THE WORLD'S BIGGEST SELLING ST MAGAZINE

ST FORMAT

ISSUE 67 ■ FEBRUARY 1995 ■ £3.95

INCORPORATING ATARI ST REVIEW

ST REVIEW READERS SEE PAGE 11 NOW!

NAKED VIDEO

Create superb video effects. On stage! On TV! On the STE!

WHICH DATABASE?

Superbase Pro vs Twist 2 - the two best databases tested head to head

PURE GENIUS!

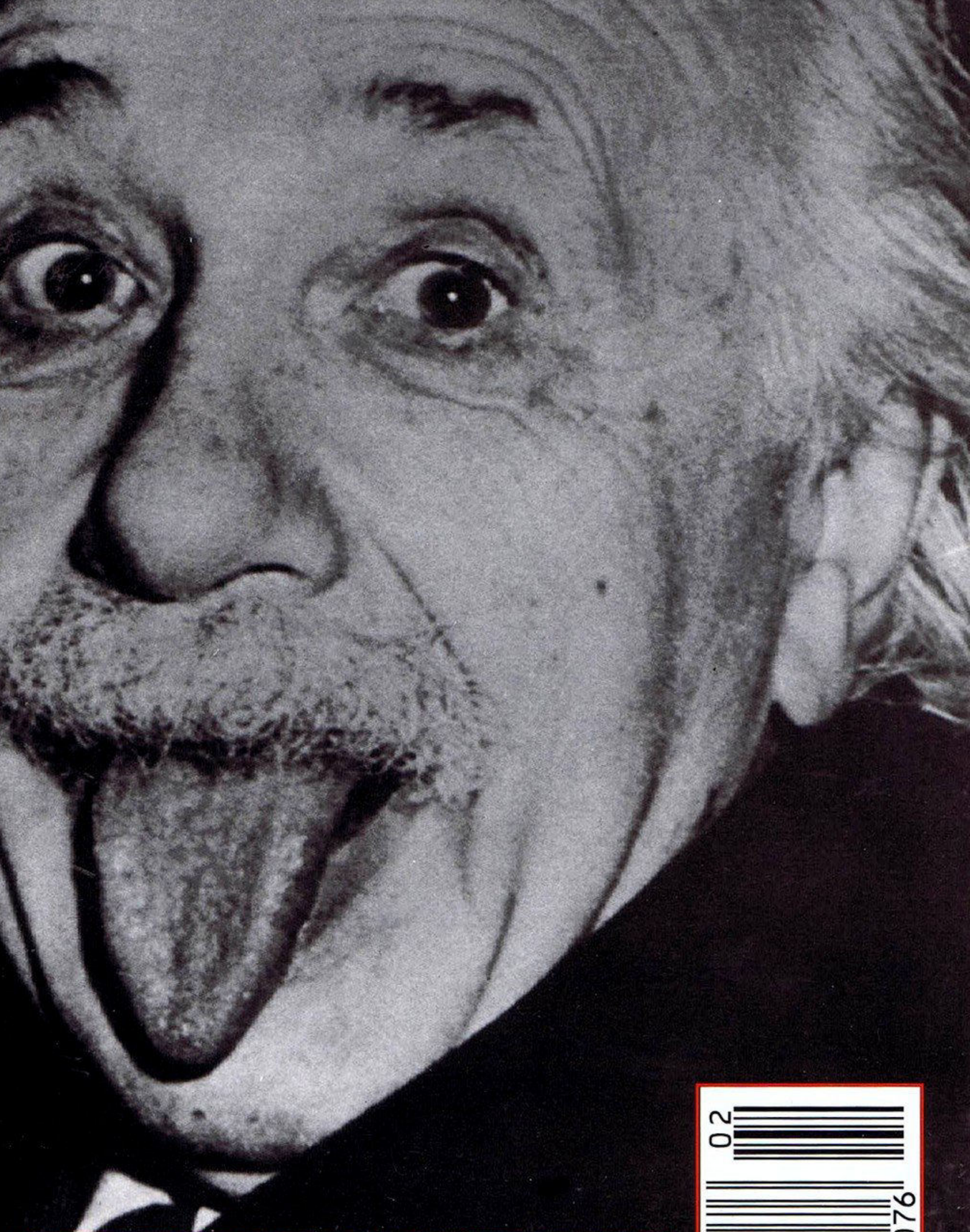
Discover how your ST's secret skills can make you an instant expert!

9 GOBSMACKING ST PROGRAMS

SEE BACK COVER FOR FULL DISK DETAILS

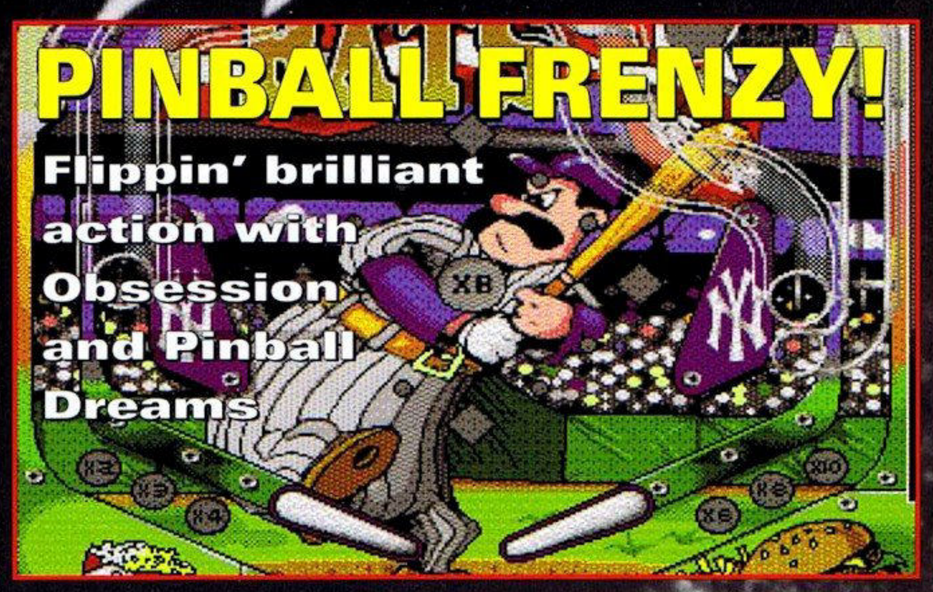
REVIEWED THIS MONTH:

LLAMAZAP ● QUILL 2 ● EPSON STYLUS INKJET PRINTER ● IMAGECOPY COLOUR 3.5 ● OBSESSION ● LINDEMO AND WAR ● OVERSCAN INVADERS ● SPEED OF LIGHT 3.5 ● ST VEGAS ● PSION-ST TRANSFER ● BIG TOP TYPE ● INTROMAKER V1.5 ● GOLDEN DAWN MENU 15 ● CYCEDELIC KNOCKOUT DEMO ● SPACOLA ● OXYD ● MOD FILES...



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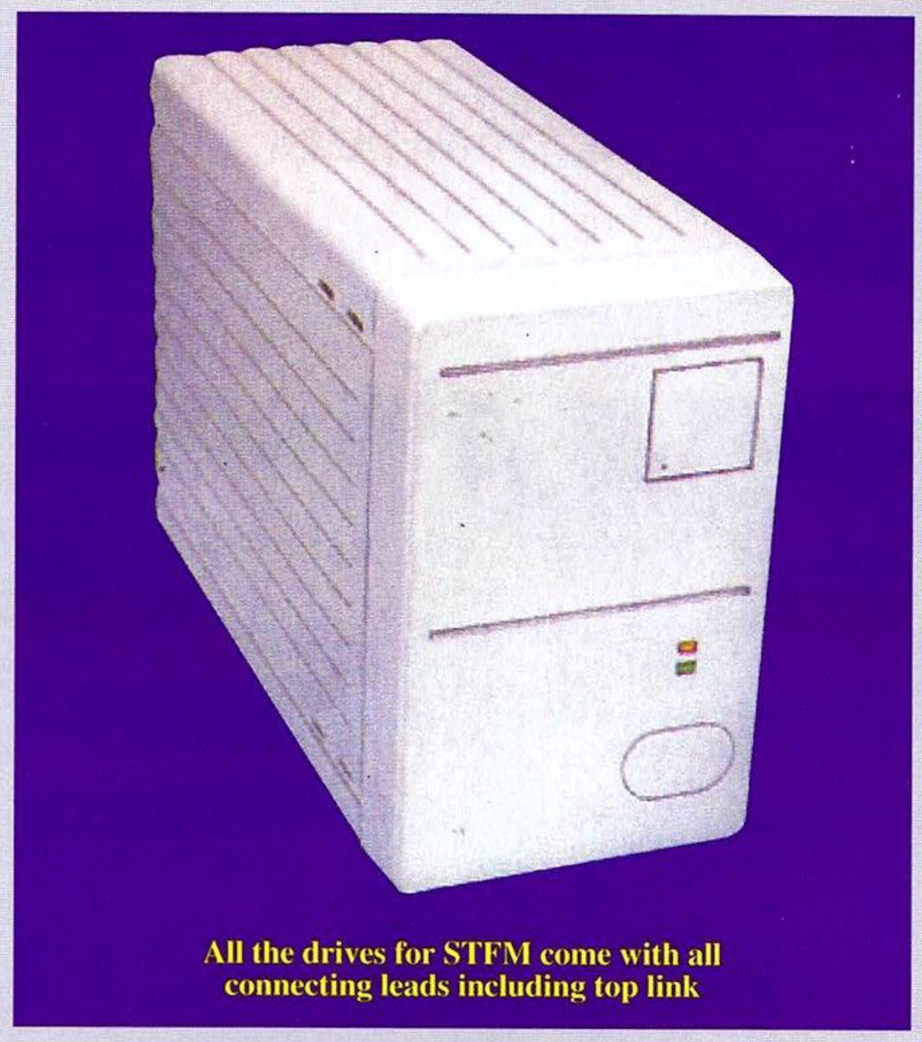
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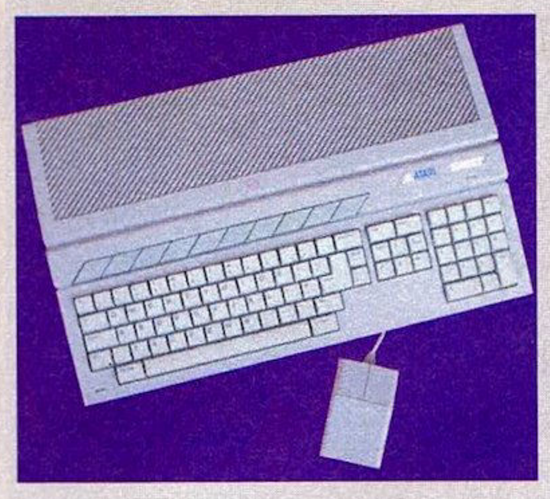
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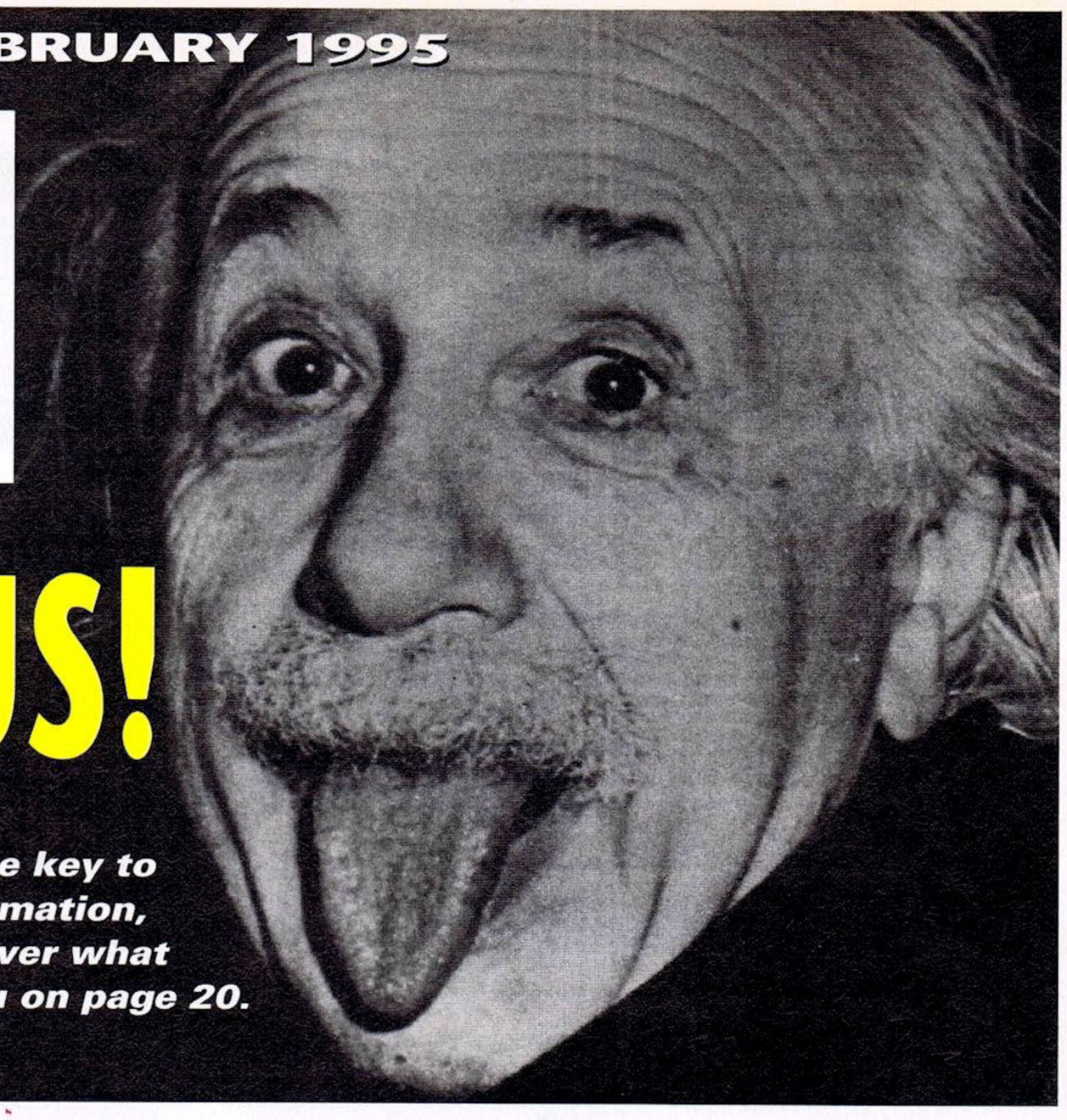
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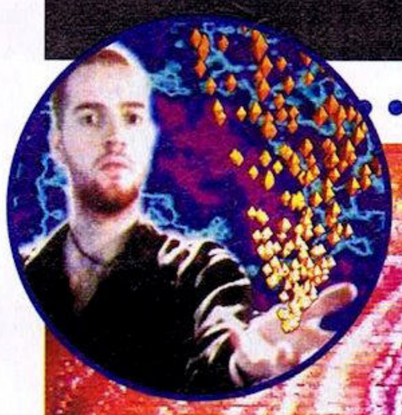
ISSUE 67 ■ FEBRUARY 1995

ST FORMAT



PURE GENIUS!

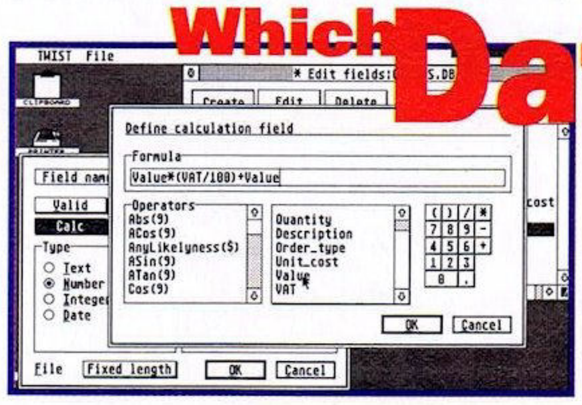
The ST isn't just a top computer – it's also the key to a whole world of information, ideas and skills. Discover what your ST can do for you on page 20.





Naked Video

These images were generated on an STE. Find out who, why and how on page 31.



Which Database

The top two data handlers go head to head in a Base To Base test. See the fight on page 26.

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36 QUILL 2
Top pen-on-paper action with the upgrade to the ST's best calligraphy package. But is it all write?

39 OFFICE AIDS
Two very odd items designed to relieve desk-bound foot and eye stress. Do they help or hinder?

40 EPSON STYLUS INKJET
Quality printing at knockdown prices!

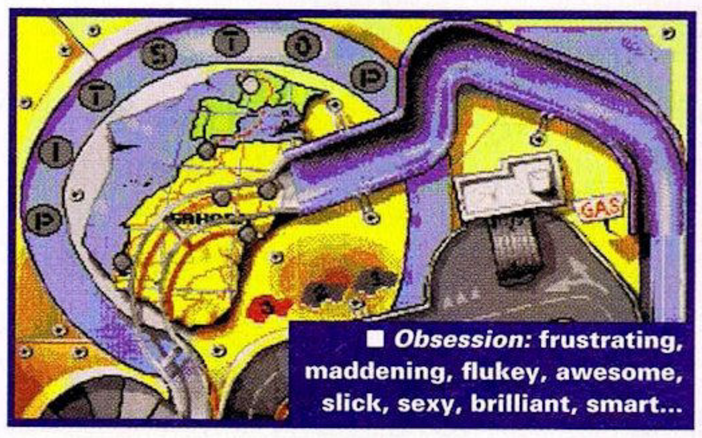
41 IMAGECOPY COLOUR 3.5
Image manipulation just gets better and better!

42 PUBLIC DOMAIN
Golden Dawn Menu 15, ST Vegas, Linodemo and *War, Overscan Invaders, Speed of Light 3.5, Clip-Art Collection volumes 1-6, Oh No!! More Froggies, The PD Collection, Psion-ST Transfer Software, Various Utilities* and *Intro Maker V1.5*. Phew!

47 INDIES
For your delectation: *Spacola, Oxyd, STOS Graphic Adventure Creator* and *Demon*. They're hot!

50 PREVIEW: PINBALL DREAMS
The all-time classic gets ready for the Falcon.

52 OBSESSION
Fabulous, brilliant, wonderful, excellent, outrage...



■ ***Obsession:*** **frustrating, maddening, flukey, awesome, slick, sexy, brilliant, smart...**

ST FORMAT ABC Jan – Jun 1994 **38,671** Member of the Audit Bureau of Circulations

Printed in the UK

MONSTERS OF ROCK EDITORIAL
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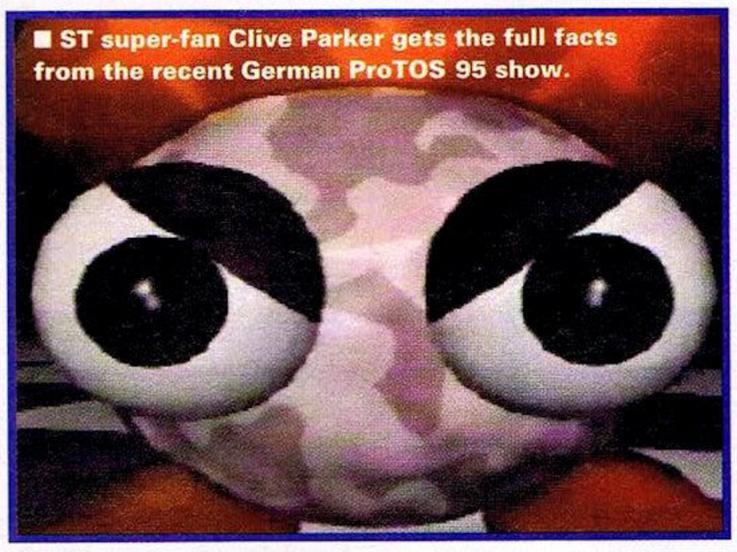
DISTRIBUTION
UK and Overseas Newsstand Distribution – Future Publishing Ltd ☎ 01225 442244

SUBSCRIPTIONS AND MAIL ORDER
FUTURE PUBLISHING, Somerton, Somerset TA11 6TB ☎ 01225 442244 Fax 01458 274378
Subscriptions ☎ 01225 822511
Customer Services ☎ 01225 822510

PRODUCTION (fax 01225 337530)
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Production controller Claire 'Debbie' Thomas
Paper controller Fiona 'Michelle' Deane

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Clive Parker's in-depth report on Germany's latest Atari Expo. Find out all about the new STFMs, new Falcons and the fabled Magic Mac.



■ ST super-fan Clive Parker gets the full facts from the recent German ProTOS 95 show.

20 PURE GENIUS
Your ST holds the key to a whole new world of wild information, facts, ideas and programs. Find out how to unlock them and make yourself an instant expert.

24 CALL YOURSELF AN ST EXPERT?
The 101 things you must have done with your ST if you want to be considered an expert. How do you measure up? And don't phone in, it's just for fun!

26 BASE TO BASE
Superbase Pro vs *Twist 2*. Which database is faster, slicker, easier to use and best suited to your needs? Peter Crush tells it like it is.

31 NAKED VIDEO
Andrew Morrison, *Trip-A-Tron* and four STEs. Put them all together and what have you got? An amazing live video animation and mixing suite that'll blow you away.

PERFECT PROGRAMMING

61 GFA EXPLAINED
Last month you saw the menu, this month you get the main course and the meat of the program. (Ouch!)

PERFECT PROGRAMMING

63 PENETRATING PASCAL
You know the theory but what about the practice? Simon Forrester gets your *Pascal* database working.

67 ST FIRST AID
Computer hygiene. How to keep your ST virus free, your disks safe and your internals clean. Treat your ST with respect, treat it well. And get your Marigolds on.

72 AROUND THE FALCON IN 80 WAYS
An occasional and sideways look at the suddenly revitalised Falcon. If you (with the aid our Cover Disk program) win the National Lottery, this could be you.

76 A MAN FOR ALL S(T)EASONS
Dave Cobbledick, the man behind Dunces Cap Software, eulogises about his STE, independent games, shareware and his intriguing new diskmag, *Voices*.

78 QUARTET CHALLENGE RESULTS
Have you won our music-making competition. Load your Cover Disk, read this and listen! You'll be impressed. We certainly were...



REGULARS

6 COVER DISK
Nick Peers gives you the lowdown on the wonders that fill this month's Cover Disk. Find out the full spec just by turning to the next page.

11 NEWS
STOP PRESS: *ST FORMAT* joins forces with *ST Review*. For the full story on this major magazine merger see page 11 instantly.

13 NEWS SPECIAL: UK ST SHOWS
London, Birmingham, Leeds and Glasgow. How did the Atari shows go? Find out the who was there and what they were showing.

49 GAMES NEWS
The new wave of games continues to break. This month we see the first glimpse of *Hollywood Hustler*, take a look at *Llamazap* and carry some important *Team* news.

54 ST ANSWERS
Captain Clive Parker takes the helm and sails the good ship ST Answers through the troubled waters of your hard, soft and otherware. Neat intro, huh?

70 SUBSCRIPTIONS
Save yourself time. Save yourself effort. Save yourself money and earn yourself a free binder, mouse and mat as well. You just have to subscribe – today!

75 READER OFFERS
A chance to peruse some of the finest ST goodies in the land, in the best ST magazine in the continent, at the best prices in the world.

79 BACK ISSUES
They're selling out fast, so get ready to order that old *ST FORMAT* you've been promising yourself. Act now before they ALL sell out.



■ One of the best adventures *ever* gets one of the best solutions ever. We would say that – we wrote it.

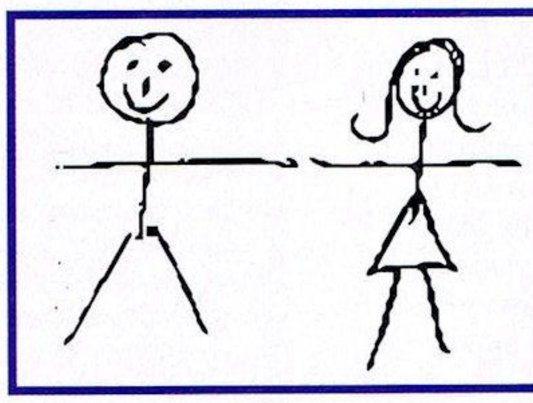
80 GAMEBUSTERS
Two huge solutions: *The Secret Of Monkey Island* and *Lure Of The Temptress*. Plus, the non-return of Captain Blunder. If you're stuck, Gamebusters will set you free.

84 READER ADS
Your shop window to the ST world. Pick yourself up a serious bargain, get shot of that kit you never use, leave messages and join ST clubs and groups.

85 ST DIRECTORY
Your complete guide to the everyone in the ST multiverse – all the addresses, phone numbers and e-mail addresses you could possibly need.

87 FEEDBACK
Your letters, our replies. Which means that about 50 per cent of it is good, and 50 per cent is written by Trenton Webb. Still, one out of two ain't a bad thing.

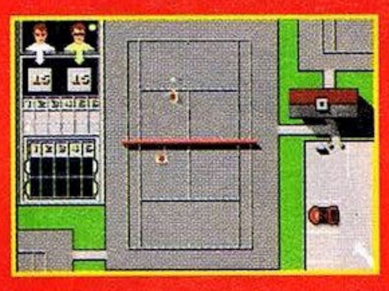
90 TWILIGHT ZONE
The far side of the magazine. The part where the tone lightens, the style loosens and even the pictures are relaxed. It's bit like Zen Buddhism on paper.



■ What is this picture doing here? There's only one way to find out – turn to page 90 now!

COVER DISK 67

THIS MONTH...



SMASH HIT: The ultimate share-ware tennis sim from the author of *Obsession*. **Uncompressed size: 217K**

KAOSDESK V2.1: Give your tired old GEM Desktop a face-lift with this excellent replacement. **Uncompressed size: 176K**

HOMEWORKER: Start your children on the road to journalism with this word processor that's designed for the younger generation. **Uncompressed size: 324K**

MIDIGRID PROFESSIONAL DEMO: Exclusive demo of the latest MIDI sequencer. Requires high resolution. **Uncompressed size: 265K**

STOS FIX 3.0: Fix *STOS* programs to run on your version of TOS (including the Falcon). **Size: 73K**

LOTTERY: Leave your ST to decide those six magic random numbers that could net you £18 million! **Size: 42K**

DESKPAC: Desk Accessory that combines a calendar, phone list and calculator among other things. **Uncompressed size: 132K**

SET DATE: Set your system time and date effortlessly and quickly with this. **Size: 18K**

HAYWIRE: A tiny game that's just too addictive to stop playing! **Size: 13K**

PERSONAL PASCAL LISTING: For use with Simon's programming tutorial. **Size: tiny!**

MENU: Dearchive and transfer your Cover Disk programs with the minimum of fuss using our brilliant *Menu* utility. **Size: 10K**

BACKUP: Always run this program first to ensure that you never lose all those valuable Cover Disk programs listed above. **Size: 13K**



The Lino Lads 'Whitesnake' Simon Chittenden; Mark Glover; Jon Moore; Chris Stocker; Simon Windsor; Jason Titley; Ollie 'Jnr' Gibbs
Printed by Garnett Dickinson Print Ltd, Rotherham
Circulation Manager Pete Walker 'Brothers'
☎ 01225 442244
Publisher Simon 'Lisa' Stansfield
Group Publisher 'Shakin' Steve Carey
Managing Director Greg 'Julio' Ingham
Annual subscription rate: UK £45

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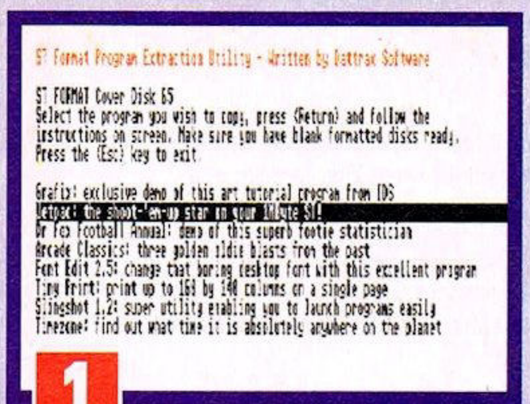
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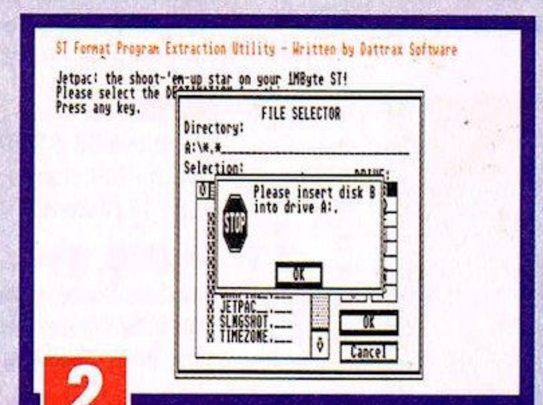
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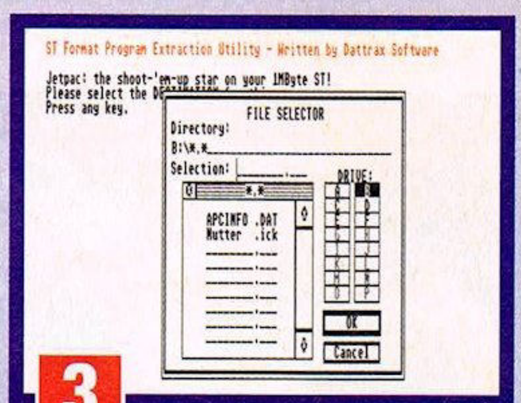
GET STARTED WITH THE *ST FORMAT MENU* PROGRAM



1 **Put the Cover Disk into Drive A, and double-click on the STF_66.PRG icon. Once the *ST FORMAT* logo appears, press any key and you will then be faced with an Options screen that's uncannily similar to this one.**



2 **Once you've made your selection, you're faced with your file selector. Select Drive B (if you have TOS 1.02 then you should click on A:\ and replace it by typing B:\ before clicking on the Close Box icon).**



3 **If you have a single drive you'll be asked to insert disk B (your blank disk) into Drive A. Do so, and once your file selector displays the information concerning Drive B, click on OK to proceed.**

SMASH HIT

BY: Peter Zetterburg
MACHINES: All STs (not TOS 2.06)
FALCON-COMPATIBLE: No
MEMORY NEEDED: 512K
RESOLUTION: Low
UNCOMPRESSED SIZE: 207K
GET STARTED: ***Smash Hit* is auto-booting, so once it's dearchived to your blank disk, just switch your machine on with the disk in Drive A.**

The stupendous *Obsession* has finally arrived on the STE (see the review on page 52). Meanwhile, we've dug up this gem of a tennis game from the author of *Obsession*, Peter Zetterburg.

For the program to run on 512K machines, the menu program decompacts SMASHHIT.PRG into an Auto folder. Then, to load the program, just switch your ST on with the SMASH HIT disk in Drive A and it loads automatically. Oh, and you'll need a joystick to play.

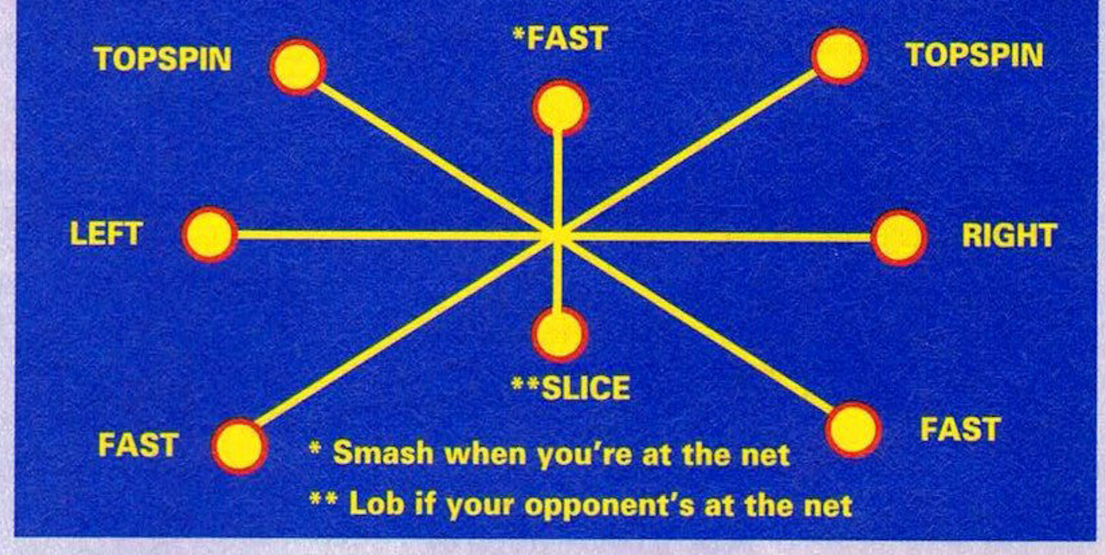
That ball was out!

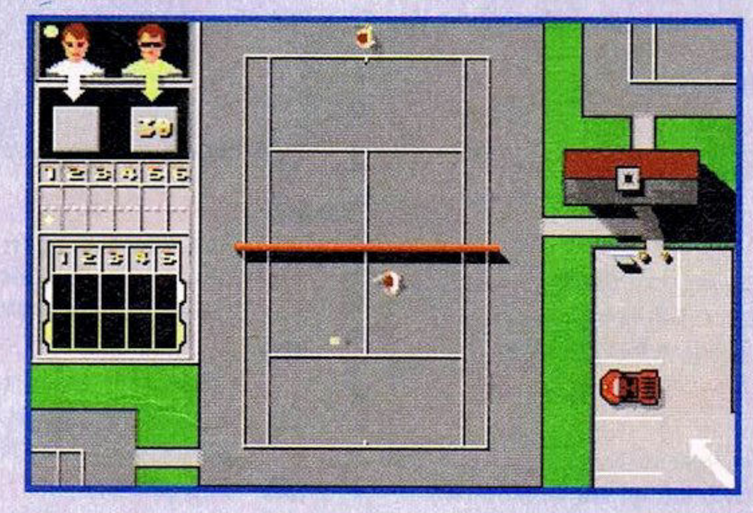
Smash Hit is you versus the computer. It can be set to one of three levels, easy, tough and 'far out man' (dig that groovy stuff). You can also decide how your opponent plays, either aggressively (usually at the net), defensively (stuck on his own baseline) or a more balanced mixture of the two. Once selected, all that remains is for you to choose how many sets you want to play (one, three or five) and you're ready to go!

The action takes place on an overhead court, and the normal rules for singles tennis apply. You can slice, spin, lob and even smash the ball using your joystick as shown in the diagram. When it's your turn to serve, a flashing pointer appears in your opponent's serve box, moving from left to right and back again. Hold down <Fire> and the pointer starts to change colour. The longer you hold down <Fire>, the faster your serve, although there is a danger of you hitting the ball out and being forced to serve again. The opposite is true too – release <Fire> too quickly and you risk serving into your own net.

Smash Hit is superbly presented, and comes with its own sampled cries of 'fault' and 'out'. It's shareware, so if you'd like the chance to play a friend, or participate in a tournament, or even view replays of your best (and worst) shots, read SMASH.DOC to find out how to register, after quitting the game.

JOYSTICK WAGGLING





■ **Get your opponent to the net and you can try lobbing him. This is one of those rare occasions when it succeeds for Nick.**

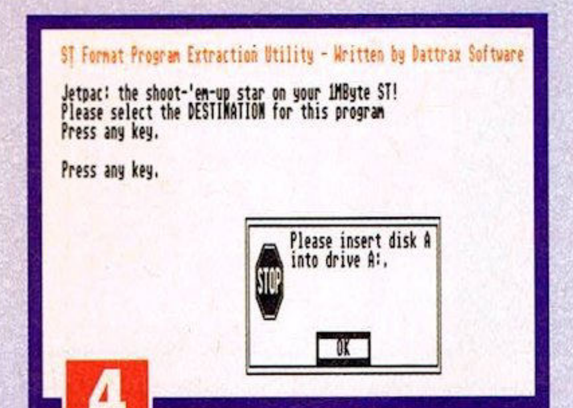
THOSE TENNIS TERMS

Does Wimbledon fortnight leave you bewildered as to what those technical terms mean?

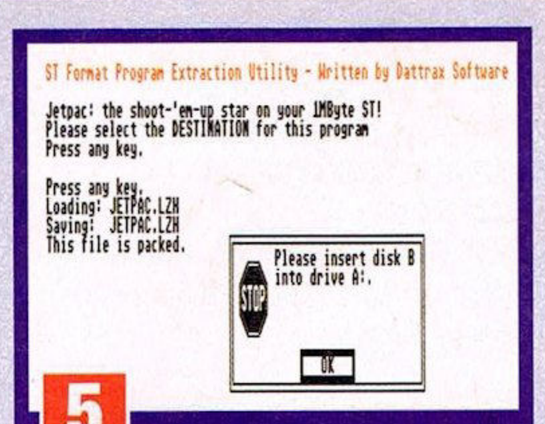
Fault: the server failed to land his serve in the opponent's serve box.
Double-fault: your two attempts to land a serve in correctly failed, giving your opponent the point.
Out: the ball has landed outside of the accepted boundaries before bouncing in your opponent's court. You've lost another point.
Deuce: you've both scored three points against each other in this game (you're at 40-all). To win the game you must win two consecutive points.
Set point: the next point lost to your opponent will give him or her the set, or vice-versa (if you're really that good).
Match point: you're either one point away from complete exultation, or the utter ignominy of defeat. We in the *ST FORMAT* office tend to be in the latter camp.

Still confused? Good, you don't actually expect to understand the game, do you?

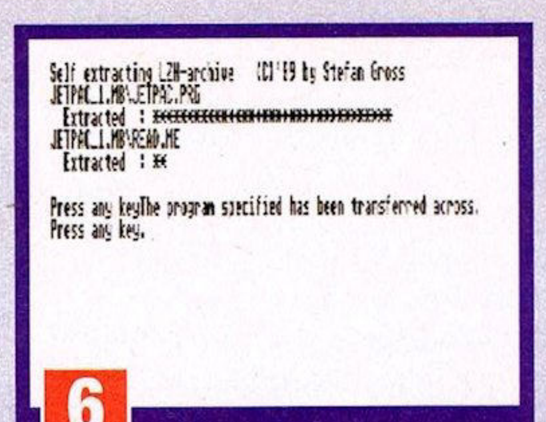




4 Once you've clicked on OK, you'll then be faced with another dialog box telling you to insert disk A (your Cover Disk) into the disk drive. Do so before clicking on OK to start transferring the program.



5 The relevant files will be loaded into memory before you're told to insert disk B (your blank disk) into the disk drive. Do so (it's repetitive, I know), and click on OK to start saving the files to your blank disk.



6 If the file is compressed, you will be told that the files are unpacking (see above). Once done, you will be told of the successful file transfer and you are returned to the Menu screen. Press <Esc> to quit.

Don't forget

Write-protect your Cover Disk. Slide the black tab so you can see through the hole.

Make a backup using the *Backup* program on the Disk. NEVER ever run software directly from the Cover Disk except *Backup*.

Many Cover Disk programs are compressed to fit them on the Disk. Use the *Menu* program to copy and extract them to your blank disks. Step-by-step instructions are given just to the left.

Read the instructions in these pages and in any document file that is on the disk. They're there for a reason.

If you have general problems with your ST, consult your manual. If you are still stuck then write in to ST Answers, *ST FORMAT*, 30 Monmouth Street, Bath, BA1 2BW.

KAOSDESK 2.1

ENGLISH VERSION TRANSLATED BY: Floppyshop
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: Any (medium/high recommended)
UNCOMPRESSED SIZE: 176K

The older your ST, the more awkward and limited your GEM desktop. By the time you reach the latest TOS upgrades (version 2.06 on the ST and version 4 on the Falcon) you get the feeling that Atari have finally begun to get things right. Which is a pity for those of you left with TOS 1.62 or worse.

Except it isn't, because *KAOSDesk* gives your ST a replacement desktop that's not only funkier to look at, but also offers you the kind of options you'll soon find it difficult to live without. TOS 2.06 and Falcon users can load and use *KAOSDesk* if you so wish – although you might have to get through an 'illegal AES function call' first though – but this program adds little to what you already have. *KAOSDesk* is really for those of you (like me) whose version of TOS is 1.62 or less.

Seeing is believing

KAOSDesk excels in its enhanced display options. You can display what free memory you have at any time by selecting 'About KAOSDesk' from the *KAOSDesk* menu. You can even set up a mask to screen files from your display, enabling you to only display files with a PRG or DOC extension, for example. Wildcarding is also permitted, which means you can also display all your Degas picture files by entering '.PI*'.

You can show your files in a variety of ways: as icons (see the panel above for extra options) or in one of three different sizes of text. You can also elect not to show specific file information (such as its size, or date and time of creation) which, when used in conjunction with 'Single column' mode, enables you to display hundreds of files on screen at once.

But believing is as good as reality

Your new desktop also offers a host of new options, which make *KAOSDesk* more than just an aesthetic improvement on your old setup. For example, having selected all the files you wish to delete, you no longer have to create all kinds of fuss and bother trying to drag them all into the trashcan (or dustbin, for those of you who prefer Anglicised versions). Instead, just select 'Delete' from the Files menu, or better still simply press <Control> and <L> to achieve the desired effect.

You can also format disks to a specified number of sectors and tracks – handy if you're still having problems decompacting *Personal Pascal* (from Cover Disk 64) to a blank disk. You can even drag files on to the desktop and execute them directly from there – far preferable to wading through any number of folders looking for that program you use on a regular basis. There's also the ability to store different desktop configurations on different drives and disks, which is activated by pressing <Control>, <Shift> and the drive letter on which your new KAOSDESK.INF file is stored. You could use this, for example, to have one configuration dealing with all your word processing and desktop publishing needs, and another storing all your games on the desktop for easy access.

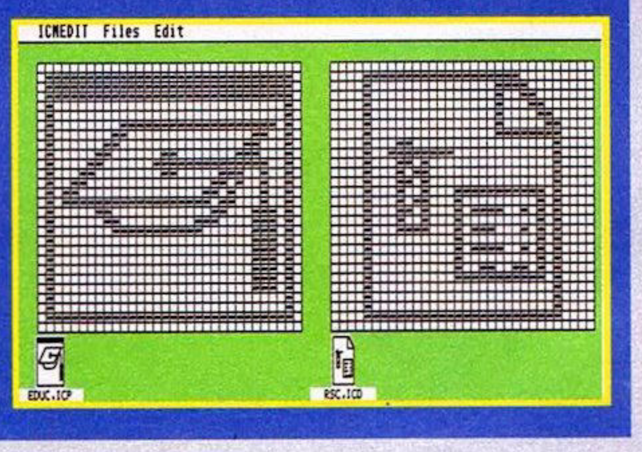
It's called the KAOS theory

KAOSDesk is an indispensable addition to your ST's setup. If nothing else, it should serve as a useful introduction to the concept of replacement desktops, and there are many others available. One of the best commercial packages is called *NeoDesk*, version four of which recently scored a massive 90% in issue 64.

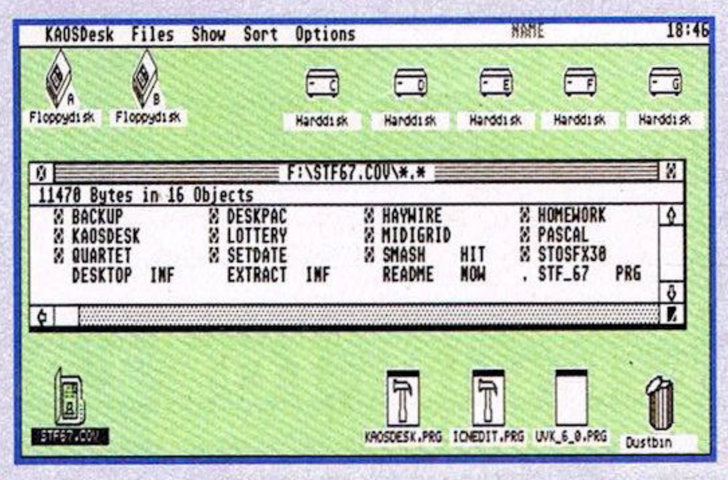
ICONIFY YOUR DESKTOP!

One of *KAOSDesk's* most impressive features is its icon-handling – you can build up a collection of icons to assign to program and data files. So, for example, all your word processors can quickly and easily be identified by a specific icon. You'll find 28 program icons (covering accounts, databases, games and others) and 32 data file icons supplied ready-made. You assign programs to icons by creating a NAMES.TXT file (yes, an example is supplied) which, when you double-click on MKICONS.TOS, does the hard work for you. You can therefore easily edit NAMES.TXT from within a text editor or word processor to include your latest software editions, then just run MKICONS.TOS to inform and update *KAOSDesk* of the changes.

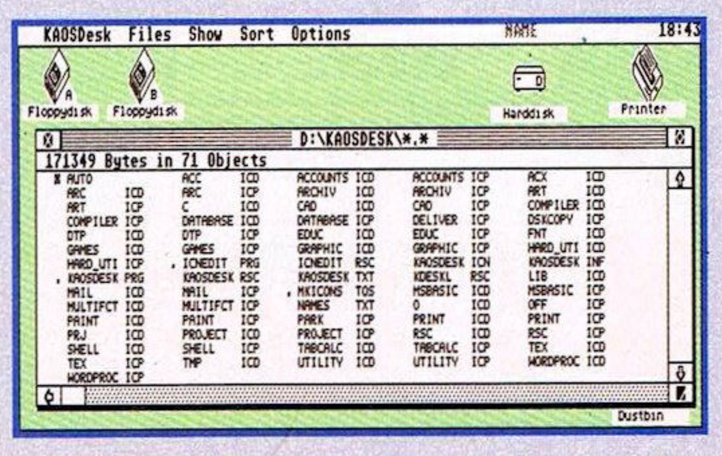
If you're unhappy with the many icons provided, design your own using ICNEDIT.PRG. It's a simple point-and-click affair, and you can save your changes or introduce entirely new icons effortlessly.



■ **If you don't like the huge selection of icons provided with *KAOSDesk*, design your own. Then send them into us at *ST FORMAT*.**



■ **You can even put files on to the desktop itself using KAOSDesk, making it easier to access them without wading through loads of folders first.**



■ **If you need to display thousands of files simultaneously, *KAOSDesk* is the replacement desktop for you.**

HOMEWORKER

BY: Geoff Camp
MACHINES: All STs (not TOS 2.06 – see below)
FALCON-COMPATIBLE: No
MEMORY NEEDED: 512K
RESOLUTION: Medium
UNCOMPRESSED SIZE: 324K
GET STARTED WITH: once HOMEWORK has been decompacted using the *Menu* program, you can then run it directly, simply by double-clicking on HOMEWORK.PRG.

Encourage the budding writer in your child with *Homeworker*. It enables you to combine and print text and graphics in a variety of styles and fonts. Three fonts can be held in memory at once, and 16 are supplied with the program. There are also lots of graphical files supplied to give you an idea of what little Jemma can achieve with it. Read through the READ.ME file for how the program works and how to register.

BACK UP

BY: Brian Tilley
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: Any
SIZE: 12K
GET STARTED WITH: double-click on CD_BACK.TOS to get going. Then just follow the on-screen instructions. Yes, it's really that simple.

It's too easy to forget where you are. Last week I was wandering around Bath and suddenly found myself in New York. As I was being mugged I realised I'd forgotten to back up my Cover Disk from last month, and by the time I got out of hospital it was too late – the disk was corrupt. The moral of the story? If you don't back up your Cover Disk you might end up mad, like me. And I wouldn't wish that on anyone.

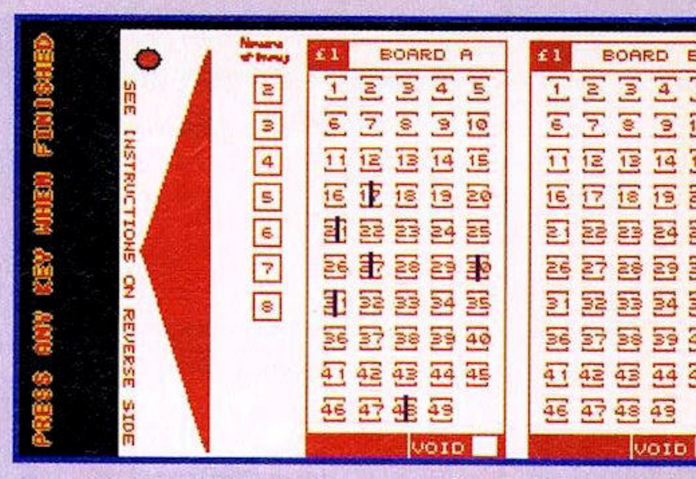
PASCAL LISTING

BY: Simon Forrester
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: Medium/High
SIZE: 473bytes
GET STARTED WITH: see the *Pascal* tutorial on page 63.

This is the listing you'll need to continue Simon's *Pascal* tutorial series – forming part of a database. Note that it's incomplete as it stands and cannot be compiled or run until you've followed the tutorial and made the necessary additions to it.

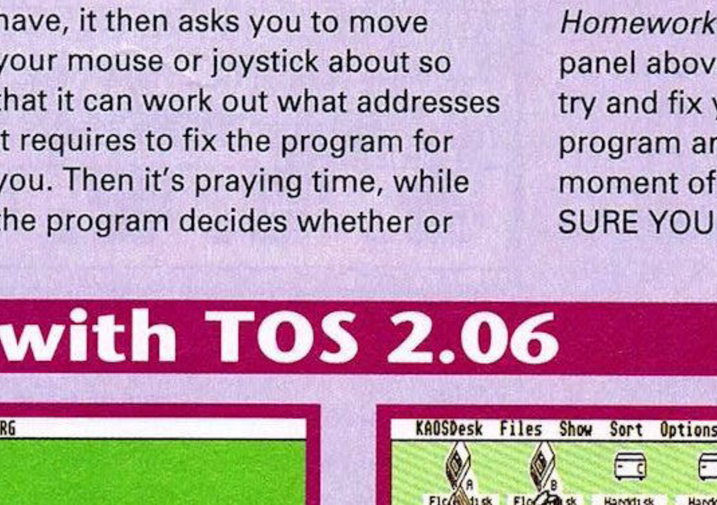
LOTTERY

BY: Marcus Platt
MACHINES: All STs (not TOS 2.06 – see below)
FALCON-COMPATIBLE: No
MEMORY NEEDED: 512K
SIZE: 42K
GET STARTED WITH: double-click on LOTTERY.PRG to run the program.



■ ***Lottery* gives your ST a vital role in your pursuit of riches and wealth.**

Of course you're going to be the next National Lottery winner. And I'm your fairy godmother. But if you're still convinced that you're going to be immersed in riches soon, you could always use your ST to do the hard work for you, and let it pick the six random numbers that stand between you and a life of luxury. And by the way, is it worth me using my birthday as four of the numbers or is it true that no one ever wins using that method?



■ **Use *Homeworker* and your child could reach Nick's level of writing competence. You'll need to run *STOS Fix* first if you have TOS 2.06.**

Running TOS 2.06?

Because *Homeworker* and *Lottery* are coded in *STOS*, they're not naturally compatible with TOS 2.06. If you have a TOS-switcher, set it to your earlier version of TOS, and the programs will run fine. If you haven't, or are determined to use them with TOS 2.06 regardless, all is not lost. Just see *STOS Fix 3.0* to find out how to convert your older *STOS* programs (including *Homeworker* and *Lottery)* to run with the latest versions of TOS.

STOS FIX 3.0

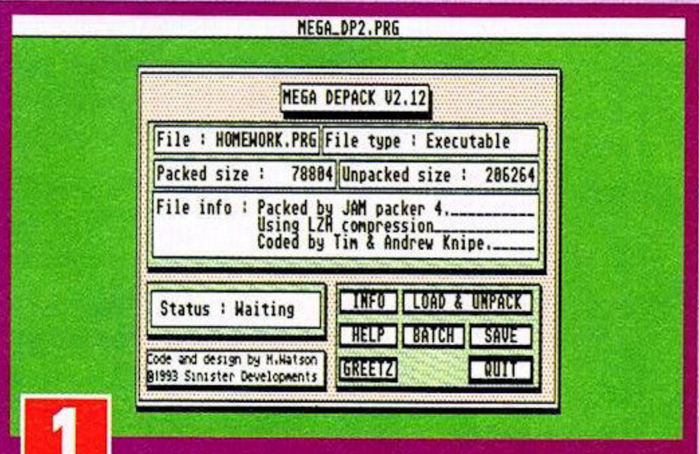
BY: Robert Quezada
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: All
SIZE: 73K
GET STARTED WITH: enter the STOSFX30 folder and double-click on STOSFX3.PRG to load the program. Full details are in STOSFIX3.TXT.

This program attempts to fix *STOS* programs to work with the latest versions of TOS, including the Falcon. It worked with *Homeworker* and *Lottery* in testing, but you may find that it doesn't work with other programs. Just load it up, and wait for the on-screen instructions for how to proceed.

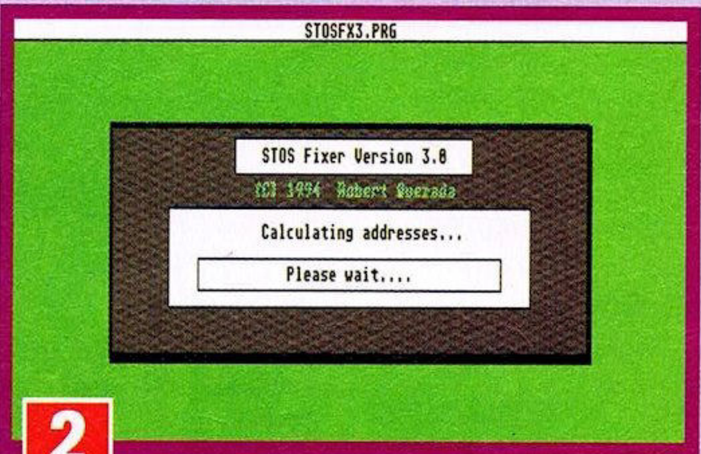
Once the program has determined what version of TOS you have, it then asks you to move your mouse or joystick about so that it can work out what addresses it requires to fix the program for you. Then it's praying time, while the program decides whether or not it will be able to solve your problems for you.

It won't work with programs that have been compressed or packed (so you'll have to unpack *Homeworker* as described in the panel above) and you'd be a fool to try and fix your only copy of the program and risk losing it all in a moment of madness. SO MAKE SURE YOU USE A BACK-UP COPY!

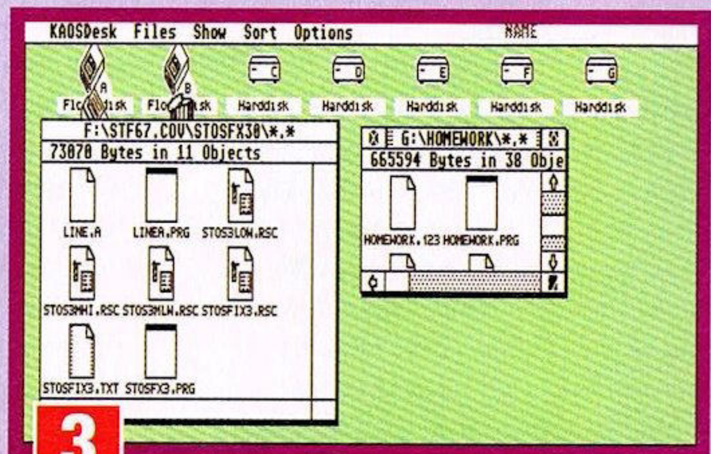
Fixing *Homeworker* to work with TOS 2.06



1 **Because HOMEWORK.PRG is packed, you first need to depack and save it as an uncompressed file. We gave away *Mega Depack* away on Cover Disk 50 (see page 79 for back issues), or you can get hold of it and similar programs from any good PD library. Once done, save the unpacked program to your blank disk.**



2 **Now load *STOS Fix 3.0* as shown in the instructions above, then just select the program you wish to convert (in this case, *Homeworker).* The program spends some time calculating new addresses before saving the converted program as its original extension (such as HOMEWORK.PRG).**



3 **The program should now work fine with your current version of TOS. The original file is stored as a 123 extension (for example, HOMEWORK.123), which means that if problems persist, you can still obtain the original version by deleting the PRG file and renaming your 123 file to a PRG extension.**

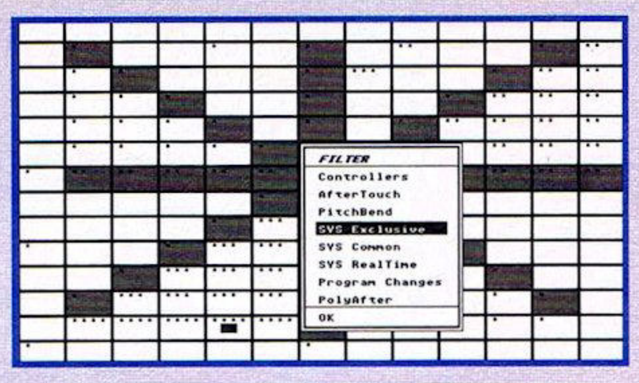
MIDIGRID PROFESSIONAL DEMO

BY: Dawson's Music
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: High
UNCOMPRESSED SIZE: 265K
GET STARTED WITH: once the *Menu* program has dearchived *MIDIgrid Pro* to a blank disk, you can run it directly just by double-clicking on DEMO.PRG.

***MIDIgrid Professional* scored a** highly respectable 79% in issue 62, and here it is, on the Cover Disk as an exclusive demo! If the title doesn't give it away, it's a MIDI sequencing package for all Ataris, although it runs in high resolution only. If you don't have a monochrome monitor you'll need a copy of *Sebra,* the high resolution emulator, which is periodically given away on the Cover Disk (most recently issues 64 and 66).

You'll need a MIDI keyboard or music generator to actually get anything out of the program, but once loaded it's a simple point-and-click affair. You can create your own grids or load in some of those provided, but the demo version doesn't allow you to save anything. The grids themselves are made up of sequences which can be bolted together any way.

The program is complex, but there's a README file included, which, although basic, will get you started. Once you've tried out the program you'll probably be interested in getting the full version, so give Dawson's Music a buzz on ☎ 01925 632591 for more details.



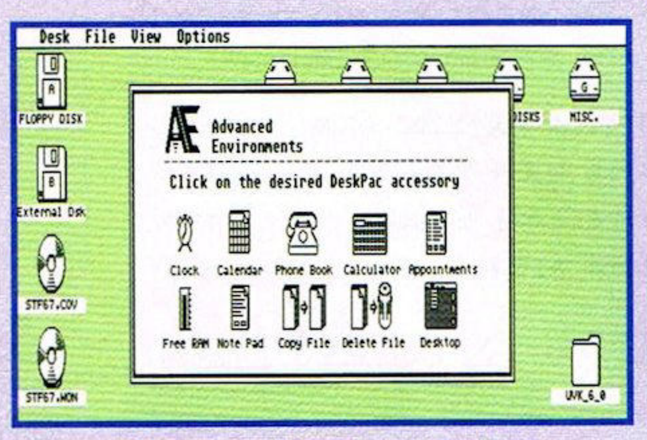
■ ***MIDIgrid* looks weird, but it must work. Otherwise Andy Curtis wouldn't have given it 79%.**

DESKPAC

BY: Advanced Environments
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: Medium/High
UNCOMPRESSED SIZE: 132K
GET STARTED WITH: re-boot your ST with DESKPAC.ACC in the root directory of your drive.

***Deskpac* is a Desk Accessory** combining loads of useful options in one. It has a clock (which can be permanently placed in the top right of the screen), a phone book and appointments schedule (with a calendar for day-by-day reference) and even a calculator with full scientific functions. And you can display the amount of free RAM you have left, copy and delete files and keep notes on a pad.

The program defaults to Drive A, but if you want to change this, load DESKPAC.CFG into a text editor and alter the file paths. If you're a businessman looking for a Desk Accessory with real power, *Deskpac* is for you.



■ **Look at all those lovely options included in *Deskpac*. It's enough to make you go all gooey.**

Read the READ_ME text file for full details, including how to register.

SET DATE

BY: Peter Ives
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: Any
SIZE: 18K
GET STARTED WITH: the *Menu* program creates an Auto folder on your blank disk before copying SETDATE.PRG into it. Then just boot up with the disk in your drive, and the program will run.

***Set Date* makes setting the** date and time on your ST easy – you'll never buy a clock again. Once you've decompacted it on to your blank disk, just re-boot your machine with the disk in Drive A and it loads automatically.

The first time you boot it you must create a TIME.INF file, which stores the date and time you last set the clock.

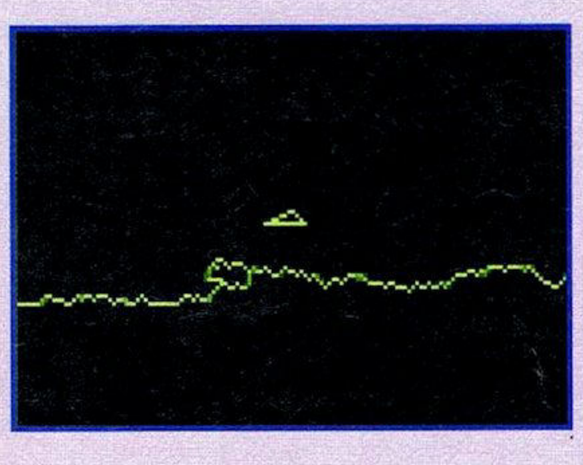
What lifts *Set Date* above its rivals is the ease with which the date is updated. Rather than typing in a fiddly set of numbers, you just have to use the cursor keys to alter the time and date before pressing <Spacebar> to finish. Your system clock is now set and you're all ready to rock to the glorious sound of Queen. *(No! – Everyone else)*

HAYWIRE

BY: John Hodskinson
MACHINES: All STs
FALCON-COMPATIBLE: Yes
MEMORY NEEDED: 512K
RESOLUTION: Low/Medium
SIZE: 13K
GET STARTED WITH: just double-click on HAYWIRE.PRG, which is inside the HAYWIRE folder.

Yes, the best 8-bit games really did used to take up less than 500K of memory. *Haywire* takes you back to those golden days when graphics meant wireframe, and a game was good because it had playability. Your task in this game is simple: alien animals have escaped from the zoo and are now running amok on eight different moons. Your job is to round them all up and return them to your mothership, which is hovering waiting for you.

Once you've loaded *Haywire,* just wait a few minutes and the instructions flash up on screen, telling you what to do and how to do it. Just one word of warning: that pull of gravity is deadly, so just make sure you manage to stay airborne! ***stf***



■ **I know the Hairy's out there somewhere. And when I find him I'll nab the little beggar.**

Problems?

If you can't load, copy or back up your Cover Disk then you may have a faulty disk. Send the disk and a padded self-addressed envelope to: *ST FORMAT* February Disk Returns, PO Box 21, Daventry, NN1 5BU. We pay the return postage for you.

PLEASE DON'T send faulty disks to our Bath or Somerton offices. We don't keep stocks of Cover Disks.

If you are having problems with a Cover Disk program, re-read the instructions and any DOC files. If you still have problems, call the *ST FORMAT* Cover Disk Hotline on ☎ 01225 442244 on Wednesdays between 2pm and 6pm only.

Cover Disks are double-sided. If you have an old STFM and can't read the Cover Disk then you need to upgrade your ST to a double-sided drive.

If you have other hardware or software queries, contact the manufacturer or publisher. Or ring the official Atari Helpline on ☎ 0131 332 93233 between 6pm and 11pm Monday to Saturday and 8pm and 11pm on Sundays.

WE WANT YOUR PROGRAMS

We pay for your software – so if you have anything that's good, original and preferably short that you think really deserves to go on *ST FORMAT's* Cover Disk, send it with this form and full documentation to Nick Peers, *ST FORMAT,* Cover Disk, 30 Monmouth Street, Bath, Avon BA1 2BW

Name _____

Address _____

_____

Daytime phone _____ Program title _____

_____ Total size in K _____

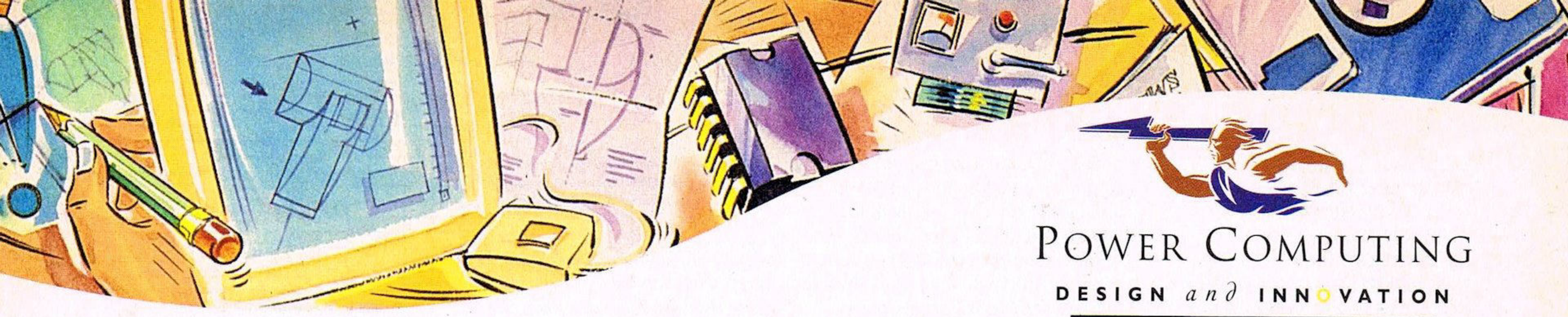
STF0295

On a separate sheet, explain concisely what the program does and why you happen to think it's so brilliant.

Remember to: ■ Include on-disk and paper documentation ■ Write your name and address on the disk ■ Use a virus-free disk ■ Keep a copy of your program, because contributions are non-returnable ■ Enclose a bribe. *Star Trek* videos are good ■ Not that it makes a difference

Please sign the following declaration: This program is submitted for publication in *ST FORMAT.* It is wholly my own work and I hereby agree to indemnify Future Publishing against any legal action should copyright problems arise.

Signed _____ Date _____



POWER COMPUTING

DESIGN *and* INNOVATION

HARD DRIVES/RAMS

EXTERNAL HD'S

These high quality external 3.5" SCSI hard drives are built into a slim casing and come complete with a power supply unit, cables and software.

52MB HARD DRIVE	£179
130MB HARD DRIVE	£269
270MB HARD DRIVE	£349
540MB HARD DRIVE	£549

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High quality peripherals for the Atari.

ATARI MOUSE	£15
OPTICAL MOUSE	£29.95
POWER CLOCK	£17.95
10 BRANDED DISKS	£5

RAM BOARDS

We manufacture our own RAM boards for the Atari computer range, each one is subject to a stringent quality control procedure.

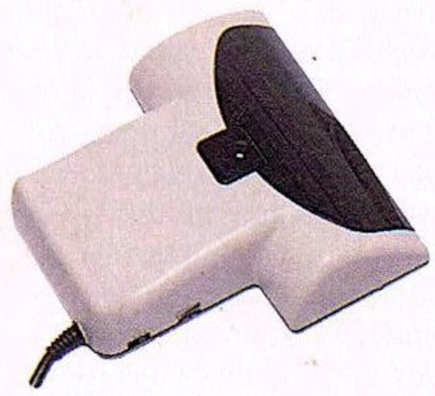
0.5MB RAM BOARD	£49.95
2MB RAM BOARD	£79.95
4MB RAM BOARD	£129.95
1MB SIMM	£35

RING INTERRUPTION

For use with the Ultimate Ripper and SuperMon. Stop games or programs in their tracks, search for infinite lives and hack with code, and with the press of a key the program is restarted.

