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10 BRILLIANT PROGRAMS
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REVIEWED THIS MONTH:
DEGASART 3, SCREENBLASTER 2,
SCREENEYE, TWIST 2, CALAMUS
UTILITIES, MORTIMER, RUGBY LEAGUE
COACH, ROBINSON'S REQUIEM O30,
DYNA BUSTERS+, DARTS 180, JET
BIKE CHALLENGE, FAMILY TREE 2.1,
IMAGELAB, ATARI MUSEUM, FALCON
UTILITIES, TIFF DEMO, PLONKER,
CRAZY CAPERS AND MORE!

NO COVER DISK?
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**NVDI v3**

The fastest display controller now comes with the Speedo and TrueType scalable font system. NVDI v3 is a highly optimized code, faster than the original. Get a faster display, comfortable font handling and faster printing for all programs using GDOS or Speedogd. Now you can use all those classic TrueType fonts from the PC or Macintosh.

NVDI v3.0 including 3 Speedo fonts £49.95
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NVDI v3.2 will continue to sell for only £29.95

**MagiC**

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

ST Review, June 1994

MagiC is a full TOS replacement; a very fast disk filing system, has accelerated serial, midi and printing routines; and, of course, a true preemptive multitasking system. MagiC Desk, a replacement Desktop and a powerful command shell are included. MagiC runs on all ST, Mega, and TT computers with STOS, but 2MB is recommended for a useful working system. The Falcon version is expected later this year.

“It’s like running an accelerator and getting the multitasking thrown in for free.”

MagiC (RRP £69.95) Intro Price £59.95
MagiC Card Ease £99.95
MagiC and Koebold £99.95
MagiC, Ease and Koebold £139.95

NE: Excellent with Cubase SL. Compatible with Notator Logic; not with Notator 6; and not very compatible with Cubase.

**PAK68/3**

The PAK68/3 turns your computer into a 32bit system using the e8030 processor. A 32MHz clock, 32bit wide TOS and a 32kbytes cache will accelerate your system by 71% (Gembach 5.10). This is faster than the Falcon and the TTT clock speeds of 40 and 50MHz are possible. The use of recycled processors makes this upgrade very affordable without sacrificing reliability.

A 32bit fastboard and a colour graphic card adapter are under development.

PAK68/3 board only no CPU £249.00
PAK68/3 33MHz CPU, TOS2.06 req £299.00
PAK68/3 33MHz CPU and TOS2.06 £359.00
PAK68/3 33MHz CPU and TOS3.06 £399.00
Please telephone to discuss your requirements.

**Koebold**

This high speed File Manager gives unbelievable speed. Copies 1000 files (10Mb) in 45sec (GDOS 5.3/min). Use Koebold for backing up formatting floppy's (200Mb ED), move, copy and delete files; use the learn function to automate repetitive jobs. Ease calls Koebold automatically for all desktop jobs and floppy operations. Runs as AGC or Pro Koebold 3.5 (RRP £59.95). Intro Price £49.95

**Ease**

Use your Atari with Ease. Replace the old Atari Desktop. This program could not be more appropriately named. Right click replaces the double click. Iconizes windows for instant access to groups of files. Ease is aware of multitasking and covers all of Smartix’s Colour Editor. Works on any ST, all TOS versions, any display and graphic card. Price £49.95

**DeskTopper**

No space for accelerators, TOS boards, disk drives, graphic cards and PC emulators? Convert your Atari into a desktop computer with more space. Simply replace your plastic top with the DeskTopper and fit your keyboard into Freekeys or replace with a PC keyboard using AT-Key. For more information - ask for a DeskTopper leaflet.

**SCSI Drives**

Min hard drives are full SCSI systems, hardware compatible with all Atari, Amiga, Mac and PC computers. They are unrivaled in size, low noise, speed and style. The ST/FM/e version comes with The Translator and a FREE copy of HD-Driven Software. Please add £20.00 if you prefer the PC Link interface.

**CD-Roms**

CD-Rom drives systems complete with Extendor, for the Falcon with SCSI cable, or TI £285.00 for the ST/FM/e with Translator £339.00

**SyQuest**

SyQuest removable media offers fast and secure storage. Ideal for backing up, or as a main drive. Imagine all your music files and software on one cartridge, and all your DTP files on another.

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128Mb Magneto Optical Drive £699.00
230Mb Magneto Optical Drive £799.00
128Mb / 230Mb M0 Cartridge £29.95 / £49.95

**T28 & T28e**

Tired of waiting for your computer? Then speed it up with a T28e processor. The T28e is now available for ST and STM computers. Compatible with Cubase and Notator Logic.

T28 - with 4Mb cache for STFM/STMGast £179.00
T28e - with 6Mb cache for STFM/STMGast £199.00

**System Solutions and the Atari Workshop**

With two service centres and Atari trained engineers at your service, the Atari Workshop is now Atari UK’s preferred and recommended service agent. Need it back in a hurry? Ask for our next day ProService. Call us for estimates and to discuss your upgrade requirements. We fit all quality upgrade products. Ask for our Courier collection and delivery.

Call Windsor on (01753) 818816, or London on (0181) 693-1919.

*Prices include VAT and may change without notice - UK P&P £3.95 - Multiple or large items, add £10 courier. E&OE*
Internet!

Everyone's talking about it. Hook your ST up to the Internet and you'll be amazed what you find. Follow our in-depth guide – page 15.

