escape plan is essential if you want to leave this planet and get back to good ol' earth. And as if all the natural hazards of the planet aren't enough to contend with, you meet all kinds of other life forms intent on making your life difficult. The half dinosaur/half hybrid monsters, for example, can be killed for food.

VERDICT

So that's the game, and very good it is too! Unlike most adventure games, *Robinson's Requiem* is all about realism. And not just the plot – because it is a survival sim, it accurately recreates how the body reacts to various conditions. This might be quite boring on its own, but it works brilliantly when combined with the tense, adventure style.

However, the game is not perfect by any means. It plays rather slowly, even if you change the level of detail and screen size to the minimum. This can become rather tedious and you also seem to be walking around at a snail's pace quite a lot of the time – tough going on the patience.

Graphically, it is a bit of a let-down. It creates the setting but tends to be more representative than realistic; objects tend to look rather pixelated, especially when you need a close-up view.

On the plus side, the sound effects and music are very good. Strange animals can be heard flying overhead creating that all-important feeling of tension and the other planetary noises create the atmosphere brilliantly. The dramatic death sequence, for example, is accompanied by a haunting track that enhances the game, as does the introduction.

Despite the few grumbles, this is a good 'un. It combines a good mixture of different elements and requires many different skills. You'll need logical thinking to keep your health in check, tactical skills for hunting and eventually escaping the planet, ability in combat and, most of all, good, old-fashioned, common-sense! A highly original game.

SUMMARY

GOOD POINTS:

Huge game that will last for ages

Nail-bitingly addictive with action that keeps you glued to the screen

A complete breath of fresh air!

BAD POINTS:

Rather too slow to play at times

Graphics are rather pixelated

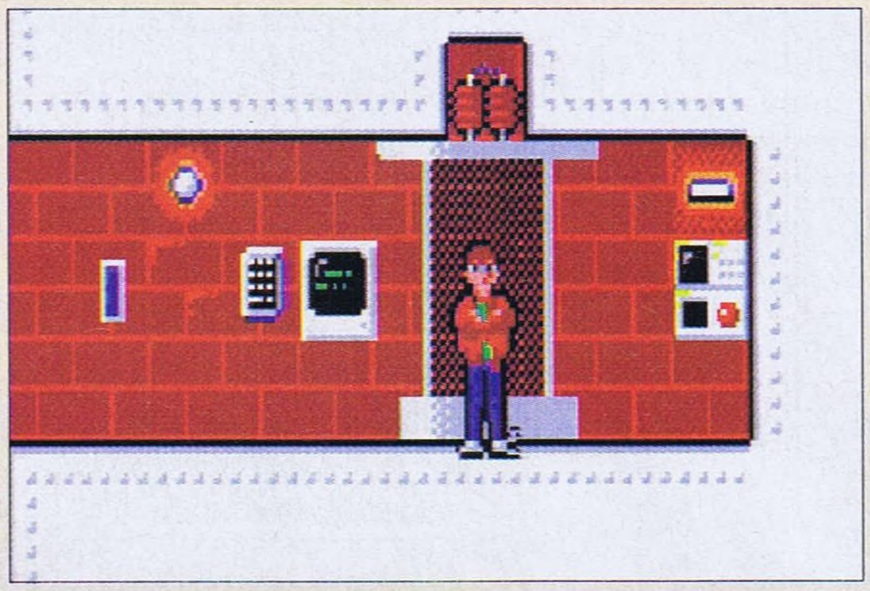
FINAL WORD:

"At last! A totally original game that draws you in completely. Highly addictive."

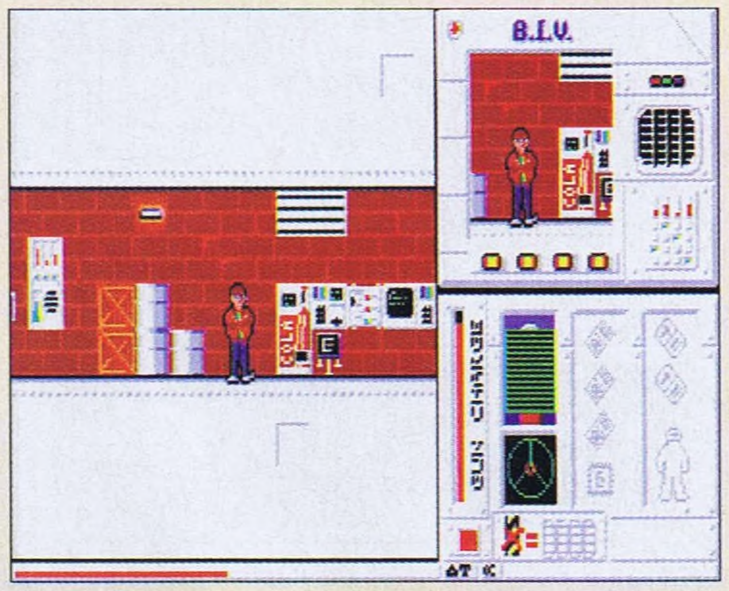
PERFORMANCE

GRAPHICS	9
SOUND	10
VFM	11
PLAYABILITY	11

OVERALL **84%**



Travel through the different levels via the Teleportation machine.



Time for some refreshment – being a hero isn't as easy as it looks!

GAME PLAY

H.E.R.O.

Human Extraction & Rescue Operation – it may sound slightly painful but it's the latest game from IDS. Tina Hackett grabs her Indiana Jones gear and goes adventuring for the day...

Yes, it's revival of the indies at the moment with many of the new games coming from independent developers. *H.E.R.O.* from IDS is one such game. Programmed in *STOS* by Tony Greenwood, it may only look like an average PD offering but looks aren't everything. It's playability that matters so it's time to dig deep and take a look at whether the £9.95 price tag is on the button or not.

ANYONE FOR COFFEE?

For starters, what you get for your money is an in-depth story line that makes an episode of Taggart look simple! Apparently some clumsy chappy spills his coffee and nearly brings an end to life as we know it – in which case most of us would have destroyed the world ten times over! But unfortunately in this instance, the poor chap works in a Bio-Nuclear Complex and spills his Nescafé all over a control panel. This sets off all sorts of reactions, resulting in "Major system warping" and "program slippages". As you can imagine, the proverbial waste really has hit the fan.

The sum result is the bizarre situation of radiation pools all over the place, trapped personnel cowering in stationery cupboards and the destruct sequence activated. Enter superhero: Batman, Superman and Danger Mouse all rolled into one. Actually, it's Jim McKenzie who has a good knowledge of the complex's domes and tunnels – well, it's more practical than big biceps and dodgy blue tights, I suppose!

KEY FACTS

Product:
H.E.R.O.

Company:
IDS

Contact:
0121-459 4340

Price:
£9.95

SYSTEM

Minimum Memory:
1Mb

Resolution:
Low

Computer:
ST/STe

FASHION SENSE

Now this is where you come in, dressed in appropriate hero clobber of blue slacks, brown anorak and green T-shirt – who cares about good taste when you're trying to be a Superguy! You have to save the universe from imminent destruction.

To do this, you roam the levels searching for human survivors, micro chips and teleporter suits and cards in order to complete each stage. And if you don't succeed within the specified time limit, then tough – the corridor becomes filled with radioactive isotopes! At the same time you also have to avoid the game's nasties such as mad robots, laser beams, toxic pools and deadly droids.



The robots prove frustrating as they move at their own will.

OUT OF CONTROL

The joystick control of your character enables you to carry out a wide range of moves. <Up> allows you to climb a wall, jump, look in cabinets and the

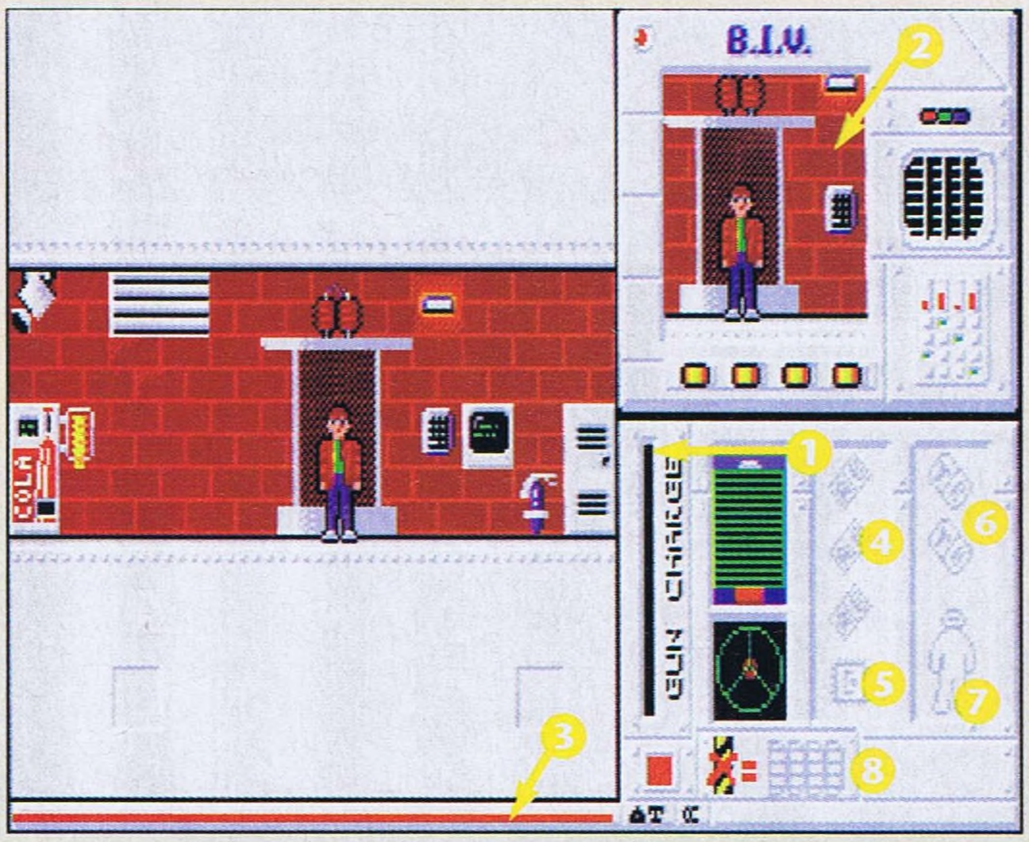


They think it's all over... it definitely is now!



Leap across the deadly pits of lava to avoid being turned into a skeleton.

THE NAME OF THE GAME



1. **Gun Charge Display – don't forget to recharge your gun power each time.**
2. **Display Screen – keep an eye on vital info.**
3. **Time Limit Displayer – complete the levels in the allocated time or you're history!**
4. **Teleporter Card Displayer – you'll need a card to escape on the teleporters to another area.**
5. **Micro Chip Displayer – three chips per level are needed to destroy the faulty systems.**
6. **Door Pass Card Displayer – some doors are Barrier Doors and you'll need a card to go through them. If you run out, you'll have to use explosives to destroy 'em.**
7. **Teleport Suit Displayer – find this to give to your rescued prisoners. They can then teleport to a safe zone.**
8. **Explosives Displayer – find them and use them to blow up doors.**

like, while <Right> and <Fire> let you run right and do a long jump.

This is all very well in theory but in practice – pah! A lot of the time you find yourself fighting with the controls and carrying out moves you had no intention of, resulting in death far too often. Another point that had me tearing my hair out was the dodgy collision detector: half of the time you can almost run through a laser beam, for example, while merely standing near such a beam on occasions results in instant obliteration.

The "Save game" option removes some of the frustration, but the way the obstacles are designed doesn't match up with the controls' response. For instance, when you have to turn around and crouch down quickly to shoot at robots, you simply can't get the joystick to do what you want in time. Highly annoying!

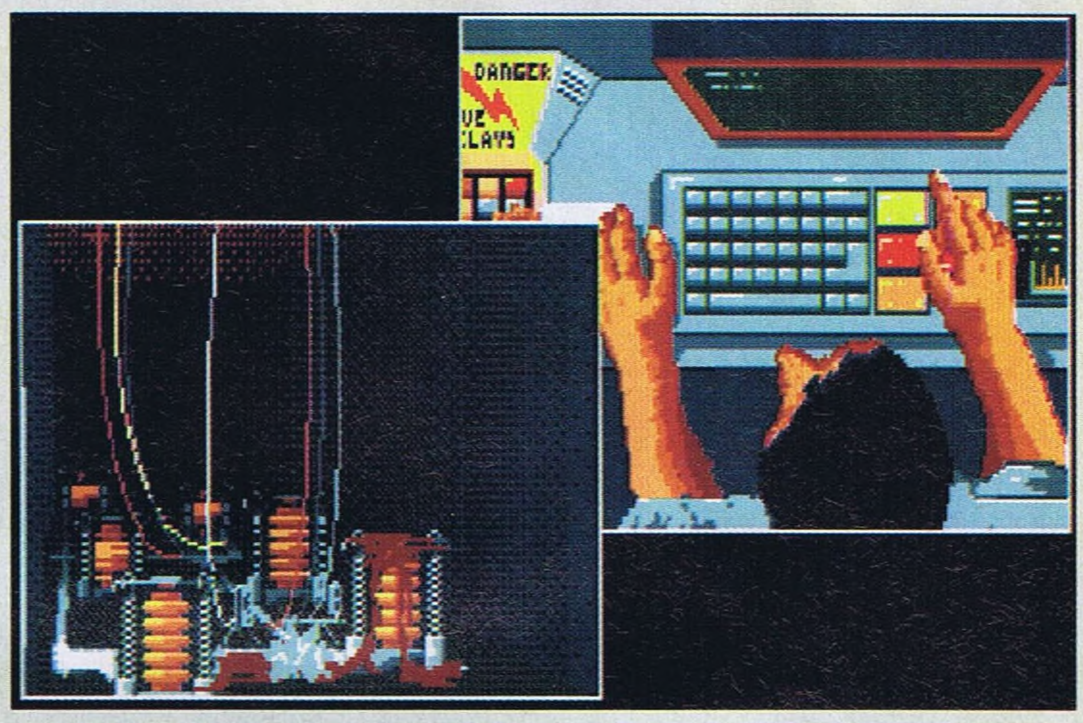
Graphics, as you can see from the screenshots, are rather basic but the simple design makes for a fairly effective cartoony style. The levels are scattered with computer terminals, teleporters and other scientific-looking objects which create a good setting for the complex. However, there are just too many chunks of white border on the screen, making for a very small playing area.

The main sprite has been quite nicely animated – leave him standing for too long and he mops his brow or grabs a can of cola! The animation also works well when he climbs up walls or crawls across the floor. When the character dies, there is a different animation sequence depending on how he met his fate. Walk into a laser and it's fry-up time, a rather humorous touch. The introduction sequence presents the story well and sets up the right atmosphere for the game.

VERDICT

The intro tune is excellent but what follows sound-wise is rather disappointing. Although the sound effects are appropriate to the actions, they start to grate after a while – recharging the laser gun produces a horrible whine akin to a demented Trimphone!

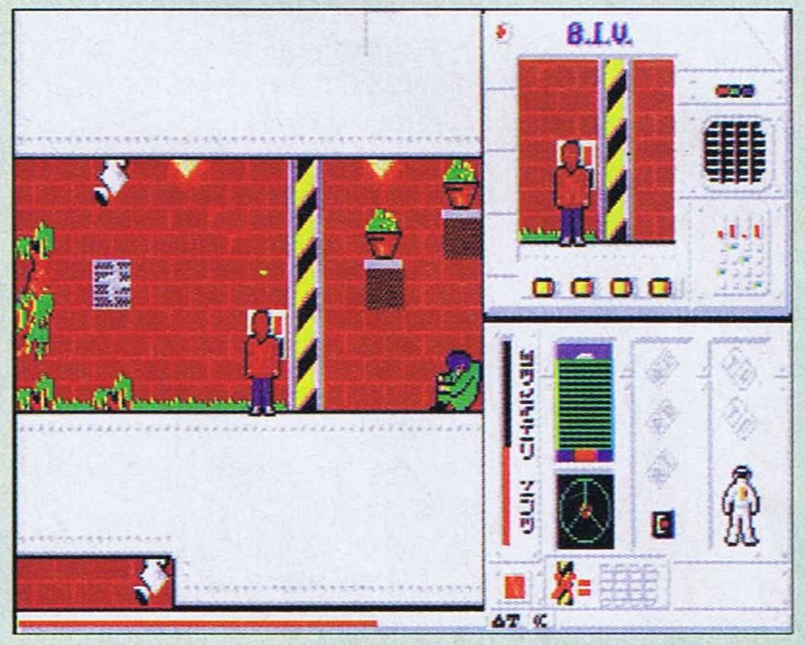
For the price, it's not a bad little offering. There are plenty of different objectives to keep the gameplay varied, and many taxing obstacles to provide longevity, but the game is let down heavily by an awkward control system. And for even the most able gamers, some of the obstacles will prove just too tricky to get round.



The intro screens work well in setting up the game's scenario.



Destruction initiated – you only have a limited amount of time to complete your mission.



You must rescue the trapped personnel by finding them a Teleportation suit.

SUMMARY

GOOD POINTS:
Good mixture of puzzles and arcade action

Nice main sprite animation

In-depth plot gives decent game objective

BAD POINTS:
Joystick controls are awkward and unresponsive

Graphics are rather basic

Gameplay becomes too frustrating

FINAL WORD:
"H.E.R.O. has some good qualities but there are just too many frustrating factors to make it that 'must-have' title."

PERFORMANCE

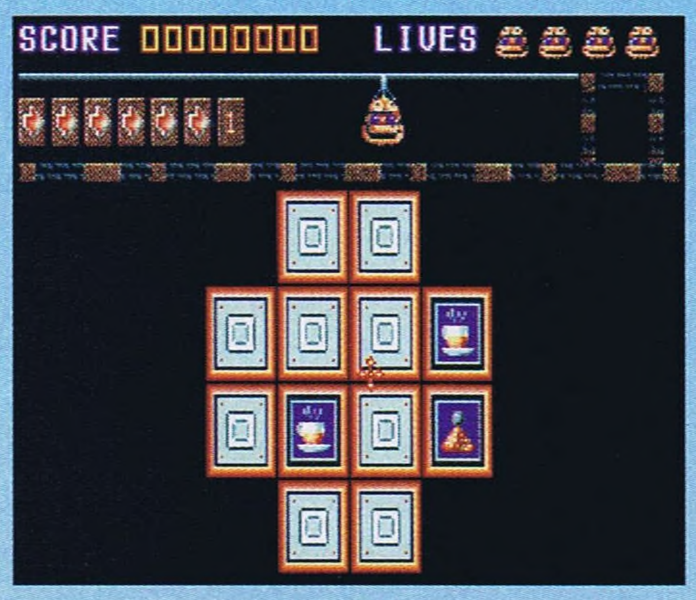
GRAPHICS	7
SOUND	7
VFM	8
PLAYABILITY	7

OVERALL 65%

WHO'S A PLONKER!

Tina Hackett digs out her dunce's cap to play the latest puzzler from Dave Cobbledick...

VFM



The first game starts off in an easy fashion with a straight-forward matching game.

Renowned for quirky puzzler games such as *Stark Raving Bonkers* and *Reflex Action*, Dave Cobbledick has just released another offering of much the same nature. *Plonker* is really a very simple puzzler – but very addictive!

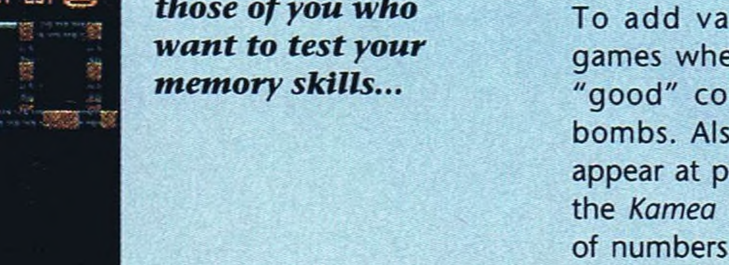
In fact, on loading up the game in the office this morning, it drew quite an audience within seconds. The bizarre sound effects drew my curious colleagues followed by helpful suggestions (*not... Ed*) as to how the puzzles could be solved.

MATCH OF THE DAY

Let me explain. *Plonker* appears to be the kind of matching game you played when you were a nipper. But it's more than that. Each round consists of a number of squares and, depending on the level, you have to remember what objects are hidden behind the squares. While at first it's just a case of matching the shapes (by a process of elimination) and remembering which two symbols are where in a certain number of turns, the game gets harder as you go through the levels.

In all there are five different skill levels, varying from "Speed Fill 'em Up", a fast round where you have to fill up the empty squares with different symbols with no like symbols next to each other, to an "Opposites Attract" round where symbols that are opposite to each other have to be matched.

This is more difficult than it sounds! It's not just a case of guesswork: you have to think logically and tap into the old memory bank! And life can get even more hectic when you have to look out for bomb squares that instantly remove half of your score. The timed rounds are guaranteed to raise your blood pressure as you race against the clock to complete the round. However, this can also be quite frustrating as the squares don't seem to open fast enough and it's quite chaotic trying to get the mouse on to the right square in time!



The timed rounds really do raise the blood pressure!



Plonker is ideal for those of you who want to test your memory skills...

BONUS ROUNDS

To add variety, there are bonus games where you need to find the "good" collectibles and avoid the bombs. Also, two different puzzles appear at points in the game. One is the *Kamea Of Mars*, based on a grid of numbers where the lines must be made to add up to 65, and *Colour Turn* where you have to memorise a sequence of colours and fill up the square in a certain order.

All this is overseen by a Plonker called Arthur who, at every opportunity, adds his appropriate comments on your progress. This is everything from "Well done, level cleared." to an annoyingly gloating laugh whenever you lose a life! But these samples add a great sense of humour to what could have been a rather dull game. The quiz show host-style animations also add a nice touch.

VERDICT

The graphics are adequate enough for this sort of thing, with a clearly set out screen, and the tunes create the corny game show atmosphere. With such a light-hearted approach, *Plonker* is certainly more than just your average puzzler.

Does it all justify the £9.99 price tag? I'm not totally convinced due to the lack of real variation and the existence of various shareware alternatives, admittedly of an inferior quality. But while you may find this quite tedious if you're not into puzzlers, it does have one very dangerous quality – it is highly addictive.

Each time you play, it has you believing that with one more round you'll have it cracked.

PERFORMANCE

GRAPHICS	8
SOUND	8
VFM	8
PLAYABILITY	8

OVERALL 75%

KEY FACTS

Product: Plonker

Company: Dunce's Cap Software

Contact: 01670 850629 (after 6.30pm weekdays)

Price: £9.99

SYSTEM

Minimum Memory: 1Mb

Resolution: Low

Computer: ST/STe

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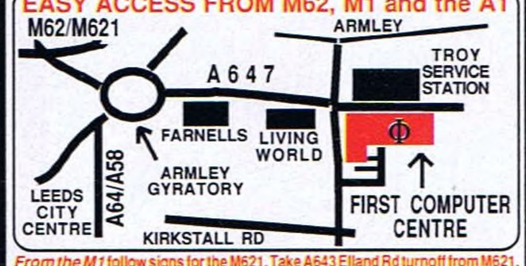
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POWER PD • DISK NO: PWR 475 • 99P • MEMORY: 1MB • STE ONLY • SHAREWARE • FALCON-COMPATIBLE

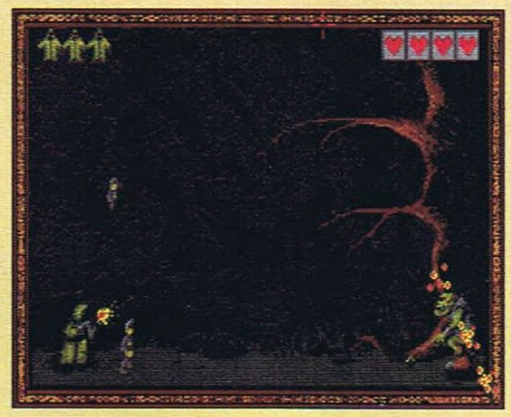
IN BRIEF: Maybe it's just the time of the year but we have another completely bizarre offering this month in *Tomtar*. Yes, you'll love this one – you play a gun-toting Grim Reaper that is trying to kill small, furry creatures called Tomtars! While the concept is rather basic, it has been carried out so well that the game really does work, especially with the long, animated intro that gets you into the mood and adds to the comical feel of the game.

Standing on the left side of the screen, the baddies come at you from the right and it's blast-'em time with your mouse-driven machine-gun. Direct the cross-hair at the desired baddie and click the left button, blasting the little critter into oblivion!



The storyboard intro has a great cartoony style with nice graphics and an atmospheric tune.

Yes, it's great fun. You get that lovely warm feeling, the same one as when you nuke all your Lemmings and, quite frankly, I like playing the bad guy and there's nothing better than a story where the good guys don't always win.



Oh yes, I've always wanted to play an evil Grim Reaper-type character!

The game looks great too with a comical Grim Reaper character and tonnes of the little creatures invading the screen. The backdrop is well created with outlines of skulls swirling together in a sinister cloud.

Sound effects are sparse but the machine gun sound samples are authentic and really provide that all-important blasting feel.

ST REVIEW COMMENT: "Although there isn't much variety here, for a quick burst of blast'-em-up action you can't go far wrong, especially with this bargain disk that also contains the excellent sequel to *Pacman on E's*."

★★★★

PACMAN ON E'S 2

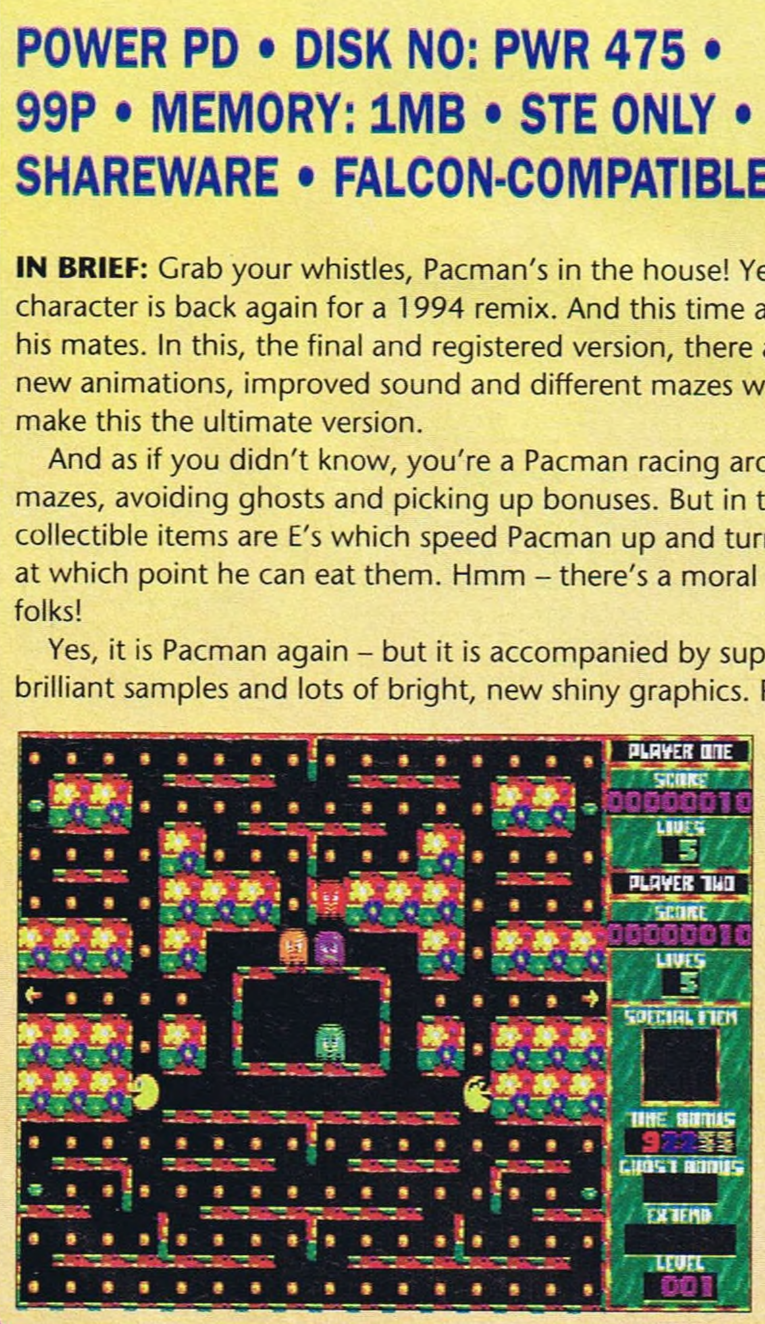
POWER PD • DISK NO: PWR 475 • 99P • MEMORY: 1MB • STE ONLY • SHAREWARE • FALCON-COMPATIBLE

BUDGET BUY

IN BRIEF: Grab your whistles, Pacman's in the house! Yes, that drug-induced character is back again for a 1994 remix. And this time around he's brought his mates. In this, the final and registered version, there are now 100 levels, new animations, improved sound and different mazes which promise to make this the ultimate version.

And as if you didn't know, you're a Pacman racing around a screen of mazes, avoiding ghosts and picking up bonuses. But in this case, the collectible items are E's which speed Pacman up and turn the ghosts blue, at which point he can eat them. Hmm – there's a moral in there somewhere folks!

Yes, it is Pacman again – but it is accompanied by superb rave tunes, brilliant samples and lots of bright, new shiny graphics. For instance, pick up a speed token and you are treated to a Roadrunner, "Neep, Neep!" sample. Or collect an "E" and a deep, booming voice reinforces this with "Eeee!".



Two Pacs can play at the same time – work as a team or as arch rivals!

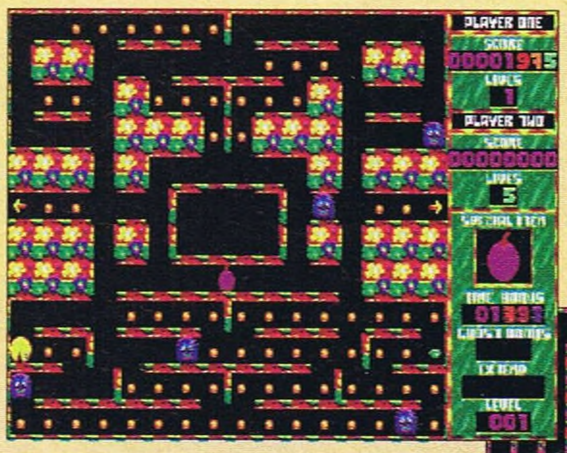
The many different mazes have been redesigned for a taxing challenge as well as providing a bit of logical thought. There are a number of different collectibles such as dancing strawberries, peeling bananas and question marks. Some are good, some bad so you have to remember which is which or in the case of the question mark, you'll have to get it first to find out!

The source code for this game can be bought for £5 from Stuart Innes, 49 Brownhill Rd, Caithness, Scotland KW14 7NL.

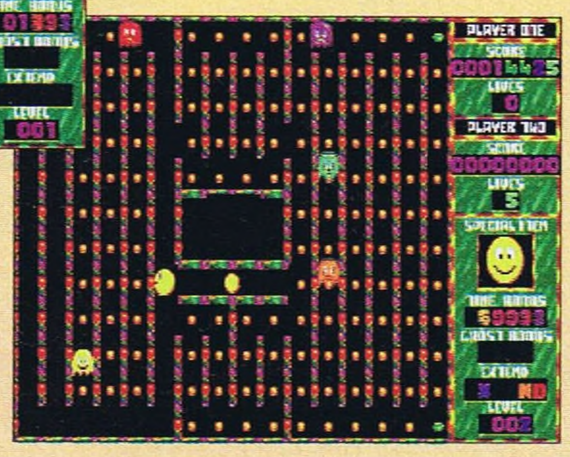
ST REVIEW COMMENT: "Two player mode adds to the fun and two chums can play simultaneously either as team mates or arch enemies, trying to kill each other. One of the Pacs is the usual yellow dot while the other is another yellow dot with dishy cool specs added so you'll know who's who!

"This really is the ultimate Pacman game and, with all the new additions, superb addictive gameplay, and brilliant tunes, I'd recommend it to everyone."

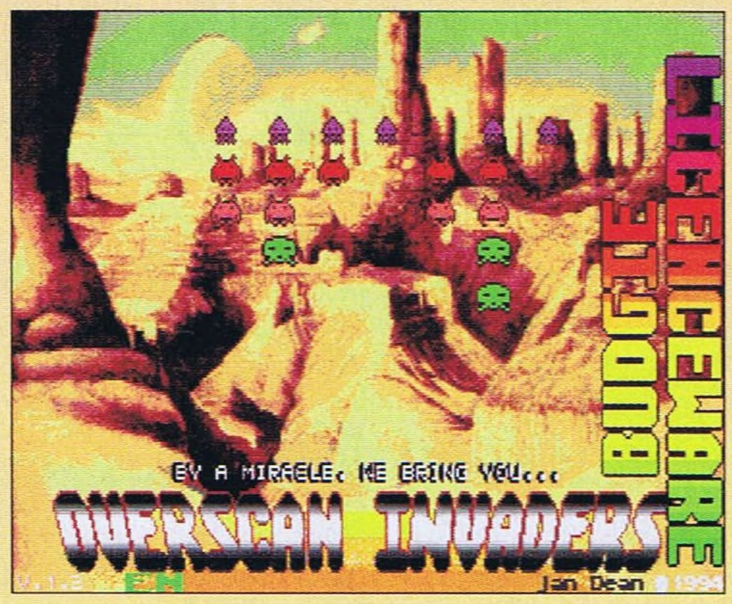
★★★★★



The final version of Pacman on E's contains tonnes of taxing new mazes.



Great graphics and brilliant tunes make this a fine variation on the Pacman theme.



Overscan Invaders is a well-executed version of a much used, but still popular, theme.

OVERSCAN INVADERS

FLOPPYSHOP • DISK NO: BUD 4666C • £2.75 • MEMORY: 0.5MB • LICENCEWARE

IN BRIEF: Another well-executed but basic concept: *Overscan Invaders* is a variation on the much-used *Invaders* formula. There are plenty of aliens to blast from your base, making for some exciting and addictive gameplay.

Although the idea dates back to the beginning of computer-time, this version is enhanced with 32-colour graphics and four-channel digital sound. Control is via the keyboard which makes life a lot easier as you can only move left and right, fire.

The music is up to today's standards and the pace of the tune changes with the speed of the game: when the aliens are speeding at you, the music changes to a tense, countdown tune which makes for end-of-level nail-biting to say the least!



Sprites are well designed, making the screens look very attractive.

ST REVIEW COMMENT: "Although this is an old concept, it is one of those timeless classics that can be used over and over again. This version is very well presented with sharp, clear graphics, appropriate music and great gameplay. It still remains as addictive and appealing as ever."