RING INTERRUPTION	£15

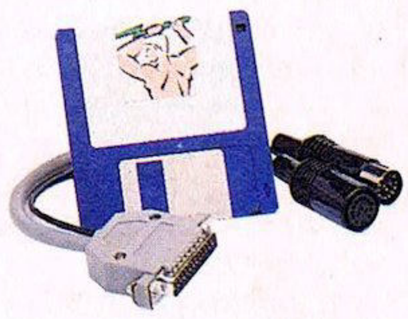
POWER SCANNER



POWER SCANNER

The award winning scanner from Power Computing allows you to scan up to 400DPI in real-time greyscale, with autoscan rate detect. The scanning software included allows you to edit and manipulate any image you scan.

POWER SCANNER	£99



BLITZ TURBO

Back-up disks at lightning speeds, Blitz copies from the internal to the external drive and cleverly by-passes your ST's controller chip. In around 40 seconds you can back-up an ST disk, what's more you can switch between your disk drive and Blitz Turbo without disconnecting your Blitz interface. (1988 Copyright Act applies)

BLITZ TURBO	£15

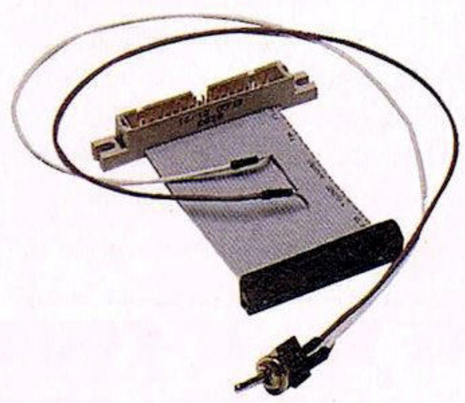
POWER DRIVES



POWER DRIVES

PC720B, the award winning external disk drive which includes a virus blocker, built-in Blitz Turbo and is able to boot from Drive B.

PC720B (INC.PSU)	£55
PC720P (INC.PSU)	£49.95
PC720I (INTERNAL)	£30
360K UPGRADE DRIVE,NEEDS CASE MOD.	
PC720OI (OFFICIAL)	£35
720K INTERNAL REPLACEMENT DRIVE	



DRIVE B CABLE

If you have an internal drive that is not compatible with 'boot from drive B', this cable will solve your problem.

DRIVE-B CABLE	£9.95

new

SUPERMON

SUPERMON

SuperMon comes with all the features of the 'Ultimate Ripper' and more. Some of the features included with SuperMon are:

Features

- Program Switcher - allows programs to be in the memory simultaneously and switched between at the touch of a key.
- Printer Spooler - allows files to be printed at the same time as other tasks.
- Comprehensive Debugger - dissassemble programs and step through them, intecept OS calls, search memory or find where a routine is called from automatically.
- Diagnostics function - check the internal functioning of your ST disk analyser, custom format disks, read/write, hide files.

Utilities

- The SuperMon also has many utility functions available, including reset proof RAM disk, mouse trap function, time display, screen snaphot and 50/60Hz toggle.

ULTIMATE RIPPER	£25
INC. SUPERMON	£35

new

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Address

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System owned

Description

Cheque/PO for £ allow upto 7 days to clear

Credit card No.

Expiry date **Sign**

THE NEWS

FORMAT AND REVIEW JOIN FORCES

By Nick Peers

ST FORMAT is incorporating *ST Review* from this edition of the magazine onwards. Future Publishing's flagship ST title is now combining with IDG's own ST publication to bring you what will be the best of the best in the ST market.

This means that there is now a strong single magazine championing the ST market. We'll be incorporating elements from both magazines, guaranteeing you the best coverage of everything that's important in the world of Atari. The move also highlights Future Publishing's strong commitment to the ST and Falcon computers – *ST FORMAT* will be here for many years to come.

We at *ST FORMAT* would like to take this chance to welcome all *ST Review* readers into the fold. *ST FORMAT* readers have a fine tradition of letting us know what they want in their magazine, and we hope that *ST Review* readers will also provide us with plenty of ideas and feedback, enabling us to deliver the magazine you want.

If you're a subscriber to *ST Review* you should already have received a letter detailing the changes to your subscription. If you haven't heard anything yet, contact: Simon Howarth, *ST FORMAT* Subscriptions Manager, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW.



■ **Fitting our title on to the cover will be a challenge. *ST FORMAT incorporating ST Review incorporating ST User incorporating ST Action and ST World!***

DIAL 999 FOR GAMES

999 SOFTWARE ARE currently developing two new games for release on the ST early in 1995. The first is *Potholer,* a graphical adventure based in a real cave system, featuring actual digitised pictures. The game is script driven (much like *Zero-5),* which means that extra levels and caves will be readily available in the form of data disks at a later date.



■ ***Potholer* offers claustrophobic ST users the opportunity to go potholing from the comfort of your living room.**

Then there's *Solar War 2,* a shoot-'em-up, again featuring digitised graphics, in which you battle aliens on and around all sorts of planets. They should be available in the first half of 1995, so keep a look out for the definitive review in *ST FORMAT,* or call 999 Software on ☎ 0121 704 6256 during the day. Alternatively, write to them at: 1 Portland Avenue, Burton-on-Trent, Staffs, DE14 3GD.



■ **Some people never realise they're too close to a planet until they burn up in its atmosphere.**

FRONTIER USER GROUP

THE PANTHER OWNERS GROUP have recently released issue six of their diskmag. The group is made up of *Elite 2* players who exchange news and other gossip concerning their favourite game on the Atari. You need 1MByte of memory to use the disk and you can write to the group courtesy of: Michael Gray, 56 Whitley Crescent, Wigan, Lancs, WN1 2PP.

PD NEWS

Entering the PD Directory this month for the first time is Who's PDL, a new PD library specialising in science fiction (hence the name). Although their catalogue is currently somewhat small, they hope to develop it over the next year. Prices are £1.50 a disk, plus 50p P&P (£1 P&P for orders of over £7), and their catalogue is available for £1 inc postage. Call them on ☎ 0181 473 1488, or write to: Who's PDL, 5 Highmead, Plumstead, London, SE18 2DH.

As a result of increased sales in 1994, Chaos PD have announced a number of discounts on the prices of their blank disks. Now you can get ten DSDD disks for just £4 (reduced by 50p), while 200 DSDD disks are just £54. Five free PD games will also be supplied per 50 DSDD disks ordered, and Falcon owners can get 10 DSHD disks for £4.50 and 200 for just £70. Chaos attribute their increased sales to the low cost of their PD (just £1 a disk) plus the chance to win free PD when you answer their questionnaire. Call them on ☎ 01296 89059 between 6pm and 9pm.

Transparent Dreams PDL have announced a new price for their disks – each disk now costs £1.75. You can contact Simon Osbourne on ☎ 0161 437 7474.

YET MORE UPGRADES

HISOFT AND CGS COMPUTERBild have announced recent upgrades to some of their products. HiSoft's *Papyrus Gold (STF* 63, 91%) is now compatible with the Geneva multitasking software using a new data disk, which also includes extra printer drivers. It costs just £5 – call HiSoft about it on ☎ 01525 718181.

And as well as releasing *Quill 2* (reviewed on page 36), CGS have now released upgrade disks for three of their programs. *DA's Vector* (£20) now stands at version 1.2 and includes joining and outlining functions, while its big brother *DA's Vector Pro* has been upgraded to version 2.10, which gives it two new animation filters and a monochrome image tracing utility for an extra £25. Finally, *DA's Picture* (£20) now stands at version 1.10, enabling you to rotate images with no loss of quality whatsoever. Contact CGS ComputerBild on ☎ 0181 679 7307 for more details.

Merry Christmas from HiSoft



Silsoe Village Scene by Gordon Chambers, typeset by Leaside Graphics, Luton.



It's that time of year again, frosty mornings, roaring log fires, red noses … and all those presents to buy.

We know how difficult Christmas buying decisions can be so, to make life just a little easier, we've come up with some splendid gifts for the Atari lover in your household, at bargain prices.

From programming languages to real-time video digitisers, we have something that should appeal to any discerning Atari enthusiast who wants to get the most from his Atari computer during the festive season.

To take advantage of these bargain buys just call us on 01525 718181, armed with your credit/debit card details, or write to us enclosing a cheque or postal order. Please add £3 P&P to each order for delivery within the UK. We will despatch goods within 5 working days or, for an extra £6 postage, the same day on a 24 hour delivery, right up to Christmas. Please quote reference ATX948 when ordering.



Languages

Lattice C Version 5.60	£99.95
HiSoft BASIC Version 2.10	£59.95
HiSoft Devpac Version 3.10	£49.95
HiSoft C Interpreter	£10
FirST BASIC with full manual	£10
Personal Pascal	£29.95
Devpac 3.10+BASIC 2.10+ Lattice C 5.60 Bumper Pack	£199
Modern Atari System S/W Book	£15

Utilities

Diamond Back 3+ Diamond Edge+ DataLite 2 Bumper Pack	£99.95
HiSoft WERCS	£10
HiSoft Knife	£10
XBoot 3 + Saved Pack	£29.95
TrueImage + TruePaint Pack	£49.95
ProFlight	£10



Home Office

Productivity Bumper Pack (Papyrus Gold + Twist 2 + NVDI 3)	£199
Papyrus Gold	£119
Twist 2	£59.95
NVDI 3	£39.95
Atari Works	£59.95
K-Spread 2	£10
Harlekin 3	£45
Superbase Professional 3	£29.95

Music/Video

Music MultiPack *(StereoMaster, Quartet, Concerto)*	£49.95
Replay16 16 bit Sampler	£99.95
VideoMaster ST+ ColourMaster pack	£79.95
VideoMaster Falcon+ ColourMaster pack	£99.95
ColourMaster RGB Splitter	£49.95
Replay Stereo 8 bit Sampler	£39.95

all offers subject to availability and only valid until 30/1/95.

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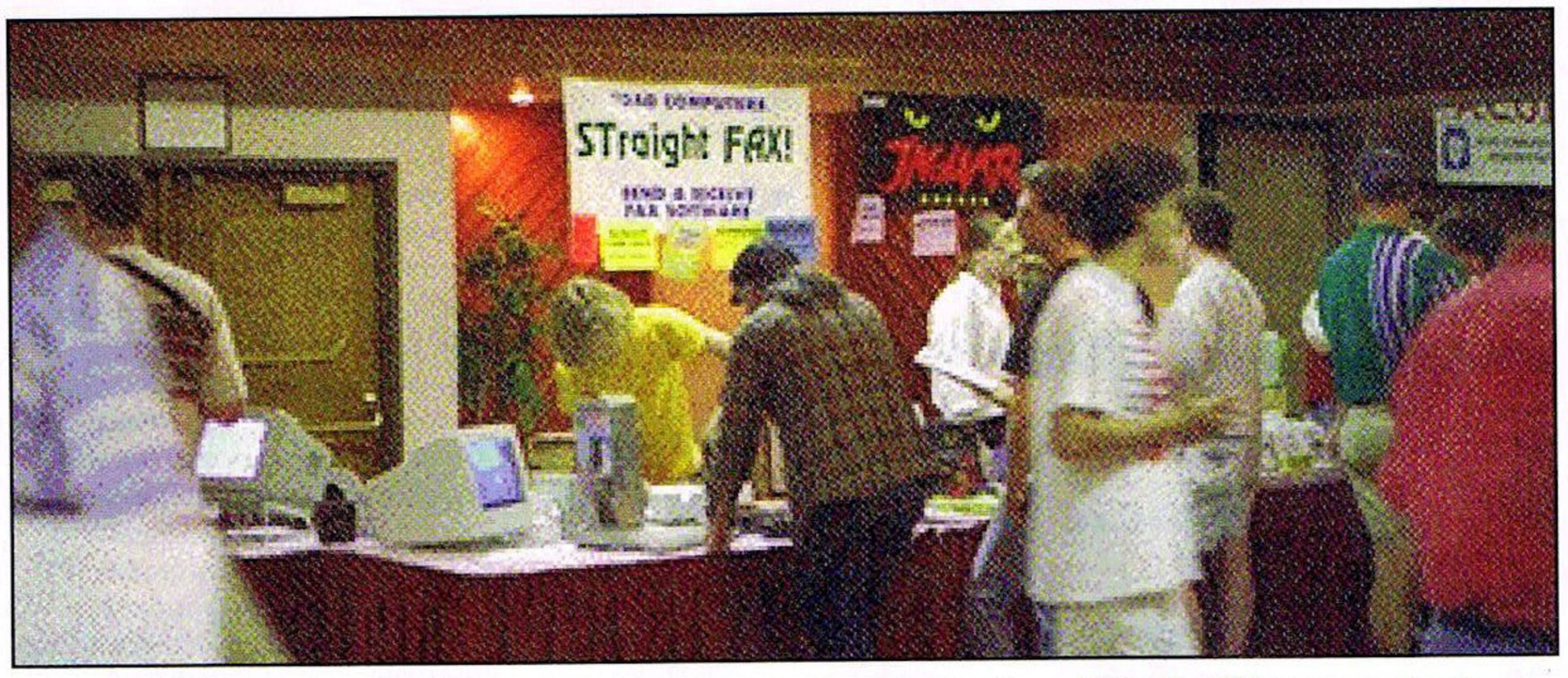
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ATARI SHOWS BIG HIT



■ **The Atari Shows were not only informative and fun, but there were some real bargains to be had.**

Show Report by Nick Peers

The most recent two Atari shows in Birmingham and London were extremely well attended affairs. The London show was held in the Novotel Hotel in Hammersmith, and included an hour-long forum at which the subject of debate was the "Future of Atari in 1995". Neil O'Nions chaired the forum, which included Vic Lennard and Ofir Gal, both ex-*ST Review*, and Trenton and myself from *ST FORMAT*. Around a hundred people sat in on the debate, including several prominent ST industry figures, and it was a valuable opportunity for *Review* and *FORMAT* readers to ask the panel questions about their feelings on the future of Atari, while it also gave Music Village a chance to present their plans for a Falcon-clone in 1995.

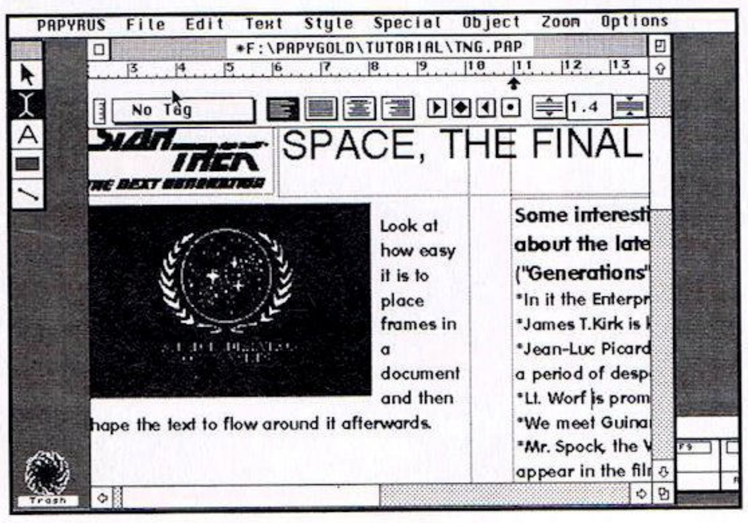
All of the prominent Atari dealers and distributors were selling their wares, including COMPO Software, Gasteiner, HiSoft/Microdeal, System Solutions, CGS ComputerBild, Goodman International, Merlin PD and Titan Designs. The full range of their wares was on display, and there were a few irresistible show bargains.

New Falcons for 1995?

The most amazing news of the day was the announcement of the imminent arrival of a new Falcon machine, from C-Lab, a German company. See the 'New for 1995' panel for more details.

Meanwhile Gasteiner unveiled plans for a new TT-clone computer called the Eagle, which is covered more fully in Clive's ProTOS '94 show report over the page. System Solutions were showing off rack mounts for the Falcon and ST and a number of CD-ROMs (mainly PD, shareware, fonts and pictures) for the Atari series. HiSoft featured *Papyrus Gold* and *Twist 2* at special show prices, while Goodman proudly displayed the *FORMAT* Gold winning *Art For Kids,* along with *Towers 2* for the Falcon.

16/32 Systems were also in good spirit, showing off *Llamazap,* the first of the 12 Falcon games they plan to release in 1995. Titan Designs were demonstrating their Falcon true-colour digitiser, and the *Calamus* User Group showed off their magazine for *Calamus* enthusiasts along with collections of PD software dedicated to the evergreen desktop publisher.



■ ***Papyrus Gold*** **was just one of many serious software packages that were available at the show direct from the publishers, and at reduced prices.**

> **"Attendees left the show feeling it had been a worthwhile investment as well as a good day's entertainment"**

Bargains galore!

There were many hardware and software bargains to be had, and attendees left the show feeling it had been a worthwhile investment as well as a day's entertainment.

COMPO, for example, were selling 520STFMs for a bargain £99 and the excellent Atari SM124 monochrome monitor for a trifling £79. At the other end of the hall, the ancient but still popular Atari 2600 consoles were available for an amazing price of just £10, while System Solutions were offering three CD-ROMs for the paltry price of £39.95 (sold separately the three would normally add up to £69.85). Gasteiner had some excellent hard drive deals, starting at just £179 for a 52MByte hard drive, and Merlin reported excellent business on *Obsession,* selling well over a hundred copies at the two fairs alone.

After the success of the recent round of Atari shows, Gasteiner have announced two shows of their own to be held at the end of May 1995 for Atari and Amiga enthusiasts. Spotlight 1995 is to be held at the Novotel in Hammersmith, and 200 free tickets are up for grabs just by calling Gasteiner on ☎ 0181 345 6000. We'll bring you more details as soon as we get them. ***stf***



■ **The *FORMAT* Gold winner, *Obsession* (see the review on page 52) was on show from Merlin PD, who reported excellent sales at both shows.**

NEW FOR 1995

THE C-LAB FALCON MK II IS SET TO ship in the middle of January, and is the result of a licensing agreement between the German company C-Lab and Atari themselves, allowing the former to "manufacture, market, and distribute audio workstation products based on the Atari Falcon030 platform into the Pro Audio and Musical Instrument markets".

The Falcon Mk II will look virtually the same as the current Falcon model, but will have a larger hard drive (500MBytes) as well as a guarantee that the shipped versions will run C-Lab's famous musical products, *Cubase Audio* and *Logic Audio.* The current Falcon model often needs modifications for these programs and some others to run on. Each Falcon Mk II will also come with hard-drive-installed demo versions of both programs so that dealers can demonstrate compatibility with both pieces of software.

Also promised in the summer is the tantalisingly titled C-Lab Falcon Pro model. Details are sketchy as yet, but keep your eyes peeled in future issues for more news, as well as the name of the official UK distributor for C-Lab's Falcon. Meanwhile, C-Lab can be contacted on ☎ 0049 40 694400 0.

ProTOS '94

Europe's biggest Atari show of 1994 took place in Germany at the end of November. *ST FORMAT* sent Clive Parker along to check it out.

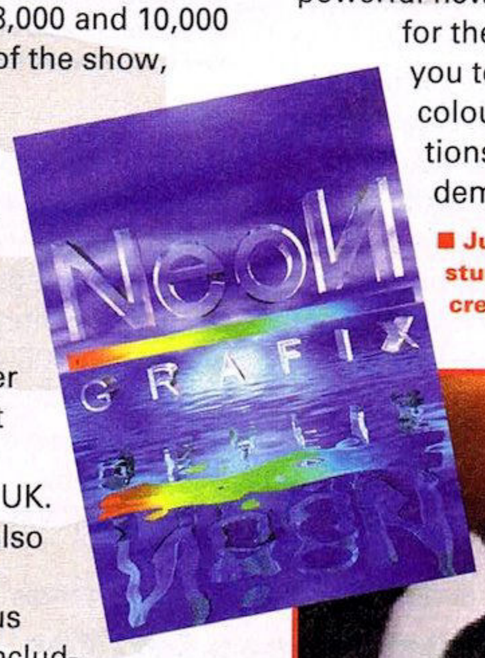
ProTOS '94 is now the Atari show in Europe. With an estimated attendance of between 8,000 and 10,000 over the two days of the show, exhibitors were extremely satisfied with both sales and the interest in their new products.

Exhibitors arrived from all over Europe, with HiSoft AVR and Gasteiner attending from the UK. COMPO Software also brought along staff from their numerous European offices, including the UK.

There was so much new software and hardware on display that it's difficult to know where to begin. But the three big products at the show were *Neon 3D* from Team Computer, the Eagle from GeSoft and *MagiC Mac* from Application Systems Heidelberg. With products like these appearing, the ProTOS show was clear demonstration that the Atari platform is well and truly alive and kicking.

Neon Grafix

Neon 3D from Team Computer is a powerful new 3D modelling system for the Falcon030, enabling you to create superb, true-colour, raytraced animations. A brilliant series of demos created with *Neon 3D* were projected on to a large screen, and everyone who saw the demos was stunned by them.



■ Just an example of the stunning imagery you can create with *Neon 3D*.

Neon 3D combines a scenery editor, object editor, material editor (for creating textures, structures and special effects), animation editor and a renderer and raytracer capable of Phong shading, shadows, mirroring and transparency. Animation frames are created in 16-bit or 24-bit TGA format at 640x480 resolution, and edit mode uses 256 colours. The best news is that *Neon 3D* works on a 1MByte Falcon with an FPU coprocessor, although you really need 4 or 14 MBytes to create proper animations. The German price for *Neon 3D* is DM750, around £300. Call COMPO Software ☎ 01487 773582 for UK prices and availability.

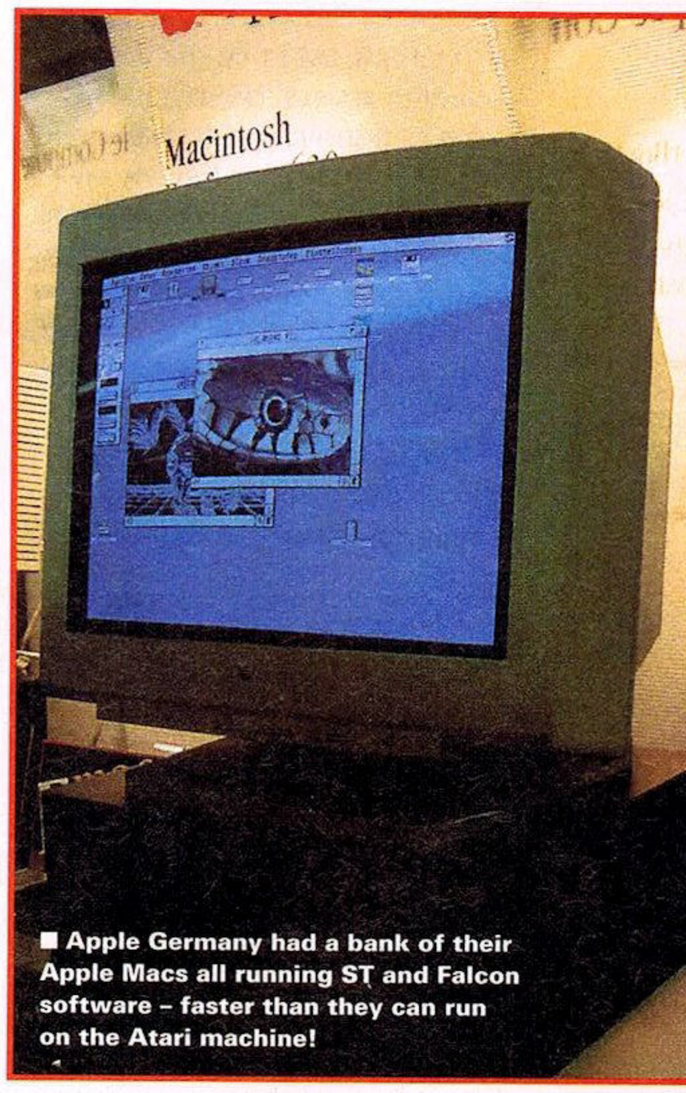


■ This is a grab directly from the *Neon 3D* demo video, created on a Falcon!

MagiC Mac

One of the surprise exhibitors were Apple Germany, who were there to throw their (fairly mighty) weight behind an alternative multitasking operating system to Mac OS, called MagiC Mac. In essence, MagiC Mac is an Atari ST, TT and Falcon emulator for the Mac.

MagiC Mac is the brainchild of Application Systems Heidelberg ☎ 00 49 6221 300002, creators of the MagiC multitasking system for the ST and Falcon030. Running alongside MagiC Mac is *Ease,* the



■ Apple Germany had a bank of their Apple Macs all running ST and Falcon software – faster than they can run on the Atari machine!

EAGLE: THE SKY'S THE LIMIT!

The withdrawal of Atari from the computer business has not impeded the development of new machines. On the contrary, the Atari scene is very much alive thanks to a vibrant third-party support, especially from Germany. Eagle, from a company called GeSoft, is only the latest Atari-compatible machine to come out of this part of Europe.

Nominally, Eagle is branded a TT-compatible but it goes much further. Opening the attractive mini tower case reveals a motherboard with eight slots, a feature sorely missing on all Atari computers. Cards offer unlimited hardware expandability and Eagle has taken this to new heights – even the main processor is not on the Eagle motherboard, as is usually the case. Instead it comes on a separate card. This means that upgrading the machine to a new processor is merely a question of plugging in a new card.

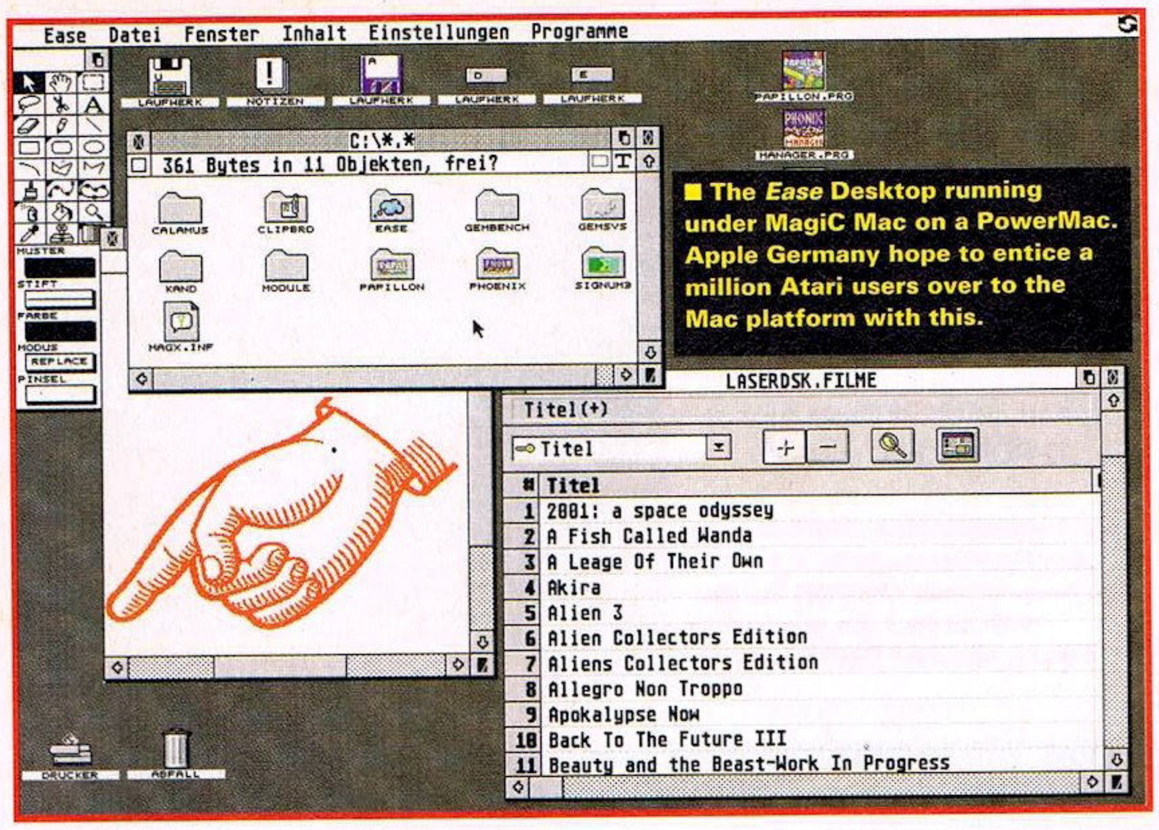
Originally the machine will be supplied with a 32MHz Motorola 68030, with 68040 and 68060 available later, both running at 64MHz. Compared to a TT this makes Eagle, respectively, 2.5, 4.5 and 7.5 times as fast. But wait, there's more! Eagle is not limited exclusively to the Motorola line of processors. Any processor can be plugged in. Yes, you read right – any! This is truly revolutionary, meaning that your computer can grow with you and is no longer limited to a single processor line or, by implication, to any single operating system. You can just as easily plug in a Pentium or the latest flavour of RISC.

This flexibility is thanks to the system bus. 'Eagle-channel' and 'Full-range-channel' are what GE-Soft call this open bus, which is capable of accessing all other buses on the market today. The Eagle bus is a full 32 bits wide and DMA-capable.

Using an adaptor the Eagle can also accept PCI cards, which are popular in the PC market. This means all those cheap PC cards, from graphics to sound, can now be used in an Atari-compatible, with proper software, of course! The same goes for keyboards, as Eagle has the



■ Roughly the size of a small mini-bar, the Eagle has bags of room inside to add even more memory, a PowerPC board, a Spectre GCR, a Pentium board and half-a-dozen hard drives.

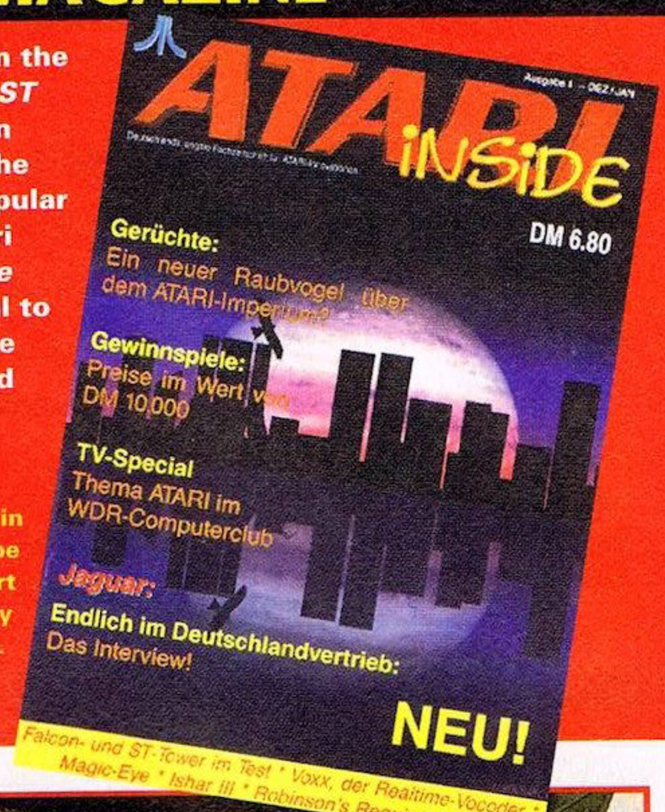


■ The *Ease* Desktop running under MagiC Mac on a PowerMac. Apple Germany hope to entice a million Atari users over to the Mac platform with this.

NEW ATARI MAGAZINE

While *ST FORMAT's* rivals in the UK are amalgamating with *ST FORMAT* itself (see News on page 11 for the full story) the Atari platform is still so popular in Germany that a new Atari magazine called *Atari Inside* has been launched as a rival to *ST Computer*. The first issue was on sale at the show and was selling like crazy.

■ **So, the ST market in Germany appears to be expanding. Greater support for the ST in Europe can only be good for the UK scene.**

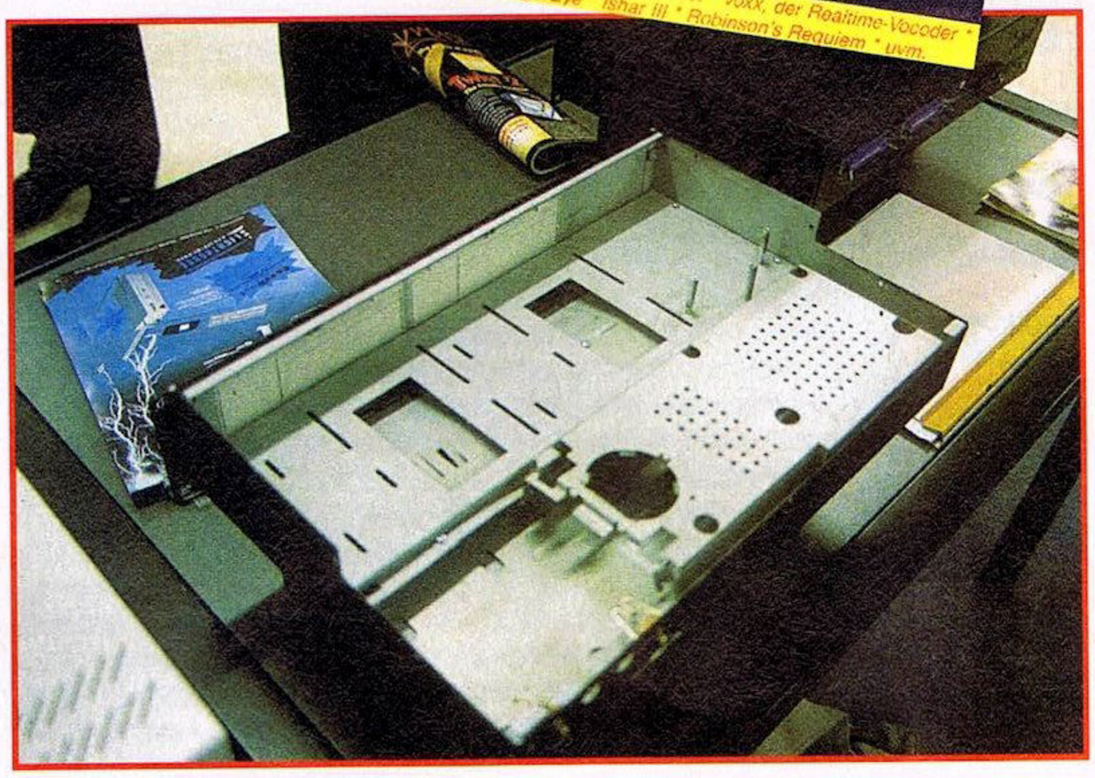


replacement Desktop shell for the ST and Falcon, which provides an enhanced version of the Desktop. MagiC Mac runs as a normal Mac application under Mac OS, and native Atari software is run from a virtual Atari partition on the Mac hard drive. Transfer of your Atari software to the Mac is a simple matter of copying the files to MS-DOS formatted disks. When MagiC Mac and *Ease* are running, the Mac can read MS-DOS disks directly using its internal disk drive.

So why are Apple Germany supporting Magic Mac? The answer is simple: mathematics. The ST, TT and Falcon are used as professional business machines in Germany. There are well over a million Atari owners in Germany, all running serious software packages like DTP, true-colour rendering, animation and graphics software. With the closure of Atari Germany and no support from Atari Europe forthcoming, Apple are happily visualising a potential sales boom for Macs capable of running Atari software. As long as Atari users can use their existing professional software, Apple are confident that many will switch to the Macintosh.

"Apple visualise a potential sales boom for Macs capable of running Atari software"

An English version of MagiC Mac should be on sale in the UK from the beginning of February. There are no firm price details at the moment, but Magic Mac sells for DM300 in Germany – which should convert to between £120 and £150 in the UK. Several UK Atari distributors are keen to stock MagiC Mac. Contact Gasteiner Technologies ☎ 0181 345 6000, HiSoft AVR ☎ 01525 718181 and System Solutions ☎ 01753 832212 for more information about pricing and availability.



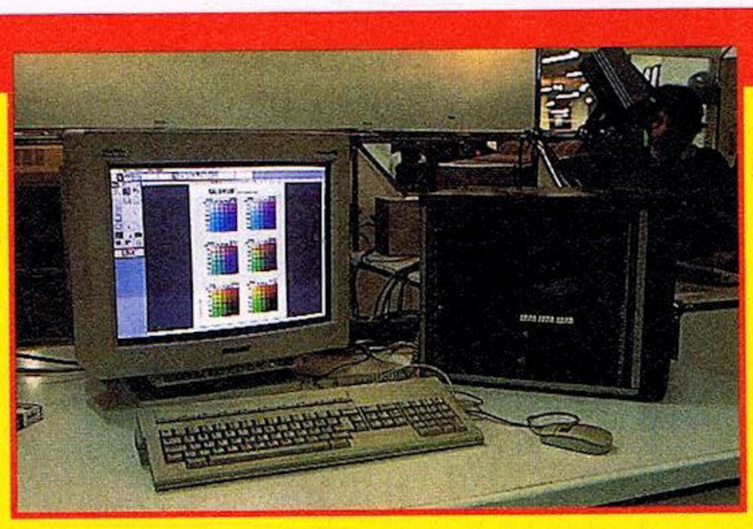
■ **The Space Case, a 19-inch matt black rack mount for the ST and Falcon cunningly displayed against a black background.**

Rack it up

Lighthouse A+G Sexton GmbH presented their range of alternative cases for STs and Falcons, including the familiar Lighthouse Tower and the excellent DeskTopper. Of special interest to musicians with an ST or Falcon is a new series of 19-inch rack mounts.

Simply stick your Falcon or ST into the Space Case, a superb matt black rack box that's a bargain at DM359 (£144). Need more hard drive space for direct-to-disk recording? You need the Drive-In, a matt black rack mount to match the Space Case for just DM259 (£104). With a 19-inch full-depth case, the Drive-In is able to contain





■ **...and this is the Eagle in action. Once you have the basic machine, all you have to add now is a full-on, 21-inch, top-of-the-range high-resolution monitor.**

industry standard MF2 interface plug. The memory is inserted on a card as well. Eagle can take up to 256MBytes of TT RAM and up to 14MBytes of ST RAM.

The standard TT ports are all there, including ACSI and SCSI to four serial ports, a LAN and a parallel port. The Eagle also has the VME bus and, of course, MIDI. In addition to the four TOS ROMs there are also sockets for four more ROMs, which are intended for alternative operating systems such as Mac OS.

In its basic configuration the machine is priced at DM3,600 (about £1,500) and will be imported by Gasteiner. The Eagle is expected to be in the shops by the time you read this, and *ST FORMAT* will bring you a full review as soon as a review machine is available.

DON MAPLE

■ **As you can see, the main board of the Eagle doesn't include a main processor. This is mounted on a plug-in board to enable quick and easy upgrades.**



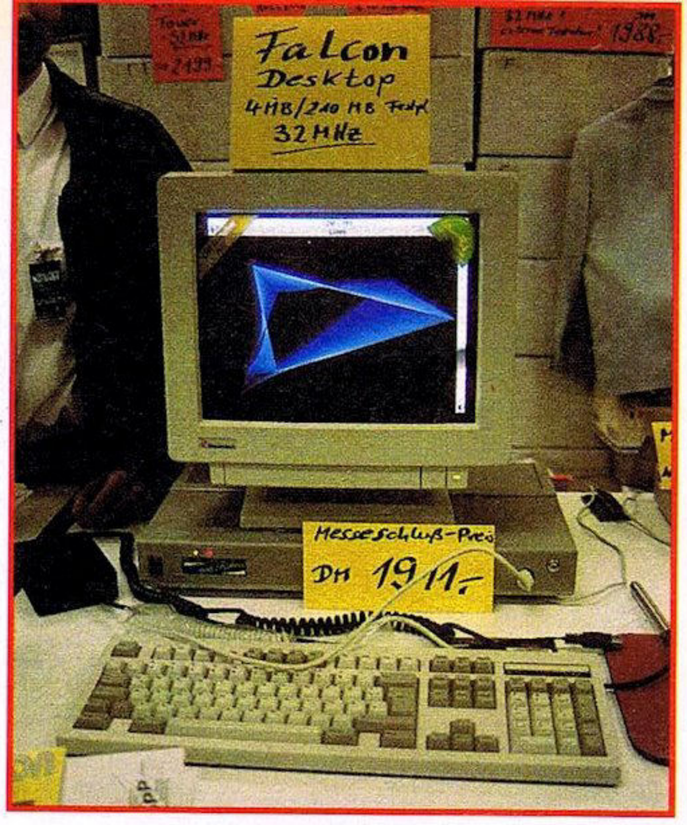
several gigabytes of hard drive storage, mounted neatly on your rack. Contact System Solutions ☎ 01753 832212 for UK prices for the Space Case and Drive-In.

Nice case

An alternative to the DeskTopper appeared at the show in the shape of the DDD Falcon case. Like the DeskTopper, the DDD Falcon mounts on the original ST base but retains the smooth-cornered design of the Atari. Unlike the DeskTopper, the DDD Falcon is supplied complete with a PC keyboard interface as standard, enabling you to finally get rid of the clunky keyboard on your ST or Falcon. And yes, there's an ST version as well, with room inside to mount a SCSI host adaptor and hard drive. The DDD Falcon is being distributed in the UK by Gasteiner Technologies (call ☎ 0181 345 6000 for prices).

"The ProTOS show demonstrated that the Atari platform is alive and well, and living in Europe"

Gasteiner are also busily distributing an IDE interface enabling external Sony and Mitsumi IDE CD-ROM drives to be used with the ST. The interface plugs into the cartridge port and a ribbon cable runs to the CD-ROM drive. ***stf***



■ For a smart-looking alternative to the DeskTopper, take a look at this. Called simply the DDD Falcon, it could be more accurately described as the DeskWhopper!

THERE'S MORE!

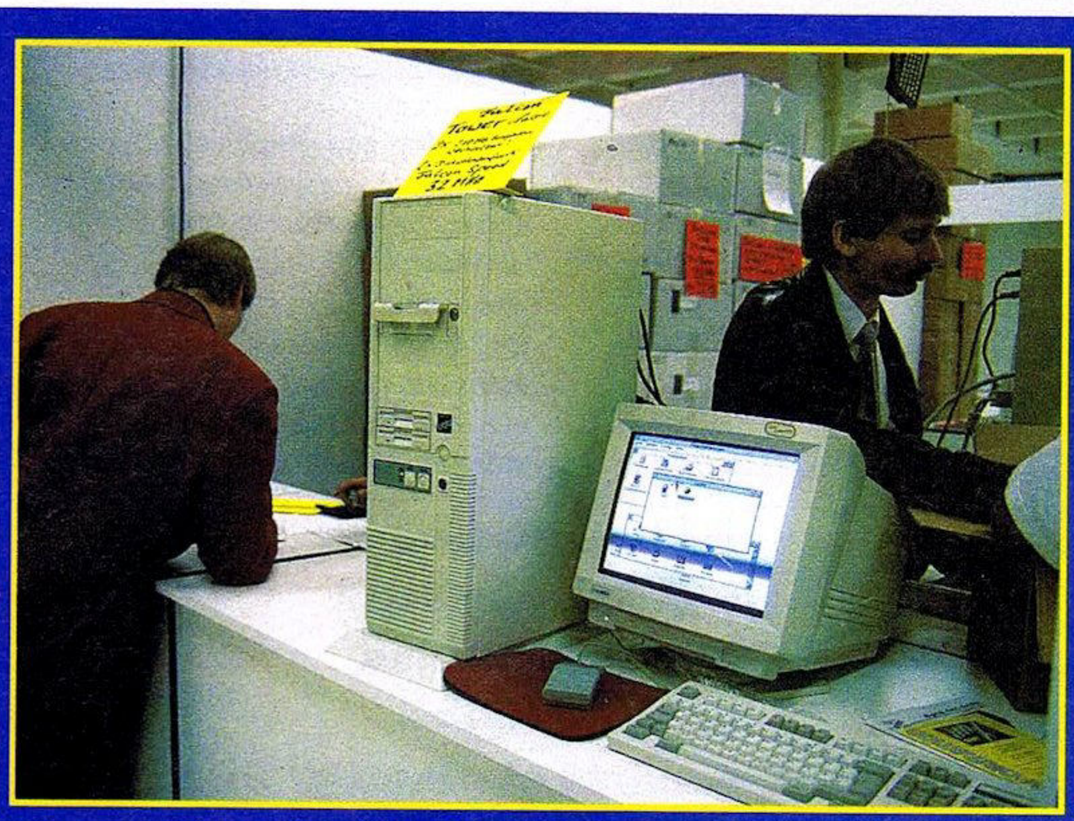
It's COMPO time

The COMPO stand was constantly crowded, with show attendees eagerly trying out *That's Write 4* (yes, really!), *Screenblaster 3 Inside, APEX media* (looking uncannily like *ChromaStudio 24)* and an infrared controller enabling you to control every infrared device in your house with your Falcon. Quite.

***APEX media* is a powerful you-name-it-and-it-can-do-it graphics package for the Falcon that completely bypasses TOS and uses its own screen-driving routines. Its morphing, manipulation and animation routines are powerful enough to put a Silicon Graphics Indy Workstation to shame. It's available in the UK from Titan Designs ☎ 0121 414 1630 for just £119.95.**

***Screenblaster 3 Inside* is the replacement for the original *Screenblaster* modules, which enable bigger screen resolutions for the Falcon030. As the name suggests, the unit now fits completely internally, which means no more trailing ribbon cables from the cartridge port. Hurrah! Not only is it tidier than the standard 'outside' version of *ScreenBlaster 3* – it's cheaper too!**

Call COMPO software ☎ 01487 773582 for price details and availability of all their new products.



■ You want a tower system? They were present in abundance at the ProTOS show. At least six different companies were showing off their enhanced ST and TT cases.



■ COMPO's infrared controller in operation, running a multi-disc CD player.

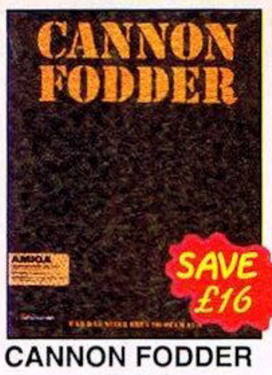
Not to mention...

Best Electronics were on hand with Atari spares for any Atari made since 1980 (Brad bought Atari's entire US stock of spares). They were also displaying a rack mount created by Whizztronics for the Falcon, which is priced at $325.

Crazy Bits, Steinberg, Maxon, GeSoft, DMA, Galactic and Akzente were all there too, showing product updates that were simply too numerous to mention. All in all, the ProTOS show amply demonstrated that the Atari platform is alive and well, and living in Europe.



■ As befits an Atari show, Steinberg were at ProTOS, displaying and demonstrating the latest versions of *Cubase* and *Cubase Audio.*



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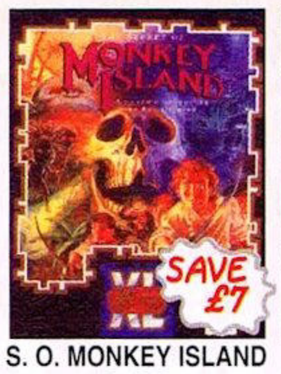


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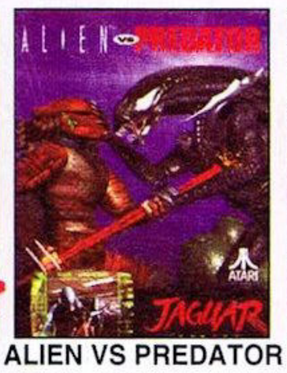
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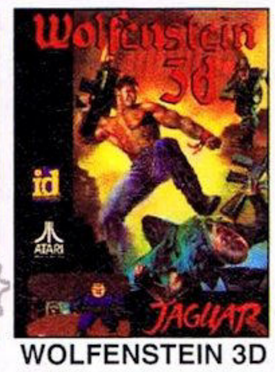
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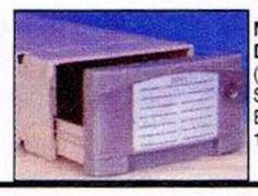


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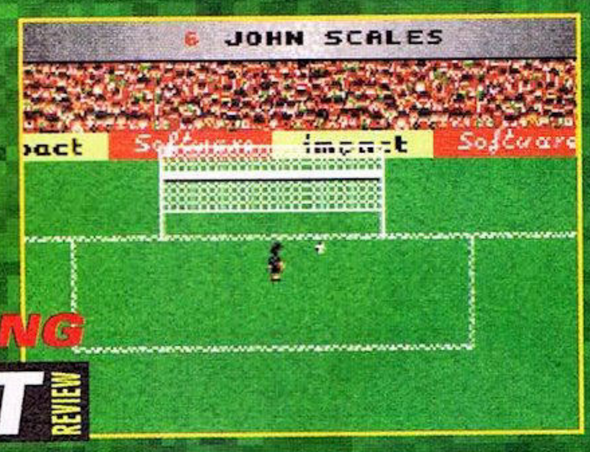
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NEXT MONTH

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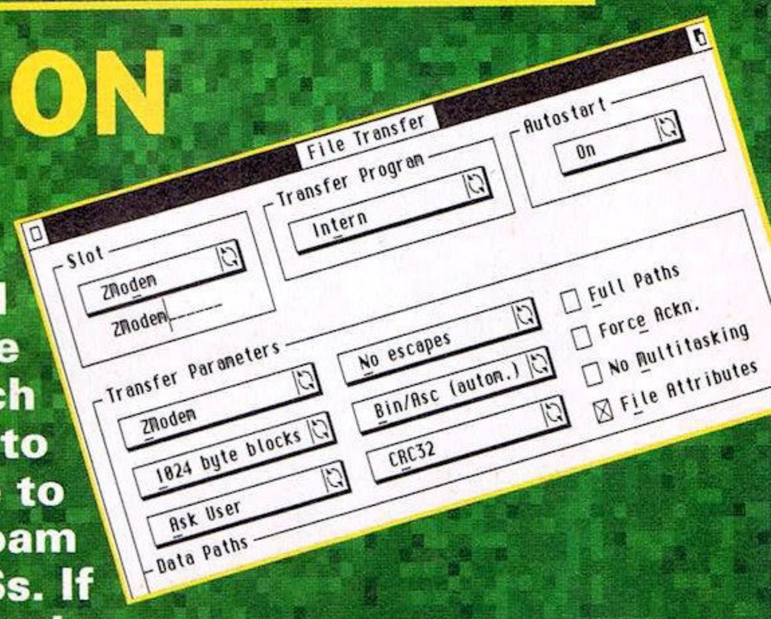
Team **is here. The review. The Cover Disk Demo. Full-on football action hits the March issue of *ST FORMAT Incorporating ST Review*. Have Impact Software managed to beat *Sensible Soccer*, or is *Team* another cup minnow? The big match kicks off on Tuesday 14 February.**

ST FORMAT INCORPORATING ATARI ST REVIEW



COMMS ON

We told you what the Internet could do. We told you about the software. In March we tell you how to use the software to full effect to roam the Net and BBSs. If you want to get the most out of cyberspace – get *ST FORMAT*.



ST ANSWERS

The ultimate technical forum. ST Answers is getting bigger and better. All the regulars will be there but they're getting more space, so they can pass on more ST information than you ever dreamed possible.

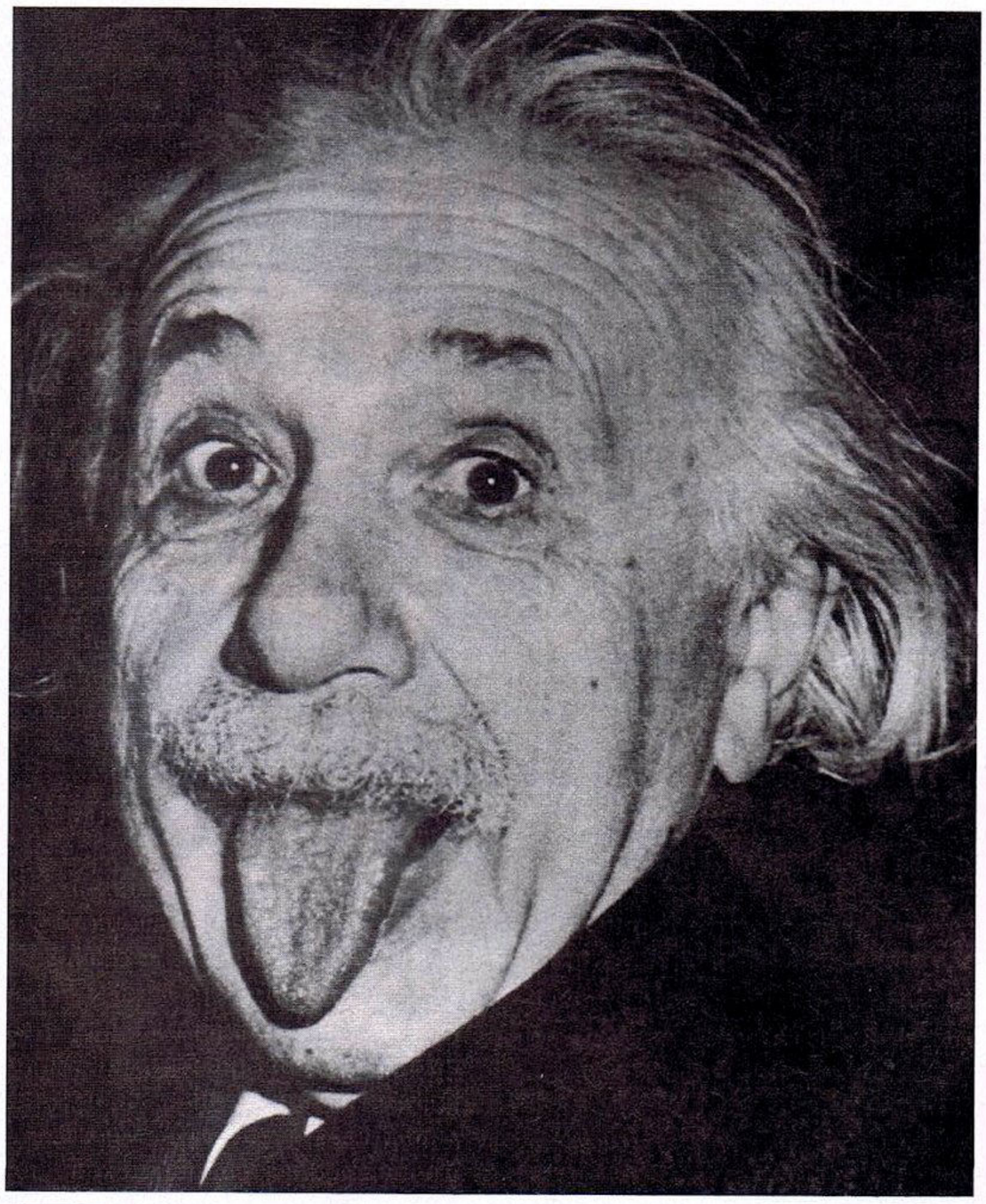


THE MARCH ISSUE OF *ST FORMAT* IS ON SALE TUESDAY 14 FEBRUARY. BUY IT!



PURE GENIUS

Your ST can teach you lots of new and unusual skills. Simon Forrester and Trenton Webb tell you how to use your ST to become an instant expert at almost anything. (Or at least a passable imitation of one.)



The ST is a powerful computer, but we're all guilty of falling into the trap of thinking there's nothing more to ST life than databases, spreadsheets, DTP and graphics. Yet your ST can do far more. It can be the key that unlocks a whole world of very different programs, ideas and data. You could find out everything you've ever wanted to know about Burmese Astrology or get yourself an accurate street map of Vienna, for example. Where else could you find all this information? You just have to know where to look.

Which is why we've scoured the small ads, PD catalogues and foreign mags to find a gold mine of wild and wonderful information. If you really want to use your ST, you just have to read on. Bizarre, funny, useful, obscure – it's all here.

■ **Learn your way around your own and, in fact, other people's bodies with *Skeleton*.**

Astronomy

Patrick Moore may be the expert when it comes to things astral, but when he's busy presenting tips on Channel 4 you need to find yourself another authority on the subject...

If you're lost when looking for stars in the night sky, you'll need to get yourself a copy of *Astronomy* (version 2 runs in high res), *Northern and Equatorial Star Atlas* (for those polar novas), *Starfinder* (a complete star map) and *Geography* to test your knowledge when you think you know it all.

Alternatively, you could find out everything there is to know about satellites, with *NORAD,* the satellite tracking system, *Orbit* for all earth-orbiting objects, and *Smart Track* for those unintelligible operation schedules.

If you're into journeying around the planets, things get more complicated – you need to know where small obstacles like the sun and moon are with *Astrocal* and *Sun-Moon,* and which portion of the Earth is illuminated (to arrive back in the daytime). To make sure you see the prettiest sights possible, you'll need *Constellations,* which shows star formations from any point in space, *Pictures from Space* to decode those WEFAX pictures (think of it as an on-line brochure), *Planetarium* to see the outer reaches of the galaxy, and some form of transport, such as *Stargate* (the complete planetary travel system). If you want to steal someone else's wheels (boosters), *NASA* gives you the low-down on Earth's probes, such as Neptune and Voyager.

Alternatively, you could play with planets. *Galaxy* tells you how whole galaxies of planets behave. Just remember – bring a towel.

Biology

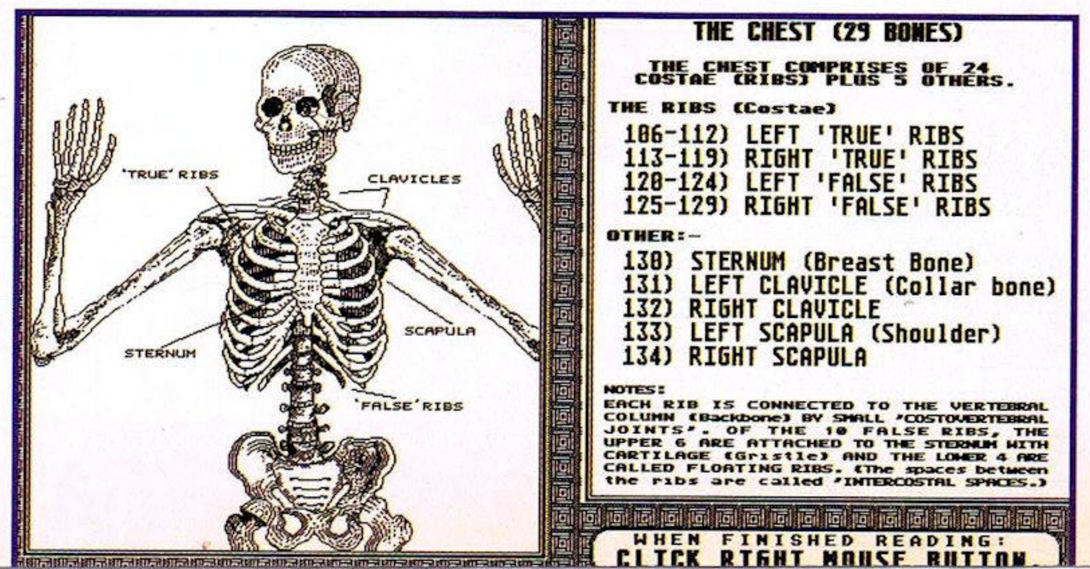
When you have the layout of the universe down to a fine art, you might start thinking about something smaller, like your own body...

If you want to get messy, and you don't have any executed cadavers to thinly slice, you need *Skeleton,* which gives you a complete guide to what every bone's called, and how much they hurt when they break. For the squidgy bits there's *Body Shop,* and on a slightly less squidgy vein, *Biomorph* gives you a grasp of evolution, Richard Dawkins style.

Business

It's a dog-eat-dog world, and only the most business-minded Yuppies can survive the rough and tumble of the economy. Your ST can give you the business sense, but you'll have to buy the suit.

Business letters are a nightmare to write. If you want a lawyer



at the touch of a button, you need *English Business Letters* for standard British letters, or *Standard Letters 1 & 2* for up to 700 prewritten business letters to mailmerge. Alternatively, if you're spending most of your time invoicing, you need *Invoice Master.*

Even if you have an electronic secretary, being the sharpest kid at the exchange isn't easy. With just a click of the mouse you can master market-traded stocks in full graphical form with *Chart XXX,* shares with *Analysis,* big-time currency conversion with *Exchange Rates* and even real estate with the imaginatively titled *Real Estate.* You could even handle full portfolios with *Stalk the Market,* which costs $79.75 US from Quidnunc Software in the US ☎ 00 1 509 627 2491.

And when you've made all that cash, you'll need *Tax Planner* to make sure you give as little of it to the government as possible.

Chemistry

You might go for the overwhelming smell of sulphur. There're a fair few experiments you can do from the comfort of your ST.

You can carry out molecular investigations with *Molecule* (in French or German), and throw chemicals at each other in *Dynamic-ST.* Instead of those textbooks, you could use *Lewis 123* for covalent bonding and *Molesys* for atoms and molecule fragments. The hypochondriacs among you should go for *Drugs,* a pharmacological database of over 22,000 prescription drugs.

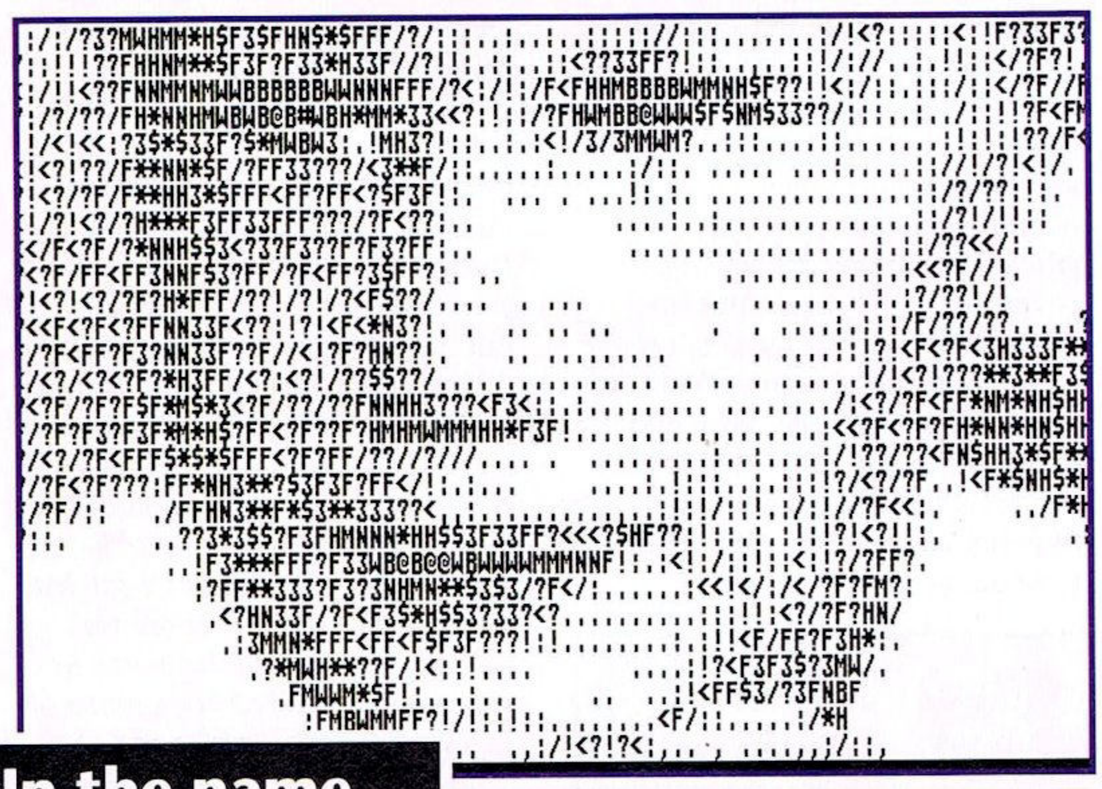
Codes

Alternatively, you might like to pursue the 007 lifestyle... if only you were any good at cracking those coded messages between the bad guys. If they try to communicate in Enigma, you can crack the code with *Enigma,* or you can use *Morse Code* or *The Ultimate Morse Tutorial* to master morse code. If you want semaphore clip-art, you need the *B-Disk Set 1.*

Computers and Electronics

Anyone who's already an expert with electronics did it the hard way – why spend hours with Chinagraph pencils and a scalpel when you could use *Electronic Art, PCB Designer, ST Cable-Maker* or *Transistor,* and create your board from the printout?

If you have trouble understanding what you're doing, you can get instant knowledge at the touch of a button with *ST-68K-Reference* (info on the ST's internals), *Hardware* for information about extra hardware for the ST, *Atari Tutor* for easy 'how it works' ST reference, *Jargon* (to explain all those long words) or *Computer Glossary* for £5.95 from Goodman.



■ **ASCII art. *Ancient* works with any Degas image file to create these.**

How obscure?

We all know a few buffs, fans and other obsessives – the kind of people who can tell you Spock's inside leg measurement. If you want revenge, try out the following two disks. *Vienna* is a massively detailed database of said city, for no other reason than it is. Alternatively there's *Stika,* which gives huge wads of information about South East Alaska in *Connections* form. What you'd do with these I've no idea, but if you want to show the propeller heads what REAL trivia is...



■ **The cast from *Star Trek,* wishing they'd never left Wes Crusher at the helm.**

The future...

If you're into the idea of knowing everything there is to know about things you can't possibly predict, you'll need the cream of the astrological crop.

The Chinese had the best prediction systems, and electronic wise men are available in the form of *Chinese Horoscope* to calculate your elements, signs and companions, and *I Ching* for those hexagram predictions. Alternatively, you could get ahead of yourself with the *Burmese* calendar. For more diverse predictions, you could use *Aztec* to tell your fortune, should you happen to live in an ancient, extinct race, or *Runes* for the Celtic equivalent.

You might prefer bright sweaters and breakfast TV, in which case you want *Aster-Tutor* to learn what the stars should mean to you, *Astrology* to make your predictions, and *Biorythms* to work out when you're likely to feel low enough to actually believe them.

Food

To be a top chef takes skill, dedication, hard work, and a good palate. For this you need the *Food & Wines* database to pick your courses, *Assistant Chef 1 & 2* to help prepare it, *Menu Maker* to tempt other people to eat what you cook and *Slimming* to work it off again afterwards.

World History

Not all historians wear cardigans and smoke pipes. If you're currently applying yourself to the atrocities of World War II to meet the demands of the National Curriculum, *The 2nd World War* is the package to help your ST get you off the front line.

American history is also vital to the budding historian, and you can study major events with *History of the USA, The Death of a President,* and *A Day in Dallas.* Any Americans wanting a paranoia trip could go for *1990's USSR* and *1990's Russians.*

Sprechen Sie Deutsch?

For the ST user abroad, things can be tough. Despite the fact that flashing a copy of *ST FORMAT* will win you instant acceptance anywhere in the world, you'll almost definitely need to know the language too. Your ST can help you out here as well, funnily enough. There's *Spanish Tutor,* and a series of LCL courses (☎ 01491 579345), including *Micro English, Micro German* and *Micro French.*

Anyone crossing the channel will also need *Orthogus* (primary French grammar) and *Anglais* (dictionary). Then there's *Pig Latin,* which converts anything into pig Latin, and *Braille* will help you with... No, sorry, it's gone.

Note for note

We all know the ST is excellent for creating music, but what if you're not? Well, first up, *Ear Trainer* gives you perfect pitch and *Guide to MIDI* helps your ST help you to wire your ST up (I think). Failing that, if you want to create 'real' music (sorry), *Final Score* endows you with the ability to create music scores at the tap of a key, and *Music Tutor* will turn you into enough of a maestro to at least get the notes in the right places.