Codemania

We start two tutorial series on GFA Basic and Personal Pascal. Want to write your own utilities and applications? Turn to page 70.

ST Answers

He's gone but not forgotten. Clive Parker answers your ST questions on page 60.

Team Talking

We've been going on about the game for ages now. Team looks like being a cracker, and we've got an interview with the coders on page 68.

COVER DISK 65

10 TOP PROGRAMS ON DISK

TURN TO PAGE 6 FOR...

Word War III

The three biggest word processors - head to head. Protext 6.5, That's Write 3 and Papyrus Gold. Find out which one's for you on page 28.

Triple W

Three new heavyweight WPs hit this month.

The wordprocessing scene for the ST has never been more exciting.
FEATURES

15 **INTERNET!**
Yea, you can take part in the global revolution too. All you need is your ST, a modem, a phone line, a little cash, Clive’s In-depth step-by-step guide and lots of coffee.

28 **WORD WAR III**
Last month we reviewed That’s Write 3, Prestex 6.5 and Page & Paper. This month they head to head in the battle of the WPs. It’s not pretty, but it’s informative.

68 **INTERVIEW: TEAM TALKING**
The programmers of Team, the great new soccer game that Nick and Trent just can’t wait for, to talk to us about, ooh, everything. You won’t believe the things they said.

CODEMANIA!!!

70 **TUTORIAL TIME: PENETRATING PASCAL**
How do you use Personal Pascal? All the secrets revealed by Simon, our programming maestro.

74 **TUTORIAL TIME: GFA EXPLAINED**
How do you use GFA Ralso? Sorry, completely crap gag. Simon tackles your programming education.

REGULARS

6 **COVER DISK**
Once again, Nick Peers introduces... The Cover Disk! With software for your delectation.

11 **NEWS**
More news than it’s decent to print. Scurrilous gossip, outright lies, provocative rumours. Just a few true stories. ‘Atari win in Sega battle shock!’ ‘Stardust to be released soon shock!’ ‘Atari shows to go ahead shock!’ ‘IDS change phone number shock!’

58 **SUBSCRIBE!**
Get on. Think of all those millimetres of shoe leather you’ll save not having to walk to the shop every month.

60 **ST ANSWERS**
More ST Answers than a man can eat. This month Clive Parker takes up the challenge, once again.

78 **GAMEBUSTERS**
“If at first you don’t succeed...” Gosh, I wonder if that line’s ever been used in a Gamebusters intro before...

NEW THIS MONTH!
81 **ST DIRECTORY**
Our list of essential Atari contacts. It’s all there – names, addresses, Phone numbers, even.

82 **READER ADS**
Lots of small but very, very important words. There’s stuff buried in here that even we haven’t seen yet.

88 **READER OFFERS**
We don’t make offers like this to just everyone you know. Oh no. We’d probably get arrested.

90 **TWILIGHT ZONE**
The one page of the issue where our publisher allows us to be funny. We try, and fail.

DEGASART 3
Got Degas? Still can’t draw? Give this a try. Then throw it away and use the Graffix on our Cover Disk instead.

**PUBLIC SECTOR**
Deep breath. There’s Dynamusters, Darts 100, Jet Bike Challenge, Family Tree 2.1, ImageLab, Atari Museum, Falcon Utilities and The Tichel demo. Blimey.

**INDIES**
Plunket and Crazy Crafty Capers. Says it all really.

**RUGBY LEAGUE COACH**
Trenton gets a gratuitous Tongan mention.

**ROBINSON'S REQUIEM 030**
The Falcon version of this fabulous game.

**ST FORMAT ARCADE**

**Robinson's Requiem 030** – can the Falcon-only version be as good as the ST version? Explore page 54 to find out.

**ST FORMAT**
We have a real one-shot option of action and independence and our reviews give our recommendations. **ST REVIEWER** You aren't buying our review. We are buying their game. **ST FORMAT** The magazine is an equal-opportunity publication. We highlight key elements in our reviews, such as graphics, sound, gameplay, and story. **SAFETY IN NUMBERS** We believe in equal-opportunity publication. We highlight key elements in our reviews, such as graphics, sound, gameplay, and story. **GREAT EXPECTATIONS** We set our standards high and hold our reviews to the highest possible standards. We believe in equal-opportunity publication. We highlight key elements in our reviews, such as graphics, sound, gameplay, and story. **@Our Guarantee of Value** Your guarantee of value is that you’ll never find a better deal on any other magazine. **TERMS OF SERVICE** We reserve the right to change the terms of service at any time without notice. **PRIVACY POLICY** We are committed to protecting your privacy and we will never sell your personal information. **SUBSCRIPTION** We are committed to providing high-quality, informative and engaging content for our readers. **CONTACT US** We are always looking for ways to improve our magazine and we welcome your feedback. **FUTURE PUBLISHING** We are committed to providing high-quality, informative and engaging content for our readers. **TERMS OF SERVICE** We reserve the right to change the terms of service at any time without notice. **PRIVACY POLICY** We are committed to protecting your privacy and we will never sell your personal information. **SUBSCRIPTION** We are committed to providing high-quality, informative and engaging content for our readers. **CONTACT US** We are always looking for ways to improve our magazine and we welcome your feedback. **FUTURE PUBLISHING**
GRAFX

By: IDS
Machines: All STs
Memory Needed: 512K
Resolution: Low
Uncompressed Size: 511K

Even the best art packages always fall down on one simple thing – teaching the graphically challenged among us how to draw neat little pictures in the first place. Grafix aims to fill that void, and its all thanks to those great people from IDS. This is an exclusive ST FORMAT demo of the forthcoming release (look out for a review in a future issue), and contains the modules that detail how you go about creating basic and shaped heads, facial features and animation.