★★★

DEMON

FLOPPYSHOP • DISK NO: FWG.08C • £3.00 • MEMORY: 1MB • LICENCEWARE • FALCON-COMPATIBLE

IN BRIEF: 3-D Dungeons and Dragons-style games are hardly a rarity these days and they have to be something really special to make the grade. At first glance, *Demon* appears to have plenty going for it and a good deal to offer the discerning adventurer with lots of baddies to kill, spells to cast and items to collect.

Unfortunately, the presentation lets it down – and big time. The main screen is divided into various different sections (the inventory, spells and the like) but the actual 3-D playing area is minuscule – you simply can't see enough of what's going on.

The sound effects don't fare much better either and yes, while it has been created in a rather "tongue in cheek" style, the effects, such as whining ghosts, really do start to grate on the nerves.

ST REVIEW COMMENT: "The graphics and main screen lose their appeal very quickly and although the programmers have tried hard to create a decent atmosphere, the overall setting looks terribly dingy and unappealing.

"The game takes far too long to get started and a lot of the time you end up wandering around with nothing much happening. All in all, it's not a particularly original idea and has very little to offer gamers."

●



At first you find yourself captured in a gloomy prison cell. Time to plan your escape...

SKATE TRIBE

ASCIILUM PDL • DISK NO: GAM 74 • £1.25 • MEMORY: 0.5MB • PUBLIC DOMAIN

IN BRIEF: Remember the craze that swept the nation not so long ago? No, I'm not talking about Deely Boppers, (remember that desirable fashion accessory?) but skateboarding. There wasn't a day that went by without a simple shopping trip to the local Newsagents being hindered, nay, made possibly life-threatening, by a bunch of youths who had decided to set up weird and wonderful ramps via your front door step in order to compete in their skating championships!

But luckily this pastime has made its way onto your local ST to make life safer for unsuspecting Grannies and shop owners everywhere. *Skate Tribe* allows you to play a hip, ace skateboarder who shows his prowess through a busy street full of obstacles.

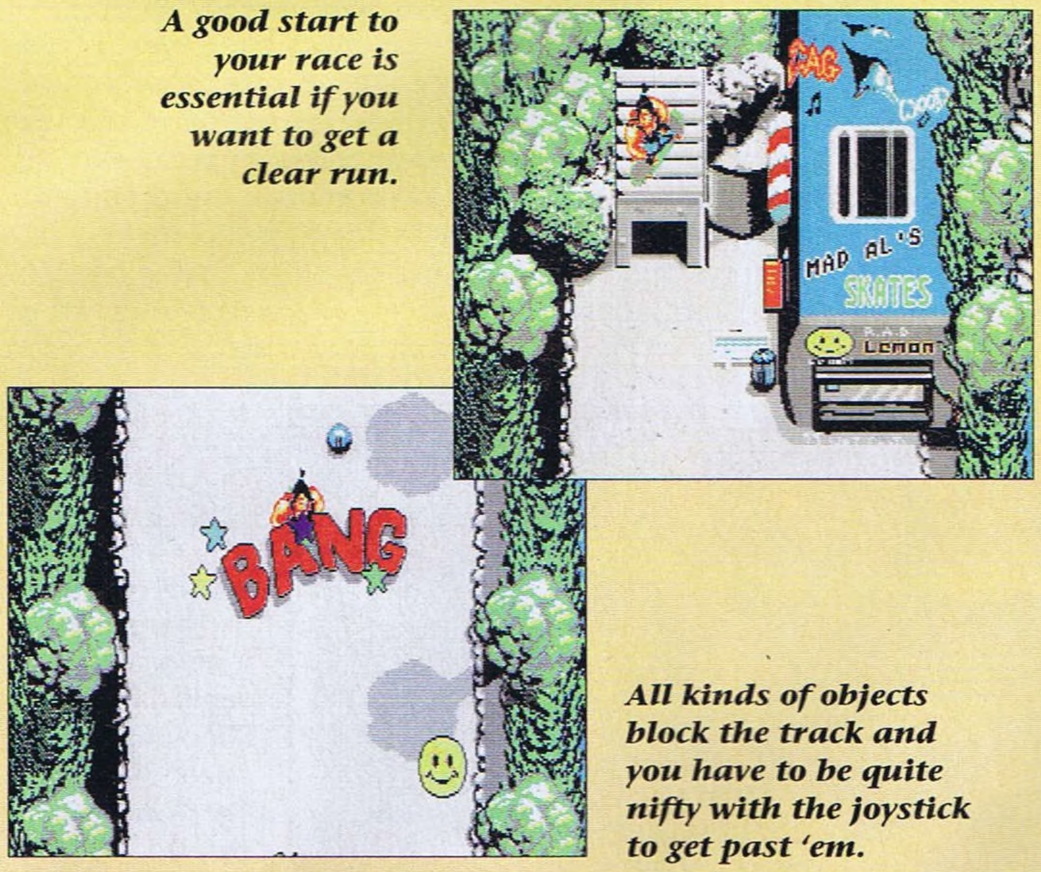
Using the joystick, you guide him around potholes, trees and the usual, everyday obstacles that make life difficult for yer average skateboarder...

ST REVIEW COMMENT: "This is quite a fun game but is hindered by an awkward control system. In a nutshell, it's quite difficult to master and gain proper control over.

"The actual idea for the game is a good one, so makes this quite a reasonable offering. Pacier music and more responsive controls would benefit this title – and possibly have it reaching up towards the four or five-star mark..."

★★

A good start to your race is essential if you want to get a clear run.



All kinds of objects block the track and you have to be quite nifty with the joystick to get past 'em.

ALIEN INFESTATION!

In the month that Alien vs Predator hits the streets, Nial Grimes struggles through the hype to bring you the latest Jaguar news from around the globe...

It's here! After what seems like an eternal wait, Atari has finally pushed *Alien vs Predator* through the doors. Stocks will be a little limited in the UK for the moment, but the situation is sure to be remedied as the Christmas push begins.

The game itself has had an enthusiastic reception from most quarters, and it certainly looks like being a system seller, if only for the gorgeous texture-mapped graphics. You can read exactly what we thought of the finished product in this very issue...

JAGGED EDGE NEWS

VIRTUA SHOCKER!

As news of Sega's investment in Atari went to press last month, more details of the deal began to emerge. Not only has Atari's share price rocketed by over 22%, but it also seems as though we can look forward to Jaguar conversions of some Sega arcade games. The *Virtua* series is almost certainly included, but thankfully Sonic is a 64-bit nightmare that we won't have to endure!

In fact, there is evidence to suggest that Atari has been working on a *Virtua Fighters* clone for some time. What's more, one of the designers of the original Sega title is said to be in on the Jaguar project (currently code-named "Fight for Life") and one or two Jag driving sims in the pipeline bear more than a passing resemblance to *Virtua Racing* already!

Meanwhile, Atari has revised its original estimate for Jaguar sales this year – it's down from 300,000 to 200,000. With over 100,000 units already out there, and vast amounts of quality software piling up for a Christmas launch, they might well reach that goal. Atari president Sam Tramiel is on record as saying that at least some of the cash injection will be used in marketing the Jaguar towards the end of '94.



Doom on the Jaguar is said to have better shading than the PC version pictured here.



Christmas promises to be an exciting time for Jaguar owners with Williams working on several coin-op conversions, including Double Dragon 5.



Jag Doom promises better designed levels than its PC counterpart, and a fair turn of speed!

JUST WILLIAMS

Veteran coin-op manufacturer Williams has been responsible for some of the most lethally-addictive arcade games ever produced. *Joust*, *Defender* and *Robotron* were all created by the company and Jaguar owners will soon be able to enjoy vastly updated versions of these very games on their system. Phrases like "immersive experience" and "compelling gameplay" are being bandied about already and when it comes to titles like *Defender*, you really want to believe them!

Jeff Minter is handling the *Defender* conversion personally (Yes, Yes, Yes!) and we are promised a game that retains all of the original's frenetic action. With *Tempest 200* available now and *Battlezone* well on the way to completion, it seems as though Atari is playing the nostalgia card quite strongly. Williams will also be publishing a range of games under its own label. *Double Dragon 5*, the classic beat-'em-up, and *Troy Aikman Football* are both pencilled in for a Christmas debut.

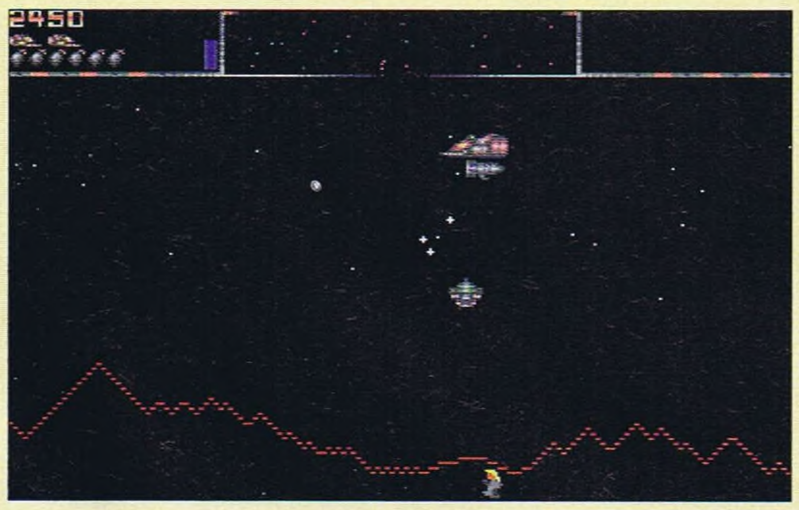
DOOM & GLOOM

Doom, id Software's shockingly atmospheric blast-'em-up, has to be one of the most eagerly awaited games for the Jaguar. Well, the wait is nearly at an end; the game is in the final testing phase and should be approaching release as you read this.

The production version is said to run at between fifteen and twenty frames per second (as opposed to *Alien vs Predator*'s 12) with a resolution of 160 by 180 pixels. This gives significantly less definition than the PC version, but the true colour graphics provide much finer shading and at the end of the day, you are not going to notice a great deal of difference.

The author describes the game's speed as being roughly equivalent to that of a mid-range 486 PC, but is quick to point out that it wasn't designed with the Jaguar in mind. From this we can conclude that if the Jag does take off, the sequel will feature a graphics engine more tuned to the 64-bit platform.

This month's news brings with it the distinct feeling that the long wait for "killer" Jaguar software is finally coming to an end. Sure, there are a couple of *Crescent Galaxys* on the way, but *Tempest 2000*s also seem to be arriving in strength...



Jeff Minter has somewhat of a pedigree when it comes to producing Defender clones, but the Jag outing should be definitive!



Virtua Racing, along with a number of other Sega titles, could be appearing on the Jaguar very soon...



Killed the guard, loads of health, but what's beyond this door?

... ah, just another guard – he's history dude!



JAGGED EDGE **GAME PLAY**

ENTER THE WOLF'S LAIR...

It's time to hit the bunkers – no, not the coal ones but Hitler's second World War hiding place. Graeme Rutt advances, pistol in hand...

"The club is smoky, figures ill-defined in the sultry lighting. You pull up to the bar and order a cold beer. A voice slides out of the dark, somewhere close. You turn and see the ideal figure of your dreams; perfect gender, height, looks. You speak, your mind afire with the possibilities inherent in this chance meeting. They speak. In minutes you're slipping out of the smoky haze, into the warmth of a cab."

Wolfenstein3D – the game that led to a million seller for ID Software in the form of *Doom*. This is the 3-D maze game that places you in the character of American, BJ Blazkowicz, the fearsome gore-machine, super-jock and all-round steroid-happy uber-mensch (*er, enough of the hyphens... Ed*). It's some time in the later stages of World War II and Hitler's evil war-machine is geared towards a scientific solution to the pesky problem of those incorrigible Allies.

Which is as good an excuse as any for a game dripping with Nazi stormtroopers, Gestapo officers, German Shepherds and the various results of horrific genetic experiments. All of which you, as BJ, have to blow away in quick succession. *W3D* is not a game of great strategy – if it moves blast it; if you can't, get a bigger gun.

JOBS FOR THE BOYS

There are six missions to smash through, each with a number of levels and an end-of-mission guardian. The number of levels per mission increases as you go through the game, as does the difficulty and the power of the guardian. Each level consists of a maze of corridors, rooms, doors and hidden panels. Strewn around the maze are a number of different object types including weapons, ammunition, health, keys and stolen Nazi gold.

Weaponry, ammunition and health are central to your well-being. You are always equipped with a pistol and your trusty – but useless – knife, but unless you find a sub-machine gun, and in later missions a chain-gun, you won't stand a chance. Topping up your health is a constant worry: you only have one life and it's very easy to get blown away very quickly. Luckily, Red Cross health packs are abundant and collecting treasure can even boost your health above the "top" level of 100%.

On the larger, more complex, levels it's easy to become almost totally lost. Thankfully you can flip into map mode at the press of a button, which brings up a scrollable screen detailing everywhere you've travelled.

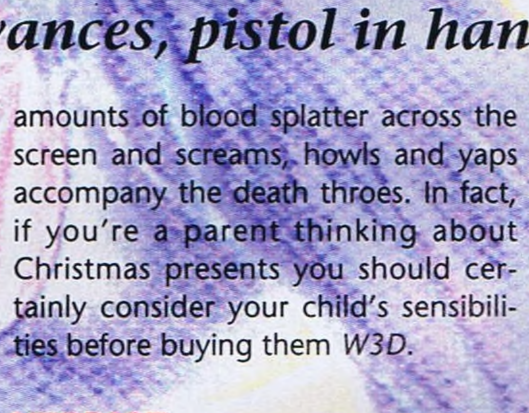
Wolfenstein3D isn't an overtly tactical game, so it lives or dies on its graphics, sound and blastibility. It wins in most of these areas, with one exception, and is by far and away the best version of *Wolfenstein* available on any platform. The graphics are very well drawn and when combined with the eerie (although not top quality) soundtrack, the bump of doors opening and closing around you and the semi-intelligent aspect of the adversaries, gives rise to a very atmospheric game. When you blow away the competition, satisfying amounts of blood splatter across the screen and screams, howls and yaps accompany the death throes. In fact, if you're a parent thinking about Christmas presents you should certainly consider your child's sensibilities before buying them *W3D*.

VERDICT

The main gripe is an insufficient number of different weapons and foes to fight against, but this is likely to be the case until games can intelligently create new types of object. Consequently, *Wolfenstein 3d* is a little on the uncomplicated side and is pretty easy to finish. I managed to complete it in seven days in "easy" mode – and it isn't the kind of game you're likely to want to play again in average or hard mode. In many ways, this game is analogous to a very pleasant, highly enjoyable one night stand.

So, if you want a technically able game with lots of atmosphere, a modicum of gore and one that doesn't require much thought, then maybe this is for you. If you're running on a limited budget and don't *have* to have every Jaguar game then you should await *Alien vs Predator* or *Doom*, both of which promise to have more weapons, enemies and better game-play than *W3D*.

"Morning. They've gone. Left sometime in the early dawn. A warm smile of remembrance twists your lips. But now it's over..."



Sod the treasure – I'm dead meat. I want my Mommy...

SUMMARY

GOOD POINTS:
Great Graphics
Good Atmosphere

BAD POINTS:
Limited weapons and foes
Too easy to complete

FINAL WORD:
"A game with excellent heritage and a lot of atmosphere, but perhaps too limited for the modern game player."

FACTS 'N' FIGURES

Product:
Wolfenstein 3D

Price:
£49.99

Players:
1

Graphics:

Sound:

Value For Money:

Playability:

OVERALL
68%



The interactive movie has arrived! Pulse rifle in hand, Nial Grimes grabs a fresh pair of socks, and enters the ultra-tense world of Alien vs Predator. Sigourney Weaver? Nowhere...



Aliens come charging out of the darkness as you try to reload your gun – in vain...

INTO THE GAME PLAY

FACTS 'N' FIGURES

Product:
Alien vs Predator

Price:
£59.99

Players:
1

Graphics:
★★★★★★★★★★

Sound:
★★★★★★★★★★

Value For Money:
★★★★★★★★★★

Playability:
★★★★★★★★★★

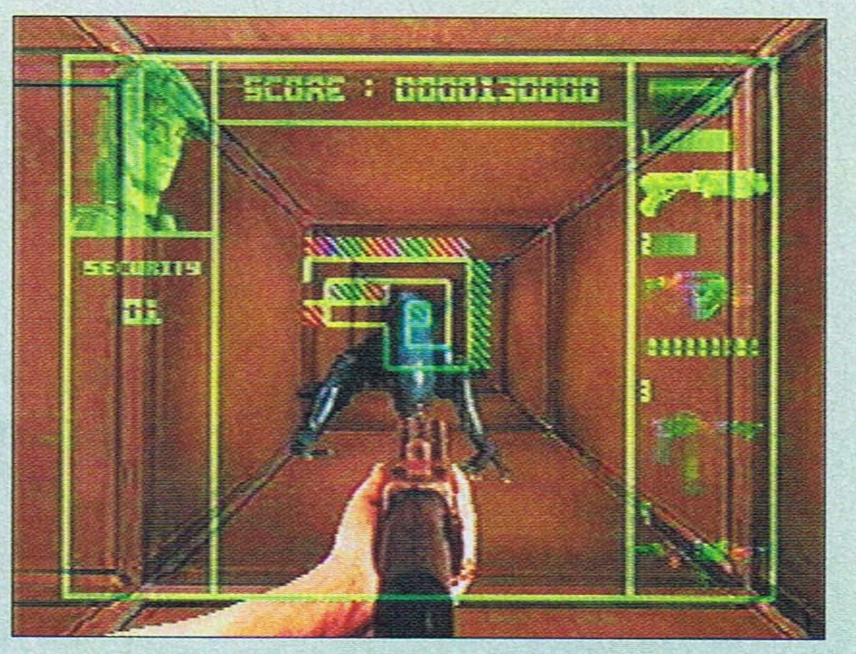
OVERALL

84%

The stasis pod opens with a loud hiss. Your custodial sentence is over, but there's something wrong – fellow crewmen lie motionless on the floor and the whole ship is sealed off, the result of a condition red emergency. So begins your quest to rid Training Base Golgotha of an alien infestation and rescue the surviving members of the crew. You start the game with nothing more than a shotgun (discovered soon after emerging from stasis) and a good supply of rounds – extra energy and ammunition can be collected along the way.

The sound effects add to the tension of the mission. The faint hum of the ship's engines fills the air, and all of the samples have been taken from the *Aliens* film. When you let off a few rounds with the pulse rifle, it sounds like a pulse rifle, and the same goes for every other effect used. Occasionally, you hear the eerie clicking of the Alien Queen – enough to strike terror into the heart of this rough 'n' ready journalist.

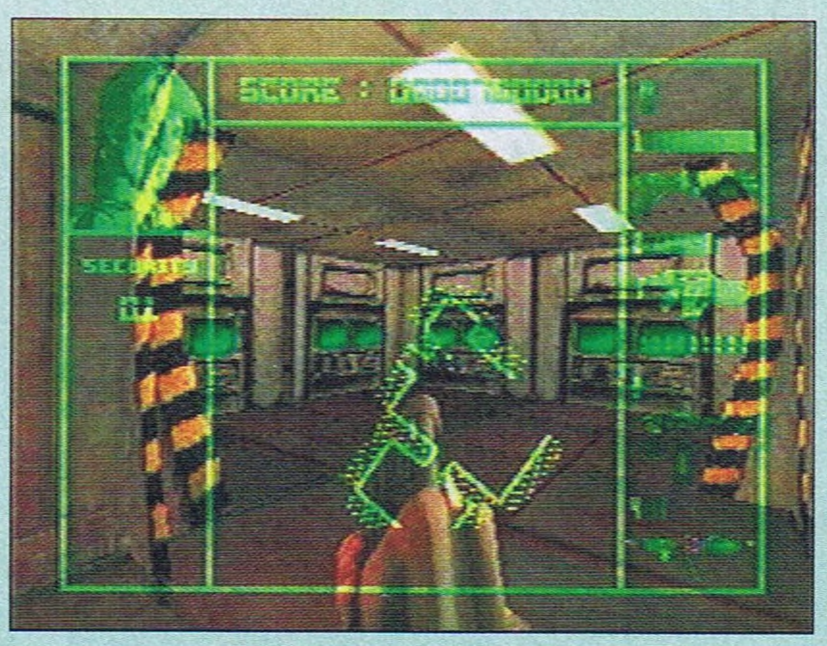
But the audio delights pale in comparison to the graphics. This game is represented through the most amazing 3-D system you have ever seen in your life. The picture spreads into all four corners of the monitor and a semi-transparent control panel has been laid over the top. Aliens come charging out of the darkness as you stumble backwards letting off shots as fast as possible. What's more, the whole thing moves very smoothly and only when a monster jumps you from behind do you wish that there was a bit more urgency about the screen updates!



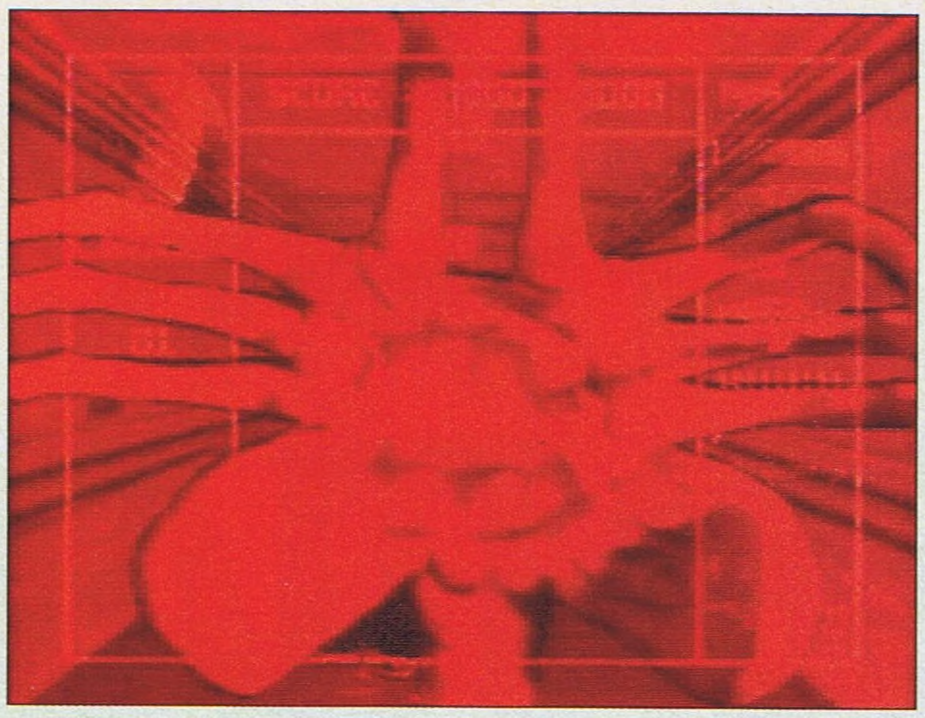
Some floors can be accessed only through the air-ducts – bumping into an alien down here is no fun!



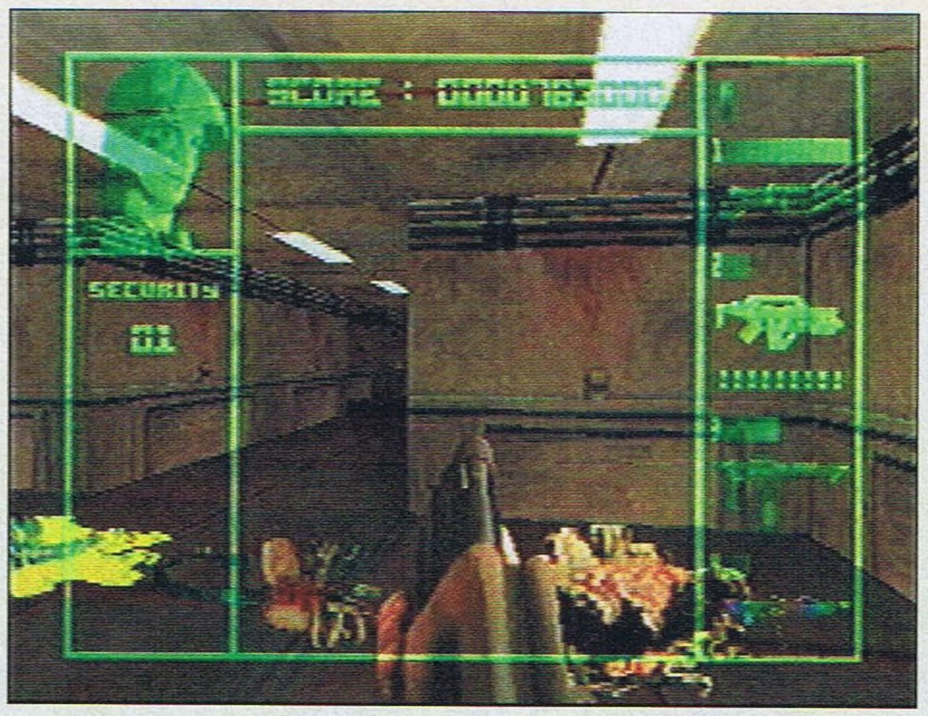
The Alien faces the tricky task of cocooning its enemies and rescuing the Queen from the clutches of the Predator.



Details of the plot emerge as you begin to use the computer panels – it ain't pretty!



Bad breath is no defence against this little sucker – a spot of joypad wiggling is called for!



The pulse rifle makes short work of alien pods, but you'll need a level 1 security pass to find it.

FIRE



Pest control, '90s style! Aliens explode into a pool of acid that zaps your energy.

JAGGED EDGE

ANY OBJECTIONS?

The temptation is to view *AvP* as *Doom* with aliens – an out and out shoot-'em-up – but there's a lot more to the game than that. In fact, it's best described as an arcade adventure, with the emphasis firmly on exploration. Although aliens are waiting behind almost every door you open, the main challenge is finding security passes and making your way to new floors in the complex. Many of these can only be reached via air-ducts and you need to make good use of the mapping system to get very far. In common with the control panel, maps are laid over the centre of the screen and you soon get used to reading them while dealing with any aliens that insist on getting in the way – yeah, bug soup!

Although the manual gives a general idea of the plot, it's up to you to search for the details. Computer panels are built in to most areas of the station and are packed with reports on the nature of the aliens and schematics. In line with the movie atmosphere, there are no levels as such, but it is very progressive in slowly letting you get at the harder obstacles. Alien eggs aren't encountered until the training maze for example, and the same goes for the bulk of the bad guys. It feels like a totally interactive experience and yet in reality you are being led on a subtly planned route through the game.

That's not to say that the gameplay is perfect. In the film, the aliens' acid blood ate through the floor and yet in *AvP* it forms a pool and robs you of energy should you walk over it. Admittedly the effect is small, but it's still annoying considering that the easiest place to zap the rotters is in a doorway. However, this minor inconvenience is counterbalanced by numerous nice touches in the presentation – aliens try to claw their way into airducts as you move through them and the marine comes up with all sorts of comments as new weapons are discovered. Add to that the horribly satisfying squelching noise that accompanies a splattered alien egg and you get some idea of the degree of atmosphere that *AvP* creates. In fact, it's not long before you find yourself muttering quotes from the film under your breath – very sad indeed!

ADDED EXTRAS

The colonial marine game is obviously the main attraction of *AvP*, but there are also two other scenarios to play: an Alien or the Predator. Although the same impressive graphics engine is used for both, they somehow don't measure up in terms of atmosphere or gameplay and besides, who wants to play a bad guy anyway?

The Alien outing fares reasonably well, the overall aim being to rescue the Queen. Speed is on your side, but you only have a claw, tail and telescopic teeth to fend off the enemy. Extra lives can be obtained by cocooning the unsuspecting marines, but that's far easier said than done – in fact, the whole affair is very, very difficult indeed. The Predator, on the other hand, has the equally tricky task of collecting the Alien Queen's skull. Unfortunately that's the only goal and it all gets boring rather quickly.

It's an arcade adventure without very much adventure and there's just not enough to keep you occupied for any length of time. It's as though the programmers wanted to make a game based on the *Aliens* films and just slotted Predator in at the last minute.

Of course, the big question when it comes to any title costing nearly sixty quid is longevity – just how much enjoyment is it going to provide? Well, the scenario is huge and it's the sort of game that you will play until you complete it (sleep or no sleep). Judging by my own progress, I can't see that taking much more than a month, but the satisfaction level is high – it's a real buzz to discover a new floor, or gain a level 5 security pass.

There are still the Alien and Predator games to think about after that, but they don't have the same "grab you by the throat" (*or some other part of the human anatomy... Ed*) appeal.

DAMN AND BLAST

Alien vs Predator is based on films aimed at an adult audience and the gameplay does reflect that to a degree. Having said that, it's the atmosphere and tension that make it such a scary experience. The strategical marine gameplay is also likely to appeal to more mature players. Atari has given *AvP* an "advisory" 13 certificate, but both of the *Aliens* films were rated 15 or above – draw your own conclusions!

Alien vs Predator is a landmark title. The marine section has a strong plot – this is one of the most atmospheric games ever released...

SUMMARY

GOOD POINTS:
Drop-dead looks
Movie-style atmosphere
Strong gameplay

BAD POINTS:
Alien acid
The abysmal Predator game

FINAL WORD:
"Alien vs Predator creates movie atmosphere like no other game – it's the first of a new generation."

ST Review would like to extend its thanks to:

Daniel Department
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Windsor
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...for the kind loan of all games in _Jagged Edge_.

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to 2.5Mb *£59*

STFM Upgrade
to 4Mb *£99*

UPGRADING AN STE

A 520 STe is usually supplied with two 256Kb 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 256Kb SIMMs. In order to upgrade you need to replace these to give either 2 or 4 megabytes of memory.

UPGRADING AN STFM

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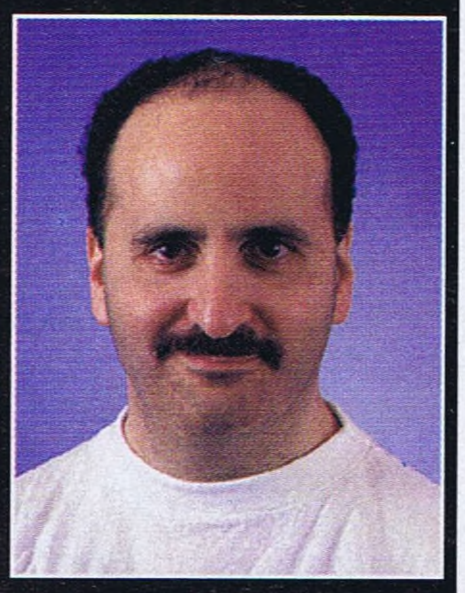
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One trackball won by a street. I ended up buying it and still use it with my Falcon and ST. Unfortunately, the Newcastle-based company vanished off the face of the Earth, so my buying advice was of little consequence – until I saw the identical trackball being sold at a computer show by Gasteiner. This is the one on offer in these pages.

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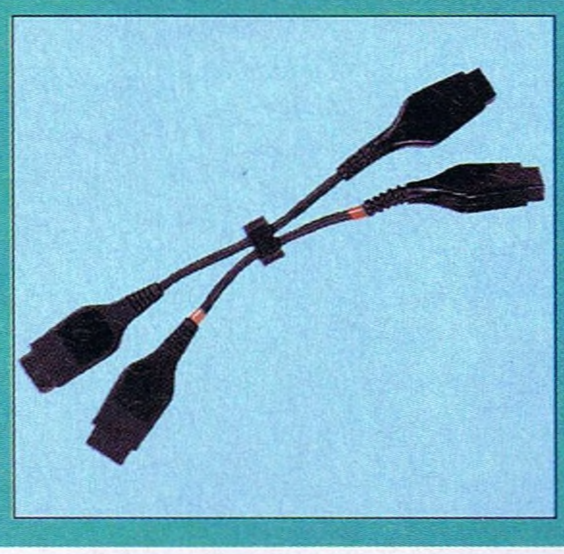
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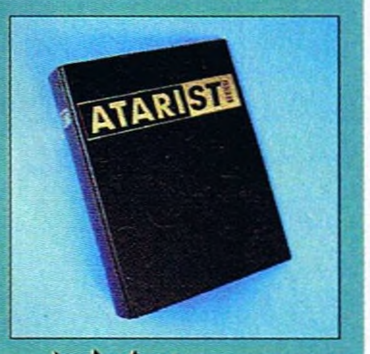
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Do you use your ST for art, graphics, DTP or music? Then you really should consider our state-of-the-art, 162 dpi trackball, as used by the editor of this magazine. Movement from one side of the screen to the other is effortless and cursor motion is rapid and smooth, far more so than with a mouse. The feel is superb thanks to the high quality micro switches under the buttons. There's also a third button that acts as a locking left button – ideal for continuous scrolling, painting or line drawing!

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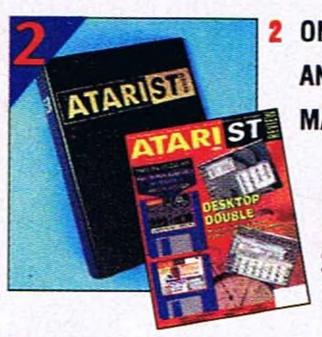
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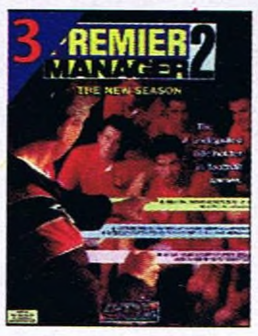
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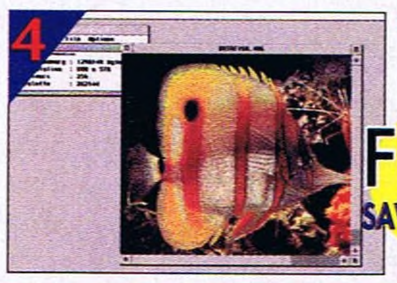
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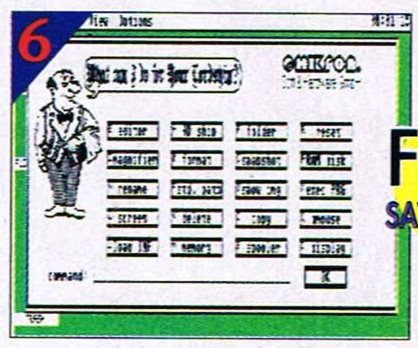
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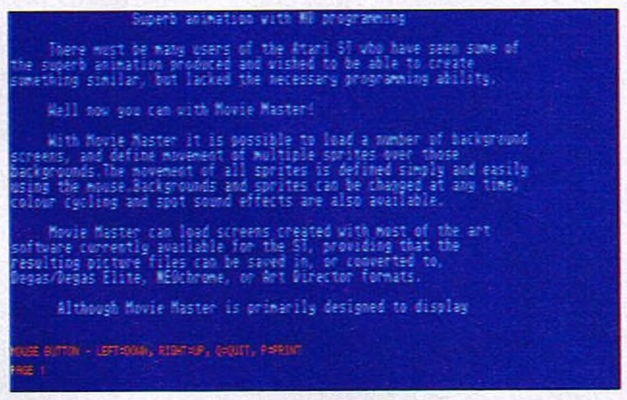
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Choosing the right sprite, screen or sound is made easy thanks to an icon-laden tool-panel.