Hamming it up

Now we're not going to even pretend to understand the world of



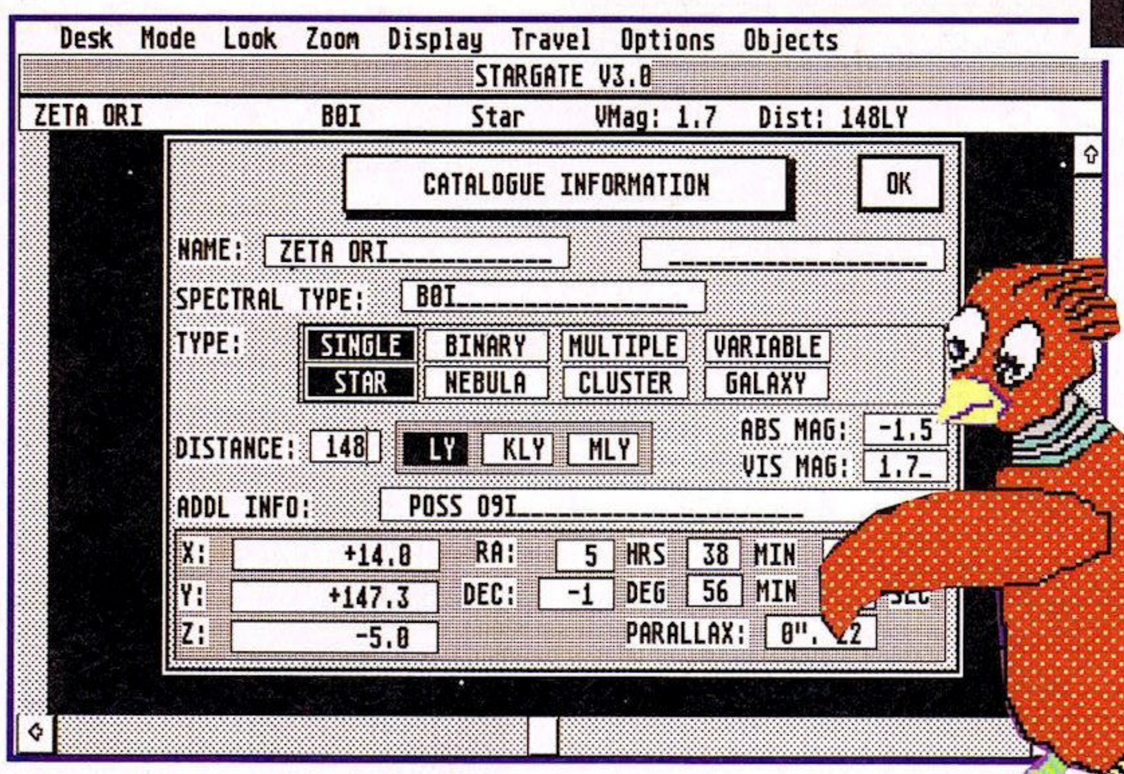
In the name of God

The word of God on a computer? Yes, if you've always fancied brushing up your *Bible* knowledge or just want to have a bit of fun in a Christian context then why not give the following disks a shot? They're all available on the PD circuit – I believe.

For starters you can get both *Old* and *New Testaments* as ten and two-disk compilations. Written in standard ASCII (so that it can be pulled straight into a DTP program or word processor), each chapter comes in its own folder for easy access.

Folk who want to scan for words or phrases should also give the demos of *Godword* and *Concordance* a look. *Godword* enables you to browse and search (in the demo version) through a few chapters of the New Testament. *Concordance* works along similar lines, with the King James version of the Pauline Epistles (Roman through to Philemon), although the compression system that's been used means that the files themselves are not ASCII.

An interesting diversion, and definitely the most novel approach to the topic that we saw in our research, comes in the form of *Fortnite,* which shows *The Bible's* events as a day-by-day tale. With Degas pics to back it up, this disk goes all the way up to modern times, with notes and queries on prophecies and modern events.



■ ***Stargate,* which helps you travel the stars at the touch of a button. You've just got to know where they all are before you start, that's all.**

amateur radio, but you could with the help of your ST. You can even incorporate your ST into the rest of your radio setup, for which there are many packages available. *World Mailbox, Packet Term* and *YARP* will help you with protocols, while the *Goodman PD Radio 1-6* disk collections give you the power to process lots of things with names like RTTY, YARP, CW, DX and KA9Q. A large amount of it was provided by *GM4DZX,* who we all know and love *(we do? – Jill).* Then you can log all the interesting things you've been getting up to with *Minilog,* the beam heading calculator and activity log book. Lucky, lucky you.

Sportsman of the year

Okay, maybe your ST can't give you the ability to break any records, but you could still make money from other people's efforts. Loads of programs promise to make you a millionaire through betting. *ST FORMAT* does not endorse betting in any way, but...

Your ST can make fabulous amounts of cash on just about anything, using *Top Dog, Formfinder, Pools Predictor Pools Wise, Treble Chance* (football again), *Pools Forecast* (like footie, me) and *Cricket Average.* Alternatively, you could use *Poolswinner, Coursewinner* (gee-gees) or *Pools Perm Plus* (to give the players curly hair) from Selec Software on ☎ 061 428 7425. If you're not into competitive sport, you could brush up your fishing with *Coarse Angler.*

Star Trek

If you're a Trekkie, fanatical about all things vaguely Roddenberry, you'll be pleased to hear that you can also get hold of sad amounts of in-depth Trekkie knowledge, with *The World of Star Trek* and *Star Trek Textfiles,* giving you information on everything from the actors to the writers. Alternatively, you could see it for yourself with *Star Trek Locations,* visiting the places mentioned in the series and, if you want to talk to the people you find there, then you'll need *Klingon,* your indispensable guide to the alien language. Forget the towel, take a bobble hat instead.

Quickies

The programs featured above are all easily categorised. The following are a little more avant-garde – leaders in a field of one, if you will. But that doesn't make them any less useful for answers to those very odd questions, or solutions to those very peculiar problems.

Ancient won't actually make you genius, but you'll look like one on e-mails and other text-files. *Ancient* neatly converts high-res Degas pictures into ASCII art. If you've ever tried to construct piccies out of ASCII symbols (123efGH*&%$£) then you'll know just how much of a pain it can be. And if the number of ASCII Christmas cards we received complete with little pics of Santa is anything to go by, then a huge number of you could save some major time.

Then there are two route finding programs that all budding ST prodigies should own: *Autoroute Demo* and *Autobahn 1.4. Autoroute* is a fully working demo of the classic 'how to get there' program, covering the south of England. *Autobahn 1.4* does the same, but for German roads. Impress people by telling them that Bonn is only 30 minutes from Munich – when moving at 172kph!

Become an expert on yourself with the *Career Themes Inventory and Questionnaire,* which asks you 174 probing questions, then coughs out a personality profile, which tells you not only what you really are (bitter and twisted like Nick) but also what others think of you! It could end in tears.

On the home front, *Knitting Machine* and *Stitch Sampler* enable you to give your really hated nephew a birthday present. And while the hubbies are sewing, wives can get involved in some serious DIY, guided by *Kitchen Designer* (from Lawrence Elliot, 42 Gwaun Coed, Brackla, Bridgend, Mid-Glamorgan, CF31 2HS) or use the advice and notes gathered together in *Gardener* – a horticultural diary.

For movie buffs there's *Film File Enquiry* (aka *Film Enquirer),* a database enabling you to search files for star names, number of appearances, year of release, and other movie trivia. Once you have all this info you'll have to fix the video to watch them, which is where *VCR Doctor* comes into its own.

For those seeking to escape from home, there's always *Rip It Up,* a Q&A Highway Code session. And just so you know precisely what you're escaping you'll need *Family Tree.*

Of course, if you just like to argue with your folks then you could always get hold of *Maastricht, Climogen* or *Animap,* which give a complete copy of the Maastricht treaty and precise details of the world's weather to row about. Or, to really freak your family out you could obtain a copy of *Principia* – a wildly over-the-top late 1960s treatise full of hippy ideas and gross political silliness.

And, unable to find a link to any of the above, there's also a range of puzzle makers (such as *Puzzle Creator* and *Crossword Designer/Solver)* with which you can make and solve real posers. But the most useful item of all is the excellent *Typing Tutor* – learn to make mistakes at high speeds!

All the packages featured here are either available through Public Domain libraries (there's a full list on page 85) or at the addresses named. They offer the chance to explore and expand huge areas of knowledge and a vast range of skills. Your ST is the key to this knowledge. And knowledge is, after all, power. So use it! **stf**

Time flies by...

...when you're the driver of a train. Or at least that's what Chigley would have had us believe. If you're a locomotion fan, why not give a railway simulation a shot? Costing £15.95 these aren't arcade games – they simply rely on track maps and stats – but the info they contain is staggering. Your choice? *Traffic Control: Doncaster 1992, Traffic Control: Crewe 1992, Traffic Control 1985, Bristol 1990, Tehachapi 1991* and *Tehachapi 1927.*

Covering electric, diesel and steam these enable you to roam the world (well, the UK and Santa Fé) by train. Very, very specialised, these make the learning 'fun' if you're into the subject matter. And if you are, then write to: SIAM Ltd, 1 St David's Close, Leverstock Green, Hemel Hempstead, Herts, HP3 8LU for full details.



■ **An illustration from *Principia,* of the devil in his casual wear. Nice jumper.**

ST FORMAT would just like to say ...

..."Thanks" to Goodman PDL (16 Canard Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffs, ST3 1SW ☎ 01782 335650) who supplied us with the illustrative material for this feature. Cheers.



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

JAGUAR UK OFFICIAL PRODUCT

Look out! There are some stray cats coming into the country! Some USA Jaguars have been imported into the UK unofficially. This imported product has been manufactured for America and is not compatible with UK Jaguar equipment. Look out for the UK sticker above on the Jaguar products you buy. This will ensure it is official product and will work properly in the UK.

AWESOME SOFTWARE



SOFTWARE UPDATE
AS OF EARLY DECEMBER '94

There are now more than 150 developers signed up to produce Jaguar software titles. The following are the current titles, with Atari's release dates.

Alien v Predator - JGS 1122	NOW	£54
Brutal Sports Football - JGS 1532	NOW	£54
Bubsy the Bobcat - JGS 1581	NOW	£49
Cannon Fodder - JGS1704	NOW	£39
Chequered Flag - JGS 1761	NOW	£54
Club Drive - JGS 1794	NOW	£49
Crescent Galaxy - JGS 1852	NOW	£39
Doom - JGS 2282	NOW	£59
Dragon - Bruce Lee Story - JGS 2272	NOW	£54
Evolution - Dino Dudes - JGS 2462	NOW	£39
Iron Soldier - JGS 4011	NOW	£54
Kasumi Ninja - JGS 4502	NOW	£59
Raiden - JGS 6722	NOW	£39
Tempest 2000 - JGS 7472	NOW	£49
Wolfenstein 3D - JGS 8932	NOW	£49
Syndicate - JGS 7301	DEC '94	TBC
Theme Park - JGS 7501	DEC '94	TBC
Zool 2 - JGS 93122	DEC '94	£54
Pinball Fantasies - JGS 5931	JAN '95	TBC
Sensible Soccer - JGS 7011	JAN '95	TBC
Charles Barkley Basketball - JGS 1741	FEB '95	TBC
Creature Shock - JGS 1802	FEB '95	£39
Demolition Man - JGS 2142	FEB '95	£39
Flashback - JGS 2971	FEB '95	TBC
Rayman - JGS 6891	FEB '95	TBC
Rise of the Robots - JGS 6942	FEB '95	£49
Battlezone 2000 - JGS 1341	EARLY '95	TBC
Battlemorph - JCD 1201	EARLY '95	TBC
Blue Lightning - JCD 1531	EARLY '95	TBC
Hardball III - JGS 3841	EARLY '95	TBC
Legions of the Undead - JGS 4941	EARLY '95	TBC
Rage Rally - JGS 6521	EARLY '95	TBC
Space Wars - JGS 7031	EARLY '95	TBC
Star Raiders 2000 - JGS 7192	EARLY '95	£49
Tiny Toon Adventures - JGS 7592	EARLY '95	£49

ACCESSORIES

Composite Monitor Cable - JGA 4327	£16.99
Jaguar Controller - JGA 2000	£19.99
RF Switch Box inc Cable - JGA 4871	£16.99
Scart Cable - JGA 4200	£9.99
CD-ROM Add-On - JGA 1164 JAN /FEB '95	TBC
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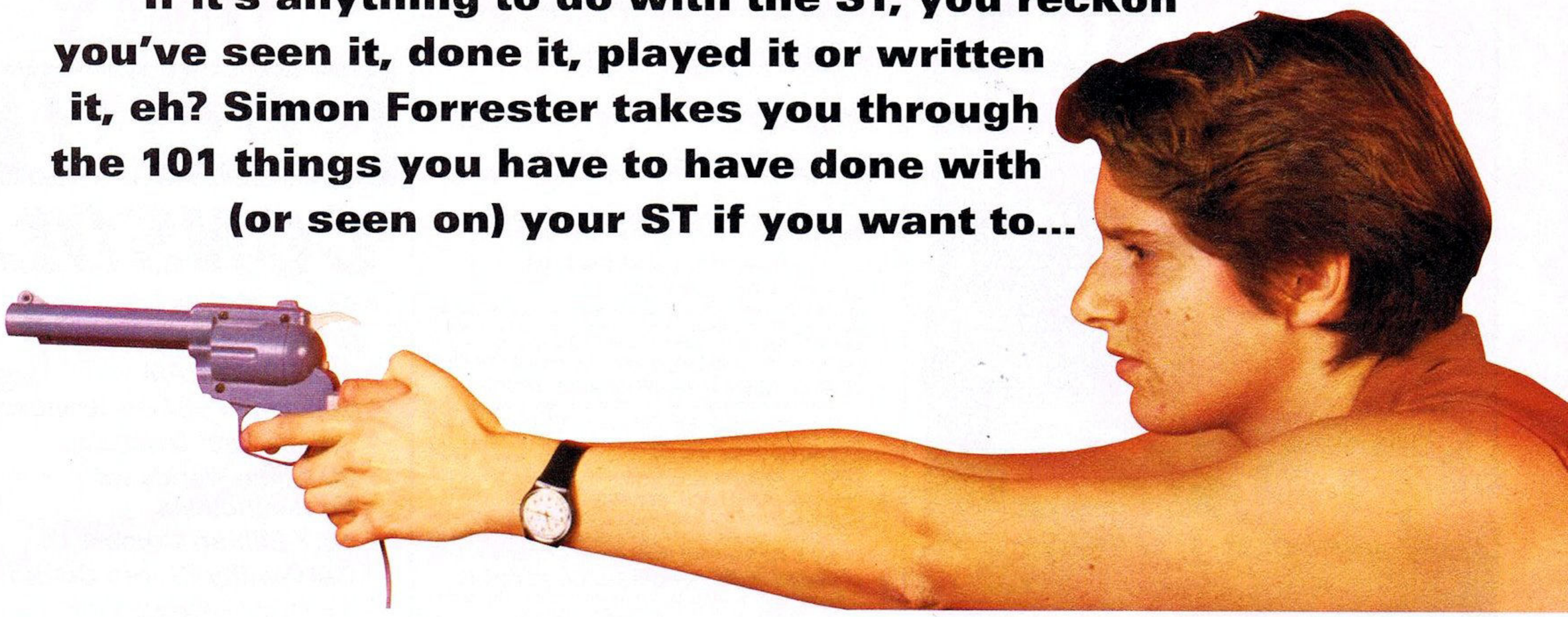
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If it's anything to do with the ST, you reckon you've seen it, done it, played it or written it, eh? Simon Forrester takes you through the 101 things you have to have done with (or seen on) your ST if you want to...



CALL YOURSELF

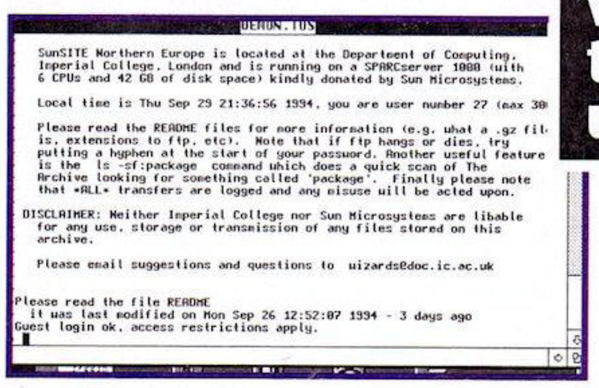
101 things you must have done with your ST:

1 Installed a new version of TOS
2 Upgraded to a double-sided drive
3 Had a disk reduce itself to its component parts inside your drive
4 Become elite in *Elite*
5 Tried out at least five different desktop systems
6 Filled your computer with coffee
7 Caught a virus
8 Broken a key
9 Bought a virus checker...
10 ...and wiped out a commercial game's custom boot sector
11 Drawn something in *DPaint*
12 Devised a system whereby your ST is totally virus-proof
13 Bought an *ST FORMAT* back issue (page 79, folks)
14 Lost your entire hard drive to that same virus again
15 Rung Nick Peers to find out why *Wordquiz* doesn't work
16 Damaged the mouse and joystick ports through careless overuse
17 Played *Joust*
18 Bought yourself mouse and joystick extenders
19 Experienced the surprising pain of static electricity
20 Lost a modem connection while uploading the last few bytes of a 3MByte file
21 Formatted the wrong disk
22 Got bored of *Joust*
23 Punched your screen
24 Beaten *Llamatron*
25 Realised that hitting reinforced glass really hurts
26 Followed an *ST FORMAT* 'Taking your machine apart' instruction
27 Realised that you can't get your machine back together
28 Reassembled your ST and found there are bits left over
29 Read an interview with Jeff Minter (at *least* one)
30 Turned on your machine and watched... absolutely nothing happen
31 Practised computer superstition ("It works if you stand on one leg")
32 Filled a hard drive
33 Predicted your biorythms
34 Created a stereogram



■ ***Rugby League Manager,* which you'll never play again, since you trashed the boot sector with your virus killer.**

35 Designed a font
36 Paid for shareware
37 Suffered a hard drive head crash
38 Spotted an ST on television
39 Received a BIOS "Bad request error" (and not understood it)
40 Knackered a Bug (joystick).
41 Waited over three months for a piece of mail order PD
42 Learnt a programming language
43 Struggled helplessly with the *Protext* keypresses
44 Received a BIOS "CRC error"
45 Written a *Quartet* tune
46 Created a morph
47 Used *UVK* purely to find out who you share a birthday with



■ **So have you been on to the Internet yet? No? And you have the cheek to call yourself an ST expert. Honestly!**

21 things you will never need to know or understand:

■ **BIOS**
■ **Parity**
■ **Atari sales departments**
■ **The TT**
■ **TOS switchers**
■ **How you're actually supposed to use TTP programs (and why)**
■ **QWK readers**
■ **UNIX Internet sites**
■ **Exactly what a 'bad request' is**
■ **How microprocessors actually work**
■ **Why your luggage takes two days to thaw after a plane flight**
■ **Exactly how a staff writer manages to produce 20,000 words a month *(badly? – Trent) (and slowly – Jill)***
■ **Why function keys are that bizarre shape**
■ **Why Atari haven't seen fit to change the design of the aforesaid bizarre function keys**
■ **Why, when Atari did finally change the design, they came up with the TT**
■ **Postscript**
■ **What a DSP chip actually does**
■ **Why the word Atari is in stupid colours on the Falcon**
■ **MS-DOS**
■ **Hillman Imp engine repairs**
■ **GIF files**

48 Subscribed to *ST FORMAT*
49 Met Clive Parker
50 Opened a printer box to find seven different ribbon cables, none of which fit
51 Failed with DIP switches
52 Bought a spreadsheet
53 Bought a database
54 Bought an integrated invoicing package and wondered how it works
55 Realised you don't want to use your ST for business purposes
56 Read your manual. (No, you're right, that's just silly)
57 Suffered from a completely undocumented error
58 Sent electronic mail
59 Typed in a 400-line listing that doesn't work
60 Read a diskzine
61 Had your name printed in *ST FORMAT, Review or User*

■ You must have bought at least four mice in your time, three of which undoubtedly packed up after two days.

64 Used a game cheat, and felt much better for it
65 Returned a faulty Cover Disk to DiskCopy Labs
66 Experimented with your ST Desktop colours
67 Discovered your own game cheat
68 Crashed your word processor,



21 games you must have played:

Another World **(US Gold) ● *Archer MacLean's Pool*** **(VIE) ● *Carrier Command*** **(Mirror Image) ● *Civilization*** **(MicroProse) ● *Dungeon Master*** **(Mirrorsoft) ● *Elite*** **(Firebird) ● *Ishar (1, 2 or 3)*** **(Daze) ● *Joust*** **(Atari) ● *Rick Dangerous 2*** **(Kixx XL) ● *The Secret of Monkey Island*** **(US Gold) ● *Lemmings*** **(Psygnosis) ● *Llamatron*** **(Llamasoft) ● *Populous*** **(Electronic Arts) ● *Sensible Soccer*** **(Renegade) ● *Sentinel*** **(Rainbird) ● *Speedball 2*** **(Kixx XL) ● *Starball (ST FORMAT Cover Disk)* ● *Starglider*** **(Rainbird) ● *Street Fighter 2*** **(US Gold) ● *Stunt Car Racer*** **(MicroStyle) ● *Zero-5*** **(Caspian)** ***(but you missed out Cannon Fodder from Virgin Interactive Entertainment! – Trent)***

72 Rung Nick Peers to find out why *Starball* won't decompact
74 Bought an assembler
75 Run a demo involving a *Star Trek* sample of some kind
76 Bought a machine code tutorial book (and not understood a word)
77 Dropped a hard drive
78 Failed utterly to learn machine code and given up

91 Realised just how stupid shops are being for not stocking ST kit – they could sell heaps.
92 Beaten someone up on *Street Fighter 2*
93 Torn a disk in two in frustration
94 Been kicked to a pulp on *Street Fighter 2*
95 Kicked a younger sibling (or a friend's sibling) off your machine
96 Uploaded a megabyte to a bulletin board

AN ST EXPERT?

62 Played a text adventure
63 Cruised down the information superhighway, and found nothing



■ Some people still haven't played *Zero-5*, despite the fact that we reviewed it last month and it was grrreat.

after typing in just over 1MByte of unsaved text
69 Launched applications in the wrong resolution (at least 700 times)
70 Gained an ST-using pen-friend
71 Received a piece of Amiga or PC software for Christmas or a birthday
72 Ordered something from Gasteiner

79 Laid out a fanzine page
80 Placed a Reader Ad looking for an obscure game in *ST FORMAT*
81 Messed about with your monitor and a magnet
82 Sent a really huffy letter to Trenton Webb
83 Rung Nick Peers to find out why *Personal Pascal* wouldn't fit on a floppy
84 Been in a "My computer's better than yours" argument
85 Played an Amiga game
86 Realised it just doesn't matter which one is better
87 Accidentally left your modem connected to a service overnight
88 Run out of printer ink on a Sunday afternoon
89 Searched for over a day for a piece of ST equipment
90 Ordered something via mail order from overseas

97 Downloaded a gigabyte in return
98 Learnt a foreign language using your machine
99 Created a game using *3D Construction Kit*
100 Dropped an open, full box of unlabelled disks
101 Realised just how bleedin' great *ST FORMAT* really is (we had to get that one in!)



■ You absolutely, definitely must have used *DPaint*. Which means you must have seen the standard ST gorilla pic.

Where are they now?

Over the years, you accumulate all sorts of junk that can be plugged into your ST in some way. Here are the 21 items any self-respecting ST user should have owned, and where they ended up.

● Atari mouse (thrown away for being crap)
● Computer desk (it fell apart)
● Dust covers (cupboard under the stairs, covered in dust)
● Four feet of anonymous cable (down the back of the desk)
● Glare filter (well, it didn't do anything anyway)
● Gasteiner mouse (still in use)
● Hand scanner (resigned to annual use)
● High-res monitor (what *can* you do in black and white?)
● Joystick and mouse dongles (still in use)
● Konix Speedking (still in use)
● Modem (phone bill arrived...)
● Monitor swivel-stand (it broke)
● Mouse mat (covered in everything but mice)
● RAM upgrade (still used)
● Realtime clock (just why did you buy it?)



■ And you have to have bought a modem...

● Printer ribbon (doesn't fit your printer)
● Redundant TOS chips (waiting in desk drawers to spike people's flesh)
● Ripper cart (still in use)
● *ST FORMAT* binder (still used)
● Westphaser light gun (ha ha)
● 3.5-inch perspex disk case (smashed, in the bin)

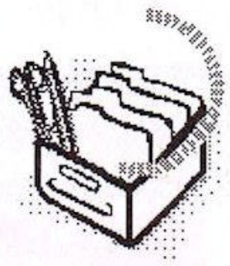
21 ST programs you must have used by now:

● *Protext* **(WP) Arnor**
● *That's Write* **(WP) COMPO**
● *Calamus* **(DTP) JCA Europe**
● *Deluxe Paint* **(Art) EA**
● *GEM-View* **(Util) Cover Disk**
● *ST Zip* **(Packer) Cover Disk**
● *POV Raytrace* **(Art) Cover Disk**
● *Ultimate Virus Killer* **(Util) Cover Disk**
● *Imagecopy* **(Art) Cover Disk**
● *Quartet* **(Mus) Cover Disk**
● *Replay* **(Mus) Microdeal**
● *Trip-A-Tron* **(Hmm) Llamasoft**
● *3D Construction Kit* **(Util) Domark**
● SpeedoGDOS (Font) HiSoft
● *NeoDesk* **(Desk) COMPO**
● *Stalker* **(Comms) COMPO**
● *Xenomorf 2* **(Art) 16/32**
● *GFA Basic* **(Prog) GFA Datamedia**
● *Personal Pascal* **Cover Disk**
● *Kozmic 4* **(Art) Goodman PDL**
● *X-Debug* **(Prog) FaST Club**



BASE TO BASE

To keep tabs on your important information you need a database, but which one? Peter Crush weighs up two of the best: *Twist 2* and *Superbase Professional*.



On the 'serious' side of the ST, one of the most useful things you can do, after word processing, is set up a database. Life is full of confusingly large amounts of information, and you can make it much easier by getting organised.

You may well think of databases as programs that only businesses use, and they certainly are invaluable for keeping lists of things like customers and products, but using a database is a great idea even if you aren't tycoon material.

A database is a collection of detailed information, stored on computer disk. You can think of it as being like a card index of old, except that you can use your ST to manipulate the data much more powerfully and usefully.

For example, say you want to catalogue your CD collection using the old-fashioned, paper method. You'd be creating a CD 'file'. You could write the details into an indexed notebook under the name of the artist or band (this would be the 'record'). Under each CD you might include different details: the track list, its release date, the kind of music, for example. These are 'fields'. Using the old-fashioned method, if you wanted to find a particular song you'd have to turn to the correct page and scan down each of the CD track listings until you found it. This is no problem with a small record collection, but what if you were running a mobile disco?

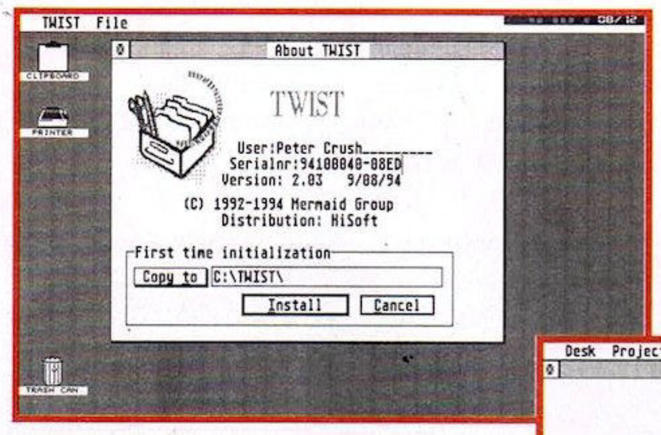
"Both are powerful, do everything you ask and are easy to use. What more could you want?"

You need an ST database. Once you'd done the groundwork of creating the file, records and fields, and inputting all the data, you could just enter the name of the song you wanted and tell your ST to search for that field. You could also get your database to find all versions of that song, or even songs by a particular writer released in a specific year. Or you could get it to sort by music type.

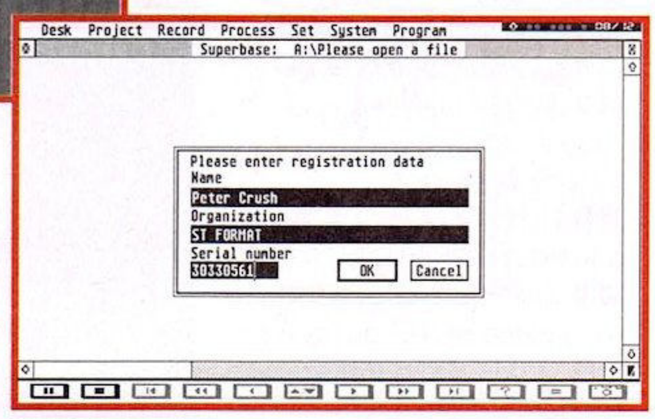
An electronic database is much more flexible than a conventional manual filing system – you can organise and sort the data in dozens of different ways. This example is just one way to use a database, because once you've acquired a suitable program you can establish many separate data files on subjects as diverse as you want.

What to look for

When you're choosing a database for yourself, the most important



■ ***Twist 2's* installation procedure creates the program wherever you want it, but first you have to enter your identity and the serial number off the master disk.**



■ **"Give me your name, rank and serial number, you svine." *Superbase Pro* complies with the Geneva Convention, which means there's no Installation program to go through.**

LET BATTLE COMMENCE...

We've chosen *Twist 2* and *Superbase Professional* because they're the two most powerful and useful databases you could possibly acquire. There are others, which are listed elsewhere, but if you want a database for serious use, read on. Let battle commence...

Get going

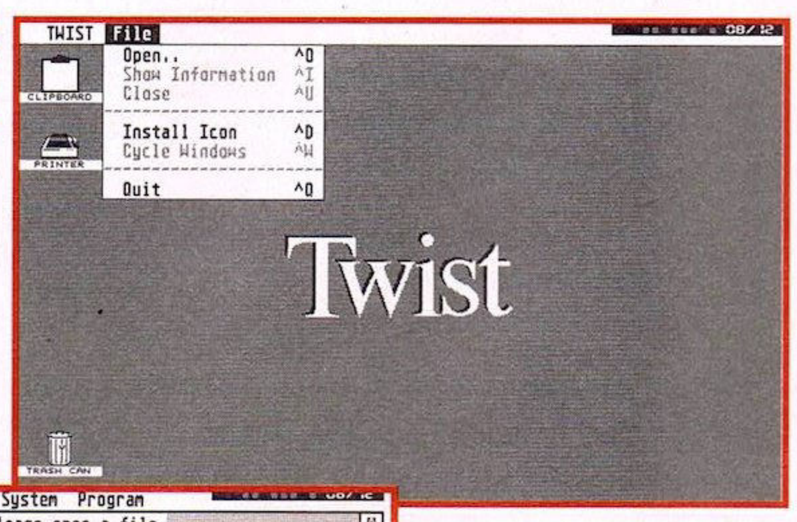
Both programs are easy enough to install – simply follow the instructions printed in the manual. Both programs can be installed either to hard drive or floppy.

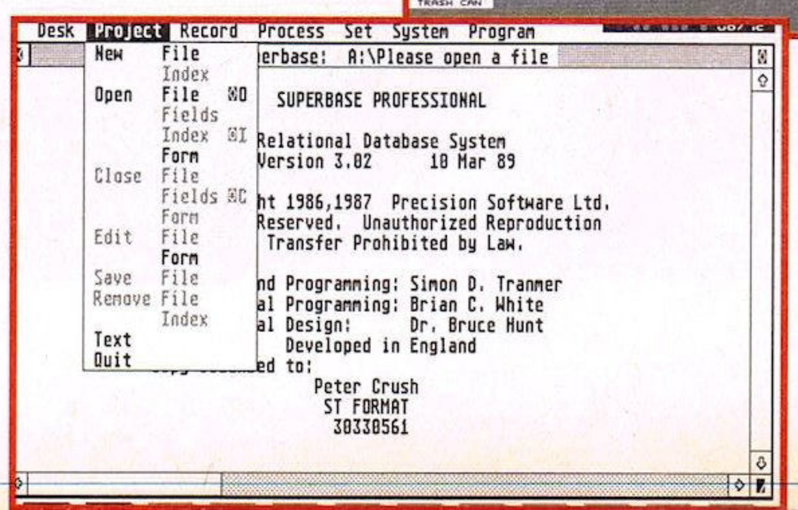
On the system requirements front there's nothing to choose between the two programs – both will run on a fairly basic ST system.

Manual operation

With something as complicated as a database the manual and any tutorials are of vital importance. *Twist 2's* manual is easy to read and uncomplicated and there's none of the usual jargon that you normally find in database manuals. It gets straight down to a simple tutorial, which is after all the easiest way to learn

■ **Those clean lines and simplicity say it all. *Twist 2* is uncomplicated and doesn't bombard you with options until you need them.**





■ ***Superbase Pro* has many more pull-down menus than *Twist 2*, and each one has at least as many options as this first one.**

COMPARISON TABLE

Program	Twist 2	Superbase
System	1MByte, D/S drive High & Med resolution ☆☆☆☆	1MByte, D/S drive High & Medium resolution ☆☆☆☆
Setting up	Very easy ☆☆☆☆	Easy enough ☆☆☆☆
Tutorial	Well structured ☆☆☆☆	More detailed ☆☆☆☆
Manual	Could contain more ☆☆☆	Couldn't contain more! ☆☆☆☆
Features	Plenty for most uses ☆☆☆☆	Jam-packed ☆☆☆☆☆
Display	Clean, modern lines ☆☆☆☆	A bit PC-like ☆☆☆
Mailmerge	Via inbuilt text ed ☆☆☆☆	Via inbuilt text ed ☆☆☆
Power	Pretty powerful ☆☆☆☆	All-powerful! ☆☆☆☆☆
Speed	Fast operator ☆☆☆☆☆	Fast enough ☆☆☆☆
Ease of use	Easy-peasy ☆☆☆☆	Not difficult ☆☆☆

thing you need to do is discover whether or not it will run on your machine. You might not have enough memory to run it on your ST, or it might only run in high resolution – which is a pain if you don't own a monochrome monitor.

If you're new to databases, then you'll also want to find one that's easy to get into, or at least that's accompanied by a fully comprehensive manual. There's little point in getting a database that's going to leave you confused and wondering what you're doing, with little or no means of enlightenment.

The next thing you're looking for in your database is how easily it can be reconfigured to your needs. Is it flexible enough to deal with records and fields the way you want it to? Can you ask your database awkward questions (such as searching all the fields for a specific keyword) without overpowering it?

What else? Well, you might like a database that features a mailmerge facility, enabling you to mass-produce and distribute letters to friends. Perhaps you want one that enables you to port your files to and from a word processor. You might prefer power over ease of use, willing to sacrifice a nice user interface for speed. To make your decision easier, just read on...

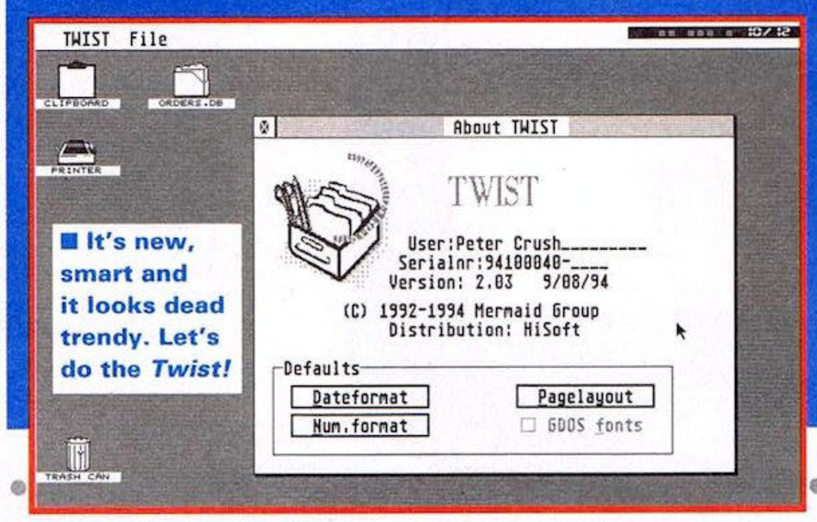
THE CONTENDERS

There are plenty of ST databases on sale, but we're going to look at two top-of-the-range products in detail. Both programs are now available from HiSoft.

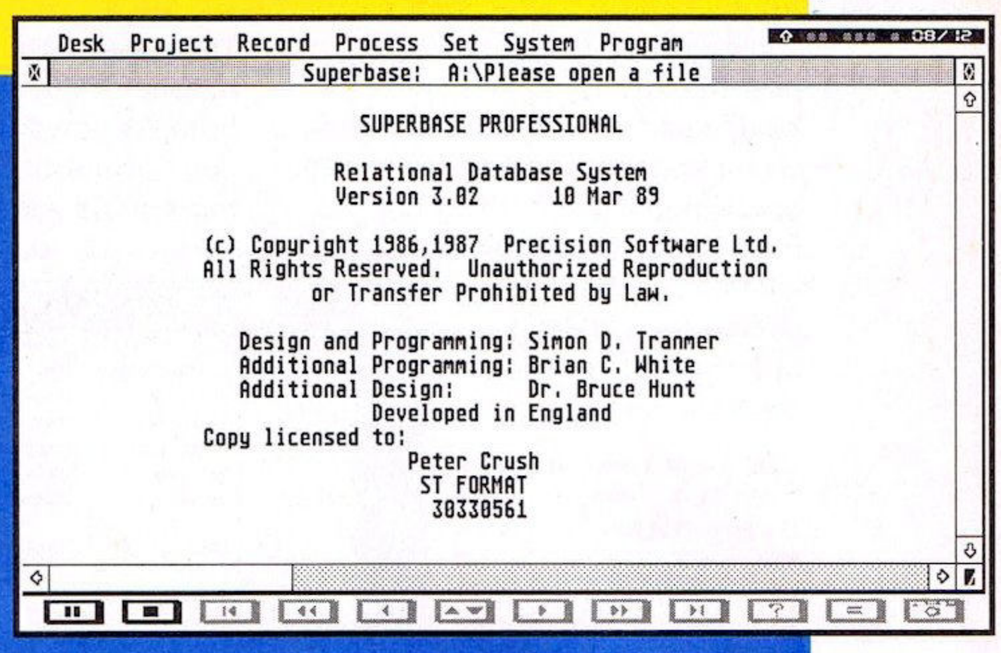
Twist 2
Price: £89.95
From: HiSoft
☎ 01525 718181
Reviewed and rated: *STF* 65, 83%

The latest database to hit the market, *Twist 2* comes from Mermaid Group, who wrote *Harlekin*, the well-known, all-singing, all-dancing Desk Accessory. *Twist 2* works on any ST, STE, TT or Falcon with a minimum of 1MByte of RAM and a double-sided disk drive, although a hard drive is definitely recommended.

Being an up-to-the-minute product, *Twist 2* takes advantage of SpeedoGDOS and enables you to use any Speedo font in place of the usual ST system font. It's billed as "the friendly database", and being so new, it ought to be the best one. So how does it line up against a comparative old-timer?



■ It's new, smart and it looks dead trendy. Let's do the *Twist!*



■ It's more powerful, and it's a couple of years older, but it's still smart-looking. *Superbase Pro!*

Superbase Professional
Price: £99.95
From: HiSoft
☎ 01525 718181
Reviewed and rated: *STF* 46, 86%

Go back to the late eighties and magazines were rating this program as the most powerful, capable ST database around. Yes, it might be long in the tooth, but *Superbase Pro* has been written to correct GEM standards, and despite its age the program still supports SpeedoGDOS.

The system requirements needed to run *Superbase* are the same as for *Twist 2:* 1MByte of RAM and a double-sided disk drive, and the program operates on any ST, STE, TT and Falcon computer without any problems.

Other databases

There are surprisingly few databases available. *Prodata* integrates well with *Protext,* and is £40 from Arnor ☎ 01733 68909, but it's the flat card-file type (not relational). *SuperCard 3* was included on Cover Disk 50 (page 79 for back issues) and is highly rated, and there are also lots of PD databases, some of them for specific purposes.

what the program can do. But it does lacks slightly in terms of technical detail – there's no easy way of looking up the specification of the program, such as how long each piece of data can be.

Lack of techie facts is not however a criticism that could be levelled at *Superbase Pro's* manuals. Between them they are roughly four or five times as thick as *Twist 2's* manual! Despite *Superbase's* greater complexity, the facts are presented in a clear, logical manner, and it offers you a series of tutorials, which take you through the setting up of an example database step by step. If you're easily put off by vast amounts of options and features then you might well find *Superbase* and its manual slightly daunting. But then, a program so powerful takes work to understand.

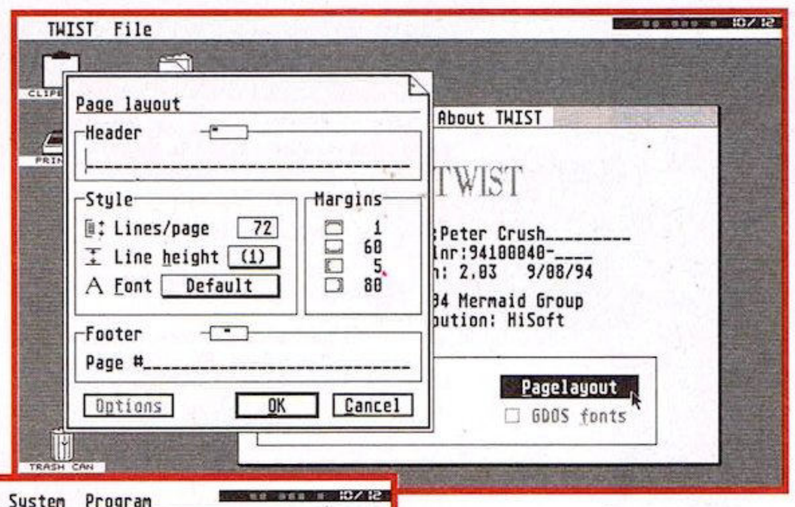
Power

If power is your bent, then either of these two biggies will suit you well. If you are looking for the most features and raw processing power, *Superbase* wins, and its programming language and massive inbuilt statistical prowess ranks it among the top programs on any machine.

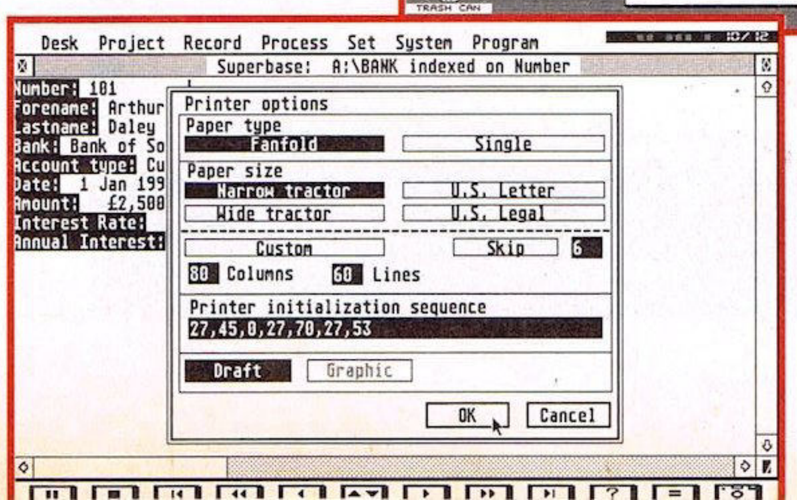
Twist 2 however offers almost as much power, is incredibly quick in terms of processing, and then there's its ease of use...

Ease of use

Yes, when it comes to ease of use *Twist* offers incredibly easy field creation and layouts, but has no example databases provided, unlike *Superbase. Twist's* uncluttered menus score well, though, with a system of sub-menu options which only appear or become accessible when you need them. Both programs are fairly intuitive once used a couple of times.



■ *Twist 2* is the easier to work with. All functions are contained within the program and appear in snazzy boxes with dog-eared corners, which means they can be moved around the screen.



■ Using *Superbase* you can adjust your printing from this Printer Options dialog. It's a little technical, but if you persevere you should work it all out. *Twist 2* is easier in this department.

THE THEORY OF RELATIVITY

Databases vary in power depending whether they are 'relational' or not. This term was introduced in *dBase 2,* the ground-breaking program that first appeared for early PCs, and refers to how information can be 'linked' between files.

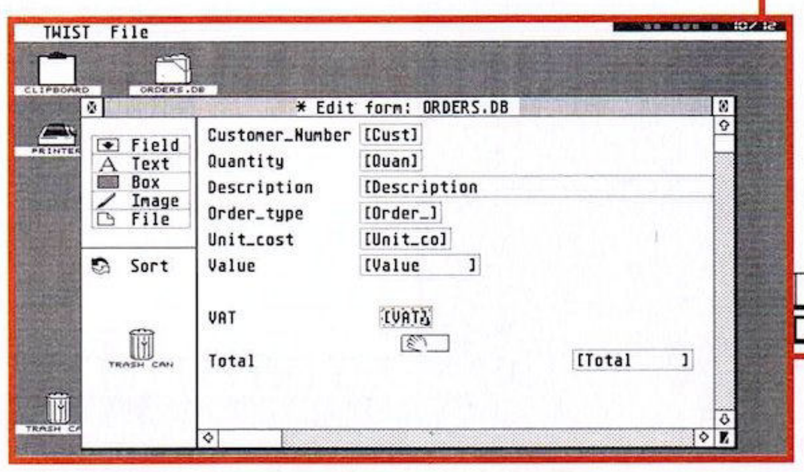
Going back to the CD database example, you could set up a database for your record collection and a second one for the artists involved. The artists database could include details of band members, their ages and other personal info, and the dates they were formed. Then, instead of having to type all the information about ABBA every time you enter one of their records in the CDs database, you can link the two files together. In this way, information about ABBA group members can automatically appear in all files relating to their CDs in the other database.

You can't do that with a 'flat' or card-file database, which is strictly one-dimensional and cannot be linked into another file. Both *Twist 2* and *Superbase* can have files linked, making them more powerful and flexible than other packages. Using these features requires a fair bit of planning and designing before you actually set up your files, so you'll have to use your loaf a bit!

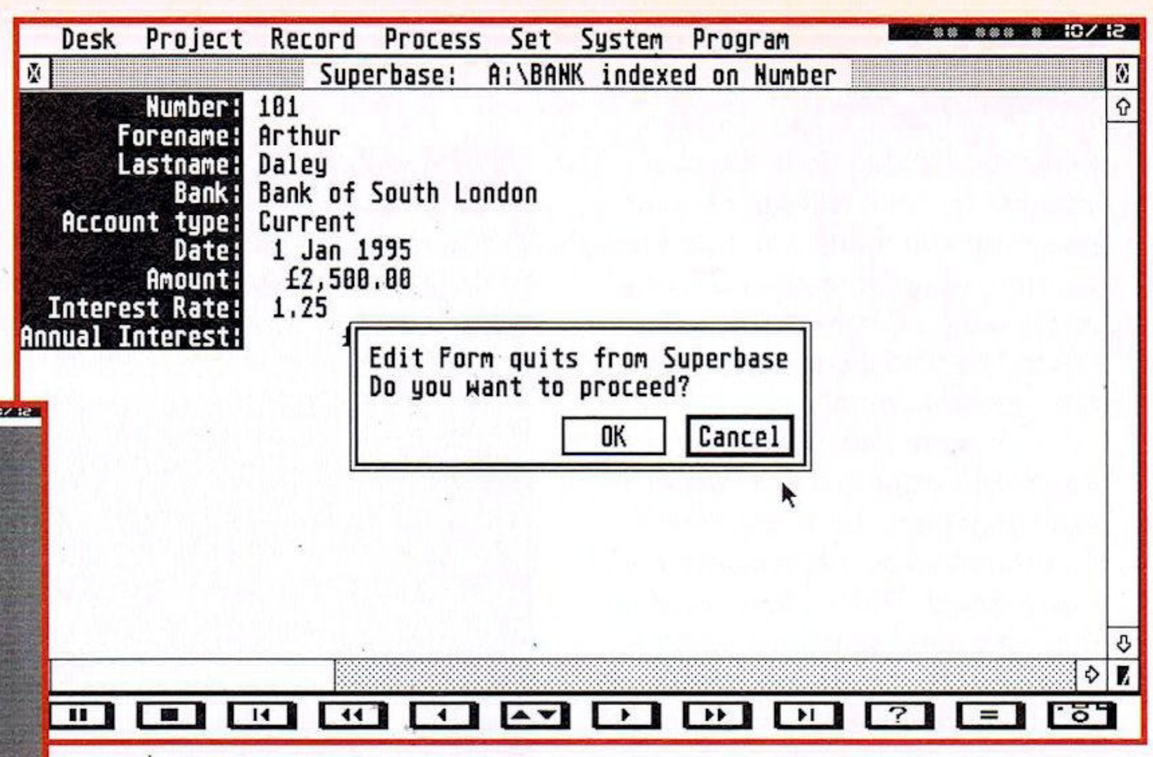
Another point worth noting is that while *Superbase* is reasonably user-friendly, its code is unlikely to be updated in future, because Precision Software (the original developers) retain it and HiSoft don't have access to it. Meanwhile, *Twist 2* is a little cheaper and, being a new product, is likely to be developed further.

Verdict

There really isn't much difference between the two programs overall. Both are powerful, do everything you ask and are easy to use. What more could you want? ***stf***



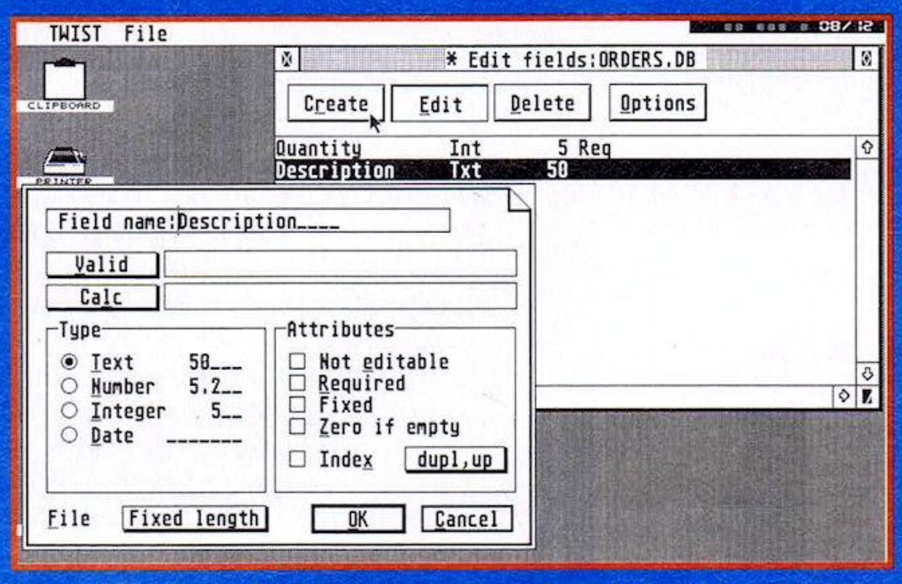
■ **Using *Twist*, changing the layout of your record form couldn't be easier. You merely click on the bit you want to shift, and drag it with the mouse pointer. All software should be this simple to use!**



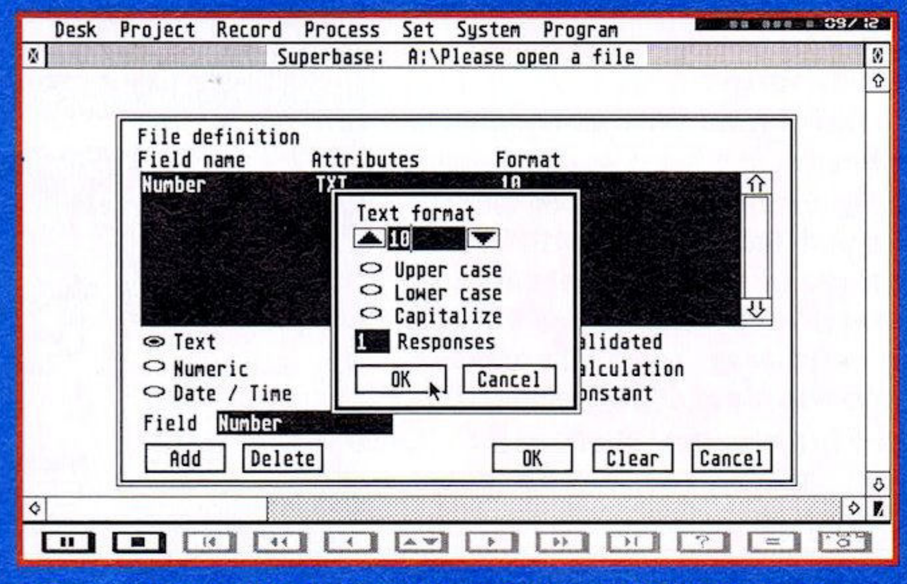
■ **Oh dear, you can't alter *Superbase Pro's* appearance quite so easily. You have to exit the main program and use the Forms Editor provided. We're not knocking it, it's just different, and less convenient.**

DATA DAYS

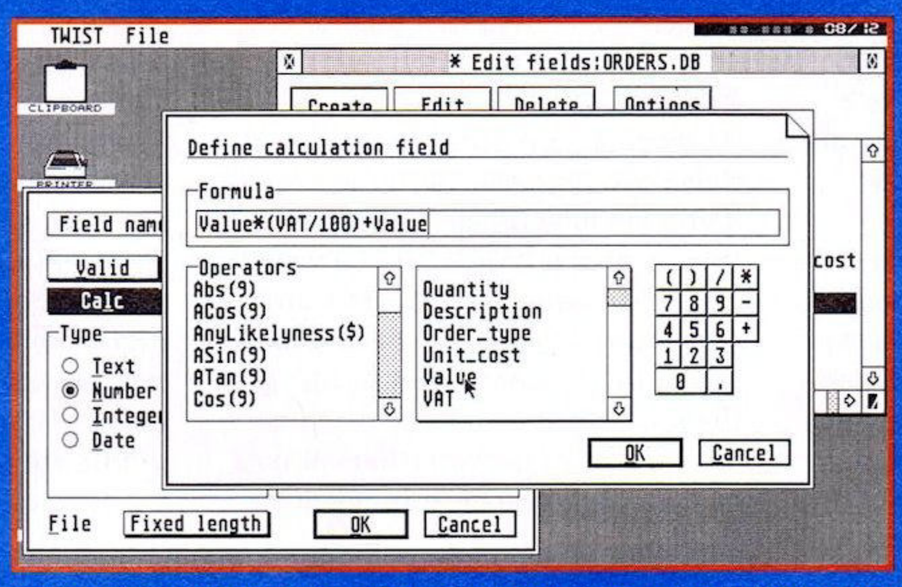
Okay, you've installed your database program, skimmed through the manual and tried a couple of the tutorial sessions. But what are they like in use, and how well do they work? Let's run through setting up a small database file with both programs and see how they compare.



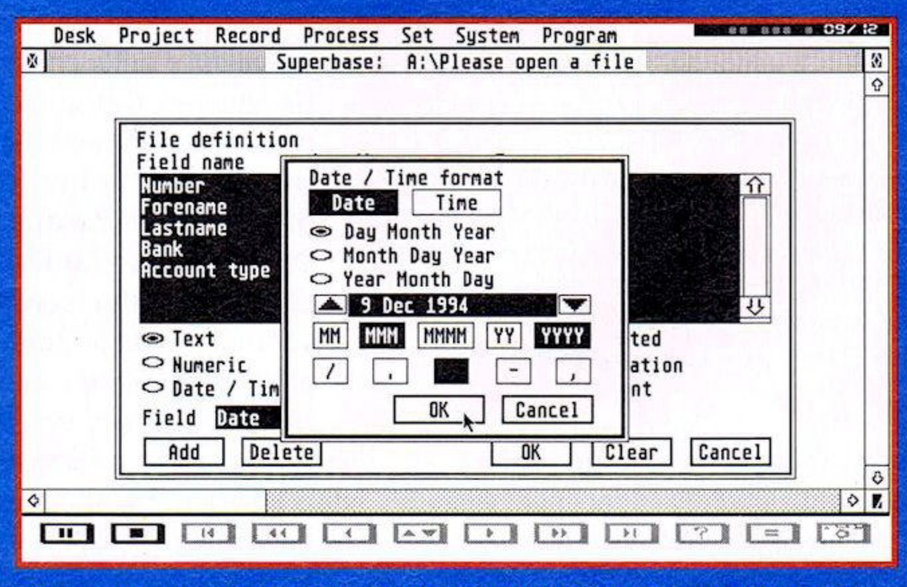
■ **Each heading or "field" must be established. It's all quite easy using *Twist 2*, and the required "non-modal" dialog boxes pop up when needed to make the relevant selections. Follow the tutorial!**



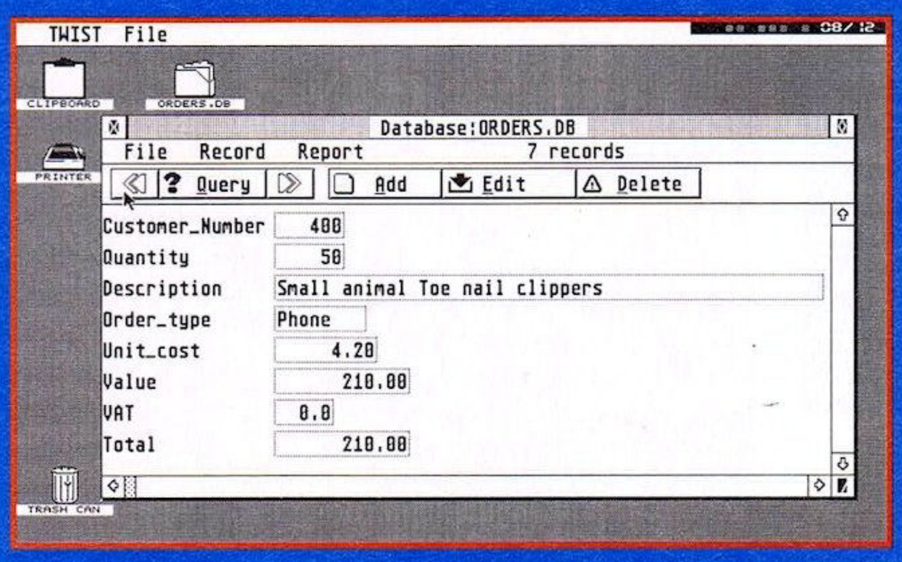
■ **Guess who copied who! *Superbase Pro's* method of setting up your fields is remarkably similar to *Twist 2's*, or should that be the other way round? Anyway, it's all very straightforward.**



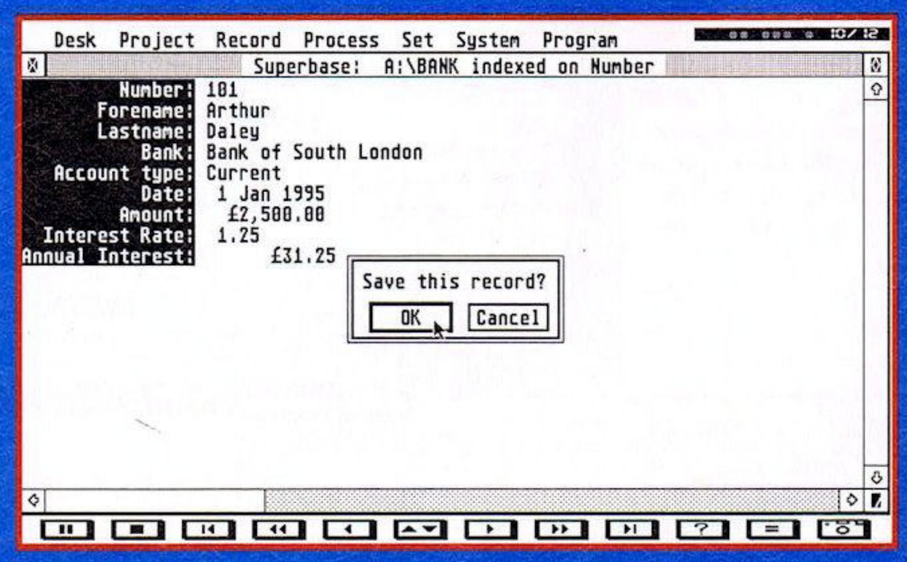
■ ***Twist 2* can be made to perform calculations for you automatically as you enter numeric data. Using this dialog it's possible to define the formulae involved, and all by mouse clicks – no typing required.**



■ **The way you can display the date is incredibly detailed. Lots of thought has gone into *Superbase*. Similar dialog boxes exist for other options, such as how numbers and financial figures are displayed.**



■ **After setting up the various fields you want, here's the resulting form, into which you can now enter as many records as you have disk space for. It's dead easy to edit or change the layout too.**



■ **And here's the record form just created. Not as jazzy as *Twist 2's* – a touch more serious. Those famous video control buttons at the bottom of the screen enable you to scroll through the database.**

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- **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:
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- Cartridge port (128K), MIDI - IN / MIDI - OUT
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- Accepts ext. video sync signal for genlocking - up to 65,536 possible colours from a palette of 262,144
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- BLiTTER graphics processor

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- 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

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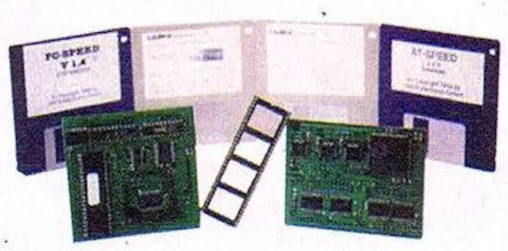
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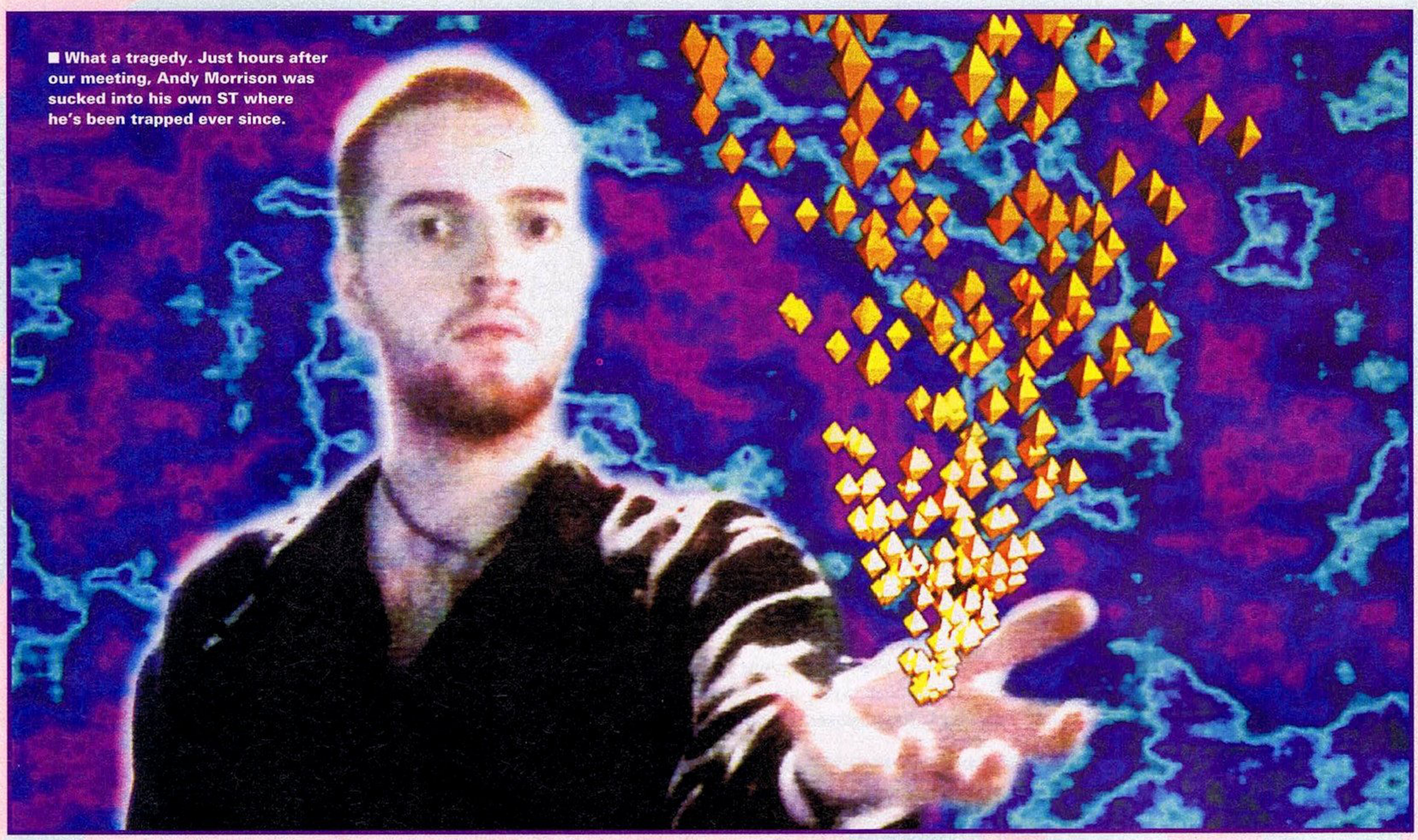
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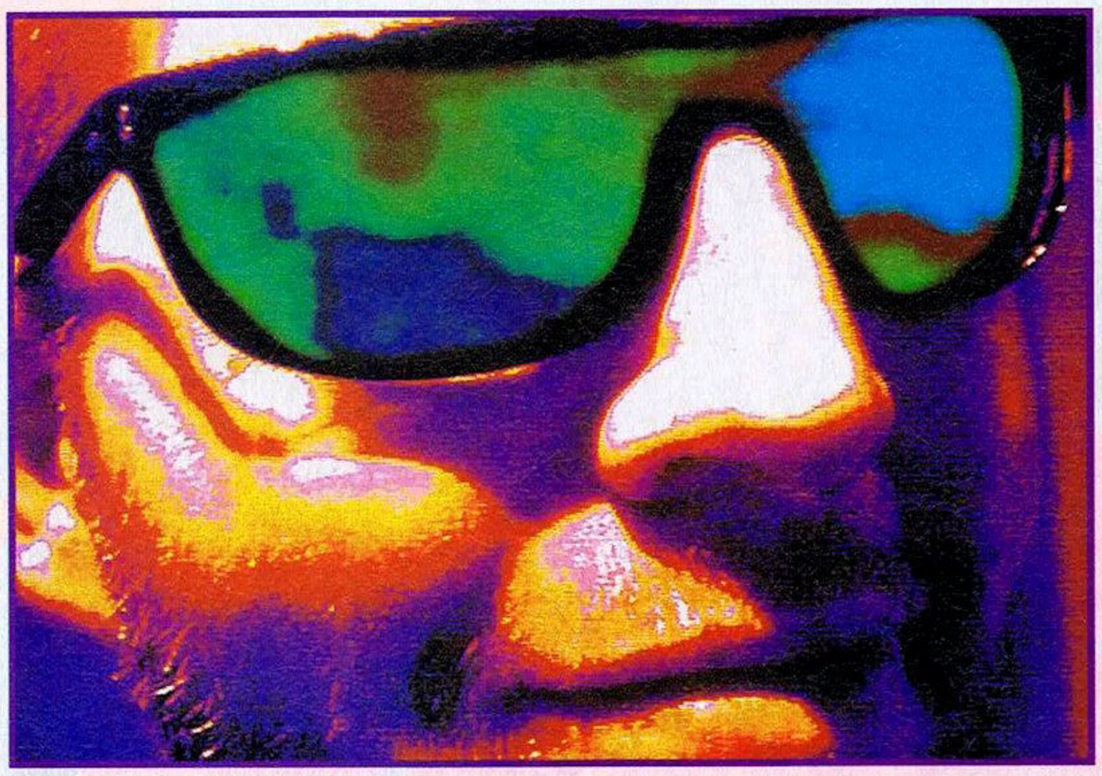
You've played games on it. You've written books with it. You've created songs on it. Now use your ST to create the video to make the song a hit. Nick Peers met a man who has.