Once you’ve decompacted Grafix to a blank disk using the menu program, re-boot your ST with Grafix in Drive A, and the program will automatically load from there. It’s a simple point-and-click affair, and you really can’t go wrong (well, I didn’t, which is saying something). Each tutorial shows you how each element is constructed and provides a basic walkthrough of how, for example, different shaped heads are put together.

The animation tutorial even includes sections where you can see the animations themselves. There’s something horribly cute about seeing a pair of disembodied legs walking along on the spot, or am I just sick?

Grafixly speaking

As the screenshot of the menu shows, the full version of Grafix will feature wonderful tutorials ranging from the rest of the body through to specific artistic techniques like perspective, dithering and sprites. It will also include an art package specially designed to enable you to create your own pictures using the tutorials provided. So now you’ve got no excuse for not exercising your artistic potential. Send your creations in to us at: Pixel Painting, ST FORMAT, 30 Monmouth St, Bath, Avon, BA1 2BW.
Now we've made it really easy for you to copy and extract programs from our Cover Disk. Just follow the ten steps below and make sure you have some blank formatted disks ready.

We've assumed a double sided, single drive system in medium resolution for these instructions. If your ST is in low resolution then switch to medium resolution using the Preferences command in the Options menu at the Desktop.

1. Put the Cover Disk in the drive and double-click on the STF .GIF icon. Wait for the ST FORMAT logo to appear and press any key.

2. After a short time a menu screen appears with some instructions at the top.

3. Put the disk in the drive and double-click on the STF .GIF icon. Wait for the ST FORMAT logo to appear and press any key again.

4. Use the up and down arrow keys on the cursor keypad to select the program you want to copy or extract and press the [Return] key.

5. After a few seconds a message appears asking you to select the destination disk for the program. Press any key and wait for the file selector to appear.

6. When the file selector appears select Drive B as the destination, even if you only have a single disk drive. If you own an STFM with TOS 1.02 you should select the command line by clicking on it with the mouse, and replacing ‘A’ with ‘B’. Do not press [Return] or click on OK at this point – click on the Close Box icon in the file selector instead.

7. An alert box appears asking you to put Disk B into Drive A – do so and then click on OK. When the alert box vanishes click on the OK button in the file selector.

8. The alert box now asks you to put Disk A into Drive A.

9. Do so and click on the OK button. After the box vanishes press any key and the menu program loads the program you have selected into memory. An alert box tells you to put Disk B in Drive A. Put your blank disk into Drive A and click on OK or press [Return].

10. The program is copied to your blank disk and automatically makes any folders it may need. If the file is compressed then the Menu program automatically uncompresses it, then deletes the compressed file.

11. Some compressed files may be contained in more than one segment. Follow the on-screen instructions and keep swapping disks when requested.

12. You finally come to a message telling you that the program has been transferred. Press any key to return to the main Cover Disk menu.

13. When you have returned to the Cover Disk menu you can select another program to decompress, or press the [Esc] key to quit the Menu program and return to the Desktop. It’s as simple as that, honest!

ARCADE CLASSICS

By: Various (see below)

Machines: All STs

Memory Needed: 512K

Resolution: Low

Uncompressed size: 95K

Even more tears flowed when these three classic games were played for the first time. blister, Tetrside and Breakanoid serve to remind all those horribly complicated games like Civilization and Robinson’s Requiem that games don’t necessarily have to involve constant reference to the manual to be fun.

Blister is a Dropzone clone – run around blasting the aliens before they capture those humans stupid enough to be standing around waiting to be abducted. Once you’ve blasted the aliens you must grab the humans and return them gently to earth (or shoot them if you don’t like scoring points and have a mean streak).

Tetrside is, surprisingly, a Tetris clone. The main advantage of this version is that two people can play simultaneously – one using the keyboard and the other a joystick. Full details of how to play are enclosed in the read-me file, but it’s not difficult.

Finally, Breakanoid is a Breakout clone with no frills. Use the mouse to move your paddle left and right and hit the ball back into the bricks with the ultimate aim of removing them all. Some require more than one hit to be destroyed and, er, that’s it really.

So there you are. Just use the Menu program to dearchive the three games together and you’ll soon be able to relive those golden days of yesteryear when the sun shone for longer, you could leave your front door open, life... (Oh shut up! Everyone.)

Jetpack

By: Pete Whitby

Machines: All STs

Memory Needed: 1MByte

Resolution: Low

Uncompressed size: 289K

Tears filled everyone’s eyes in the ST FORMAT office when we found this little gem lurking in the archives. If you’ve ever owned a Spectrum or Commodore 64 then you must have played this game and loved it. It’s one of those mad-deningly addictive games that has no real purpose (build your spaceship, kill the aliens, fuel your spaceship, take off, go to next level and do it all again) other than to enable you to vent your frustrations after a hard day of doing whatever it is that you find particularly taxing.