Full documentation for Movie Master is included on-disk along with a rather flash text viewer.

MOVIE MASTER

GOODMAN INTERNATIONAL • DISK NO: GD.2380 • £1.95 • MEMORY: 0.5MB • SHAREWARE

IN BRIEF: Multimedia is a buzzword in the computing industry at the moment and you don't need an expensive PC with a CD-ROM to experience the phenomenon; *Movie Master* will allow you to produce presentations on the ST, albeit with a few limitations.

The program is based around the use of sprites and screens to create an animation. Backgrounds are imported in a range of standard formats and *Sprite Master* files are also supported directly. Putting together a show is very straightforward once the various objects are loaded – for example, a moving sprite can be defined by simply dragging the mouse. The animated frames are shown as you work in the editor, so you do get a good idea of the finished product.

Having said that, there are aspects of the program that make it rather frustrating to use. For example, there's no way to add or remove sprites from an animation; you're stuck with the original set-up. A range of spot sound effects can be used to brighten up presentations, but unfortunately there is no way to import samples.

All of these features are explained through a short on-disk manual. Registering the program costs just a fiver and a copy of *Sprite Master* is thrown into the bargain. An ample range of example sprites are also included and all have been skilfully crafted into a large demo animation. If you don't have *Sprite Master*, blocks can be cut from *Degas* or *NeoChrome* pictures to produce the necessary frames.

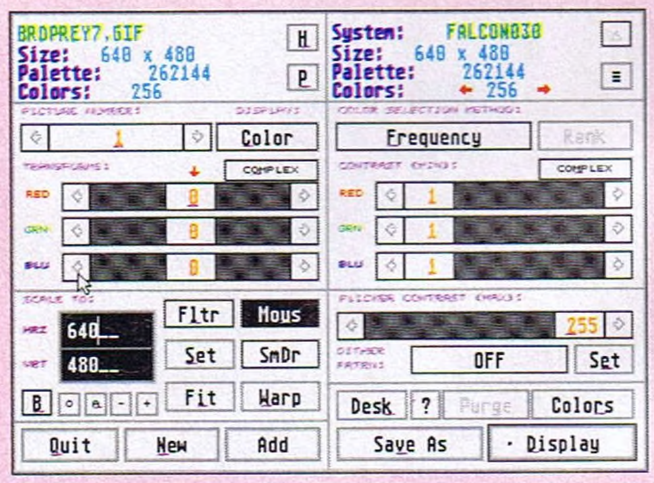
Memory seems to be handled quite efficiently and you can expect to get some fairly impressive animations out of a megabyte machine. The only serious problem with *Movie Master* is the fact that there's no runtime program – the only way to distribute your work is to include the whole package...

ST REVIEW COMMENT: "*Movie Master* has its quirks, but it remains quite a fun program. While not supremely powerful, it is straightforward to use and you can expect reasonable results within seconds of kicking the package into action. With a more considerate interface and a few more features it could have been a classic."

★★★



The number of sprites, screens and blocks is defined at the start of a session and cannot be changed!



Loading times in Speed of Light 3.5 have been slashed even further and the whole package is far more stable.

BUDGET BUY

SPEED OF LIGHT 3.5

FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 1MB • SHAREWARE • FALCON-ENHANCED

IN BRIEF: *Speed of Light* is well known among the ST graphics community as the fastest picture viewer available, and version 3.5 looks set to reinforce that reputation. Although primarily it's a bug-fixing mission (the .GIF save routines have finally been nursed to health) the author has taken the opportunity to bolt on a whole host of extras.

In addition to lightning fast .JPG and .GIF loading, you can now warp pictures, and palette-switching tricks are used to make sure that pictures look classy despite the limited number of colours offered by ST Low resolution. The whole program has been tweaked even further for speed and you'll now find a glossary of all the tricky image-processing terms on-disk. In actual fact, tests show that *Speed of Light* is faster than *GEMView* when dealing with .GIFs.

ST REVIEW COMMENT: "The main bugs in the initial release have been crushed and *Speed of Light 3.5* can now take its place alongside the cream of ST graphics software. You can also look forward to some pretty hefty new features when you register."

★★★★★

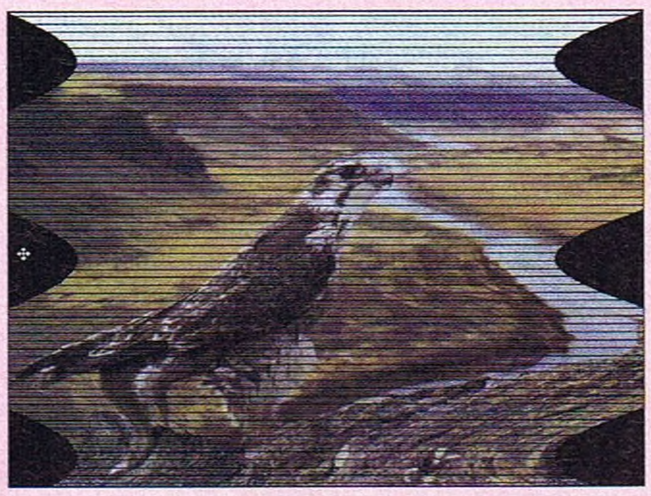


Image warping is just one of the incredible features that keeps Speed of Light well ahead of the competition.

KOZMIC 4

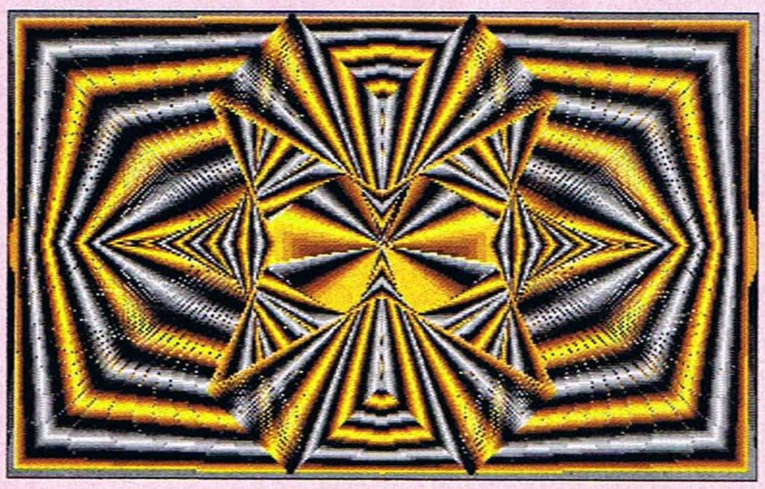
GOODMAN INTERNATIONAL • DISK NO: GD.2380 • £1.95 • MEMORY: 0.5MB • FREEWARE

IN BRIEF: Think of "pattern generation" (*...and the first thing that springs to mind is "knitting" – Ed*) and the word *Kozmic* is likely to emanate from your lips. It's one of the best-known pieces of ST shareware ever written and some of the images produced by this surreal art package have even been used to spice up pop videos!

Although this latest release is still the same *Kozmic 4* we all know and love, the shareware restrictions have been removed and it now holds freeware status. In other words, you can use it to death without worrying about paying your debts to software society. All operations are controlled through a mouse-driven interface and full on-line help is included. A couple of companion disks containing some *Kozmic* artwork have also been released by the author this month.

ST REVIEW COMMENT: "*Kozmic* is a classic piece of ST software if ever there was one. You can spend hours just adding extra patterns or cycling colours and the fact that it's now free is an extra bonus!"

★★★★★



Mind-blowing psychedelic patterns can be produced easily with Kozmic – switch on the colour-cycling and prepare to be quite amazed!

IMAGELAB

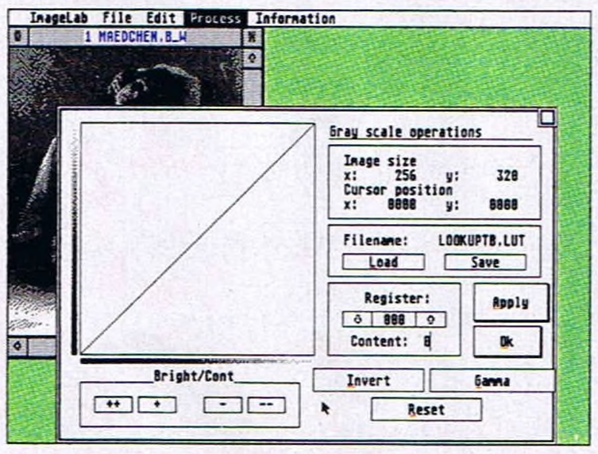
GOODMAN INTERNATIONAL • DISK NO: GD.2368 • £1.95 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: Scanned mono images are all well and good, but there's very little you can do with them in the way of image-processing effects. *Imagelab* is a clever suite of utilities that skilfully work their way around this problem – a dithered mono image can be converted to greyscale, effects applied and then the finished product fed into your favourite desktop publisher. All of the programs feature a suave GEM interface and are very easy to work with despite the German documentation. A short tutorial file (in English) briefly explains the role of each of the programs and even includes a couple of simple examples to get you started.

Although the central image-processing program works with greyscale pictures internally, the actual screen display is in mono, which can make some of the effects difficult to see. Nevertheless the range of practical (rather than stunning) effects on offer is good.

ST REVIEW COMMENT: "*Imagelab* is a perfect companion to any mono desktop publisher. Its ability to deal skilfully with dithered images is almost unique and there are no worries on the usability front. However, a basic understanding of image-processing is essential due to the distinct lack of English documentation."

★★★★



The screen display may be mono-only, but Imagelab packs a lethal punch of processing power!

TOP TEN GRAPHICS PROGRAMS

1 SPEED OF LIGHT 3.5 • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 1MB • SHAREWARE • FALCON-ENHANCED

Speed of Light is one of the best picture display systems available for the ST. It's incredibly fast when dealing with .GIF and JPEG files, includes a range of image-processing effects and even manages to display more than 16 colours on a standard ST. This latest bug-fixed version is the bizzo!

2 KOZMIC 4 • GOODMAN INTERNATIONAL • DISK NO: GD.2380 • £1.95 • MEMORY: 0.5MB • FREEWARE

Kozmic 4 is art for the artless. It allows all sorts of colourful patterns to be overlaid on your ST's screen and the colour palette cycling will drive you wild. What's more, you no longer need to pay a penny for experiencing this little piece of ST public domain history.

3 SPRITE WORKS • FLOPPYSHOP • DISK NO: FWP.19C • £7.00 • MEMORY: 0.5MB • LICENCEWARE • FALCON-COMPATIBLE (PART)

Sprite Works is an extension to *GFA BASIC*. It provides a whole range of new graphics-oriented commands and the on-disk demos show just how powerful the system is. If you're thinking about games writing with GFA, consider this an essential purchase.

4 IMAGELAB • GOODMAN INTERNATIONAL • DISK NO: GD.2368 • £1.95 • MEMORY: 0.5MB • SHAREWARE • FALCON-COMPATIBLE

Imagelab is designed to work in tandem with mono scanners. It allows dithered pictures to be converted to greyscale and the central image processor program provides a good deal of power. Most of the prompts are in English, but you will have to cope with German documentation.

5 PHOTOCHROME 3 • MERLIN PD • DISK NO: MPD.1517 • £1.25 • MEMORY: 0.5MB • SHAREWARE

PhotoChrome may be getting a bit long in the tooth, but it still kicks botty when it comes to displaying true-colour pictures on the ST. Full advantage is taken of the STe's enhanced colour palette and an accompanying display program allows you to build your own slideshows.

6 JET EMULATOR • FLOPPYSHOP • DISK NO: UTL.4536 • £2.00 • MEMORY: 1MB • FREEWARE • FALCON-COMPATIBLE

Jet Emulator is rather a quirky graphics viewer. It deals solely with DeskJet and LaserJet .PCL files and displays them on the screen in a GEM window. It works very well as long as the data isn't compressed and could be helpful in diagnosing printer/software problems.

7 GENESIS • MERLIN PD • DISK NO: MPD.109 • £1.25 • MEMORY: 0.5MB • SHAREWARE

Genesis is yet another fractal generator, but instead of producing pointless abstract patterns, it draws even more pointless landscapes. Seriously though, the pictures it comes up with are quite impressive in a "wonder what on earth you could do with them" type of way and it's guaranteed to keep you amused for a few minutes.

8 DMJ GIF 3 • THE ST CLUB • DISK NO: GRA.147 • £2.25 • MEMORY: 0.5MB • SHAREWARE

DMJ-GIF sits in the shadow of *Speed of Light* these days, but it's still a very good piece of software. It allows 256-colour .GIF pictures to be converted to Spectrum 512 files that the ST has no trouble in displaying. It also does a good job of scaling pictures down and is reasonably nippy in operation.

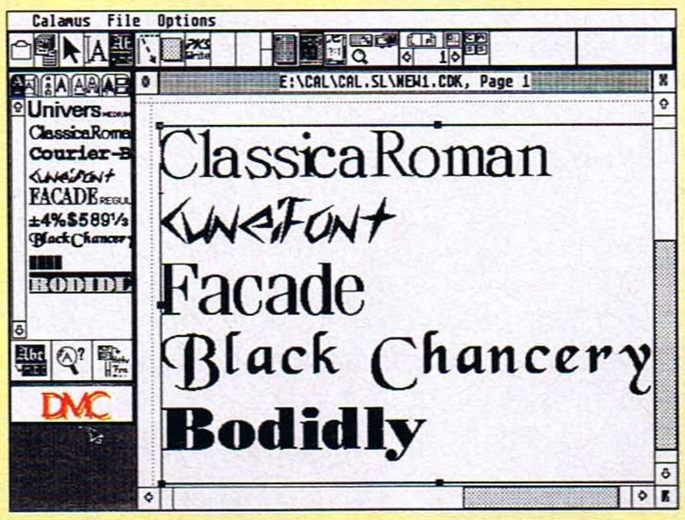
9 MOVIE MASTER • GOODMAN INTERNATIONAL • DISK NO: GD.2380 • £1.95 • MEMORY: 0.5MB • SHAREWARE

Turn your ST into an animation studio with *Movie Master*! Sprites, backdrops and sounds are all easily controlled though an icon panel and it even runs happily on a half meg machine. In terms of power it leaves a little to be desired, but it's ideal for beginners.

10 GEN-ART • FLOPPYSHOP • DISK NO: F.4659 • £2.50 • MEMORY: 0.5MB • FREEWARE • FALCON-ENHANCED

GEN-Art is a rather quirky pattern generator. It's designed to make the most of any screen resolution and the results are best described as "interesting". A Falcon enhanced version is supplied but sadly, true-colour screen modes are not supported – and are we disappointed? Oh yes indeedy!

PD ZONE

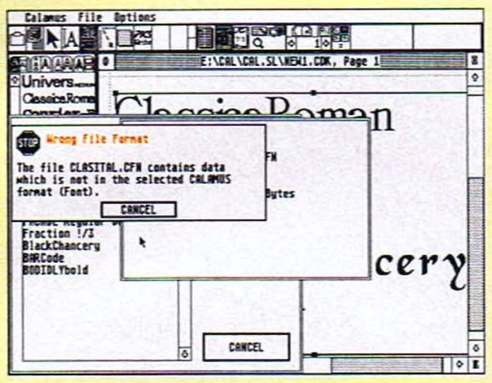


A good mixture of display and body fonts are included in the collection and the quality is pretty good.

CALAMUS FONTS

THE ST CLUB • DISK NO: FON.143 & FON.144 • £4.50 ALL IN • MEMORY: 1MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

IN BRIEF: Font collecting is addictive for most *Calamus* users and you can always rely on the public domain to come up with a good "fix" every so often. This two disk set comprises some sixty fonts varying in style from the very readable ClassicaRoman to more decorative styles such as Florence Light. There are also some specialist typefaces such as Fraction and Barcode. Unfortunately, while the quality of the fonts is reasonable, the format clearly needs some attention – quite a few produce an error message when loading into *Calamus 1.09*. Mind you, the rogues don't seem to take up an awful lot of disk space, so you're not wasting vast amounts of money on unusable fonts.



Sadly, quite a few of the fonts refuse to load into Calamus 1.09, and SL produces a few extra casualties.

ST REVIEW COMMENT: "This collection can hardly be described as the cream of public domain *Calamus* fonts, but it does contain a few good, usable typefaces. The downside is that at least a third produce some form of error message when loaded into *Calamus 1.09* and the situation is slightly worse under SL."

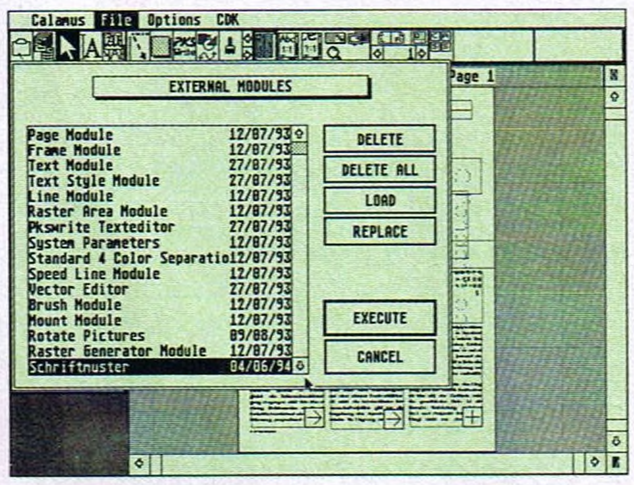
✪✪

FONTSHOW

FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 2MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: There are literally hundreds of *Calamus* fonts available in the public domain and finding the right style for a specific document can be a nightmare. *FontShow* is a *Calamus SL* module that can help to solve this problem by printing out a font test-sheet.

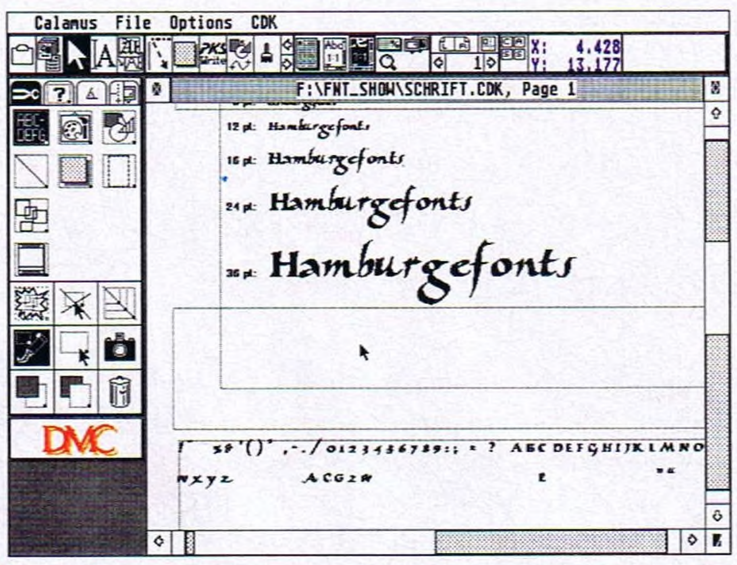
The module is a piece of cake to use – just load up the supplied *Calamus* document, select the module itself and then choose the font you'd like to preview. A few seconds later a data-sheet will emerge from your printer, listing the path of the typeface in question, every character available and examples of type at various sizes. It does get a little bit confused about page orientation, but switching from "Automatic" to "Portrait" in the print dialogue box soon sorts that out. Unfortunately, the example text is all in German, but it should be fairly easy to make the necessary translations to the document.



FontShow operates as a Calamus SL module, so can be used from within the package itself.

ST REVIEW COMMENT: "*FontShow* is a nice idea, and it makes short work of building up a comprehensive *Calamus* typeface reference. The fact that you can use the module from within SL is a big bonus and the only minor gripe is the lack of an English test sheet."

✪✪✪



The resulting font test-sheets are extremely comprehensive, – but the text is all in German.

CFN-LIST

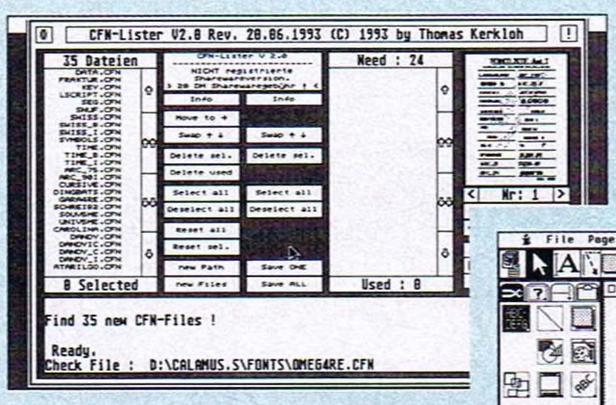
FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • MONO MONITOR REQUIRED • SHAREWARE

IN BRIEF: *CFN-List* is much the same as *FontShow* in principle, apart from the fact that it's designed to run as a stand-alone program. This means that it works happily with all versions of *Calamus*, and instead of dumping font samples directly to the printer, it saves a .CDK which you can output at your own leisure.

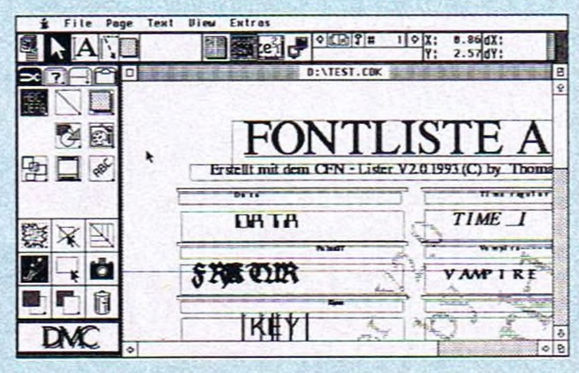
The program is used through two windows contained within a GEM dialogue box. Your *Calamus* fonts directory is listed on the left and new typefaces can be added to the test sheet by simply clicking on their names and prodding the "move" button. Up to 24 fonts can be included on each page, although all you see is the title – a full character-set listing is not given. Shareware persecution comes in the form of a hefty delay at the beginning of each session, and unfortunately the program doesn't seem to be fully Falcon or SL-compatible.

ST REVIEW COMMENT: "*CFN-List* is useful in that it provides an overview of a large number of fonts in a small space. It's ideal for the home user and the program is easy to work with, despite the lack of English documentation."

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A neat little interface allows new fonts to be added with ease – just select your Calamus directory and click away!



CFN-List produces an attractive test-page, which can contain up to 24 Calamus fonts.

New Age PDL

NEW PRICES AS FROM OCTOBER!

1 DISK - £2.00 2-4 DISKS - £1.75 ea.
5-9 DISKS - £1.50 ea. 10-14 DISKS - £1.25 ea.
15 DISKS AND OVER - £1.00 ea.

All disks require a COLOUR system unless: 'H' - High resolution monitor required, 'A' - Any setup suitable.

FALCON 030 – WE STOCK A LARGE RANGE OF FALCON SPECIFIC SOFTWARE ALL ON HIGH DENSITY DISKS. OUR FALCON CATALOGUE IS FILLED WITH FREE PROGRAMS AND COSTS JUST 50P. ALL FALCON DISKS £1.75

GAMES

GAME 168 - Napolean - a 'Risk'style game of war and strategy. 'H'.
GAME 185 - Oxyd 2 - the sequel to the brilliant Oxyd, much harder than the original. 'H'.
GAME 186 - Tetric - new Tetris type game. 'H'.
GAME 214 - Shocker 2 - Excellent ball/puzzle/strategy game similar to Oxyd. 1 Meg + 'H'
GAME 215 - Nobi Racing - Control your snake to collect all the objects on the screen. 'H'
GAME 11 - A Question of Snooker, Pinball, Devestator, Roll n Nudge, Ranger.
GAME 78 - Popeyed - a pop music game with an adult theme.
GAME 83 - Grandad & the Holey 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.
GAME 139 - Grandad II - the sequel to Game 83, comes on 2 disks 1 Meg+.
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 - B17 - bomb the buildings, F-16 - very good flight game, 8 missions.
GAME 179 - Asteroid, Bang 3, Battle, Bellum, Quiz, Blaster, Chunks, Europe, Explode, Fuzzball, Gems, Invaders, Megaroids, Micro, Octopod, Othello, Pac Man, Plant, Rockfall, Tanx, Tennis, Wall Street, Zappy.

MEGA-GAMES PACK ONE!
Christmas Special Offer

No less than ten disks crammed to the brim with archived games (de-archiver and printed instructions supplied) to squeeze on an amazing 117 games covering board/puzzle/strategy/arcade and adventure. For a full list ask with your order or if not ordering, send a stamp. All should run on a colour system with 512k and be STE compatible! You will need about twenty disks to unarchive these disks onto! AMAZING VALUE FOR MONEY.

117 GAMES – JUST £12.50!

GAME 180 - Mystic Well, Deep Lair, Football, Harris Goes Skiing, Haunted House, Invaders, Jumpster, Roam, Stoneage Deluxe, USA, Zyxm, Firestorm.
GAME 181 - Utopos 1.5 - very slick STE only Oids/Grav type game, Endurance - 3D game.
GAME 183 - Towers - a great new Dungeon Master Clone - the best yet! 2 disks (1Mb+).
GAME 187 - Karate Champion, Hector and the Mutant Vampire Tomatoes - nice platform.
GAME 188 - Premier Mahjong II - excellent version of this superb tile game. 60Hz only.
GAME 189 - Cud Lee's Quest - platform game for kids, Mindmelt - roleplaying fantasy game.
GAME 190 - Quest for Knowledge - quiz type game set in a maze arena.
GAME 191 - Walls 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! Grav - good arcade game based on Oids.

WE NOW STOCK STARBALL! (GAME 222)
THIS IS THE LATEST BLOCKBUSTER GAME THAT EVERYONE HAS BEEN RAVING ON ABOUT - HAS TO BE ONE OF THE BEST GAMES OF THE YEAR!

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 puzzler.
GAME 211 - War of the Worlds 3 - 3D game 1 Meg+, Pac Attack - very good new Pacman clone.
GAME 212 - Combat - shoot 'em up similar to Operation Wolf. Space Wars 2000 - dogfight.
GAME 213 - Darts 180 - mouse controlled Pub darts game. Stone radier - boulderdash clone.
GAME 216 - Rumbo - new split-screen platform game, quite easy - suitable for kids.
GAME 217 - Ultiquiz - a complete quiz construction set to make your own team quizzes.
GAME 218 - Starburst - simple shoot 'em up, Max - nice arcade/adventure game.
GAME 219 - Startrek - a complex looking battle simulation where you must fend off an invasion.
GAME 220 - Dunces Cap Compilation - Outrageous Fortune, The Wiz, Match Maker & Mindlock.
GAME 221 - Frame of Mind - new DCS game based around gambling - very addictive.
GAME 222 - Starball - absolutely brilliant pinball game with 4 sub-games! Excellent!
GAME 224 - Winglord demo (like Joust), Snacman, Sqish, Well 'Ard - arcade/adventure.

DEMOS

DEMO 355 - The Brace Demo - nice auto-running multi-part 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.
DEMO 335 - Reality is a Lie - a 13 screen demo by Psychomix, very good. 1 meg+.
DEMO 333 - Cemetary 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 - Crackart 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 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 STFM and one for STE which takes advantage of a 32,768 colour pallete! EXCLUSIVE to New Age PDL! Ten crammed disks.
ART 209 - Erotic Dreams slideshow 1 - all pictures of Supermodel Cindy Crawford.
ART 212/213 - POV Raytracer, the best raytracer around! 2 disks.
ART 223 - Easy Art - A nice art package with many useful features.
ART 225 - Moskavites 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 - Con, Short, House, Jewel, Spassong, Celtic 6, Rappit, A-Team, Sweet Dreams.
TRAC 127 - More Lemmings, Backpopped, 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. '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'.

SPECIAL OFFERS FOR NEW CUSTOMERS ONLY!

YOU MAY CHOOSE ANY TEN PD DISKS FROM THIS ADVERT FOR JUST £9.95!
(NOT INCLUDING MEGA + GAMES PACK)

FREE ST CATALOGUE FOR NEW CUSTOMERS UPON REQUEST

UTILITIES & APPLICATIONS

UTIL 2 - Startgem, Head Start 1.1, DC Clock, Disk Checker, Hard Disk Utils, Ram Disks, Hack 'n' Copy, Turtle 3.2 (HD backup), Megaformat, 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, Postmortem, No Bombs, E-Disk, 9 Quick Utilities. 'A'.
UTIL 13 - German to English translator, fast Print, DC Salvage, MiNT, Maccel 3.0. 'A'.
UTIL 14 - Printer Drivers inc Canon Bubblejet, Qume Daisywheel, Brother + Epson. 'A'.
UTIL 16 - Chameleon - loads and unloads accessories without having to reboot, Sticker 3.0 ('H'), Definitive File Selector, Super Virus Killer, Benchmark. 'A'.
UTIL 19 - Your Second Manual, Jokes, GDOS info, Bombs info + several magazines. 'A'.
UTIL 30 - Superboot 8.1, Build Your Own Scanner, Report Writer, Disk Cleaner. 'A'.
UTIL 35 - Cheetah 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, Qume, Taxan, Toshiba, Riteman, Atari. '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.inf 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 - Nation 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, SpiritED 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. 'A'.
UTIL 77 - Before Dawn 1.25 - latest and biggest version of this screen saver. 2 disks.
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 progs. 1 meg+.
UTIL 94 - OMEN 2.46 - A new Open Multi-tasking Environment for all STs. 'A'.
UTIL 97 - German To English 3.0 - latest version of this file translator, includes computing.

MUSIC & MIDI

MUSIC 11 - Arpeggiator, Zeppelin, MIDI Beat, Project, Jukebox, MKS-50. 'A'.
MUSIC 12 - Henry Cosh 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 - Octalyser 8-track tracker - STE only, Protracker 2.1, YM 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 'D' Series Sound Banks for D5, 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, TX81z, Roland D110.
MUSIC 45 - Noisetracker 2 - The latest version of our most popular tracker program.
MUSIC 47 - Quartet files in 4v format, MIDI Master Drummer, sample replay. 'A'.
MUSIC 49 - Rowland D10, D20 editor, K1-K4 converter, Busker demo. 'H'.
MUSIC 53 - Octalyser 0.9 - new version of this great 8-tracker program. STE only.

EDUCATION

EDUC 1 - Kid Music, Kid Notes, Kid Piano, Kid Puzzle, Kid Graph, Rebus Writer.
EDUC 21 - G.C.S.E. Higher Maths Grade Tutor, Franglais 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 & meassures and a complete chemistry reference book!
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.
EDUC 46 - Scool not School - learn drawing, spelling, sums, typing and more for kids.
EDUC 49 - Big Top Type - Encourages kids aged 2-6 to start using the computer. 1 Meg+

PROGRAMMING

LANG 1/2 - Sozobon C Compiler release 2. Includes documentation, shell etc.
LANG 5-9 - GNU C++ Kit - Hard Drive + 2.5meg required, not for novices! 5 disks.
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.
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 Sozobon 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 routs for games.
BUPRO 4 - Moving Bytes 1 - more routines for screen effects, music, scrolls.
BUPRO 16 - ST-68K Reference 3 - includes full data on ST internals, excellent.

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
IMPrint, for quality mono printouts on 9 or 24 pin printers	£9.95
IMPrint, 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
Stereo Cad - enables you to easily create those 3D pictures	£28.95
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
10 Capacity disk box (only with order of one or more disks)	£0.95
100 Capacity Disk Box	£7.95
200 Capacity Disk Box	£9.95
3.5 inch Drive head cleaner	£3.45
ST or Falcon dust cover	£3.45
Copyholders (attach to monitor to save desk space)	£3.45
Mouse house	£2.95
Mouse mat	£2.95
10 High quality blank disks	£4.45
50 High quality blank disks	£19.95
100 High quality blank disks with 100 cap disk box	£41.95

For full details on any of these products just give us a call!

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.

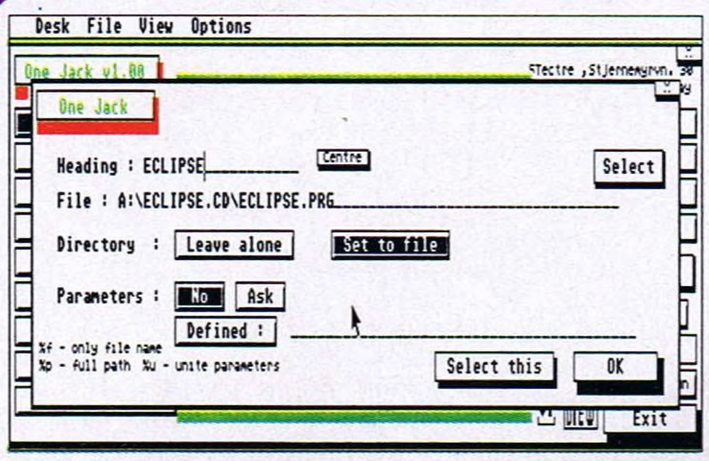
General Mail and Enquiries

(no orders please

Also to Internet address:
"caroline @ dunian.demon.co.uk"

NEW AGE PDL (DEPT STR20), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD TEL: (01702) 333040

PD ZONE

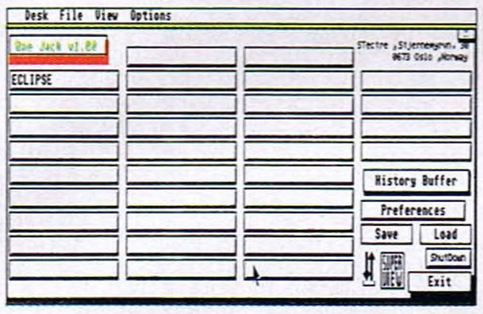


Quite a number of programs can be piled into One-Jack and it will even allow default parameters to be passed.

ONE-JACK

FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE

IN BRIEF: When it comes to using a cramped hard disk, nothing is more useful than a program launcher. Of course, the public domain is literally heaving with the things, but the ace up *One-Jack*'s sleeve is its ability to run as a desk accessory. This means that you can continue working with your favourite desktop replacement, but still have the convenience of a launcher at hand.



One-Jack may sound trendy, but the inherent restrictions make a replacement desktop a more attractive option!

The way it accomplishes this seemingly impossible task is rather sneaky – in fact programs aren't run from the accessory at all! Instead, you just select an entry in the panel, quit to the desktop and double click on *JRUN.PRG*. In turn, this runs the selected program and saves you having to root around your hard disk. *JRUN* can be assigned a keystroke under later versions of TOS, but in that case you might as well just put the program on the desktop in the first place!