You're well aware that your ST is a versatile machine. Atari really missed the boat when they elected to emphasise its abilities as a games machine with MIDI ports, because it's capable of so much more. Last month's animation feature introduced you and your ST to the world of moving graphics. Now we feature an interview with a man who has pushed his ST to the limits with *Trip-A-Tron*, a light synthesizer program that appeared on Cover Disk 40 (see page 79 if you missed it).

Andy Morrison has been involved with the ST for a long, long time. He bought his first ST back in 1985 for £750, when TOS was supplied on a floppy and disk drives were external 360K affairs. He was involved in one of the country's first disk-based magazines, *Cursor 7* ("it flopped massively"), and worked on a few graphics projects on the ST, making it on to both Psygnosis' and MicroProse's books. And then Jeff Minter wrote *Trip-A-Tron.*

Let's Rock!

Andy works by day as a director of Creation Station, a company that makes graphics presentations, such as 3D animations, while helping to develop new pieces of custom-built equipment (one of which enables them to render images to broadcast quality, to be played from a hard drive in real time).



■ Andy spends up to five days creating effects like the stunning picture above, and all on the "humble" STE.

At other times Andy is happy to play with his custom rig, which is firmly based around four STs. It's been used in clubs and at live gigs to produce visual effects, and Andy has even used it in the making of a rock video for Senser, one of last year's top independent acts. Andy used his ST rig to help director Jim Wilson come up with some footage that appeared in the video for *The Key.*

The rig enables Andy to display up to five RGB input signals simultaneously. Each of his four STs displays a different effect, all created and manipulated in real time using a custom-written animation program from within *Trip-A-Tron.* Andy can then combine the signals to create stunning visuals like those shown here.

The heart of the system

The custom-built mixer lies at the heart of Andy's rig. It enables him to take the signals from up to five STs, then, using sliders, fade each signal in or out as desired. From there he can project the combined signal on to video, television or a projector. He also has an output to a preview monitor which enables him to easily manipulate his effects in real time.

Next, there are the four STEs. Each has had custom chips added to keep the four images synchronised and improve the picture. Two of the machines have 4MBytes of memory and subsequently run the two animated images on top of the background still, or starfield, which is run on a 2MByte machine. The last ST has a mere 1MByte of memory, and is used in conjunction with a sampler and video for Andy to capture and colour live stuff without storing it for future use. "Useful for long sessions in nightclubs," he explains.

As well as the colour monitor he uses for previewing purposes, and a large hard drive to store his animated sequences, Andy also possesses a video digitiser, along with S-VHS video and camcorder for capturing images.

"You won't see any effects unless they're the best they can be. And very rarely do I use the same effect twice"

In the software stakes, he mainly uses *Trip-A-Tron* and the grandaddy of all art packages, *Degas Elite* ("to me the best art package on the Ataris") to prune and manipulate his images. With *Trip-A-Tron,* Andy has written an animation player that enables him to change an animation's speed, direction and colour palette in real time, enabling him to use his rig in a live situation.

AUTO-SYNCHRONICITY

The concept of auto-synchronicity was thought up by Jeff Minter in a conversation with Andy, and deals with the idea of images and music being in time, or not as the case may be.

"The point is, it doesn't matter if the two are in time or not, because generally speaking they're not going to be – you'll jump the beat every now and again. You layer the various images on top of each other, but it's your mind that 'automatically' locks stuff into the beat – you can't help it. If I then add another animation on top – a faster one perhaps – your mind could happily switch between them and grab whatever's on the beat."

It works in real life too, but what does it all mean? "It means that your mind is playing with its surroundings, trying to make sense of it."

It works in a similar way when selecting images for use. "All I try to do is get a mood for the music, really. It doesn't matter that you can't tell what the hell I'm putting up on the screen, as long as it gives a certain feel.

"So long as the rate is right, the colours are right, then the texture coming out of there is enough... it could be an alien coming down if you've got some weird piece of ambient music. You can do just about anything really – it's all about mood."

Creating...

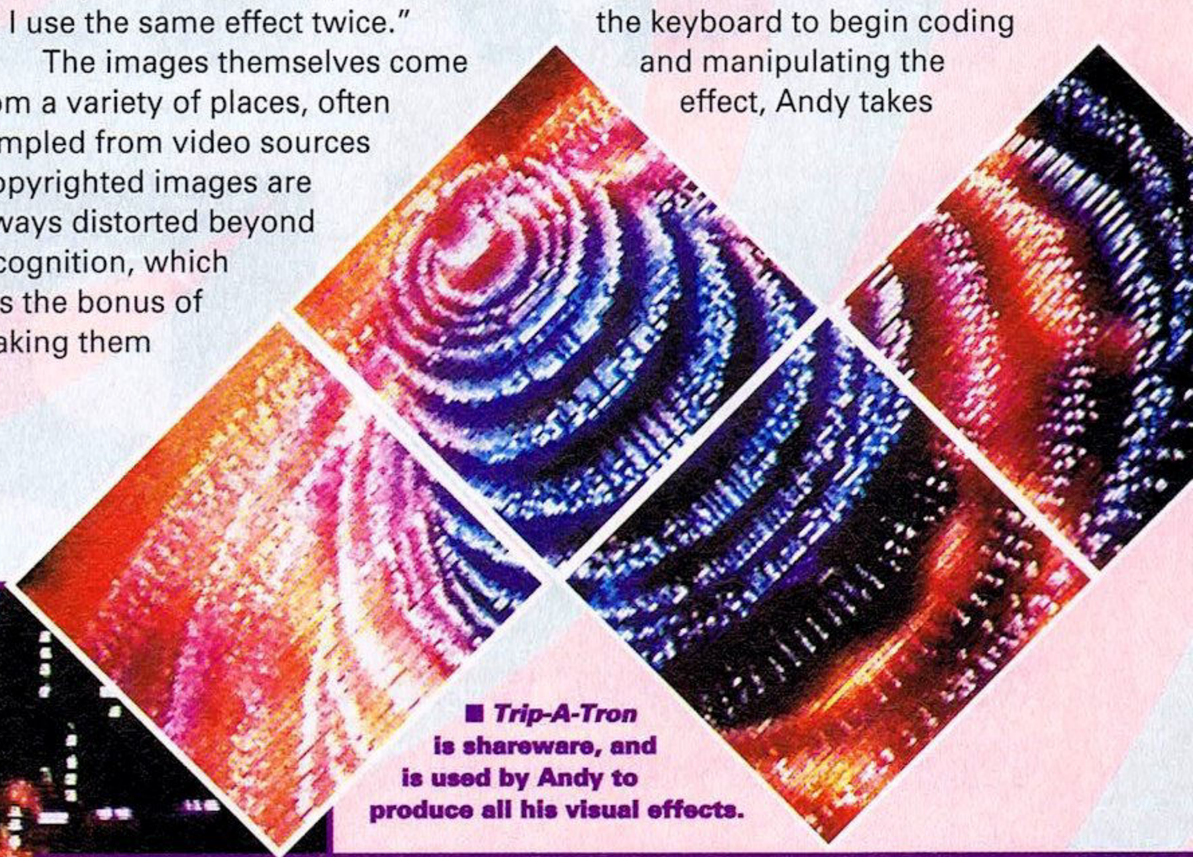
Where does Andy get his effects from? "Often effects are suggested to me by things I will see on television, films, real life and that sort of thing. It's like any art form, you just put yourself in the middle of modern life and suck up everything around you, and sooner or later something spits out."

While admitting the "cheesiness" of it all, Andy sees each effect as a child to him: "You won't see any effects unless they're the best they can be. And very rarely do I use the same effect twice."

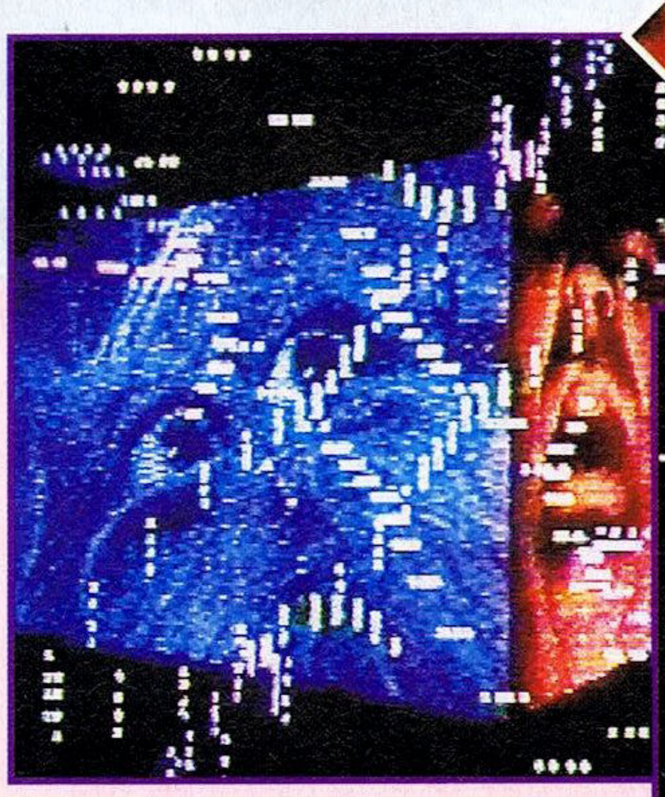
The images themselves come from a variety of places, often sampled from video sources (copyrighted images are always distorted beyond recognition, which has the bonus of making them more original). Andy has also used fractals and 3D models in his images, as well as the inbuilt effects found in *Trip-A-Tron* (such as starfields and lasers).

The versatility of the KML language for experimenting with effects means that Andy has hundreds and hundreds of routines that he's tried and rejected. In all, he has about 40 stills, and between 60 and 70 animation sequences that he can mix together any way he chooses, giving him access to well over a thousand different effects using assorted combinations and colour palettes.

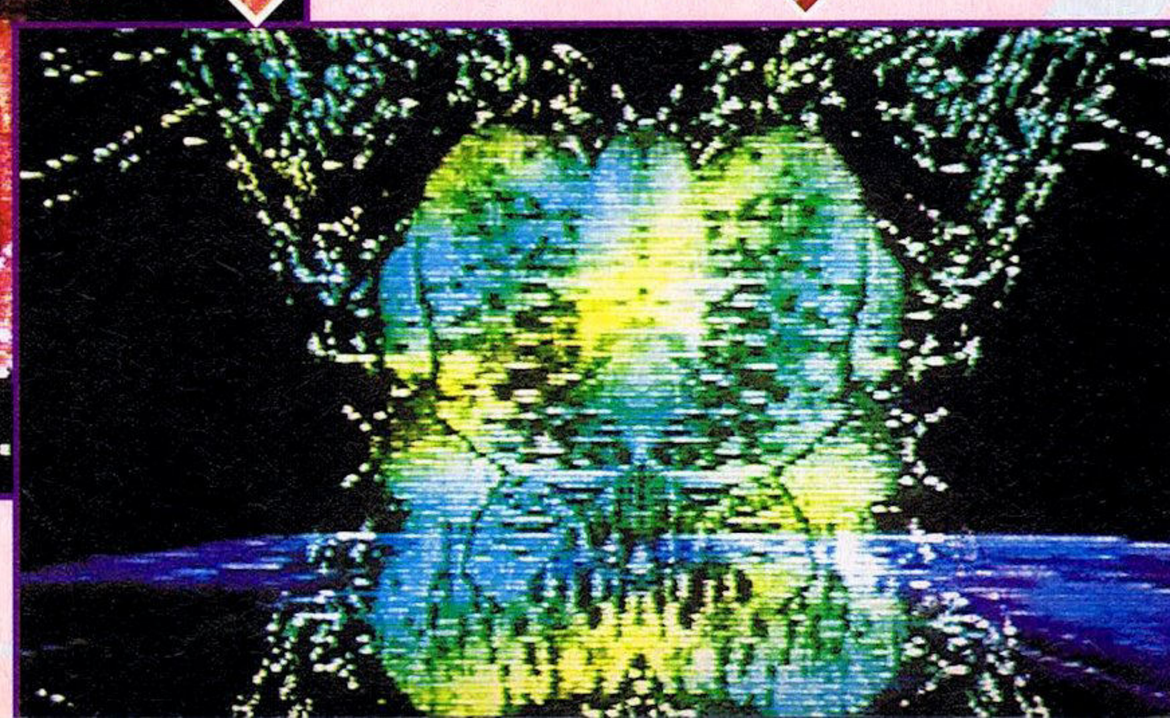
From finally sitting down at the keyboard to begin coding and manipulating the effect, Andy takes



■ *Trip-A-Tron* is shareware, and is used by Andy to produce all his visual effects.



■ Andy often uses digitised images in his animations, carefully altered to avoid infringing copyright laws.



TRIP-A-TRON

At the heart of *Trip-A-Tron* is the KML language, which "is just shifting around light, colour, anything in three dimensions. The z-dimension gives it real perspective, which also makes it very nice for starfields, as you can have them coming out from the screen." He praises Jeff Minter's light synthesizer for the ST highly: "Jeff spent a year coding this, and in some ways it's his magnum opus on the Atari. He wrote it absolutely the best he could, and no one used it."

Originally a commercial package, poor sales forced *Trip-A-Tron* into the shareware market and an appearance on Cover Disk 40 (see page 79 if you missed it). The KML language is straightforward to get into, "with a very tasty front end", according to Andy. "There are a lot of modules you can go into, but you're really only accessing portions of the code that you can write yourself."

The animation player program that Andy uses, which incorporates the starfield and strobe effects, "is a custom-written program within *Trip-A-Tron*, so anybody could write it if they understood KML I guess".



■ **The hands in this shot were grabbed using a digitiser, and then cut out and shaded using *Degas Elite*.**

four or five days to complete each one. This time includes test renders to iron out the bugs in each image – a time-consuming process. And because Andy faces the same problem at Creation Station with rendering, the ultimate result is that "it makes for very careful coding".

...and manipulating an effect

Trip-A-Tron is used in the creation of effects that distort as well as animate the original images. Andy has, for example, written a custom-built ripple program, which creates an invisible grid, then spins the images around a central point on it. Individual gridlines are then subjected to a sine wave effect on the z-plane, which creates the ripple and completes the effect. All four machines are rigged to produce starfields too. "Because these are done in real time, it's a cheap way to get a very, very tasteful effect."

One small drawback of Andy's system is that it's not genlocked, which means he can merge images but not place one behind or in front of another. "This is just straight vision mixing, so I've had to work around that. I don't find it a problem, to be honest. I don't really want people to know exactly what I'm putting up all the time."

I asked Andy whether he had any hints 'n' tips for ST users wishing to try their hand at creating live video effects. He's a strong advocate of over-sampling. It gives you lots of raw data to edit the best possible footage from. "The more raw footage you have, the better."

He's also a fan of regularly making back-ups, and working on a copy of the original disk.

"I've got so paranoid – I've been working with computers for so long. I'm a pathological saver – I'm saving things all the time. You should get into the habit of it. On PCs I've lost entire gigabytes of data."



■ **Linking the four STs together gives Andy up to 64 colours on screen.**

"It's a flexible system and STs are very robust, unlike a lot of other systems such as PCs"

Why the ST?

Good question, you might think. Why use an 8MHz ST instead of the quicker Falcon or PC? Andy does admit that, while images can take a long time to render, an 8MHz machine is more than capable of playing back the animations at a frequency quick enough to keep up with normal TV (in other words, 50Hz, or 25 frames per second). He also affirms that the STE runs much faster than the STFM – its blitter and hardware scrolling among other things make it more powerful graphically. "Compared to the original ST these things fly. The operating system is so much better."

■ **Contrary to popular belief, the ST is more than capable of displaying broadcast-quality animations.**

Andy has received some stick for standing by the ST in this way. "They go 'Ataris? What do you want to use Ataris for? Surely you want to use PCs?' And I say no, because I've got the software to do exactly what I want. I can write my own routines. It's a flexible system and STs are very robust, unlike a lot of other systems such as PCs. There's a lot of snobbery, which @£$^&%s me off quite frankly."

And finally...

We couldn't leave without asking Andy his view of Atari. He shares everybody's opinion on the matter. "I must admit that the Jaguar does appear to be a last-ditch effort from Atari. Atari's problem has always been marketing. The design of their products is good but their marketing is appalling. They seem to think that the kit will sell on its own, but nowadays it's not like that – the markets have reversed." It's a good thing that people like Andy are still showing what can be done with an ST, then. ***stf***

ANDY ON ST GAMES

Andy's often too busy to play games on his ST nowadays, but he does have a favourite few. "Top of the pile in playability is *Llamatron*. I've played that thing so much, I even got to the stage where I have a particular album I listen to because my games last so long as that album." *Rainbow Islands* ("totally faithful to the arcade original") as well as *Starglider* also get honourable mentions.

Andy's also impressed with the recent trend of STE-only games. "That's good in a way, because you've got to cut out the deadwood at some point, which is really what the STFM is. What screwed up the PC for so long is that they tried to keep complete compatibility with everything all the way down the line, and a company just cannot do that indefinitely, otherwise the machine cannot make any fundamental steps to keep up with the new technology coming out.

"It takes a bit of guts, I'm sure, because you're cutting off an entire group, an entire section of your market, but it's a false economy otherwise, because you're producing consistently crap games. You're not encouraging repeat buying of the system. You've got to be able to look at your mate two doors down and he's just bought a Falcon and look at that, see the Falcon software and say, 'I need a Falcon.'"

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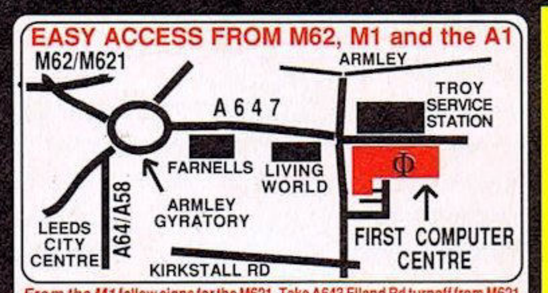
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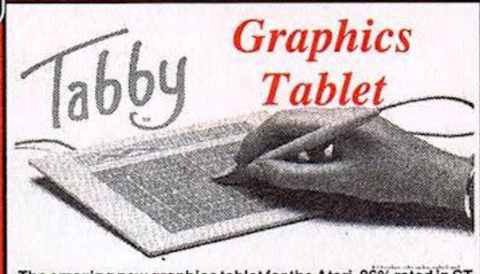
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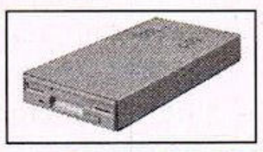
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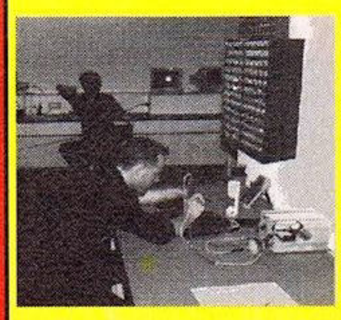
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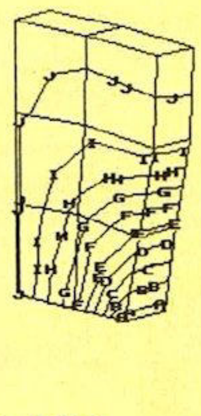
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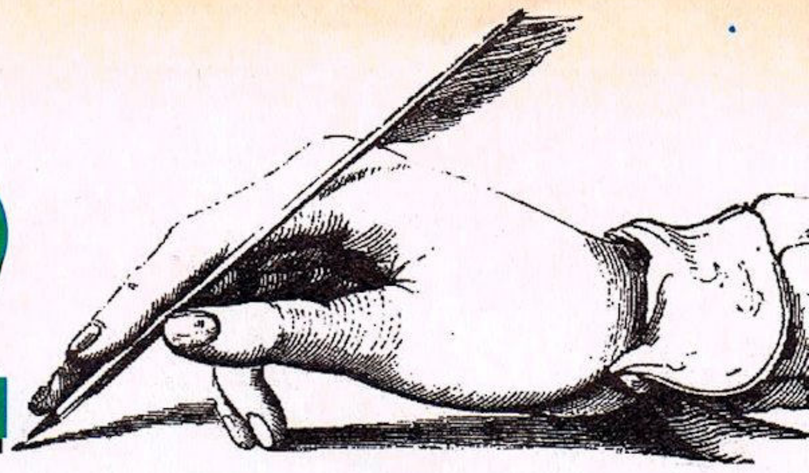
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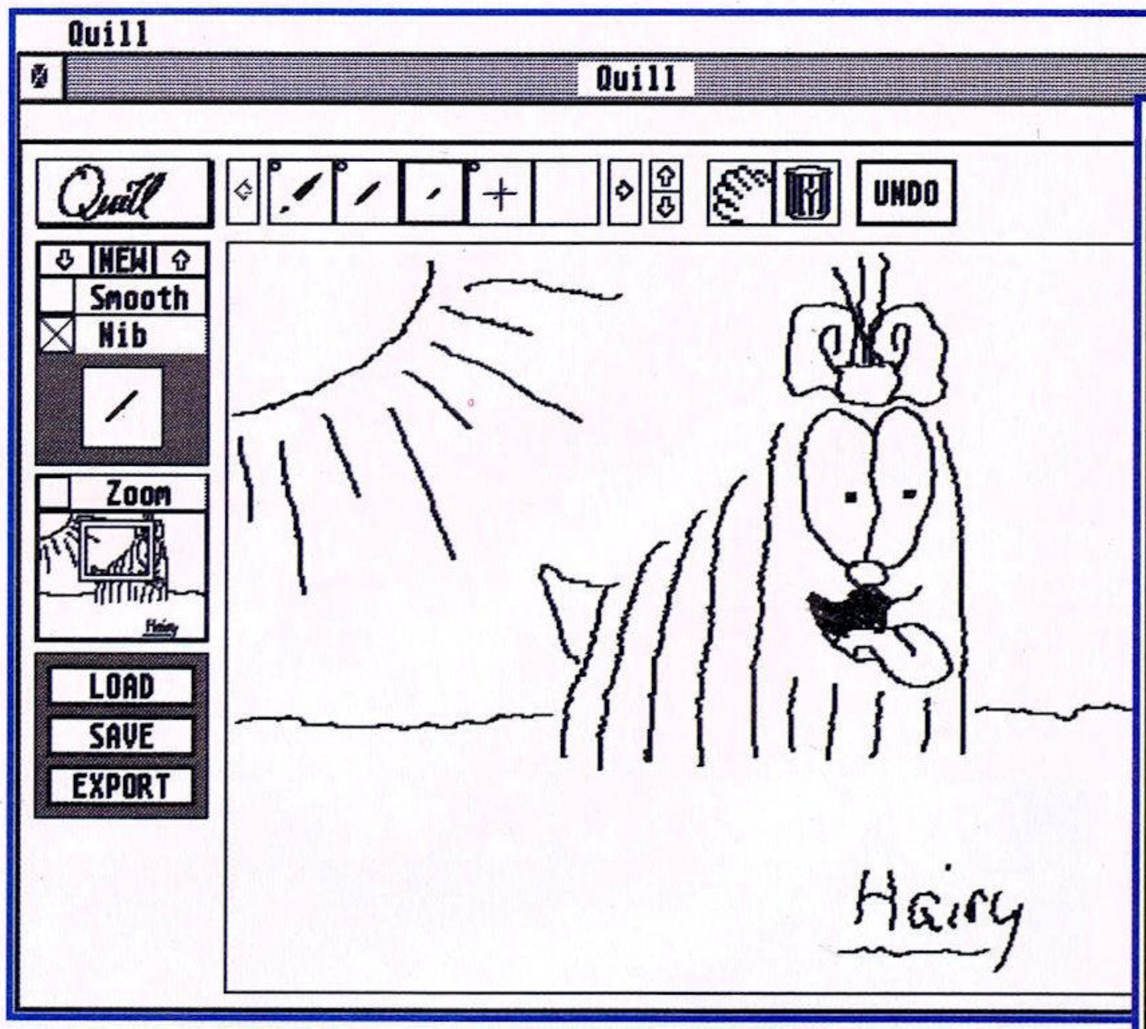
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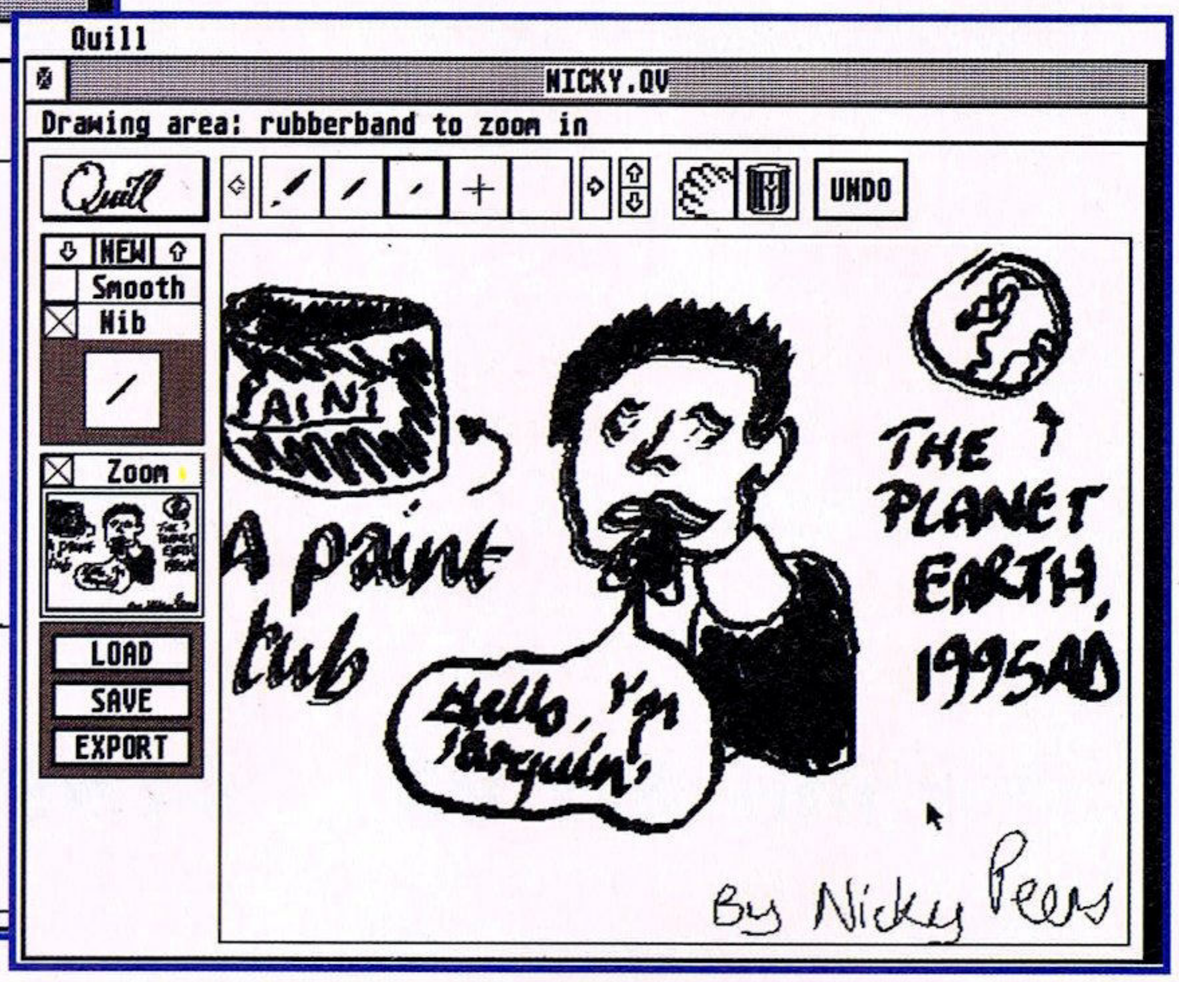
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Quill 2





■ The beauty of *Quill 2* is that it's so easy to use. You can just get straight into sketching and doodling with it. Thanks to Simon for this attractive little effort.



■ On the other hand, it doesn't make any claims to turn non-artistic types into artists, as Nick so amply illustrates with this somewhat Freudian piccie.

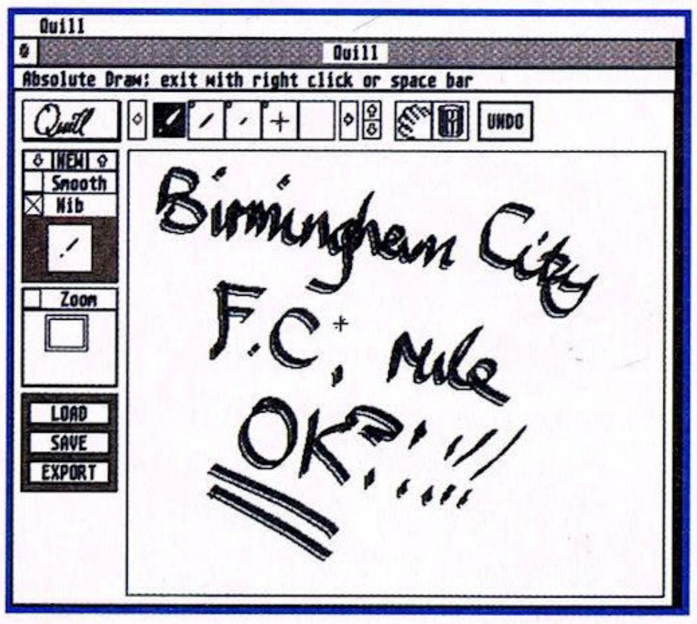


Dipping his pen into the ink, the Bard spilt a drop on the paper. "If only my Atari ST had a calligraphy program to prevent this kind of mess." Four hundred years later...

Quill's touted in the manual as a "pen-and-ink freehand vector drawing package", which means sketching or doodling to you and me. The pen or ink comes in the guise of nibs, with which you draw your sketches, or images.

The original version, which scored 84% in issue 59 and featured on Cover Disk 63, was fast and simple to use, but restricted you to only one nib per drawing. *Quill 2* remedies this by permitting up to 32 different nibs per picture, which enables you to make your creations even more attractive and eye-catching. Or you could go for drawing like a five-year-old, as the *ST FORMAT* team have done on these pages.

It's important to realise that *Quill 2* is designed as a sketching or calligraphy program, and not as a more generalised art package. Its primary function is to enable you to draw little doodles or sketches, which can be imported into your documents to make them look less sterile and computer-like. And it's easier and cleaner than scanning them in from paper and pen. *Quill 2* is designed to be used with CGS' Tabby Graphics Tablet *(STF* 54, 86%), and is written by Jonathan Lawrence, who also wrote the *Tabby* software for the Atari. The program will work happily with your mouse, but because mice are so difficult to draw with, your sketches won't turn out as well.



■ Computing doesn't have to be serious! *Quill 2* is fun to use. You too can produce this drivel.

The might of the pen

Quill 2 is a point-and-click affair, with only one drop-down menu in sight (enabling you to quit the program or access any Desk Accessories you might have loaded). The rest is accessed via icons and alert boxes, and there's no need to use your keyboard except for naming your files.

You can alter the shape, size, orientation and even the texture of your nibs easily – which allows for lots of experimentation – and there's space to store up to 32 different nib styles per drawing. You can save your preferred setup to default on loading.

"*Quill 2* enables you to make your creations attractive and eye-catching"

You can select certain pen strokes to move or delete as you see fit. Using the well-known rubberband method, you simply drag a box around the stroke(s) to be amended, and you're free to dispose or move them around your drawing. There's an Undo option, just in case it all goes horribly wrong and you want to start that amendment again.

You can easily zoom in and out of your drawing, although this doesn't necessarily make fine, detailed work any more straightforward – the nib remains the same size in proportion to your drawing, and although you can create smaller nibs there are still problems. Zooming into the top left quarter of your drawing restricts you to using the top left corner of the Tabby, for instance, rather than freeing the whole of the Tabby so that you can work in detail on that particular section.

What can I use it for?

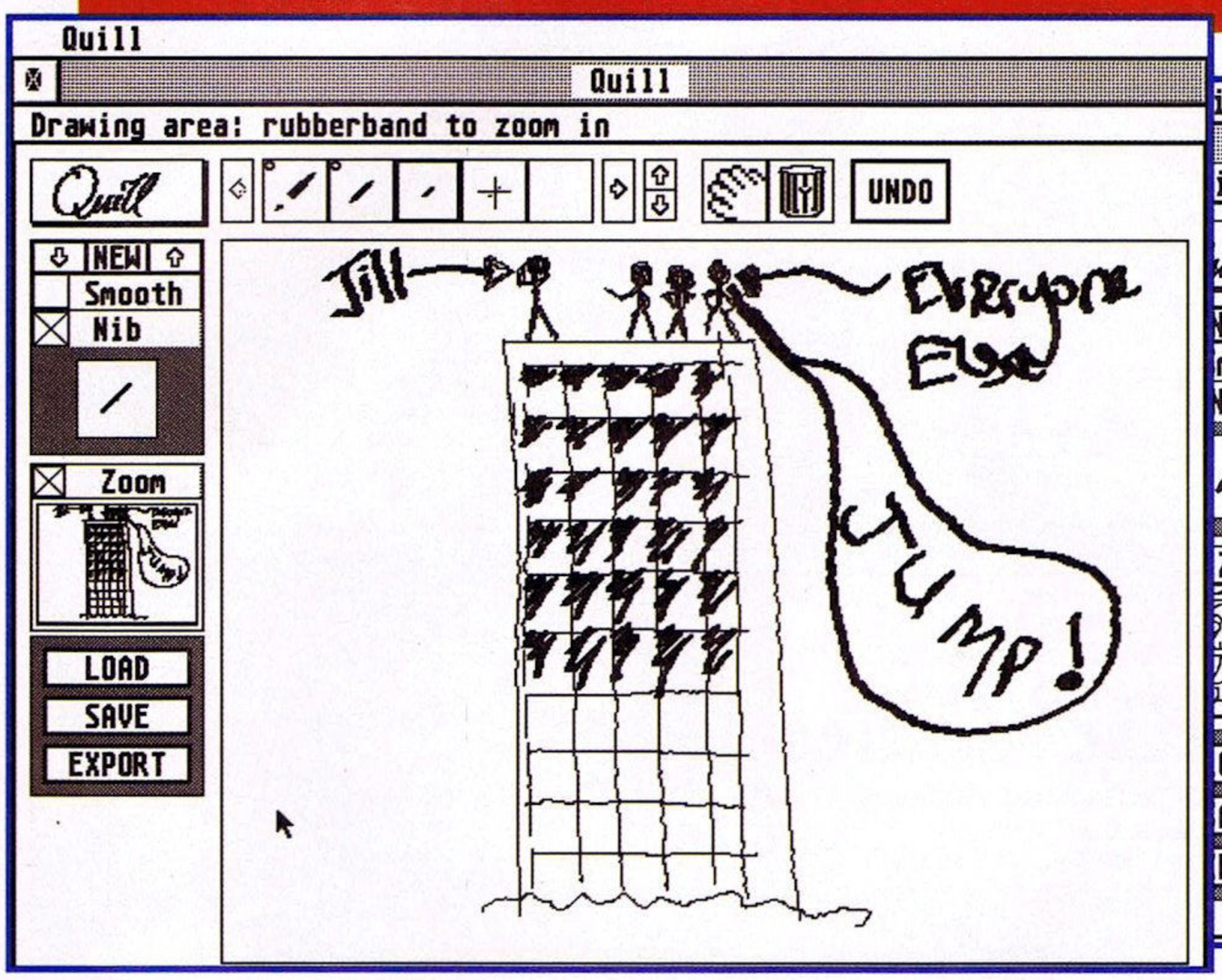
A calligraphy program, however polished, may seem a luxury. But you might be able to find the oddest uses for Quill 2. We did...

1. Writing your own signature. Useful for mass-produced letters, which you can produce using your ST and a printer rather than a photocopier.

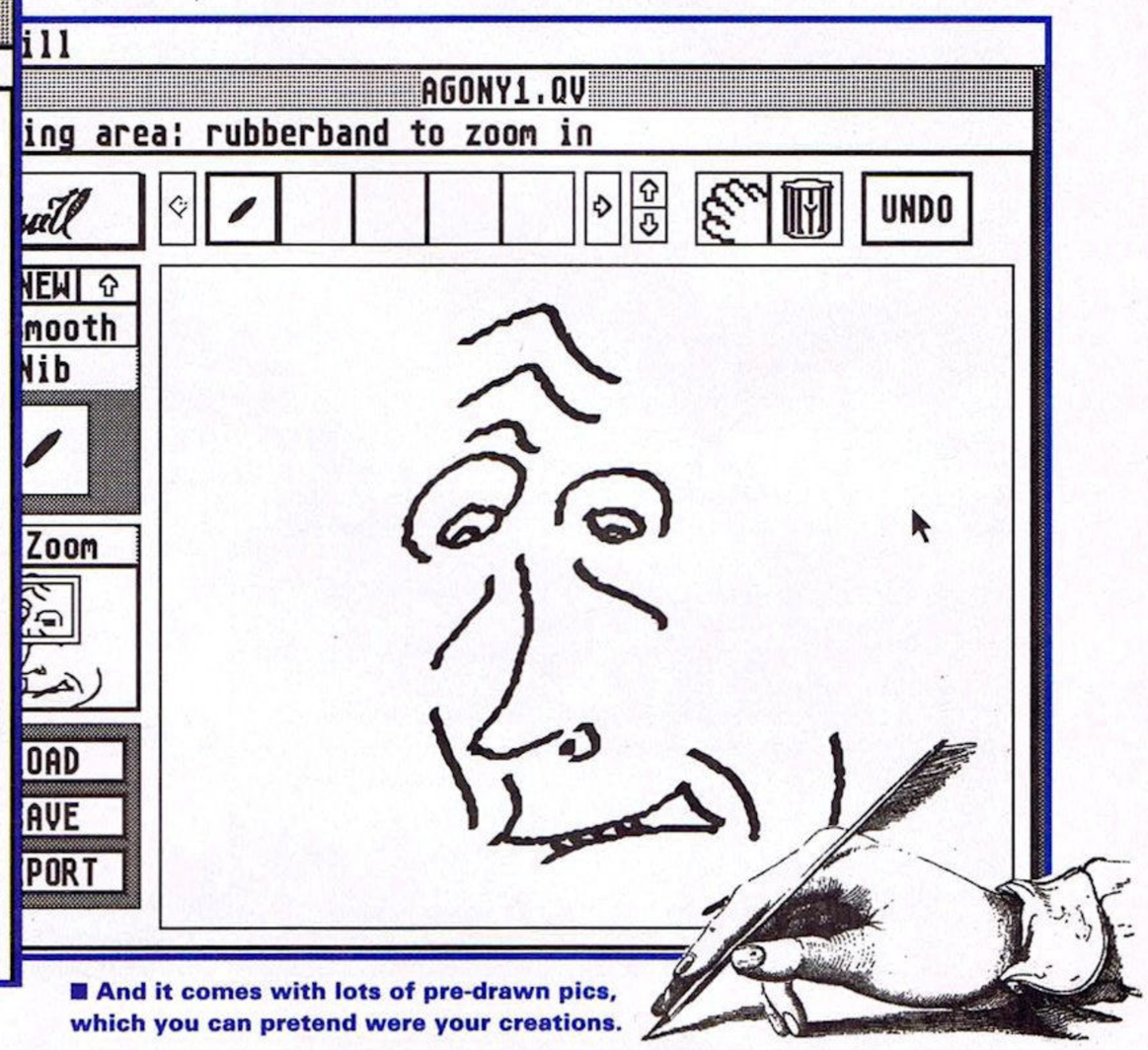
2. Creating hand letters. Old books often have the first letter of each chapter printed in a typeface that's far more suited to the rotting insides of a Gothic castle. Now you too can create documents that look more suited to the Stuart Era than the Modern Age.

3. After having had fun producing these fine pictures, the *ST FORMAT* team had their own ideas for handy uses for *Quill 2:* DIY wedding invitations (Trent), mince-pie evenings (Sarah), 'Brian Blessed Fan Club' leaflets (Andy O), 'Birmingham City Are Great' stickers (Nick), 'Birmingham City Are Rubbish' stickers (Jill), Sausage Evenings (Andy Curtis).

4. All those twiddly bits you can never get right in an art package (and not home accounts, as suggested by our resident Hairy).



■ *Quill's* good for expressing your feelings though. Jill had had a particularly bad day...



■ And it comes with lots of pre-drawn pics, which you can pretend were your creations.

Recording your strokes for posterity

Although the program only saves and loads vector images in its own peculiar QV format, you can export your creations as bitmapped IMG files. This enables you to import your creations into most art packages and document processors, for whatever odd purposes you might have in mind.

And in case you're worried about a loss of quality when converting your images to bitmapped affairs, rest at ease. You can make your cartoon or doodle as large as you like in vector format before you export it, which ensures that you get as smooth a bitmapped image as required.

Quill 2 can also be configured to run as an Accessory. This enables you to call it up from within any other programs that support GEM, such as art packages, document processors and desktop publishers *(Papyrus Gold* and *Calamus,* for example). This is handy for when you're importing your images into these packages. And it comes with a 16-page manual and upgrade sheet, which explains the program succinctly. You should only need to read through it once, except in matters of occasional reference.

What's it like?

Quill 2 is in a market of its own. Its very nature means that it's limited as an art package, but it's obvious that a lot of time and thought has gone into making it as effective and useful as it could be in terms of doing what it does. It's vector-based to ensure your sketching is as realistic as possible, and has a comprehensive array of functions, which are easy to access once you become familiar with the system. And that doesn't take long.

Quill 2 is designed to be used with the Tabby Graphics Tablet, and it's easy to see why. The Tabby is literally like writing with a pen, and much easier than writing or drawing using a mouse. If you're thinking of using *Quill 2* with a mouse, you should knock at least ten per cent from the review score before you start.

There are a couple of drawbacks to the program, although both can be overcome. Firstly, the Zoom option doesn't make detailed work any easier, but then, *Quill 2* is a doodling and sketching program, and not really designed for anything other than rough work. There's no colour support either, but you can then import your saved bitmapped files into programs like *Papyrus Gold,* which supports IMG graphics in eight different colours.

The first version established a precedent that would be difficult to beat, and *Quill 2* has done the right thing by sticking with its predecessor's good points and fixing its few faults. *Quill 2* also supports a System Drawing Option (see the panel below), which improves its compatibility with graphics cards.

As a doodling package, *Quill 2* is a worthy successor. The upgrade path should be good value if you already have the original, and if you haven't already got a copy, get hold of the new version. After all, it's fun! ***stf***

NICK PEERS

What's new in Quill 2

1. Up to 32 different nibs can now be used within each drawing. The original release only supported one nib which meant obvious restrictions on the variety and texture of your drawings. A host of associated options are also provided to supplement this, including the ability to assign certain pen strokes to certain nibs.

2. You can export your sketches in IMG format at any magnification, as you could before, but you can now also decide whether you want to export or print them in landscape or portrait orientation, via *Imagecopy 3.54,* which is available from the FaST Club on ☎ 0115 941 0241, and reviewed on page 41.

3. It supports the Wacom Artpad, which is an as yet unreleased graphics tablet with a higher resolution than the Tabby, and is aimed at the professional user.

4. System Drawing Option means that *Quill* is compatible with more graphics cards, because it complies with certain standards. When graphics cards are released in the future, as long as they also obeys this set standard (they probably will), *Quill 2* will be compatible with them.

Quill 2

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- There's an upgrade option

Lows
- Without Tabby it's awkward and clumsy
- No colour support

81%

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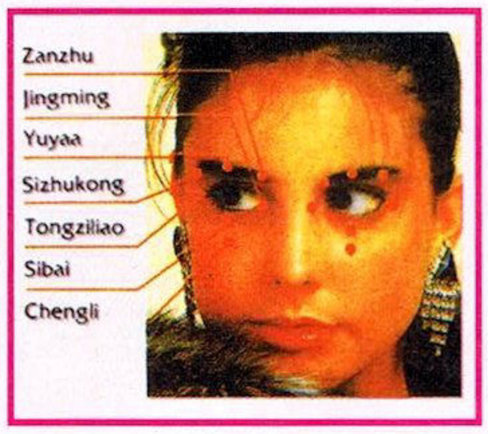
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Office aids

If you've ever suffered from gritty, tired eyes or cramped, uncomfortable legs after a good long session on your ST, then take a look at these.

No, your eyes don't deceive you, no matter how tired they might be. We're reviewing an eye massager and a foot rest. Why? Well, if you've ever used your ST for extended periods – and that means anything over half an hour at a time – then you've doubtless suffered from gritty, red, tired eyes and stiff legs (not to mention the rest of your body).

Now we can't offer news of any cures for stiff *(snip! – Trent) (ouch! – Simon),* but we might have found a cure for the sore eyes 'n' cramped legs. But then again, we might not.



■ The eye massager claims to use the ancient art of acupuncture.

The eye massager, a curious goggle-type piece of equipment that Nick thinks he recognises from an early episode of *Star Trek,* is designed to reduce eye fatigue and strain by promoting stronger blood circulation. It also claims to prevent or slow the onset of near-sightedness and help people who have difficulty sleeping by reducing tension. And it achieves all this using the ancient Chinese technique of acupuncture.

Sounds painful? Don't worry. In fact, you just strap the massager around your face, and switch it on. It then wobbles furiously under battery power, stimulating certain acupuncture points around the eyes.

Ouch!

However, a controlled experiment reveals a few flaws in the theory. These goggles haven't been designed with average shaped noses in mind. You can say what you like about my proboscis (and most people do) but even those subjects with fairly small noses found that after just a few seconds of vibration it felt like the bridge of their nose was being ground to dust. It may be cheaper than having plastic surgery, but you're going to have to bring your own anaesthetic.

"Even subjects with small noses found that after just a few seconds it felt like the bridge was being ground to dust"

Meanwhile, the padded bits that are supposed to massage those vital acupuncture points, as illustrated in the attractive picture above, don't actually achieve contact with your face. Worse, the vibration made nine out of ten participants feel vaguely nauseous and, particularly on the low vibration setting, made the monitor screen appear jumpy. We weren't sure whether you should keep your eyes open or closed with them on, but you certainly shouldn't try any computer-type activity when using them.



■ Sorry, but I still think this looks like something you might see in a dodgy *Star Trek* ripoff. But that's nothing...



■ ...this is what you look like with the eye massager on. This woman isn't really smiling. She's actually grimacing with agonising pain.

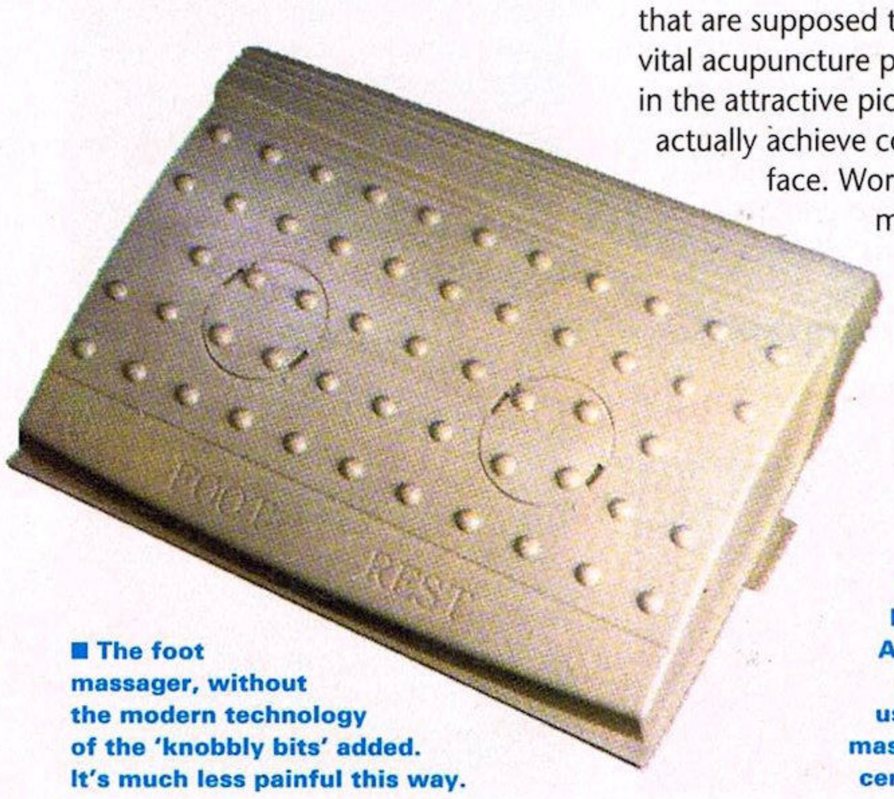
Knobbly bits

And then there's the foot massager. This knobbly piece of equipment "improves productivity and reduces discomfort" by enabling you to find a more comfortable sitting position. It also provides surface treadbumps and knobbly, rotating spheres to massage tired feet and improve blood circulation. This assumes that you always sit with your feet directly in front of you, under the desk. Show me the person that does this and I'll show you an ST user that backs up his hard drive every night.

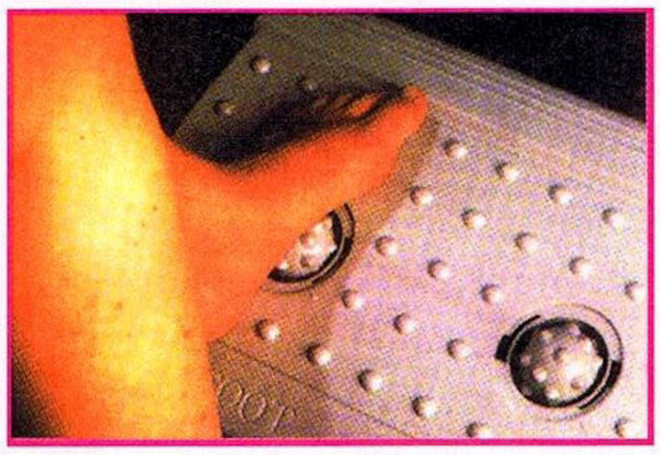
Then, once again, there's the discomfort factor. The surface bumps aren't too bad, but the massage spheres are, to be blunt, agonising.

All is not lost, though. Stick the massage spheres over your eyes and strap them on with some sticky tape, attach the eye massager to your feet, and you're away. Much better. ***stf***

JILLIAN WERB



■ The foot massager, without the modern technology of the 'knobbly bits' added. It's much less painful this way.



■ You don't have to wear American Tan tights when using the foot massager, but it certainly helps.

Eye massager and foot rest

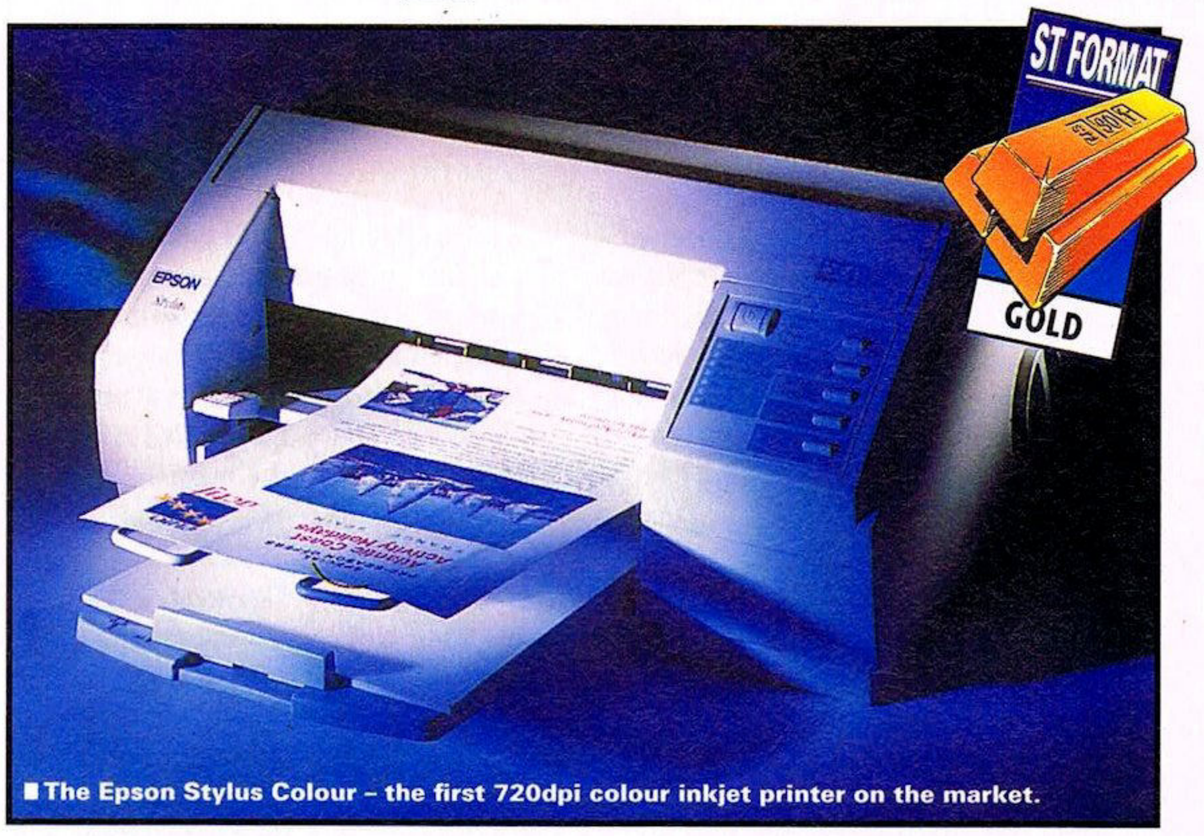
Eye massager £24.95
Foot rest £19.95
Golden Image (UK)
☎ 0181 900 9291

Highs
- Robust foot rest
- Good for a giggle

Lows
- Painful to use
- Neither works
- Expensive, and it all feels 'plasticcy'

30%

Epson Stylus Colour



■ The Epson Stylus Colour – the first 720dpi colour inkjet printer on the market.

The best-known colour inkjets tend to have Hewlett Packard or Canon stamped on them, so what's this new Epson colour machine all about?

Although there are quite a few inkjet printers on the market, most of them originate from HP or Canon, or are clones using the same technology. But now there's a serious alternative contender in the shape of Epson, the printer giant renowned for its dot matrix and laser machines. Their first inkjet – the Stylus 800 – scored 79% in *STF* 48. Epson have now released their first colour inkjet, and it can produce full-colour output at 720 dpi, over double that usually available on other printers. Just how is this possible?

Previously released Epson inkjets all print at 360dpi, the standard set by Canon's bubblejet printers. But by using a special plastic coated paper that's exclusive to Epson, the little ink dots deposited are 'shrunk' to half the size before they dry. Utilising a special printer driver, which overprints with more information, you end up with 720 dots per inch – four times more detail per square inch than 360dpi printers. The only drawback is that special drivers are needed to take advantage of this extra resolution, However, these drivers are being written. COMPO are in the final testing stages with a Speedo-GDOS driver for ST and Falcon applications. *Imagecopy 3.5* (see facing page) can output at this resolution, Arnor are planning to develop new printer drivers for *Protext,* and System Solutions are currently writing drivers for *Calamus SL* and *Didot Layout* (colour) and *NVDI* (mono). The printer also works well with a program called *Idealist,* which enables you to use the printer to print ASCII text in different ways.

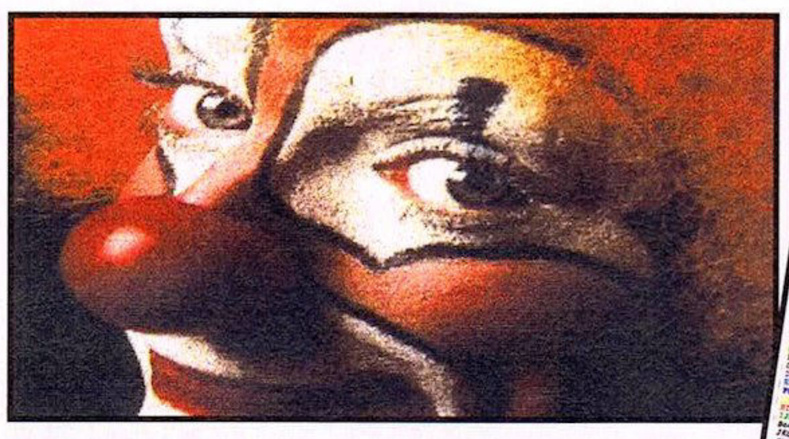
How it all works

The Epson printer contains two printheads, each with its own ink reservoir. One head has black ink for normal mono text output, and the other is equipped with a special tri-colour (cyan, yellow and magenta) cartridge for colour printing. Mixing black and the three colours together results in millions of hues on your page, given the right software. *Imagecopy 3.5* excels here, enabling you to fine-tune the individual brightness and contrast of each colour – like adjusting your TV but with even more control. Your preferred settings can be saved to an INF file, which can be loaded in when required, or can be the default.

Stylus in use

The Epson Stylus Colour looks more like a dot matrix printer than a typical inkjet machine, but setting it up for use is very easy. We tested the printer for text using our usual 60-line *STF* test page, printed out from *Protext v6.5,* and with black text only it took 47 seconds, which compares fairly well with most inkjets. The printer gave a good result, much better than Epson's previous mono Stylus 800 which produces rather unimpressive, spidery output. The test was conducted at 360dpi, as no 720dpi driver exists yet for *Protext.*

We used *Imagecopy 3.5* to evaluate the printer's performance with graphics. The results were really outstanding – the best colour printouts you're likely to see from a 'home' printer – and the pics looked like real colour photos. The only drawback is speed. At 360dpi, a 6" x 4" pic takes only five and a half minutes to print, but at 720dpi it takes just over half an hour!


■ This picture was printed at 720dpi on Epson's special glossy paper. It took four times longer than the 360dpi print of the same picture, but was worth the wait.


■ Colour text looks very pretty.

Verdict

Competition is good news for ST users, and now there's another excellent printer to rival HP's DeskJet range. The lower running costs need to be tested over a longer period, but the replaceable ink cartridges should be competitive with others on the market. If you want the best possible colour output from an inkjet printer, this is the machine to go for. ***stf***

PETER CRUSH

Epson Stylus Colour

£449 (possibly lower if you shop around)
Epson UK Ltd ☎ 0800 289622

Highs
- Amazing colour printing
- Highest ever resolution for an inkjet

Lows
- Max resolution graphics printing is slow
- Lack of printer drivers, but this should change

What else
- DeskJet 560C, street price £435 approx Hewlett Packard ☎ 01344 369222 This and the similar DJ550C are traditionally the favourite colour printers among ST owners, but the Stylus Colour's superior colour graphics output could change this.

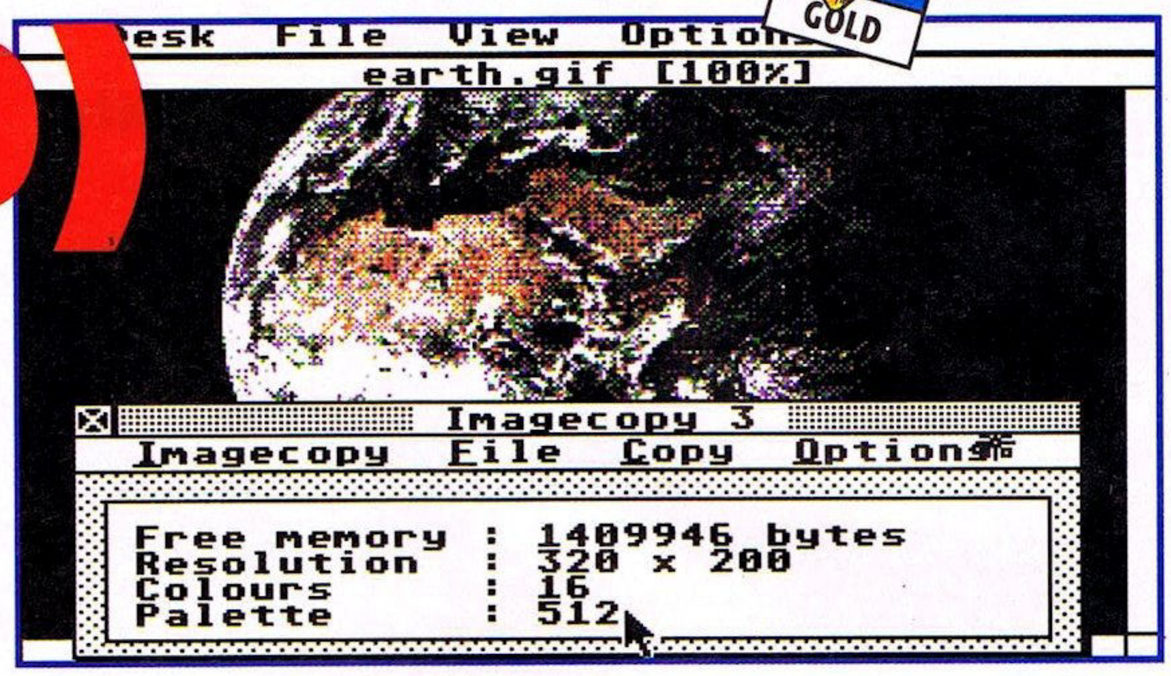
90%

Piezo vs Thermal printheads

Coming on to the inkjet scene somewhat belatedly with their Stylus range of printers, Epson have developed their own printheads that last the life of the whole printer. These Piezo heads utilise tiny piezo crystal 'pumps', as opposed to the thermal heads used on DeskJets and Bubblejets. Both technologies spit the ink on to the paper without the physical contact hammering as used by dot matrix and daisy-wheel printers. This makes inkjets much quieter and smoother than the conventional impact printers, but not quite as fast and detailed as laser printers. The combined printhead-cum-ink-reservoir cartridges used in the HP and Canon models are supposed to be thrown away when the ink runs out, although some people have been known to refill them. But when the ink is all gone with Epson printers you only have to renew the ink reservoir, which the manufacturers claim to be cheaper and more eco-friendly.

Imagecopy 3.5 (CD)

PhotoCD images are now showing on your ST or Falcon screen thanks to the latest version of *Imagecopy*.



■ ***Imagecopy* 'dithers' whatever image you throw at it and displays on any monitor. The 512 colours in this pic are represented by the 16 colours available on an ST.**

Back in *STF* 62 *Imagecopy 3* scored a whopping 92% for its excellent image handling abilities, which include being able to grab and save images from your ST or Falcon screen, display them in a multitude of file formats and print them out. Now in strides version 3.5, with loads of new capabilities and an intriguing 'CD' tagged on.

Imagecopy v3.5 comes in two flavours, 'standard' *Imagecopy 3.5* and *Imagecopy 3.5 CD*, both of which are supplied on normal double-sided disks. What's the difference? Well, the CD version costs a fiver more, because it can load and display PhotoCD images. PhotoCD is a picture file format developed by Kodak and now widely used on Macintosh and PC computers for top quality work in printing and publishing circles. The CD version takes up about 37K more memory, so unless you plan to acquire a CD-ROM drive you'll find the standard v3.5 does everything you want except display PCD (PhotoCD) files. On the other hand, if you do plan to buy or have already bought a CD-ROM drive, you can get PCD files reasonably cheaply on CD-ROM, with everything from NASA space photos to travel and landscape photography on offer. For example, you can get a range of CDs from GST Software ☎ 01480 496575 at £19.95, each containing 100 photos, ranging from views of London and Paris to sport and summer holidays.

The new features

All the previous *Imagecopy* features are still there – you can copy images from screen in any video mode, print images and screen dumps to virtually any printer, catalogue up to 60 images per page with names, create halftone images to use in other programs, convert images between numerous different formats, batch process and the program can be an Accessory or standalone. Then there are all these new goodies crammed into version 3.5:

1. A Thumbnail option displays miniature pictures from disk and represents a set of images in a single window.



■ **On your ST the latest version of *Imagecopy* zooms in and out of pictures, much like most art software. It works incredibly fast too.**

This is useful for cataloguing images – you can grab and save a snapshot of the thumbnails for future use.

2. Screen images can be scaled to fit exactly on to your screen. This enhances the Slideshow feature, improving the appearance of pictures on low-resolution monitors, and saves you scrolling.

3. A new Zoom feature enables you to zoom in and out of any picture displayed, either via a pop-up menu or using the <+> and <-> keys on your ST. You can also rotate and flip your picture in 90-degree steps.

4. New Read formats are SunRaster-files and XGA files, and new Write formats include true-colour IMG in 16, 24 or 32-bit.

5. Improved random print dithering features reduce 'banding' effects with some inkjet printers, improved memory allocation reduces RAM usage, and there are many other minor improvements, features and tweaks.

Is it worth it?

There aren't any other similar commercial products on the market. *Imagecopy* is almost unique in the wide range of functions it performs. The closest is *GEM-View*, a shareware utility, which can view pictures but can't 'grab' images from screens, nor can it print with the finesse of *Imagecopy*. Although *GEM-View* and most art programs can convert between file formats, *Imagecopy* scores in the wide range of image types it can handle, and it can batch process. *Imagecopy 3.5 CD* can read about 30 different file formats and write ten major formats in various configurations.

Also, all *Imagecopy's* features are built-in, whereas other programs involve loading in extra modules to handle certain operations. This together with its ability to run as a Desk Accessory or a standalone program makes *Imagecopy* a force to be reckoned with, and, working fine under MultiTOS or MagiC, it's fully multitasking compatible.

With CD becoming the standard for storage, and CD-ROM drives appearing for the Falcon and ST, *Imagecopy 3.5 CD* is the one to go for if you want picture power. ***stf***

PETER CRUSH

UPGRADING

Upgrading involves returning your master disks and sending a fee of:
From *Imagecopy v3* to *v3.5*, £6.95
From *Imagecopy v2* to *v3.5*, £15.95
From *Imagecopy v1.5* to *v3.5*, £20.95
From *Imagecopy v1* to *v3.5*, £24.95
Add £5 if you want the CD version of *v3.5*.

PHOTOCD?

PhotoCD is an image format that provides fantastic photographic-quality pictures. They're ultra-high resolution (up to 2,048x3,072) and packed with detailed colour information. In fact they contain so much data that just one PhotoCD image takes up 18MBytes of storage space at its maximum resolution. For that reason, PhotoCD images are always supplied on CD-ROMs, which can hold up to about 600MBytes compared to your humble floppy disk that can hold up to 800K max. At present not many ST owners have access to a CD-ROM drive (your music system's CD player won't do) but they plug into the Falcon's SCSI port easily enough, and are gaining in popularity. COMPO are launching a CD-ROM drive that will work on any ST, bypassing the usual need for a SCSI port by using a special cartridge port adaptor. If you don't have a CD-ROM drive you won't need the CD version of *Imagecopy 3.5*, which costs £5 extra because of royalties payable to Kodak.

Imagecopy v3.5 (CD)

£34.95 (£29.95 for the non-CD version)
FaST Club ☎ 0115 945 5250

Highs
- Powerful and fast
- Friendly to operate
- Handles virtually all image formats

Lows
- Can't read vector files (but these are less used)

What else?
- There are some good PD and shareware image utilities around, like *GEM-View* and *Speed of Light*, but they lack the all-round features found in *Imagecopy*

93%

PUBLIC SECTOR

Once again the Public Domain market is heaving with new releases. Nick Peers selects only the best.

GAMES

GOLDEN DAWN MENU 15
STELLAR PD, DISK GOLD 15

CYBERNETIX IS A CROSS BETWEEN *Asteroids* and *Dropzone* but with superlatively detailed graphics, and it's horribly addictive to boot. You simply blast anything and everything to get to the next level – asteroids, aliens, assassins and even a piece of lettuce *(er, no – Trent)*. It can be difficult, and you shouldn't go flying around at high speeds expecting to kill everything without being blasted back. Fun, fun, fun.