The author has left the basic game well alone, concentrating on improving the graphics and sound and adding loads of extra levels (there are fifty in all). To play, you must first put the three bits of your spaceship together by picking them up and carrying them over the launch site where they automatically fall into place. Once done you then pick up the fuel pods and drop them in exactly the same spot as your ship, all while avoiding (or blasting) the aliens that wander at will around the landscape. There are even bonuses, such as gold bars, which can be collected to boost your points score, while you can also pick up a bubble that makes you indestructible for a time.

Jetpack away from it all

Those aliens that get in your way come in a variety of shapes and sizes. The earlier ones are easy to destroy – one hit and they self-destruct on hitting the floor or platform. Later aliens are more cunning and impervious to your firepower, and you’ll soon find yourself desperately trying to prolong your existence in what seems an impossible situation. Jetpack may be easy to get into, but completing it is another matter.

Jetpack is part of the Budgie UK Collection, the first ever licenceware scheme, whereby PD libraries who distribute their software charge a slightly higher fee for each program (usually around £3) so that Budgie can send a small amount of the money per game sold on to the authors.

You can see the quality of Budgie games in Jetpack, and there are loads more available from all good PD libraries, details of which are contained in the libraries’ catalogues (turn to page 48 for a full list of libraries). Go on – you know you won’t regret it!
SLINGSHOT
By: Artisan Software
Machines: All STs
Memory needed: 512K
Resolution: Any
Size: 31K

If you have a disk or hard drive full of folders and cleverly hidden programs, you'll find Slingshot is a gift from heaven. Simply boot SLINGSHOT.PRG and you'll instantly be able to swiftly access any selected programs with the greatest of ease. Just click on an unassigned letter to be presented with your file selector, then you can find the program you want before clicking on OK to assign it to the relevant letter.

You can even label each path to make it easier to find the program you want. Once you've selected the program to be loaded, just click on the pathline, delete the text therein (for example, A:JET-PAC.1MB/JETPAC.PRG) and replace it with a more user-friendly description of your program (such as 'Jetpack').

If you're still stumped, read the SLINGSHOT.DOC file for full details of how it all works, and remember to register the program if you use Slingshot on a regular basis.

- Slingshot could be used as a menu program to access one of your blank disks containing a selection of dearchived software from this month's Cover Disk.

FONT EDIT 2.5
By: Paul Foster
Machines: All STs
Memory needed: 512K
Resolution: Medium/High
Uncompressed size: 72K

Bored with the unglamorous Desktop font? Wish you could change it to something a little more attractive? You need Font Edit. Once you've decompiled the program using the Menu program, just open up F_EDIT25S.PRG, and double-click on F_EDIT25.S.PRG. You'll then be presented with a screen like the one shown below, from which you can alter the fonts quickly and simply, or even load in one of the 10 that are provided.

Then, by selecting 'Save as .PRG', you can create a standalone file, which takes up a mere 2K and enables you to alter that boring Desktop font either by double-clicking on it directly from the Desktop, or by installing it into your Auto folder on your non-copy-protected disks.

A word of warning however! Font Edit does not like NVDI at all, and extremely strange things might happen. But then when you consider that NVDI comes with its own replacement font there's no real need to use it with the screen accelerator installed, is there? No.

DR FOX'S FOOTBALL ANNUAL
By: Dr Fox
Machines: All STs
Memory Needed: 512K
Resolution: Medium/High
Uncompressed size: 134K

Hurrah! According to Dr Fox, this program will help you chart Birmingham City's triumphant return to First Division football. Unfortunately, what it won't do is actually secure that globally-anticipated event.

For the small minority of football supporters that don't follow the Blues, the program thoughtfully and includes details of all the English league clubs from the mighty Doncaster Rovers all the way down to humble Manchester United. All the results from the 1990-91 season to the present are included, as are the fixtures for the present league campaigns. For the current season, all the results up until 24th September are included and the demo version enables you to keep your results thoroughly up to date and save them to disk.

Over the moon
You can display all your team's results and fixtures, as well as view their current league form. A graph shows you how your side have boomeranged around their division this season.

The program is far more than a useful database of league statistics, however. It also includes a section in which future results are predicted, based on your side's current form.

If you keep your results up to date, the program has a wider range of results to choose from, which enables it to make more accurate predictions. For those of you desperate to make a quick fortune the benefits of this are obvious, but the program is also useful in that it can give you a rough idea of how your side is going to slide later on in the season.

ST FORMAT ISSUE 65

TIME ON YOUR HANDS

There are loads of files to be decompiled from Dr Fox, and it takes quite an age for your ST and the Menu program to dearchive them to a blank disk. So we've come up with a few things you might like to do while you're waiting:

1. Make a cup of tea or coffee (rather obvious one that, I'm afraid).
2. Wax lyrical on the sort of system from your favourite footballing side's players/manager/board (if there's any potential guilt or innocence of Richard III with regard to the Princes in the Tower).
3. Hurl some 'friendly' abuse at your team's biggest rivals actually, you might spend a couple of hours doing that, and the program doesn't take that long to decompile.
4. Ponder how it is that Jimmy Hill and John Motson are still employed by the BBC.
5. Grapple with the idea that the US World Cup was wrecked by the dreadful final between the two 'greatest' teams, Brazil and Italy.
6. Debate the potential guilt or innocence of Richard III with regard to the Princes in the Tower.
TIMEZONES

By: Alan Butcher  
Machines: All STs  
Minimum memory: 512K  
Resolution: Medium (recommended) or High  
Size: 28K

Ever wondered what time it is in Bangkok? About to pick up the phone to wibble on to someone in America when you suddenly realise you don’t know what time it is? Well, this is the program for you! Simply enter the current time in the UK, and click on your chosen city and hey presto! The time there is displayed.