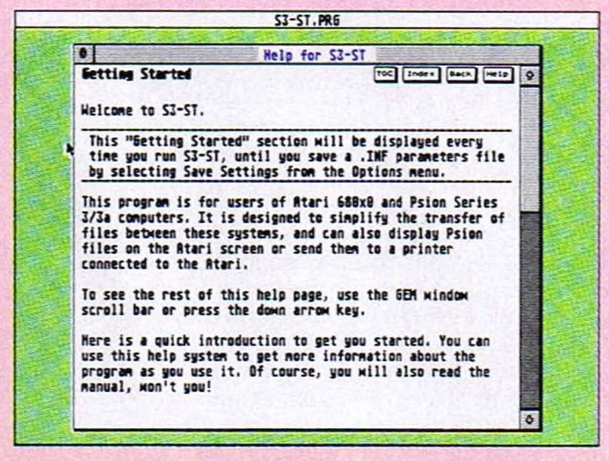
ST REVIEW COMMENT: "If *One-Jack* worked exactly "as advertised" there would be very little to touch it. However, it's just a little bit too fiddly to be worth the hassle at the moment. If you really need quick access to all of your programs, use *Gemini 2*."

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S3-ST

GOODMAN INTERNATIONAL • DISK NO: GD.2375 • £1.95 • MEMORY: 0.5MB • FREEWARE • FALCON-COMPATIBLE

IN BRIEF: More and more people these days are giving up their Filofax or notepad in favour of an electronic organiser. The Psion 3 is king among this breed of handy travelling companions and *S3-ST* is all you need to persuade the little perisher to talk to your ST. This is no twenty-minute hack either – it's a dedicated piece of software, with a squeaky-clean GEM interface.

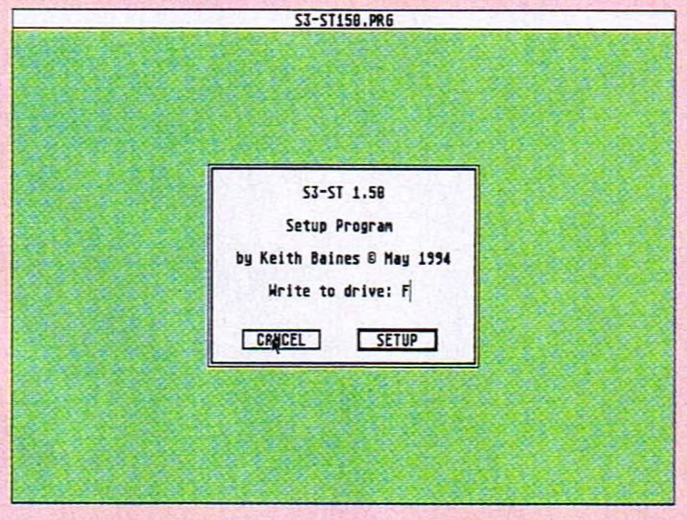


A superb on-line help system provides all the information you need to unite Psion and ST as a team.

Installing the program is relatively straightforward – the ST side of things is handled via a custom program and a separate utility is provided to port the necessary code across to the Psion. All you need to buy is the serial interface and cable. Full on-line help is included and the whole thing looks extremely easy to use. Unfortunately I was unable to actually test the program in use – fancy lending me a 3a, Psion?

ST REVIEW COMMENT: "Let's face it – if you own a Psion, *S3-ST* would be essential regardless of whether it was intuitive or particularly powerful! However, the programmer has obviously put real effort into the program and the result is a quality piece of software."

✪✪✪✪

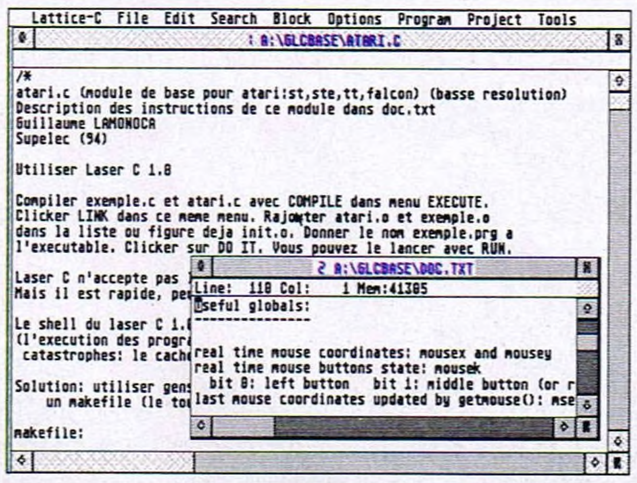


The installation procedure is totally automated – just select the destination drive and you're ready to roll!

GRAPHICS LIBRARY FOR C BEGINNERS

FLOPPYSHOP • DISK NO: BY NAME • £4.00 • MEMORY: 1MB • PUBLIC DOMAIN • FALCON-ENHANCED

IN BRIEF: In principle, *GLCB* is a programmer's dream come true. It's a universal library that aims to make games on different platforms completely compatible at a source level. It provides facilities for sprite animation sound, mouse events and plenty more besides. The package claims incarnations on the ST and Falcon, Amiga, PC, Macintosh and X-Windows. Unfortunately, the ST source code is set up for use with *Pure C*, but a *Lattice C* conversion shouldn't be too difficult.

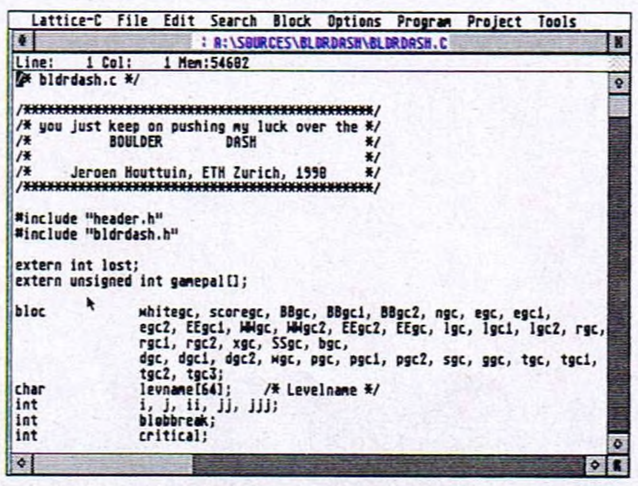


Brief English instructions do grace GLCB, but all of the source code comments are in French...

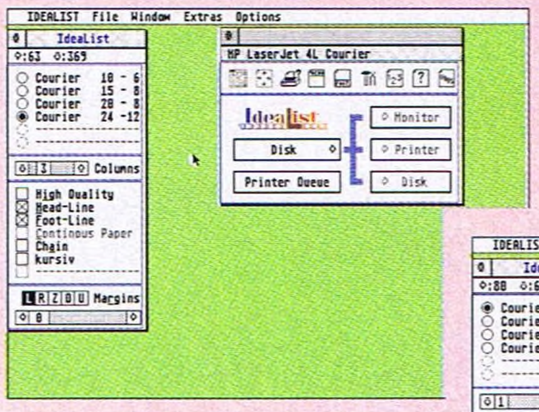
Although documentation is adequate, it doesn't go into huge amounts of detail on the functions available and beginners are probably going to feel at a loss. Mind you, there are plenty of example games included on the disk, and simply leafing through the source code can tell you a lot about *GLCB*.

ST REVIEW COMMENT: "*GLCB* is a great idea, but it's hard to see it becoming a new standard for games programmers. With a few more functions and clearer documentation, it would be a different matter. Nice idea though!"

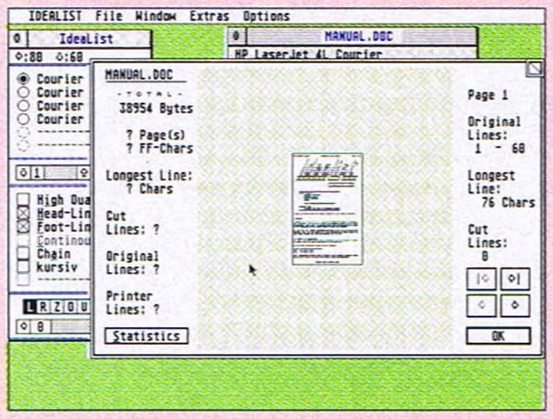
✪✪✪



Quite a number of example programs are supplied and should compile on anything from a Macintosh to an ST!



The two main windows allow you to tweak the configuration and output finished documents.



The page layout can be viewed on screen before any paper is wasted – oh, it's economical alright!

IDEALIST 3.5

BUDGET BUY

CIX BBS • ATARI.ST/2LISTINGS AREA • FREE • SHAREWARE • FALCON-COMPATIBLE

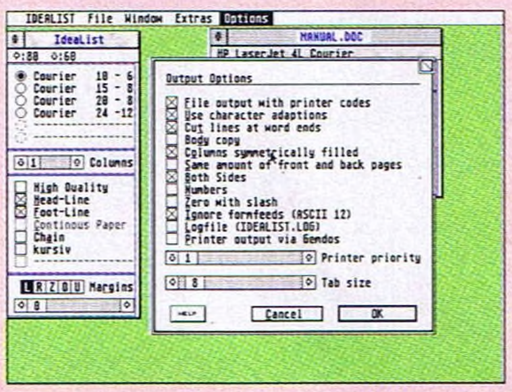
IN BRIEF: Desktop publishers and document processors are all well and good, but they can be overkill if you simply want to print a copy of a long-winded public domain instruction manual. It's in these situations that *Idealist* really comes into its own – it produces great looking documents with the minimum of fuss and will push your printer to the very edge of its performance curve.

In common with most major shareware packages these days, the program looks fantastic on-screen, with windowed GEM dialogue boxes and icons everywhere. The vast majority of modern printers are supported directly and that includes everything from humble LC-10 right up to the latest LaserJet 4. The program is controlled through two main panels – one to handle printer specific settings while just about everything else is crammed into the second. Reformatted text can be displayed on the monitor as a miniature preview, dumped to disk or sent directly to the printer. All sorts of trendy layouts are possible and the amount of text you can squeeze onto a page is frightening! In fact, there are so many parameters to play with, it can be a bit mind-blowing at first.

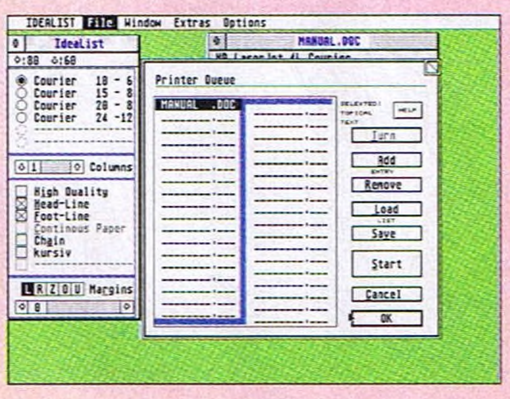
Over and above support for your printer's internal fonts, *GDOS* or *SpeedoGDOS* can be used if installed. It's a bit tricky to select a font and you need to go digging in configuration files to do anything sensible, but a few examples are provided. Perhaps the best aspect of *Idealist* is that it runs as a desk accessory, meaning you can use it alongside a standard word processor or text editor. It deals happily with the .RTF format produced by many ST, PC and Mac word processors, as well as the statutory *1st Word Plus* files. *Idealist* is supported in the UK by Joe Connor, so you can order your registered version without the risk of sending cash abroad and at £13.00 it's very good value for money. You can contact Joe at 65 Mill Road, Colchester, Essex CO4 5LJ.

ST REVIEW COMMENT: "If you need to print large amounts of text, *Idealist* is unmissable. It takes a little while to get used to the interface, but once your margins, columns and headers are set up, it's all plain sailing. Suffice to say that with the package installed as a desk accessory, it's unlikely that you will ever want to see the 'Show, Print, Cancel' dialogue box again!"

★★★★★



Idealist can be a bit baffling at first, but don't worry – the interface's bark is much worse that its bite.



A handy queue allows multiple documents to be stacked up ready for output.

TOP TEN UTILITIES

1 IDEALIST 3.5 • CIX BBS • ATARI.ST/2LISTINGS AREA • FREE • SHAREWARE • FALCON-COMPATIBLE

Kick your printer into shape with a little help from *Idealist*. This superb printing utility will take any ASCII, .RTF or *1st Word Plus* file and turn it into a beautifully formatted document. The margins, headers, footers and number of columns are all fully adjustable.

2 S3-ST • GOODMAN INTERNATIONAL • DISK NO: GD.2375 • £1.95 • MEMORY: 0.5MB • FREEWARE • FALCON-COMPATIBLE

This package is the complete solution for connecting a Psion 3 to the ST. It allows files to be transferred quickly and easily between the two machines and also supports a few nice extras such as remote printing. It's extremely easy to set up and the documentation is nicely written.

3 MEMWATCH 1.2 • THE ST CLUB • DISK NO: DMG.42 • £2.25 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

Ever wondered exactly how much memory is being gulped up by your favourite applications? In that case you need *Memwatch* – the very best memory monitor. It runs as an accessory and provides a constantly updated gauge of used RAM.

4 WATCH • THE ST CLUB • DISK NO: DMG.42 • £2.25 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

Yet another utility which proves that nothing is too pointless to appear in the public domain. *Watch* simply displays a pair of eyes that follow the mouse pointer around the screen. As an accessory, it works alongside almost any GEM application and I guarantee you won't be able to resist the temptation to make the poor guy cross-eyed every now and again!

5 SPEEDOMETER • THE ST CLUB • DISK NO: DMG.42 • £2.25 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

Speedometer provides a real-time display of your computer's horsepower. It's best used under a multi-tasking environment and gives an idea of the amount of processing power currently being used. Yet another gadget that's guaranteed to brighten up a dull desktop.

6 BUGABOO FALCON • FLOPPYSHOP • DISK NO: F.4453 • £2.50 • MEMORY: 1MB • FALCON (RGB) ONLY

Users of *Turbo-Assembler* will be pleased to learn that *Bugaboo* (its partner in crime) is now fully Falcon-compatible. It's still one of the best debuggers available and the only trouble is that it insists on using an RGB screen mode – big trouble if you're running on a VGA monitor.

7 ASCII-VIEW 3.8 • THE ST CLUB • DISK NO: DMG.40 • £2.25 • MEMORY: 0.5MB • FREEWARE

Let's be honest – the ST's built-in text viewer is abysmal. *ASCII-View* is yet another utility that kicks out the "Show/Print/Cancel" dialogue box and replaces it with a fast text display system. It's fully mouse controlled, but keyboard shortcuts are included for every single operation, which will no doubt please experienced ST users.

8 ASSEMBLER 2000 • FLOPPYSHOP • DISK NO: FWG.03 • £3.00 • MEMORY: 0.5MB • LICENCEWARE • FALCON-COMPATIBLE

Fancy a dabble in the world of bits, bytes and registers? If so, take *Assembler 2000* for a test drive. It's a no-frills package that is aimed squarely at beginners and a demo game is included to get you started.

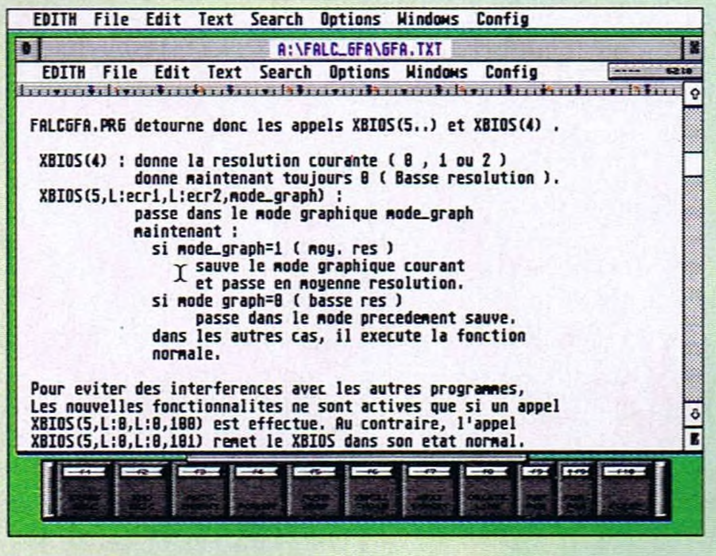
9 GRAPHICS LIBRARY FOR C BEGINNERS • FLOPPYSHOP • DISK NO: BY NAME • £4.00 • MEMORY: 1MB • PUBLIC DOMAIN • FALCON-ENHANCED

The *Graphics Library For C Beginners* promises great things in terms of cross-platform compatibility. It provides a range of games-oriented functions and source code is included for several machines including the ST, Amiga and PC. Oh for a few more features!

10 ONE-JACK • FLOPPYSHOP • DISK NO: BY NAME • £2.00 • MEMORY: 0.5MB • SHAREWARE

Program launching from a desk accessory is a great idea, but sadly *One-Jack* doesn't quite live up to its bold claims. It provides a good number of slots alright, but running each program is a two-stage process. If you can bear that thought, it's worth a look.

PD ZONE



Exact details on the new commands are included in the documentation, but all of the comments are in French...

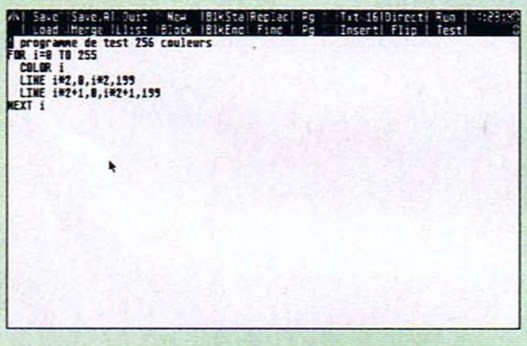
FALCON GFA PATCH

FLOPPYSHOP • DISK NO: F.4633 • £2.50 • MEMORY: 1MB • SHAREWARE • FALCON ONLY

IN BRIEF: *GFA BASIC* is one of the most popular programming languages ever to grace the ST. Its blinding speed and structured nature won the heart of many Atari coders and it retains a large following down to this day. Unfortunately, GFA Data Media dropped the ST version some time ago and as a result it was never upgraded to take advantage of the Falcon. The patches contained on this disk will do just that – simply pop the supplied programs in your Auto folder and all of a sudden GFA will be able to use 256-colour screen resolutions. Examples are included for the commands that are affected, although you'll have to dust off that old French dictionary to make any sense of them!

ST REVIEW COMMENT: "If you are still battling on with GFA on the Falcon, this disk has got to be worth a try. Despite the French documentation it is relatively easy to pick up the new commands – it's just a shame that you need to run the Auto folder programs before the patches work."

✪✪✪



The extra colours offered by the Falcon can be accessed easily through most GFA graphics commands.

525

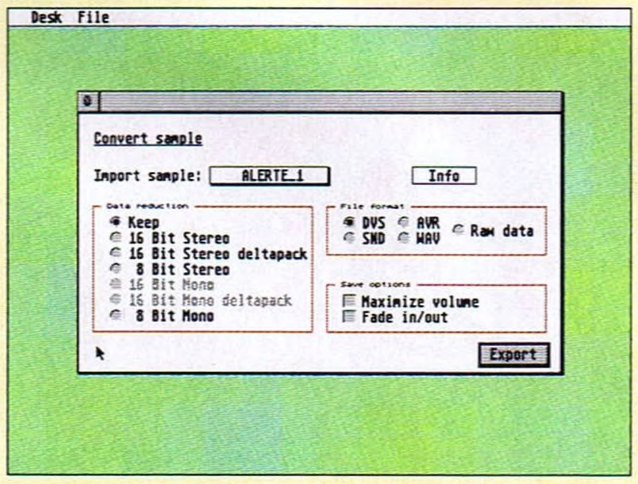
FLOPPYSHOP • DISK NO: F.3962 • £2.50 • MEMORY: 0.5MB • PUBLIC DOMAIN • HIGH DENSITY DISK DRIVE REQUIRED

IN BRIEF: Almost every computer these days has the ability to attach sound samples to system events and the Falcon is no exception. A problem arises though when you want to use "foreign" samples with Falcon sound managers such as *SAM*.

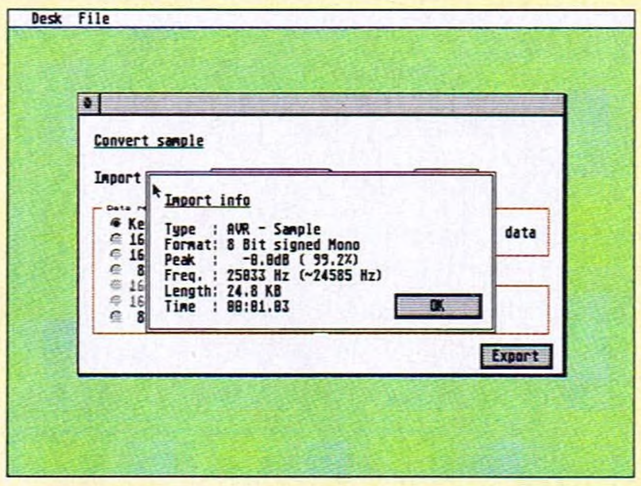
525 is a sample conversion program that blitzes this common headache. It derives its name from the fact that five different formats are supported including .WAV, a popular PC format; .SND, the Macintosh standard; .AVR, the norm on the ST. Translation takes place through a window-based dialogue box and the sample rate can be changed as well as the format. You can even apply one of two effects to the sound namely: volume maximisation and fade in/fade out. Unfortunately, there's no way to play samples from within the program, but obviously that's not a problem if you have *SAM* installed.

ST REVIEW COMMENT: "*525* will deal with the vast majority of sound samples in the PC and ST public domain. The interface is beautifully easy to use and the only fly in the ointment is the lack of bulk conversion facilities."

✪✪✪✪



Both the frequency and format of a sample can be adjusted through 525's excellent GEM interface.



The Import Info dialogue box provides all sorts of useful information about the sample in memory.

PLAYMPEG 0.6

FLOPPYSHOP • DISK NO: BY NAME • £2.50 • MEMORY: 1MB • SHAREWARE • FALCON ONLY

IN BRIEF: JPEG is rapidly becoming the industry-standard professional graphics format thanks to its incredibly powerful compression system, and its sister format, MPEG, is starting to make inroads into video-animation. *PlayMPEG* is a utility that uses the Falcon's DSP to deal with the goliath task of decoding these animations.

The first thing that strikes you about the player is its speed; it leaves similar utilities on other machines at a standstill! A quarter-screen MPEG movie plays at a shade over 13 frames a second and what's more, version 0.7 is said to be at least 30% faster! There is no interface as such, but you can play a movie simply by dropping it on the *PlayMPEG* icon – a report on the speed is given before the program quits.

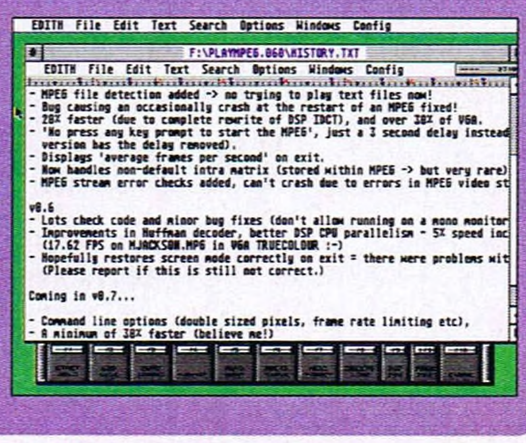
The unregistered version is limited to greyscale only, but the full-colour release costs just a fiver!



PlayMPEG displays movies at a breakneck speed and leaves similar Mac and PC utilities standing!

ST REVIEW COMMENT: "*PlayMPEG* is a truly incredible technical achievement. On a practical level, it's a little less impressive, simply because there aren't very many good MPEG animations available at the moment. Still well worth a look to remind you just how hot your Falcon is!"

✪✪✪✪



Even greater frame rates are promised for the next version and the registration is only a fiver!

FaST Club

For users of Atari ST & Falcon computers

7 Musters Road - Nottingham - NG2 7PP
Tel: 0115-945-5250 - Fax: 0115-945-5305

Software

This is just a small selection of the programs that we publish - see our catalogue for a full listing and for product specifications.

❒ 3D Calc Plus	£24.95	❒ Fonty: Calamus Font Editor	£11.95
❒ Address 1.6	£12.95	❒ Mouse Tricks 2.15	£ 9.95
❒ Astronomy Lab	£24.95	❒ Multiprint	£ 9.95
❒ C-Font2	£ 9.95	❒ PageAssistant	£29.95
❒ CalAssistant	£19.95	❒ STC Calamus Fonts	£14.95
❒ CalAssistant SL	£29.95	❒ STC Fonts Catalogue	£ 2.95
❒ Clip Art Catalogues (2)	£ 4.00	❒ Ultimate Virus Killer 6	£12.95
❒ TW Clip Art Catalogue	£ 2.95	❒ Universal Item Selector III	£14.95
❒ Fontkit Plus 4.1	£24.95	❒ Warp 9	£29.95

Start Here!

❒ Starter Pack £6.95

If you have just started to use an Atari computer then this pack is just right for you. It contains a paint program, wordprocessor, spreadsheet, database, label printer, some essential utilities, and a selection of educational programs and games. All programs will work on a standard 520ST(E or FM) with a colour TV or monitor.

Save £5.00

❒ Int. ST Machine Code £14.95

Introducing ST Machine Code is an excellent book that takes the beginner step-by-step into the secrets of programming the ST in assembly language. The accompanying free disk contains a complete programming environment - there is no need to buy a separate assembler or resource kit! The books 24 chapters introduce the gamut of ST applications programing from formatting a disk to constructing drop down menus and dialog boxes.

Textstyle

❒ Textstyle £19.95

Another cracking program from Jeremy Hughes, author of Imagecopy. Enter your text into Textstyle, select a Calamus or GEM font, add text effects and justification, and the resulting picture file can be imported into a whole range of packages. Great for generating headlines for wordprocessors like First Word Plus, Redacteur or Write ON; or use it with an art package such as PixArt or HyperPaint to make posters, banners, logos, greetings cards, etc. Thousands of applications.

❒ Textstyle £FREE!



Order Imagecopy 3.5 and we will send you a free copy of Textstyle!

Imagecopy

❒ Imagecopy 3.5 £29.95

❒ Copy images from screen in any ST/TT/Falcon video mode.

❒ Display images and slide shows in any ST/TT/Falcon video mode.

❒ Create halftone images to use with other programs (wordprocessors etc.)

❒ Convert images between different formats or to different colour types.

❒ Batch processing facility: convert or print batches of images.

❒ Extensive range of image formats. Imagecopy can read and write: Degas, GIF, IFF, IMG, JFIF (JPEG), PC Paintbrush (PCX), Prism Paint, RSC free image, Targa, TIFF, and Windows Bitmap. Other read-only formats include: Art Director, Calamus Raster Graphic, DR Doodle, Macpaint, Neochrome, OS/2 Bitmap, Pictor, Pixart, Portable Bitmap, Spectrum, Tiny, and True Paint, XGA.

++ Major New Features in Imagecopy 3.5

❒ Thumbnail option that displays miniatures of a set of images within a single window. This is useful for looking through a disk of images or for creating disk catalogues.

❒ Nine zoom levels plus the ability to flip and rotate images. Screen images can be automatically scaled to fit the screen.

❒ Faster colour processing: the colour saturation option is 20 times faster than previously.

❒ Slide Shows can be started with any image on a disk.

❒ Upgrades phone

❒ Imagecopy 3.5CD £34.95

Imagecopy 3.5 CD can load Photo CD images in any of the five standard resolutions: 128x192, 256x384, 512x768, 1024x1536, and 2048x3072 (memory permitting), and can also load blocks from any resolution, without having to load the complete image.

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As well as being an excellent image management tool Imagecopy 3.5 has highly sophisticated easy-to-use printing features.

❒ Print pictures in black and white or colour on a wide range of printers: 9-pin, 24-pin, Stylus, Bubblejet, DeskJet, and LaserJet.

❒ Prints catalogue pages with up to 40 or more pictures on a single page.

❒ Full control over size, area, orientation, and position.

❒ Prints multiple copies - great for letterheads, invitations, labels, signs, posters, Christmas decorations, greeting cards, etc.

❒ Prints pictures with up to 16 million colours. Yes, as well as printing Amiga and PC pictures, you can even print photographs!

❒ Sophisticated colour settings ensures that you get the very best results from your printer. With Imagecopy 3.5 you can control: Primary Colour Strengths, Grey Balance, Blue Balance, Brightness (gamma correction), Contrast, and Saturation.

❒ Can be installed to print automatically with HyperPaint.

++ New printing features in Imagecopy 3.5

❒ Microweave printing reduces or eliminates banding on dot-matrix and bubblejet printers.

❒ Random print dithering option for better definition than halftoning.

❒ Enhanced printing facilities with a Print Density option for detailed control over print quality, Black Balance option for improved CMYK print quality on DeskJets, and a new 720-dpi Epson (Stylus Color) inkjet driver.

ST Applications

For the last four years we have been publishing a monthly magazine for ST users. Full of informative and authorative articles ST Applications is an essential read for all Atari users who are serious about getting the best out of their machine.

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❒ 6-issues: £8.00
❒ 3-issues: £5.00
❒ Sample issue: £1.50

New lower prices!

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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❒ Photo2Disk Info' FREE

For the same price as an enlargement we can transfer your photographs to disk so that you can use them in your art and DTP software.

£99.95 An ST for your PC!

❒ Gemulator £ 99.95
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Massive sales across Europe have pushed the cost of the Gemulator down to its lowest ever price. This stunning emulator allows ST software to be run on your IBM compatible PC. Needs a 386 or 486 PC with HDD, 4MB RAM, and one free expansion slot. For more details write or phone for a copy of our Gemulator InfoPack.

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❒ FastCopy PRO 1.2 £14.95

The best disk utility for Atari computers has just got better! FastCopy PRO features: highly efficient disk copying and formatting, creates and copies both extended format and MS DOS disks, fast hard disk backup with data-compression, built in disk editor and virus killer with virus immunization. Now fully Falcon compatible.

Le Price Cut! Save £54

❒ Redacteur 3.15 £45.00

In France Le Rédacteur has sold over 10,000 copies and it is used extensively by several national newspapers.

Features:
- # Amazingly fast
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- # Automatic creation of tables
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- # Font Editor
- # Sigma equation editor for formulae
- # English and French spell checking plus verb conjugation
- # Editor for user-defined dictionaries
- # Automatic Hyphenation
- # Saves in ASCII, First Word (Plus), Word Perfect 4.5 and Microsoft Word
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- # Comprehensive 650-page manual

Redacteur 3.15 runs in both mono and colour on any Atari ST or TT computer with at least one megabyte of memory. Send 75p for Demo disk.

Free Fonts. Order Redacteur 3.15 before January 31st 1995 and we will send you our Redacteur Fontpac Plus Set containing ten professional quality fonts completely free of charge.

PD and Shareware

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Probably the most comprehensive catalogue for the ST. Details on hundreds of PD and Shareware disks plus specifications of all of the products listed in this advert. **PD Disks cost £1.25 each!; or £1 for subscribers!**

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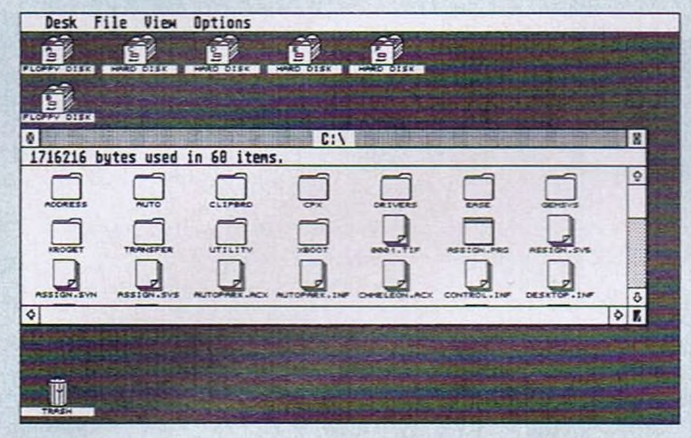
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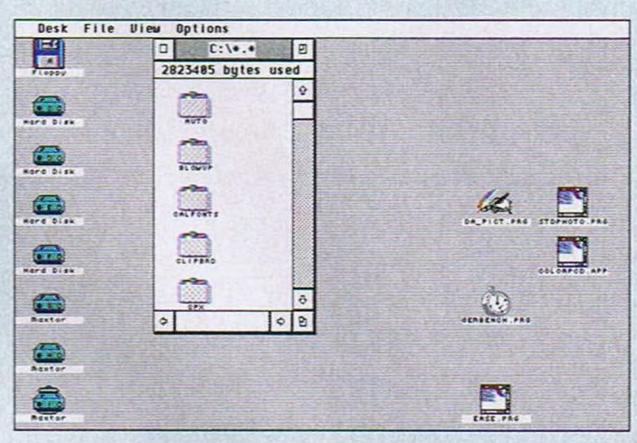
STR01

ESSENTIAL EXTRAS

Do you want a bit extra from your ST's desktop – more powerful functions and a faster way of working? Ofir Gal surveys the possible alternatives...

ALTERNATIVE DESKTOPS





The Atari desktop, from 1985 (left) to now. Even the latest offering, NewDesk (right) still leaves a lot to be desired.

When the ST first appeared, the Atari desktop was one of the system's main strengths. As opposed to the command line approach of DOS and the like, you could simply double-click on icons to start programs, delete files by dragging them to the trashcan and make use of lots of other features which we quickly learned to take for granted.

Yet there are always going to be those who want more! One such user, Dan Wilga, took it upon himself to write an alternative desktop for the ST and created what has become the most popular product of its kind – *NeoDesk*.

However, *NeoDesk* was not the only desktop available and gradually several other replacements appeared on the market, some commercial, others in the public domain.

THE ATARI DESKTOP

What is the standard desktop? It's a program like any other, permanently stored on the ROM chips along with TOS. This is its greatest advantage, as it is loaded faster than any disk-based desktop. It is designed to launch other programs, copy files, format disks and set system options in a graphical environment, freeing you from the need to type DOS-like commands.

The desktop appeared with the first version of TOS and was not improved a great deal until the arrival of the TT and MegaSTe where it received a major overhaul and a new name – NewDesk. The main features of NewDesk are the ability to place icons on the desktop and to assign different icons to programs; various PD utilities have appeared for adding new icons to the desktop.

Up to 20 programs may be assigned a keyboard shortcut and each desktop option can also be assigned a shortcut. Programs can be made to load files by dragging the file and dropping it over the program icon.

As a whole, NewDesk, which is now available to all ST users by upgrading to TOS 2.06, is a fine system. But it is still nowhere near as good as any of the desktop replacements on review here.

The Falcon desktop is almost identical but adds modern-looking animated colour icons.

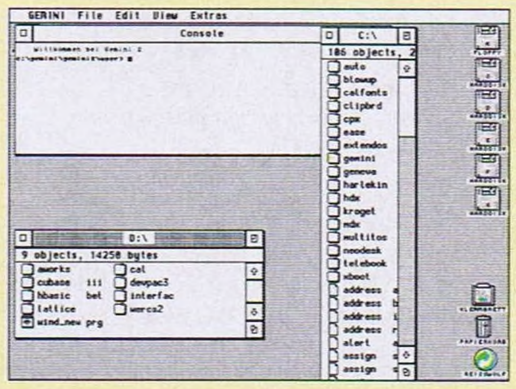
The *MultiTOS* desktop is the same, but also supports dragging and dropping multiple files onto program icons. All the desktop alternatives featured here support all of the NewDesk features – and much more!