Psycho Pig 2 is a cutesy platform game that, owing to its simplicity, should appeal to younger players. The only challenge to more hardened game players is that every time you lose a life you have to start again... at the beginning. The limited cartoon graphics, right down to the explosions themselves, are reminiscent of those old BBC computer platform games, and the sound effects aren't much more impressive. Fun in a nostalgic, five-minute kind of way.



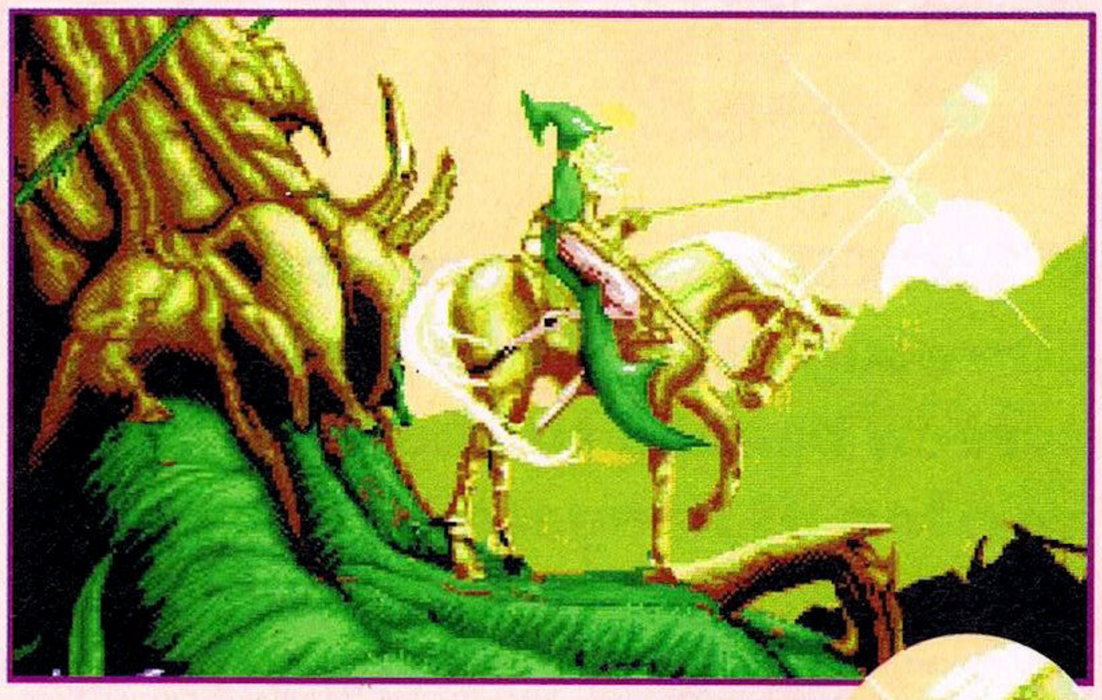
■ ***Cybernetix*, in (fast and furious) action. Don't you just love waggling your joystick at random and firing madly.**

Frogger is *Frogger,* no more, no less. It's been coded by Dave Munsie this time (he also coded *Frantick,* which scored 73% in PD last month), but the game brings nothing new to the genre. Again, one for the kiddies.

Teteri is immediately recognisable as a *Tetris* variant, in which two players compete for supremacy, although the swirling backgrounds, beepy music and high-speed scrolling messages are too annoying to lift this variant above its rivals.

The disk scores highly largely on the basis of *Cybernetix.* The other three games are fun, but are more likely to appeal to the less chronologically challenged (in non-politically-correct terms, younger) among you. 'Nuff said? No? Oh, just go out and buy it!

***STF* RATING: 85%**



■ ***Frogger*. It's great, it's fun, and it's really old. Jill used to play it at school – that's how old it is.**

ST VEGAS
WHO'S PD DISK GD5

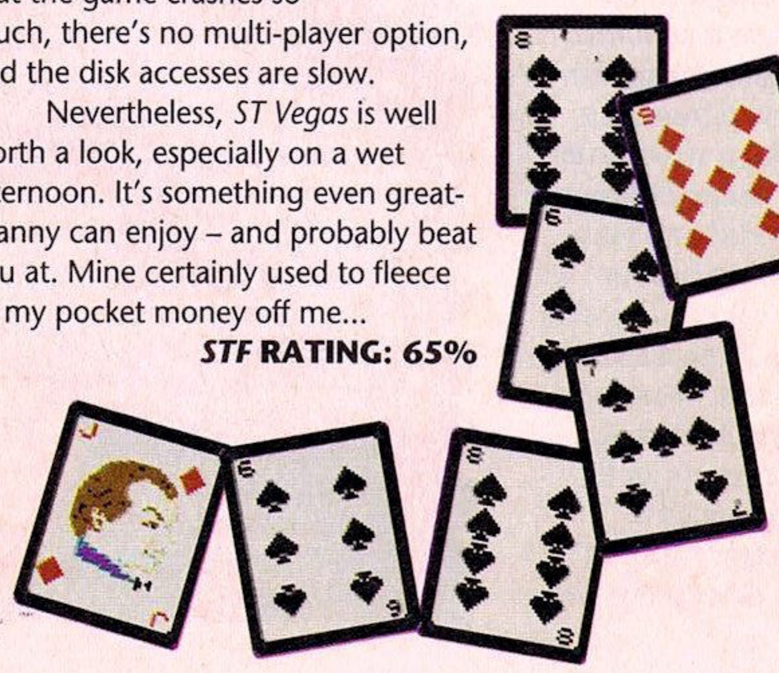
GAMBLING PROGRAMS on the ST are by nature limited affairs. This one is less limited than most in that it offers you four games: *Roulette, Slots, Poker* and *Blackjack.* Each is nicely presented, and the spot effects are minimal yet effective. The major criticisms are that the game crashes so much, there's no multi-player option, and the disk accesses are slow.

Nevertheless, *ST Vegas* is well worth a look, especially on a wet afternoon. It's something even great-granny can enjoy – and probably beat you at. Mine certainly used to fleece all my pocket money off me...

***STF* RATING: 65%**



■ ***Poker* involves getting pairs, three of a kind, flushes, that sort of thing. But where are your opponents?**



LINDEMO AND WAR
GOODMANS PD, DISK GD2374

LINDEMO IS THE DEMO OF A TEXT-only adventure that sees you catapulted from your normal life into a magical land, and you're going to have to find ten gems to enable you to return to your own life. Hmm. It's when you find yourself wandering, utterly lost, around the landscape, with descriptions like: 'You are in section three of a winding passage', that you realise it's just not worth the hassle by any means.

Meanwhile *War* enables *Warhammer* (the tabletop role-playing game) addicts to create lists for their own armies, which saves the time and hassle of recalculating troop strengths. If you don't own or like *Warhammer,* this is not the program for you. If you do, it'll save hours of fiddling around with bits of paper trying to work out where you are.

***STF* RATING: 50%**

OVERSCAN INVADERS
FLOPPYSHOP, DISK BU4666

OVERSCAN Invaders is *Space Invaders* but with the borders removed, giving a larger screen area. You blast the colourful, detailed aliens (but why is your spaceship so badly drawn?) in the fine but essentially limited, tradition of the genre. The more you kill, the quicker they get, until you're firing as fast as you can in a futile attempt to kill the last alien before he reaches the bottom of the screen.

This offering adds nothing new to the genre. It's colourful (using 32 colours on screen) and it uses some new technology (in the form of overscan), but you should only get it if you really want yet another *Space Invaders* clone.

***STF* RATING: 55%**



■ ***Overscan Invaders* is so named because it uses overscan to increase your ST's resolution. Cunning, eh?**

ART



SPEED OF LIGHT 3.5

FLOPPYSHOP
DISK ART 4673

■ **If you want to create the illusion of 256-colour images on your ST, *try Speed* of Light 3.5. Then, bands of the calibre of A-ha can be immortalised on your machine forever. Oh yes.**

Speed of Light 3.5 enables you to view GIF or JPEG images on your ST. GIF images are common on PCs and Macs, and can use up to 256 colours, which leads to problems on your ST when it comes to displaying them.

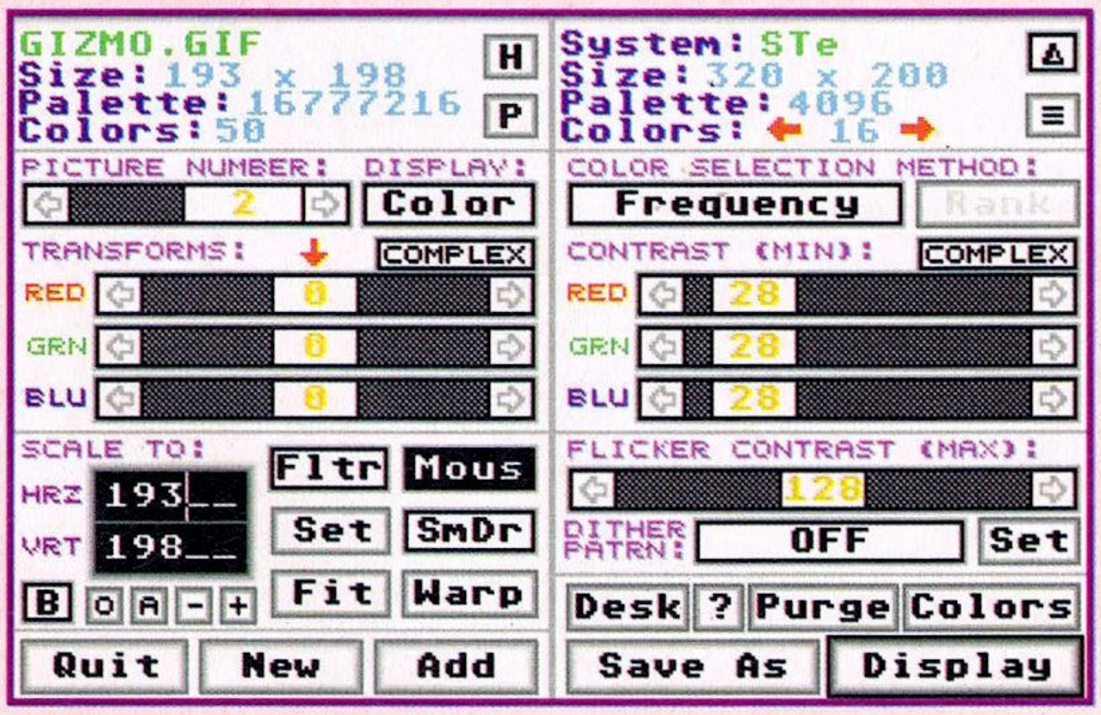
Using *Speed of Light* you can load in your GIF file(s), then display them in colour or in greyscale. The program rapidly switches palettes to make the ST's 16 colours look more like 256 colours. Unfortunately, the picture flickers as the program manfully attempts to switch palettes as swiftly as possible, but you at least get a good idea of how attractive a GIF file can look. If you have more memory the switching is quicker, and subsequently less annoying.

Displaying the images in greyscales removes the flicker problem, although you are obviously restricted to viewing the image in monochrome. There are also lots of dithering options, which give you a compromise between colour and greyscale by 'shading' the picture with dots to create a more attractive illusion. You can even save your changes between formats, enabling you to convert between GIF and Degas file formats to then use in your favourite art package, for example.

Registering costs about $30, but it does lift certain restrictions – you'll be able to load more than one JPEG image in every time you load the program, and you'll also be allowed access to all the dither options which can only improve your images for conversion into Degas or IMG format.

Version 3.5 of *SOL* continues to make the program yet more versatile – it supports JPEG graphics and it has more options available, as the screenshot shows. If you want the chance to view graphic files from other machines on your ST, this is one program you shouldn't miss.

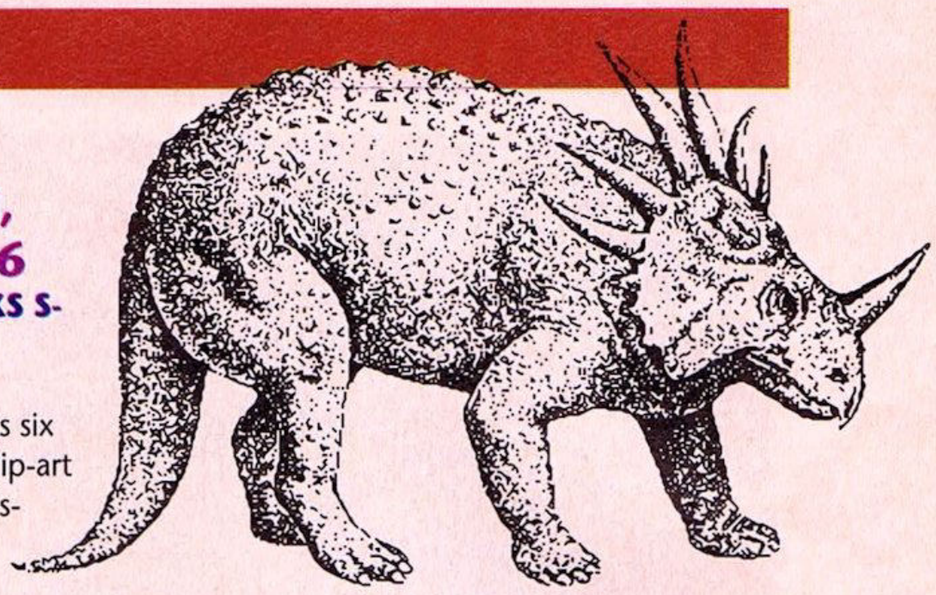
***STF* RATING: 90%**



■ **The main screen for *Speed of Light* is littered with options for you to try.**

CLIP ART COLLECTION, VOLUMES 1-6

FLOPPYSHOP, DISKS S-CLIP 4590-5



■ **Argh! Run away, run away! Oh, it's just a picture of a ferocious dinosaur from the Floppyshop clip-art collection. Ahem.**

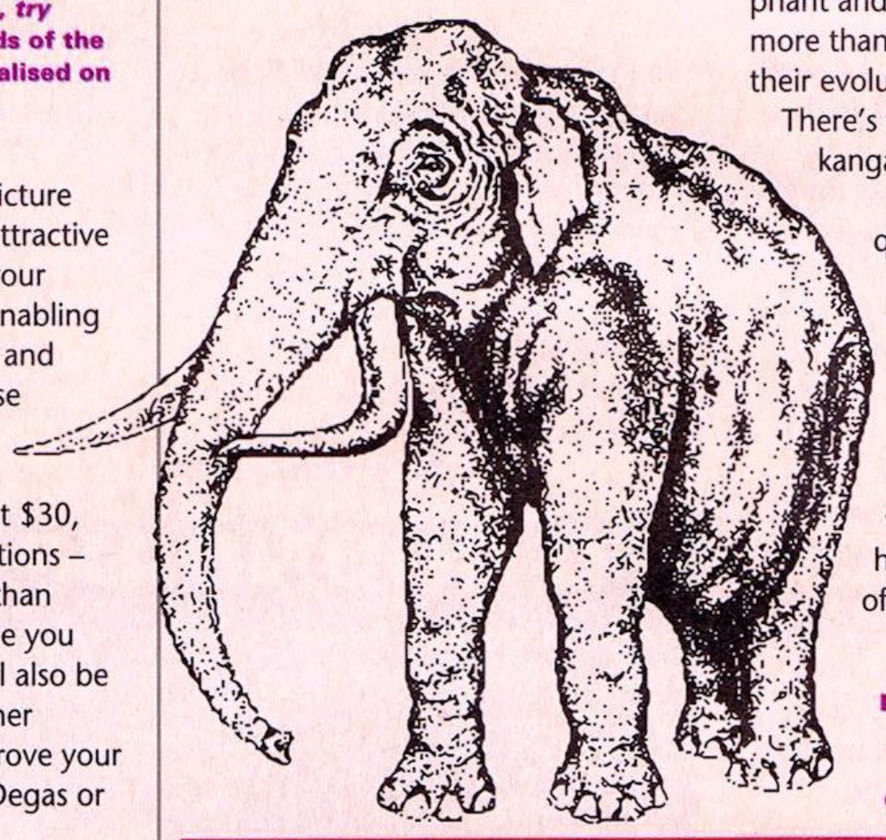
This collection includes six disks of high-quality clip-art images from the prehistoric era. Unlike other PD clip-art collections, each IMG picture in this collection consists of one animal or item only, and is blown up to maximum resolution to achieve as high a quality as possible when imported into DTP packages or document processors. The files themselves are packed, and it manages to cram 20-30 pictures on to each disk.

The disks provide a good overview of the era, featuring several dinosaurs, but also concentrating on mammals, plants, fish and even pre-humans. Several creatures, such as the elephant and man himself, are given more than one picture to highlight their evolutionary development.

There's even a picture of an early kangaroo in there somewhere!

If you're after some high-quality clip-art from the prehistoric era, you need look no further. At £10.50 for six disks that are literally crammed with top-notch image files, you can be assured that you're getting value for money, unless you have no interest in the era, of course.

***STF* RATING: 88%**



■ **Some creatures are shown at different stages in their development. Here's an early picture of a mouse.**

DEMOS

OH NO!! MORE FROGGIES

FLOPPYSHOP, DISK DEM 4687

Demos are a subjective experience. Some love 'em, others detest 'em. This one's bloomin' marvellous, for a change. Yep, there are messages. Yep there's an annoying tune. But there's some great still pictures along with the usual swirling colours. Unlike the awful *Fly Over Fantasy* demo from the last issue you don't wait ages for each screen to load, and the credits are left to the end of the demo. Brownie points there lads!

And the froggies in the title are presumably the French boffins who wrote the demo, collectively known as Sector One. Thanks for some great entertainment from a rosbif (that's an Englishman for the less cosmopolitan among you).

***STF* RATING: 83%**



UTILITIES

```
>LOAD "DEMO3"
Couldn't open file!
>LOAD "DEMO2"
>LIST
   10MODE 0
   20PRINT "PLOT85 ( Triangles ) with us
er-defined patterns....."
   30A=INKEY(800)
   40MOVE 0,0
   50!&82=&018007E0
   60!&86=&1C3838IC
   70!&8A=&324E65A6
   80!&8E=&6246E187
   90!&92=&E1876186
  100!&96=&742E3BDC
  110!&9A=&1C3807E0
  120!&9E=&0
  130?&80=1:?&81=0
  140A%=64:X%=&80:Y%=0:CALL&FFF1
  150MOVE 1279,0
  160PLOT 85,640,512
>_
```

■ **If you miss the days when you paid £399 for a 32K machine then fret no more! Except that now it's a mere £1.75 for the privilege. Here's a listing of one of the demo programs supplied with the *BBC BASIC emulator*.**

THE PD COLLECTION
TRANSPARENT DREAMS PDL

A variety of odd utilities make up this new collection from Manchester's finest PD library, and they're all useful as well as entertaining. There's a virus killer, *VKiller 3.84*, which is old but indispensable if you don't possess a virus killer of your own.

Also provided is a BBC BASIC emulator, which will enable you to dig out those old copies of *Input* and type in all your favourite listings.

Then there's the *Big Eye* demo (a *STOS* utility with which you can create swirling psychedelic patterns), which is fun if a little painful on the eyes first thing in the morning.

Rounding the disk off are *WP Tools*, an Accessory for *1st Word*, which gives you such wonderful features as alarm, word count and free RAM among other things, and *Phraqtal* which is lots of swirly fractals (no, really!). An odd bunch, but even if you're after just one of the programs provided, you can have some serious fun with the others.

***STF* RATING: 76%**

PSION-ST TRANSFER SOFTWARE
GOODMANS, DISK GD

If you've got one of those newfangled Psion Series 3/3a Notepad things and you want to transfer files between it and your ST, this is the disk for you. Then, if you're a real masochist, you can work on the Notepad while on the train to and from work (what do you mean, no?), and transfer your files to your Atari when you reach your destination.

You can also view or print files on either machine using your Atari's monitor or printer, and even create folders or delete files from the Psion on your ST. This is yet another classic example of how PD fills in the gaps that commercial companies avoid because the user base isn't strong enough. Full instructions for connecting your Psion and ST together are included, but note that you'll need the PC cable called link3. Try wherever you bought your Psion thingy – Dixons for example.

***STF* RATING: 71%**

VARIOUS UTILITIES
GOODMAN PDL, DISK GD2375

This disk features two archiving utilities: version 2.2 of *DC Xtract* and a German offering, *Automatic File Extractor*. Then there's *Gempak*, which enables you to pack various file formats, including PRG, ACC, FNT and DOC. The final program is *CKBD Deluxe*, with which you can easily access your system's character set – useful if you suddenly need to write to a German friend in their own language. How *CKBD Deluxe* fits in with the other three programs is a mystery, unless you like packing files with German characters, or something.

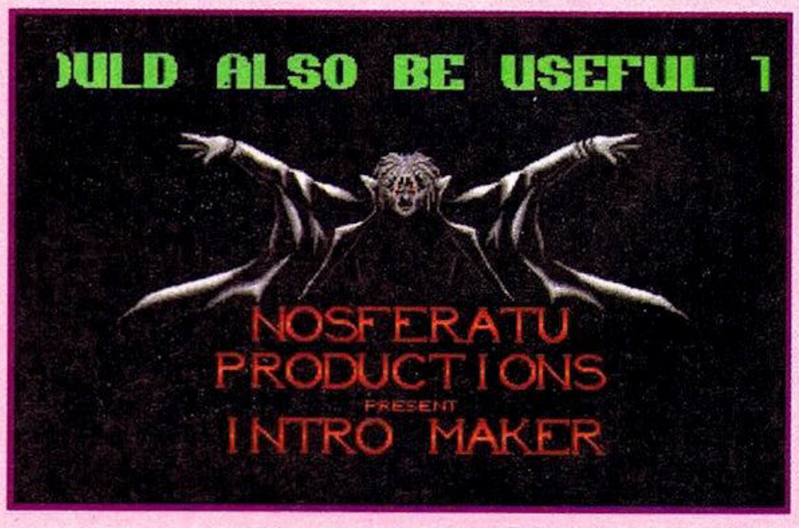
Unfortunately, you'll need a good working knowledge of German to use *Automatic File Extractor* and *Gempak*, but apart from that this is a useful compilation.

***STF* RATING: 70%**

INTRO MAKER V1.5
FLOPPYSHOP, DISK UTIL4656

Intro Maker does exactly what its title says – it makes intros for your programs, demos, games and anything else you can think of. It's coded in *STOS*, but hasn't been fixed to work with any machines other than STFMs (see *STOS Fix 3.0* on this month's Cover Disk for a solution). To create your intro you just include the main INTRO.PRG in your Auto folder, along with a tracker module (created in *STOS* or *ProTracker* for example), a Degas picture, and a text-file containing your scrolling message. The rest is up to you, and if you like the effects don't forget to register!

***STF* RATING: 68%**



■ **You too can have an annoying scrolling message, tracker tune and picture at the start of your programs thanks to *Intro Maker*.**

PD ROUND-UP

Missed a back issue? Want to know when we reviewed a particular piece of PD in the last few months? Look no further than this guide to PD over the past four issues.

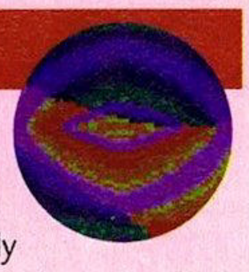
Title	PD Library	Type	Issue	Rating
Starball	Cover Disk 64	Game	63	96%
Munch	Ad Lib PD	Art	64	93%
Dynabusters+	AWF PD	Game	65	92%
Award Maker Plus	Tumblevane PDL	Utility	66	91%
HP Support Disk 2	Floppyshop	Utility	64	87%
Falcon Utilities	Floppyshop	Falcon	65	86%
Route Finder 2.0	Cover Disk 66	Utility	66	86%
Marcel W.P.	Marcel	Utility	63	85%
Walls of Illusion	Goodmans PD	Game	63	85%
ST Beermat	Organised Chaos	L/Ware Diskmag	64	84%
Kozmic 4Goodmans	PD	Utility	66	81%
Ultimate STE Megademo	Floppyshop	Demo	66	81%
Family Tree 2.1	Merlin PD	Utility	65	80%
Golden Dawn Menu 10	STellar PD	Game	64	80%
Power Magazine 16	Power PD	Diskmag	64	80%
Novadisk 2	James Bird	Diskmag	64	76%
Scorewriters Tumblevane	PDL	Music	66	76%
Darts 180	Merlin PD	Game	65	75%
MIDI Utilities	Floppyshop	Music	63	75%
World Series Cricket	Riverdene	Game	63	75%
Imagelab	Goodmans PD	Utility	65	74%
Frantick	Goodmans PD	Game	66	73%
Lotus Document Displayer	Chris Sharp	Utility	64	70%
The TIFF Demo	Floppyshop	Demo	65	70%
Violent Death	Transparent Dreams	Game	66	68%
Atari Museum	Merlin PD	Misc.	65	66%
STellar MOD Collection	STellar PD	Music	66	65%
Ozbornz Modules 1/2	Transparent Dreams	Music	64	60%/50%
Zuffers	Power PD	Game	66	60%
Golden Dawn Menu 9	STellar PD	Game	64	55%
Club Culture Mix Pack 2	STellar PD	Demo	66	51%
Jet Bike Challenge	Transparent Dreams	Game	65	48%
Education Comp	Floppyshop	Education	63	45%
World Cup 1966 Demo	GL-PD	Demo	64	40%
Fly Over Fantasy	Floppyshop	Demo	66	25%
Bart's Rainy Day	Floppyshop	Education	63	15%

See page 85 for a list of all PD libraries. Although we've listed the libraries who sent in the disks for review here, most of the programs should be available from a selection of libraries.

FALCON

CYCEDELIC KNOCKOUT DEMO

FLOPPYSHOP, DISKS SF4667/8

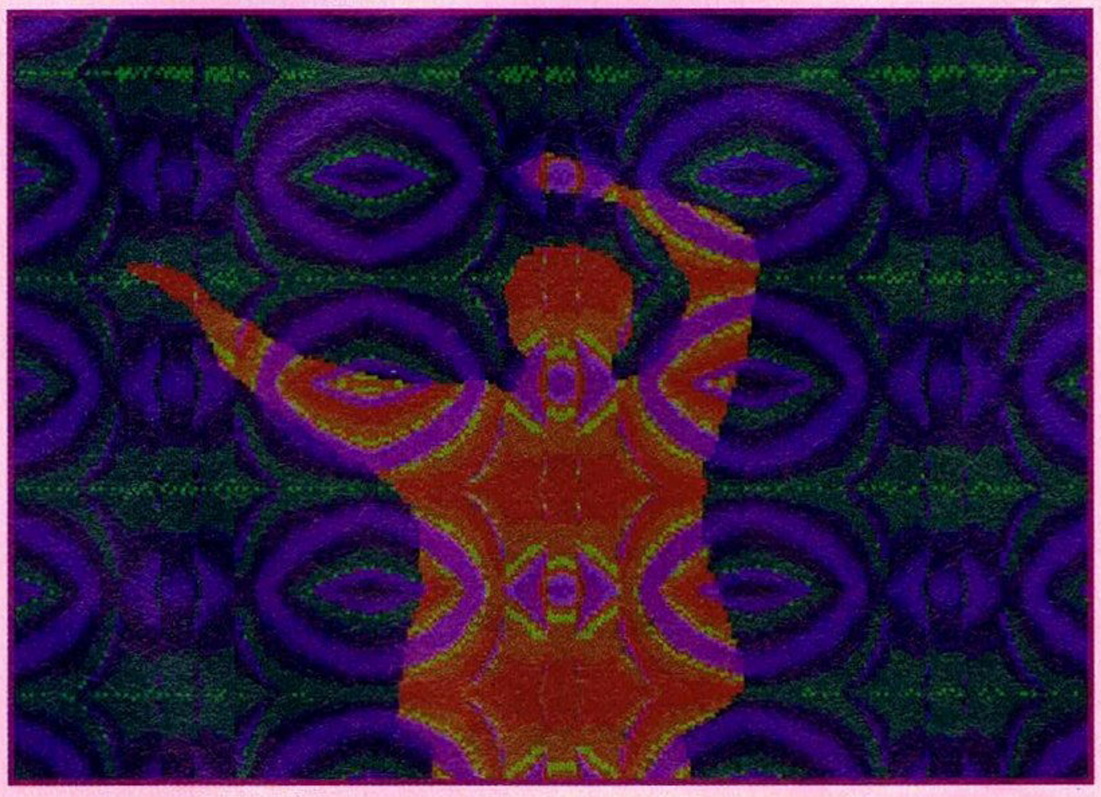


THE INTRODUCTION TO THIS DEMO is excellent, and provides an entertaining three-minute distraction. *(Editor's note: Nick, being a Star Trek aficionado thinks anything with Star Trek in it is fabulous. The rest of us were, to be honest, a bit bored by this part of the demo. Please continue, Nick.)*

The main section of the demo, however, is your usual banal house tune and swirly psychedelic graphics. Nice animation though, which I managed to appreciate even through the hangover.

(Editor's note again: The rest of us really liked the rest of the demo. Standard tricks were used, and it wasn't technically ground-breaking, but it was well put together and entertaining.)

***STF* RATING: 79%**



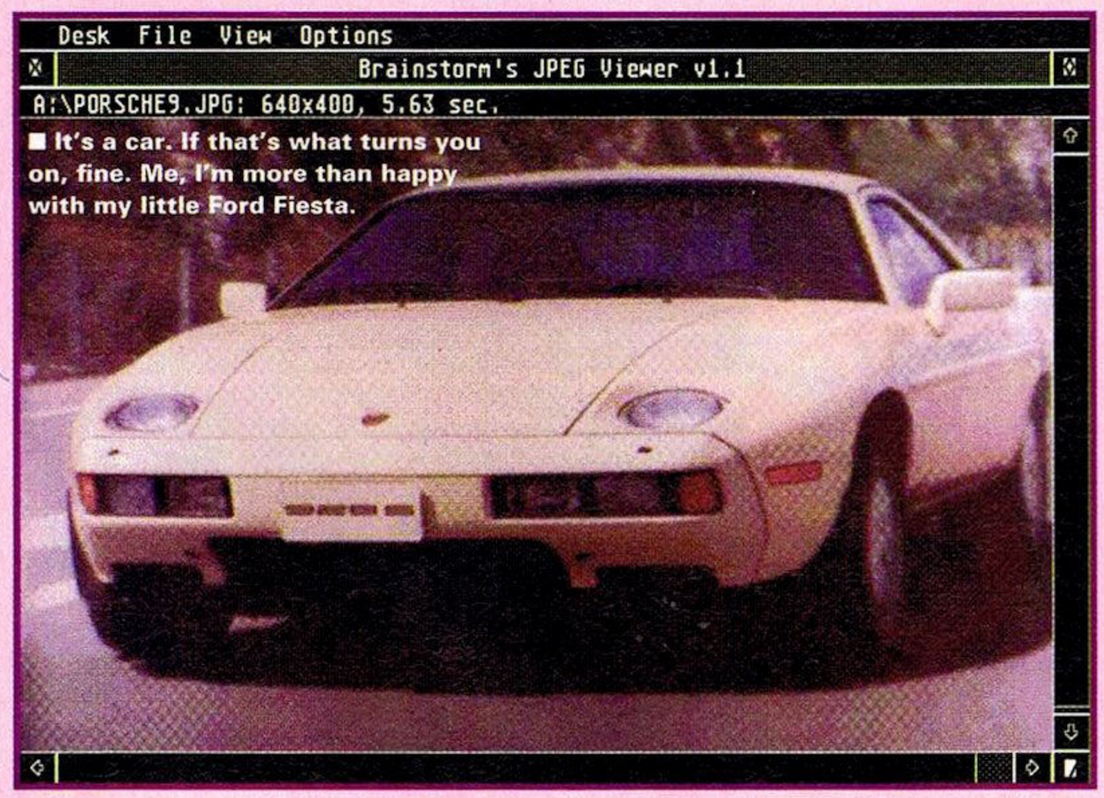
■ **Haylp! Haylp! It's the Mugwumps, and only Captain Picard can save us now!**

JPEG PICTURES

FLOPPYSHOP, DISK F4576

IF YOU'RE A CAR FREAK (CUE BANAL comment from Trent about the joy of biking) you'll love this disk, packed as it is with around 20 JPEG pictures of four-wheeled motor vehicles. If you prefer scenic pictures of Welsh valleys then you won't find much here to entertain you. All reet?

STF RATING: 75%



MOD FILES

FLOPPYSHOP, DISK F4681

DON'T YOU JUST LOVE ALL THESE compilation disks giving you a list of MOD tunes that are named one thing, but are actually something completely different (for example, PAPAWAS.MOD is actually called *2nd Dream* or something). But then, however atmospherically they start some damned thudding dance rhythm intrudes sooner or later. If you like dance music, you'll probably love this to death. If you're into Queen *(no! – everyone else)*, this disk is statistically proven not to be for you. ***stf***

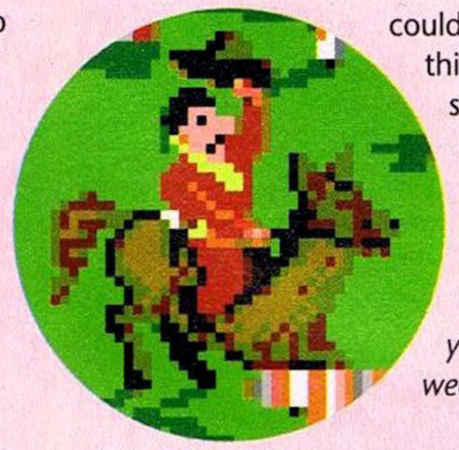
***STF* RATING: 61%**

EDUCATION

BIG TOP TYPE

FLOPPYSHOP, DISK EDU4587

THIS ONE'S STRICTLY FOR THE KIDS – a simple demonstration program that teaches your child about the circus. Just get little Algernon or Tabitha to hit any of the keys to bring up a little picture and accompanying sound effect. If you'd rather little Timmy didn't get his grubby hands all over your pristine keyboard, you can select the demo version taking you through each letter.



The graphics are nicely done if a little small, and the digitised sound effects work well. An 'adult' would be entertained by this for a maximum of, say, ten minutes, but if you have a 1MByte ST and you'd like to keep your little 'un entertained for days, you could do worse than buy this. It's a bit limited in scope, but it's fun, and would make a perfect companion to an actual visit to the circus. *(Oh, I wondered why you were carrying your ST to the circus last week – Trent)*

***STF* RATING: 67%**



■ **Introduce your child to the circus with *Big Top Type*. Then pray he or she doesn't (or alternatively, does) run off to join one when he or she is old enough.**

PD TOP TEN

Our monthly feature where one PD Library gets to list its best-selling PD of recent times. This month, Welsh giants GL-PD get to show their wares:

1. **Hunt for Grey November (GL0152)**
2. **Psycho Pig 2 (GL1180)***
3. **Super Psycho Kart (GL1652)**
4. **The Computer Coarse Angler (GL0906)**
5. **CD Player STE (GL0499)**
6. **Birds of Prey (GL1223)**
7. **The Sid James Demo (GL1220)***
8. **DCS Compilation Disk 1 (GL1709)**
9. **Award Maker (GL0661)**
10. **Home & Office (Mystic, Periodic, Scribe, Thesaurus) (GL0494)**

***: two disks**

GL-PD can be contacted on ☎ 01792 799762, or by writing to them at: 62 Colwyn Avenue, Winch Wen, Swansea, SA1 7EJ. Any PD Libraries wanting their Top Ten featured here should send them in to us, with their latest software at: Public Sector, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW. Okay?

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GAMES

ARCADE

G.366 DAVE MUNSIE GAMES: 9 games from the master programmer, including Frogger.
G.355 WING LORD: Aerial duelling game in the style of the classic "Joust" S/W
G.352 JEWEL BUGGY: Arcade diamond mining game.
G.380 STARBALL: Pinball game arguably the best PD game on the ST!
G.381 MAX (1Mb): Help Max find his girlfriend. A 'cute' arcade platform game.
G.333 SUPER PSYCHO KART: High speed platform game to rescue piglets (1Mb S/W)
G.316 H-MEC 2: The Ultimate Pac Man? (1Mb STE or Falcon)
G.286 ROCKFALL - SPECIAL EDITION: Tunnelling/diamond collecting puzzle game.
G.281 PSYCHO PIG: Platform shoot 'em-up with Rambo-esque pig. (2 disks £3.00) S/W
G.279 OPERATION GARFIELD: Frantic Operation Wolf type shoot em-up action (STE)
G.268 MEGALINE: 1Mb Tron light cycles game for 1-4 players (STE only)
G.250 CYBERNETICS: Good, challenging Defender type arcade game.
G.80 TETRIS & PILE UP: Two very good versions of the Tetris arcade game
G.171 HACMAN II :1 Megabyte version of Pacman, 100 new levels
G.221 GRAV 2: Follow up to highly praised Oids type rotate and thrust arcade game.
G.110 LLAMATRON: 100 levels of fast arcade action with wicked sound FX. (S/W)
G.150 COLUMNS: An impressive relative of the Tetris tumbling block game (1Mb)
G.201 BLAT! Tetris style three in a row, falling blocks with many added features

FANTASY/ROLE PLAY

G.351 TOWERS: First person view role playing fantasy adventure game (2 disks £3)
G.308 WALLS OF ILLUSION: The ultimate Dungeonmaster clone... but it's in German. A knowledge of the language is a distinct advantage but not compulsory.
G.370 MINDMELT : Fantasy adventure with an overhead view.
G.343 BLUDGEON: Solo Fantasy adventure using the Bludgeon combat system (S/W)
G.288 DARKLYTE: Space Crusade type droids wargame
G.262 ALIENS!: Space Marines v Aliens Strategy combat game.
G.115 MYSTIC WELL: Complete "Dungeonmaster" style adventure game

PUZZLE

G.387 SPACESWEEPER: A challenging "Minesweeper" game in three dimensions!
G.315 SKULLS: Addictive up to date reworking of Landmines/Minefield (1Mb STE)
L.94 GRID MANIA (£3.00): One ot two player word search game from Nice Bytes
G.306 LOGIC PROBLEMS II: Three more logic problems from Ben Weston.
G.311 JIGSAW: A computerised jigsaw puzzle. (1Mb)
G.280 COLOUR CLASH: Adventure/maze game with puzzles by Animalsoft. S/W
G.269 QUIZMASTER: Multi-choice answer general knowledge quiz. (STE only)

ADVENTURES

G.356 ENDURANCE: A futuristic virtual reality adventure.
G.321 INVESTIGATION (2 disks/£3.00): Graphic adventure in the style of Sierra On-Line
G.200 ANARCHY ACADEMY: 3D graphic adventure to blow up the school!
G 140 A NIGHT ON THE TOWN: An adventure with the opportunity to meet the girl of your dreams and.... well, the rest is up to you.
G.200 ANARCHY ACADEMY: 3D graphic adventure with the opportunity to meet the girl of your dreams and...well, the rest is up to you.
G.222 GRANDAD AND THE QUEST...: 3D graphic adventure by Ian Scott. Shareware 1Mb
G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Sequel to Quest for the Vest (1Mb 2 disks/£3.00)
G.385 OKLIBS REVENGE: A text adventure in a fantasy setting.
G.156 THE AWE CHASM: An adult adventure featuring Snatch and Crunch (over 18's only)
G.167 SUSAN: An adult adventure (over 18's only)
G.91 QUEST FOR THE HOLY GRAIL: Pythonesque madcap humour
G.202 UNNKULIAN UNDERWORLD: Highly rated large scale text fantasy adventure

STRATEGY & OTHERS

L 98 WORLD AT WAR (£3.00): Complex economic/military strategy game of World War
G.344 CHESS MATE: A chess/draughts game analysis tool (S/W)
G.332 CAESAR: Strategy game set around the Mediterranean in 200BC (S/W)
G.330 GNU CHESS: French chess playing program for all levels.
G.388 STRATAGEM: Two player strategy world war game.
G.329 PEGASUS: A massive space strategy game. Seek out and colonise planets. (1Mb 2 disks £3.00)
G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy. (1Mb)
G.382 STAR TREK - KLINGON WARS: A starship Enterprise battle simulation. (1Mb)
G.287 THE COARSE ANGLER: Angling simulation game (1Mb)
G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or 5Mb)
G.324 IMPERIAL CONQUEST: A complex ancient Mediterranean game of conquest! (S/W)
G.325 SOCCER MANAGEMENT: Complex simulation of soccer management (S/W)
G.217 THE MAZE: 3 D adventure game loosely based on "The Crystal Maze"
G.173 PENGUINS: Move your penguins around the screen "Lemmng" fashion.
G.10 VEGAS: Roulette, poker, blackjack and slots.. without the Nevada sand!

LICENCEWARE GAMES

L. 69 BIO-HAZARD: FULL version of the sci fi "Dungeonmaster" clone (1Mb £3.00)
L. 22 GRAND PRIX MANAGER: Grand Prix management sim. Employ drivers, mechanics, etc. test cars, then race in a full grand prix season! (£2.50)
L. 87 STORM 94: (STE) Aliens meet Gauntlet for super blasting action. A must have for all arcade fans. (order L91 for STFM version) (£3.00)
L. 79 DARKLYTE II: (1Mb) Sequel to highly rated Space Crusade type game (£2.50)
L. 84 WORD WIZARD: Word puzzle game with a gamble feature from Nice Bytes (£2.75)
L. 101 DUNCES CAP #1 (£3.00): Four super puzzle games: Outrageous Fortune, Matchmaker, Frame of Mind and Cryptogram.
L. 85 ZUFFERS (1Mb STE) Puzzle game of guiding the Zuffers to shelter (£3.00)
L. 83 ZIGGY : A memory and strategy game from Nice Bytes (£2.75)
L. 66 HEARTBREAK: Highly addictive shape placing game. (£3.00)
L. 67 LOGIC PROBLEMS III: BenWeston's back with more challenging puzzles (£3.00)
L. 31 THE CURSE OF AZRIEL: Fantasy trading/adventure game (2 disks/£4.00)
L. 60 CONQUEST: A "God" game in the style of Populous (£3.00)
L. 58 NICE BYTES #1: Gridword, a word game & Rega, a tile flipping game (£2.50)
L. 50 DEMON: Fantasy game with 3D view, monsters, magic, teleports, traps, secret walls, etc (£3.00)
L. 52 ENERGETIX: Puzzle game from Nice Bytes. Save the Nuclear Reactor £2.50)
L. 41 MURDER ON THE ORION EXPRESS: Murder solving game set on an interstellar cruiser (£3.00)
L. 21 DEAD OR ALIVE...?: Large complex and challenging text adventure (£3.00)
L. 97 STONE COLD SOBER: An adventure game with graphics

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BU.119 FOOTBALL TACTICIAN 1: The original £19.95 version!
BU.111 INTERNATIONAL CRICKET II: Animated 3D game (1Mb)
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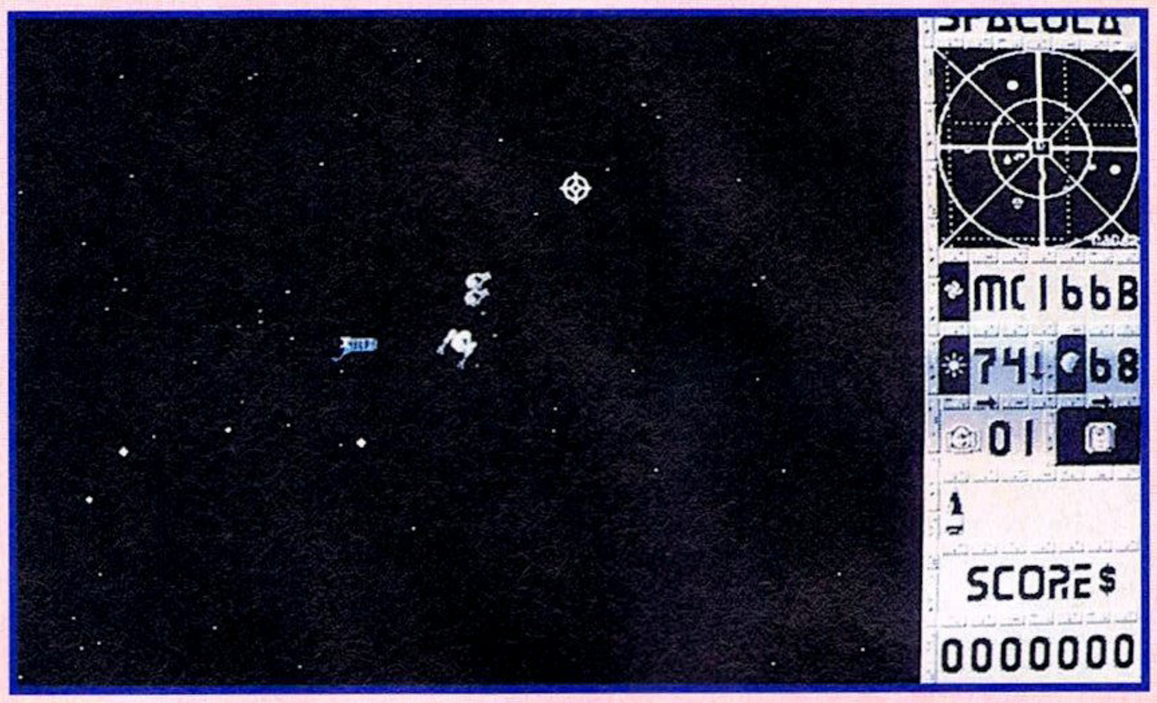
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Please state if you have a Falcon.

Access VISA

INDIES CORNER

Not all the good software has to be commercial. Not all the bad software has to be PD. You can find both the good and the bad from independent softies.



■ **The strange and twisted gameworld of *Spacola* offers you free goodies, lots of shootin' and fightin', and the opportunity to dabble in a little slave trading.**

SPACOLA

DONGLEWARE IS GOOD STUFF, AS both *Spacola* and *Oxyd* demonstrate. Unlike *Oxyd, Spacola* runs in monochrome, and it relies on its gameplay style to carry off the slightly dated look, which it does with ease.

The idea behind *Spacola* is simple. You're looking at an overhead view of your ship, and a radar representation of nearby objects. The galaxy in which you're fighting has been divided up into quadrants, each containing a post and a planet (looking a lot more like a space station). These sit, unprotected and alone in a godless universe.

You are a pirate. Goodies floating through the black void attract people like you, so you pick them up. Rather predictably, the locals become a little annoyed at your free-fingered antics and go all out to stop you, either sabotaging your ship as you fly past, or sending their own forces out to get you.

The attacks these ships make are probably the strangest thing about the game. Instead of going one on one with daring space pilots, you find yourself getting covered in little, scatty ships that don't fire on you, but instead nick your cargo. It's a twisted world out there, y'know. Occasionally, someone actually comes straight out with it and shoots at you, at which point the battle begins. And this is the really odd bit – the incentive is now people.

"Elements of *Buck Rogers, Star Trek* and *Asteroids* all merge in one game, and it plays like a dream"

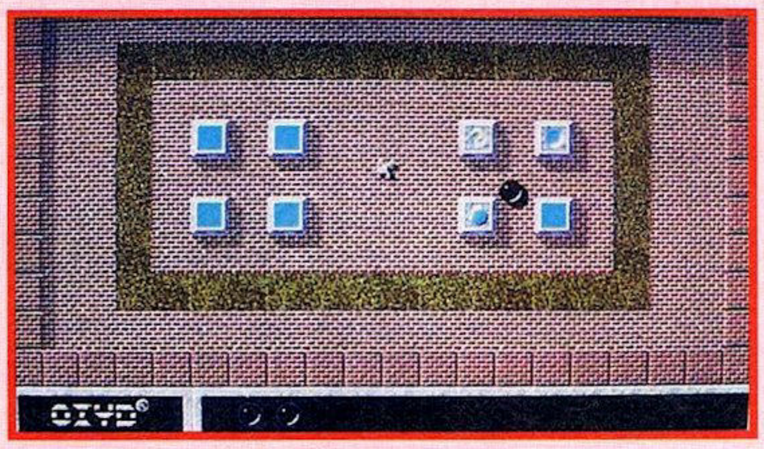
That's right – it's the skin trade. When you destroy a ship you notice that, among the rubble and the wreckage, there's a bloke spinning into the dark unknown, yelling as he goes. If you're into the idea of dealing with slaves you can pick them up.

Spacola is a strange game, with a strange name. It shows a surprising amount of originality over the normal dross you see in this vein. While playing it you can't help noticing the elements of *Buck Rogers, Star Trek* and *Asteroids* all merge in one game, and it plays like a dream. The only real criticism of a game like *Spacola* is its difficulty. You find yourself dying an awful lot, which makes it slightly less approachable. But it's still stupidly good fun.

STF RATING: 75%

OXYD

OXYD IS A CROSS BETWEEN *MARBLE Madness* (a game with its origins in the 8-bits) and *Chip's Challenge* (the Atari Lynx version being probably the best). The plot is irrelevant – you wander around each landscape playing pairs with the randomly coloured boxes. Sounds dull doesn't it? Except that it's not. Starting with an overhead view of your black marble, placed on the grid-like landscape of *Oxyd,* you have to do a lot more than match colours. The *Chip's Challenge* element means you have to avoid the bad guys, play with lasers and mirrors, cope with cracking floors, time explosions, slide blocks, hit switches, open doors and much, much more in your quest to match the colours.



■ ***Oxyd* – the blue blocks contain colours that, once revealed, can be matched to get to the next level.**

And this is where *Oxyd* finds its charm. It's an otherwise be a deathly dull puzzle game that, with the addition of enough switches, mirrors and bottomless pits, becomes a truly engrossing puzzle game, pushing your ability for lateral thinking to the limit. And as yet more features are introduced, the puzzle element is taken yet further.

The beauty of *Oxyd* is its diversity. More devices are added as the levels fly past, and the gameplay gets increasingly novel, original and varied. You find yourself sliding blocks around to push switches into place one minute, but on the next level you might be running along platforms where you've just planted a bomb, or sliding down a cracking drainpipe.

Complementing the excellent game design are the exceptional graphics and sonics. The sprites are not only coloured, taking advantage of the Falcon's palette, but move smoothly and with the kind of momentum physics that suggest years of research and tweaking. The only real problem is the scrolling, which reminds you somewhat of a tap-dancing hippo on stilts. And *Oxyd* can only really be appreciated through external speakers at substantial volumes. All the objects in the game deliver a range of sound effects when you interact with them.

But that's its only fault. *Oxyd* requires reflexes, lateral thinking and a sense of humour. Passworded levels save you from continually having to start with screen one. But then, you won't stop playing this one.

STF RATING: 80%

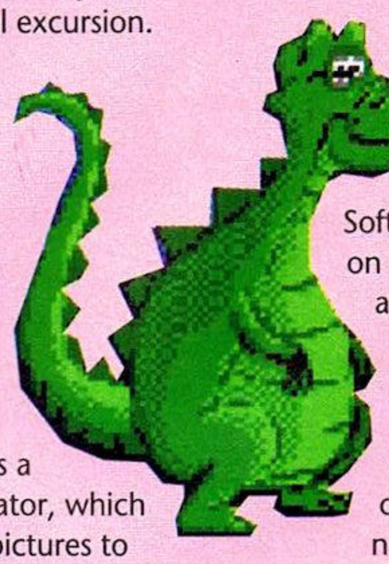
Purchase your copy, now!

Getting hold of *Oxyd* and *Spacola* is easy. Both are available from: 16/32 Systems, 173 High Street, Strood, Kent, ME2 4TW. The version you receive will be restricted, until you send £20 to the UK Dongleware distributor, Cachet UK (☎ 01795 435594), at which point you'll receive the key to the whole game.

STOS GRAPHIC ADVENTURE CREATOR

IF YOU'VE EVER BEEN DRIVEN TO the edge of insanity by text adventures, here's your chance to do exactly the same to every other ST user. Yes, *STOSGAC* enables you to create your own verbal excursion.

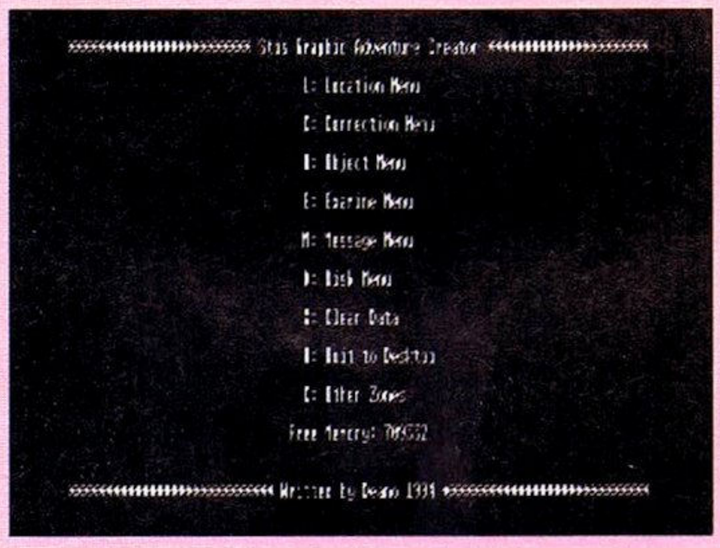
Text adventures are the computer game equivalent of radio plays – there are no graphics or sounds (usually), so you have to create atmosphere, excitement and enjoyment solely through the written word. Of course, this is a graphic adventure creator, which means you can draw pictures to accompany your location descriptions, but nothing moves, explodes, or looks even vaguely exciting.



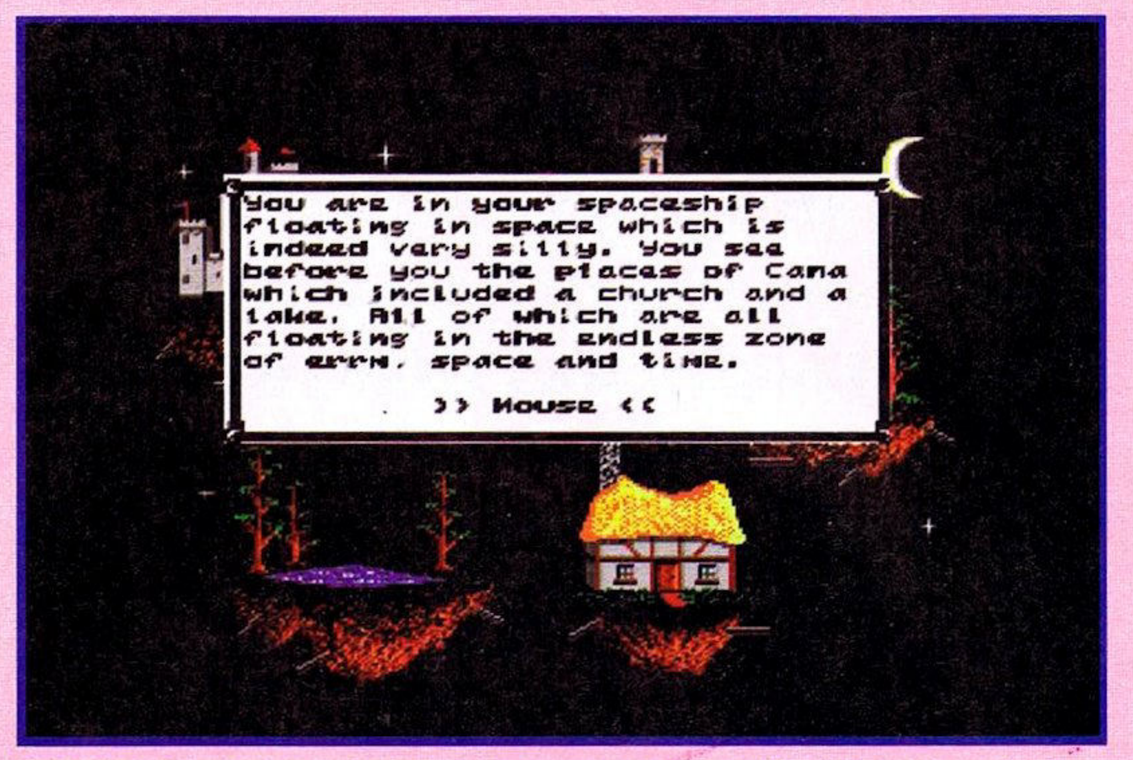
This adventure creator works from a structure of menus and options, from which you build your map location by location, adding descriptions and linking rooms as you go.

Unlike Incentive Software's *Graphic Adventure Creator,* which is sadly no longer available, Silly Software's package relies more on basic information than on any kind of structured design. Where *GAC* had you writing all manner of subroutines to deal with the player's input, *STOSGAC* leaves you to concentrate more on your scenario and plot, and does the bulk of the donkey work for you.

The package comes with a sample adventure of fairly high quality, which highlights a few shortcomings of the package. The first problem is that the weighting of the system is predefined – you can't cast aside pictures for longer descriptions, or take control over the finer points of your game's presentation. The second problem is that you'll have troubles creating anything but the simplest puzzle – the rigid structure in which you have to create your game doesn't give much scope for improvisation.



■ **Fascinating though it may be, this is the main menu of *STOSGAC*. No, don't get too excited, it's only a piece of software.**



■ ***STOSGAC* can be used to some quite impressive ends with a little patience and a bit of hard work. *STOSGAC* doesn't provide the imagination, though.**

Having said that, the system does have merits over more complicated commercial packages. You don't have to spend months getting to grips with what's essentially a different programming language just to create your first adventure. If you're only linking four locations together and throwing a few objects on to the map for interest, this is the best way to go about it.

This is after all a piece of licenceware, aimed at those who want to get into writing adventures rather than those with experience. There's no point rushing out and buying an expensive commercial package unless you know you're going to enjoy writing adventures. Stick with *STOSGAC* and your work won't be technically excellent, but you'll get the chance to produce some fairly good adventures in the meantime.

STF RATING: 70%

DEMON

OVER RECENT YEARS, THE ST HAS seen many a 3D adventure. *Demon,* following in the *Dungeon Master* style of gameplay, is no exception – it offers you a first-person perspective view and you can move forward, backward, left and right. You start the game trapped in a prison cell, with nothing but your wits, cunning, and eyesight to help you.

Eyesight?

Demon is a *STOS* game. This means that, being compiled BASIC, it has technical troubles. Consider the fact that calculating a 3D image is a complicated process. Doing it in BASIC really can't be at all easy, then. For this reason, your viewing window is reduced to the size of a stamp (well, a small book of stamps) on the screen, which causes particular problems when you're trying to work out exactly where you are, as you don't exactly have the aperture to see too far into the distance.

On the upside, these technical problems are balanced with what's essentially a fairly deep game. Obvious system constraints mean that the monsters don't roam free, but are freed by your treading on certain squares, an action that also sets off other fates. This strange system may seem inappropriate for a 3D dungeon game, and the compromises that have been made to the game to compensate for *STOS'* lack of ability make for a slightly less involving version of *Dungeon Master.* But then, the less you have to know and learn, the more accessible a game becomes.

You can still manipulate objects, cast spells, solve puzzles and fight people, just as you can find more unexpected features such as pits and invisible walls. Unfortunately, the game's size limits exactly how much of this can be included, and you find yourself running out of things to do in no time at all.



■ **The majority of the screen is taken up with static illustration, the action taking place in the box at the top.**

In short, *Demon* suffers from system limitations as opposed to design flaws. If you like the idea of a quick romp through a series of stone rooms, killing people and collecting shiny things, then £3 is a perfectly reasonable price to pay. If, however, you're looking for a deep, involving stomp around an epic land, you'll be disappointed with *Demon.* Unlucky for some, eh? ***stf***

STF RATING: 65%

Availability

If you want to get your gauntleted fist on *Demon* or *STOSGAC* they're available from: H Tilley, 33 York Road, Church Gresley, Swadlincote, Staffs, DE11 9QG, for only £3 each.

GAMES NEWS

When things happen in the ST gaming world, they certainly happen fast and furious. This month we bring you news of *Hollywood Hustler, Llamazap* and the soon-to-be-released *Team*.

HOLLYWOOD HUSTLER

PREVIEW

BY: DESERT STAR
DISTRIBUTED BY: DESERT STAR
☎ 01482 871210
MACHINES: 1MBYTE UPWARDS
PRICE: £TBA
RELEASE DATE: TBA

COMING FROM THE NEWLY FORMED Desert Star software, *Hollywood Hustler* has to be the closest thing to interactive video we've seen on the ST. You follow the story of a young David Essex lookalike, who's on a quest to retrieve his wayward girlfriend by gambling (so that's how it's done).

Complete with a cast of unshaven actors in ill-fitting shirts, *Hollywood Hustler* combines digitised animation (filmed on location in Hollywood and Hull alike) with sampled sound, to give a more up-to-date feel to the game. But we're not going to bombard you with phrases like 'interactive entertainment' and 'multimedia', because that's sad.



At its core, *Hollywood Hustler* is a five-card poker game, which is fleshed out with plots and other game sections. It's aimed at a mature audience, containing material that could be unsuitable for younger audiences, but without being at all offensive or explicit. So be warned if you are easily offended. There's no firm release date but *Hustler* should be rearing its head as you read this.

SIMON FORRESTER

LLAMAZAP

UPDATE

BY: JEFF MINTER
DISTRIBUTED BY: 16/32 SYSTEMS
☎ 01634 710788
MACHINES: FALCON
PRICE: £24
RELEASE DATE: JANUARY

FROM THE JEFF MINTER STABLE COMES an impressive, fast shoot-'em-up, with his usual emphasis on gameplay as opposed to complexity. It's a sideways scroller, in which you're the only person who can save the planet from an onslaught of camels, sheep, yaks, and other such furry animals. Originally reviewed and raved over in issue 51, the game has finally been released by 16/32, so you can now actually buy yourself a copy.

But there are lots of problem with Jeff Minter games from a reviewer's point of view. Though they're great to play, graphical excellence, sonically impressive effects and even pretty loading screens are all irrelevant. You stare at sheep, you play, and you have the time of your life (nearly). It's one of the fastest, most furious games the Falcon's seen.



Having said (or rather, written) that, *Llamazap* is still an incredibly impressive game. There are elements of it, like the attack patterns and explosions, that just blow your mind. The gameplay is enormously improved by these, but if you're into pretty graphics and clever plots, forget it. This is an impossible game to review – just go and buy it.

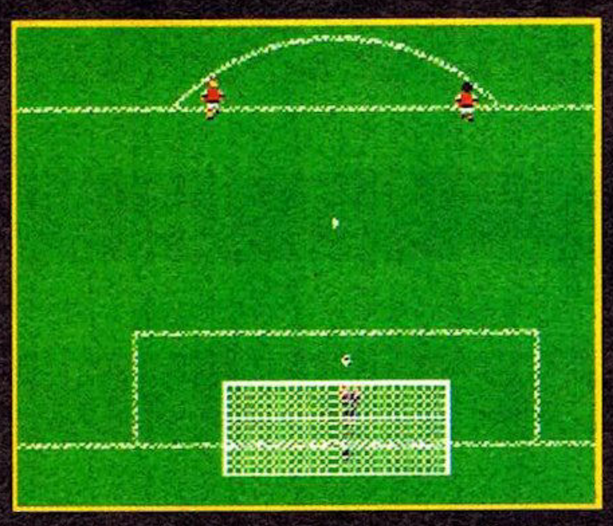
SIMON FORRESTER

TEAM

PREVIEW

WE'VE TOLD YOU A LOT ABOUT *TEAM* already, but the latest vital news is that the authors of *Team,* Impact Software, have gone independent and are now finishing the game as a solo project, which means that all queries should be now be directed to Impact Software by calling ☎ 01280 850450 or writing to: 12 Bell Lane, Syresham, Northants, NN13 5HP.

Why would you want to find out about 'yet another' footie game, though?



Well, because *Team* offers you technical features like: 1/50th-second screen updates rather than the normal 1/25th; hardware scrolling that's accurate to 1/100th of a degree; blitter-driven animation for all the sprites in the game; 32 colours on screen to create a beautifully textured pitch; sampled noises and effects, which are played at 50KHz; control options including keyboard, Powerpad and joystick; all data stored in RAM, meaning no disk access during the game; and a 3D environment that uses scientifically-accurate calculations to offer those wonderfully realistic football flukes.

Oh, and if that wasn't enough Impact will also be crafting a Falcon specific version that will be available a few months after the initial release. And if all you Falcon owners can't wait, the original will run on the Falcon, and there will be an £5 upgrade offer available later. ***stf***

TRENTON WEBB

PREVIEW

PINBALL DREAMS

16/32 are about to release *Pinball Dreams*, one of the best computer pinball games ever, for the Falcon. Simon Forrester looks suitably impressed.

BY: 21ST CENTURY
DISTRIBUTOR: 16/32 SYSTEMS
☎ 01634 710788
MACHINES: FALCON
PRICE: £24
RELEASE DATE: JANUARY

Since the dawn of the arcade, videogames have muscled in to share the limelight with other less digital but more long-lasting machines. While you might see exodus-type crowds of kids swarming all over *Samey-Fighter 7* as soon as it arrives, you can also regularly see pinball tables propped up by the shells of former men and women, still manically pulling a plunger and hitting flipper buttons.

Pinball is a timeless game, and it's not surprising that it should find its way on to our computer screens before long.

If you liked *Starball (STF* 63, 96%) and you're looking forward to *Obsession* (reviewed over the page), you're quite obviously one of those people – empty eyes and sagging bones responding to nothing but the roll of a steel ball and the thwack of a rebound. You might be surprised to know, though, that *Starball* wasn't the first computer pinball game around...

Way back in the mists of time, shortly after this magazine split into the sisters *Format (ST* and *Amiga), Pinball Dreams* was released

■ These screenshots were taken on the Amiga A1200. Due to production problems the Falcon version wasn't available at time of printing, but it's guaranteed to look at least as good.



■ ***Pinball Fantasies*, the follow-up to *Pinball Dreams* on the Amiga and PC. Could this be the start of a long line of new Falcon games?**

by 21st Century, a company born of the now-extinct Hewson. And *Pinball Dreams* had quite a few advantages over any other pinball games of its time.

Pinball Dreams was the first computer game that managed to accurately represent the physics of a pinball table on the Amiga and the PC. Previously, most games in the genre were about as realistic as *Snooker* on a ZX Spectrum. *Pinball Dreams* not only added proper weighting, but the ball's ability to go crazy on bumpers.

Pinball Dreams was the also first pinball game to really explore the fact that it was on a computer instead of four legs – it wasn't just restricted to one table. *Dreams* takes the form of a series of tables, each with different layouts, obstacles, goals, gimmicks and little flashing lights. 21st Century realised that when you're not dealing with metal ramps and plastic bumpers, you can design far more complex tables, creating a pinball game based on more than just accumulating points. Like *Obsession*, *Pinball Dreams* is deeper than your average digital table, employing not only reflexes but brain-power, and involving a certain amount of high-speed problem solving.

Of course, that was all on the Amiga and the PC. Now it's just about to be released on the Falcon, and people are starting to get excited. 16/32 Systems, the people behind Falcon releases like *Llamazap* (reviewed on page 49) and *Evolution Dino Dudes* (watch this space) are releasing *Pinball Dreams*. It was supposed to arrive at last December's London *ST Review* show, but because of production problems we haven't yet seen the game in play on the Falcon. However, problems aside, it should be available by the time you read this, for the predicted price of £24.

And it looks like the delays in production are going to be well worth the wait. *Pinball Dreams* on the Amiga and the PC is wonderful, and if the Falcon's higher clock speed and custom hardware are used properly, then the game will be truly spectacular, rather than just great. Let's hope they can do it, because we can't wait. **stf**

PINBALL FOR THE ST

If you don't have a Falcon you can still play pinball. If you have an STE with 1MByte of RAM, you can play the wonderful *Obsession*, reviewed on the next page. And all ST owners are able to play *Starball*, which was given away on Cover Disk 64. See page 79 if you missed it, or give your favourite PD library a try.