A quick word of warning though. The Accessory has problems running in high resolution. When you exit, only half the screen is cleared. This is only a minor wibble however. To solve the problem, just open a window and drag it over the affected area to wipe the screen clean.

TINY PRINT

By: Richard Kelsch  
Machines: All STs  
Memory needed: 512K  
Resolution: Medium/High  
Size: 42K

We are not worthy! We are not worthy! This superb little utility comes all the way from California, and is written by a man whose current claim to fame is that he has appeared in Renegade, an American TV show that’s aired over here in the small hours (even members of ST FORMAT have seen it). Taking the classic “good cop/bad cop” method, he fights crime from the fringes of the law. Luckily, he happens to be a martial arts expert and rides a neat Harley... Sorry, back to Tiny Print.

Luckily the program is excellent enough to stand up in its own right. It enables you to cram loads of text on to a single sheet of A4 using Epson compatible printers (up to 160 columns by 140 lines). The program has an incredibly user-friendly interface – just click on the options you want before clicking on OK, and before you know it you’ll have your text pouring forth from your printer. You can select either Pic or Elite pitch, draft or letter quality printing, and you can even print out your text in dual columns. Finally, you can justify your text in a variety of ways – you’ll be flabbergasted at how such a small program can be so powerful.

Tiny Print also works with various multitasking environments (including MultiTOS and Magic!), enabling you to get on with other things while the program does its job. It’s shareware, so if you like it and use it a lot, read the conveniently titled README.TXT file for more details. Now you’ve no excuse not to write unreadable letters to your favourite great-uncle.

This is Richard Kelsch, and in his spare time he programs his ST. Er, sorry, in his spare time he acts in American TV shows.

BACKUP

By: Brian Tilley  
Machines: All STs  
Minimum memory: 512K  
Resolution: Any  
Size: 12K

Look, don’t ask why, okay? Just format a blank disk, put your Cover Disk into Drive A, open up the BACKUP folder and double-click on CD-BACKDOS. Then follow the on-screen instructions and before you know it you’ll have backed up your Cover Disk. Easy, isn’t it. Now you can be safe and secure in the knowledge that only a massively severe magnetic storm in the vicinity of your room can possibly destroy all your hopes and aspirations. (Er, and your Cover Disk.)

Oh! Don’t go yet! If you’re a subscriber, (and if not, why not?) why don’t you back up your Wonder Disk while you’re at it? I’ll tell you why. Because I said so, that’s why. (Er, sorry about that. He’s been under a lot of stress – Trent!

TEN TIPS FOR COVER DISK SATISFACTION

1. Write-protect your Cover Disk by sliding the black tab so you can see through the hole; this prevents you from accidentally erasing data.
2. Always make a backup copy using the ST FORMAT backup program, see the instructions on page 6.
3. Always read the instructions for the program you are using on the Cover Disk pages and in any document file that is on the disk.
4. Never run software directly from the Cover Disk except the Backup program, and always use your backup disk.
5. Never try to decompress self-extracting TOS files on the Cover Disk, always copy them to a blank disk.
6. If you have any general problems with your ST, consult your manual. If you are still stuck then write to ST Answers, 30 Monmouth Street, Bath, Avon BA1 2BW.
7. If you can’t back copy or back up your Cover Disk programs then you may have a faulty disk – it happens sometimes.

SEND THE DISK AND A PADDED SELF-ADDRESSED ENVELOPE TO:  
ST FORMAT December Disk Returns, PO Box 21, Dovecote, NN4 8AI  
We pay the return postage. Please, please please don’t send faulty disks to our Bath or Somerset offices because we don’t keep stocks of Cover Disks there.

WE WANT YOUR PROGRAMS

We pay for your software – so if you’ve got anything that’s good, original and preferably short that you think really deserves to go on STF’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.

We will

Name

Address

Daytime phone

Program title

Total size in K

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

Remember: 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 an attractive bribe. Not that it makes a difference, of course.

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
### Gasteiner Hard Drives for Atari ST & Falcon

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All the drives for Atari ST come WITH our TOP LINK controller.

### Falcon 030 Computers

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### Falcon 030 Bits

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### 2.5" IDE Internal Hard Drive for Falcon 030

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<td>NEW 2.5&quot; TO 3.5&quot; IDE CABLE</td>
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### 3.5" SCSI Hard Drives

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### 3.5" SCSI HARD DRIVES

| External case with PSU & SCSI cable | £75.00 |
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**Atarist Spares**

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- Internal Drive: £40.00
- TOS 2.08 STE: £30.00
- TOS 2.08 STFM: £45.00
- Keyboard: £35.00

### Printers

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### Accessorys

- 280 DPI Mouse: £7.80
- 400 DPI Mouse: £13.00
- DMA cable: £5.00
- SCSI cable: £5.00
- Scart cable: £8.90
- Modem cable: £8.00
- Trackball: £20.00
- Optical mouse: £20.00
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- EMAGIC UNITOR: £230.00
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- CUBASE V3+: £284.00
- CUBASE AUDIO: £550.00
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- TIMWORKS: £35.00

### Word Processors

- 1ST WORD: £35.00
- PAPYRUS: £109.00
- THATS WRITE: £109.00

### Blank Disks

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Official purchase orders welcome from Educational establishments and major corporates. (Strictly 14 days net). Please phone for approval. All prices exclude VAT. Prices and specifications subject to change without notice. E&OE. All goods under £50 please add £3.50 p&p and all goods above £50 please add £10 Courier Service. Next day service please call. 126 Fore Street, Upper Edmonton, London N18 2AX Major credit cards accepted.
Atari get a cash injection, Stardust is nearly complete and IDS have a new phone number.
Nick Peers gives you the low-down on what's hot in the Atari world at the moment.