GEMINI 2

Gemini has been the most popular shareware desktop in Germany for many years, the latest version bringing both *MultiTOS* and *MagiC* compatibility. Its status in Germany has allowed it to set the standard for GEM programmers, most notably the AV protocol for communication between programs and accessories.

Gemini supports colour icons and all the bells and whistles you can imagine. It is memory hungry and nowhere as fast as *TeraDesk* but has some unique features not found in any other Atari desktop, such as a console window where TOS programs can be run, courtesy of the powerful *Mupfel* Command Line Interface. A large selection of CLI scripts are included and in this respect, *Gemini* surpasses all other alternatives.

Files can be viewed as miniature icons or text in the same window and also uses *GDOS* fonts for display. It supports *Kobold* and a whole range of utilities that use the AV protocol. There's a recoverable trashcan and the package includes a large number of colour and mono icons. New ones may be added by using a resource file editor such as *Interface*. And yes, you can install pretty background pictures!



Gemini displays icons and text in the same window. The "console" is a powerful tool in experienced hands.

BUYER'S GUIDE

UNDER THE SPOTLIGHT...

Here's the facts 'n' figures to help you compare the four main replacement desktops...

Product	Company	Contact	Price	Colour icons?	File groups?	TOS windows?	AV protocol?	Background pic?
TeraDesk	Freeware	PD Library	N/A	×	×	×	×	×
Gemini	Shareware	PD Library	N/A	✓	×	✓	✓	✓
Ease	System Solutions	081-693 3355	£39.95	✓	×	✓	✓	✓
NeoDesk	Compo Software	0487 773582	£59.00	✓	✓	×	×	✓

NEODESK 4

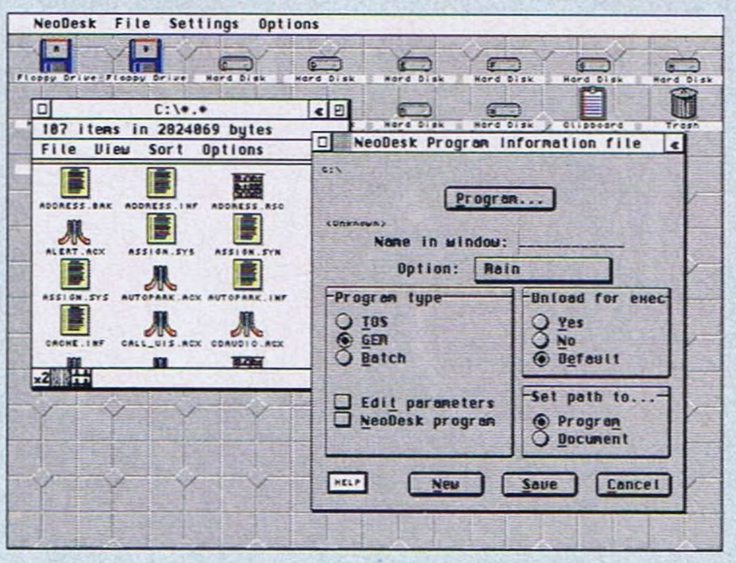
Despite the heavy competition and the long delay between this version and its previous incarnation, NeoDesk remains a firm favourite of UK and American users, though not in Germany. There is no doubt that NeoDesk has more features than any of the other desktops, including background copying, file grouping, environment setting, a recoverable trashcan, GDOS fonts and more.

NeoDesk 4 was designed with Geneva in mind, but works well on all machines. It's multi-tasking friendly – several dialogue boxes can be open at the same time. Its custom user interface has received mixed reactions from users. Generally, you either love it or hate it!

Each directory window has its own menu bar and various buttons allowing independent control. You can toggle between icons and text display, select and deselect all items and there is even a separate trash-can for each window.

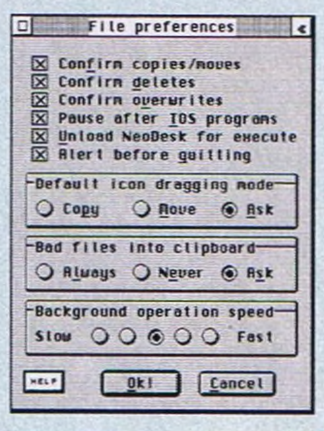
File groups are probably the most innovative feature of NeoDesk 4. This lets you create ghost copies of files and programs and group them in various ways. So a single copy of a file can be made to appear in different locations without having to make additional copies of it.

NeoDesk supports both colour and monochrome icons and includes a fully-featured icon editor.



NeoDesk 4 features a redesigned user interface with non-modal dialogue boxes and 3-D buttons. The context-sensitive help facility is extremely helpful while getting to know the program.

NeoDesk is the only desktop able to perform background file copying without external help.



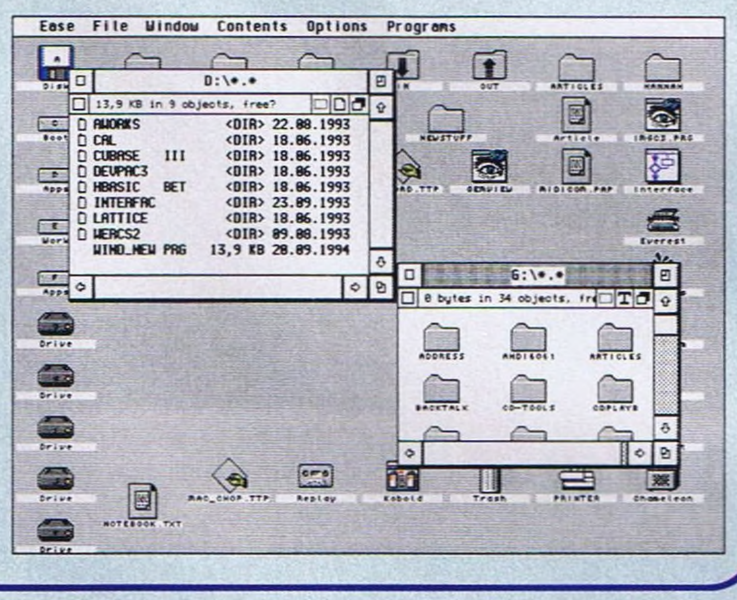
EASE 3.1

Ease is gradually taking the place of *Gemini* in Germany and is also gaining popularity in the UK. It was designed with *MagiC* in mind, but works equally well under TOS and *MultiTOS*. Like *Gemini* it supports *Kobold* and the AV protocol to run TOS programs in a window.

The program has various unique features such as a Mac-style menu and the use of the right mouse button for extended functionality. Unlike the other desktops in this survey, there is no limit on the number of applications with a keyboard shortcut. Each installed icon also appears in a pop-up menu which is available by double clicking on the desktop, useful for access under a multi-tasking system.

It allows each window to use icons or text independently of other windows and even remembers the setting for each drive and folder. Installed programs can be assigned optional parameters and the flexibility of this part of *Ease* is second to none. The use of several custom buttons at the top of each window also goes a long way to providing you with a quick way of changing between icons and text, iconifying a window or closing it.

Sadly lacking are keyboard shortcuts in dialogue boxes, and the program can be a little slow at times. *Ease* uses *GDOS* fonts for display if installed and includes a versatile colour icon editor along with a host of other utilities.



Ease is the ideal partner for MagiC. It can display icons in one window and text in another, and also uses GDOS fonts.

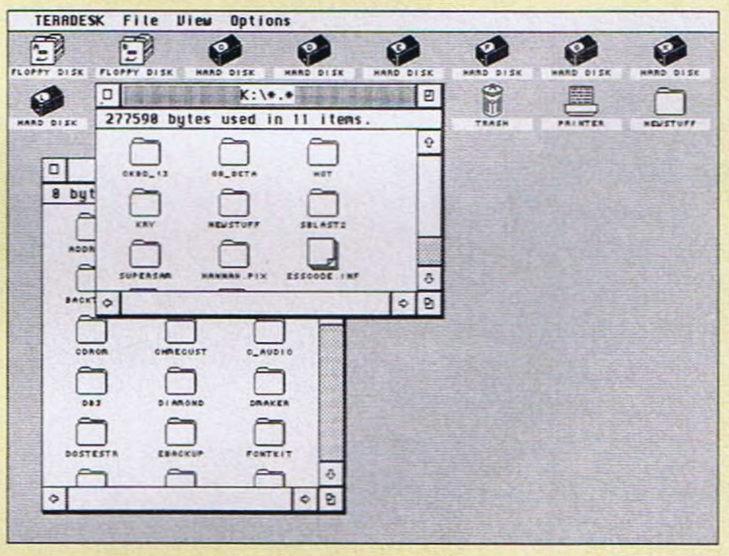
TERADESK 1.4

If you are running a TOS version earlier than 2.0x, *Teradesk* provides you with a simple and friendly desktop that is just as powerful as NewDesk. It also has the added advantage of being absolutely free, available from most PD libraries and BBSs.

TeraDesk is very small, with a file size under 100Kb and similar memory requirement, making it usable even on a floppy-based system. It supports *MultiTOS* and mimics all the NewDesk features such as the ability to place icons on the desktop and drag and drop files on programs to launch them. Applications can be installed so that a double-click on a specified file type launches them, passing optional parameters. Up to 20 programs can be assigned a keyboard shortcut.

TeraDesk also gives you the option to display dialogue boxes in windows and to install an optional file editor. Whenever you double-click on a file, a dialogue box opens and gives you the option to view, edit or print the file. The file viewer can display text or binary files in a GEM window. *TeraDesk* comes with a selection of icons, and additional icons may be added using a resource file editor.

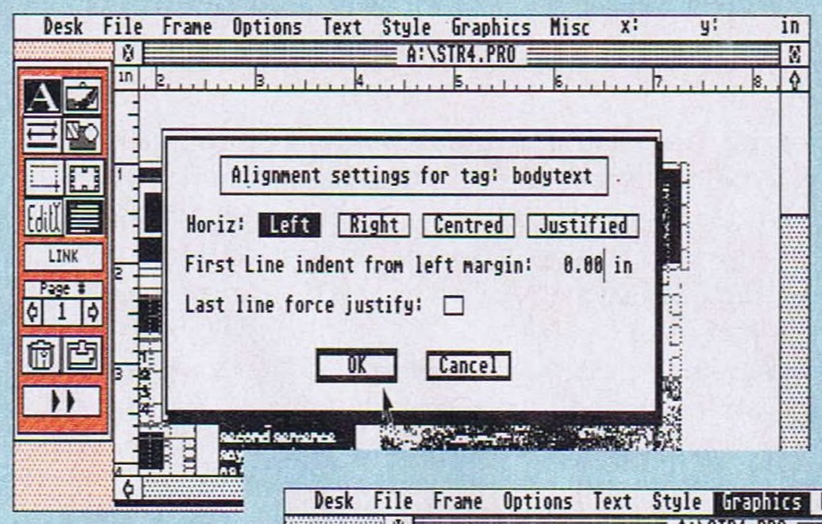
This is a fine program which is economical both in price and memory requirement and is definitely worth a try before investing in a commercial desktop.



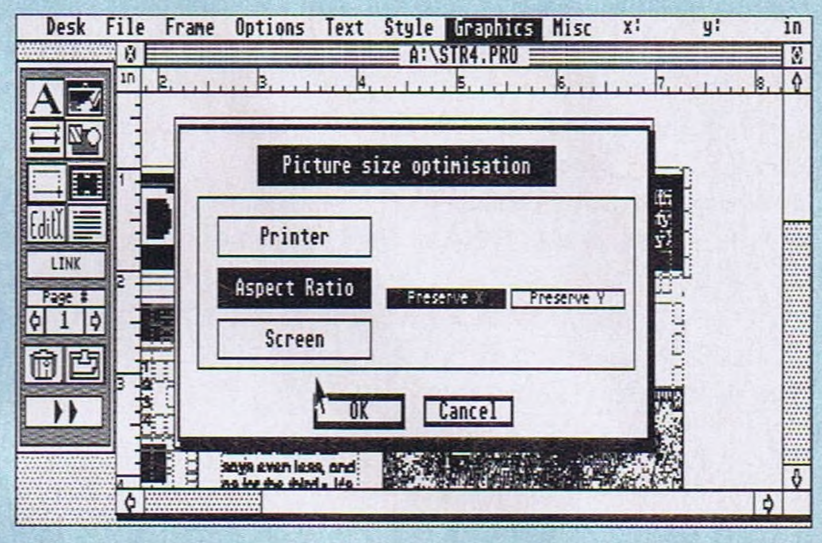
TeraDesk offers simplicity and speed, two advantages that make it well worth trying.

RAM	Unloadable?	GDOS fonts?	Features	Effectiveness	Documentation	Ease of Use	Value for money	Overall
150Kb	×	✓	5	7	7	9	10	76%
600Kb	✓	✓	8	8	No English docs	8	10	68%
300Kb	✓	✓	7	9	9	9	8	85%
300Kb	✓	✓	9	7	9	9	7	83%

TAKE IT EASY!



Justified text is handled from here. It's a good idea to use a first line indent for body text.



Bitmapped pictures can look very good – remember to size them to suit the resolution of your printer.

Well and truly infected by the desktop publishing bug courtesy of last month's cover disk giveaway? It's Nial Grimes to the rescue with some practical Easy Text Pro advice...

Every avenue of computer use is packed with jargon, and desktop publishing is no exception. Many of the terms have been inherited from the print industry and as such bear little relation to everyday ST lingo.

This month we are going to look closely at dealing with the two main elements in any document – text and graphics. We'll meet plenty of jargon along the way, but grasp this little lot and you will be well on the way to conquering the basic principles of DTP...

TAG ALONG

Of all the many tools at a desktop publisher's disposal, "paragraph tags" are certainly one of the most useful. Once you begin to put longer documents together, you'll notice how tedious it is to select huge chunks of text to simply change the style or font – especially so if the whole lot is linked through a number of frames. Paragraph tags allow you to apply a predefined style to larger sections of text. In the case of *Easy Text Professional*, they serve an even more important role, because some typographical effects simply aren't possible without the help of a tag or two.

Easy Text Pro handles paragraph tags in a very straightforward way. Just to the right of the Edit button in the control panel is the **Tag** icon and once highlighted, a simple click on a paragraph is enough to send you leaping into the appropriate dialogue box. The fourteen tags available are listed down the left-hand side, while on the right are the changes you can make to those tags. At this point it would probably be a good idea to run through the options available, as they neatly cover the basics of typography.

To start at the top, the tag names can be changed. The first four entries are already defined, but when adding more, it makes sense to reflect the font and size in the name – "Dutch 14" for example. Just for reference, everything you import or type is styled as "bodytext" by default. The **font and size** dialogue box will already be familiar to you, as will the **text style** section. Bear in mind that the changes you make will affect both the paragraph you have selected and also all other paragraphs marked with the current tag.

RIGHT ON

Alignment is one of the main reasons for using a paragraph tag as it's the only way to use right-justified text. **First line indent** is also useful when dealing with body text. It places a space at the start of each paragraph, which is a technique used by most magazines to improve the readability of articles. As a general rule, you'll want to leave the "force justify" button unchecked – stretching the last line of text in a paragraph to touch both borders usually looks tacky in the extreme.

Especially important when dealing with fully justified text is letter spacing, and adjustments in this department are handled through the **typography** box. It's all to do with how much space is used between the characters in a paragraph – tracking refers to a constant gap, while letter spacing changes (within certain limits) to make justified text look a little more natural. As if that isn't confusing enough, character spacing is measured in "ems", or the width of the letter "M" in the selected font. Yep, it's a case of fiddling with the settings until the page looks right!

The **spacing** dialogue box is in a similar vein; it deals with the gap used between lines, namely the leading. Auto-adjust works well for most purposes, but bear in mind that leading is measured in "points" (or 1/72 of an inch) if you do want to fiddle with the settings manually.

Now all of this might sound horribly complicated, but don't worry – once the styles are actually defined, it's just a case of highlighting a paragraph to change, clicking on the name of the tag to use and you're outta there! The nice thing about tagged text is that it can be easily changed at any time. If you

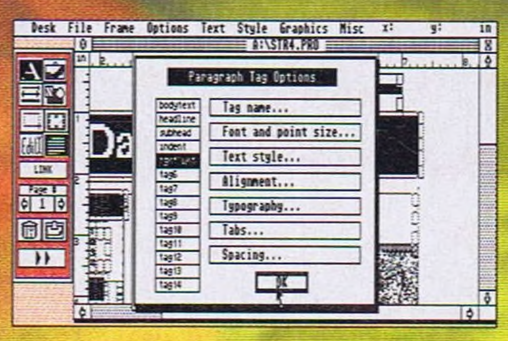
STEP BY STEP GUIDE

STAND IN LINE

Having trouble getting to grips with paragraph tags? In that case, let's use your new-found knowledge to add the finishing touches to last month's tutorial document...



1 ***Load up your almost-complete page and draw a medium-sized text frame on the screen. Click the edit icon and type "Faith & Honesty (Probably)", using <Return> where necessary.***



2 ***Now highlight the paragraph icon and click on the words you've just typed. The tag dialogue box will appear.***



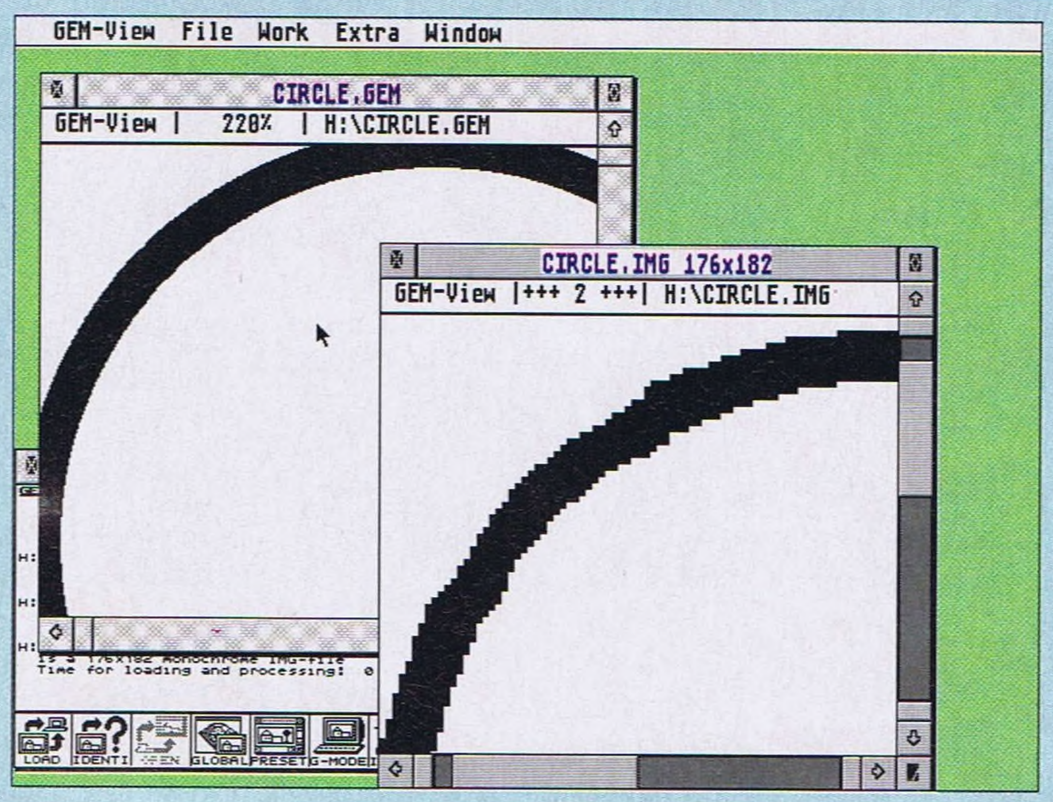
3 ***Select any unused tag and give it the following attributes: right justified, white, 12 point, Dutch. Click on "OK", apply the new style to the remaining lines and you're in business!***

BITS 'N' PIECES

One of the trickiest DTP concepts to grasp is the difference between bitmapped and vector artwork. You can look upon bitmapped images as pictures drawn on a huge piece of graph paper, the overall effect created by lots of little black squares. If you enlarge the graph paper with a photocopier, the straight lines are going to look jagged as each little square, or "pixel", is doubled in size. The same thing happens when you enlarge a picture in an *Easy Text Pro* document. This neatly highlights the main failing of bitmapped images – they are resolution dependent.

Vector art on the other hand works on an entirely different principle. Instead of describing every single point in the picture, a vector image is made up from primitive graphical shapes – lines, circles, curves and so on. When the ST is asked to draw a circle with a radius of, say, 2cm, it can do so once at screen resolution and a second time with more definition for the printer.

Now if all of that is just a bit too much to comprehend, simply remember to keep an eye on the size of bitmapped pictures, the .IMGs, .DOOs, .TNYs and .PI3s of this world...



The difference between bitmapped and vector images shows up quickly as you begin to enlarge them.

decide that 12-point body text would be better than 10-point, you can change the whole lot in one fell swoop by simply fiddling with one tag!

GET THE PICTURE?

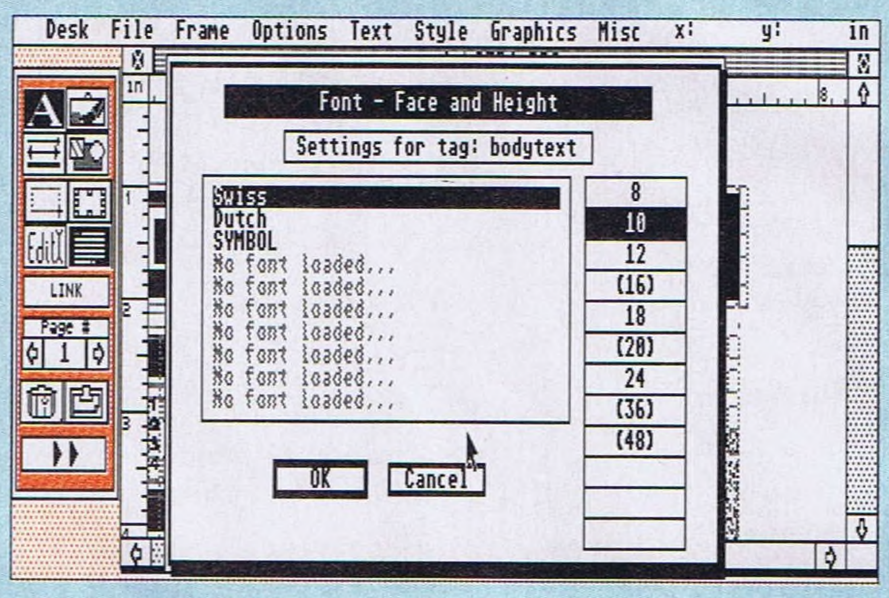
Graphics are just as important as text in desktop publishing, but making them look good on the page can be difficult at times. *Easy Text Professional* supports a range of different graphics formats, but they all fall into two main categories – bitmapped and vector. The difference is explained in the *Bits 'n' Pieces* box.

Although bitmapped pictures are sometimes limited in resolution, there is a lot you can do to make sure that they look good when they reach your printer.

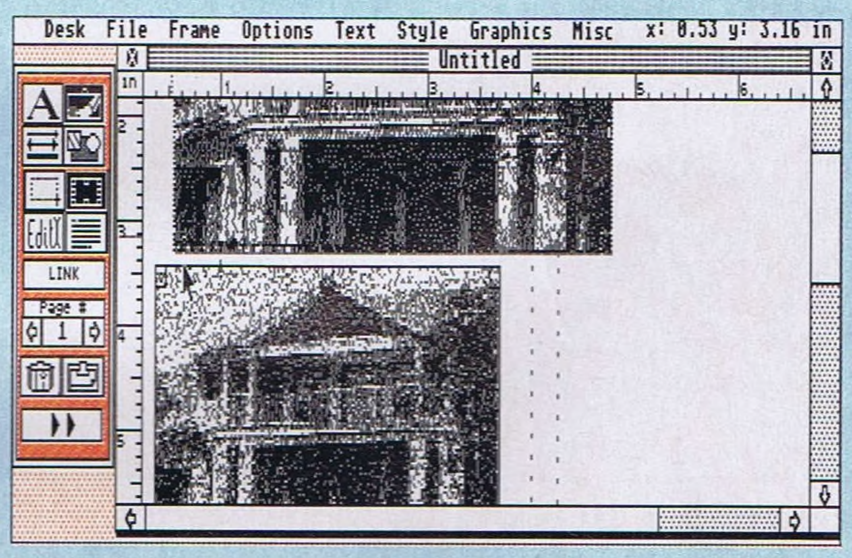
Your first port of call should be the **size optimisation** dialogue box, which can be found lurking in the **graphics** menu. Here, pictures can be sized, or "scaled", to suit either the screen or printer; the aspect ratio can also be dragged into line. In an ideal world, all pictures would be scaled to printer resolution and kept at exactly that size. Obviously, that's not possible all of the time, but that shouldn't stop you sizing to printer resolution as a basis for adjustments.

Remember that *Easy Text Pro* always uses as much information from a bitmapped picture as possible. For example, if you import a 150dpi (dot per inch) picture, it will be reduced to 90dpi for display on the screen, but will print at full resolution. As you can see, there's more to using pictures within documents than meets the eye. If you find yourself struggling to grasp the basic principles, simply import the same picture into a document a number of times and experiment with the **size optimisation** dialogue box.

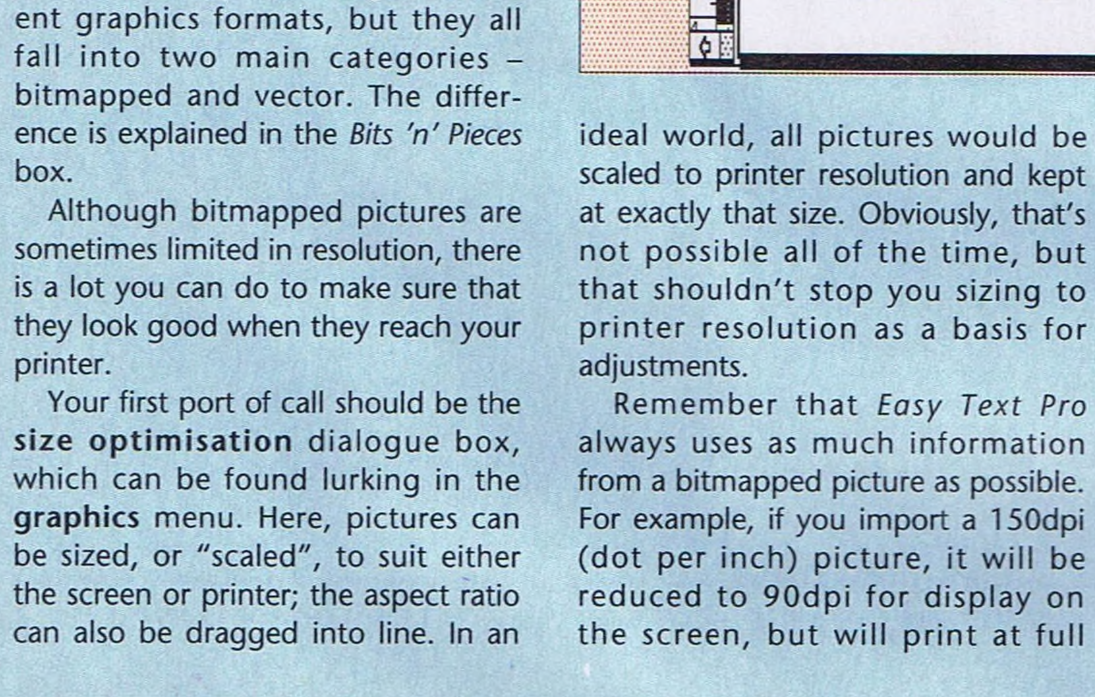
And now I'm sure we've given you more than enough jargon to cope with for one month! Keep practising what you've learned and tune in next time for another foray into the fascinating world of *Easy Text Professional*...



Changes made at this point affect all paragraphs tagged as "bodytext".



It's a good idea to preserve a picture's aspect ratio, even if the resolution is compromised.



All tagging operations are carried out through this dialogue box – make sure you've got the right tag highlighted!

The spacing between characters can be adjusted through the typography dialogue box.

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BUYING A... PRINTER

With a printer available for virtually every task, how do you select the right one for you? Maurice Collins presents the right questions...

Not that long ago, printers were seen as a luxury as far as home computers were concerned but these days it's hard to imagine not owning one. There are three main technologies you can go for, each with pros and cons, but the right choice depends on exactly what you intend to do with your ST.

• **Dot matrix**. The cheapest printers are generally dot matrix designs which work by hammering ink from a ribbon onto the paper and so can be rather noisy. The sheer simplicity makes them very fast, particularly when printing in draft mode. As for quality, you get what you pay for – 24-pin printers offer better quality text and faster output than their 9-pin cousins. Dot matrix printers are ideal for listing lengthy programs or *read.me* files and fine for light word processing.

• **Inkjet**. Inkjets have taken over the printing middle ground and are particularly good for home users dabbling in DTP and graphics but still needing text output on demand. The output quality isn't as high as a laser but they're cheaper to buy and run, and the noise level is very low. They tend to be slow at printing text though.



The new generation of HP DeskJets offer 600 dpi resolution in colour with the 560C (left) and mono courtesy of the 520.

• **Laser**. The price of laser printers has dropped dramatically of late and it is possible to buy a good one for under £500.

Relatively quiet and moderately fast, they produce very high quality output but you can face big bills for toner and new drums if you use them a lot. For DTP use, they are ideal but ensure you order one with enough memory – a complex A4 page may need 2Mb or more of internal printer memory.



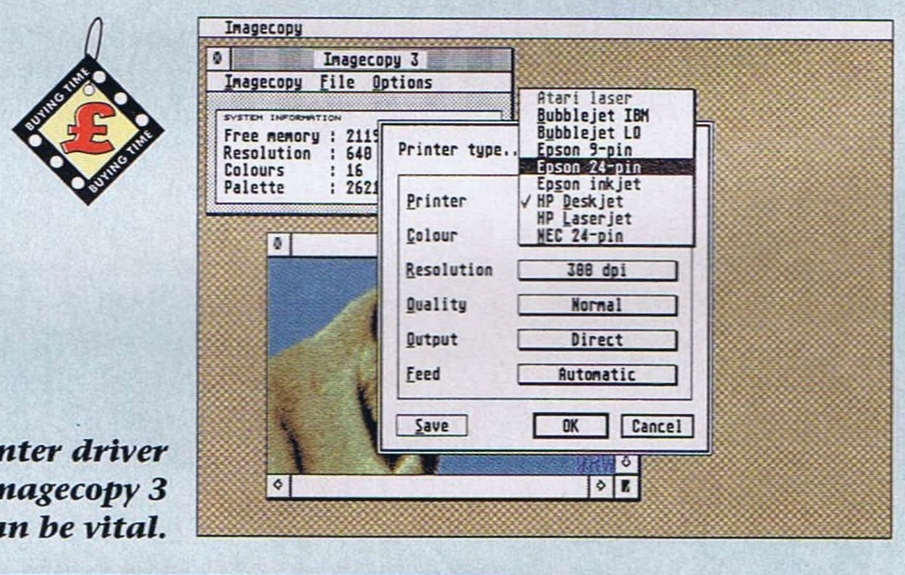
With a high resolution, 360dpi output, a bubblejet printer such as the BJ-10sx has a lot to offer for a small outlay.

• **Running costs**. At one end of the scale come the matrix printers which use cheap, long-lasting ribbons while at the other end come lasers with £150 replacement drums and expensive toner cartridges. The media type is also important – all printers can use plain paper but some really need special paper if they're to produce their best. Some types of inkjet paper can cost £1 a sheet, so check this out. You can save money by re-inking your dot matrix ribbons (not recommended) or refilling inkjet cartridges rather than replacing them (worth a try but messy).

• **Colour**. Colour dot matrix models cost little more than their mono equivalents and are still very cheap to run, but colour inkjets are more expensive to buy and run. In fact, it can work out at well over £1 a page to print pictures on a colour inkjet, even on plain paper.

• **Compatibility**. This is crucial. Most ST programs need to convert your on-screen creations into a form your printer can understand. To do so it uses what are called "drivers", tiny programs that translate the program's output. No software can include drivers for every printer but there are some standards that most printers emulate, so pick a printer with an emulation mode that your software can handle.

Most 9-pin dot matrix printers emulate the Epson FX80 or IBM Proprinter and most ST programs have a driver for one or the other of these. Moving up, 24-pin models have a wider range of emulations but the most common is probably Epson LQ850 (LQ870 for colour). The inkjet standard is the DeskJet, which many now emulate, though the Canon Bubblejet is also popular. The laser standard is the HP LaserJet in several guises. If your printer is compatible with any of these, you shouldn't have much trouble getting it to work properly.



A good printer driver like Imagecopy 3 can be vital.



The Star LC24-200, a classic colour 24-pin dot matrix printer.

JARGON JOGGER

Buffer: in-built printer memory that speeds up printing on inkjet and dot matrix designs.

CPS: Characters Per Second, a measure of print speed.

LQ: Letter Quality, the best print quality on a dot matrix. Draft is the worst while NLQ is "Near Letter Quality".

Parallel interface: the standard way to connect a printer to an ST. A serial printer will be much slower – avoid them.

PCL: Hewlett-Packard's Printer Control Language as used in DeskJets and most lasers.

PPM: Pages Per Minute, a measure of print speed on laser printers.

Resolution: in dots per inch, resolution has a direct bearing on quality. A 9-pin can range from 120 by 72 dpi (draft) to 240 by 144 dpi (best) while a 24-pin goes from 120 by 180 dpi (draft) to 360 by 360 dpi (best), depending on the driver. Most inkjets and lasers are 300 by 300 dpi but the new generation lasers are capable of 600 by 600 dpi.

Sheet feeder: feeds cut (single) sheets one at a time through the printer. A system used on lasers and inkjets but optional on dot matrix printers.

Tractor feed: a mechanism on dot matrix printers for pulling perforated paper through the machine.

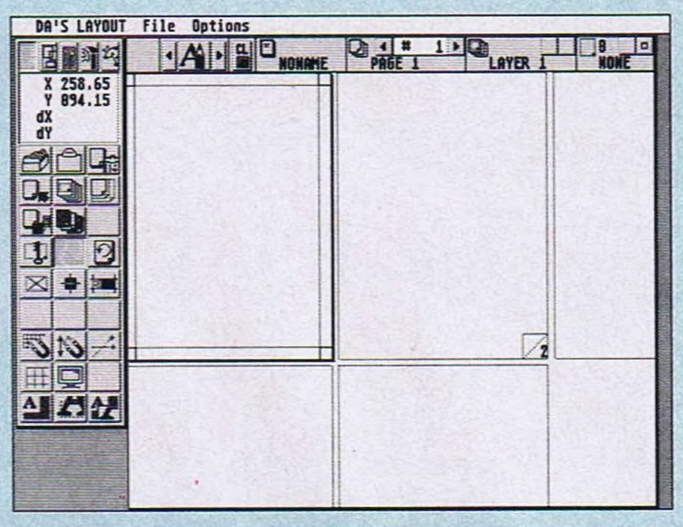
What is a page? Günter Minnerup continues his series on good DTP design with a look at page sizes and margins...