■ ***Starball* – buy a back issue and take it for a test drive.**





■ **Steel Wheels. Solid fun but it's about trains – yeeeeeuuch! Still the music's better than Beat Box.**

■ **Now Beat Box is annoying because its theme tune is pure, unadulterated Euro-pap.**



■ ***Pinball Dreams* works beacuse the tables are huge. Like real tables the point-scoring targets are agonisingly far apart.**

■ **Ignition is one of the best tables in *Pinball Dreams*. Fill the rocket up with fuel, then blast off to some major, major points.**

OBSESSION

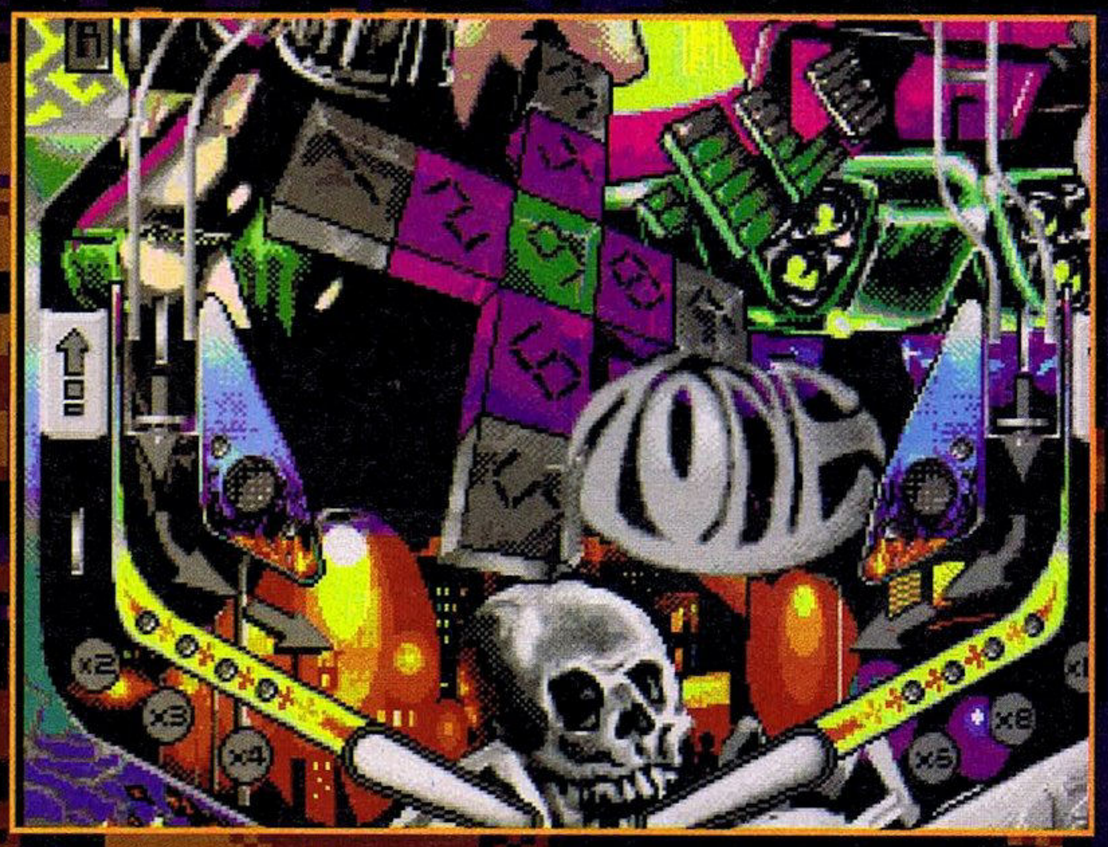


In the beginning there was hope. Then came the hype. Then came the review copy. Trenton Webb reckons he was right to get so excited about a pinball game written by Vikings. What a relief.

The physics work. The colours are brilliant. The sound is excellent. It scrolls smoothly. There you have it. *Obsession* is a technically brilliant re-creation of pinball on the STE, and uses the machine to its full. That's the facts – time to rave on about just how good 'good' can be.

Pinball is a frustrating, infuriating, annoying and gutting game. One flick of the flipper can seem like a deft, elegant and skilful shot. The next can roll you into an outlane without so much as a 'by your leave'. Pinball is an unnatural hybrid of skill and luck. The higher the score, the more you claim it was owing to your skill. The greater the cock-up, the more you blame it on luck. Hopeless shots can be saved while teetering on the edge of disaster, yet the easiest shot in the world can be screwed up – even if you do the right thing at the right time.

Most pinball novices think there's little more to the art of a high-score than madly flipping every time the ball comes anywhere near the base of the table. Pinball vets on the other hand, (and we are not talking animal doctors here), wibble endlessly about related targets, specific bonus sequences and paddle technique. And they're both right.



■ A high-score! I got a high-score on the *X-File* table, the hardest of the four! It's a miracle! Oh, I'm behind Nick. Damn. Well, it was nice being tenth while it lasted.

Bonus multiplier

To be a great (not just good) pinball game, *Obsession* has to meet all of these needs, supplying enough easy targets to ensure that beginners can at least get on to the high-score board, yet still involve enough subtleties to keep the die-hards happy. It succeeds.

And to be a great (not just playable) game it has to pack enough variety into what is an established formula to keep you playing long into the night. *Obsession* crams four tables on to two disks, each of which has wildly different flavours, feels and foibles. Taking their lead from the classic modern tables they feature magnets, kickbacks, overhead runs, combination targets and comments on just how badly you played that last ball. And those lovely people from Unique Developments even tell you how to milk loads of points properly, with a lovely little annotated diagram of all four 'levels'. But enough faffing about. Let's get talking tables!



■ Speed on through the rally. Read the flashing sign. Crash. Burn. Die. On the other hand, failing that, ignore them and carry on scoring points.

Aquatic Adventure

A silly table. This one tells the tale (nominally at least) of Bobby Bubble. Will he be eaten by sharks or will you manage to save him from the evil Captain Notpolite and his



Falcon owners read this

In the addendum sheet – yup, proper documentation and everything! – there's a note to all Falcon owners, confessing that the game uses only some of the Falcon's secret powers. To which end, buy STE *Obsession* now and play it to death, as is inevitable, then come March you'll be able to send off for a Falcon upgrade version that makes this masterpiece look almost ordinary. Now that's what I call service!

Stop Press

News has just reached us at *ST FORMAT* – well we phoned Merlin and asked them actually – that there will be a three-table data disk available for *Obsession* in May 1995. Look, I'm sorry Unique Developments, but you can stop trying to impress everyone by offering service, value for money and stuff now – we're getting confused...

Stealth Sub 137? It's all nonsense, but then, who wants sense from their pinball tables?

AA has some neat multipliers, in which you struggle to create pearls from a conch shell. With some sly time-based bonuses and some seriously random points action courtesy of Mr Starfish, it has the feel of a beginners' table. And there's nowt wrong with that, even if I can't beat Nick at it!

X-ile Zone

Not a nice (in the polite sense) table. X-ile, which I still want to call X-File, is all about killing an enemy tribal leader. The theme is of a post-apocalyptic *Terminator* world where people run around shooting each other a lot, which isn't pleasant, but makes for some dramatic artwork. It's all skulls, WAR and 9mm Uzis.

This one plays fast, loose and has some nasty outlanes, which the table wants to throw you in via kickbacks, so you're forced use all three tilts to keep the ball alive. The Berserk Ramp is the star of this table. Hanging just over the right outlane, it's temptingly dangerous. Shooting it gives you 15 seconds to shoot the ramp again. If you manage then multiple pleasantries are your reward: a gate opening at the top of the table, a 500,000 bonus, bonus hold, X million, bonus multipliers, Xtra ball and more. The trick is shooting the ramp time and time again. It ain't easy, but it is very, very tempting.

Balls & Bats

The weakest table, B&B relies too heavily on a gimmick for its character. It's the kind of table that you'd dabble with once in a seaside arcade and then never touch again. Still it's fun, for a while.

The theme here is baseball. You know, the sport they haven't played this year in the US. The table has two modes: normal and pitching. Normal mode is much like normal pinball, focusing on targets, pins and points. In pitching mode, the table hoys balls down towards your flippers and you have to knock them back to the top to move towards the home plate. It's a neat idea, but it doesn't really work. The three pitches are too random – they mimic the magnet effect made famous by the Addams Family table, which changes both the pace and direction of the ball, thus reducing the game to one of chance. If you can keep the ball in play then it's points-city. If you can't, you just want to smack the monitor in. But then, that's the joy of pinball.

"Four tables, each of which has wildly different flavours, feels and foibles"

Desert Run

The foolishness that is the Paris-Dakar rally is bought home in Desert Run. Hit two loops and a target in sequence and you progress through the rally. To race you need gas, and to get gas you need money. That's free-market thinking – and it works.

In many ways this is the simplest of the tables, but the position of the targets and the speed of the runs balances elegantly. With loops to both the left and the right it's wonderfully difficult to get the hang of both in a single game. Which creates the kind of brilliant frustration where you can shoot for gas but have no cash, or have a pile of money but can't for the life of you get the ball anywhere near the refuel stop. And without that, there's precious little reason for shooting up the table. This is pinball is at its best – a test of different shots in rapid succession.



■ The LED panel offers helpful hints and tips like "You're out!" Like I didn't know. That'll probably be why my ball is BELOW the flippers!

Shoot again!

This praise is all well and good, but what's wrong with *Obsession?* There has to be a catch, surely? Well, no. What gripes I have are personal ones, engendered by my own silver-ball snobbery. I don't like five-ball games, I'm not keen on the Bats & Balls table, and there's no match feature.

Five-ball, in my humble opinion, gives beginners too many chances to fluke a big score – and beat me. Bats & Ball I can't play, but that's my fault. And as for a match, well, it would be pointless – every game is free anyway, so what's the point?

Obsession is one of the greatest ST games ever. It ranks with *Zero-5 (STF 66, 92%)* as one of the best STE games ever. It's simply brilliant. Anyone who touches it – even if they hate computers and loathe pinball – will be hooked after a single game. Well-presented, well-written and well-documented, this shames the old guard of softies. If you own an STE there is not excuse for buying this game. Otherwise your computer will hate you forever – and I'd have to agree with it. ***stf***

TRENTON WEBB



■ Nice table, nice and nasty. Why can't we have some pleasant tables, with cuddly, fluffy, animals, happiness and good neighbours?

■ Hit <Alternate>, <Space> or <Caps> and bounce the table so that it goes over the illuminated channel, and you get a brilliant skillshot bonus.



■ You have to get gas if you want to race. By the way, did I tell you that Rovers supporters are called the Gas. Why? Because way back in 197...



■ Hold the launch button and see it charge. Quite what the point of the Supercharge is on this table I don't know, but it looks good.

Obsession

Unique Developments
£24.95

Review copy from:
Merlin PD, 11 Grange Close, Minchinhampton, Stroud, Glos GL6 9DF
☎ 01453 882793.

Also available from JCA Europe ☎ 01734 452416

1MByte STEs and Falcons

Highs
- Brilliant pinball action
- Gobsmackingly good use of the STE's capabilities
- Three brilliant tables
- Anyone can play

Lows
- One 'dull' table (in my opinion)

94%

ST ANSWERS

Always ready for a challenge, Clive Parker plays with printers, messes with memory, dabbles with drives and answers questions.

Amstrad answers!

PRINTERS

ST FORMAT £25 WINNER

Despite the advice given to Keith Whitnall in *ST FORMAT 65*'s ST Answers, it is possible to use the Amstrad DMP 2000 to print graphics. I use the Amstrad DMP 2000 with my STE and *Imagecopy 2* without problems, which means that Keith's trouble probably lies with his DIP switch settings.

At the back of the Amstrad DMP 2000 you will find two banks of numbered switches, DS1 with eight switches and DS2 with ten switches. The banks aren't clearly marked, but when the switches are in the up position they are off, when they are in the down position they are on. To print graphics, all switches should be off except DS1-3, DS2-1 and DS2-5. DS1-6 sets the paper length of the printer to 12 inches when on and 11 inches when off. Make sure that the printer is switched off when you make any alterations to the DIP switches.

After setting the printer to this configuration, Epson 9-pin printer drivers usually work correctly – even though the Amstrad DMP 2000 isn't in fact compatible.
William Andre, Midhurst, West Sussex

A *Thanks for that much-needed information William. Amstrad DMP 2000 owners across the world are breathing a sigh of relief as they finally get a graphics printout from their trusty STs. If you'd care to contact Trenton with your full address he'll put your crisp cheque in the post.*

On the Net

COMMS

I read with great interest the feature about the Internet in *ST FORMAT 65*. I don't have my ST hooked up to the Internet but I do use the Internet for e-mail a lot here at university. Is it possible to download Atari files from here? We have networks of PCs and most of them have 3.5-inch disk drives, so if I formatted disks MS-DOS double-sided I should then be able to transfer software to my Atari ST. Is this correct?
Phil B, mu_f734@kingston.ac.uk, via e-mail

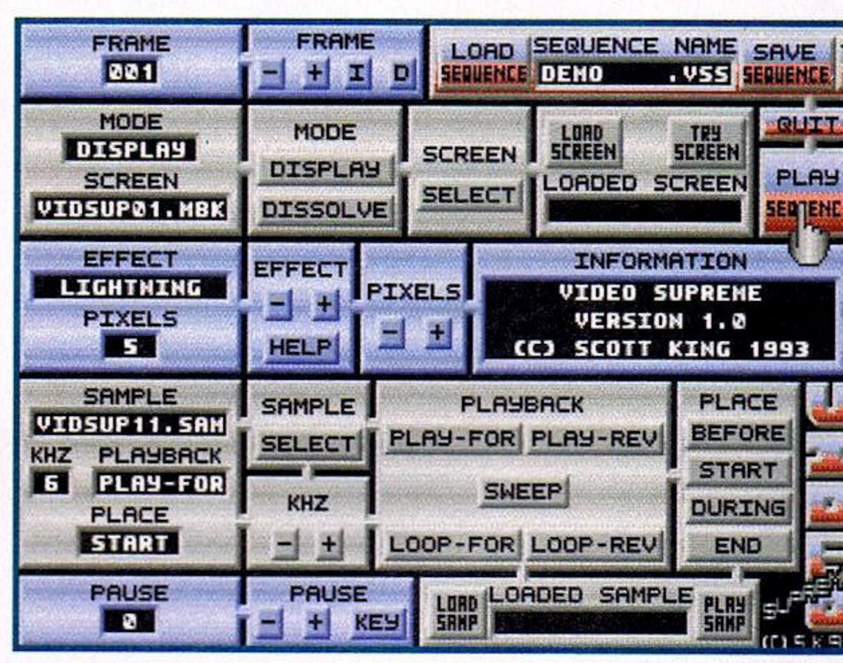
A *Yes you can. As long as you format the disks to 720K MS-DOS format, you can download files from any of the Atari ftp sites that are mentioned in the feature. This means you can have instant access (almost) to all the PD and shareware available for the ST in the world. Have fun downloading.*

Video star

SOFTWARE

I want to make amateur video films using my ST. I need an inexpensive video titling program, a text-scrolling program and a lead to connect my STFM to my video recorder. Where can I get these from, and how much do they cost?
Andrew Ainscow, Atherstone, Warwickshire

A *The video titling program you need is called Video Supreme and costs £14.95 from*



■ ***Video Supreme*** **is a raunchy program. Look at the Dissolve features on it! I'll sell you it for a monkey. (That's £15.)**

ASSEMBLY POINTERS

PROGRAMMING

Tony Wagstaff explains that printing a line of text isn't as easy as you may think.

Printout

How do I go about sending lines of text to the printer?
D Bell, Swindon

stf: *There are various ways of doing this. The easiest method is to send each character to the printer in turn, using the BIOS Bconout call:*

```
move.w #char,-(sp)
move.w #device,-(sp)
move.w #3,-(sp)
trap #13
addq.l #6,sp
```

where device can be:

0 parallel port
1 auxiliary device (usually the RS232 port)
2 console screen
3 MIDI
4 intelligent keyboard (IKBD)
5 raw screen output

The printer is generally connected to the parallel port. Since this call will 'hang' if the printer isn't connected, you should first check that it's ready, by using the BIOS Bcostat call.

```
move.w #0,-(sp)
move.w #8,-(sp) Bcostat
trap #13
addq.l #4,sp
tst.w d0
beq no_printer printer not
connected

lea buffer,a3
next_char move.b (a3)+,d2
beq done
ext.w d2

move.w d2,-(sp)
move.w #0,-(sp)
move.w #3,-(sp)
trap #13
addq.l #6,sp
bra next_char

done

buffer dc.b 'This is my
text',13,10,0
```

The problem with this is that specific codes have to be sent if you want to produce, for example, italics. These codes vary from printer to printer, and what with the myriad makes and types of printer on the market, this can be a headache. This is why word processors such as Protext come bundled with so many printer drivers.

To get around having to write code for lots of different printers, you need to use GDOS, the VDI extension, which has to be loaded via the Auto folder. The original GDOS wasn't up to much, but considerable improvements have been made with Speedo and NVDI.

Printing with GDOS is much more versatile, but it's also rather more complicated. To get the most from it, you really need to invest in a good reference book such as The Atari Compendium by Scott Sanders, which costs £39.95 (ISBN 0-9638331-0-3).

Mouse trap

I'm writing a game and need to detect when the mouse moves over various objects on the screen. Can I do this without continuously checking the mouse co-ordinates?
Brian Booth, Exmouth

As long as you don't need to be too accurate, then the answer is yes, you can. Use the AES evnt_mouse call. This returns whenever the mouse either leaves or enters a rectangle.

On entry, intin[0] should contain zero to detect when the mouse is entering a rectangle, one to detect leaving it; intin[1] to intin[4] give the top left xy co-ordinates and the width and height of the rectangle.

When it returns, the x and y position of the mouse will be stored in intout[1] and intout[2].

For your game, you need to map out the xywh co-ordinates of the objects, then divide the background into rectangles. Once you know which rectangle initially contains the mouse, you then only need to wait until it leaves that rectangle, then check which rectangle it has moved to.

Shell suit

Can you tell me how to run a program after my program has finished? I know about the Pexec call, but I want to clear my program from memory first.
B Spiner, Cambridge

This can be done with the AES shel_write call, which takes five parameters. The first parameter, which is entered into intin[0], determines how the other four will work. With early versions of the AES, it will generally be set to one, instructing the Desktop to run the required application. In this case the second parameter, placed in intin[1], specifies whether it will run as a TOS program, value zero, or a

Goodman International ☎ 01782 335650. You can use Video Supreme for all kinds of video titling effects, including scrolling text, and use Degas or Neochrome format images too.

The exact lead you need to connect your STFM to the video recorder depends on the connections on the video. Make a note of the name and the model number of the VCR and contact Meedmore on ☎ 0151 521 2202. If they haven't got a ready-made lead they'll make one for you. The lead will cost you about £15, depending on what kind of connector is required for your VCR.



■ **He's cute, he's bouncy and he smells of wee. Very nice. It's *Baby Joe*, fresh from the demo on Cover Disk 30.**

Oh baby

SOFTWARE

On an *ST FORMAT* Cover Disk about six years ago there was a demo of a game called *Baby Joe*. The problem is that although I enjoyed the demo, I never got around to getting the full version of the game, and now I can't find it. Do you know where I can get a copy of *Baby Joe?*
Mr J Brown, Strood, Kent

Sorry about this. Much as we'd love to be able to help you, and we nearly sent you another copy of the Cover Disk just to make us feel better, we don't know where you can get Baby Joe. Your best bet is to take out an free 'Wanted' ad in our Reader Ads page (turn to page 84). Sorry not to be able to help you – can anyone else be of assistantce?

GEM program, value one. Intin[2] should be set to one (a value of zero should run the application within the current one, like Pexec, but this doesn't always work, so it's best not to use it!). Addrin[0] should contain the address of the filepath of the application to launch, and addrin[1], the address of the command line to send to the application. You can of course use the ARGV protocol to send the command line, as outlined last month.

With the advent of the various multitasking systems for the Atari, the shel_write call has become much more versatile. Using this call with MultiTOS, for example, you can specify the maximum memory size, the process priority and other goodies. The Atari Compendium contains full details. Details for running applications concurrently with MagiC using shel_write are described in the MagiC manual.

E-mail
You can e-mail your Assembly queries direct to Tony Wagstaff at: **twagstaff@cix.compulink.co.uk.**

Dodgy drive

HARDWARE

I have a problem with my 1040STFM. When loading a disk, the drive whirrs continuously without any information being downloaded into my ST. Yet when I load *Lemmings*, for example, the drive makes the same whirring noise and the intro screen appears, but then nothing else happens.

I want to fix this problem, but I can't afford to send my ST off for repair. I'm sure it's a faulty drive, and I may upgrade to a high-density drive. What do you suggest?
Mike Southwell, Christchurch

It certainly sounds like you have a faulty drive, although a little more detail would have helped. It seems rather odd that the loading screen from Lemmings loads but nothing else does. It may be a good idea to check out your disks on another ST – if they work there then you'll have to replace your drive. There's no need to upgrade to a high-density (HD) drive though, a normal double-density (DD) double-sided drive is fine.

You can get internal DD drives from many suppliers for around £40 – see the ads in this issue of ST FORMAT. Installing the drive is normally a simple case of unplugging the old drive and plugging in the new one. If you're not sure about doing the work yourself, you should consider sending your ST off to be repaired professionally. It costs a bit more, but in the long run it's worth the extra to get your machine thoroughly checked out.

Real video?

HARDWARE

Is there a way of connecting a SCART lead into the cartridge port so I can get real video into VideoMaster from Cover Disk 59? I have a 1040STE.
Andrew Carpenter, Cirencester, Gloucestershire

I don't want to be negative but no. You can only use the VideoMaster software to record live video or from a video tape using the VideoMaster hardware. You can use the software to make animations by loading Degas or Neochrome images, or load VID or FLM files created by someone with a VideoMaster cartridge. VideoMaster isn't that expensive – you can get VideoMaster ST RGB for £99.95 including the RGB splitter for creating colour animations. Give HiSoft a call on ☎ 01525 718181 to check out the current price.

Bargain hunter

PRINTERS

What's the best low-cost inkjet printer available? At the moment I use a Brother M-1109 printer with *Protext 4.3* from your Cover Disk. And where's my nearest PD library?
David Johnstone, Woodbridge, Suffolk

Why not get a Brother BJ10sx? It's small, quiet, generates excellent quality printouts at 360dpi (dots per inch) and is totally Epson-compatible. Just select Epson 24-pin printer drivers from within programs like Protext for perfect printouts. You can get it for £185 from First Computer Centre, which is about as inexpensive as you're likely to find an inkjet printer for. Call First Computer Centre on ☎ 0113 231 9444 for the latest prices. And if you turn to our ST directory on page 85 you should be able to find your nearest PD library, but note that you tend to have to order PD by mail anyway.

Colour output

GRAPHICS

I have a 520STFM and a Star LC100 colour printer. I've tried printing in colour using *Neochrome*, but I can only manage to get black-and-white output. Is there any way I can get *Neochrome* to print out my pictures in colour?
Mrs C A Turner, Nottingham

It's unlikely that you'll get Neochrome to print in colour at all. If you want to print out the images you create in Neochrome on your colour printer, get Imagecopy 3.5 for £29.95 from FaST Club ☎ 0115 945 5250. You can find the full review of Imagecopy 3.5 on page 41 but, to be brief, it isn't actually a paint program – it's a powerful colour printing program that enables you to print out images created with almost every ST paint program on the market. Once you have Imagecopy 3.5 you can always print out your pictures even if you change to a new paint package.

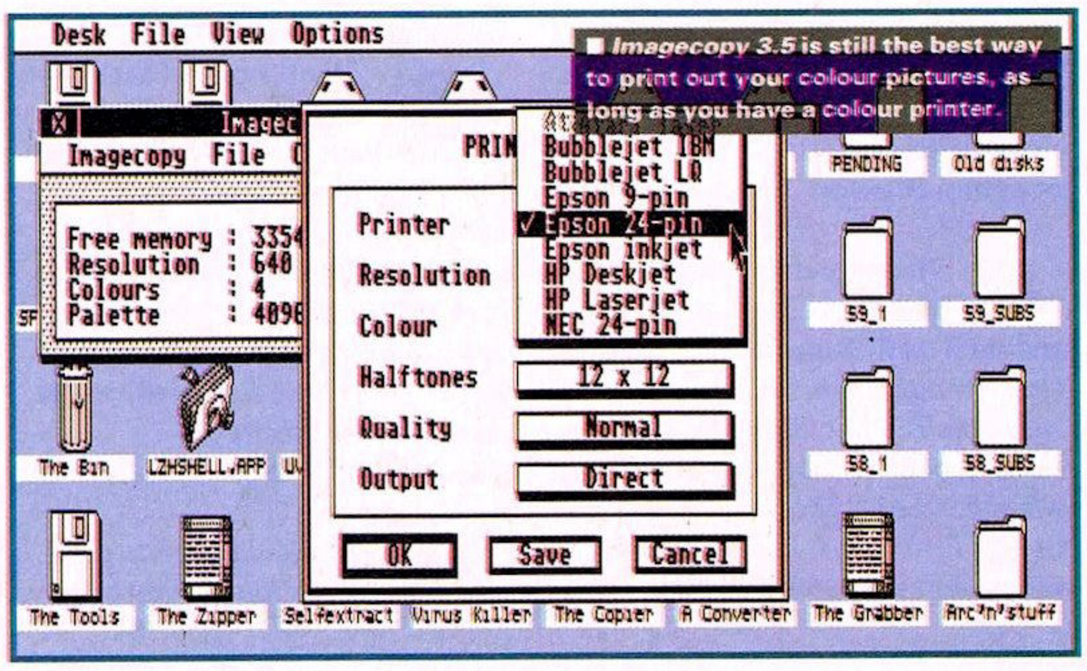
Alt-help me!

PRINTERS

I've recently upgraded to an Epson LQ100 printer and I'm very satisfied with the results. Satisfied, that is, until my wife tried to use her knitting program software. This program uses the <Alternate> <Help> key combination to generate a screen dump. It generates the screen dump all right, but compressed into about an inch and a half. I've tried performing a screen dump from the Desktop with the same results. The author of the program suggested setting the printer to 9-pin emulation, but it doesn't appear to be able to do this. Do you have any suggestions?
Richard Stoker, Seaton, Workington

You need a handy little Desk Accessory program called The Alt-Help Solution. This Desk Accessory is available from all good PD libraries and enables you to create your own customised printer drivers. When you use the <Alternate> <Help> key combination, the Desk Accessory intercepts the command and prints out using its own routines. It's easy to set up and use, it only costs a couple of pounds and, because it's a Desk Accessory, it works in the background while you or your wife uses the knitting program on your ST.

Take a look at our PD directory on page 85 and give one of the libraries a call. It's a popular program, so they should all have it in stock.



■ ***Imagecopy 3.5* is still the best way to print out your colour pictures, as long as you have a colour printer.**

GFA WORKSHOP

Mac Marsden inputs a few BASIC ideas about looping the loop. He's a wild and crazy man.

Need more input!

I have been a keen *ST FORMAT* reader for a year or so now and I've just been introduced to *GFA Basic*. Being a novice at the language I would be grateful if you could explain the differences between the following commands: INPUT, LINE INPUT, FORM INPUT n,a$ and FORM INPUT n AS a$.
Gerald Cummings, Huddersfield

Initially these commands look imposing, but they all accept the input of data from the keyboard because they are all variants of the INPUT command.

If you enter the line:

```
INPUT "Please input your answers",x,y,z
```

the text string is printed on screen and you enter the three numbers x, y and z from the keyboard, each number followed by pressing the <Return> key.

The x,y,z part of the command could easily be a$,b$,c$, where the input from the keyboard would be a character string rather than numbers. The only drawback with this command is that it does not accept a comma as part of an input – everything typed after the comma is truncated and lost. The way to work around this is to use the command:

```
LINE INPUT "Please input your answer",b$
```

where the comma is accepted.

FORM INPUT n,a$ works in exactly the same way as INPUT, but enables you to specify the number of characters to be entered, up to a maximum of 255. FORM INPUT 10,a$, for example, accepts the first ten characters that you input and holds them in a$.

FORM INPUT n AS a$ is a little different. On execution it displays the current value of a$ and enables any errors to be edited. If you had previously input the string "ST FORMIT" into a$, FORM INPUT n AS a$ enables you correct your previous input. The arrow keys move to the character to be corrected.

```
B$="ST FORMIT"
PRINT B$
FORM INPUT 9 AS B$
```

"ST FORMIT" is displayed on screen. Edit the string and replace the I with an A.

```
PRINT B$
```

The amended string "ST FORMAT" is displayed.

File assassination

I am in the process of writing a program in *GFA Basic* and I want to add the option to rename an existing file on disk. I would also like the program to be able to delete a file that is no longer required.
Brian Ginty, Swansea

The commands that you are looking for are NAME oldname$ AS newname$ and KILL a$. If there is a file on Drive A called 'OLDFILE.TXT' and you want to rename it to 'NEWFILE.TXT', then use the following command.

```
NAME "A:\OLDFILE.TXT" AS "A:\NEWFILE.TXT"
```

Note that the full pathnames have been included and that they are on the same disk drive. This is because the command is not capable of copying one file from one drive to another drive and renaming it.

The command that deletes a file from disk is KILL a$. You can delete the file "A:\NEWFILE.TXT" in two ways:

```
a$="A:\NEWFILE.TXT"
KILL a$
```

or simply:

```
KILL "A:\NEWFILE.TXT"
```

This is an easy-to-use but dangerous command – a simple spelling mistake can delete an important document.

Looping the loop

I have been programming for a little while now but I am unable to understand the difference between the following loop commands: REPEAT – UNTIL and WHILE – WEND. There must be differences, otherwise only one of them would be included in the language.
Joseph Marston, Exeter

The main difference is that a REPEAT – UNTIL loop executes any code held within the loop before checking to see if the exit conditions have been met.

```
X=10
REPEAT
    Your program code here
UNTIL X>=10
```

We have given X the value of 10. In our REPEAT – UNTIL loop, if X>=10 we do not want anything to be executed. Unfortunately, because the value of X is not checked before the loop's execution, the code runs at least once, possibly causing a problem in your program. If you use a WHILE – WEND loop, the exit condition for the loop is checked before the loop is entered and any code held within the loop is thus ignored.

```
X=10
WHILE x<10
    Your program code here
WEND
```

Both loops perform exactly the same function.

E-mail

You can e-mail your *GFA* queries direct to Mac Marsden at **mac@mentor.demon.co.uk.**

Visual basic

Just two questions. Can I use my Atari SC1224 monitor to show TV transmissions from my Panasonic NV-J40 HQ VCR? Can I use the monitor with my Apple Mac Performa, or with any Mac?
Jonathan Dickson, London SW6

A The answer to both questions is no. The Atari SC1224 monitor is an RGB monitor with a relatively low resolution. Even if your Panasonic VCR has RGB output, the image resolution is too great to work with the SC1224. The same applies to the Mac Performa, it needs a monitor with at least 640x480 resolution. The Atari SC1224 cannot display images at this resolution.

SCART choice

I have noticed that companies sell SCART leads for the Sony and for the Philips range of TVs. I have a Samsung CK 3351A with a SCART socket and I am wondering which lead to buy. Does my Samsung have Sony gubbins under its shell? If I have to purchase a specially made lead, who do I contact?
Guy Walker, Laarbruch, Germany

A You should have no problems as long as you get a Philips-compatible lead. The SCART pin-outs that you supplied for your Samsung correspond to the standard Philips layout. You didn't mention whether you had an STFM or STE. The leads are different, so make sure you get the correct one for your ST. And no, I'm afraid that there isn't a Sony sneakily lurking inside your Samsung. Sorry about that...

Change of colour

How do I go about getting the menus in *Protext 4.3* to appear like your nice cool blue instead of the standard angry red?
Desmond Reilly, Belfast

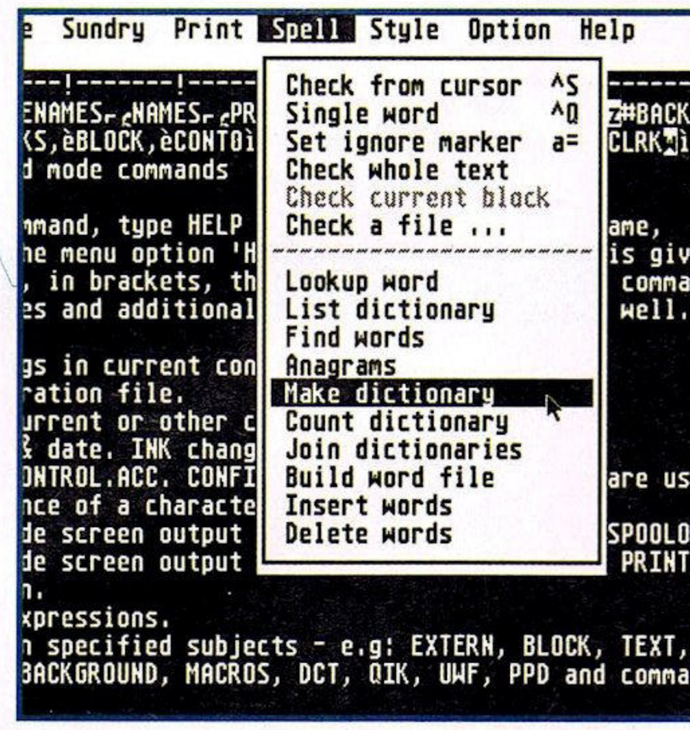
MIDI AND

Andy Curtis constantly fades in and out, accompanied by an incredibly irritating background hum.

Hanging on

I'm a keen MIDI musician and use the *Concerto* sequencer all the time. I sometimes have a problem however when playing music into the sequencer – notes hang on and on and never finish. If I switch off my equipment, then switch it back on again, I can get this to end. This is a really difficult problem because my settings are erased when I re-boot. Is there any way I can solve this problem without turning my equipment off?
B Singh, Birmingham

There are no secrets involved here. Simply get hold of a little program called Panic from any good PD library or BBS. This runs as a Desk Accessory, which means that when notes hang you can use it to send 'note off' messages to all MIDI devices on all channels. If the problem of hanging notes is persistent, we suggest you carefully check all your MIDI connections and make sure that your master keyboard is set so that Local is OFF.



■ **Yep. With menus this colour in *Protext 4.3* you'd probably want to change them just to be on the safe side. Yeeuuuchh.**

A Easy. Run Protext and select the Configuration option. When the configuration program runs, scan through the menus until you find the Display option. Now you can select the colours of the background, the text, the markers and the menus. When you have selected the colours you want, and probably tried lots of combinations, save the information and return to the main Protext program.

Do-it-myself

I've bought a bare 100MByte SCSI hard drive from a computer auction. I've been in contact with a couple of

MUSIC

Impossible with Cubase?

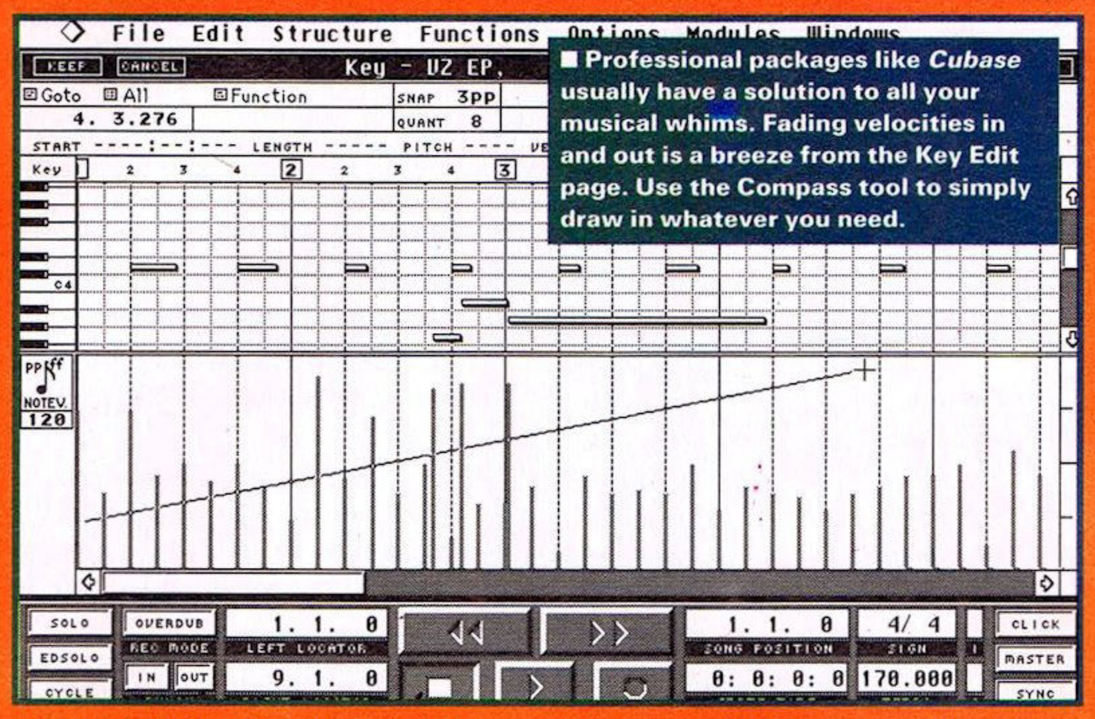
For the last few years I have been sequencing with *Virtuoso* from The Digital Muse. Although the program is a bit weird it has served me well. However, I got some unexpected cash recently and decided to splash out on a copy of *Cubase*. While I have mastered the program with ease, it appears to be unable to perform a feat that *Virtuoso* has no difficulty with. It seems impossible to fade the velocity of a part (or group of parts) up and down without editing each note value individually. Surely a clever program like *Cubase* should do this?

Andrew Clarke, Guildford

Without wanting to appear smug, we should point out that your mastery of Cubase might not be quite as complete as you imagine. Contrary to your belief, there are actually several different ways of approaching this challenge. Here are two of them:

1. Highlight the part and load it into the Key Edit page. Display velocity information in the window at the bottom of the page – you may want to click and drag the box upwards to make it bigger. Right-click on the mouse to reveal the Toolbox and select the Compass. Find the section of the part you wish to work on and drag out a line in the velocity display, which describes the fade up or down you need. When you release the mouse the velocities have been altered accordingly. You can use this technique to create complex fades very quickly and easily, with no tedious number entering whatsoever.

2. The other method is to actually record MIDI volume changes to the part. Use a standard MIDI mixer for the channel in question and simply use the slider at the requisite point to fade the sound in or out. These changes can be recorded and become part of the sequence. It is advisable to save before playing around with this, though.



■ **Professional packages like *Cubase* usually have a solution to all your musical whims. Fading velocities in and out is a breeze from the Key Edit page. Use the Compass tool to simply draw in whatever you need.**

Noisy output

I got very tired of the quiet output from my SM124 monitor so I decided to do the decent thing and use the left and right phono outputs from the back of my STE. I hooked them up to my hi-fi and used the CD/AUX input. The trouble is that the sound is terrible! There is a loud buzzing all the time and the sound actually chugs along with the disk drive when it is being accessed. If the computer is 'thinking' hard, there is a burst of static and the whole thing is just really awful. Am I the unluckiest guy in the world or is there something I can do to make the sound better?

Graeme Ramsbottom, Ilkley

There is always a certain amount of noise that will creep through into the audio channels, but usually it isn't enough to cause any real problems. We would suggest that you check your cables and make sure they are proper shielded ones, and that all the connections are sound.

It may be, of course, that there is a problem with your hi-fi. If all the above are correct then you may have an earth loop, which is causing the buzzing. This really requires an electronics tech-head to look into, so make sure you've checked everything else out thoroughly first.

E-mail

You can e-mail your MIDI and music queries to Andy Curtis at: **andy@theshack.demon.co.uk**

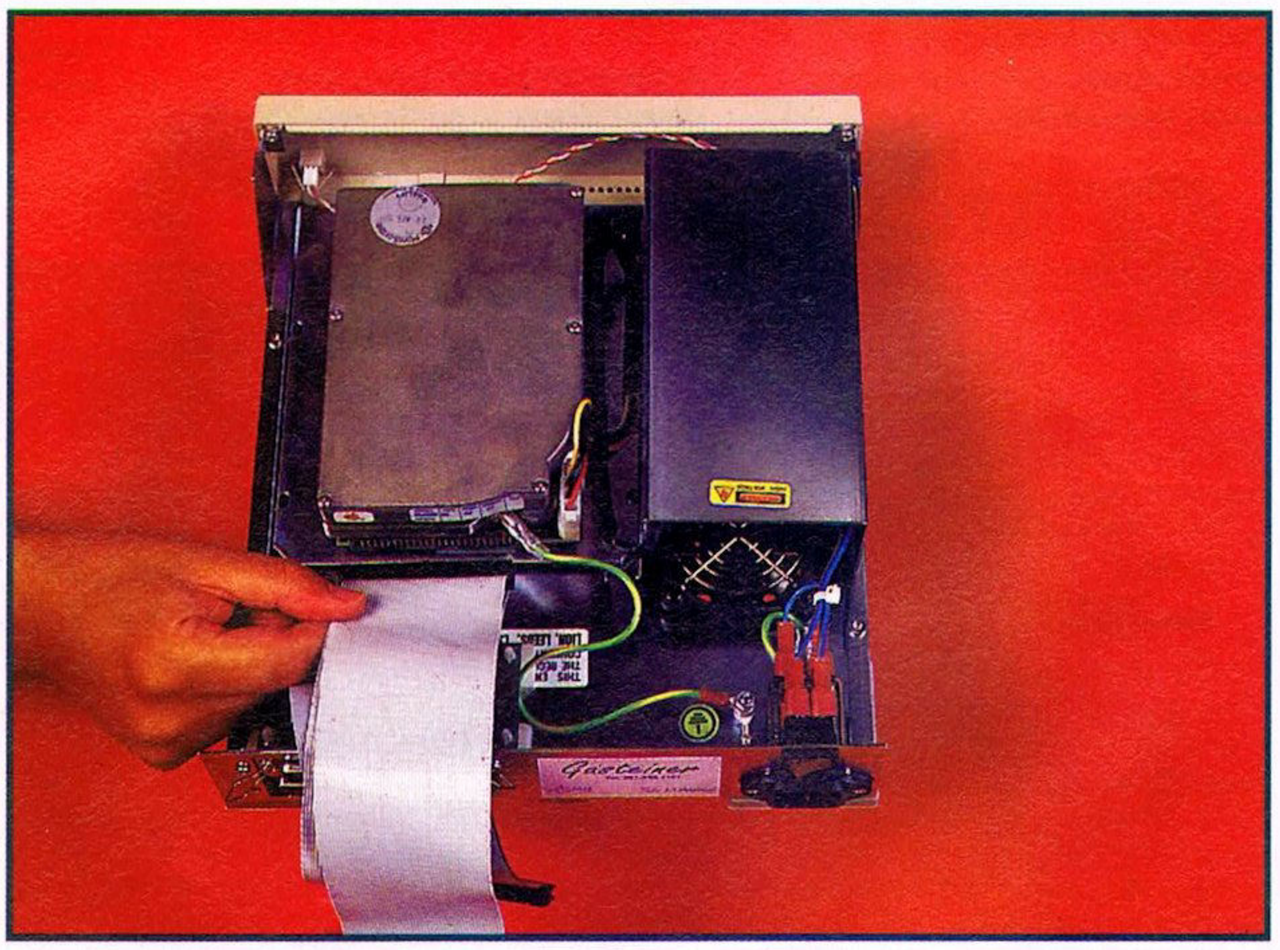
companies about getting the other components I need to connect it to my STE and ended up with various information about hard drive kits. The problem is, the advice I have had from different companies is different, and I'm not sure what parts I need or whether I have to make any modifications inside my ST. Could you please list all the parts I need to buy to build my drive, and can I use a plastic Tandy project kit box?

David Johnson, Chingford, London

There are three main components you need to turn your bare SCSI drive into an ST drive: a power supply, a case and a SCSI host adaptor. You also need the software to format your hard drive, which is supplied with a host adaptor when you buy it. When you get the kit, the power supply and host adaptor are already fitted in the case, so there's no point in getting a Tandy project box. All you have to do is mount the drive inside a the case, connect the power supply and host adaptor – they just plug into the bare SCSI drive – and connect the assembly to your ST. Both Gasteiner Technologies ☎ 0181 345 6000 and First Computer Centre ☎ 0113 231 9444 can supply you with the kit you need. A kit costs £99 from Gasteiner and £149 from First Computer Centre, the main difference being that you can add more drives to the First Computer Centre ICD kit. It's probably worth checking the current prices yourself – just give both of the companies a quick call.

You should also get hold of ST FORMAT issues 51 and 52 – we showed you how to build the kits in these two issues. If you haven't got these issues then turn to page 79 to order a copy.

■ **It's really not that difficult to build a hard drive from scratch. All you have to do is plug the parts together and get drivin'. This is a picture from the step-by-step guide to building the ICD drive kit, as amply demonstrated back in *ST FORMAT* issue 52.**



Can't print

SOFTWARE

Even though I have three different word processing programs, I can't print with any of them. I believe that this is because I can't access the Desk menu, because I don't have a boot disk. How do I access Desk Accessories like the Control Panel and Install Printer?

G Christmas, Swindon

A boot disk is any disk that's in the drive when you power up – or boot-up – your ST. To install Desk Accessories (DAs) they must be on a disk in the drive when you boot up, and the DAs must not be inside a folder. Copy the DAs you need to a blank, formatted disk. Once they have been copied, leave the disk in the drive and press the Reset button. Your ST resets, and after about 30 seconds the Desktop appears. If you go to the Desk menu you should see the DAs listed after the Info command.

The good news for you is that you don't need the Control Panel and the Install Printer DAs installed to print from a word processor. All you have to do is select a printer driver that matches your printer, from the Printer Options or Preferences menus within your word processor software. Once you've found a printer driver that works, use the Save Preferences command in your word processor. Unfortunately you haven't specified the word processors you use, so I can't be more specific.

Hard choice

HARDWARE

I'm considering buying a high-resolution monitor. I've seen several advertised in *ST FORMAT*, all for about £130. Which should I choose?

Harry Smith, Woodbridge, Suffolk



■ All high-resolution monitors aren't the same, but the differences in picture quality are so small that it doesn't really matter which you choose.

A All the high-resolution monitors that you can get for the ST give you just about the same picture quality. Indeed, many of them are in fact the same monitors, except with different names and badges added by the distributor.

As a basic guide, try and get a 14-inch monitor with sound from your nearest supplier – you won't go far wrong if you do that.

Converting Calamus

SOFTWARE

I have a MegaST4 with TOS 2.06 (Compo T-Board), Marpet XtraRAM +8, Megafile 60 hard drive, SM144 mono monitor and SLM804 laser. My problem is that I can convert *Calamus* to work with the XtraRAM +8 using the *UseXtra* program but the printer output no longer works after I've converted the program.

I'm also reluctant to convert other programs such as *Redacteur 3*, *Calligrapher* or *Timeworks 2* because of the lengthy installation procedures I'd have to go through should the conversions fail. Do you have a solution?

Brian McNulty, Bridlington

A Yes, I do have a solution for you. There's no need to convert Calamus to work with the XtraRAM +8 board, because it automatically works with the extra TT memory that the board provides. This is because Calamus was designed to work with the Atari TT030 as well as the ST.

Calamus uses an internal checksum routine to make sure that it hasn't been hacked by software pirates. When you use the UseXtra program to convert Calamus, the length of the Calamus program file is changed. The internal checksum routine detects the change and automatically disables the program.

The easiest way to convert the rest of your software is to make duplicate copies of the main program files, and keep the duplicates in the same directory as the original. You could make a copy of REDACT.PRG and call it REDACT8.PRG, then convert the copy with UseXtra. You should then be able to use the extra 8MBytes of RAM with all your main software. **stf**

■ It's big and it's very clever. You can use the XtraRAM +8 board to take your ST up to 12MBytes of RAM, as long as you already have 4MBytes and TOS 2.06 inside your ST.

Send your ST Answers questions, hints and tips to Clive either by e-mailing him at: **cparker@futurenet.co.uk** or **clive@netmag.cityscape.co.uk** or post them directly to: ST Answers, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW.

PROGRAMMING

STOS CORNER

Frank Charlton structures a few commands and reports on a new STOS Extension under development.

Stricter structures?

I've been playing around with *STOS* for some time now, because I find it easy to use for producing programs that use a lot of graphics and sound samples for my kids. I must admit I have some niggles with it.

I've written a few programs using *GFA Basic*, and I miss some of the more structured commands it provides. If I want my program to jump to a selection of subroutines depending on which key is pressed, do I really have to use a separate IF statement for every choice? In *GFA* I used to use the CASE and SELECT commands, which made my programs much easier to follow when I went back to them weeks later. Why can't *STOS* do anything like this?

Robin Mitchell, Guernsey

It's true, STOS wasn't designed with structured programming in mind. The CASE SELECT idea you mention makes your source code much more readable than using lots of IF statements, especially if you end up nesting them inside each other.

There is some good news though, Robin. Les Greenhalgh's STOS Control Extension, which is now at version 3.0, should be able to help you. It introduces 'switch constructs', which give you the power of using those two GFA Basic commands you miss so much. Control 3 is shareware, and registration is a mere five pounds. By now you should be able to pick it up from your usual PD library, and netsurfing STOSsers can grab it from the ftp site at ftp.uni-kl.de in the pub/atari/programming/STOS directory. And even if you aren't interested in these commands, Control 3 is chock-full of other stuff, from border removal on an STFM to lovely horizontal scrolling commands and routines that enable you to access those old four-player joystick adaptors, which you could use with games like Gauntlet 2. This extension is well worth a look, and Les promises even more in the future for those who register.

The eagle has landed

I thought you might like to see some details on my new *STOS* Extension, called *Eagle*. I'm still working on it, and it has over 80 commands including 15 or so MFP interrupt routines, which do stuff like animated mouse pointers, vertical scrolltexts and wrapping screens around tubes – all under interrupt. *Eagle* should be finished shortly, and I'll send a copy as soon as it's ready.

David Haylett, Leicester

Cheers, David – the list of commands you sent looks awesome. I'll make sure it gets the exposure it needs when it's ready to be unleashed.

If anyone else has written Extensions or routines for STOS, which they'd like to share with the world, then please do send them in on disk. As well as giving BBS users the chance to see them, I can make sure that they're placed on the Internet site I mentioned in the previous answer, so that STOS peeps all over the globe can get at them. If they're really good, you may even get to see them on the ST FORMAT Cover Disk – who knows?

AMOS or not to AMOS?

A friend at school keeps harping on about *AMOS*. He tells me how great it is, and that it's much better than *STOS*. I know he has an Amiga, and I think it's just *STOS* for his machine – is that right? Can I get it for my STE? Can we swap programs we've written to get them to work on each other's machines?

Colin McHugh, Isle of Man

You're right, Colin – AMOS is the Commodore Amiga version of STOS. AMOS was written after the ST version, and has gone through a few more versions than STOS. Since the Amiga and the ST are quite different, you could possibly convert your work to the Amiga, but transforming your friend's stuff for use on the ST could be difficult.

The Amiga has some custom chips inside, which perform graphics and sound functions, and AMOS offers commands to access these chips. Porting your program would mean that you'd have to remove any of these hardware commands and write STOS routines to perform the same job. I'm not saying it's impossible, just don't expect it to be easy.

Your friend needs to pick up an Amiga program like MessySID or CrossDOS to be able to save his files to PC formatted disks, which you can then read directly in your ST drive. Tell him to check out his favourite Amiga PD library, and good luck with the task ahead!

E-mail
You can e-mail your *STOS* queries directly to Frank Charlton at: **frank@theshack.demon.co.uk**

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Atari ST Budget Software

GFA EXPLAINED

The third and final instalment of Simon Forrester's thrilling tutorial, in which you add modular routines to your menu to form a handy disk utility!

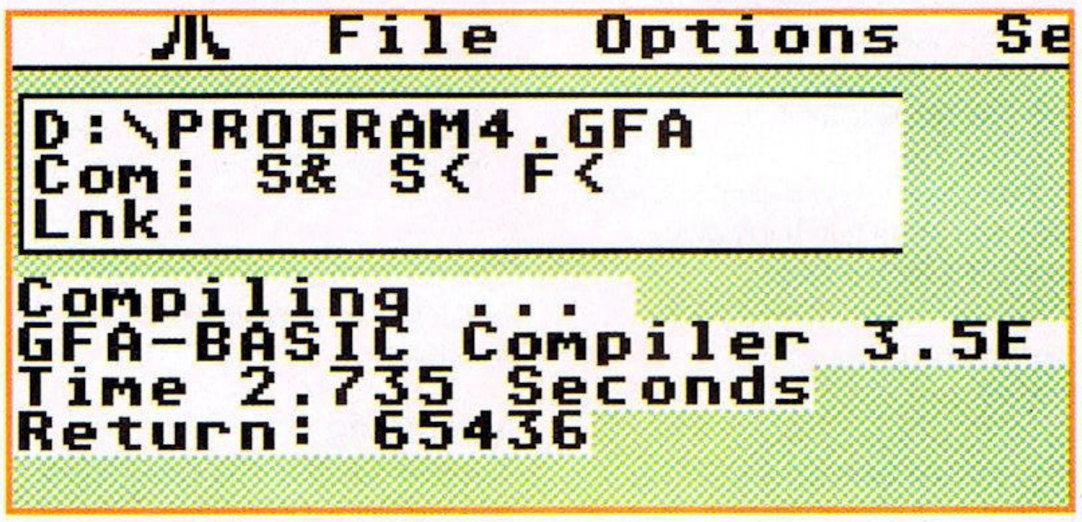
Right, if you've been following a word I've been saying so far over the last couple of months (and if you haven't then you might find this all a tad confusing), you'll have a simple, working menu structure, which will form the basis of a handy little disk utility. From this point on, all you have to do is insert the routines that actually carry out the tasks, and patch them into the correct points on the menu. Remember, this disk utility is multi-functional. It's a collection of smaller routines, each of which can be activated separately by the user to carry out its individual task.

Your first task is to decide what routines you want to slot in, after which you'll have to slide them into your menu program. You can, in fact, leave it until this point to decide exactly what you want your utility to do.

Blimey

Let's begin with a simple little routine to display a text-file. Text-files are like every other file on a disk – great long strings of numbers. These numbers can be converted into letters and characters, each number corresponding to a letter. The standard set of codes is known as ASCII, standing for American Standard Code for Information Interchange, which is all irrelevant right now, but might come in handy one day. Y'never know.

When it comes to reading a text-file from a disk, using *GFA Basic,* you receive the file line by line, each line being a string of characters ended with a carriage return (character number 13, or CHR$(13) as we call it). The program waits for the user to press a key before it displays the next line, which enables them to scroll through the file at their own speed by holding down a key. So, thinking on a really basic level, the text display routine has to go through several steps:



■ **The compiler, showing this month's code turning wonderfully into a fully executable program, once linked.**

1. Open the text-file on the disk.
2. Check whether it's reached the end of the file.
3. Stop if it has.
4. Read in a line.
5. Display it.
6. Wait for the user to press a key.
7. Jump to step 2.

And the *GFA Basic* version of this operation is simple:

```
DIR
INPUT "Filename:",n$
OPEN "i",#1,n$
DO UNTIL EOF(#1)
   LINE INPUT #1,a$
   PRINT a$
   WHILE INKEY$=""
   WEND
LOOP
CLOSE #1
END
```

Doubtless there are commands listed here that you haven't seen before, and others (like INPUT) that are used in a slightly different way. The panel immediately to the left explains them all clearly, simply, concisely and in an almost organised fashion.

Once you've written and tested your routine, you need to patch it into the menu program, so that the user can select this routine simply by calling it up from the menu. To to do this, take a look at the panel on the next page.

So far you have a program that can view files, but that's not really the basis for an entire program, is it? You need another few routines to make this your customised utility. Turn the page for a couple more suggestions.

AT YOUR COMMAND

There are a fair few new commands in the text-file routine listing, all of which are extremely simple to use and understand. They all deal with messing about with files, and are as follows:

OPEN *mode, #stream, "name"*

This command will open a file ready for the program to read from it. This will not load the file into memory in a way that lets you access the whole thing, but it'll make your program look at it in such a way that you can read its lines one by one. The mode is 'i', as the file is being opened for 'i'nput into your program. Note that every file you open has to have a different stream value, because *GFA* needs to keep track of all the different files you're dealing with at once, and numbers are the easiest way to do this. Which number goes with which file is completely up to you, just make sure two files don't have the same number. Finally, the command needs to contain the actual name of the file you're opening.

Incidentally, you might like to know the different mode letters you can use at the start of an OPEN command – if you were opening a file for output (creating a new file), you'd use 'o', and if you were opening a random access file (don't ask), you'd use 'r'. To write to an already open file, attaching new data to the end, use 'a' (append). Writing to a file is easy as well – if you'd opened a file and wanted to put data into it, you'd use something like: PRINT #*stream*,"Hi there"

LINE INPUT #*stream, var$*

And this is the command to read a line from the file. If you look back at the text-file routine listing, this command is used in repetition to read in each individual line. You've used this command before to take text inputs from the user, but this time you're taking a text input from a file, so you give the command a stream number, matching that of the file you want to read from.

The LINE part of the command makes sure the whole line is read, otherwise the program will interpret any commas in the text to mean end of line.

CLOSE #*stream*

This command simply tells the program to stop reading from the file, because you've finished with it.

EOF(#*stream*)

This isn't actually a command so much as a variable – it stands for End Of File, and must be suffixed with the stream value in brackets. It's called a marker because it marks the end of the file. When the end of the input file is reached it equals 1, the rest of the time it's at 0.

DIR

This command simply prints a directory of the disk's contents on screen, no questions asked.

```
Save, A | Quit | B
Load | Merge | Llist |
DIR
INPUT "Filename:",n$
OPEN "i",#1,n$
DO UNTIL EOF(#1)
  LINE INPUT #1,a$
  PRINT a$
  WHILE INKEY$=""
  WEND
LOOP
CLOSE #1
END
```

■ A simple little module, just waiting to be inserted into the main menu.

Disk directories

You can get a directory of a disk on screen by simply issuing the DIR command. If you wish, you can state exactly which directory you want to see by giving a path. For instance, you could type in:

```
DIR "a:\programs\*.*"
```

Or you could get the user to state a path and store it in a variable, using this little listing:

```
INPUT #2,"Path:",p$
DIR p$
```

This has the benefit of enabling the user to give a path name if they wish, or press <Return> to see a directory of the current path. This is an incredibly simple little routine, but it's an important element of any disk utility, because it means that the user can see exactly what they're doing. For a complete list of files, complete with their types and sizes, replace the command DIR with FILES.

Changing directories

If you want your user to be able to move around different directories then you're going to need the following commands:

DIR$(n)

This gives you the current path, which you can place into a variable with the line:

p$=DIR$(0)

The number (0 in this case) refers to the drive for which you want a path. The number 0 is simplest to use, because it refers to whichever drive you're currently using.

CHDIR p$

Simply issue this command with a new path string, and you'll end up in that path.

CHDRIVE n$

Issue this command, and you'll be selected to whichever drive's letter (A, B, etc) is held in n$.

Of course, none of these commands can sit on their own, but they could be amalgamated, like this simple routine that enables the user to change path:

```
p$=DIR$(0)
PRINT "Old path:";p$
INPUT "New path:";n$
IF n$<>""
   CHDIR n$
ENDIF
```

This is now a complete module listing, which you can slide into your menu, and your utility has yet another use.

SLOTTING YOUR ROUTINES INTO THE MENU

Once you've written a routine, you then need to patch it into the menu structure program that you created last month.

The first chunk of your menu program looks like this:

```
DO
    RESTORE menu_dat
    GOSUB menu_n_stuff
    ON mi GOSUB
opdir,opdisk,opfile,opview,opdrive
LOOP
'
menu_dat:
DATA
"Dir","Disk","File","View","Drive"
DATA "","",""
```

If the file viewing routine is to run from the 'View' option of the menu, you'd simply add the routine listing to the end of the menu listing (for neatness' sake), encasing it with:

```
PROCEDURE opview
    The routine
RETURN
```

If you look back at the text-file viewing routine, it has a DIR command at the beginning. When you incorporate this listing into your menu program you can delete the DIR command. You don't need it now that this isn't a standalone program any more.

However, there's a problem. As the program stands, everything you print will overwrite the menu box itself. A simple way around this is to display the routine in a window. The command to display a window to the right of the menu box is:

```
OPENW #2,80,320,0,199
```

This command should sit at the very start of the program, setting up one window that you'll use from the beginning. Because you've defined your window as stream number 2, you must then make sure that your routine prints everything to window 2. Dead simple – the PRINT command now looks like this:

```
    PRINT #2,a$
```

As you can see, streams are wonderful things not only for accessing files but also for organising textual information into tidy little boxes. If you want to close a window down after using it (this one in particular), simply use the command CLOSEW #2.

```
DEMO.DFN
DIALOG.DFN
RCS2.DFN
MINISND.GFA
RSCDEMO.GFA
RSCDEMOL.GFA
DESKTOP.INF
DEMO.LST
DIAL_SMP.LST
MENU_SMP.LST
WINDOW.LST
WIND_SMP.LST
DEF2DFN.PRG
GFABASIC.PRG
GFABASRO.PRG
RCS2.PRG
DEMO.RSC
DIALOG.RSC
RCS2.RSC
SPLAT1.GFA
SPLAT1.BAK
SPLAT1.LST
Filename:
```

■ The first section of that little reader module working. The directory isn't actually essential, but it helps.

Are you getting it?

Adding modules to your disk utility is incredibly easy. We've covered three possibilities here, but there are many more. But there's no point us covering them all. Instead, get yourself a copy of the *GFA Basic* manual if you haven't already, and go through the commands, adding anything you might find useful to your utility.

But there's more. Write your own modules for your utility and, if they're any good, send them in to us marked 'I'm getting the hang of this *GFA* thang' at: *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW. The best modules will either be thrown on to a Cover Disk or compiled into a PD collection. Get 'em in by the end of April, and you could be famous. ***stf***

```
Save | Save, A | Quit | New | BlkSta | Replac | Pg  | | Direct | Run |
Load | Merge | Llist | Block | BlkEnd | Find | Pg  | Insert | Flip | Test |
```




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Penetrating PASCAL

Simon Forrester's shown you how to build a database. In this final instalment, he gets into the techie details.

Last month, we came to some decisions about exactly how this database should work in theory, without producing a final listing. Like the *GFA* project it's only in the final stages that you really get down to the meat of the program. In any program, the majority of work goes into creating the environment in which your clever routines and smart commands can function to the best of their abilities.

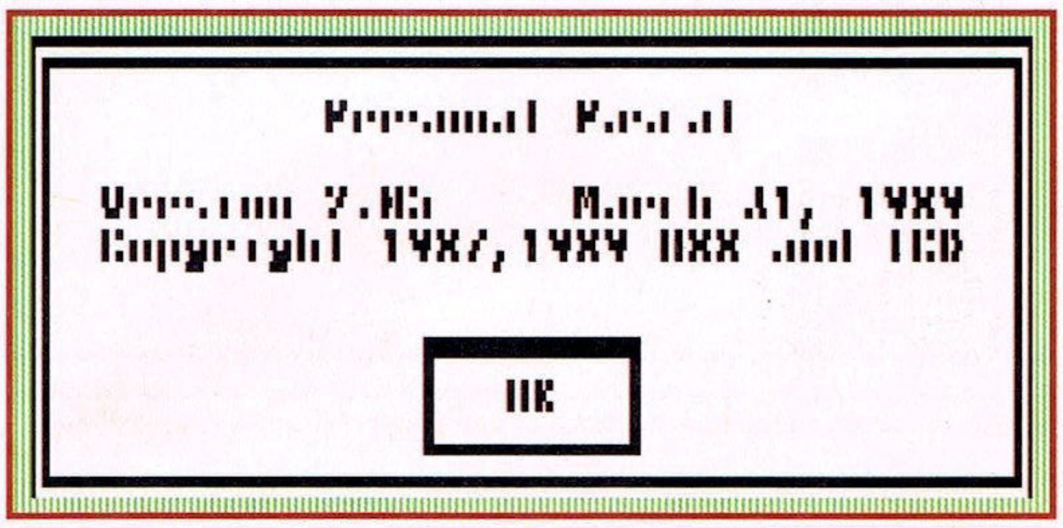
Stuffing it on

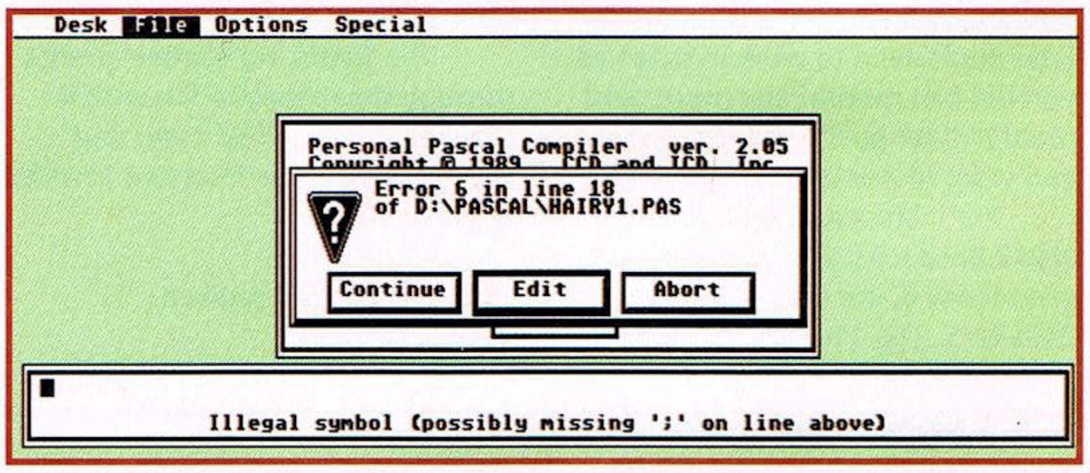
This month, we're going to deal with the most important part of the program: the section that takes the data from the user and saves it to a file on a disk. Last month we suggested you try writing your own listing. If what you read from here on is different to the version you've created, don't worry. Everybody programs in different ways.

Before going any further, let's take a look at exactly how the listing works piece by piece. Remember that this routine effectively works directly to and from disk – very little is stored in memory. This means that the size of your database is limited only to the amount of free space you have on your disk. Don't worry about the initial setting up of variables yet.

```
write ('Name:');
readln (nam);
write ('Phone number:');
readln (pn);
```

The first thing you have to do is take the user's input, using five 'readln' commands. For now, assume the user is only inputting two lines of information – there's no need to be weighed down with too many lines. You can add more easily later.





■ **If you do get these seemingly blank errors, you can be sure you've missed a semicolon (;) from the line about the one reported as an error.**

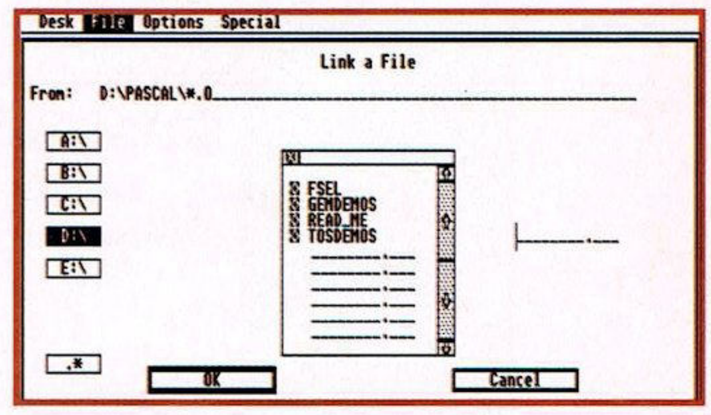
```
f^:=nam;
put (adfil);
f^:=pn;
put (adfil);
```

Next, you append your lines on to the end of the file, using the 'put' command. The variables you set up at the start of the program are important – you need these lines at the very beginning of the program:

```
type hfile=file of string[20]
var adfil:hfile;
      name:string[20];
      pn:string[20]
```

Essentially, your data entry routines are now complete – except for the chunk that defines variables, which should sit at the beginning of your program. You now need to insert the data acceptance and file writing lines into your program – see the panel over the page called 'Fitting it all together'.