**ATARI VS SEGA**

**BY NICK PEERS**

After a battle strongly reminiscent of the Jaguar's Alien vs Predator, Atari recently made an extra $90 million at the expense of Sega. After a four-year legal battle over video game patents which saw Atari filing a lawsuit against the Japanese giants last autumn, the two companies recently came to an out-of-court settlement worth $50 million in cash for the rights to over 70 Atari patents and another $40 million in return for an 8 per cent stake in Atari.

Atari had been experiencing some problems in terms of cashflow which affected not only the advertising of the Jaguar, but also its construction. According to Computer Trade Weekly, Atari lost $48 million last financial year, so the money from Sega is a big boost.

The final settlement is excellent news for the Jaguar. Sam Tramiel, CEO of Atari, commented: “The increased cash position will be used, among other things, to enhance our marketing position this fall.” This improves Atari’s chances of a worldwide success with the machine, especially considering the fact that the settlement will enable Atari to launch a fresh assault on the market in time for Christmas. Part of the deal is that Atari can also license certain Sega games, so look out for the likes of Sonic and Virtua Fighters on the Jaguar.

More Jaguar news

A licensing agreement between Williams Entertainment and Atari could see captured versions of arcade classics like Joust, Defender and Robotron appearing on the Jaguar. These could well also be the first versions of these games to introduce first-person perspective in a realistic three-dimensional environment. Williams have already developed Troy Aikman NFL Football and Double Dragon V for the Jag. Byron Williams, president of Williams Entertainment was all chuffed about the whole thing: “We're very excited about the Atari Jaguar 64-bit platform and happy to support it with our finest titles.”

**IDS NEWS**

IDS have changed owners in the past month. Midland Software, who also run AWF PDL, have taken over the reins of the company from Wright and Hayes, who ceased trading in October. The phone number and address have stayed the same however.

A provisional price tag of £24.95 has been put on Graphix, the art tutorial package featured on this month's Cover Disk as an exclusive ST FORMAT demo. The price will also include an art package to enable you to try out the tutorials.

IDS have also revealed that HERO was completely written and compiled in STOS. The announcement has blown rather a large hole in the myth that STOS is too basic and slow be used in any serious form to write games. HERO's programmer Tony Greenwood has also announced that the Stosser disk magazine is to return following a large public outcry on its demise (see Feedback, for a start). Tony is also writing the Advanced Programmer's Guide to STOS which, considering the quality of HERO, might be a valuable read if you're into programming.

**MY FIRST BBS**

First Computer Centre have recently announced that their bulletin board, set up three months ago, is already proving popular according to General Manager Bryan Cobley. Currently providing a forum for customers to place orders, download printer drivers and get technical help from First Computer's engineers, the BBS is to expand with an Atari file area for users to contribute and download files specific to the ST and company.

The BBS can be contacted on 01132 311422, and it runs 24 hours a day up to V32bis, 14400 baud with a standard 8N1 communication protocol and Ansi or ANSI850 terminal emulation. There is also a FidoNet number for the BBS on 2:250/356. Turn to our Comms feature on page 15 now!
STARDUST PREVIEW

BY NICK PEERS

Due for release this month is the long-awaited Stardust from Daze Marketing. It's been coded in Sweden by Bloodhouse and was a big hit on the Amiga last year (indeed, it was so good that even Jonathan Nash liked it). On the ST, we've seen a demo of one of the sub-levels, in which you fly down a tunnel in a manner similar to the 'assault on the Death Star' scene from Star Wars. And to be brutally honest it all looks and sounds amazing. The graphics whizz by at an incredible rate while remaining smooth and polished - the screens don't do the game justice because you have to see it in action to have any idea of quite how detailed it looks. The game is STE-only and requires 1MB of RAM, but you'll be pleased to know that the extra power and memory have been put to good use.

There's the usual banal plot about princesses and evil lords and the like, but all you really need to know is that it's them versus you. The game is based around the old classic Asteroids, but with the inclusion of sub-levels like the one shown here. Just blast those meteors and aliens, hang on to your hats and get ready to be blown to Stardust. It's looking damn good, and if the Amiga version is anything to go by it'll be a winner.

Stardust will retail at £24.99 - you can contact Daze Marketing for more information on this and other products on 0171 372 7435.

DESKTOPPER AMENDMENT

SOME ERRORS, OMISSIONS and downright mistakes featured our review of the DeskTopper (a replacement/expansion case for the ST) from System Solutions (ST FORMAT 64, page 25).

Firstly we implied that the installing the DeskTopper would increase the levels of electromagnetic radiation. This is not true. Being made of metal the DeskTopper significantly reduces such emissions. Apologies to all concerned.