BETTER BY DESIGN

Last month, the importance of white space for good page design was stressed: or, more precisely, of the correct balance between white space and printed areas. The starting point for all such considerations, of course, must be the "real estate" actually available to you – the size of the page.

We're all familiar with the standard A4 and A5 sheets as used in letters, and all DTP software offers these sizes, but even a cursory glance at your bookshelf will tell you that these sizes are almost never used for books. Magazines, too, will often be slightly larger or smaller than A4, not to mention promotional leaflets, business cards and invoices. Commercial printers use sheets much larger than A4, and economic considerations often dictate page sizes that fit the printing machine with a minimum of waste. "Imposition" is the name given to the arrangement of page items on the physical sheet of paper going through the printing machine, and you would follow the same principles when arranging multiple business cards on your A4 laser or inkjet printer. So when we talk of the page size, we are referring to what the trade calls the "trimmed" size after the items have been separated and any waste trimmed off.

Unless you are simply designing a letterhead or anything else intended to be of exact A4 proportions, it is a good idea to follow the established convention of marking the trimmed page size with crop marks. Even with business cards on a laser printer, such crop marks will help you use the guillotine to precise effect, and to visualise the available design area on screen. For book work, the so-called "golden section" or "golden rectangle" is supposed to describe the most visually pleasing page dimensions: at a ratio of 8.1:5, this is narrower than an A4 or A5 page and would make a good starting point if you are really unsure where to draw the line.



Crop marks give a visual indication of the trimmed page size you are working with and serve as guides for the guillotine.

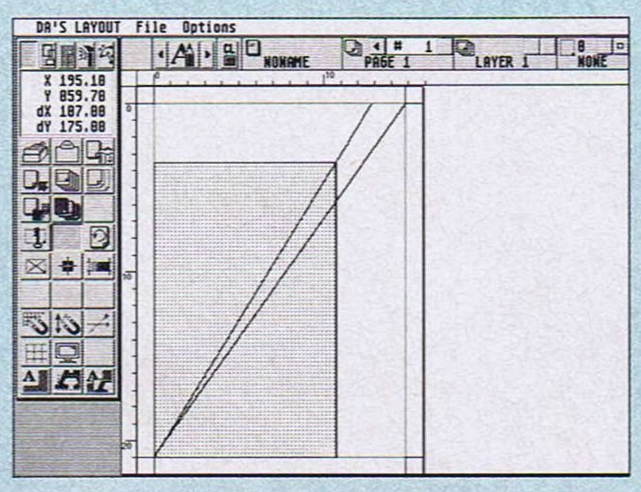
MARGINAL CONCERN

The main white space on a page is the margins around the printed area. As with the "golden rectangle", traditional concepts of elegance have been largely derived from the beauty of medieval manuscripts and prescribe a rather generous arrangement where the bottom margin is twice the size of the top margin and equal to the combined size of the left and right side margins.

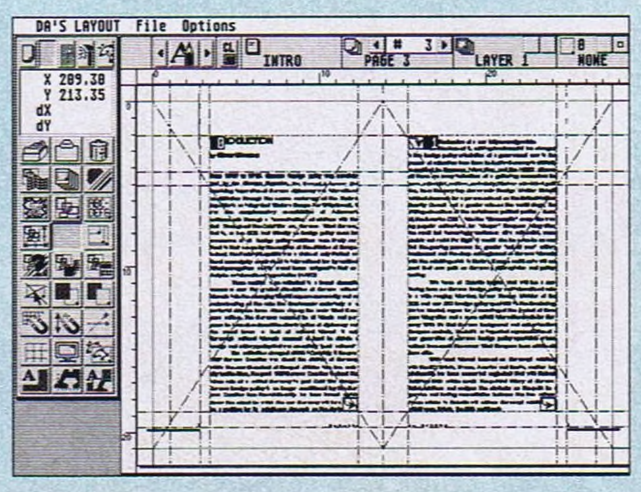
In our more cost-conscious (and ecological) modern times, this is considered a bit wasteful and narrower margins – especially bottom margins – are the rule. Do what looks good to you, but keep in mind the general rule that means margins suggest cost-cutting and "luxury" margins, class! The printed area will often be made up of several columns, most obvi-ously in newspapers and magazines but also in business stationery and promotional leaflets. The number and width of such columns will be the subject of next month's article, and for the time being we will consider the printed area as one rectangle. That still leaves the issue, however, of whether the left and right margins should be equal. Symmetrical page design with equal margins on either side is the more conventional approach and has the advantage of being handled more easily by the beginner. In DTP terms, it also makes it easier to switch pages around within a document – you only need one master page rather than different ones for left and right hand pages. The drawback is that symmetrical page design can look rather staid and boring.

Asymmetrical design, by contrast, introduces an element of tension which can bring pages to life and offer much greater scope for creative design. The debate between the two camps has raged for many decades now – and I must admit to being heavily biased towards the asymmetrical school of thought. Yet I hesitate to recommend it to the absolute beginner as it is much easier to learn the basics with a strictly symmetrical approach as this seems to be more in tune with our natural inclination towards order and balance.

Most commonly, asymmetrical page design has wider outside than inside margins: the extra wide space looks luxurious and can be used for illustrations, folios (page numbers), headers, footers or even footnotes. In a DTP context, however, it requires very accurate planning as the simple insertion of just one page into an existing document can lead to all kinds of problems! (*tell me about it... Art Ed*)



A page defined by the proportions of the so-called "golden section" superimposed on A5. You will find that most paperbacks are trimmed very close to these dimensions.



Asymmetrical page layout looks livelier and offers a wide marginal design space that could be used for illustrations or footnotes.

TRUE TO Type

This month Andrew Wright looks at the first considerations when choosing a font for your document...

Every time you sit down to design a document, you should devote some time to planning the way it will look and feel. The look of a document is its overall size and shape, the width of the margins and so on. You can think of the look of a document as the scientific side of DTP – follow the rules and you'll rarely go wrong. The way a newsletter or a report feels is something else again and this is a chance for the artistic side to come shining through.

The most important input in terms of feel is often the typefaces that have been chosen and used. A document can look very modern and high tech, distinctly *avant garde* or staid and classical, depending on the typeface you choose. Further on in this piece, I've set out a simple classification of typefaces so you can immediately catalogue your collection, either mentally or on paper. Clearly, for most DTP work, the most important fonts will be those capable of being used as body text – in other words, serif typefaces.

However, the first thing to think about when planning a typeface for a document like a newsletter is not whether you actually have it (although that is clearly important!) but whether it will stand up to the task. Is it a commercial quality font or is it one with a more dubious origin? Most shareware and PD fonts tend to be display or script typefaces, unsuitable for page after page of body text. Others that do appear to be suitable at first glance may have a number of hidden faults that will soon come to light when used. Print out a full page of text in each typeface and look for irregularities. For example, one character might not sit quite correctly on the baseline or there may be a large gap between two particular characters.

Another problem that often comes to light after you've laid out half of the document is the lack of vital characters! It's no good opting to lay out your maths thesis in a font that doesn't have mathematical symbols or your French short story in one that lacks characters with the correct accents. As always, it pays to think ahead.

BY TYPE

It's virtually impossible to classify every single typeface in existence but the following guide should help.

• **Serif:** Serif typefaces like Times/Dutch are widely used for body text as they are generally acknowledged as being the easiest to read. They are easily identified by the tiny serifs on the ends of the strokes and include the Speedo typefaces Dutch 801 and Bitstream Charter, Serif in *Timeworks 2* and Garamond Antiqua in *Pagestream*.

Sans Serif

Swiss, better known as Helvetica, is a classic sans serif face...

Castleton Roman

... while this Castleton Roman serif typeface came from FaST club's GDOS Fontpac series.

• **Sans Serif:** In contrast, sans serif fonts have no serifs at all. This makes them plain and simple and explains why they are often used for headlines and posters. They can be used for body text, of course, and can give a bright, modern appearance like the pages of *ST Review*. Well known examples are the numerous variations of Swiss/Helvetica found in most programs and PD ones such as Futura from the FaST Club's collection.

Slab serif

Geometric Slabserif can be used for short passages of body text.

• **Slab Serif:** Slab serif typefaces deserve a class of their own as they generally fall between serif and sans serif in terms of readability. They serve well as headings and cross-headings but the lighter varieties can also be used as body text in short documents. The *Timeworks* font Rockface is a good example.

• **Script:** Script typefaces are an exaggerated form of lettering that can often be joined in imitation of handwriting. They are best reserved for things like menus and invitations and should never be used as body text because they are hard to read except in short phrases. Examples include the Park Avenue font supplied with *SpeedoGDOS* and Sage from *Timeworks 2*.

• **Display:** In many ways, the category of Display fonts includes the ones you can't squeeze in anywhere else. They are generally useless for body text and tend to be far too fancy for cross headings, making them best kept for attention-grabbing headlines and titles. Examples include Drury Lane Capitals from *Timeworks* and Cooper Black from the Speedo collection.

BOUTIQUE

WILD WEST

modern

Display fonts come in all shapes and sizes..!

Brushwood from Timeworks 2 is a reasonably legible script face but beware of using it as body text.

Brushwood
ABCDEFG
abcdedfg

JUST THE JOB

If you want to emerge from a mail merge operation with your sanity intact, follow Richard Williams' quick guide...

Mail Merge – the very words are enough to make sole-trader mail order business people cry! In fact, many of you may be inclined to trade your soul for the ability to make mail merge work properly every time. Why can the mere mention of mail merge turn those with even a little knowledge of it into asylum cases? Ah, yes – the answer is in the question itself. A little knowledge...

Know your enemy is one of the most sensible elements of battle strategy. So it's time to acquaint ourselves fully with the word processor/database user's enemy *numero uno*.

What is mail merge? Well it's supposed to be a marvellous means of automating the process of sending the same letter to many people. But some people don't find it marvellous at all. After it's fallen over for the twentieth time, it's back to editing the letter and printing each one individually.

Know your enemy – so here's your battle brief:

- First ask yourself if you *really* need to use mail merge. If you're sending a note to half a dozen suppliers and it's very much a one-off exercise, it could be a major waste of time.
- Plan meticulously. Winning this first campaign will set you up for victory in many more to come.
- Many word processors can handle mail merge entirely on their own as they allow you to create both the name and address file and the letter file, then merge the two elements to produce your mail drop. But data entry can be tiresome as you have to enter a delimiter (often a comma) between each "field" or element of the name and address. Typing names into a database is much easier, but you need to be able to save the database file as ASCII (unformatted) text with commas or some other delimiter between the names in the fields. Fortunately, many databases can do this – but then your word processor needs to be able to read such a file to make use of this data!
- When you have created a name and address file, **make sure you keep it updated**.
- Keep at least the last mail merge letter you wrote, complete with the holders for the fields to be inserted at the top. This means you can edit the letter to send out a new message, but never have to remember how to type in the holders again.
- Get a sheet feeder for your printer. Having to pause between pages to place a new sheet in the machine is seriously bad news.

BY EXAMPLE

And now, the practical bit. Using Compo's excellent *That's Write* as our example word processor, here's one way of doing it.

Create a new file and type all your names and addresses into it, placing each one on its own line and with a comma as a delimiter, like this:

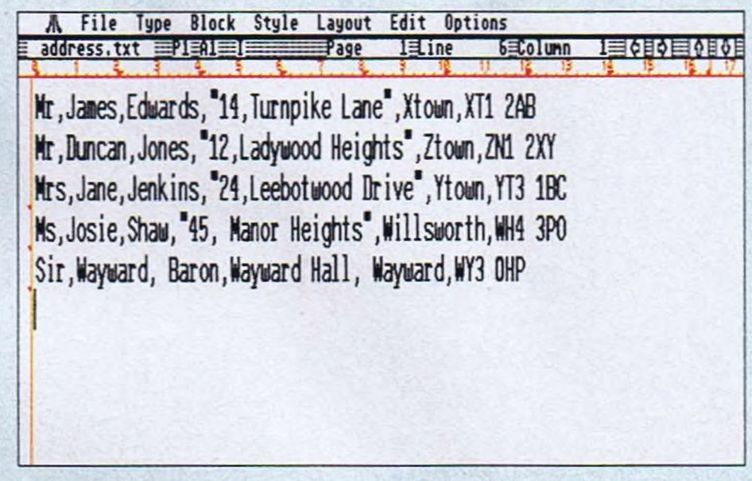
```
Mr,Richard,Williams,
"1, Asylum Street",Newport,
Isle of Wight

Mr,John,Major,
"10, Downing Street",
Westminster,London
```

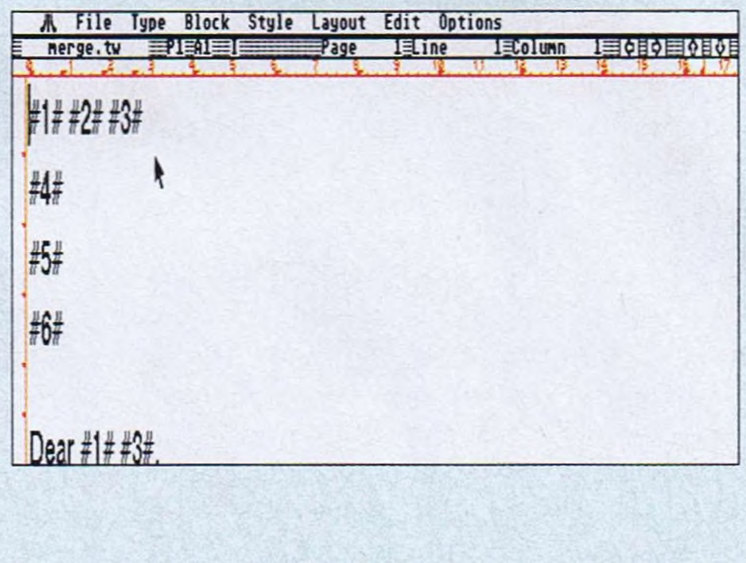
Don't hit <Return> and break a line – make the line wider if it doesn't fit. The quotes around the number and street part of the address tell the program to ignore the address comma for field separator purposes.

Each name and address must have the same number of fields. If, for instance, you did not know Mr. Major's first name, you **must** indicate that it is missing by placing two commas next to each other like this:

```
Mr,,Major
```



Creating the addresses file. Type your addresses like this – and make sure you save the file...



In your merge letter, type in the field numbers. Each number is preceded and followed by a hash, and there's a space in between.

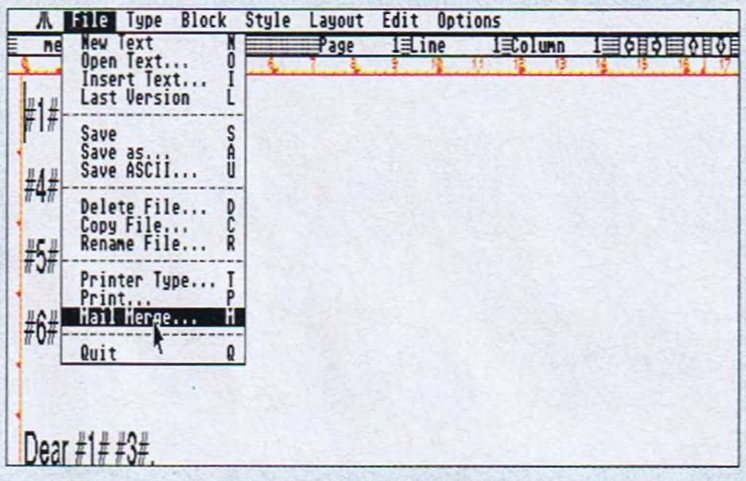
Save the address file as ASCII. For the merge letter, create a new file and write your own message but between your own business name and address and the message, be sure to follow this format for the recipient's name, address and "Dear... " bits:

```
#1# #2# #3#
#4#
#5#
#6#

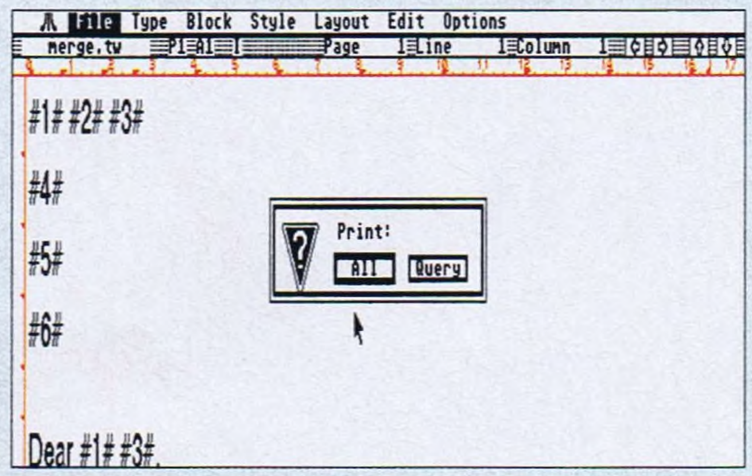
Dear #1# #3#,
```

Now, with your merge letter on-screen and your printer connected and switched on, choose **Mail Merge** from the **File** menu. A dialogue box will appear, asking you for the name of the address file you wish to use. Hunt through your files and find it, double-click and you should be rewarded with another dialogue box asking if you want to print **All** (a copy of the letter for every address) or **Query** the list. Choose the latter and you can view each letter on-screen before it prints.

And that's it. Once you are the master of mail merge, and you've saved your first successful effort, you will never look back. Life gets less tedious then for the person whose success depends on sending the same thing to lots of people. And isn't that what much of business is all about? Yes, those who master mail merge will see in microcosm the meaning of... (*We stopped Richard here and switched off both his ST and printer, which had just produced 10,000 copies of this article, every one addressed to Mr. Major... Ed*)



Choose Mail merge from the File menu, and you'll be asked which file you wish to use as the address list.



Do you want to print copies for all names and addresses, or query the list? For query, you'll be shown each address and can answer "yes" or "no" in each case.

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3.5 BLANK DISKS

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40	28.49	21.99	20.49	15.00
50	35.00	26.00	23.99	17.50
100	65.00	49.99	44.99	35.00

OPEN WIDE

Ofir Gal continues his exploration of the AES window messages...

What happens when a user clicks on the *full box* in the top right-hand corner of a window? The size of the window is maximised and while this is quite easy to implement, there are several steps that you need to take in order to correctly support this feature of GEM.

First you have to obtain the maximum possible size of the window, a constraint of the screen. Do not assume that it is always 640 by 400 pixels! All STs support three screen resolutions and some users will have overscan or a graphics cards installed. There are also the TT and Falcon to consider; the latter can produce a variety of screen resolutions. You can safely assume that the screen mode will not change while the program is running, so you only need to find it once, typically at the beginning of your program.

This is achieved with the help of *FNwind_get* which is called with the window handle 0 and the function code *WF_FULLXYWH*. This returns the maximum size of window 0. If you are wondering where window 0 comes from, read the *Window IDs and Handles* box. The program line below is all you need to obtain the maximum size of your windows; the code places the maximum values in the variables maxx, maxy, maxw and maxh:

```
junk=FNwind_get(0,WF_FULLXY-
WH,maxx,maxy,maxw,maxh)
```

When the user clicks on the full box, the AES sends your application a *WM_FULLED* message with the window handle in *mess(3)*. The sub-routine *WinMessage* requires a new entry for *WM_FULLED* which should call the sub-routine *WindowFull*, passing it the window handle as found in *mess(3)*. The code in listing 1 demonstrates this.

BACK AGAIN

The full box acts as a two-way switch, maximising the window first time and returning it to its original size *and* position. This is not difficult to implement and is a very useful feature of GEM. The sub-routine *WindowFulled* has to change, making use of another *FNwind_get* variety, namely *WF_PREVXYWH* which returns the previous dimensions of the window. It should first check the current size of the window – if this is already the maximum possible size it should call *FNwind_get* with the code *WF_PREVXYWH* and then set the window dimensions to the values returned by the call. The source code is simpler than the explanation (*thank goodness for that... Ed*) and is shown in listing 2.

THE TOPPING

One other window message needs to be looked at here – *WM_TOPPED*, sent whenever the user clicks on a background window. Your window can end up in the background if your application uses more than one window or if another application or desk accessory opened a window on top of yours. When a *WM_TOPPED* message is received the window handle is placed in *mess(3)* as usual. The response is to call *FNwind_set* with the function code *WF_TOP*. This is shown in listing 3. The standard x, y, w and h parameters in the call are of no consequence and you can simply pass zeros instead.

It is interesting to note that in most cases, topping a window requires a screen redraw because parts of the window may have been obscured and are now visible again. The AES is clever enough to detect this and will also issue a *WM_REDRAW* message if necessary.

```
LISTING 1
SUB WinMessage
SHARED mess()
STATIC message
message=mess(0)
SELECT CASE message
   CASE WM_MOVED,WM_SIZED
      junk=FNwind_set(mess(3),WF_CURRXYWH,mess(4), _
      mess(5),mess(6),mess(7))
   CASE WM_REDRAW
      WindowRedraw mess(3),mess(4), _
      mess(5),mess(6),mess(7)
   CASE WM_FULLED
      WindowFulled mess(3)
END SELECT
END SUB

SUB WindowFulled(VAL win)
SHARED maxx,maxy,maxw,maxh
junk=FNwind_set(win,WF_CURRXYWH,maxx,maxy,maxw,maxh)
END SUB
```

```
LISTING 2
SUB WindowFulled(VAL win)
SHARED maxx,maxy,maxw,maxh
STATIC curx,cury,curw,curh,prevx, _
prevy,prevw,prevh
junk=FNwind_get(win_WF_CURRXYWH, _
curx,cury,curw,curh)                    'get current size
IF curx=maxx AND cury=maxy AND  _
curw=maxw AND curh=maxh THEN            'its full size
   junk=FNwind_get(win,WF_PREVXYWH, _
   prevx,prevy,prevw,prevh)             'get previous size
   junk=FNwind_set(win,WF_CURRXYWH, _
   prevx,prevy,prevw,prevh)             'set to previous size
ELSE
   junk=FNwind_set(win,WF_CURRXYWH, _
   maxx,maxy,maxw,maxh
END IF
END SUB
```

```
LISTING 3
SUB WinMessage
SHARED mess()
STATIC message
message=mess(0)
SELECT CASE message
   CASE WM_MOVED,WM_SIZED
      junk=FNwind_set(mess(3),WF_CURRXYWH,mess(4), _
      mess(5),mess(6),mess(7)
   CASE WM_REDRAW
      WindowRedraw mess(3),mess(4),mess(5),mess(6),mess(7)
   CASE WM_FULLED
      WindowFulled mess(3)
   CASE WM_TOPPED
      junk=FNwind_set(mess(3),WF_TOP,0,0,0,0)
END SELECT
END SUB
```

GEM MOUSE FORMS

Constant	Value	Meaning
ARROW	0	Arrow
TEXT_CRSR	1	Vertical bar
BUSYBEE	2	Busy bee
POINT_HAND	3	Pointing finger
FLAT_HAND	4	Extended fingers
THIN_CROSS	5	Thin cross hair
THICK_CROSS	6	Thick cross hair
OUTLN_CROSS	7	Outline cross hair
USER_DEF	255	User defined*
M_OFF	256	Hide mouse
M_ON	257	Show mouse

*The user defined option should not be used without defining the form first. The form structure is documented in the *HiSoft BASIC* manual as well as most GEM programming books.

The program code here will handle such multiple messages without any problems.

MOUSE DROPPINGS!

Although our program appears to work flawlessly, it suffers from a fundamental problem which I have avoided until now. Click on the full box and then move the mouse – a mess gets left behind, fondly known as "mouse droppings" among GEM programmers!

How do you solve this? The GEM programming guidelines require you to use two AES calls before and after drawing to the screen: *FNwind_update* and *graf_mouse*. The first tells GEM that you are about to do some drawing and locks the system so that no other programs are able to draw. The second hides the mouse, preventing the so-called "mouse droppings". On finishing the drawing, you must call these again in reverse order, effectively displaying the mouse and then releasing the screen.

The call *FNwind_update* takes a single parameter, a flag telling the AES whether you are about to draw or have just finished. The value 1 is used to start drawing and 0 to end it. However, it is much better to use the constants *BEG_CNTRL* and *END_CNTRL* to do the same.

graf_mouse takes two parameters, but only the first is important for our purposes. It is best to use constant names rather than explicit values with this call. In addition to being able to hide the mouse, *graf_mouse* is also used to change its shape from the standard arrow to one of seven optional shapes. The *GEM Mouse Forms* table lists the various mouse forms available under GEM; the fixed code is shown in listing 4.

The full program along with the file *AES.BH* which contains the various constants used by the program can be found on the cover disk. Next month I will continue this tutorial by adding a menu bar and other functions to the program.

SPLIT LISTING

As a final point, when writing GEM applications, the use of complex sub-routines and functions means that lines of code can be very long. However, it is possible to break a line of code into two. Take the following line for instance:

```
IF very_long_variable=2 AND
another_long_variable=4 THEN
```

Treating it as a single, continuous line of code, it can be written as:

```
IF very_long_variable=2 AND _
another_long_variable=4 THEN
```

The space and underscore at the end of the line are used to indicate this to the compiler. Note, though, that you cannot break a long text string into two lines...

MISSED THE FEBRUARY ISSUE COVER DISK WITH K-RESOURCE?

No problem – just turn to page 98 for information on how to order back issues.




```
LISTING 4
DO
   evnt_mesag VARPTR(mess(0))
   junk=wind_update(BEG_CNTRL)      'take over the screen
   graf_mouse M_OFF,0               'hide mouse
   IF mess(0)>=WM_REDRAW and mess(0)<=WM_MOVED THEN
      CALL WinMessage               'handle message
   END IF
   graf_mouse M_ON,0                'reveal mouse
   junk=wind_update(BEG_CNTRL)      'release screen control
LOOP UNTIL mess(0)=WM_CLOSED
```

NEW COMMANDS

graf_mouse: used to change the mouse shape or hide it. It takes two parameters: the mouse shape and a pointer to a user-defined mouse form.
wind_update: an AES function used to block or release the screen. When used to block the screen, no menus can be pulled down and other applications or desk accessories must wait until the screen is released.

WINDOW IDS & HANDLES

In most cases, BASIC makes the life of the programmer much easier, but on occasions it adds a layer of complexity to programming, especially when it comes to the AES. This is the case with window IDs and handles.

BASIC window commands use an ID that is determined by the programmer when calling the *WINDOW OPEN* statement. You may specify an ID ranging from 0 to 7 inclusive.

The AES gives each window you open its own handle which is effectively the AES window ID. This ID is determined by the AES and depends on the number of windows currently open. Normally, ID 0 is taken up by the desktop.

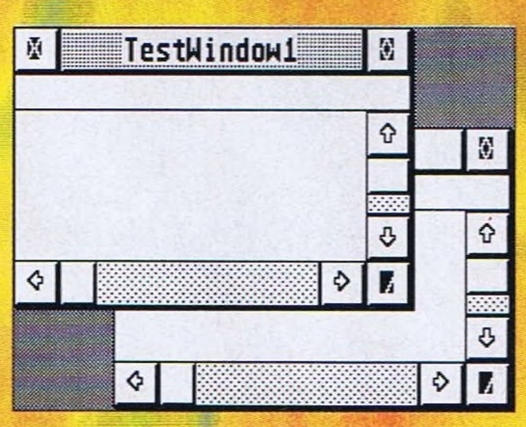
As a rule, always use the BASIC ID when using the *WINDOW* statements and the AES handle when calling any of the *FNwind_ AES* functions. BASIC provides a command that allows you to convert from one to the other if required.

Use *WINDOW READ id,5,result* to find the AES handle of the window which is then placed in the variable result. *WINDOW READ handle,6,result* can be used to find the BASIC ID of a window.

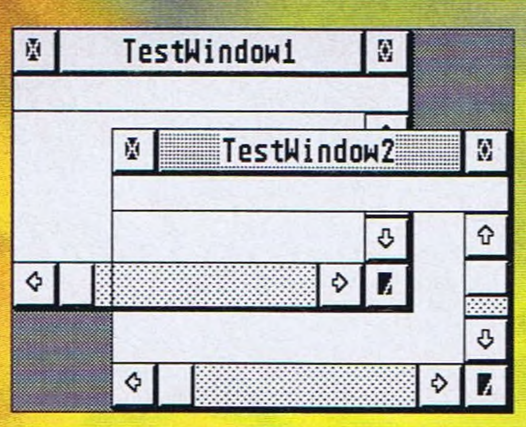
STEP BY STEP GUIDE

WINDOW TOPPING

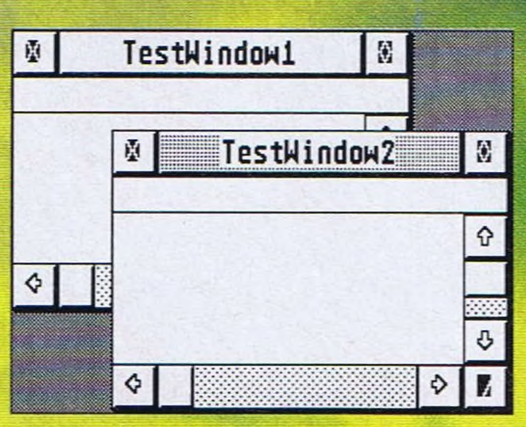
See what happens when you click in the window entitled "TestWindow2", a part of which is hidden behind the "TestWindow1"...



1 The computer's AES sends a WM_TOPPED message to your program when you click on the bottom window with the window's handle in mess(3).



2 Respond to the message with a WF_TOP command. The AES puts the window at the top of the window stack, redrawing only its gadgets.



3 The AES then sends a WM_REDRAW message upon which your application must redraw the newly revealed part of the window.

WELL SORTED...

What is the most efficient way to put items in order? Jon Ellis figures it out...

The last C tutorial ended with a gristly function declaration for you to chew on:

```
void qsort(void *base,int n,
int size,int (* compare)
(void *,void *));
```

This is the declaration for the ANSI standard library function **qsort()** which sorts an array using the Quicksort algorithm. As the name implies, Quicksort is generally a much faster technique than the dismal bubble sort which seems to turn up in many books on programming.

The real beauty of **qsort()** lies in the flexibility offered by the programming interface. Arrays of any kind of object can be sorted according to any rule you like. Even better, the fiddly details of the algorithm are squirrelled away in the library, making programming simple.

Returning to the function declaration, it should have been clear that **qsort()** expects four arguments: base, n, size and compare. The middle two arguments are simply integers, specifying the number of elements in the array and the size of each element in bytes. "base" is a pointer to the start of the array, typed as a void pointer, **void ***, because **qsort()** does not know (or indeed care) what items it is sorting. Void pointers were introduced in the issue 29 *C tutorial*, if you need to refresh your memory!

These three arguments give **qsort()** enough information to be able to shuffle elements around within any array. The final one allows it to know which elements are out of order. "compare" is a pointer to a function that returns an integer, and takes two pointer arguments as input. Where does this function come from? You have to write it, because only *you* know how to compare whatever data may be in the array.

At each stage in the sort, **qsort()** calls the "compare" function to find out whether or not to swap two elements. The two inputs are pointers to array elements that **qsort()** would like compared. The function returns a negative number if the first array element should rank below the second, 0 if they are equal, and a positive number if the first element comes before the second. Once again, void pointers are used to allow **qsort()** to retain its ignorance about the array element type.

ORDER, ORDER

As usual, this looks dreadfully complicated in writing but is much easier in use. To demonstrate **qsort()**, let's develop a program that reads in a text file, sorts it and then lists out the sorted lines. To make life awkward, we will strip out any blank lines as we go, and also remove any leading tabs or spaces at the start of lines. There is a good reason for doing this: spaces rank before any alphabetic characters in the ASCII table, so create a rather unexpected, though entirely logical, output file.

The program, *QSORT*, is based loosely on the code developed for *UCPRINT*. The full source code is in the tutorial folder on the cover disk, but we will review some of the more important features here. The first task of the program is to read in its input file using a short **while** loop as in listing 1.

Lines are read into a temporary buffer (with the exciting name "buffer"). A generous over-estimate of the likely length of one line of text is used to make sure the buffer is big enough to cope with most eventualities. The next task is to scan through the line, and strip out any leading spaces. This is done neatly by making use of the power of the **for** loop. So far we have mostly used these loops for numerical counters, just like a normal BASIC *FOR-NEXT* loop. For more information, read the *For What It's Worth* box.

The **for** loop starts by making the pointer "s" address the start of the line buffer. It then moves the pointer along, checking each character to see if it is the end of string null (if so, ***s** will evaluate to zero and the loop will exit) and if the character is white

Listing 1

```
while (fgets(buffer,BUFFER_SIZE,infp) != NULL)
  {
  if (saved >= MAX_STRINGS)
    terminate("Too many lines !\n");
  for (s=buffer; *s && isspace(*s); s++)
    continue;
  if (*s == '\0')
    {
    discarded++;
    continue;
    }
  if ((string_array[saved++] = strdup(s)) == NULL)
    terminate("Run out of memory while reading data !\n");
  }
```

Listing 2

```
int sort_strings(element_1,element_2)

void *element_1, *element_2;

{
  char **s1, **s2;

  s1 = (char **)element_1;
  s2 = (char **)element_2;
  return(strcmp(*s1,*s2));
}
```

FOR WHAT IT'S WORTH

To think of the C **for** statement as being in any way related to *FOR-NEXT* in BASIC is actually wrong. While it *can* do the same job, as a program control statement it is structurally very different. Let's look at a general **for** loop:

```
for (expression1; expression2; expression3)
  {
  do_stuff();
  }
```

expression1 is evaluated before the loop starts, so is often used to initialise a count variable. expression2 is evaluated before each pass round the loop; the loop ends if the result is zero. expression3 is evaluated at the end of each pass, so is often used to increment loop counters. The key difference between **for** and *FOR-NEXT* is that the three expressions don't have to process numbers – they don't even have to be related to each other in any way. Of course, most of the time they are, because that is how most programmers think. Despite this, the following would be perfectly good C:

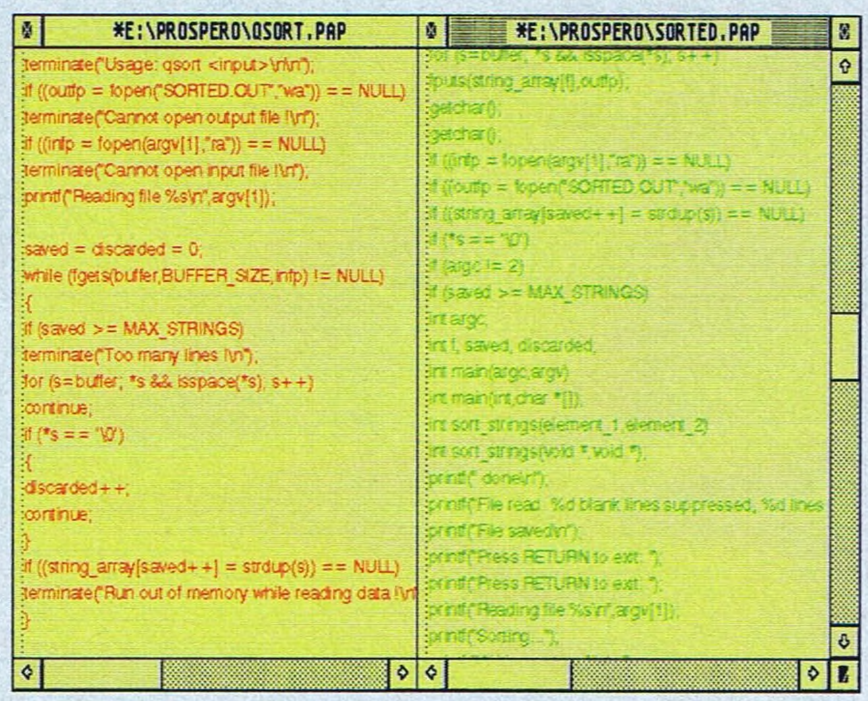
```
for (today=MONDAY; cup_of_tea!=COLD; strcpy(buffer,"Acid"))
  stand_on_head();
```

Bizarre? Yes, but legal! If you have difficulty getting away from the *FOR-NEXT* idea, think of a **for** loop as being identical to the following code:

```
expression1;
while (expression2)
  {
  do_stuff();
  expression3;
  }
```

Now do you think all a **for** loop can do is count from 1 to 10?