■ **Strangely, *Personal Pascal* hasn't been updated for quite a while. We may put some more libraries on the Cover Disk soon, though – keep an eye out.**



■ **If you're having trouble with the menu program, try just running the editor.**

Spitting it out

The second chunk of the program has to read files from the disk. This is accomplished easily – last month you went to great lengths to ensure that each record was the

DISK FILING

You're also going to need to understand how to use a PASCAL disk filing system for your database. The easiest way to look at this is as one big set of variables, sitting on disk instead of in memory. Start by setting up a file as you would any variable: state exactly what it is, what it's called, and what type of file it is. To do this, you have to define your own variable type.

If you're confused, think back to the first instalment, when you set up variables and stated whether these variables were numbers or strings? Well, you can create a file that is a series of string files, using the following setup:

```
type wibble=file of string[20]
var doof:wibble;
```

The definition 'file of' means simply that. So how do you throw things into this file? You need a new command: 'put'. This is one of the most useful commands you'll come across in the series, because it enables you to place information into a disk file.

This is a straightforward process – you can add to the listing you've already created using the following lines. Note that they assume that the line you want to add is held in a variable called 'shumfa':

```
f^:=shumfa;
put (doof);
```

This places the contents of the variable into f^, a buffer provided by PASCAL, then writes that buffer out to the file called doof (defined earlier). Using this method, you can work through the file line by line, adding the two lines that make up the record. If you're reading a file, you can take the contents of a line using a similar process:

```
get (doof);
shumfa:=f^;
```

```
File  Block  Find  Mark  Options
Line:     1 ========== Filename: HAIRY1.PAS
program database (input, output);

var comm: string[10];
var i: integer;

procedure add_rec;
begin
end;

begin
 readln(comm);
 i:= pos('add',comm);
 if (i=1)
  then add_rec;
end
```

■ The tabulation, indenting nested lines and subroutines, is inserted automatically. If your program doesn't end flush with the left, there's a bug somewhere.

same length. Now you work out how many lines long the record is (you don't need to work in bytes as you did last month, any more) and multiply that by the record number you want to see minus one.

For instance, if each record was 2 lines long and you wanted to see record 6, the sum would be 2*(6-1)+1. The 11th line in the file is the first line in the two that make up the record.

The following routine counts through the lines of a file until it reaches the specified byte, and then reads out the next two lines as the record.

```
write ('Record number:');
read(r);
r:=2*(r-1)+1
```

Of course, you need to find out which record you'd like to read and hold it in the variable 'r', after making the calculations to convert that value into lines:

```
while r:>1 do skip
get (afile);
name:=f^;
get (adfile);
pn:=f^;
```

This looks more complicated than it is. You're skipping past the correct number of lines using the 'skip' routine, using the value 'r' as a counter – it starts off as 1 and decreases with every line you skip. After that, you simply read in the variables. You can use the 'write' command to display the contents on screen – read last month's instalment to find out how.

```
procedure skip;
begin
     get (adfile);
     r:=r-1
end
```

Finally, this routine skips a line and decrements 'r'. This must sit out of the way of the main program, so just tack it on to the end of the whole listing.

■ If you've written any PASCAL programs and you'd like us to print them, send them along and we'll think about it...

Your turn

Flicking through a set of records one by one is easy to program. What happens when you want to perform a search? Well, that's what you've got to work out. Everything you need to know is included in this tutorial – all you have to do is work things around your own way. To search for an item, the procedure is as follows:

1 Ask the user which name they want to search for.
2 Go through each name in the file, looping until you either find a matching name or reach the end of the file.
3 Display the number that is linked to this name.
4 Finish.

Give it a try – you understand much more than you think by now.

Next...

From now you're better off writing your own version of the program, using what you've learnt. Don't worry, just use everything you've been taught. Send the finished version, and any other tips of hints you'd like to share, to us at: 'My PASCAL database', *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW, and you might be up for some fame and glory... ***stf***

```
Desk  File  Options  Special

   Personal Pascal Compiler   ver. 2.05
   Copyright @ 1989   CCD and ICD, Inc.

        Main file:  CUBE.PAS

      Include file:  GEMSUBS.PAS

            Errors:  0

              Cancel
```

FITTING IT ALL TOGETHER

These routines will mean little and do even less when they're used on their own. Last month, we covered a parser program, and left gaps to which you could later add these routines. The routine for adding records to the file should sit in the 'add_rec' procedure gap, and you can create a similar gap for record display. Refer to last month's instalment to see exactly how you'd go about doing just that.

```
File  Block  Find  Mark  Options
Line:     1 ========== Filename: GEMSUBS.PAS
{ gemconst.pas - Personal Pascal GEM library constant definitions. }

const
    No_Window  = -1 ;
    Root       = 0 ;          { Index of root w/in object tree }
    Max_Tree   = 100 ;
    Null_Index = -1 ;         { Index of a non-existent item }
    Max_Depth  = 8 ;          { Max depth of search or draw }

    Max_Fn     = 12 ;         { Max length of file and path names }
    Max_Path   = 80 ;

    Max_WTitle = 80 ;         {Menu constants}
    Desk_Title = 3;

  { Event values: }
    E_Keyboard = $01 ;
    E_Button   = $02 ;
    E_MRect_1  = $04 ;
    E_MRect_2  = $08 ;
    E_Message  = $10 ;
    E_Timer    = $20 ;
```

■ ...but only useful, handy or tutorial programs will be printed. You could even win a prize, in the form of a token *ST FORMAT* £25 cheque. You lucky people, you.

THE FULL DATABASE LISTING

```
program database (input, output);

type hfile=file of string[20]
var adfil:hfile;
    name:string[20];
    pn:string[20];
    comm: string[10];
    i,r: integer;

begin
    readln(comm);
    i:= pos('add',comm);
    if (i=1)
    then add_rec;
    i:= pos('view',comm);
    if (i=1)
    then view_rec;
end.

procedure add_rec;
begin
    write ('Name:');
    readln (nam);
    write ('Phone number:');
    readln (pn);
    f^:=nam;
    put (adfil);
    f^:=pn;
    put (adfil);
end;

procedure view_rec;
begin
    write ('Record number:');
    read(r);
    r:=2*(r-1)+1
    while r:>1 do skip
    get (afile);
    name:=f^;
    get (adfile);
    pn:=f^;
end;

procedure skip;
begin
    get (adfile);
    r:=r-1
end
```

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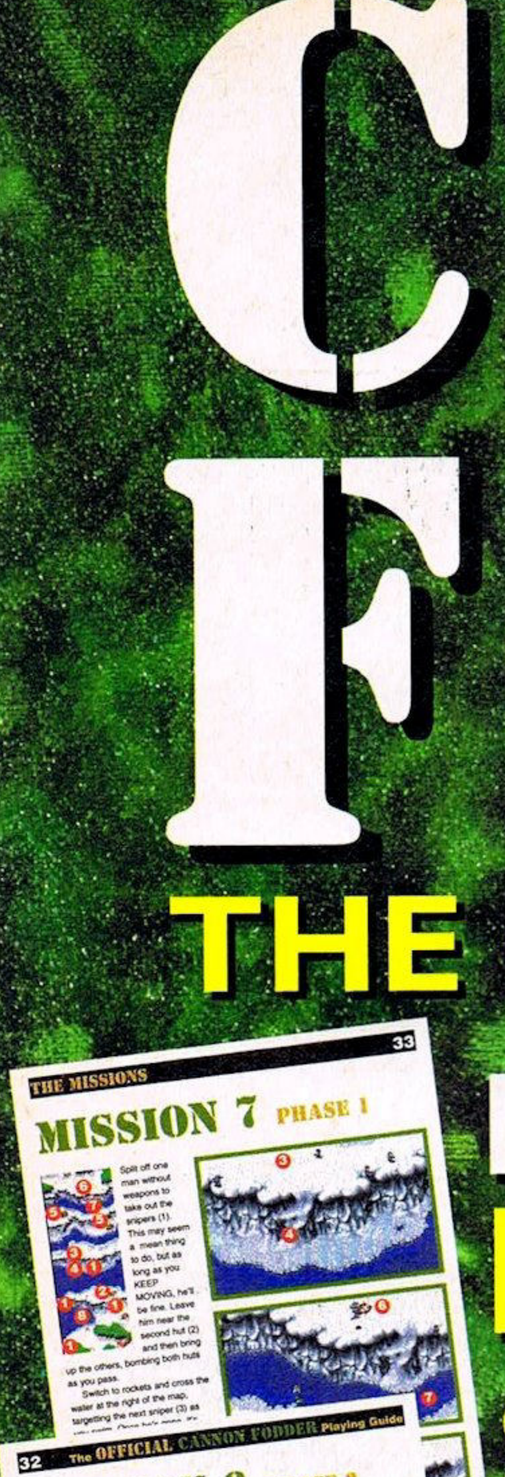
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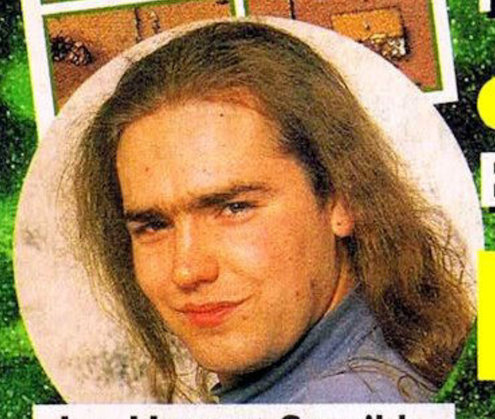
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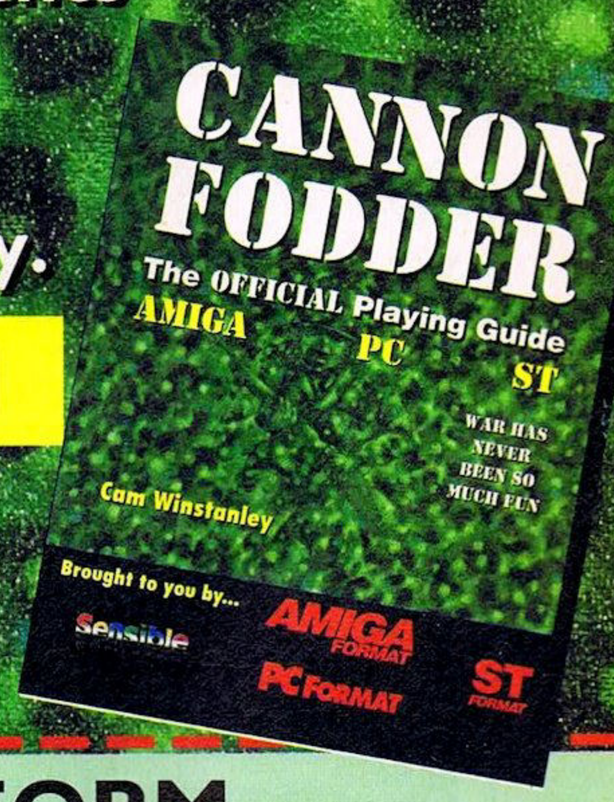


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ST First Aid

In the second part of our first aid special, Nick Peers and Simon Forrester are covered in soap suds and force-fed antibiotics as they continue to advise you on how best to keep your ST happy and alive.

VIRUSES

It could happen to anyone, including you. Make sure you're prepared.

"It'll never happen to me." That's what most people say shortly before a rude message appears on their screen, and their hard drive goes through the simple process of committing digital suicide, while things inside the machine begin to go pop. A virus can hit anyone – if you think you're safe then you're either a complete idiot, or you don't own a computer. And if you don't own a computer then why are you reading this magazine? So for those that are sane and own computers, the complete guide to all things virus...

What exactly is a virus, Simon?

Just as people can catch viruses, computers can get their own equivalent of the electronic flu, in the form of small, discreet programs written by warped people. The unfortunate thing is that although people can catch anything from a common cold to athlete's foot, every computer virus is the equivalent of the plague. The virus might start off by infecting just one disk, but every time that disk is inserted into a machine, that machine is infected. Every other disk inserted into that machine after this point is also infected, spreading the virus to other computers, and so the cycle continues.

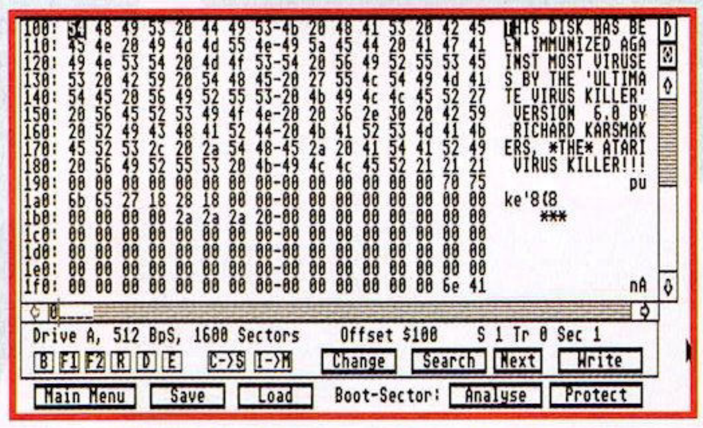
At least, it continues until something sets the virus off. When a virus decides to get nasty it doesn't necessarily happen everywhere at the same time, because it's not in touch with its parents or children, although some of them are designed to go off at a certain time. But if it's on your machine then you're in deep trouble. Depending on the author's instructions, a virus could do anything from formatting disks and hard drives to locking up your machine, or even having fun (reversing your mouse or flipping your screen, for example).

Countless different viruses have been written, many of which are on the ST. They're still around today – viruses never really die, they just wait and reproduce. They can travel down phone lines (if you download something from an on-line service) and they can travel by train (if you post a disk to someone, or order PD). You need to be careful not to catch a virus, and when you do get one, your ST needs treatment.

How can I stop getting a virus?

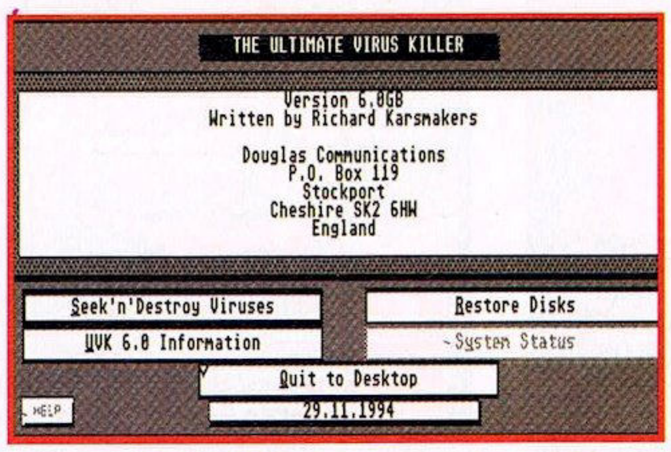
There's no sure-fire way to prevent your ST catching a virus, because for every virus-killer that's released there's a virus it can't kill, either pre-existing or written afterwards. So before you even start to think about anti-viral programs there are some basic precautions you should take.

- If you're not sure about the integrity of a disk then take precautions when inserting it. Don't copy anything from the disk to your hard drive, and make sure that when you've finished with the disk you take it out and turn your machine off, and leave it off for at least ten seconds. You also need to make sure there are no other drives connected to the machine that the virus could spread to. This way you're letting the virus infect your computer until you turn it off – you cure the disease by killing the patient and burning the body, the only difference being that you can turn your ST back on.
- Be careful when making backups of your hard drive or floppies. The last thing you want is to find that your only copy of that expensive word processor has enormous viral problems and isn't ever likely to work again.
- Only order public domain software from long-running, established PD libraries. Your mate down the road may have disks full of excellent software, but it's up to you whether you think it's worth the risk or not.
- Listen to your computer. ST disk drives aren't the quietest in the world, and you can tell when a disk is being accessed even if you don't spot the drive light. There will be times, obviously, when your ST needs to access the disk, but there will also be other times when it quite obviously doesn't. If your machine acts at all suspiciously and takes time out to do things you didn't ask it to, then you should start to worry.



■ **Your boot sector – the perfect home for a virus. Certainly beats Barratt.**

What should I do when I've got a virus on my ST?



■ **The *Ultimate Virus Killer*. It might just save your life (or the odd disk).**

You should turn to page 75 and buy yourself a copy of *Ultimate Virus Killer 6*, for the paltry sum of £9.95 (that's £3 off, folks). Alternatively, you could use one of the many PD virus killers out there, but *UVK* is particularly powerful. Using it you can kill any viruses on your machine quickly and easily.

UVK works by slowly working its way through an entire disk or hard drive, seeking out just about every virus you can get and destroying it. This can means blowing files away completely, but that's a small price to pay.

You mean I may still lose data?

Yes. Unless you *UVK* every disk in your possession, you can never be safe. If you have time to use *UVK* on every disk that passes through your hands, you'll be okay. However, if you keep floppy backups of all your important software, you should be able to patch up any virus disaster, be it on a hard drive or on a PD disk. Never underestimate a virus' ability to multiply.

CLEANING AND MAINTENANCE

Just stop reading this for a second and run your finger along part of your ST. Does it come away covered in grime and dust? Tsk. We're going to show you how to keep your ST looking pristine and fresh without getting it wet. But before you start, remember to completely switch off your ST and peripherals, and disconnect them from the power supply (except when you're cleaning the disk drive heads – see below). That way you won't risk electric shocks or worse when cleaning your ST.

Get yer Marigolds on

How should I keep my ST's disk drive heads clean?

All you need for this is a special cleaning disk, available from most ST dealers, which cleans the drive heads in much the same way as a tape cleaner does. By regularly cleaning the heads you prevent the build-up of microscopic dirt which can corrupt your disks should it get on to them.

So do I need to keep my monitor/TV clean?

Yes. It picks up a lot of dust caused by the amount of static electricity generated, and a regular wipe prevents the dirt building up and obscuring your vision. If you use a dedicated spray to wipe it clean you'll be amazed at how much brighter and clearer your display is, which has to be good news for your beleaguered eyes.



■ Just some of the stuff you can use in cleaning your ST. We would have included the cotton buds too, but Nick ran off with them. He wouldn't say what he wanted them for, either.

My ST's casing is a somewhat dirty yellow. Is there any safe way that I can clean it and return it to its original colour?

You can give your ST's casing a good rub using a dedicated cleaning agent (see your local computer supplier for more details). Never clean your ST while it's connected to the mains supply, and don't forget that water should never be used in the cleaning of your computer.

How do I clean the awkward bits, such as the keys and sockets at the back of the machine?

Always use a dry cloth or cotton buds when cleaning the various bits of your ST. The bits you should aim for include between the keys on the keyboard (see the walk-through below if you feel confident enough to open up your ST to get to the deep-down dirt, but it's not obligatory), and the various sockets at the back of the machine. Cotton buds are best in both these cases for picking up the dust and dirt, because not only are they more likely to get to all that deep-down dirt, they're also less prone to damaging your ST in any way because they're soft. This assumes, of course, that you apply them with due consideration and care.



■ Even though cleaning your ST won't turn it into a Medusa, it'll feel and work a lot better for the experience.

My mouse won't work properly. What can I do to make it run smoothly and responsively again?

Keeping your mouse rollers clean prevents them from clogging up with dirt. Open the small hatch on the bottom of your mouse and remove the mouse ball. You'll find three mouse rollers, probably covered with dirt and fluff. Clean these using cunning, patience and cotton bud, replace the ball, close the hatch and your mouse should roll freely again. ***stf***

Prevention rather than cure

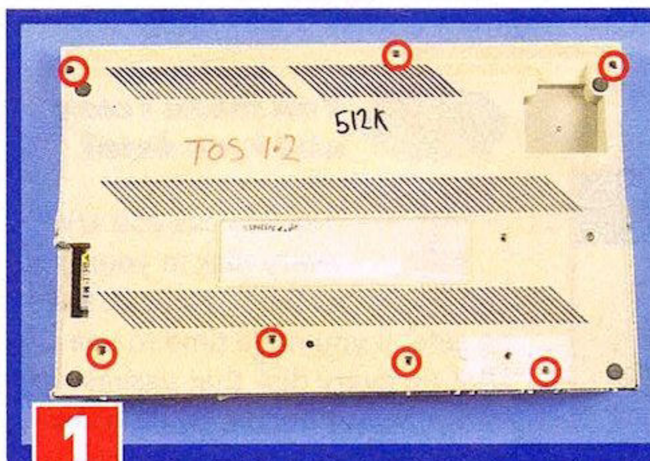
The best way to prevent the build-up of dirt and dust on your ST and various peripherals is to get them a dust cover each. You can then prevent the build-up of dust and dirt by covering all your equipment when it's not in use and reduce the need for cleaning your ST quite so often.

You can get dust covers from just about everywhere – just look at the various advertisements in *ST FORMAT* every month, or try your favourite PD library (you can find a full list of libraries on page 85).

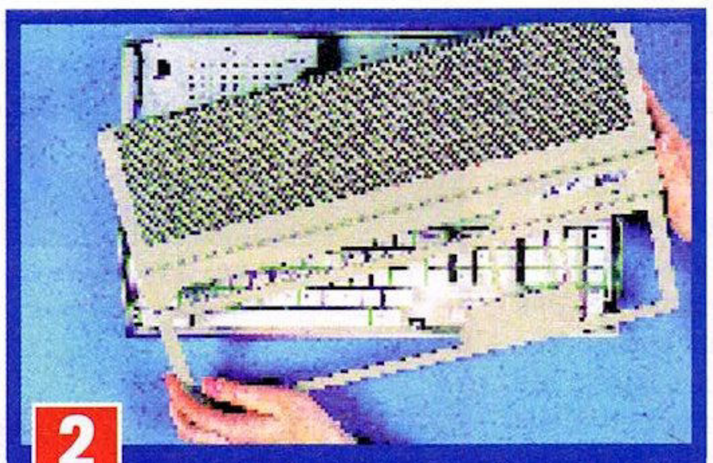
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OPENING UP YOUR ST

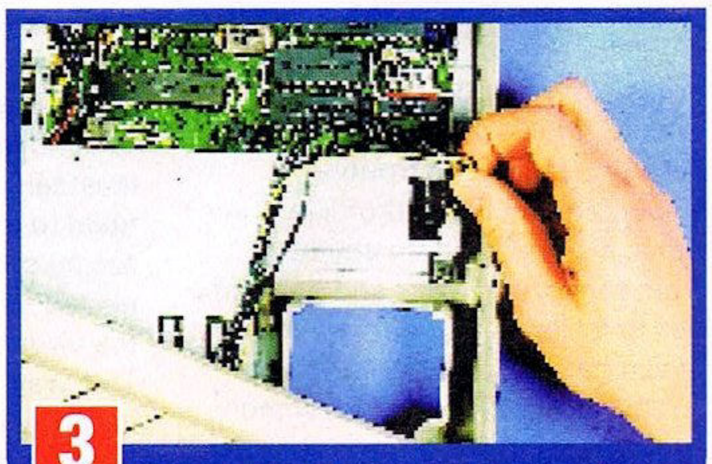
It's not obligatory by any means, but it's the best way of getting to the deep-down dirt inside your keyboard. Do not, however, do anything else inside your ST aside from wiping all the dust free with a clean, dry cloth.



1 Turn your ST on to its back and remove the screws that attach the casing together. Do not touch the three screws that are under the disk drive – they hold it in place (marked in red on the photograph).



2 Keeping hold of the casing firmly, turn your ST on to its front, then gently lift the lid off as shown in the photograph. Remember to slide the upper casing slightly to the right to dislodge it from the disk drive.



3 Disconnect the keyboard as shown here and you can now clean the two parts without touching the rest of the ST. Once it's all pristine and to your liking, reverse the process to put your ST back together.

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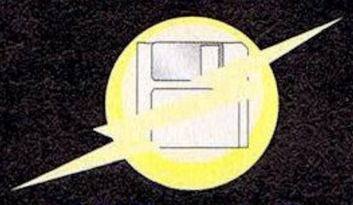
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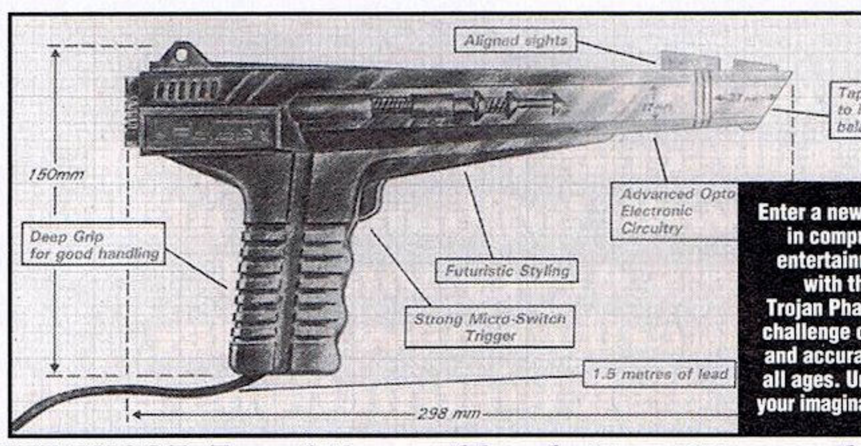
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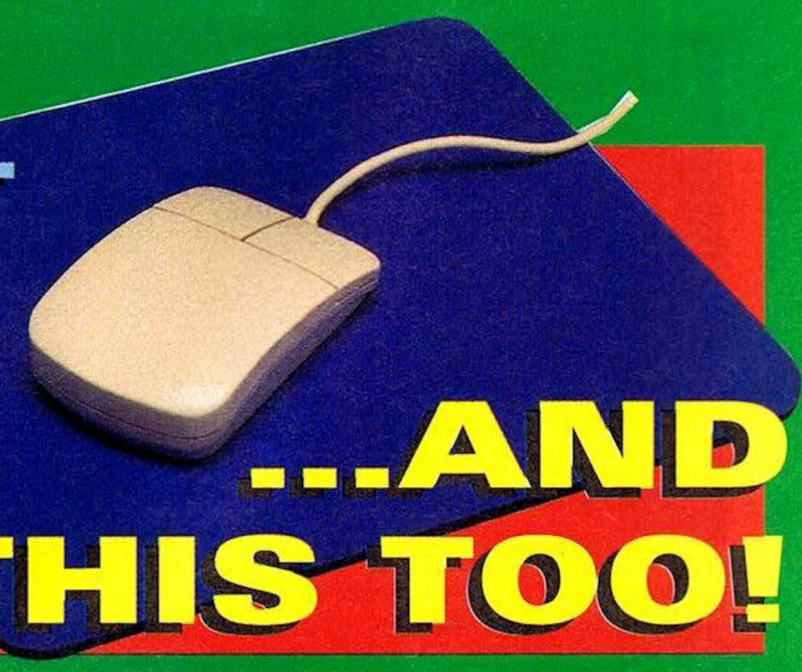


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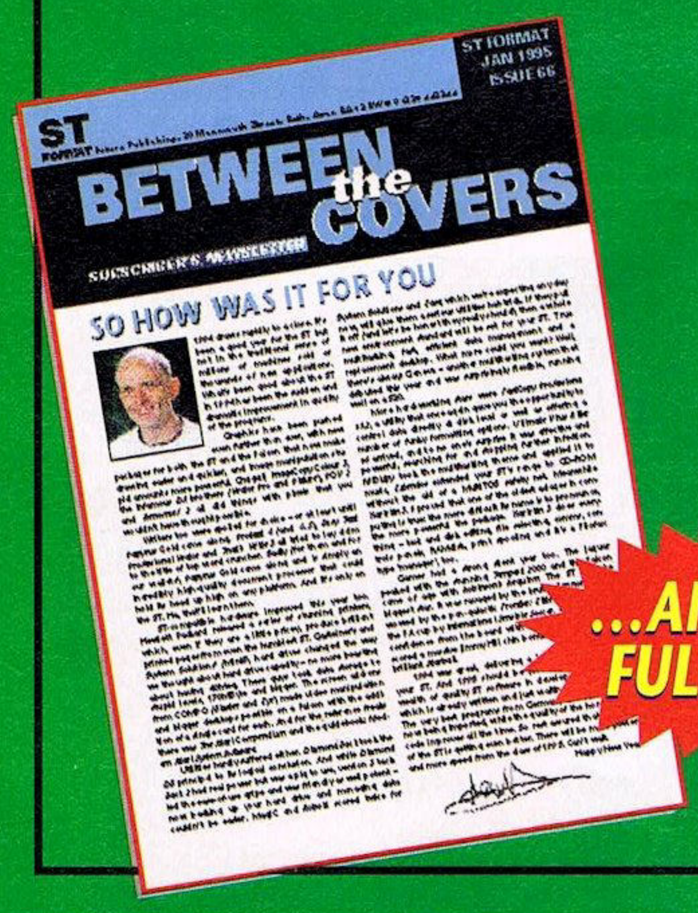
■ ***World Conquest*** **is yet another multi-player game that will threaten your already tenuous friendships (cue demonic laughter from Max Von Sydow as Ming the Merciless).**

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LAMP: **SEQ file – goes with last month's anim feature.**



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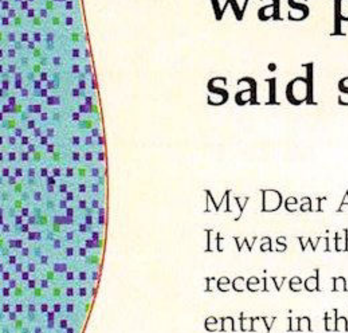
Date _____

AROUND THE FAL

We received this odd letter from a chap calling himself Phileas Frogg the other day. Apparently he'd just received a large sum of money, and was planning a spending spree. He said something about a Falcon setup...

My Dear Aunt Agatha,
It was with great interest that I received news of your fortuitous entry in the new National Lottery Competition. And your generous donation to my allowance, I assure you, will not be wasted. I had of course originally planned to travel around the globe in a large balloon, but recent events have overshadowed that particular enterprise.

You see, I am the proud owner of one of Mr Tramiel's superlative Falcon machines, a computer that excels in the production of audiophonics and pictograms, and only now have I been granted the opportunity to acquire the best the software craftsmen and technical engineers can offer. As soon as I received your banker's draft I procured a Falcon Wing RAM expansion board with 14MBytes of SIMM memory, as provision for the discoveries which lay ahead. I'm sure you will agree the funds were well spent.

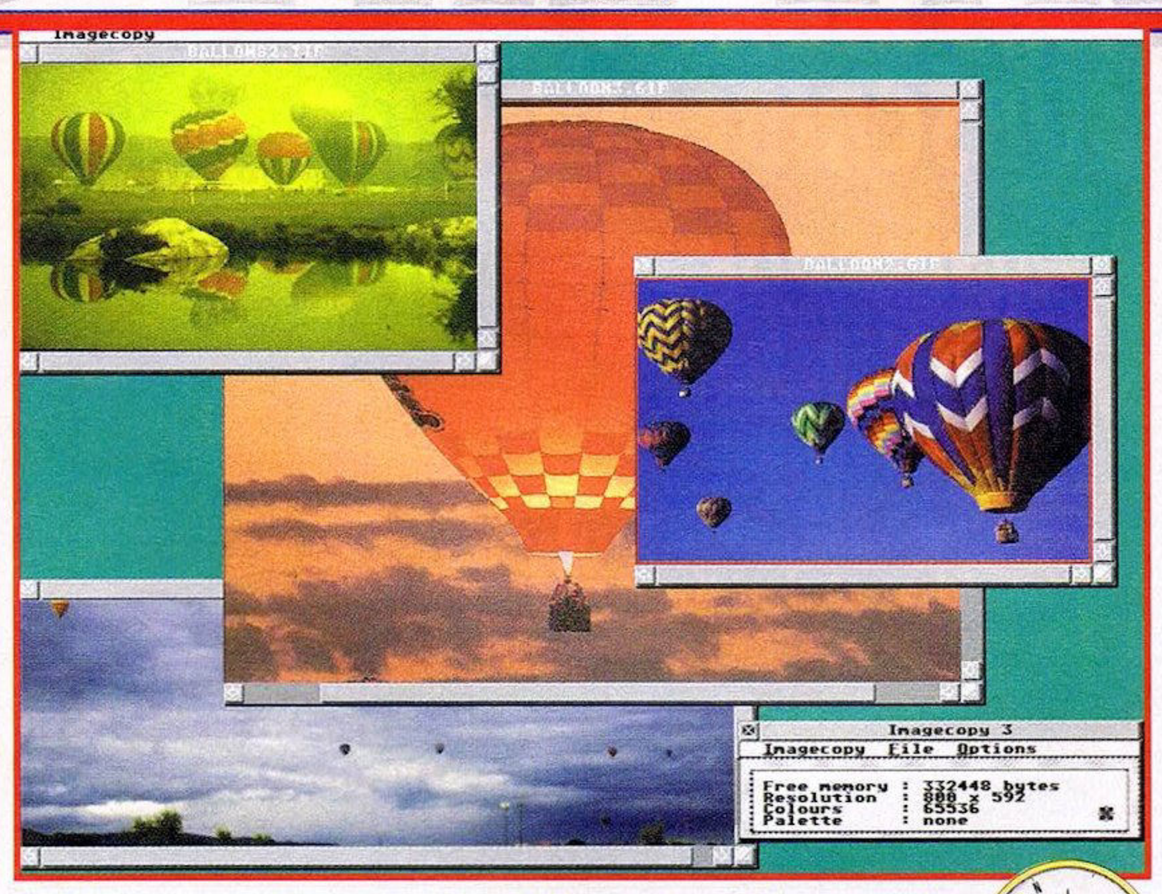


Sound Advice

I have collected a large number of waxings in my travels, and I soon realised my recordings would be markedly improved if I connected my aged phonograph to my Falcon's sound ports. The best in Falcon music software is unquestionably the mighty *Cubase Audio*, a professional package that even the Falcon needs extra hardware to fully exploit. However, the sheer wealth of features confused my layman's senses, and I invested instead in *Musicom 2*, a quality direct-to-disk recorder, which transformed my sounds no end. Not only did it provide me with a real-time 10-band graphic equaliser, but I was able to sample selected noises and produce a digital catalogue of my favourites. With a System Solutions MiniS external SCSI hard drive of generous proportion, I captured entire chants and recitations and re-recorded them with renewed clarity. With the addition of *TrakCom*, possibly the best 'soundtracker', I designed entirely new compositions, using my samples as instruments.

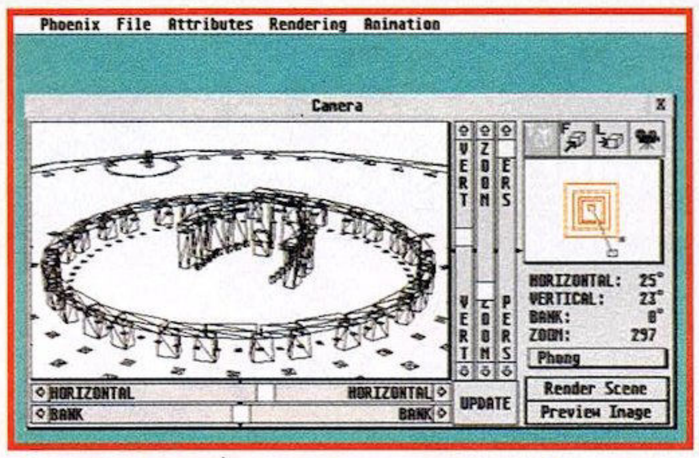
Services Rendered

My thoughts then turned to the Maharajah of Monitorstan, who had commissioned me to design his new palace's outside convenience. My Falcon was invaluable. I purchased *Xenomorf 2*, a full-featured 3D rendering program which has the advantage of supporting the *Cyber Studio* object format, and a 68882 maths coprocessor to improve the speed of the rendering process.



■ **Drift up, up, up and away into the wild blue yonder with *Imagecopy 3*.**





■ **Inspect the wonders of the ancient world from the comfort of your own Desktop, using *Xenomorf 2*.**

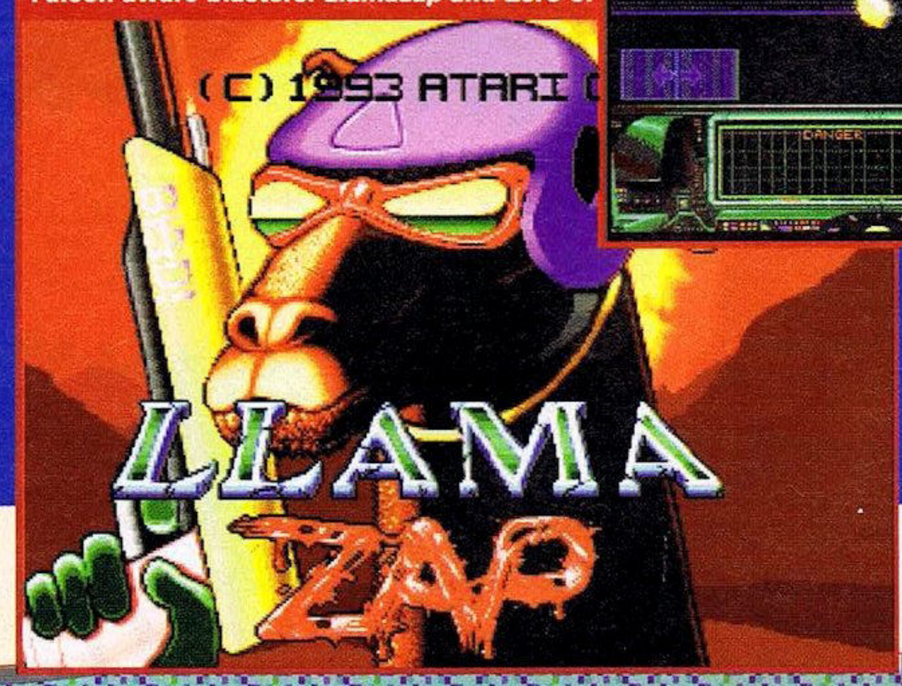
With its improved texture-mapping and lighting capabilities, I was able to construct a magnificent model of the proposed structure, complete with picture backgrounds, and record an animated flythrough in FLC format which I played to the Maharajah at his Kensington residence. The old gentleman found the presentation 'far out' and 'well wicked', as he put it. Having had such success with the Falcon's ability to create 3D animations, I resolved to pursue the subject further. Sources had informed me that one of the ultimate graphics programs, *APEX media*, had at last been released. This truly enables the Falcon's capabilities to shine

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■ **...and then sample the new generation of Falcon-aware blasters: *Llamazap* and *Zero-5*.**





CON IN 80 WAYS

forth. DSP hardware is utilised to the full for speedy true-colour image processing, and offers unparalleled morphing capabilities in addition to the processing of FLC and FLH animation formats. With this marvellous product, I further enhanced my depictions of architectural endeavour with stroboscopic lighting effects, rotating image maps and, with the Expose Digitiser, which *APEX media* can use directly, captured video sequences. The resultant 'film' was then recorded on to VHS cassette tape and dispatched to my Royal chum.

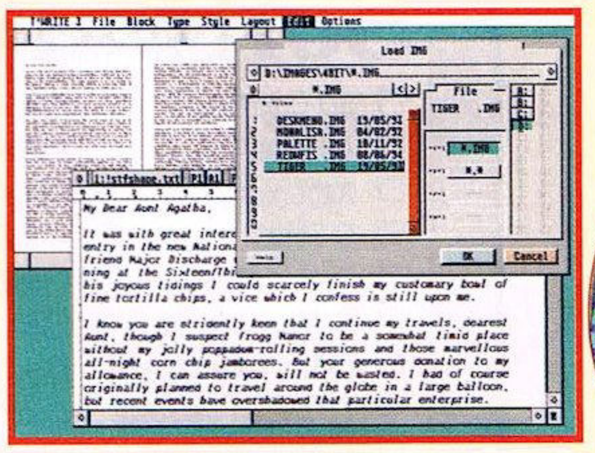
Down To Business

Lest I be accused of trivialising the Falcon's worth as a tool of industry, I must mention the wealth of DTP, word processing and productivity tools now in popular demand. I write this monologue with *Papyrus Gold*, a document processor noted for its professional interface and SpeedoGDOS support, as well as high-quality printed output. As for larger documents, I find *That's Write 3* possesses everything the serious author might require. My collection of spicy snack recipes now resides in an *AtariWorks* database, while the built-in spreadsheet speedily tracks the bucks and trends of my financial accounts. Of course, the Falcon and its software work well with most mainstream peripheral printing devices, and the shrewd purchase of an HP LaserJet 4 prints my literary outpourings in handsome fashion at 600 'dpi'.

I eagerly await a copy of *DA's Layout TC* and *Vector Pro*, highly-specified DTP applications. At last, a chance to explore the realm of colour photographical reproduction, in which the Falcon has proved of be of considerable worth. With the weighty Epson GT-8000 scanner and *GT-Look* software, I can pull in virtually any printed image, and mimic the photographer's art with *DA's Picture*, a still-image processing package with the power to retouch, nay, transform bitmapped graphics. Furthermore, my Falcon SCSI CD-ROM bundle, together with the *Photoshow Pro* slide show software, grants me privilege to observe *PhotoCD* recordings from my last trip.

The Leisured Classes

I must confess, the lack of satisfying games on the Falcon has been a source of recurrent disappointment. I have however taken great cheer from recent developments. The excellent shareware ST/STE emulator *Backward 2 (v2.7)* enables me to run many of my favoured Atari games of yesteryear: *viz Populous 2*, *M1 Tank Platoon* and *Battle Command*. But new games are at last on the horizon. With a Powerpad controller, I can enjoy the stereo sound and vibrant 8-bit colour of *Llamazap*, the compelling gameplay of *Evolution Dino Dudes* and the sheer arcade thrill of *Pinball Dreams* and *Obsession*. Most exciting of all is *Zero-5*, an STE and Falcon-only space combat adventure.



■ **One's memoirs never looked so good until one discovered *That's Write 3*.**

games of yesteryear: *viz Populous 2*, *M1 Tank Platoon* and *Battle Command*. But new games are at last on the horizon. With a Powerpad controller, I can enjoy the stereo sound and vibrant 8-bit colour of *Llamazap*, the compelling gameplay of *Evolution Dino Dudes* and the sheer arcade thrill of *Pinball Dreams* and *Obsession*. Most exciting of all is *Zero-5*, an STE and Falcon-only space combat adventure.

A Final Communication

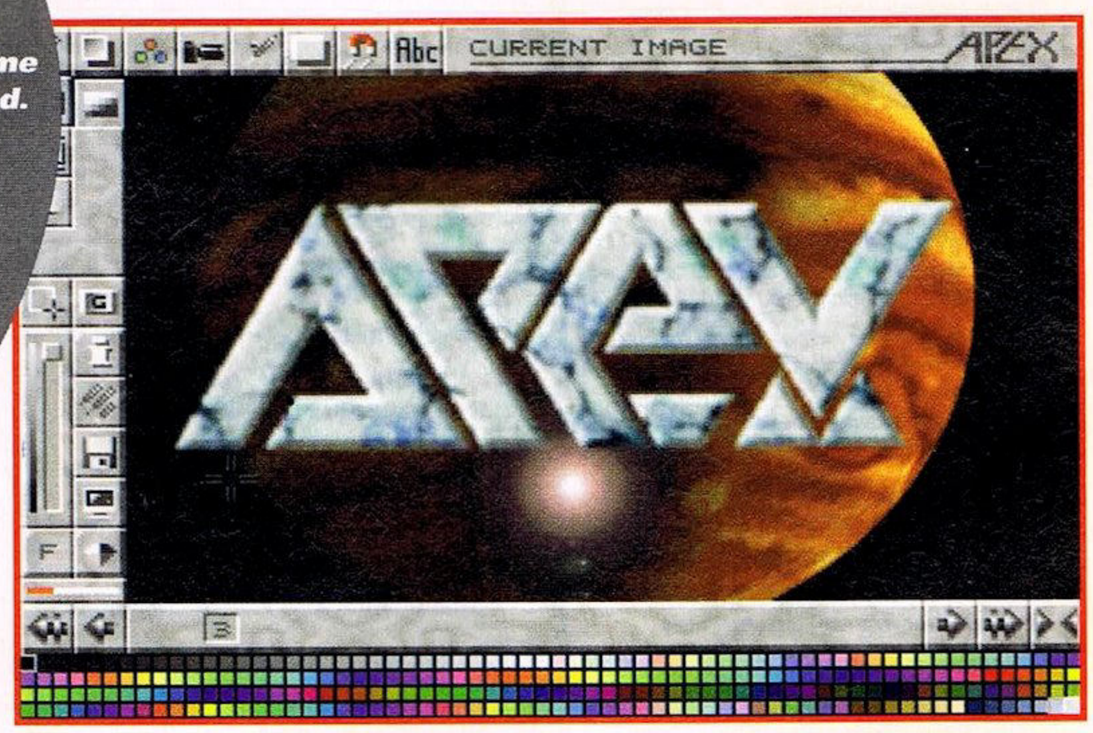
I could impress you further, dear Aunt, with all manner of excellent goods for the Falcon device and the growing support that many other worthy companies now offer. I planned to correspond by fax and the Internet, courtesy of my new Ladbroke FaxModem and comms software including *Straight Fax 2* and *Stalker*, but the National Telegraph Service as yet cannot meet the required standards of baud rate and error correction. Alas, I am restricted to mere paper and ink. Ah well...

Your Loving Nephew
Phileas Frogg

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Blowup030 (res enhancer) £15
NVDI 3 (display accelerator) £49.95
System Solutions ☎ 01753 832212)



■ *APEX media* **looks like being the jewel in the crown of Falcon graphics software.**

AS RECOMMENDED BY PHILEAS FROGG

...all the software listed in his letter, and where you can get hold of it.

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AtariWorks £99.95
Modern Atari System Software £19.95
Lattice C 5.52 £169
HiSoft/AVR ☎ 01525 718181

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Backward ST/STE emulator v2.7
Shareware, available from good PD libraries (see list on page 85)

Motorola 68882 coprocessor £45
Orion Microsystems ☎ 01672 511811
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AF Weaver Engineering ☎ 01382 60044

Zero-5 £24.99
Caspian Software, Block 1A, Lee Valley, Technopark, Ashley Road, London, N17 9LN

Populous 2 £varies
M1 Tank Platoon £varies
Battle Command £varies
I fear these titles are now out of distribution, although you may find them in the bargain bins of some retailers. Another unsolved mystery of the modern age!

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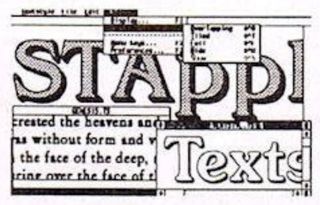
Introducing ST Machine Code is an excellent book that takes the beginner step-by-step into the secrets of programming the ST in assembly language. The accompanying free disk contains a complete programming environment - there is no need to buy a separate assembler or resource kit! The books 24 chapters introduce the gamut of ST applications programing from formatting a disk to constructing drop down menus and dialog boxes.

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Order Imagecopy 3.5 and we will send you a free copy of Textstyle!

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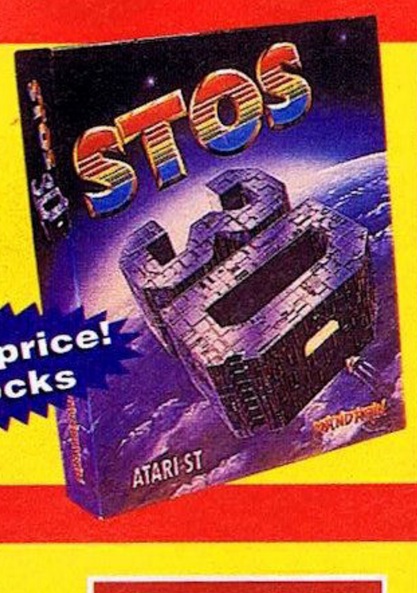
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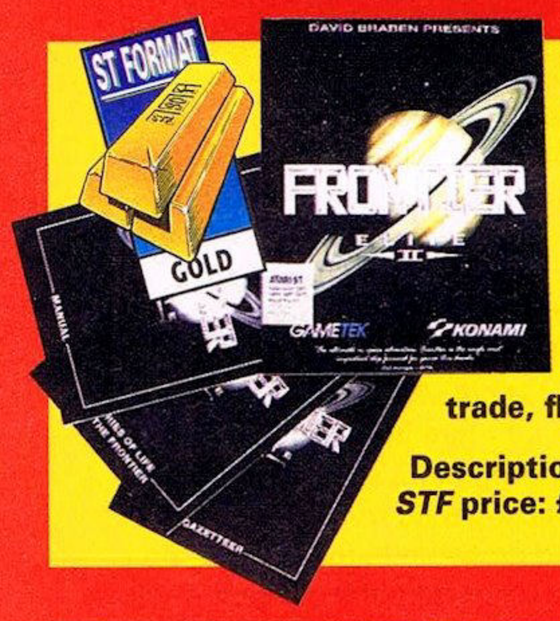
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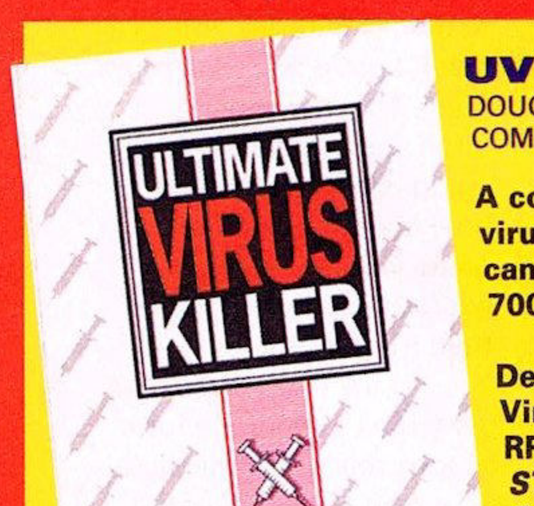


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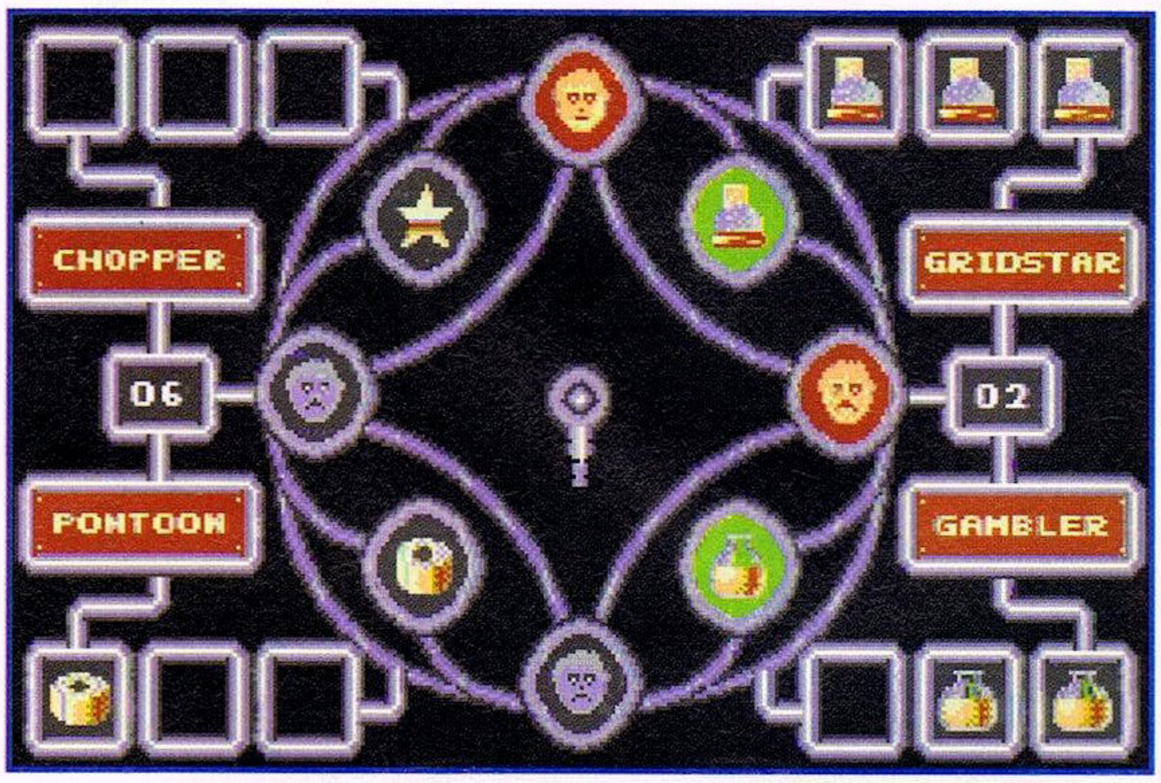
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A man for all

The title *Plonker* and the name Dave Cobbledick are currently synonymous. Trenton Webb tries to find out why.



■ Now Dave is a bit of a fan of the Bitmap Brothers. Now don't I recognise those sweets from somewhere? Like *Magic Pockets*? Who cares – it looks good.

Dave Cobbledick could almost be termed the perfect ST user. Passionate about his 2MByte STE, he uses it to run Dunces Cap Software (the company, not the software), to write games, to experiment with *STOS,* to compile *Voices* (the multiformat diskmag) and, most of the time at the moment, to play *Obsession.* Will all ST owners one day grow up to be like him? Let's hope so.

"If people can't honestly afford £9.99 for a game they should write and tell me what they can afford"

Dave on Voices

It's not every day you stumble across something that dares to be different. *Voices* is. It's a multiformat disk magazine that runs on ST, Mac, PC and Amiga – in fact, anything that can read a standard DOS disk. Which is all well and good, but why?

"I looked at a lot of disk magazines and they all seemed to do the same thing. It seemed to be that the trick was to get people actually talking to each other, in a non-computer-specific environment, by providing provocative topics," explains Dave. "I sent *Voices* out to ST, Amiga and PC PD libraries – I couldn't find any Mac ones – and as a result I've been sent enough stuff to fill another ten issues, but it wasn't the response I was expecting. A lot of the feedback said what a good idea *Voices* was and that the submissions were interesting, but that they weren't really talking. What I wanted were people's reactions, beliefs, opinions and feelings.

"Ideally each issue of *Voices* would feature some element of debate, one or two relatively pert articles and one or two more fun extras. The only rules are that there can be no format comparisons. As far as I'm concerned, as long as the computer does what you require then it doesn't matter which system it is. How often *Voices* comes out and what's on the disk totally depends on the response (both in terms of quantity and quality) from the punters. I'm just aiming to create something different."

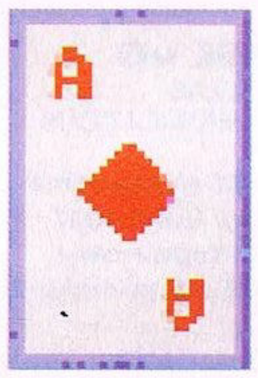
...on games and shareware

For four years now Dunces Cap Software has been turning out games of all shapes and sizes, published on all manner of formats (shareware, licenceware and full commercial). Most of us have either played a Cobbledick game or seen one reviewed, but what makes him tick? Why does he do it? And, most important of all, how does he do it?

"I started with a ZX81, then moved on to an Atari 800. I got into them because I'd always been intrigued by computers – mainly because of things like *Star Trek.* I dabbled a bit on the 800 but was then sidetracked for 15 years playing in a band.

"When the band came to the end of its life I got myself some music kit for personal amusement. But it wasn't the same, there wasn't the same spontaneity. So I wandered down to our local computer store – I was interested in an Amiga but then I saw the Atari logo was still kicking around. The price and name won – and I got a good deal on a 520STFM display model.

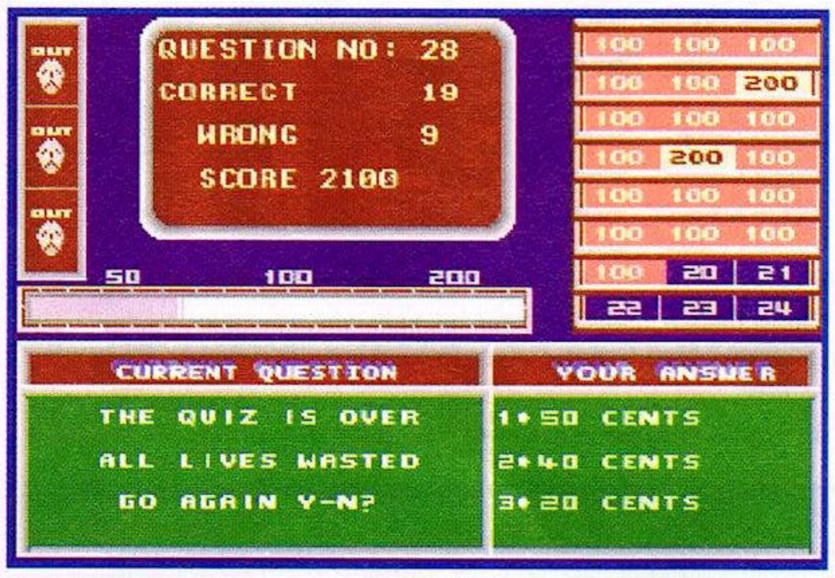
"I got the machine home, unpacked it, turned it on and realised that this was not an 800 – there was all this new stuff like mice and GEM. I played a few of the games that came in the pack and didn't really think it was for me. Three weeks later I rifled through it again and this *STOS* disk fell out. I loaded it up and thought, 'Wow, this is more like the 800 I used to know...'



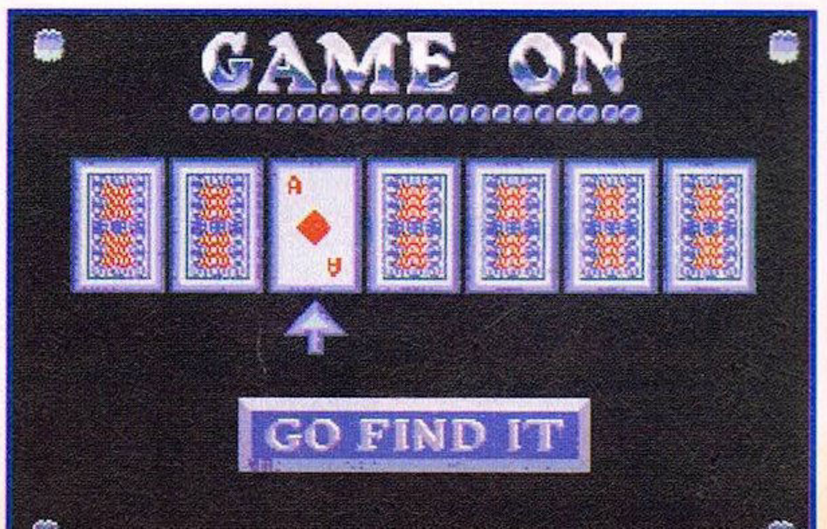
"The first game I knocked together was *Billboard.* There was a character running about on screen avoiding missiles. I finished it and sent it in to *ST User,* who sent it back with a very nice message saying 'Thanks but no thanks.' At the time *Triv* games were popular and thought if I followed this line I may be more successful, so I started work on a game called *Quizical.* I rattled my brain-cage on how to create the game and get an original angle. Again, when I finally finished it I sent it off to *ST User* and this time they put it on one of their cover disks. I got £100, bought a few more disks and thought, 'I've hit on something here.'

"*Mindlock* was next, and this was a lot more involved. It had sprite animation, sampled voices and I also had to try to figure out how to do something different. So I added a few bits of fun. I sent it off to the PD libraries and as a result I got a few registrations. They were nice, often coming with encouraging letters explaining how it was good to see a game where you could exercise brain cells rather than trigger fingers.

"I saw that a *Breakout*-style game hadn't been done for a while, so I took this old game style and added a new slant. The result was *Rebound,* where the aim was



■ Build up quiz points and move up the bonus ladder. Sounds too much like *Supermarket Sweep* to me.



■ *Ace Chaser.* The kind of game your mother told you never to play for money. And she was absolutely right, y'know.

STeasons



to keep the ball in play by bouncing the ball off different pads for points. There were linked bonuses where you had to bounce the ball off a series of pads, while the pads themselves got smaller and the ball sped up.

"The game was well received by the press and in terms of sales through PD, but in terms of registration the response was abysmal. The same was true of *Galactic Fruit Bowl*. One library forwarded records of their sale of 170 copies, but I didn't get a single registration from any of their customers.

"To encourage registration I tried a few different approaches – if nothing else to show people that I wasn't out to make a fortune, just cover my costs. For instance the standard price of shareware (at the time) was £5. I dropped my prices to £2 and £3 but that didn't seem to make any difference.

"The libraries said I was under-pricing myself, but I just wanted to encourage registrations. So I did up my prices but I introduced Fair Deal, a scheme where you could knock the price of buying the PD disk off the registration cost. It didn't make that much difference. My regular customers would still register but the response was still generally poor.



■ *Galactic Fruit Bowl.* Now should I spin or should I go now? Oh heck let's spin and be damned. Damn. I was right.

"I think the shareware scene got a bad name because of the success of *Llamatron* by Jeff Minter. There were legends that he made thousand of pounds, so everybody jumped on the bandwagon, and nobody released any PD. Licenceware has drifted the same way. Libraries could come into their own by setting a standard – insisting that weaker programs are PD while good ones are sold as shareware. And that's why I started along the semi-commercial route – through libraries like Merlin and GL-PD – with *Stark Raving Bonkers* and *Reflex Action* (the sequel to *Rebound).*



■ If you thought *The Wiz* was the *Wizard of Oz* version starring Mickey Jackson – then think again.

"*Plonker* [Dave's latest game] is the culmination of *Matchmaker* and *Super Matchmaker*. I've had 'good' responses, mainly along the lines of 'You're a sadistic swine', but it's essential to know people are enjoying what I'm writing.

DEXTERITY

"I decided to publish *Plonker* myself and I'm doing it properly. I've got professional labels, good quality disks, sleeved case and a lifetime guarantee. £9.99 covers my costs and gets me a little more kit that will help me to develop more games the future. All the money I've made from Dunces Cap Software has been ploughed back into the company – printers, extra RAM and the like. If people can't honestly afford £9.99 for a game then they should write to me and tell me what they can afford. I'm a very reasonable guy.

"The future? I'm going to try the licenceware route, selling through eight libraries. This way the PD libraries will agree a fee that they'll charge for selling the game, then pay me royalties every quarter. There's a good reason for curtailing the list – there are about 30 active PD libraries, which means 30 disks every time I release something, as well as 30 sets of documents and 30 lots of postage. If any other libraries want to be involved then they know where I am.

ST FORMAT on Dave

All of Dave's projects, from games through to *Voices,* depend on interaction. As a developer he'll only keep creating games as long as he gets the feedback from the folk who play them – and that means you. It will also be your diatribes and debates that turn *Voices* from intriguing experiment in communication into a serious talk-shop for all flavours of computer. So, over to you... ***stf***

TALKING PAGES

A FEW EXCERPTS FROM *VOICES* ISSUE 1:

Humour
Q) What's the difference between blondes and supermarket trolleys?
A) Supermarket trolleys have minds of their own.

UFOs
"In late 1979, things had gotten almost entirely out of hand when it became known that the Greys (aliens) had implanted a tiny probe, 3mm in size, into the brains of abductees before releasing them. MAJI investigators determined the probe could be used to hypnotically and telepathically program and monitor the person."

Artificial Intelligence
"Artificial Intelligence is a process by which a device is made able to perform tasks which, when they are performed by humans, are said to require some thought."

If any of this intrigues you, get hold of a copy of *Voices* – available from all good PD libraries. And if you like what you read, why not bash out a few words and send them in!

THE GAMES

The Cobbledisk Collection
A virtually complete back catalogue of Dunces Cap games can obtained from Merlin, Floppyshop, Goodman and LAPD PDLs. They come on four disks, costing £3 each. Here's what you get:

Disk #1

Brain Damage
A quiz game. Type in your answers ☆☆

Shapes
Build a shape, win some cars (well, points actually) ☆☆

Link
***Loopz*-style circuit game** ☆☆

Quizical
Beat-the-clock trivia game ☆☆☆☆

Disk #2

Outrageous Fortune
Coloured ball sequencing test ☆☆☆

Super Matchmaker
Pairs plus, in four different styles ☆☆☆

Frame of Mind
Different slant on fruit machine gambles ☆☆☆

Cryptogram
A brilliant clone of Channel 4's *Countdown* ☆☆☆☆☆

Disk #3

Quest For Knowledge
***Call My Bluff*-style word-game** ☆☆☆☆

Rebound
A very different approach to the *Breakout* genre ☆☆☆☆☆

Galactic Fruit Bowl
***Triv* meets fruit machines sim. Odd, but fun** ☆☆☆☆

Grey Matter
Guess the word, then spell it! ☆☆☆☆☆

Disk #4

Ace Chaser
Limited find-the-card fun ☆☆☆

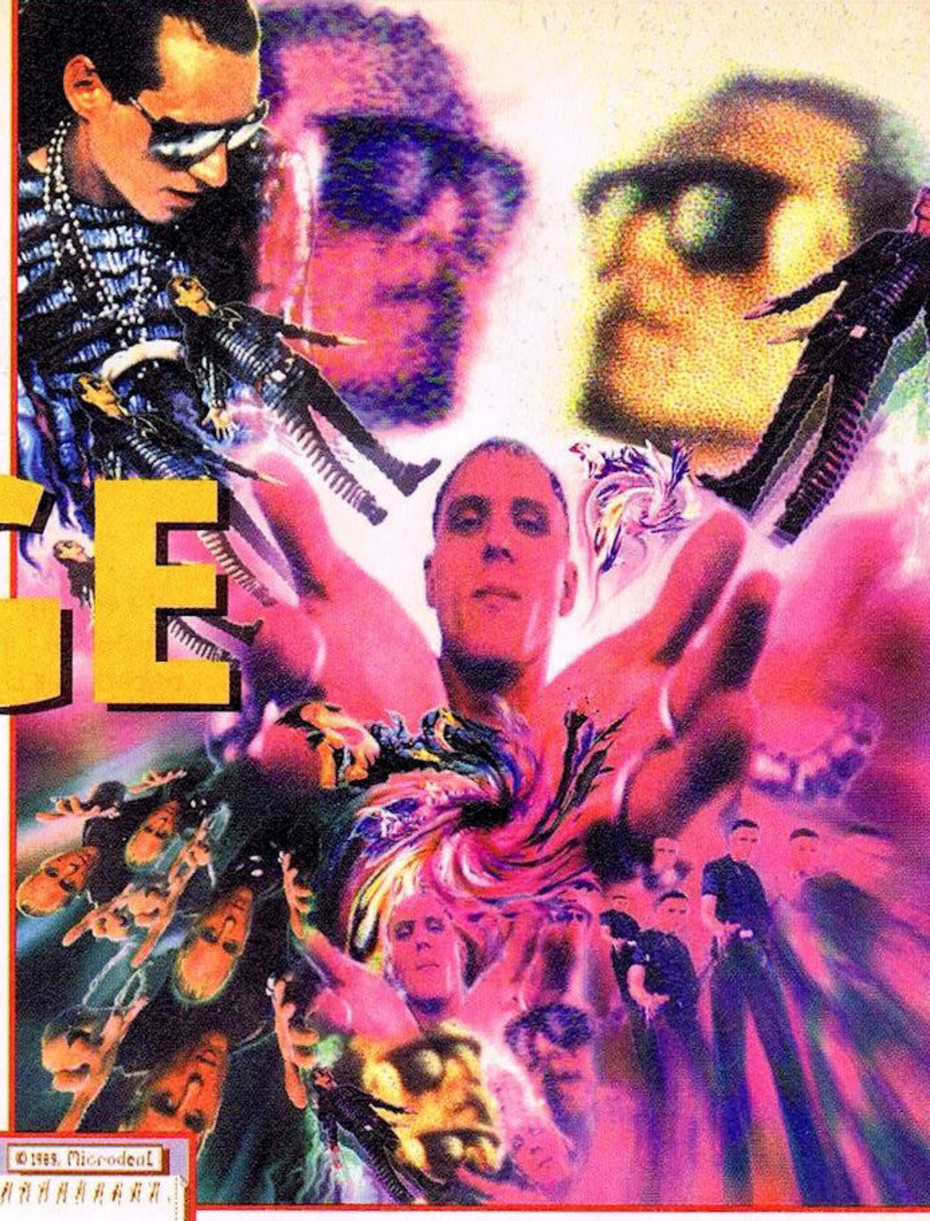
The Wiz
Stylish quizzer. The best Cobbledick so far? ☆☆☆☆☆

Mindlock
***Hangman* meets *Triv* in *Lemmings* clothes** ☆☆☆☆

Matchmaker
The original pairs engine ☆☆

Dunces Cap Software can be contacted at: 245 Rosalind Street, Ashington, Northumberland, NE63 9AZ. *Voices* can be obtained from any good PD library.