The picture used to illustrate the review also featured the FreeKeys accessory (a replacement keyboard kit), which is a separate item and costs £39.95. The DeskTopper and FreeKeys are available as a complete kit for £99.95. The standalone DeskTopper costs £89.95, as we stated in the review.

For information about the DeskTopper and clarification of some of the comments made in the review please see Feedback on page 88.

ATARI SHOWS FIRM DATES

FOLLOWING OUR SOMEWHAT vague report in the October Issue of ST FORMAT about this autumn's Atari shows, firm venues have now been booked and the four shows will be going ahead at the following dates:

November 12, Glasgow Forte Crest
November 13, Leeds Hilton
December 10, Birmingham Motorcycle Museum
December 11, London Novotel

If you're serious about your ST, and want to see all the latest products on offer, you'd be mad not to pop along. Among the exhibitors will be CGS ComputerBild, COMPO Software, System Solutions, IDS, Goodmans PDL and Titan Designs. You'll be able to view the latest ST games - HERO and Team for example - and try out the likes of NVDI v3.0, That's Write 3, NeoDesk 4 and Janus. There'll be some great show prices for example, Goodmans were offering Necochrome for a mere £2.95 at the July and August shows, so if you're after a bargain, you know where to go. The shows will run from 10am-5pm each day - and tickets should be around £5. Call any of the companies mentioned if you want more details of how to attend.
TOWERS 2 COMING SOON!

BY NICK PEERS

Due around late October is Towers 2, the Falcon version of the American RPG, previously released for the ST. It's being released as a 'try before you buy' product, which means that you can progress through several levels before you have to shell out for the manual which, in the UK, will cost £19.95 from Goodmans International (+ 01782 335650).

Towers 2 on the Falcon will be three times as large as the original release on the ST and run in true colour mode with stereo sound effects and music — mind you, you will need 2MBytes of free memory and 4MBytes of hard disk space to achieve all that. The original game was reviewed in STF 57 and received 86%. If you like role-playing games it should appeal, and being able to try the game first makes it an offer potentially too tempting to miss.

Art for Kids

Goodmans are also distributing the Australian release Art For Kids for Moving Pixels in the UK. It's a fun art package, featuring sound effects and animation, for 1MByte STE, TT and Falcon owners, and it'll cost £24.95.

Finally, although ST FORMAT subscribers have Munch on this month's Wonder Disk (turn to page 58 to see how to subscribe), the less fortunate among you can now get this monochrome art package from Goodmans' PD section. Write to them at: 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffs ST3 1SW, or call + 01782 335650, quoting disk GD2378.

STARBALL COCK-UP

By a badly beaten Disk Editor

Before you all shoot me, yes there is a problem with Starball from last month's Cover Disk — if you only have 512K of RAM, that is. The Menu program refuses to dearchive the game, but fear not, for while I was being soundly thrashed for my mistake, I came up with a solution that is simple, yet foolproof. (Does this mean you respond well to thrashing? — Jill.)

Open up the STARBALL folder on Cover Disk 64a and copy STARBALL.Z_H to a blank disk. Next, select 'Show Information' from the File menu on the Desktop and change the name of the file to STARBALL.TOS. Finally, double-click on the file and it automatically decompacts all the files to your blank disk. Once done you can delete the STARBALL.TOS file and re-boot Starball now loads automatically and you can work off your frustration by racking up the biggest score ever. Alternatively, you could wait for me to come out of hiding, but I'm not telling you where I'll be. STF.

NEXT MONTH

DIRTY ROTTEN SCOUNDRELS!

ST users like you and me are being robbed - right now! Our shareware and licenceware programs are being mercilessly ripped off which starves authors of development cash and YOU of software. Piracy is back. And this time it's personal.

STARDUST

'Superb' 'elegant' and 'playable' is how Jon Nash described the Amiga incarnation of Stardust. Now it's ready for the ST and it looks even better. Be prepared for the graphical ride of your lifetime - and a playable demo to match! Just watch out.

STAY HEALTHY

The ST will live forever - if you treat it right. The definitive guide to ST health-care and first aid. If you value your ST you just have to read this!

CHRISTMAS PRESENTS

That festive time of year is upon us! With stockings to fill and January sales on their way you'll want to know what to buy and what price to pay. The latest ST software will be reviewed and we'll hunt out the best bargains from the stars of 1994. Going shopping? Don't leave home without STF!

January issue on sale Tues 13 December
OFFICIAL ATARI REPAIR CENTRE

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QUANTUM/MAXTOR MECHANISM WITH CACHE

Compatible with all ST/STM/STF/STM/STE/Mega ST/Mega STE/Falcon

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STFM, STE, FALCON O30 COMPUTERS

We shall try to beat any genuine advertised Falcon prices

P.O.A.

STE/STFM 2.06 TOS SWITCHERS
with Hardware Switch

The only Solderless DIY Kits available

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MONITORS

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ACCESSORIES

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<td>Mouse Mat</td>
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- All prices include VAT
- Fixed charge for repair does not include Disk Drive Replacement & Keyboard
- All prices subject to change without notice
- We reserve the right to refuse any ST Repair
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INTERNET!

Visit the world from the comfort of your own Desktop. Blag billions of terabytes of data without moving a mouse. Talk to millions of people without even picking up the phone. It’s not only possible, it just has to be done! Get a modem, and a ‘vast electronic cyber-world becomes your virtual oyster’. Clive Parker and friends show you how to join the comms revolution that is the Net, and how to milk the information contained in the domain of the BBSs. Beware, this ten-page feature could change the way your ST computes - forever!