QSORT in action on its own source file. The red text is the input file, the green is from the output file.



space or not (if not, again the loop is exited). Once the loop is finished, **s** is left pointing at the null or at the first non-space character.

These two outcomes are checked, and appropriate action taken. If the loop ends with **s** pointing at a null, the line had no non-space on it, and is therefore discarded. Otherwise, the ANSI standard library function **strdup()** is used to take a copy of the text, from the position of **s** up to the end of the string. **strdup()** returns a pointer to the copy, or NULL if there is not enough memory to make one. If **strdup()** succeeds, the address of the copy is stored in the global variable "string_array". The variable "saved" counts the number of lines saved in this way, and indicates which element of "string_array" is to be used next. If the count exceeds the size of the array, the program aborts.

When all lines have been read in, they are sorted into order using **qsort()**. Because of the way we have stored the data, sorting is quick. We never actually move the lines of text around in memory, we just shuffle the order in which we will read them out, by moving the positions of the string pointers stored within our array. The comparison function passed to **qsort()** for this task is very short (see listing 2).

Remember that the inputs to the function are *pointers* to elements of the array being sorted. These are supplied as pointers to void, so our first job is to convert them back to their real type. In our array, the elements are themselves pointers to characters, so the inputs are pointers to pointers to chars. To impose the right type, we use a cast (see issue 29): **(char **)**. To make the code easier to follow, the recast pointers have been assigned to new temporary variables, **s1** and **s2**. To go from pointers to array elements, to the array elements themselves, we just apply the indirection operator *, and the final result is a pair of pointers to strings, just perfect for feeding to **strcmp()**. Oh look – **strcmp()**'s return value is just the right format for **qsort()** to accept. What a coincidence... (*yep – Houdini would have been proud of that... Ed*).

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 cover disk along with a laser copy of the first tutorial, send £2.50 (payable to Europress Publications) to: *Prospero C Disk, ST Review*, Europa House, Adlington Park, Macclesfield SK10 4NP.



CONTROLLED EXIT

In the last tutorial, we ended with a challenge to rewrite the *UCPRINT* program, using the **atexit()** library function. The program fragment in listing 3 shows how you might do this. The complete file appears in the *C.TUT* folder on the cover disk as *ATEXIT.C*.

The key design feature of the listing is the presence of the global variable "exit_message". This is because we want the program to print a message describing the reason for termination. There are a number of possible reasons, so we need to vary the message printed. Since the function called by **atexit()** receives no arguments, we must find another way to tell it what message to print. The program gets around the problem by putting a pointer to the required text in "exit_message" before using **exit()**.

This approach has another useful property. A special value like NULL can be used to instruct the **atexit()** routine to behave differently, in this case to act like it was not there. Such code is the only easy way to turn off **atexit()** routines, as the ANSI library does not provide a mechanism for deinstalling them.

In such a simple program as *UCPRINT*, **atexit()** does not simplify the code at all, and you probably would not want to use it. However, in more complex programs, particularly those using GEM, **atexit()** becomes a real boon. Take a look at *ATEXIT2.C* on the cover disk. This is an **atexit()** routine that handles the closing down of AES and VDI resources to safely terminate a GEM application. With this routine set in place by an **atexit(close_gem)** call during program initialisation, you can terminate the program cleanly anywhere just by calling **exit()**. No more crashes due to unclosed VDI workstations!

Each of the various components of the routine checks a series of global variable flags that indicate whether particular system resources have been used. If so, appropriate shut-down code is executed.

Obviously this approach requires that the flags are kept up to date at all times. By way of maintaining this discipline, the routine updates the flags as it works, even though the program is just about to exit. If this seems like a waste of code to you, think again. Defensive programming of this kind, ensuring internal consistency at all times, is well worth a few extra bytes for the time and effort it can save during debugging and maintaining software. Spend a moment considering the alternative...

Listing 3

```
int main(int,char*[]);
void exit_routine(void);

/*
** Global variables...
*/

char *exit_message = NULL;

/*
** The program starts here...
*/

int main(argc,argv)

int argc;
char *argv[];

{
   FILE *infp, *prfp;
   int c;

   atexit(exit_routine);
   if (argc != 2)
      {
      exit_message = "Usage: ucprint <filename>\n\n";
      return(EXIT_FAILURE);
      }
   .
   .

void exit_routine(void)

{
   if (exit_message == NULL)
      return;
   puts(exit_message);
   printf("Press RETURN to exit: ");
   getchar();
}
```

THE SEARCH IS ON!

Graeme Rutt and Mark Baines

browse around the Internet's equivalent of the telephone directory...

Last month, we had a look at electronic mail, the Internet's postal and telephone service. But what happens if you want to get in touch with someone whose 'net handle and address you don't know?

If you wanted to find someone's telephone number you'd reach for a telephone directory and look them up. While you can find anyone in your local area through your telephone book, you have to call directory enquiries if they live elsewhere.

The situation on the *Internet* is pretty similar, with a couple of further twists. Firstly, people are much more fluid: accounts are made and destroyed in minutes and people may well have any number of accounts, some of which may be used regularly and others not at all. Secondly, there are concerns over secrecy and privacy to bear in mind.

A person's handle is usually the first part of their login sequence and there are fears that this could lead to breaches in security. Privacy is also a difficult issue. On such a large system as the *Internet*, it's very difficult to ask each and every user if they want to be ex-directory!

So with these difficulties in mind, it's time to look at how to go about searching for somebody on the 'net. There are several services to look at, and which one is best depends on the amount of information you know about the person – and a degree of *luck*. All the services we're going to look at are available to both CIX and Demon users.

ONE FINGERED

The most simple service is **finger**, but you must know either their handle, last or first name, and the host. Finger returns all of these details and also a small amount of text the user may have set up to be displayed. To use this service, get to the **ip>** or **NET>** prompt (on CIX and Demon respectively) and type in **finger name@host**, where **name** is a handle, first or last name and **host** is a valid host site. **Whois** is a slightly more complex service, offering you the chance to search a directory for people across different systems. There are actually two "whois" directories, one for military sites (nic.ddn.mil) and the other for non-military (rc.internic.net). While you are free to telnet to either of these, you are advised to use **telnet ds.internic.net** which will look through both. Once on-line, type **whois** and then any portion of the name or handle of the person you're looking for. Use a full stop to denote a partial search. For example, **rutt** would find any whole name "rutt", while **rutt.** would find "rutt", "rutter", "rutther" and so on. The e-mail search service at MIT is, for many users, the best way of finding someone's complete addresses. The server has built up a large directory by scanning Usenet messages and will return information (via e-mail) on all matches it finds.

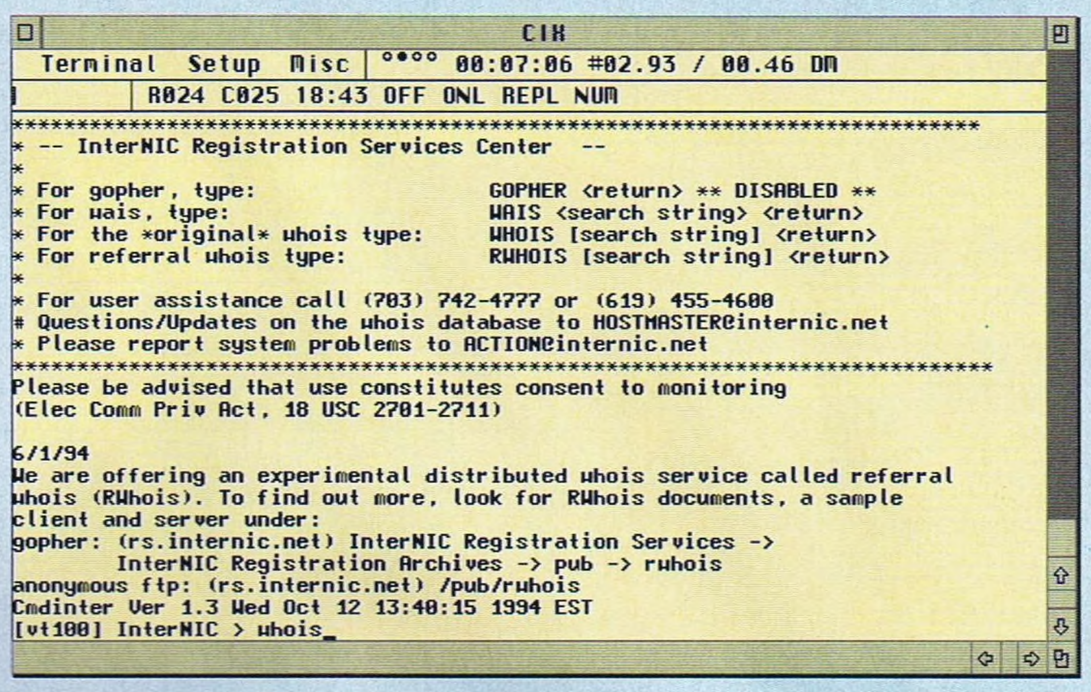
To use this system, send an e-mail to **mail server@rtfm.mit.edu** with no subject and **send usenet-addresses/name** as the body text. **name** should be any whole handle, first or last name.

LAST TRY

Finally, let's consider a Netfind server. This is a relatively new service which isn't based on any kind of static directory. Instead, this very impolite program tries to interrogate any site it can find within the limits that you pass to it. Connect with **telnet monolith.cc.ic.ac.uk** and a user name of **netfind**. Hit <2> to search. Type in a line like **name hint hint hint**, where **name** is part of a handle or real name and **hint** can be anything – country, organisation type, company name or the like. Netfind isn't a very good service at the moment, but it *may* come up trumps if all else has failed!

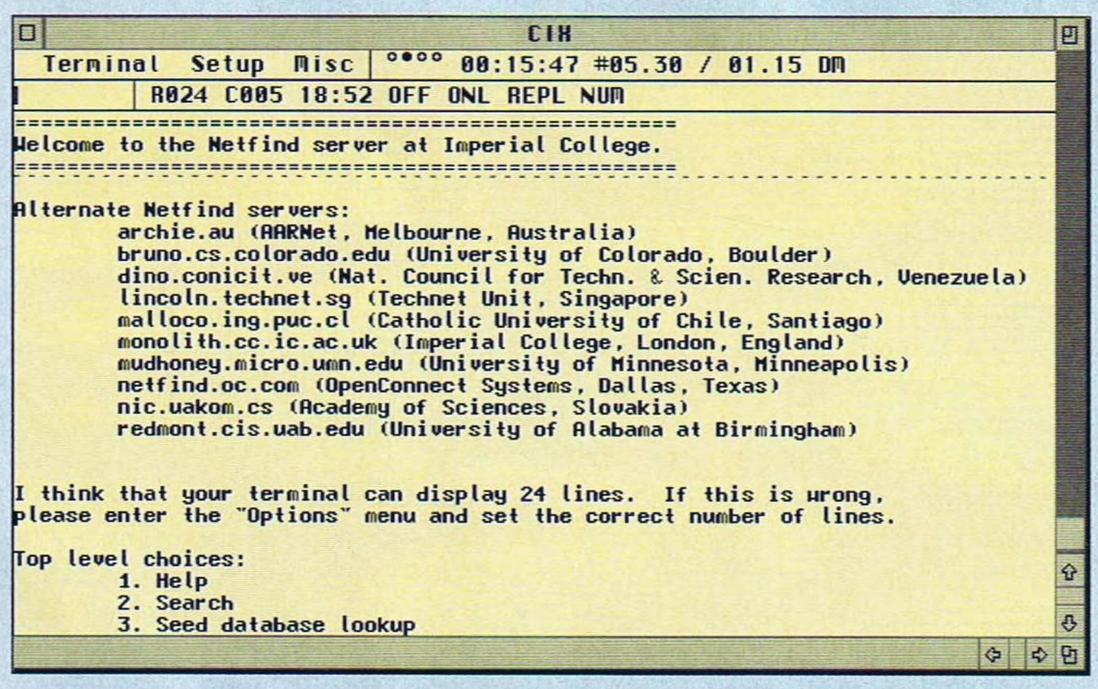
That's it for this month. Next issue we're back with some more *Internet* secrets. And remember, if you can't find someone to talk to then chat to someone at random.

You'll feel better for it, so will they and "wrong numbers" are rarely treated with the same ill humour as on the telephone!

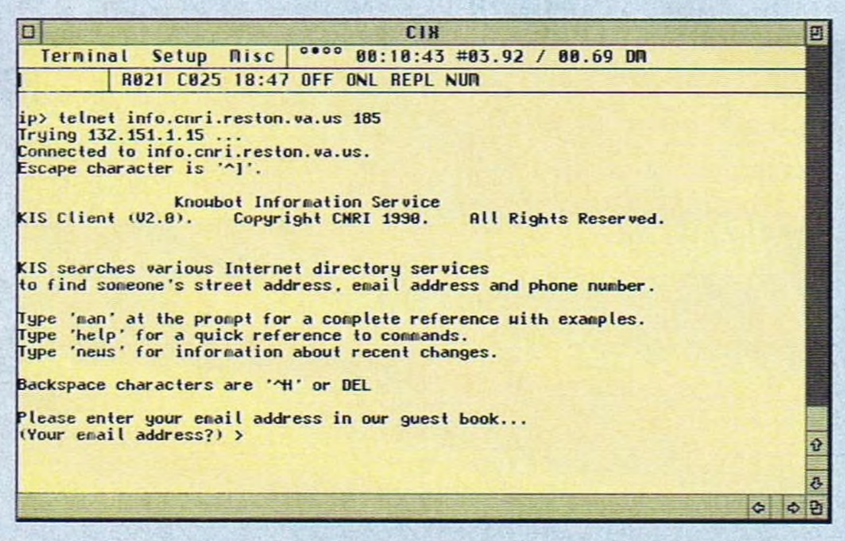


Logging into the whois server at rs.internic.net.

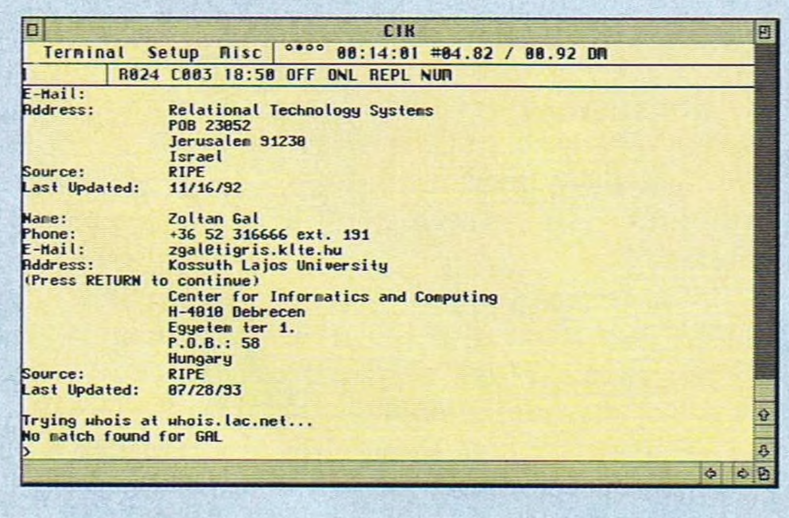
INTO THE



Netfind – maybe you'll have more luck than me with this temperamental service.



The Knowbot Information Service at Reston, probably the best non-e-mail choice as it uses all the other white pages' directories!



That said, no luck searching for Ofir Gal. It's a good job I know his e-mail address anyway!

BEHIND THE SCENES

'NET

Sending e-mail to someone is easy if you know their address and have the appropriate software. However, unless that person gives you their address you are lost, just as you would be trying to send a letter without a postal address.

Contrary to popular belief there isn't an address directory or "white pages" containing all the addresses of everyone on the *Internet*. How could there be? The current number of people using the 'net stands at over 20 million and this changes by the hour with users coming and going, moving from one computer host to another or accepting multiple accounts. Then there are those that worry about the privacy and security aspects of such a list. If people want to be ex-directory on the 'phone, why not e-mail as well?

There is no single company to maintain a list although individual companies or educational sites may maintain their own internal staff directories. How would someone publishing such a list know who is on the *Internet* and if they want to be held in a list? What standard would be used to format the data? What data should the list contain? All of these problems are currently being looked into.

METHODS

• **Finger**: If you know the system that a user is on then you can use the UNIX command **finger** which examines the user log on that system for their personal name. It will also tell you if that user is currently logged on.

Finger can be useful, but you have to know half of the e-mail address (the system) before using it. The format is **finger name@host**; the **name** is optional but if you omit it you get a list of users currently logged on at that system address. You can use a first name or last name, spelt correctly and in the format likely to be in the user log. "Steve" won't find "Stephen", for instance. **host** is the computer system you want to enquire – omit this and it looks at your local system. Users can install a file called **.plan** on their system which is displayed whenever someone fingers them. It can pass on biographical information or other contact points to enquirers.

This plan file can also be used to distribute information to callers.

For instance, you can get the latest NASA news by **finger nasanews@space.mit.edu**. **finger @space.mit.edu** will tell you who's currently logged on there.

• **Whois**: This is the name of a white pages directory and the program that accesses it.

The directory was started years ago on the old Arpanet and is maintained by the DDN NIC. It only contains those people who are responsible for the working of the network or doing research.

You can use the **whois** command if your host supports it or telnet to **nic.ddn.mil*** and use it or e-mail **service@nic.ddn.mil** with the subject line **whois name** where **name** is the person or company you want to trace.

• **Usenet User List**: This list is maintained by MIT in the States and contains all those people that have posted messages in Usenet news groups that pass through MIT. To use this service, e-mail **mail-server@pit-manager.mit.edu** with no subject line and the message **send usenet-addresses/name** where **name** is your search string. This is a very effective way to get addresses but replies can be slow – up to several days!

• **Knowbot**: Still in development, the Knowbot Information Service is a new service that searches various sources worldwide for you, including some that are difficult to access directly. Telnet to port 185 at **nri.reston.va.us** and, at the prompt, type in your search string.

For further information, send an e-mail to **mail-server@rtfm.mit.edu** containing the message **send usenet/news.answers/finding-addresses**. You will get the FAQ back: "How to find people's E-mail addresses".

```
ip> finger nasanews@space.mit.edu
[space.mit.edu]
nasanews: [space] Sat Oct  1 08:29:18 1994

                    MIT Center for Space Research
------------------------------------------------------------------------

This NasaNews service is brought to you by the Microwave Subnode of
NASA's Planetary Data System.  We also maintain an email listserver
at "pds-listserver@space.mit.edu", an anonymous ftp server at
"delcano.mit.edu", and a WWW home page at "http://delcano.mit.edu/".
If you have any suggestions for how we might improve our services,
please mail them to "pds-requests@space.mit.edu".

NASA press releases and other information are available automatically
by sending an Internet electronic mail message to "domo@hq.nasa.gov".
In the body of the message (not the subject line) users should type
the words "subscribe press-release" (no quotes).  The system will
reply with a confirmation via E-mail of each subscription.  A second
automatic message will include additional information on the service.
```

A finger to nasanews displays the latest information file – very useful if you want to know the current status of the shuttle!

```
CixRead  System  Files  Mailboxes  Memos  Info  Misc                    13:04
                                Cixread 3.4.6R
X-Problems-To: owner-mail-server@rtfm.mit.edu
Apparently-To: msbaines@cix.compulink.co.uk

-----cut here-----
Thomas Baines <bainest@SMTPLINK.EID.ANL.GOV> (Apr 22 94)
Stuart Baines (Aug 31 94)
dwb@dcs.ed.ac.uk (Dave Baines) (Aug 30 94)
v120q4v4@ubvms.cc.buffalo.edu (CONRAD BAINES) (Aug 18 94)
bain8828@elan.rowan.edu (GEORGE BAINES) (Dec 5 93)
cunningm@gusun.acc.georgetown.edu (Conrad Baines) (Feb 24 94)
ah114@FreeNet.Carleton.CA (Devin Baines) (Jan 24 94)
Thomas Baines <bainest@SMTPLINK.DIS.ANL.GOV> (Jul 14 94)
julio@freenet3.scri.fsu.edu (Torrey D. Baines) (Jul 22 94)
julio@freenet2.scri.fsu.edu (Torrey D. Baines) (Jul 21 94)
bainesr@cix.compulink.co.uk ("Roy Baines") (Jun 5 94)
sbaines@cougar.multiline.com.au (Scott Baines) (Jun 4 94)
Bill Baines <bill@nickel.ucs.sfu.ca> (Nov 4 93)
S.M.Baines@sheffield.ac.uk (Nov 25 93)
bill@nickel.ucs.sfu.ca (Bill Baines) (Nov 2 93)
Jim Baines <IO11182@MAINE.MAINE.EDU> (Sep 26 94)
Baines <70712.1402@CompuServe.COM> (Sep 18 94)
jtb@crnvma.cern.ch (John BAINES ) (Sep 14 94)
msbaines@cix.compulink.co.uk ("Mark Baines") (Sep 19 94)
BAINES <CYAD000@MUSICA.MCGILL.CA> (Sep 12 94)
Robert E Baines <baine001@gold.tc.umn.edu> (Sep 22 94)
-----cut here-----
M1:
```

The reply to my e-mail sent to the Usenet User List in search of "baines". I wonder if we are related?

```
CixRead  System  Files  Mailboxes  Memos  Info  Misc                    13:06
                                Cixread 3.4.6R
*  Please be advised that all INTERNET Domain, IP Network Number, and    *
*  ASN records are now kept at the Internet Registry, RS.INTERNIC.NET.   *
*  Please also be advised that better serving RFC repositories exist for *
*  internet users. Get file, "netinfo/wags_to_get_rfcs" and  RFC 1400     *
*  for more details.  To retrieve netinfo/wags_to_get_rfcs using this    *
*  mail service, mail to service@nic.ddn.mil with the subject or first   *
*  line  "SEND netinfo/wags_to_get_rfcs".                                *
**************************************************************************


Kehoe, Brendan (BK59)  brendan@cygnus.com  (415) 903-1427
Kehoe, Donald T. [ISE] (DTK16) KEHOE@WOOD-EMH1.ARMY.MIL
          (314) 596-8131 ext. 58312 (DSN) 581-8312
Kehoe, Eleanor (EK28)  ekehoe@PICA.ARMY.MIL
          (201) 724-6313 (DSN) 880-6313
Kehoe, Elliott W. (EWK7) e_kehoe@NISE-P.NOSC.MIL  (804) 485-6422
Kehoe, Gary Lee (GLK15)  CIRSC-ZAMCASEY-EMH1.ARMY.MIL
          (DSN) (315) 738-4236
Kehoe, John B., Mr.  [E-4] (JBK77) dkretch@PACIFIC.DRMS.DLA.MIL
          011-81-311755-7863 (DSN) (315) 225-2295
Kehoe, John E. (JFK7)  KEHOE@HOFFMAN-EMH1.ARMY.MIL (703) 325-5683
Kehoe, Kevin J. (KJK10)  OSCB@WIESBADEN-SAILS1.ARMY.MIL
          001-49-611-705-6133 (DSN) 3587195 (ETS) 337-6133
Kehoe, Miles (MK168)          (415) 882-7852
Kehoe, Richard M. (RMK9) rkehoe@PICA.ARMY.MIL
          (201) 724-5471 (DSN) 880-5471
Kehoe, Russell (RK136)  KEHOER@HOFFMAN-EMH1.ARMY.MIL (703) 325-9366
M1:
```

A reply to my whois by e-mail for "kehoe" the author of the famous "Hitchhikers' Guide to the Internet". There he is at cygnus.com.

```
ip> whois cybercafe
CyberCafe (CYBERCAFE-DOM)
   1a Monmouth Street
   London WC2H 9DA
   GB

   Domain Name: CYBERCAFE.ORG

   Administrative Contact, Technical Contact, Zone Contact:
      Jewell, Tony  (TJ12)  tony@CITYSCAPE.CO.UK
      +44 223 566950

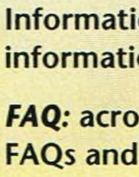
   Record last updated on 01-Jun-94.

   Domain servers in listed order:

   NS.CITYSCAPE.CO.UK           193.128.244.5
   NS.PIPEX.NET                 158.43.128.1


The InterNIC Registration Services Host contains ONLY Internet Information
(Networks, ASN's, Domains, and POC's).
Online VT100 | Buffer: | AL: ON | AM: ON | AX: ON | WW: ON | 19200 8N1 RTS/CTS | Online: 0:03:02
```

Having heard of a CyberCafe opening up in London, let's get the low-down with a "whois" search.



Arpanet: **Internet was started in 1969 by the US Defense (sic) Advanced Research Projects Agency (DARPA) as an experiment to see if computers could be linked together across the country.**

DDN NIC: **the Defense (sic) Data Network, Network Information Center based at Network Solutions Inc. in the US. A central information distribution service for the Internet.**

FAQ: **acronym for Frequently Asked Questions, text files containing FAQs and their answers.**

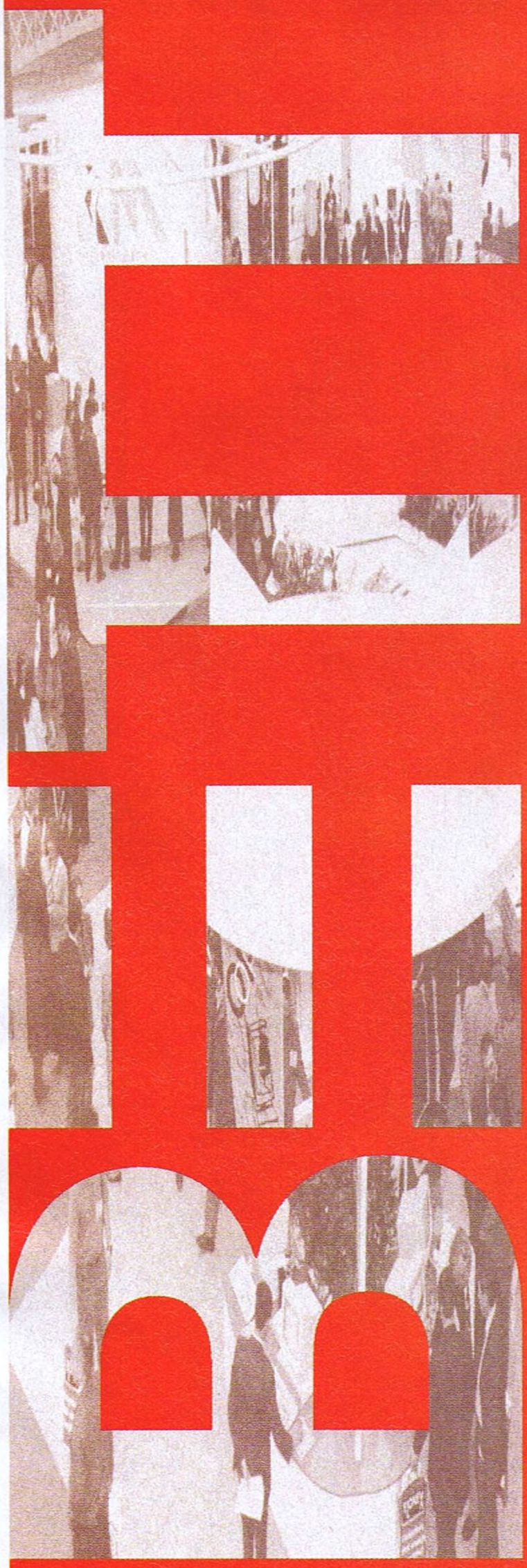
Knowbot: **from Knowledge and Robot. A network information search device.**

MIT: **Massachusetts Institute of Technology in the States.**

Usenet: **world-wide group of systems that exchange messages in the form of news groups. The world's biggest discussion forum.**

User log: **file list of users with accounts at a particular system.**

White pages: **American term for the telephone directory. Now applicable to any list of names and addresses.**



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Job Title

Mr/Mrs/Miss Surname

Job Title

Mr/Mrs/Miss Surname

Job Title

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RI 12345

ASK THE EXPERTS

You set the questions, the ST Review team answers them...

GETTING MY BACK-UP

I have some disks that I would like to make a back-up copy of, mainly magazine cover disks. The problem is that although the disks work perfectly, any attempt to copy them from the desktop just displays an alert box and returns to the desktop. How can I copy the disks? Is this another one of those TOS bugs I keep hearing about?
S. Kelfen, Doncaster

This is not a bug as such, but more of an oversight in the Atari Desktop design. Most cover disks are formatted using programs like FastCopy and Kobold. These programs use extended formatting schemes that allow the magazine to squeeze a few more bytes onto the disk.

This is why you will find a dedicated back-up program on the ST Review cover disk – STRBAKUP.TOS can be used to copy most disks unless they are faulty or copy-protected. There are several programs, both PD and commercial, that can also help you get around this problem. For instance, FastCopy 3 is popular and available from most public domain libraries and BBSs. Indeed, almost any copying program will do a better job of copying disks than the desktop! **Mike Robinson**

BEEP, BEEP!

I hope you can help me. I have a 4Mb MegaSTe with a 52Mb hard disk. Everything seems to work OK but sometimes when I turn it on, it makes a loud beeping noise as if a key has stuck down. Usually turning it off and on again fixes it. Is there anything wrong? Should I get it repaired and if so can you recommend a good place to get this kind of job done?
Daniel Pearson, Cambridge

```
================================
ST Review Cover Disk Copier v1.0
     © Ofir Gal 24.5.1993
================================

Use this program to backup the cover disk
Make sure the source disk is write-protected

Place source disk in Drive A
Hit any key to continue (Esc to quit)
```

Full back – STRBAKUP on our cover disk can be used to back up almost any normal, undamaged disk.

Some STs do what you have described if there is a joystick attached when you boot up. The worst offenders are ones with auto-fire buttons that have been left on. These send out a stream of signals to the ST that confuses it when it is first turned on. If this is the case, make sure you unplug any joysticks before turning your MegaSTe on.

If you haven't got a joystick attached, the chances are that your machine is still fine. I have known several Ataris that do what you have described without showing any other ill effects. However, for peace of mind, you could try calling Atari Workshop on 0181-693 1919 to ask for a quotation to look at your machine. **Iain Laskey**

PC MOVE?

I bought a 520STe in 1990, and have constantly upgraded it since then. The only other thing I bought with it was a Colour monitor (Philips CM8833 Mk II). This was admittedly mainly for games. As time went on, I started to use it for other things too, such as word processing, and art packages. The need to upgrade the machine was there, so during the past couple of years, I bought myself a 4Mb memory upgrade, a mono hi-res monitor, a colour printer and TOS 2.06. This all seemed fine, but now I find that with my increasing interest in other areas, I need to buy a hard drive, a high-density floppy drive, and a CD-ROM player. My father has a PC with all of the above, and my ST seems like a toy, compared to his. Should I sell my ST and buy some extra hardware for my father's PC, which I will be able to use?
Karl Blinkhorn, Lancashire

Help is at hand, Karl, in the form of a little program called Ghostlink. With this, there is no need to sell your ST as long as your father keeps his PC! This neat little utility allows your ST to use the disk drives from the PC, its floppy drive (double or high-density), the hard disk and any CD-ROM drives attached to it. All that is needed is a null modem cable to connect the Atari and the PC, and to tweak a few settings in the programs provided for the PC and the Atari. Then away you go – and the best thing about it all is that the program is free!

So, you can now load pictures stored on a CD-ROM (connected to a PC) directly into GEMView on your ST. You can copy files from the PC's hard disk to your floppy or hard disk, and vice versa. You are also able to save files to the hard disk. However, you cannot run programs over this link. The program is still in its infancy, and the ability to run programs over the link is planned for a near future release, as well as the ability to use the serial and parallel ports.

Ghostlink v1.02 is available from good PD libraries and BBSs. If you have problems finding it, just contact CyberSTrider, on 0161-796 5864. **Denesh Bhabuta**

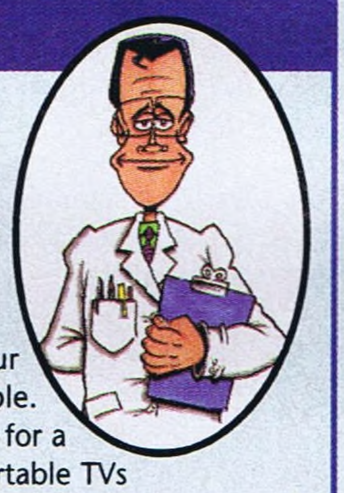
SEE IT ON CD

I've heard and read a lot about PhotoCD and as an amateur photographer, I'd like to try it out. I have just upgraded from a 2Mb STe to a 4Mb Falcon with an SVGA monitor. I intend to get a CD-ROM drive, probably from System Solutions as they seem to be leading the field in this area, and a DeskJet 560C or something similar for printed output. What I need to know is, how can I access the PhotoCD images and in what resolutions? I've tried the shareware version of *GEMView* from your cover disk but it only appears to load base size or one other that I can't work out.
Roy Murphy, Oxon

PhotoCD is Kodak's proprietary system for developing film directly ➢

THE ORACLE

It's Andrew Wright's turn to impart five pearls of wisdom – or not, as the case may be!