QUARTET CHALLENGE



The last person you should get to judge a music competition is a failed musician with no talent, timing or originality. Simon Forrester was, however, the only person available.

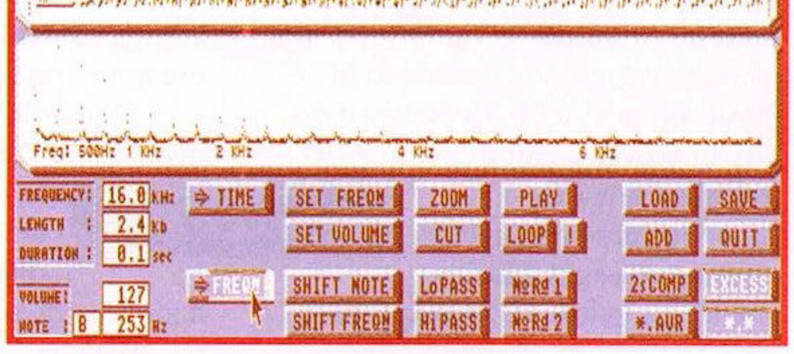
When we gave you lots of hints and tips on using *Quartet,* back in our ST Answers biggie in issue 64, we didn't realise quite how many people were into producing top-quality music with the package. Which is why we, possibly somewhat foolishly in retrospect, asked for your contributions. Yes, we offered you the chance to win not only eternal fame and accolade on the *ST FORMAT* Cover Disk, but also some luscious new software for your ST.

The sheer volume of entries we received was terrifying – the postie's still seeing an osteopath – and we can't promise to return all disks sent to us, particularly as some were lost in the fight over the winner. The 'discussion' got so heated that in the end we had to choose several winners. And so, in no real order (that'd suggest we knew what we're doing), the maestros of the ST world:

Harry Tily

Harry's entry to the competition (all the way from Wisbech) was twofold – his tracks were called *Souldance* and *Fear.* While *Fear* didn't particularly impress our panel, *Souldance* was rather nicely written, well-arranged, and lengthy enough to stand as a piece of music in its own right. For someone who professes not to be much of a musician, Harry did well to win a runner-up position.

Top tip: If you're going to use four different instruments, start with the drums and add from there.



■ **Problem? Just follow the line with your eyes, very quickly, and you'll realise it's quite obviously a flute. You don't?**

Karen Anderson

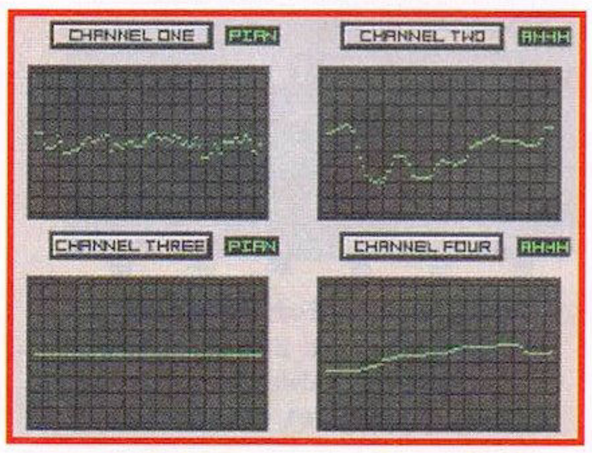
Durham's very own musical child prodigy, Karen Anderson got Nick's vote. While her music showed a good understanding of channel mixing, that was, in Nick's eyes, an incidental factor. Much more importantly she sent in, among other tracks, a cover version of Queen's *Crazy Little Thing Called Love.* A smart move, and one that wins Karen a runner-up position.

Top tip: Create a tune with some kind of popular hook. You're more likely to get people to listen to your work if you cover a tune that everybody recognises.

Richard Gray

Despite being devoid of anything remotely interesting, Broadstairs is the home of Richard Gray, another of our runners-up. Richard sent us several good tunes, among which was the misleadingly titled *Monty,* a tune bearing no relation to anything even vaguely serpentine. Still, Richard's won himself some top music software for his efforts...

Top tip: In *Monty,* Richard demonstrates his willingness to change time signatures with amazing regularity. Which should keep you, the listener, on your toes and interested to find out where every note is headed.

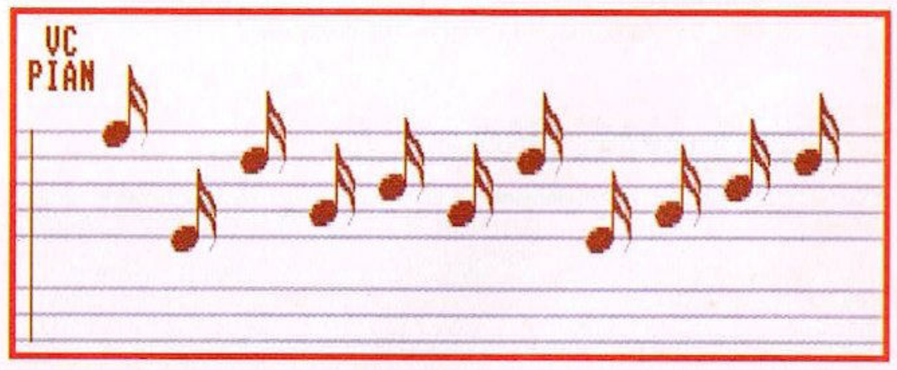


■ **No – trust me – it sounds great. It's just difficult for a novice to see.**

Trevor Newbon

Trevor from Kent sent us a letter with his entry, which included the words: "You've found a winner for your *Quartet* competition!" Thanks Trev (if you don't mind us calling you that), but I think we'll decide that for ourselves. Ah. Except that his entry's rather good, after all. Continuing in the not-using-any-new-instruments theme, Trev relies more on the form of his music rather than the instruments it's played on.

Top tip: Don't feel afraid to use the same instrument on more than one channel. Our Trev managed to use the 'Aaah' on three different channels simultaneously, hitting chords, harmonies and fifths, creating a quiet, relaxing tune as opposed to a cacophony of activity. Cheers, Trev.



■ **"It's sheet music." "Oh, I thought it was quite good, myself."**

■ **The Shamen – a band who've made their living from computer music. Pity it all sounds like so many car alarms really, isn't it? *(Hmmm – Trent)***

JS Allen

The all-time winner, without a shadow of a doubt, has to be JS Allen from Winter Park in Florida, who's sent us some of the most innovative pieces of work *Quartet* has ever created. The two tracks we singled out as being by far and away the best were the catchily named IGTRYTHM and TREAT_HR, clinching the prize with some amazing rhythm work. If you want to find out exactly why he won, Nick's included IGTRYTHM on this month's Cover Disk.

Top tip: Load up his work and find out for yourself... ***stf***

SYRINGE YOUR EARS AND LISTEN

We've only included one of the songs here on the Cover Disk, but if you're interested in the others, we've come up with a compromise that should stop everyone else wingeing that their Cover Disk's full of *Quartet* tunes. To hear the work of the runners-up, plus a few more tracks from JS Allen, write to Goodman PDL (the address is on page 85). They'll supply you with the special *ST FORMAT Quartet Challenge* disk for their standard PD price of £2.75 inc P&P.

ST FORMAT

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ISSUE 65

DECEMBER 1994
Disk: *Grafix, Jetpac, Arcade Classics* and many more **Inside:** Plug your ST into the Internet, word processors head-to-head, GFA and Pascal tutorials **Reviewed:** *Twist 2, ScreenEye...*



ISSUE 64

NOVEMBER 1994
Double Disk special: *Personal Pascal, Starball* and *Grafiek* and much more **Inside:** Future of the ST and full PD library round-up **Reviewed:** *HERO, NeoDesk 4, Munch, Robinson's Requiem*



ISSUE 63

OCTOBER 1994
Disk: *Quill* and *HERO* demos and *Herman* **Inside:** Pure Gold – all the *FORMAT* Gold winners, coding for beginners **Reviewed:** *Starball, Protext 6.5, Papyrus Gold* and *That's Write 3*



ISSUE 62

SEPTEMBER 1994
Disk: *Medieval Chess, Fastcopy 3, Albion* and *TUC* **Inside:** Supercharge your ST special **Reviewed:** *Rainbow, Xenomorf 2, EZ-Art Pro, Imagecopy 3, Ishar 3, Nova card, MIDIgrid Pro, Rorke's Drift...*



ISSUE 61

AUGUST 1994
Disk: *Well 'Ard, Twinz, Digit 1.1* demo and *Atari View 3.8* **Inside:** Serious software preview, art packages rated **Reviewed:** *3D Calc, Kobold, Diamond Back 3, HP Chrome 2.5*



ISSUE 60

JULY 1994
Disk: *Snacman, DeskPic, Sam 2 Disk, Diskfree* and *Music Mon 2* demo **Inside:** Next generation of ST games, WPs sorted! File handling, *Exposé* **Reviewed:** *MagiC, DA's Vector Pro...*



ISSUE 59

JUNE 1994
Disk: *Mouse-Ka-Mania 2; Videomaster; Morph* **Inside:** Video – how to edit and produce films; DTP – everything you need to know **Reviewed:** *Tempest 2000* and *Persistence of Vision 2*

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GAMEBUSTERS

This month Gamebusters goes graphic adventure crazy as Simon rips both *Monkey Island* and *Lure of the Temptress* to shreds with the help of our illustrious gaming readers.



■ "Honestly, ossifer, I didn't think he looked too disreputable..."

THE SECRET OF MONKEY ISLAND

KIXX XL ☎ 0121 625 3311
***ST FORMAT* 51, 90%**

It would seem that the raging debate over the non-release of Monkey Island 2 has done no harm to the sales of its prequel. Quite a few people have become horribly stuck on the classic LucasArts graphic adventure. Here, then, is the complete solution for budding pirates everywhere.

General tips

1 Pick up any objects that you find and have a quick look at them. If you're absolutely, definitely sure that they're of no use then chuck them away.

2 Talk to everyone. You can find out some useful information this way.

3 Save the game at regular intervals. You never know when you might have a power cut or spill your coffee on your ST.

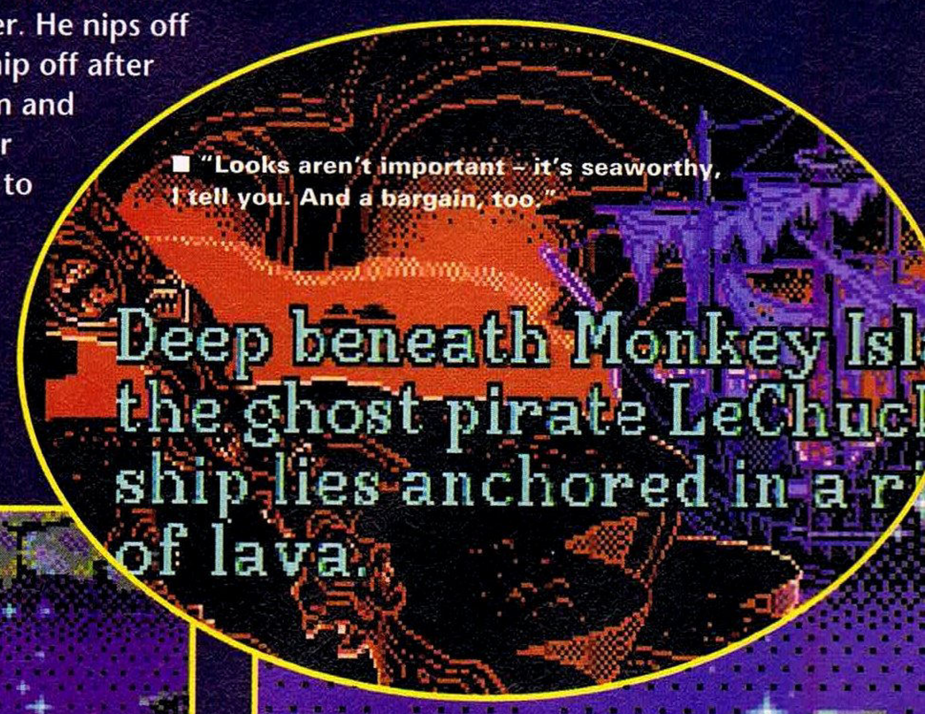
The game starts you off as a young would-be pirate called Guybrush Threepwood. Starting from the mountain-side, head right until you come to the Scumm bar. Walk in and 'talk to' the pirates for some useful information. Make sure you talk to the bloke in blue – he has a lot to say. Now walk right and talk to the important-looking pirates. Don't be afraid to keep asking them questions, they're friendly enough. After you've finished, wait for a while until the cook exits the kitchen and leaves the screen you are on. Walk into the kitchen and pick up the hunk of meat and the pot, which is under the table. Use the meat in the stew and then pick up the now-stewed meat. Go through the door on the right and step on the plank at the end a few times. This catapults the bird into the air, leaving you to pick up the fish that's lying there. Leave the bar and head left, back to where you started from. Have a chat with the lookout for some LucasArts 'humour'. Walk up the path at the back of the screen and click on the clearing on the map. Keep walking and you find a circus tent. Walk in and listen to the Fettucini brothers arguing. Butt in and you'll get a once-in-a-lifetime, must-do-it-now, never-to-be-repeated chance to have a go in the cannon. Ask for money and accept their offer. When they ask if you have a helmet, say yes, and give them the pot. Watch the game develop and you'll have loads of money.

First you need a fight...

Walk back to town and go straight past the Scumm bar. Look around and you find a building with a spooky voodoo-type person in it. Have your fortune told and, as you leave, pick up the chicken from the trunk. On the corner of the street is a shady bloke with a parrot. Talk to him and buy the map. Go to the shop and pick up the sword and the shovel, then talk to the shopkeeper. Buy the items and ask him about the Swordmaster. He nips off to talk to her, so you nip off after him. Keep tracking him and you find yourself at her house in no time. Talk to her and she suggests some fencing lessons. Flick to the map and head for the house. On the way you're confronted by a troll, who's guarding the bridge. Give him the fish and he lets you by. When you get to the house, ask Captain Smirk for some lessons but be firm. Don't back down and you'll get some. After he chucks you out, hang around somewhere on the map and intercept the various pirates going about their duty. Challenge them all to a



■ Guybrush Threepwood was not in the mood to roast his chestnuts by the fire...



■ "Looks aren't important – it's seaworthy, I tell you. And a bargain, too."

USTERS

fight to gain some practice. When you're told that you're good enough to fight the Swordmaster, do just that. If you lose, don't panic. Just go and fight a few more pirates, then go back and challenge her again. Eventually you win and you get an amazing(ish) prize (not telling you what). You have now completed one of the tasks. Well done.

Then you need the idol...

Right, go to the fork and look at the map you're carrying. Use the dance steps as directions and stop off at the nice yellow flowers. Pick up one of them and continue wending your way. You come to a massive sign and a big 'X'. Use the shovel on the X and dig up your treasure. Task two is complete. Very well done.

Pop back to the Scumm bar and give the pirate leaders a visit. Give them the two exciting prizes (still not going to tell you what they are) then go to the governor's mansion that's situated at the end of the town. Use the petal on the meat and give the meat to the cutey-wootey doggie-woggies. Go past the dogs then go inside. Open the door nearest the entrance and sit back and laugh.

Good. You've sat back and laughed. Anyway, you should have tied up the sheriff, got hold of some items and discovered that you need a file to get the idol. So how do you get the file? Easy – just nip down to the prison and talk to the prisoner. Try to talk to him again, but you can't. To solve this just go to the shop where you got the sword and shovel and talk to the shopkeeper. Buy the breath mints and give them to the prisoner. Talk to him again and give him the gopher repellent. In return he should give you some carrot cake. Use the cake to reveal that the cake has a file hidden in it. Now go back to the governor's mansion and go back into that strange room. The idol is now yours. Get out again and you find Governor Marley standing there. In a massive stroke of luck, it appears as if she, er, fancies you.



■ The Governor's mansion, scene of a truly great fight sequence.



■ Well, you soon work out who your friends are, don't you?


■ ...which explains the odd way he walked. And the look on his face.

The sheriff, however, doesn't fancy you. He takes you away and chucks you in the sea with the idol tied to your foot. To get out, pick up the idol and climb up the conveniently placed ladder. When you dry out you find that Marley has been kidnapped by the evil pirate, LeChuck (boo! hiss!). You have also decided that you, er, fancy her as well. Being the hero that you are, you decide to rescue her. You must be mad. To rescue her, you're going to need a boat and a crew. The prisoner sounds like a decent enough chappie so start with him. To recruit him, go to the surprisingly quiet Scumm bar and pick up all the mugs you can find. Use one with the barrel of grog. The grog melts the mugs, so you're going to have to move pretty darned quick and switch mugs a lot. Do this by 'use'ing a melting mug with an intact mug. Use the last melting mug of grog on the lock of the prisoner's cell and he's free. Now go to the Swordmaster's house and talk to her, then go to the shore at the top of the island. Use the chicken on the cable and swing across. The chicken has a pulley in it. Get to the house on the other side and talk to Mr Meathook.

Now you need a boat

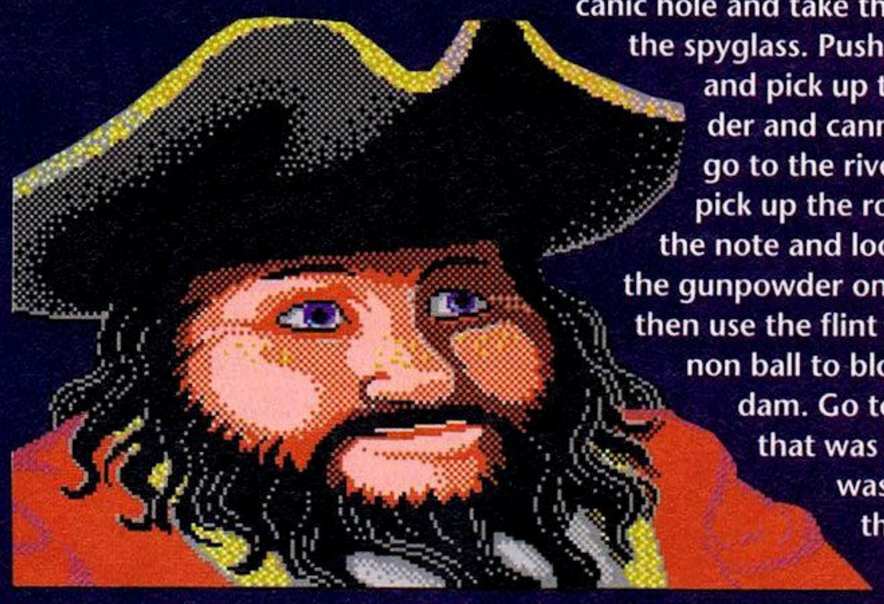
Right, you have a crew. Now you need a boat. Run down to the bright lights at the bottom of the island and you find it's Stan's Previously Owned Vessel Emporium. Tell the over-the-top Stan that you don't have much money, and he drags you over to the sea monkey. Nip back to the shop and ask the shopkeeper for a credit note. Tell a few lies about employment and carefully watch the combination he uses to open the safe. He refuses you credit, so ask him about the Swordmaster. He goes and finds her, which leaves you to open the safe by 'push'ing and 'pull'ing the handle in the combination that he used. Pick up the credit note inside and go back to the even-more-over-the-top Stan. Point out the credit note to him and argue about the price. Come to an agreement and the boat is yours, leaving you to go to the dock.

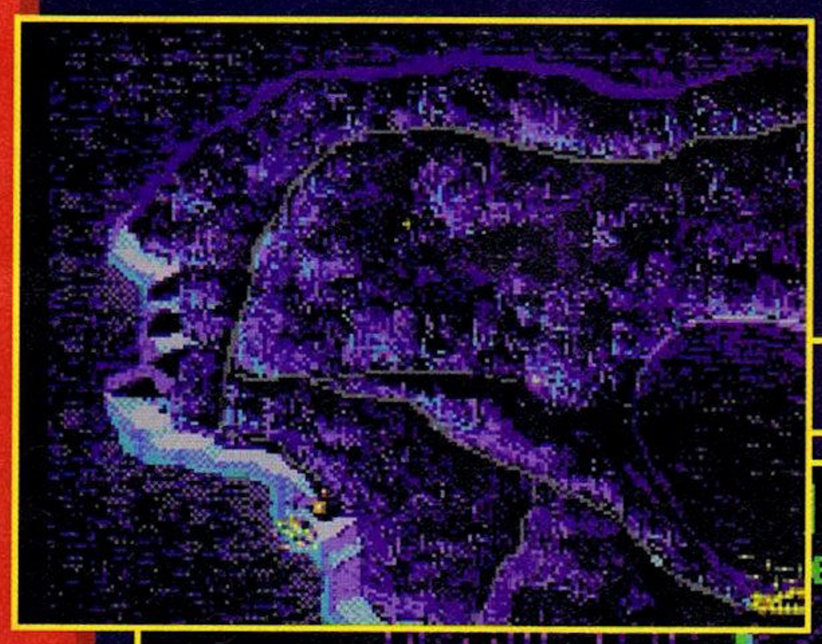
Take no notice of the rather disagreeable crew and leg it up the rope ladder to the crow's-nest. Pick up the Jolly Roger, then leg it down again. Go down the hatch and go down another hatch. Fun, isn't it? You're now in the hold. Pick up the rope, open the chest and pick up the fine wine inside. Take the kegs for a handful of gunpowder. Go into the galley (the kitchen to you and me) and take the pot. Open the cupboard and take the cereal out. Open the cereal to find a prize inside. It's not a T-shirt saying "I found the free prize in the box of cereal" so don't worry about that. Go to the cabin and pick up the ink. Use the prize in the cabinet and open the chest inside. Take the cinnamon sticks and the recipe. Go back to the kitchen and use the cinnamon sticks, Jolly Roger, breath



■ You shouldn't hang around on Hook Island for long. The wine's atrocious.

mints, rubber chicken, ink, fine wine, cereal and gunpowder in the cooking pot. After a while (once you've regained consciousness, in fact) use the business card that Stan gave you on the fire under the pot and you make a flaming mass. Save the game now on a preformatted disk just in case you mess up the next bit (you will). Take the flaming mass, go down to the hold and take some more gunpowder and run like jiggery back to the deck. Use the gunpowder with the nozzle of the cannon and use the rope with the cannon. This should make a fuse, which can be lit by using the flaming mass with the rope. Now use the pot on your head and get in the cannon quickly!





■ Forget the island – that bloke's got no nostrils.



■ The fortune teller's house is a great place to find a rubber chicken...

Get ahead in navigating

You're now on Monkey Island. Hooray. Pick up the banana on the beach. Go to the fort in the volcanic hole and take the rope and the spyglass. Push the cannon and pick up the gunpowder and cannon ball. Now go to the river fork and pick up the rock on top of the note and look at it. Use the gunpowder on the dam, then use the flint with the cannon ball to blow open the dam. Go to the pond that was empty and was at the end of the dry river but obviously isn't any more. Pick up the rope that the dead body is holding. Go to the crack near the beach and use both ropes to climb down to the bottom. Pick up the oars and go back to the river fork. Walk to the footholds in the mountain and go up. Go up the next lot as well. Push the rock and watch it sink your ship. Now take the heap of rocks and put them where the big rock was. Go to the primitive art and pull it twice, then go back to the top and push the rock. It bounces on the art and lands in a banana tree. Go to the beach and pick up the bananas.

Use the oars with the rowboat and row to the top of the island. Go to the village and take the bananas in the fruit bowl. Listen to the cannibals (it's very funny!) then get locked in the guest hut. Take the skull and open the loose floorboard on which it was lying. Make your escape through the hole. Go back to the beach at the bottom of the island, then click on the monkey that's wandering around aimlessly between the beach and the crack. Give him all five bananas and he follows you. Nip off to the clearing and walk to the monkey head. Pull the nose on the far totem pole to open the gate. Your newfound friend takes over, allowing you to go and nick the wimpy little idol. Go back to the village and give it to the cannibals. When they leave, go into the room you were locked in. Take the banana picker and step outside. Herman Toothrot is outside. Give him the picker in exchange for the key to the head. Leave the village, then go back again. Talk to the cannibals again. Keep talking until they tell you about the navigator's head. Talk to them again and offer to give them the leaflet you're holding, called 'How to get ahead in navigating'. They seem to think this will tell them how to get another navigator's head (a subtle joke), so they give you theirs. Fools.

Go to the monkey's head again, use the key in its ear and go in. Use the head and follow the direction it points to, until you get to the ghost ship. Do not get on it yet. Try to use the head's necklace and he (it?) won't let you have it. Talk to it (him?) and be firm. Make sure you use the comment about drop kicking him into the sea. He'll give in, so use it and board the ship.

Go into LeChuck's cabin and use the magnetic compass that Stan gave you with the key that's hanging on the wall. Go down the hatch and into the livestock room. Pick up the ghost feather and nip over to the crew's cabin, then use the feather on the sleeping pirate's feet. Pick up the grog and go back to the livestock room. Use the key on the hatch and keep the rats under control by using the grog in the bowl. Take the vat of cooking grease and use some on the squeaky door. Open it and go inside. Take all the tools and use them on the glowing crate in the livestock room to get at the voodoo anti-ghost root

Get off the ship and go to the village. Give the villagers the root and they give you a magic seltzer bottle. Go back to the ship and do what you think you should. The last bit you need any help with is when your magic seltzer bottle gets jammed – use the root beer that falls out of the grog machine. Sit back and watch more hilariously funny sequences and you have completed *The Secret of Monkey Island*. Congratulations.

You know the routine. If you have any helpful hints, top tips or scammy scams, send them to: Gamebusters, ST FORMAT, 30 Monmouth St, Bath, Avon, BA1 2BW.

Not Captain Blunder



One of the problems with Gamebusters is that since Captain Blunder left, you just can't be sure of getting the cheats for the games you want. Well, you couldn't until now. I can't promise to be as bold, dashing or handsome as Blunder (although as you can see, I'm trying), but I can help you with games that are causing you problems. Just write to: Simon Forrester, Not Captain Blunder, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW.

LURE OF THE TEMPTRESS

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***ST FORMAT* 58, 90%**

Saving the sanity of everyone who's having problems with this adventure from Revolution, London's Andrew Campbell has obliged with a complete solution. There are many different ways to actually complete this adventure, but Andrew's solution works. Give it a try if you're completely and utterly stuck.



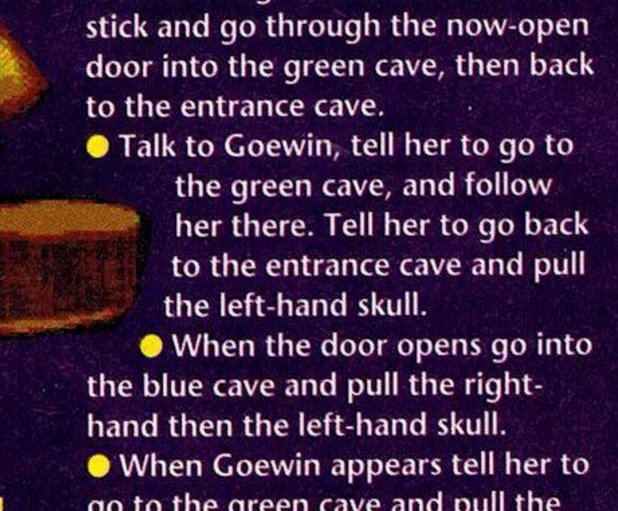
■ "What are you doing?"
"Oh, just hanging around..."

The jail

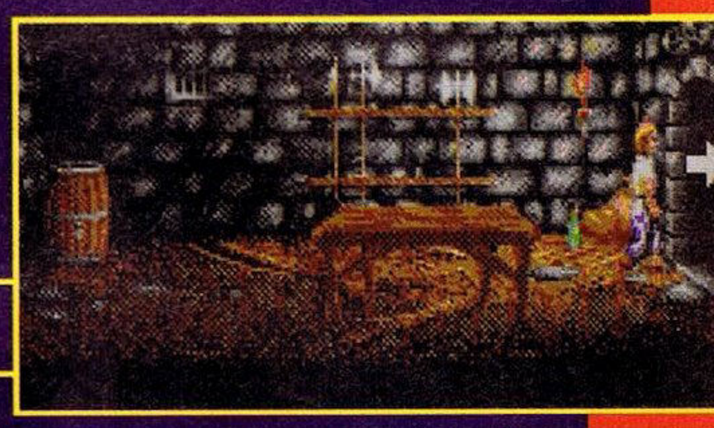
● Pull the torch to make it fall on to your bedding and run behind the guard as he enters the room. Go outside, then shut and lock the door. Talk to the person hanging on the wall (Wulf).
● Go to the room next door and pick up the bottle. Look at the barrel, then use the bottle on the tap. Pick up the knife from the top of the barrel (you can't see it so just move your cursor around the top).
● Look at the sack in the right-hand corner, then use the knife on it. Look at the sack again and pick up the coin. Go back and give the bottle to Wulf.
● Use the knife on the cord holding Ratpouch in the torture chamber, then go back to where Wulf is and tell Ratpouch to push the bricks in the wall, and follow him.

Rescuing Goewin

● Find the blacksmith's (you can tell when you're near because you can hear the banging). Talk to the man inside (Luthern) and tell him you've escaped. Pick up the little tinderbox off the floor.
● Go to the Magpie Tavern (below the monk's house), and talk to the man sitting in the centre, Morkus. Bribe him using the coin to find out where Goewin is.
● Find Mallin, the man in the green jacket. He's usually in the dark leafy alleyway. Ask him for instructions.
● Take the bar that Mallin gives you to the shop, and give it to the shopkeeper, Ewan.
● Return to the Magpie, talk to the barmaid and give her the gem Ewan gave you.
● Go to Luthern and give him the flask. Watch him drink it then talk to the beggar outside the Magpie, whose name is Grub.
● Go the Severed Arms and speak to the lady at the table, Edwina. Ask her if she has seen Taidgh. Look at the diary she gives you.
● Now go to the market-place outside Ewan's shop, and give Ratpouch the lock pick Grub gave you. Watch the Skorl go past the door on the right – there is a short gap then a long gap between his appearances. At the start of a long gap, tell Ratpouch to use the pick on the door.
● Open the door, go inside, and look at the apparatus on the table. Examine it, then use the tinderbox on the oilburner and wait for some steam to be let off, before using the flask on the tap.
● Drink the flask and go to the guard who is outside the gate. Talk to him and, because of your disguise, he lets you by.
● Open the door, go inside, and look at the two Skorls. Talk to the dopey looking one (on the left), then leave with Goewin. Follow her back to her apothecary, talk to her, wait for the potion to wear off, then talk to her again.



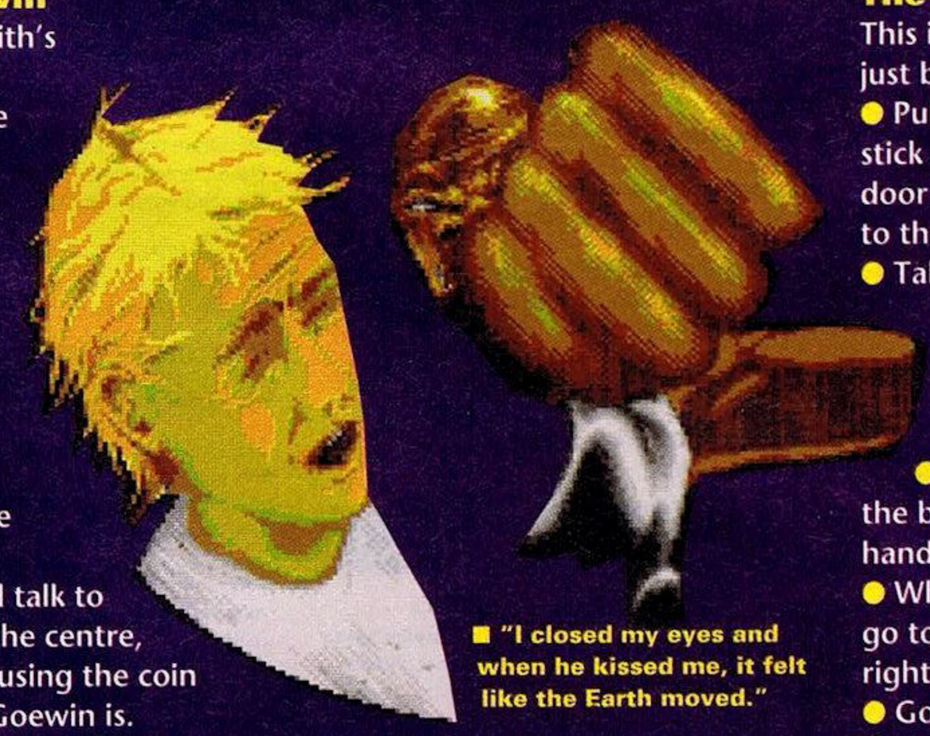
■ "Doctor, I just haven't been sleeping at all well recently."



■ The guard room, featuring that all-important barrel in the left corner.

The weregate

● Read the notice at the monastery, then find Mallin and reply, "Yes, certainly."
● Take the book he gives you to the fat monk at the monastery. Ask about the smell (to get the herbs).
● Talk to the thin monk about defeating Selena, and remember the three herbs: Houndstooth, Cowbane and Elecampane.
● Talk to the mad lady in the rocking-chair at Luthern's blacksmith and give her the herbs. Go outside and, in the garden to the left of Luthern's, look at the flower next to the two red ones, then pick it up. This is the Cowbane.
● Take it to Goewin's apothecary and ask her if she will make you an infusion of Houndstooth, Cowbane and Elecampane.
● Find Gwyn (the busybody with the red hat), talk to her and return to the weregate.
● Go back to the apothecary, talk to Goewin, go to the weregate.
● Talk to Goewin again, then go through the gates.



■ "I closed my eyes and when he kissed me, it felt like the Earth moved."

The caves

This is a tricky part of the game, so just be patient.
● Pull the right-hand skull on the stick and go through the now-open door into the green cave, then back to the entrance cave.
● Talk to Goewin, tell her to go to the green cave, and follow her there. Tell her to go back to the entrance cave and pull the left-hand skull.
● When the door opens go into the blue cave and pull the right-hand then the left-hand skull.
● When Goewin appears tell her to go to the green cave and pull the right-hand skull.
● Go left through the door. Save the game now!
● Go up, kill the guard (attack high then low). Go left, use the potion on the dragon. Tell it to help you.
● Go back into the blue cave and pull the left-hand skull. Go into the green cave and repeat, then go to the entrance cave and leave.

The castle

● Talk to Goewin, then find Mallin and talk to him.
● Go to the market-place and wait for a Skorl to go into Ewan's shop. Look through the window and watch their conversation. When the Skorl leaves go into the shop and talk to Ewan. Watch the animated sequence, with you finally ending up in the cellar of the castle.
● Look at the top cask on the pile of three in the bottom left-hand corner of the screen.
● Go to the kitchen, look at the carcass, then take the fat and tongs, and then go back to the cellar. Use the tongs on the bung on the cask.
● Go into the passage and wait for the boy Minnow to walk past. Talk to him and tell him to tell his Skorl master that there is a leaky cask in the cellar.
● Go out of the kitchen to the right and go up the stairs to the balcony. Wait for the Skorl to go through the door, then wait a bit (in this time the Skorl will have gone into the cellar and drunk the wine and fallen asleep).
● Walk through the room of drunken Skorls and go into the gate room on the right. Use the fat on the lever, and then go back to the drunks and tell minnow to go to the gate room and to pull the lever. When he does this, operate the winch.
● Go back, pull up on to the balcony, and up the steps to the drawbridge. Kill the guard, and watch the end-of-game sequence. ***stf***

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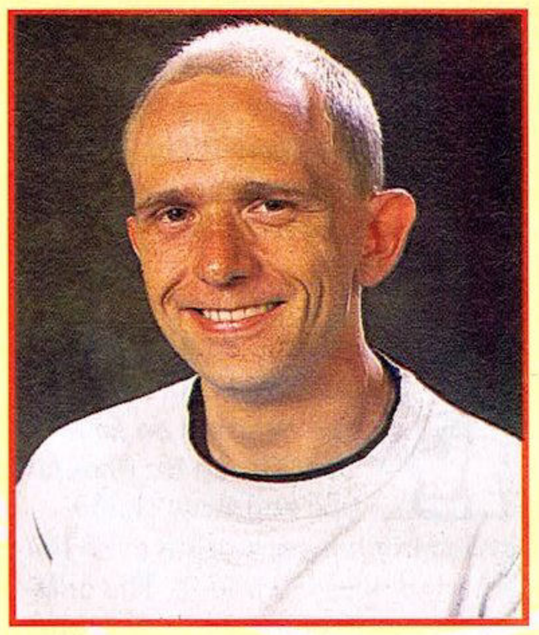
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ST FORMAT FEB 1995

FEEDBACK



By day he was Trenton Webb, mild-mannered reporter, editor of *ST FORMAT* and author of Feedback, the section of the magazine where your letters let you have your say...

Brain damage

Dear *ST FORMAT*

As usual we in Finland get *ST FORMAT* one month later than you in Britain so that's why this comment is arriving so late. On the subject of demos: scroll-texts are very old-fashioned and there hasn't been a demo around for quite a while that uses scroll-texts as the main attraction of the demo. The demos you showed pictures of were old and probably nothing wonderful. *Brain Damage* by Aggression, the people making *Stardust,* is very nice, so try and get that from somewhere.

Another thing. Why do you feature 'new' Falcon demos ages after they appear on the scene? The best Falcon demo I've seen so far is *Experience* which is much better than any of the demos you have ever reviewed. You have too few Falcon articles anyway and the stuff you have is sometimes outdated. Now that you have an Internet account, why not ftp to ftp.uni-kl.de to get the newest demos and stuff like that?

Kristopher Lawson, Finland

PS When talking about modems, baud doesn't mean the actual transfer rate over the phone line. It's the rate at which the modem and computer 'talk' to each other. In the review of a modem recently it seemed like baud would be the actual transfer rate when connecting to a BBS.

stf: *On your prompting, and with the address you supplied, I did mange to get hold of some of the more recent Falcon demos and I must admit I'm impressed. Some of the traditional ST FORMAT doubts still remain, but they're certainly innovative and intriguing nonetheless.*

Falcon users visit the armoury

Hi,

Atari Falcon Owners can subscribe to the DIGITAL 030-zine by sending their e-mail address to requiem@armory.com. This is also the address for the Falcon Owners' Group. Details about alt.comp.atari.falcon will be sent soon.

Richard Davey via e-mail



■ STOP PRESS: New Falcons are on their way in 1995. Turn to page 13 for details of where, when, who etc.

stf: *Cheers for letting us know about that online-zine. Remember, if you're involved in any Internet Atari related stuff and want subscribers, let us know and we'll let everybody else know.*

Over the Edge

Follow these steps carefully...

Take a walk down to the local Future Publishing gun cabinet and choose a handy, light assault weapon. Arm said weapon and proceed to *Edge* offices. Point weapon in various directions while repeatedly pulling back on trigger. Walk around office, making sure every writer is no longer living. If some are found still alive, reload chosen assault weapon and dispense rounds into the upper skull area. Now return weapon to gun cabinet and continue working at the world's finest ST mag. Wait for one to two weeks whereupon you should be in a position to apply for job at *Edge.* Accept job and begin that ancient art of "truth telling" whereupon many loyal Jaguar owners will begin to purchase the magazine once more. Seriously though, don't let them get away with it!

KD via e-mail

stf: *You're a little peeved with Edge's Jaguar coverage, aren't you? Sadly, I think your course of action is a little severe, not to mention massively illegal. You might however be interested to know that Edge are running a feature on Atari in their March issue (Edge 18).*

Anyway, tell me, have you seen any movies directed by John Woo? I think you'd enjoy them!



E-(mail)s are good

Dear Feedback,

I have e-mail access, and have been trying to find some information on the options open to get fully connected (needless to say most people forget the ST). I've been hoping for ages that one of the ST magazines would run such a run-down on what's available. Now *(after our Internet feature in ST FORMAT 65 presumably – Trent)* all I need is a faster modem and some more hard drive space ;-)

Andy Middleton, Okehampton

stf: *Cheers, and I'm glad the feature was useful. We'll be carrying more comms and Internet info in coming issues, so if you want more modem related facts, stay tuned.*



■ *Zero-5*, a truly splendid game. Unless you own a TT that is.

■ Fight the power! Well, we're not going to shoot *Edge* as suggested. Just at them... A bit. Maybe.

Gobsmacked

Dear *ST FORMAT*

I've just played a one-level demo of *Obsession* and, to put it bluntly, I'm gobsmacked. I never knew my STE could handle such graphics and sound. It's reaffirmed my faith in the STE's capabilities. Well done, Unique Developments. More power to your elbow and I eagerly await your next title.

David Woodley via e-mail

stf: *It's stunning isn't it? Check out the review of the full game on page 52. It appears that programmers have finally started to utilise the STE properly – Obsession and Zero-5 are two games that really make the STE perform.*

Zero option?

In issue 64 you featured an interview with the author of *Zero-5* in which it was reported that *Zero-5* would run on a TT. However, in the advert in issue 65 it says that *Zero-5* will run only on Falcon or STE. Is the article wrong?

Tom Rees via e-mail

stf: *When the interview took place, Zero-5 was intended to run on any ST, using each machine to its full ability. This didn't prove practical and so sadly, anyone working with less than an STE is*



out of luck. If you want to get hold of Zero-5 then write to: Caspian Software, Block 1A, Lee Valley Technopark, Ashley Road, London, N17 9LN and they'll give you full details on how to order.

Ishar anybody out there?

Dear *ST FORMAT*,

I am starting an *Ishar* User Group for general tips and Save Game swapping between users of all the *Ishar* games (1, 2 and 3). The criteria for membership is simple: one or more saved game/s for any one of the series, two or more tips and an SAE. I will send the disk back within the fortnight full of saved games and tips from other users. Disks should be sent to: *Ishar* User Group, Steve Minton, 71 Woodshutts Street, Butt Lane, Talke, Stoke-on-Trent, Staffs, ST7 1LD.



■ ***Ishar*. If you play it, say it! Join the user group for cheats, tips, saves...**

stf: *Job done. Address printed. Let me know what kind of response you get.*

Oi! Garçon

Dear Sirs,

Promises, promises! It is now three months since you issued what I considered to be an excellent word processor program – *Marcel*. I've sent off the requested £10 to the States and have revived the manual and registration certificate and am quite happy with it – in fact I am using it right now to type this very letter.

However, I'm beginning to wonder if I shall ever see the *Spell Check* program that was supposed to be on the following month's Disk (because you couldn't fit it on issue 62's Cover Disk). Who knows – it may be on issue 66, but I very much doubt it. I live in hope.

KO West, South Wirral

stf: *Oooops. I can explain, honest. The mix up with the Marcel spell-check program was a result of the hand-over of Disk Editorship from Clive to Nick. As you can imagine there's an awful lot of info to pass on and somewhere the spell-checker got drowned. Nick didn't put it on the disk for the simple reason that he was unaware it was supposed to be included. He'll make sure the spell-checker is included on Cover Disk 68.*

BBS Bulletin

Hi *STF!*

Taking up your offer in the subscribers' newsletter from issue 65 I decided to make some points that have been nagging at me for ages. I have subscribed to your magazine for two years, and before that read a friend's copies of your magazine, and I've always been satisfied. Up until now, that is.

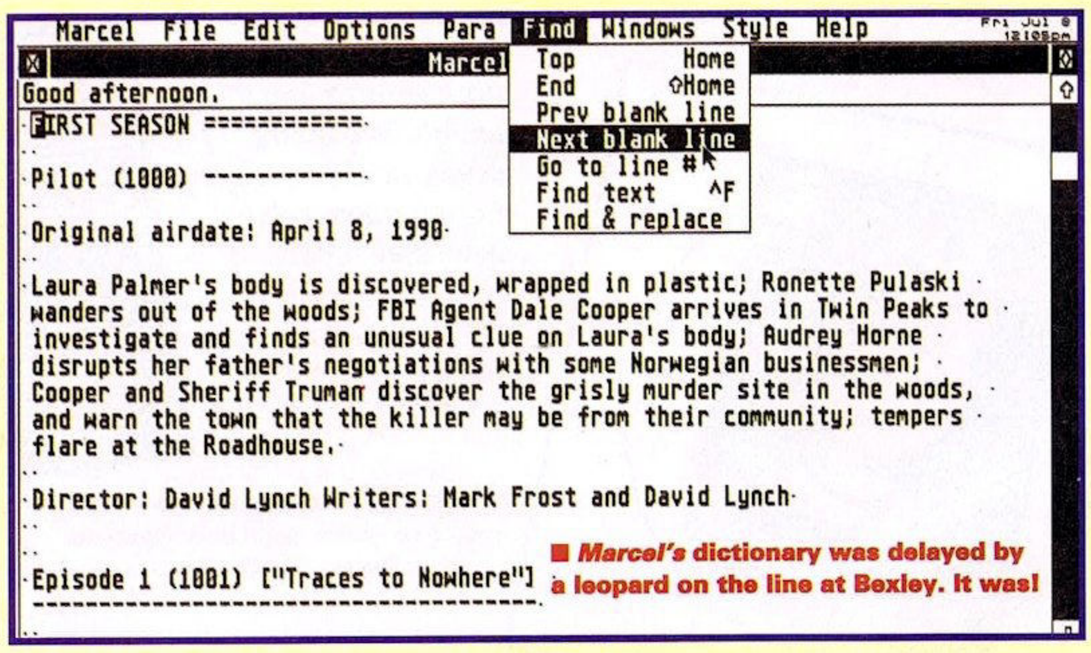
With the slow and inevitable decline of the ST commercial scene; ST users worldwide rely on magazines like *ST FORMAT* more and more to learn what's new and what's good. You cover the commercial and public domain side of the ST very well, but what about the comms side? In issue 65 you featured a section on the Internet and in past issues you've touched lightly on BBSs such as The Holodeck, Ad-Lib, CIX, Bull Ring and a few others, but you haven't emphasised the power these have over computer markets. More shareware is available from these sources than most PD libraries!

I think you should regularly feature articles (preferably large ones) on ST-dedicated BBSs and their SysOps. You should encourage readers to publish their e-mail addresses, or to get e-mail addresses either by linking to Demon or by joining a BBS that has e-mail support. Reopen the *STF* BBS and encourage large ST-dedicated FIDO conferences. Make all the PD/freeware that you review easily available on it. Create topic areas such as *Red Dwarf* or *Star Trek*. More than a quarter of your users probably already have BBS/Internet access, but have you ever asked them in a questionnaire? Also, on BBSs there are large numbers of text-files that are freeware – why not publish them on Cover Disks rather than repeatedly including software like databases that almost no one's interested in? Have you read the *Hacker Crackdown* text-file by Bruce Sterling? Now that is infinitely more interesting than *Darts 80* or *Car Registration!*

Robin Mthawanji, Malawi

stf: *It seems we've tapped into a rich vein of interest with our Internet feature in ST FORMAT 65. We tried to split the feature roughly 60/40 in favour of the Internet side of comms, but we will also be carrying considerable Bulletin Board features and regulars over the coming months.*

The sort of text-file you talk about can't be included on the Cover Disk on the grounds of copyright. And we hope that the programs we choose for the Cover Disk, while specialist, are sufficiently diverse for there to be some programs of interest to every ST user on every ST FORMAT Cover Disk. I appreciate that in Malawi a British car registration database is more than a little redundant!



■ ***Marcel's* dictionary was delayed by a leopard on the line at Bexley. It was!**

FALCONRY

Falcon-contemptible?

Dear *ST FORMAT*,

Firstly I would like to congratulate you on an (in general) excellent magazine. I have been a fairly regular reader since the days of *ST/Amiga FORMAT*, but I'm sad to say that in recent months I've purchased fewer and fewer copies because most of the programs on the Cover Disk that I am interested in won't work on the Falcon, and I feel that £3.75 is a little too much to pay for the magazine alone. I hate to grumble, but more Falcon-compatible software on the Cover Disk would really be appreciated.

It's about time that software houses who are still supporting the ST at least make their software Falcon-compatible. I've had my Falcon since March 1993 and I've yet to find an ST game that says it's Falcon-compatible. You could also mention in your reviews whether a game will run unmodified or via an ST emulator such as *Backwards*. In

When I were a lad...

Dear Sir

I was really pleased to find last month's Cover Disk included *Jetpac* and *Blaster* (otherwise known as *Defender)*. I used to own a Spectrum, and played and enjoyed both thoroughly. I am writing to find out if you (or anybody else out there) are going to revive more Speccy games. *Jetpac* and *Blaster* really bought back those memories. Anybody out there who owns a Speccy will know what I am talking about.

Jonathan Cooper, Westcliffe-on-Sea

stf: *Thanks for the feedback – it's always good to hear what people enjoyed (or indeed hated) on the Cover Disk. If you really enjoyed the classics last month, then get yourself a PD catalogue. Most are stuffed with clones of many Speccy faves. Or why not get yourself a Spectrum emulator and a disk full of proper Speccy games? The best one is Spectrum Emulator v2.07 and is available from New Age PDL ☎ 01702 480691 on disk UTIL 55, with a pile of games on disk UTIL 79. That way you can really indulge your nostalgic streak.*

But where?

Dear Trenton,

On receiving my latest subscription issue *(ST FORMAT* 64), I found the Cover Disk, the mini-mags of *.net*

short, don't let the Falcon go the way of the STE. Sure, all new games now work on the STE, but few make use of the extra hardware – a fact that I still find hard to believe.

The ST is a highly competent machine. I've had one for years, and from a programmer's point of view it's a dream to use, but it is beginning to show its age and it needs to move over a little and make room for the Falcon and TT. The survival of the ST lies in the success of the Falcon. I know that the survival of Atari currently hinges on the sale of Jaguars but what good's the Jaguar to the ST if no one is prepared to support it?

Come on software houses, the Falcon is an extremely capable machine. Just look at the professional software market, with software such as *APEX media* and *Cubase Audio*. These titles prove that the Falcon can hold its own against the PC, so why are so many of you unprepared to support it?

I'd also like to get in contact with anybody who is interested in producing software for the Falcon (be it games or serious stuff) in their spare time, and to support your Internet feature I'm including my e-mail address. And incidentally, in your picture in Feedback in *STF* 65, are you wearing a British Basketball Association Top?

Ben Schofield, ben@ncc.co.uk

stf: *Forward and backward compatibility is always a problem with the Cover Disk and we try to serve the greatest number of people with the greatest number of programs. This does mean that certain machines – by way of TOS levels, RAM size and friends – are excluded from certain programs. I take your point however that while we regularly state 1MByte-only or TOS 1.4-compatible, we don't specify in either our reviews or Cover Disk pages if programs will run on a Falcon in either its native state or under emulators like Backwards. In future you can find out by looking at the instruction text in the Cover Disk pages.*

As for your comments on the Falcon, while I agree with the fact that it's a greatly under-utilised computer, increased usage by the programming community shouldn't necessarily be at the expense of the ST.

Meanwhile, ST FORMAT saw APEX media at the ProTOS '94 show in Germany and were highly impressed. It is indeed the kind of package that such a good machine as the Falcon deserves.

As for the top – no, it's a Boston Celtics shirt. And I'm wearing it for one simple reason: they have the best logo in the NBA. So what if they haven't won anything in the last three or four centuries? After all, that's never stopped me from supporting Bristol Rovers...

Whatever happened to...

What happened to all those games Atari were going to release for the Falcon: *Steel Talons, Road Riot 4WD, Evolution Dino Dudes, Raiden* and *Space Junk* (all of which influenced my decision to buy a Falcon in the first place)? Surely they haven't scrapped them all after completing most of them?

The price of the Falcon has dropped dramatically over recent months, and perhaps it is time for Atari to market the Falcon, with the demise of Commodore marking the end of the Amiga in the near future.

Kevin McLeod, Aberdeen

stf: *News of these games came over the fax just as we were in the process of putting issue 66 to bed, so we squeezed it into news The fax contained details of 16/32's plans to release 12 Falcon-specific games over the next year. One of these, Pinball Dreams, is previewed this issue and is painfully good. Give 16/32 a buzz on ☎ 01634 710788 and they'll tell you when these games are available and how to go about getting hold of them.*

As for the ongoing saga of Commodore and its problems, I don't think the 'demise' of the old corporate structure necessarily means the end for the Amiga. In my opinion, the Amiga isn't so

and *Ultimate Future Games* and the Wonder Disk. There was not however a copy of *Between The Covers* (the subscribers' newsletter), so I have no information on how to use my Wonder Disk 64. Was this an isolated event or did it happen to all subscribers? Whatever the answer, please send me the missing items so I can see the wonders I am missing and read the news about *ST FORMAT* still being here. I'm sure that this would have never happened with that nice young Paula Richards!

Mike Southwell, Christchurch

stf: *Yes, due the sheer amount of stuff that had to be crammed into the subscribers' copies that month it seems there were a few mistakes: two disks the same, missing an issue zero .net or whatever. I've got all your letters here and I am now trying to sort them all out. Hopefully everybody should have got all bits they're missing by the time this issue of ST FORMAT hits the streets.*

You're right though. This would never have happened when Paula was in charge, because she used to pack every subscribers' letter herself, you know. I, however, am lazy and rely on a force of pixies and elves to do it for me. But recently they were moonlighting for Santa and started making mistakes due to tiredness. Anyway, if any more subscribers have had problems with their subscription issues, you're best calling our pixie force direct on ☎ 01225 822510. (WARNING: Some statements contained in the above paragraph are blatant lies.)

Games for free!

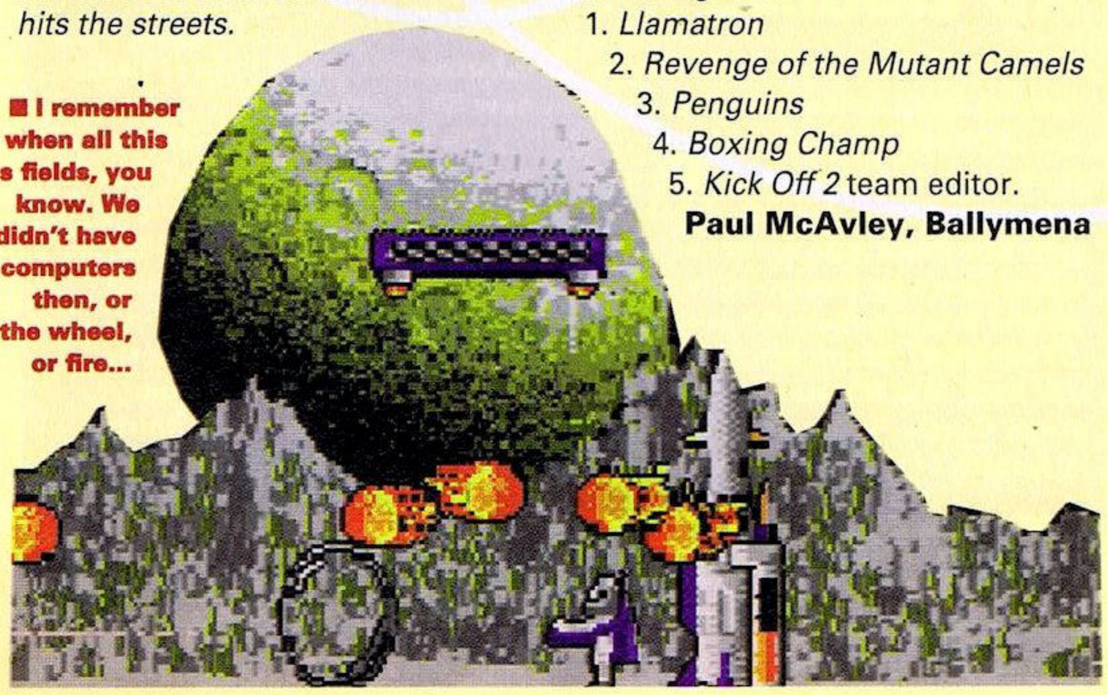


Dear *STF*,

I am 13 years old and because I can't afford games at £25 I have to make do with PD games, but I find them just as good as normal commercial games. These are my top five PD games:

1. *Llamatron*
2. *Revenge of the Mutant Camels*
3. *Penguins*
4. *Boxing Champ*
5. *Kick Off 2* team editor.

Paul McAvley, Ballymena



I remember when all this was fields, you know. We didn't have computers then, or the wheel, or fire...

stf: *Cheers for your list. But where's Starball?*

Book 'im!



Dear Trenton,

I am quite a competent *STOS* programmer and would like to write a book on demo coding in *STOS*. I have written to quite a few demo coders and their reactions have been mixed. Most are willing to share their code but are not so sure if there is a market out there for a book on demos. What I need is some feedback from readers and publishers telling me if this is a good idea or if there's no chance it'll sell. So please send your replies to: Ijaz Hussain, Jazzbox Incorporated, Well Croft Hope House, 165 Ash Road, Saltley, Birmingham, B8 1DR.

PS: If you're a *STOS* programmer... get the *STOSSER* disk-zine from your favourite public domain library. And don't just read it – write to them!

stf: *STOS demos do appear to be a reasonably narrow field, but if you're interested in the project please get in touch with Ijaz.*

Are you LISTENING?



Dear Trenton,

You seem like a nice guy, so why do you insist on digging *ST FORMAT* into its grave? Surely you have enough Jaguar owners and enthusiasts writing in to warrant decent coverage in your magazine. Surely, as ST games dwindle you'll have more room for Jag stuff?

Before you get into your "buy our sister magazine" act, I'd like to stress that most of us don't want to shell out for two magazines each month when one could cover it all. I've been an *ST FORMAT* reader since the beginning and in all that time I have never witnessed a magazine so determined to ignore its readers' pleas as much as you are.

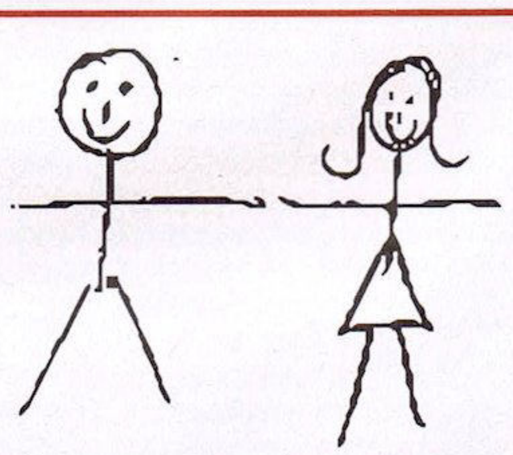
Jody Smith, Woodbridge

stf: *I'm not listening. But seriously, to resolve this debate could anyone writing in now put either 'More Jag' or 'Less Jag' as a PS on their letter. This way we'll get an idea of which way to go!* ***stf***

...but few would have guessed that at night he became Trenton Webb, mild-mannered reporter. Which really isn't as dramatic as it could have been, but it does mean he has time to read all your letters, e-mails and faxes. If you have something to say then put it in writing and share it with the ST world. Send your letters to Feedback, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW. Faxes to ☎ 01225 465982 and e-mails to stf@futurenet.co.uk

TWILIGHT ZONE

PIXEL PAINTING



THIS IS THE BEST I CAN DO AT THE MOMENT BECAUSE THE GRAFIX DEMO.PRG WAS CORRUPT. I'VE SENT IT OFF FOR REPLACING, BUT UNTIL THEN, THIS WILL HAVE TO DO. (ACTUALLY, EVEN WITH GRAFIX, I PROBABLY COULDN'T DO MUCH BETTER!!! BUT THEY DO MAKE A LOVELY COUPLE, DON'T THEY? I CALL IT "CHARLES AND DI - THE EARLY YEARS")

Now it's not every day that we encounter true genius here at *ST FORMAT*, but *David Hazelden of Winchester* has surpassed all previously set standards with his touching portrayal of our beloved royal couple (before it all went horribly wrong). Unfortunately, for him anyway, David's entry doesn't win him a thing, but we thought it at least deserved printing.

YOU CAN ALL STOP SMILING NOW (PLEASE)

LITTLE DID WE REALISE WHEN WE started the Keep Smiling competition in issue 65 that the response would be so massive. As well as the postal entries we received, Trenton has been flooded with e-mail entries, making the job of judging the competition almost impossible. One collection of characters looks much the same as the next when you've looked at several hundred. We've managed, however, to whittle the winning entries down to three that particularly tickled us, plus Simon's effort:

Bert Kemper from Holland sees himself as diplomatic =|:-)X
Galactic St Bernard, aka ***David Sime from Perth,*** has shaved off his right eyebrow ':-)
Nigel Briggs of Birmingham goes to raves q:-)
Simon Forrester of Bath has judged too many smileys |-O

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A SPACEFILLER OF COLLECTIVE NOUNS

IT REALLY DOESN'T TAKE MUCH to spark off a Twilight article in this place, you know. This month, the team turned its thoughts to the problem of collective nouns, and what happens when you get more than one ST in a room. A collective noun, incidentally, is the term used to refer to a group of anything – a flock of sheep, a murder of crows, that sort of thing. Taking a stroll around the *ST FORMAT* offices, we managed the following:

A corrupt of disks
A TOS of Falcons
A fire of games
A broke of joysticks
A knot of leads
An unread of manuals
A pointer of mice
A cancer of monitors
A deafen of printers
An error of STs
A bitter of Cover Disk editors
An incompatible of TOS chips
A lost of screwdrivers

AD LIBBING

Two months ago, in our Internet feature back in issue 65, you should have gasped over the massive amount of great things you can access over the Internet. But there's an even easier place that you can go to receive all the latest gossip from the *ST FORMAT* team. It's called Ad-Lib BBS, and it's run by our own Andy Curtis. There you can find a wealth of ST software, handy information, and loads of useful new ST contacts.

So if you have something to say, or any software that you think the world could benefit from, ATD ☎ 0191 370 2659 with your modem today, and become a part of something that, although it isn't exactly the information revolution, could be described as a fairly large scuffle on a street corner.

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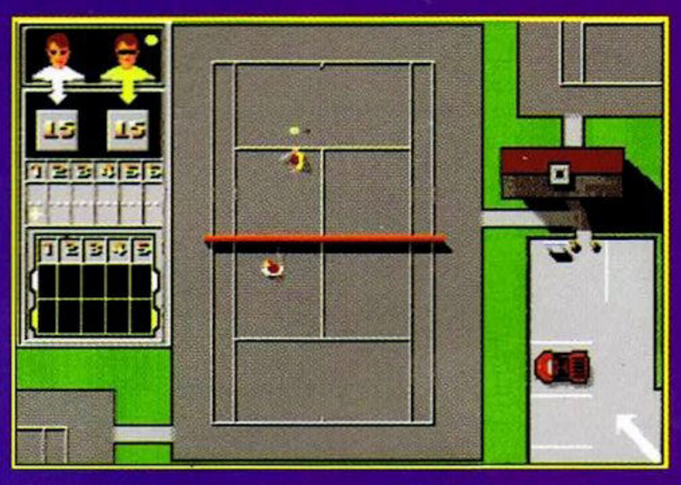
You won't find a better Cover Disk on any ST magazine. That's why ST FORMAT outsells all competitors

COVER DISK

9 RATHER SPLENDID PROGRAMS

SMASH HIT

Game, set and match from the author of *Obsession*. Can you live without it?



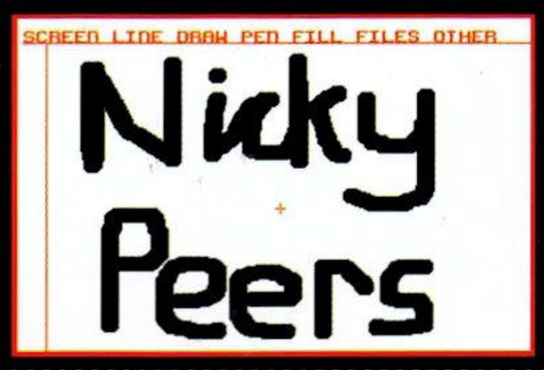
KAOSDESK v2.1



The not-to-be-missed Desktop replacement for your Atari ST!

HOMEWORKER

The ultimate shareware word processor for kids. Simply excellent fun!



MIDIGRID PRO

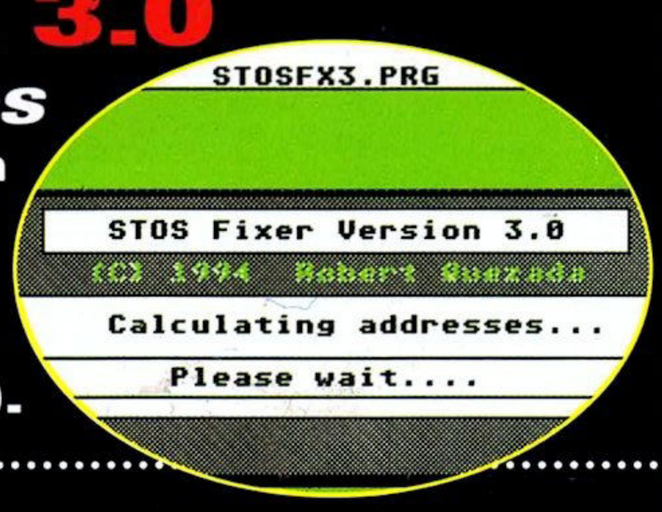


Smart demo of this great MIDI sequencing package (hi-res only).

PLUS!!!
***Backup* and *Menu* programs**

STOS FIX 3.0

Fix your *STOS* programs to run on all the latest versions of TOS (including the Falcon030).



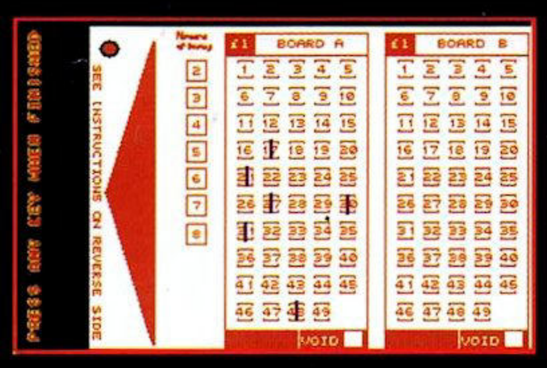
DESKPAC



Calendar, phone book and diary all rolled into one top Desk Accessory.

LOTTERY

Could your ST make you millions? Find out using this!



HAYWIRE

Small, but perfectly formed Vektrex-style *Thrust* game.

SET DATE

Set your system time and date.