● If you're spending several hours in front of your computer each week, you've got to be comfortable. One of the best ways to pep up your system is to go for a decent monitor. Those of you who are still using portable TVs will be amazed at the difference a good mono monitor makes to any text-based program – like a word processor, address database, accounts or DTP package.

● Make sure the monitor is at the right height. The ST's awkward design makes it hard to balance a TV or monitor on the case. With just three bits of wood you can make a handy shelf-style stand to get the monitor up to eye level and give you space when you need it by tucking your ST underneath.

● Improve your keyboard's response and make it much more pleasant to use. You can add rubber buttons under the keys or even purchase a connector to allow you to use a professional PC-style keyboard. Give System Solutions a ring.

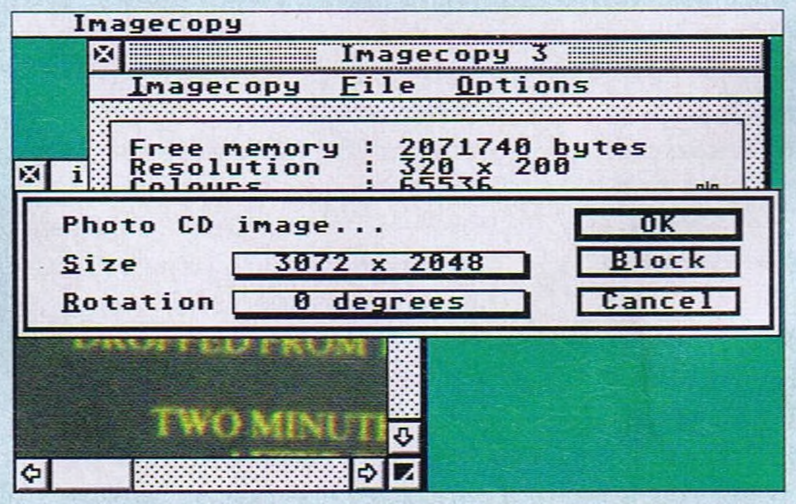
● Get rid of that clunky, horrible Atari mouse. A good quality replacement is a must and it won't require half as much space to roam around, thanks to the higher resolution.

● Many of you have probably added a second floppy disk drive to your shopping lists. If you've done so, take it off. It won't make the slightest difference to 99% of your work – so put the money towards a hard disk instead.

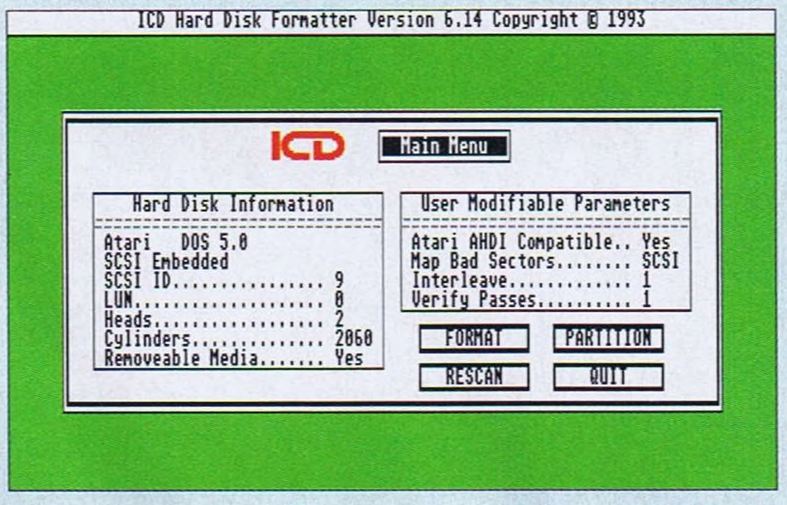
*in to a compressed digitised image format stored on an ISO-standard compact disc. The *.PCD files on the disc can be accessed using appropriate software at any one of five resolutions: 192 by 128 (wallet), 384 by 256 (snapshot), 768 by 512 (standard or base), 1536 by 1024 (large) and 3072 by 2048 pixels (poster). These images take up roughly 74Kb, 295Kb, 1.3Mb, 4.7Mb and 18.9Mb respectively, meaning 4Mb Falcons are limited to 768 by 512 – and even 14Mb machines can't load the highest resolution images.*

You're quite right in that GEMView can only load PhotoCD images in the base or snapshot sizes depending on whether or not you tick the PCD: Base Size box in the Globals dialogue box. A more flexible option is Imagecopy 3, which not only loads and dithers images a lot quicker but which allows you to load in any resolution, memory permitting. The next version, Imagecopy 3.5CD, will even allow you to load portions of a PhotoCD image, so you can make use of the full resolution of the poster-sized images.

If you want to touch up or process the images, DA's Picture from CGS is the best option and it now has a PhotoCD module. Compo's StudioPhoto has fewer features but can also load all resolutions. Using Outside, the Falcon's virtual memory driver, the latter can load images at maximum resolution. DA's Picture should, as it has its own virtual memory system, but I haven't managed it. Other programs that might interest you are PhotoShow and PhotoShow Pro from System Solutions which can display PhotoCD images and also convert them directly to TIFFs without loading them into memory. **Maurice Collins**



Big pics – the soon to be released Imagecopy 3.5 will load portions of PhotoCD images at the highest resolution.



Up and mobile – partitioning a SyQuest drive using HDDriver software.

SWAPPING DISKS

I have an Atari 1040STFM expanded to 4Mb. I'm thinking about buying a removable SyQuest drive but I'm puzzled by the different sizes. What are the pros and cons of a SyQuest for an Atari computer? What software should I use to format and partition it? Would an Atari-formatted drive be compatible with PC and Mac drives? I need to be able to take large images, sampled sounds and music files created at home for presentations and so on at work. **Louise Pitts, Notts**

SyQuest drives come in two main flavours. The older 5.25 inch drives have cartridge capacities of either 44Mb or 88Mb while the newer 3.5 inch models have cartridges of either 105Mb or 270Mb. The most cost-effective model at present is the 105Mb drive, both in terms of cartridge cost and initial purchase price but this will really depend on the amount of storage you require.

SCSI SyQuest drives work admirably with all Ataris and the 3.5 inch drives are almost as fast as similar-sized hard drives – and just as quiet. The main advantage of a SyQuest drive is that you can transport your data to another SyQuest-equipped system and you can keep adding storage space as your needs grow. It is also handy for backing up existing hard drives. The only real disadvantage is that long-term reliability isn't quite as good as that of a fixed hard disk though the new 3.5 inch drives certainly look and feel much better.

To connect the drive to an STFM you will require a host adapter such as The Link or Translator and suitable driver software such as the ICD Utilities that come with The Link, or the HDDriver utilities that come with the Translator. Both can be bought from System Solutions and they can also supply the drives themselves.

You can't use an Atari-formatted cartridge with another computer, but with HDDriver or ICD software you can read and write to a cartridge formatted on a PC. Note that as your Atari can only use the SCSI SyQuest drives, the PC will have to have a SCSI host adapter too. There is one limitation with PC-formatted cartridges – the Atari cannot read large DOS partitions over 32Mb in size. **Andrew Wright**

PROSPERO PUZZLER

I have been using the *Prospero C* language program since it was issued on your cover disk in September last year. Although it has behaved reasonably well up to now, it did not run a larger program I have recently written, which has run perfectly well on another machine. It appears that when variable arrays are declared which total over about 1,000 double-precision floating point numbers, which would occupy only 8Kb, the program is unable to allocate space to them. The program compiles correctly (eventually) but when it is run, an error message "Error S at 2B44" is returned. I assume that this is a size error and memory is not being allocated. Is this correct?

There is certainly memory available, for if the program is re-written to dynamically allocated memory, enough can be reserved. But if anything has to be re-written, it defeats the objective of having a "universal" language.

I can find no reference to any program limitations in your magazine. Could you please advise me whether the *Prospero C* issued with the September 1993 magazine is limited in some fashion? Or is there some set-up or compiler option I have missed? I would not be in the least surprised if there was a limitation as cover disks are often limited in some way.
J. N. Ellis, Devon

It's really weird answering a question from such a precise namesake! The first point to make is that the Prospero C package featured on the cover disk from September last year is a completely functional, unlimited version of the system. Rest assured that had this not been the case, you would have been told at the time.

What you have encountered is a run-time error. I am sure that you will have encountered many error messages from the compiler during the course of developing your programs. These are called compile-time errors and occur when the source code breaks the rules that describe the C language. Run-time errors are caused when something happens during the execution of a program that causes the C environment to become unstable. A common example arises from arithmetic code, where a variable unexpectedly acquires the value zero, and is then used in a division operation. If the C library is asked to divide by zero, what can it do? There is no sensible answer it can return, so it flags a run-time error and stops the program. Most run-time errors are essentially bugs in the program that have been caught by the library code before they cause a crash.

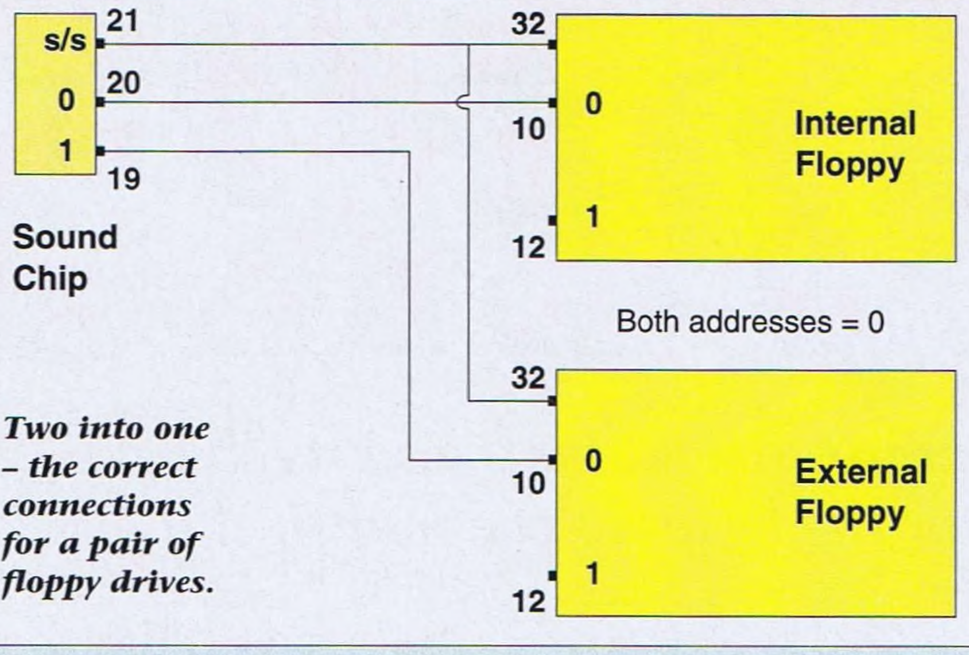
```
ANSWER.PRG
Y
8000
N
N
N
CFIRSTO
ANSWER
CLIB/S
LAST
.
```

The particular error you mention, error S, is due to a shortage of stack space. This area is used for all automatic variables among other things. By default, the Prospero system provides a 4Kb stack, which is only sufficient for small programs. To cure the problem, either make the arrays global or static; or use a linker control file like that shown below to increase the stack size. Type this file in, replacing ANSWER with your filename, and then save it as TEST.LNK. Compile the program as normal, but before linking it, tick the "Using control file" menu option, and select TEST.LNK from the file selector.

For more details, watch out for the C tutorials on run-time errors, stack handling and the linker which are scheduled to appear shortly! **Jon Ellis**

FAULTY FLOPPY?

I have an Atari 520STFM upgraded to 1Mb, with the original TOS 1.02 on board. The internal drive is double-sided and I use an external drive as well. On three occasions, I've been adding



Two into one – the correct connections for a pair of floppy drives.

new files to data already stored on disk, via disk drive B. When I've come to re-load the information, the computer tells me that the disk is empty. Not only is the new information not being stored, the previous information is disappearing!

Examining the disk with *ST Tool* reveals that there are too many clusters while *Knife ST* says that the files are found after unassigned entries and that they can't be read by the operating system. Is it the drive or the computer at fault?

I don't think I'm overfilling the disks, and the problem hasn't occurred on drive A. The only thing I've discovered is that the second drive was set to drive "0" on its DIP switch. I've now reset this to "1"
Keith Marriott, Crewe

From your description of the problem, there are two factors that could be causing data loss.

Due to a poor implementation of the floppy drive circuitry in the ST, the "side select" (s/s) line can become confused when two drives are used (internal and external). The side select line coming from the second chip cannot drive the line "low" if both drives have 1K ohm internal pull-up resistors on the lines. The only cure for this is to locate these resistors and remove them on one drive or both. The problem is that the resistors are usually very small surface-mounted types and inaccessible.

The other possibility is where you mention moving the drive select to drive "1" and the drive still apparently working. Most external drives are wired so as to have both drives set at address "0" and to use drive select "0" for the internal and to connect drive select "1" to drive select "0" on the external drive (see diagram). The drives are selected when the front panel's light comes on. If your drive selects when addressed as both "0" and "1", then a wiring problem (or an internal ST problem) must be suspected in the external cabling. It could be that you are inadvertently writing to both drives simultaneously – hence your problems!
Paul Rossiter

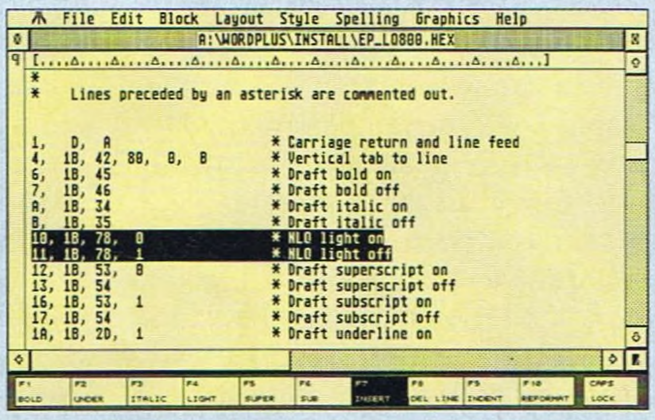
COLOURFUL CHARACTERS

Help! My Citizen Swift 240C is driving me mad! I've been printing great pictures from dozens of art programs using an excellent program called *Flexidump*. but can I print in colour from *1st Word Plus 3.2*? No! I need to print text in different colours for school (I'm a teacher) but I can't see a way forward. I've tried all the supplied drivers.
Mark Redhill, York

The easiest way around this is to create your own custom printer driver. Load an existing printer driver (.HEX file) into 1st Word Plus in "WP Mode". The Epson LQ800 driver is a good bet. Look for the start of the list of codes (lines without asterisks preceding them) and then go to the lines referring to "NLQ Light". If you do use light text, choose another rarely used one such as superscript.

In the line that says "NLQ Light On", the codes for printing light text are listed as 1B, 78, 0. "NLQ Light Off" is 1B, 78, 1. Now, consult your manual and find the printer commands for printing in red. For the Citizen Swift the commands are 1B, 72, 1 – amend the .HEX file accordingly, saving it under another filename. To turn off the red ink, simply set ink colour to black by inserting 1B, 72, 0 in the line for "NLQ Light Off".

Now, when you've converted this .HEX file into a printer driver, using the INSTALL program, any text you instruct the program to print as light text will actually come out as red. Once you've satisfied yourself of this, you can go back to the .HEX file and replace the codes for italic with those for another ink colour like green. You can even use superscript, subscript, underline and bold to get more colours if you need to. Just bear in mind that you will have lost the light, italic, superscript and subscript text attributes.
Andrew Wright



Number crunching – editing a 1st Word Plus .HEX file... in 1st Word Plus!

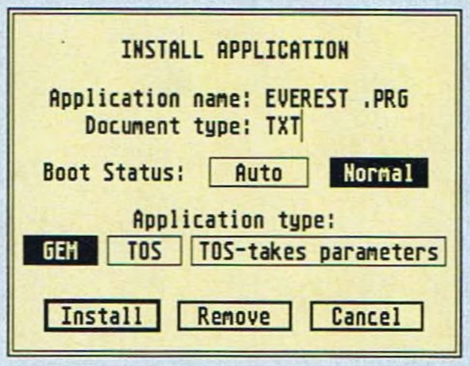
READERS' HINTS



Win a tenner the easy way – just send a tip to ST Review!

The built-in desktop offers very little in the way of a file viewer. You can view files, but there's no way of scrolling back or searching for a particular word. It is much better to install a file viewer if you have a hard disk. My personal choice is *Everest* which is really a text editor, but works very well as a viewer because it's simple to use and even uses *GDOS* fonts for display.

The desktop offers a partial solution hidden under the menu item *Install Application*. Here you can assign any file type to a program so that double-clicking on the file automatically launches that program which then loads the file. The problem is that only one file type is allowed. The trick is to edit the *DESKTOP.INF* file with any text editor or word processor – such as *Everest*!



Good alternative – a file viewer can be installed using the "Install Application" dialogue box from the desktop.

There are two things to watch out for. Some editors, including *Everest* remove trailing spaces at the end of the line automatically. You must make sure that this option is disabled. Also, when using a word processor such as *1st Word Plus*, make sure that you save the file as a pure text, or ASCII, file. Turn *WP Mode* off in *1st Word Plus*.

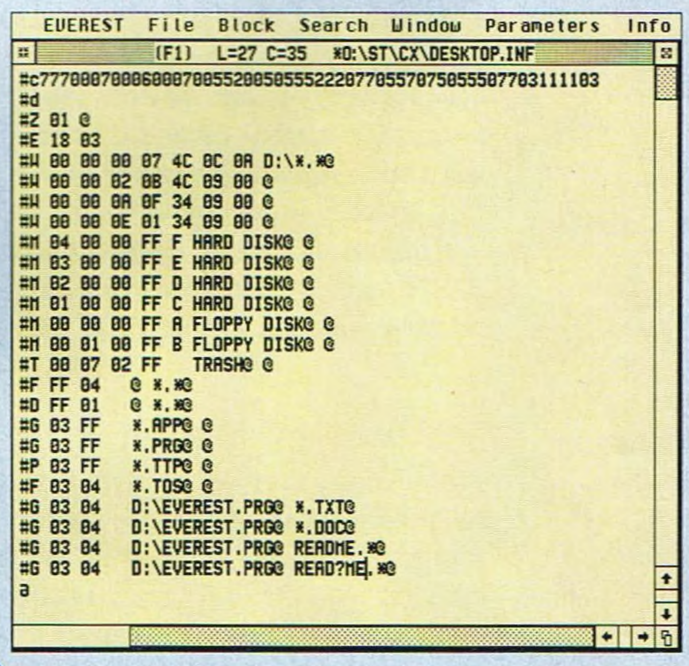
First make a back-up of your *DESKTOP.INF* file, then install your preferred viewer for .TXT files and save the desktop. Next, load the *DESKTOP.INF* file into a text editor. In it you will find a line similar to the one below:

```
#G 03 04    D:\EVEREST.PRG@ *.TXT@
```

Simply repeat this line, changing the file type each time as shown below:

```
#G 03 04    D:\EVEREST.PRG@ *.DOC@
#G 03 04    D:\EVEREST.PRG@ README.*@
```

Now clicking on any README or .DOC file will display the file in *Everest* instead of using the desktop viewer. **Colin Caston, Preston**

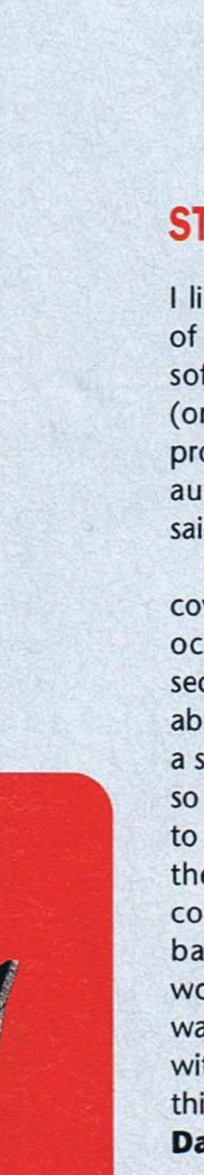


For a change – a simple text editor will let you hack away at the desktop configuration file.



LETTERS

Speak to Vic Lennard, the editor – and receive a £25 cheque for the letter of the month...



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 or 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.

STICKY SITUATION

I like your magazine – quite the best of the glossy Atari mags. And the software on the disks is good, too (one of the other mags supplied a program without even informing its author and it didn't do what they said it did).

One small complaint about the cover disks, which has probably not occurred to you. They are firmly secured to the front cover, presumably so that they can't be stolen from a shop's display. But the sticky tape is so strong that I have only been able to get the disks out from my copy at the cost of tearing off some of the cover with the tape. As I keep my back copies, this is unpleasant. It would be good if you could find a way of keeping the security you need without causing the legitimate buyers this problem.

Daniel Cohen, London

I would love to say that security is the reason for your difficulty in removing the cover disks, but 'fraid not. About nine issues back, we took the cost-cutting decision not to varnish the cover any more. I felt that the lack of a shiny front to the mag would be better than making savings on the editorial front. The upshot of this is that the sticky tape adheres far more fiercely to a matt cover.

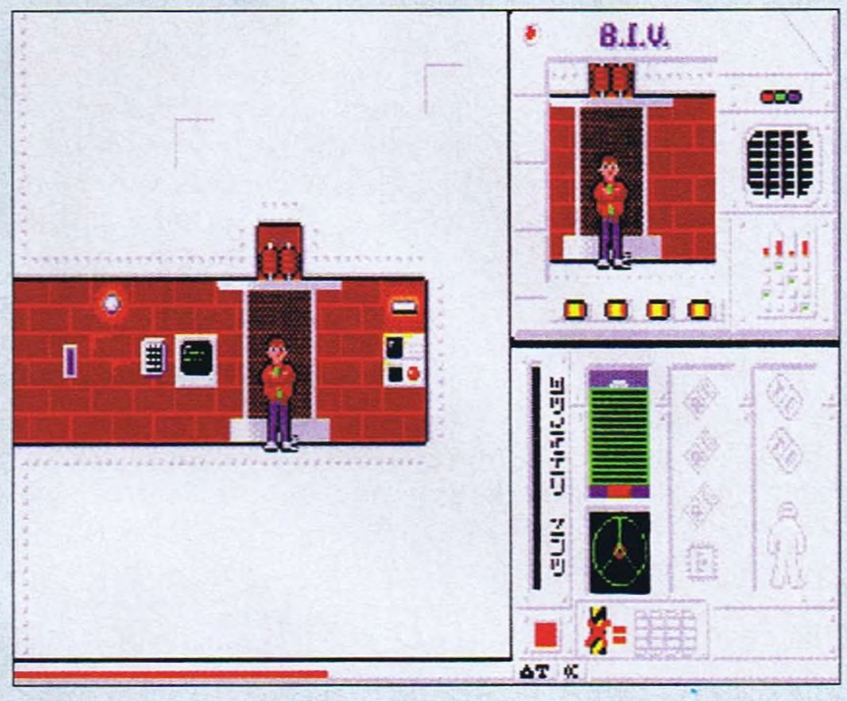
How about the ST Review Cover Disk Removal Kit? Check out its contents in item 20 on page 38...

FUN AND GAMES!

Well, well, well – you've finally dragged *ST Review* into the centre of the market! I refer, of course, to the inclusion of a *real* games section, even if it has been half-inched from your recently departed sister.

All joking apart, I think issue 33 is one of the best *ST Reviews* in a long time. I'm one of that dying breed of ST gamesplayers who happens to also use his machine for word processing rather than the other way round. So *ST Format* has always been my first port of call.

Well I'm convinced. You've waited until we can actually walk into a shop and *buy* a Jag before reviewing the games – and the piece on *Obsession* and the Swedish developers just blew the opposition's coverage away.



The full story – the H.E.R.O. review in this issue is based on the full, final UK product...

Just one more point before I take out a subscription to your mag. You're going to have to tighten up your act on getting products reviewed first – how come *ST Format* reviewed *H.E.R.O.* in the same issue as you *previewed* it?

John Townsend, London

Thanks for the vote of confidence. We took the best aspects of ST Action, kept our own scorebox system and added the four-page Jagged Edge section to keep you in touch with the best games console on the market.

While not affecting our serious editorial coverage of reviews and features, we're taking the games aspect seriously hence the inclusion of playable versions of Ishar III, Premier Manager 2 and Obsession on our recently-added second cover disk. And there's a couple more corkers in the pipeline!

As for H.E.R.O., all I can say is that ST Review does not take a half-finished game, write about it and call it a "review". When we say that we only review final, UK products, we mean it...

SPREADING THE LOAD

I am a proud owner of a 1040STe which I will never part with. But although it is an excellent computer, I feel that it is time to move on. So I have decided to stay with Atari (naturally) and buy a Falcon. I will be using the Falcon mainly for Direct-to-Disk recording and to do so I will need a machine with quite a high specification – 4Mb RAM, 120Mb SCSI hard drive and PowerUp2, all fitted in a nice Tower Case, and a good SVGA colour monitor. This is quite an expensive shopping list, and so I want to get the best deal available. I called Gasteiner as they are a reputable Atari supplier and they gave me a good price – and, by the way, the prices in your magazine are wrong. When I asked them why their prices have dropped so considerably, I was told that they are pulling out of the Atari market and moving into Macs. Does this mean the end of Atari? If companies such as Gasteiner, who have been in the Atari market for several years, are now pulling out this must say something for the recent sales of Atari products. I really do hope that this isn't the case as I cannot think of any other type of computer other than an Atari. So give me an honest answer – do you think that this is the beginning of the end of Atari or am I just getting my knickers in a twist?

Ben Hills, Somerset

All of us have to face the sad fact of life that Atari is no longer supporting our machines. This leaves the suppliers in a dilemma: do they diversify their Atari range in order to appeal to the enthusiasts or branch into other markets as well? System Solutions is a good example of the first of these, introducing new Atari products each month. Gasteiner has taken the second view and, while continuing to support the Atari platform, have decided to also move into the Apple Mac

arena. With Mac MagiC on the way, this could be a good move.

For medium quality direct-to-disk recording, no other computer on the market can match the Falcon. Major products such as Cubase Audio and Notator Logic Audio will ensure this machine's longevity and give you damn good value for money.

As for incorrect advert prices, the advertisers supply us with the information – we just print it.

FLEET OF FOOT

I am writing to *ST Review* as a last hope. A few months ago I bought *Fleet Street Publisher 3* from a dealer selling second-hand and obsolete software. It seems to be a pretty good package as far as DTP for the Atari goes. However, disk D is missing. This contains the graphics library and spelling checker, so it's not essential, but I'd really like to get hold of a copy. The dealer can't help, other than offering a refund and taking back the software, so I've made numerous 'phone calls to see if there are any piles of old Mirrorsoft software languishing on a dusty shelf somewhere. But no luck.

It seems to me that my only hope is to find somebody still using *FSP3*, and begging a copy of their disks. So if any *ST Review* contributors or readers have a copy, please contact me and put me out of my misery.

A. J. Osbourne, London

Guess what? One of our freelancers just happened to find his four-disk set of Fleet Street Publisher 3, and so disk D is currently winging its way to you. And we've also found a reader with a copy of Autoroute for Mr. Edwards from last issue...

IN THE FAMILY

£25 STAR LETTER

In the October 1994 issue of *ST Review*, the columns written by Nial Grimes and Andrew Wright should be made required reading for all Atari enthusiasts. Andrew Wright's column about "keeping it in the family" should not be skipped over as buying from a "stack 'em high and sell 'em cheap" vendor can cost you dearly.

Having replaced my troublesome ST (complete with TOS 1.0 and external drive), with a brand new MegaSTe and 14" monitor, I was in Atari heaven. *Timeworks*, *1st Word Plus*, *Hyperchart* and *K-Spread 4* all worked faster and better than ever before. The new version of TOS was great, and computing was a real pleasure.

Unfortunately my monitor was one of the early batch of the new Atari 14" beasts and the picture at the edges was less than perfect. Having had no problems in the past with my SM125 monitor I decided to return it to the supplier to be adjusted. This is when I discovered that this particular supplier was definitely not a "member of the family". After waiting the "stipulated" number of days for the monitor to be returned, I called the supplier. Guess what – the company had gone out of business and I had to make a claim through the Receiver. This was near the end of 1992 and the monitor was never returned. After using a 14" monitor, my SM125 just didn't seem the same.

A few weeks later, in November 1992, the MegaSTe began to chew disks. This time I called Atari who, after checking the registration number, agreed to rectify the problem free of charge if I sent it to them direct.

The local courier wasn't a member of the "Atari family" either. As the problems I was experiencing were intermittent, Atari indicated that I should be prepared to wait for a number of weeks for the problem to be identified and the machine to be returned to me. I contacted Atari at the end of one month – but they had never received my MegaSTe. The local courier office? "Oh yes we did." Atari? "Oh no we didn't"...

Atari finally won the day and confirmed the fact in writing. The courier came up with all sorts of reasons why it could not return my computer or replace it with a similar machine. After all, if I did not bother to let them know that it had not been delivered, it must be my fault!

I had to take my claim to court and accepted an out-of-court settlement in December 1993 that left me slightly out of pocket. I just could not face more legal proceedings and accepted the moral victory even if it meant losing out financially. After over a year of fighting my case, I was tired of all the hassle and relieved that my legal costs could be finalised.

Being unable to replace my MegaSTe with like for like I had to buy something – but what? After the support that Atari had given, I decided to purchase an STe from Ladbroke Computing, definitely one of "the family", and attached it to my old SM125. This was delivered on time as promised and I've had no problems. The money that I received at the end of the court case covered the cost of the STe and replaced my LC10 printer with a Canon BJ200. Brilliant printer – and very quiet.

I do miss the MegaSTe's faster processing speed, 4Mb of memory, hard drive and TOS version. In many ways, it is like having only half the computer that I had previously owned. But at least it has the Atari logo on it.

I don't regret sticking by Atari, a company that has always answered any queries promptly and courteously and hope to upgrade to a Falcon one day. The greater speed, higher drive capacity and superb screen display modes mean it is now the machine of my dreams.

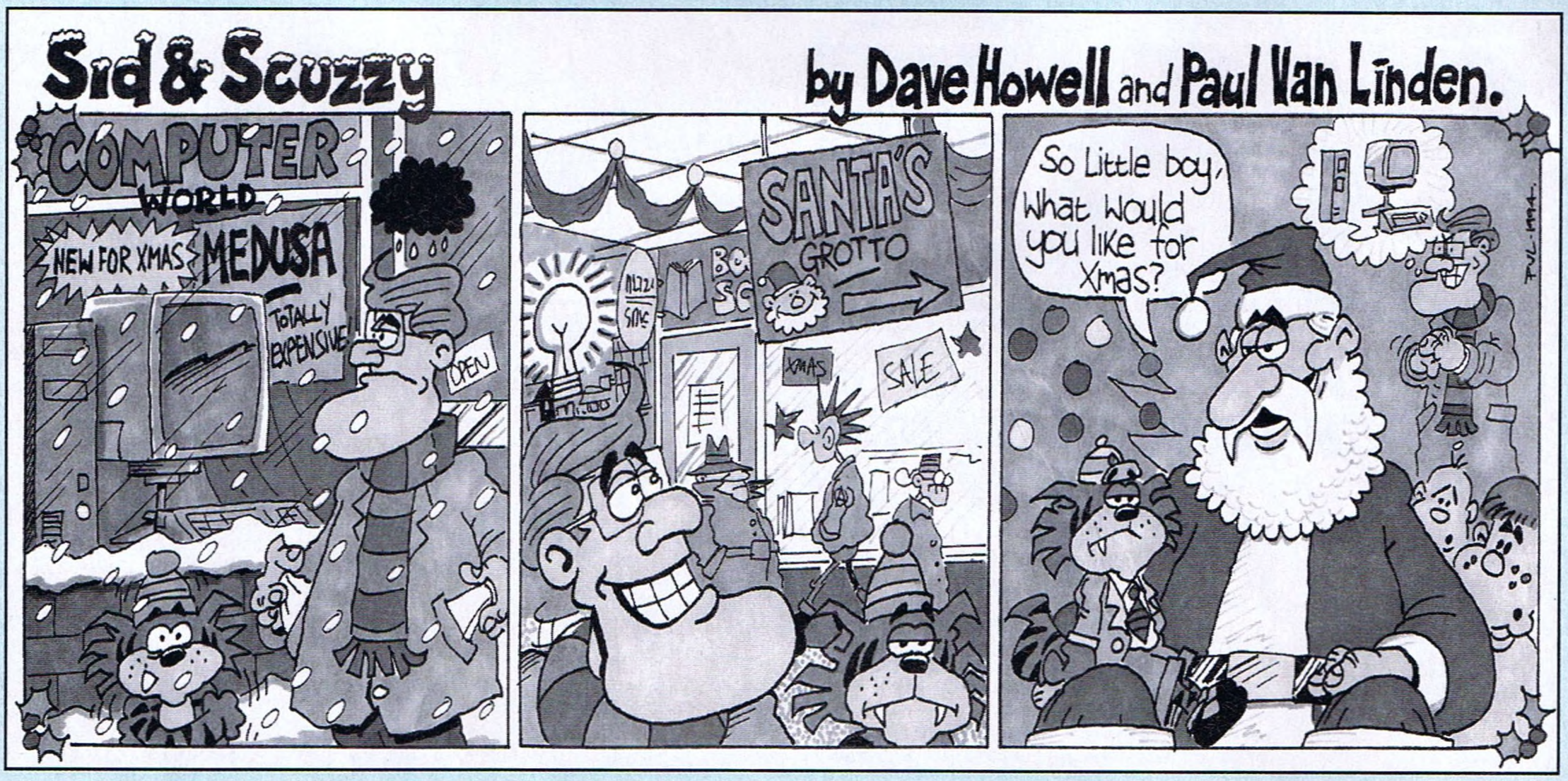
Nial Grimes said that there are good reasons why you should stay with Atari – so think before you move on...

Charlie Hunter

I've printed your letter almost in its entirety, Charlie, as a warning to all – and it's nice to see our columnist's comments ringing true. Atari specialists such as System Solutions, Ladbroke Computing and Gasteiner Technologies have been around for some years and are unlikely to disappear in a puff of smoke, genie-style. You may be able to buy computers cheaper from a non-Atari specialist, but is it really worth the risk?

If you have to courier goods to a company, contact it first, ask it to organise the pick-up and then pay when the goods are picked up. That way, you're using a courier of known renown – and the company the other end knows exactly when to expect delivery.

And by the way, the £25 cheque you'll receive shortly will pay the lion's share of a TOS 2.06 upgrade for your STe from Compo Software...



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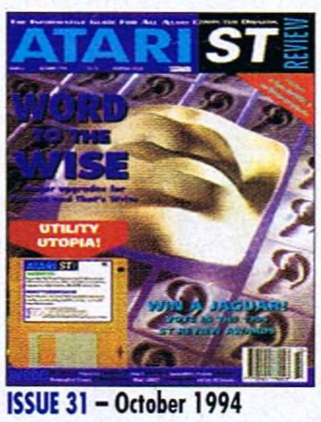
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