You don’t need a powerful UNIX workstation or even a PC or Mac to be able to access the terabytes of data and software available for download from the Net. Using your ST, a modem and a standard phone line you can hook up to the network everyone’s talking about. For our full, step-by-step guide, turn to the panel on page 16. But first some background.

What is the Internet?
The Internet is a huge mass of networks and computer systems linked together, which move chunks of information around from one location to another. Data may be sent from a UNIX machine, pass through a network run by PC, another running on Macs and finally be downloaded over a phone line on to the hard drive of your ST.

You connect to the Internet by dialing a dial-up service using a modem and your ST at home. Using a dial-up service is similar to using a BBS - you dial the number of your nearest Demon Internet connection, but instead of being connected to a single computer running a BBS you’re connected to every computer in the world that’s on the Internet. It doesn’t matter which type of computer you are using – as long as you are running the right communication software and protocols you can access the whole Internet. There are loads of obscure techni-

*There’s always loads of new stuff appearing on the Net. This is, allegedly, the USS Voyager from the new Star Trek series.*
STEPPING ON TO THE INFOBAHN

First, get a modem (see the modem round-up on page 22). The faster the modem can transmit data, the lower your phone bill is going to be. Modem speed is measured in bps (bits per second) - this is called the baud rate. A 14,400 baud modem is fast and desirable; a 2,400 baud modem is slow and should be avoided at all costs.

You’ll need to be able to use a phone line for long periods of time – computer data transmission is a busy task to transmit over a phone line. Be prepared to get a telephone extension cable or to move your computer desk closer to the phone socket.

Using the Internet – or any BBS – is highly machine intensive. Ideally you want at least 2MB of RAM in your ST and a hard drive round-up on page 24. Because you will be moving sizeable files around you want to be able to load and save them quickly and easily.

Different systems
All the different computers and systems on the Internet can link together because they use the same communication protocols to move data about. These are called IP (Internet Protocol) and TCP (Transmission Control Protocol).

A version of this protocol software exists for your ST and is contained within the software that Demon Internet supply to get you on-line. See the panel above called Stepping on to the Infohahn for exactly how to get hold of the software, but don’t worry about how it all works – it’s set up automatically for you when you install it.

En route
The communications software supplied by Demon also takes care of the breakdown, routing and transmission of data by slicing it up into chunks called packets. Each packet is marked with a unique label and the destination address, then sent by your modem over the Internet. Special computers called routers study the address information and select the best route to get to its destination. When the packets reach their destination, the receiving computer reads the labels and rebuilds the data back into its original form. Dead simple.

What’s your address?
The addresses used by the routers are part of a domain name system. Each computer on the Net has its own unique name, which is made up of a number of different parts. Each part of the address exists inside the previous level, while each level is called a domain and is made up as follows:

game@hostname.domain
subdomain.top_level_domain

So, for example, cpgarker@netmag.cityscape.co.uk breaks down like this: cpgarker is the individual computer user’s login name; netmag is a unique name set up on the Cityscape system for.net magazine accounts (this costs extra); cityscape is the service provider’s network name; co signifies that the network is a commercial organisation; and uk is the country code. So when you set up your account with Demon Internet your name would look something like: streader@demoen.co.uk.

ftp - file transfer protocol
More the acronym, all you need to know is that you can use ftp software to connect to ftp sites. These are special computer systems that store thousands of programs and files, which are available for you to download to your ST – similar to downloading files from a BBS.

However, instead of dialling up a BBS and browsing through the file lists, you enter the address of the site you want to visit into your ftp program, wait for the software to connect you and then search through the file areas for the stuff you want. Easy. You can even connect to more than one ftp site at once and download two separate files at the same time – try doing that on a BBS!

Getting the software
Suppose you want to get a file from the Atari Archive (oh, go on). You would simply run your ST FTP program from the DEMON.TOS menu (see the panel on the next page for exactly what this means) and enter ftp: atariarchive.umich.edu to tell the software to contact the archive at the University of Michigan and take you directly to the Atari software directory. Now you can just browse through the software and select the file you want to download. It’s as easy as that.

Usenet - the news of the world
Usenet is huge area where you can find text-files about almost any subject you care to think of, using a piece of software called a newsreader. If you have a hobby or interest, you can bet that an area

To explore the Infohahn you have to get an Internet account from a service provider. This provides you with a contact number called a POP (point of presence) which connects you to the Net. All service providers charge an initial connection fee and a monthly subscription. It may look like a lot of money but there are no hidden charges involved. When you use other services like CompuServe, CIX, Delphi and the new Apple eWorld service you are charged by the hour when you are online, and if you’re not careful you can build up a frightening monthly bill. Here’s a rundown of the current Demon Internet charges. The standard dial-up service costs £14.68 for the connection fee and £11.75 monthly charge, making a total annual charge £185.68. The e-mail forwarding service enables you to use your own company name instead of Demon’s as part of your domain address. This costs £23.5 a year extra, making the total cost £358.68 per year. You can write to Demon at: Demon Internet, 42 Hendon Lane, London N3 1TT. Or call: Sales = 0181 349 0063 Helpline = 0181 343 3881 Fax = 0181 349 6309. Or e-mail them at: internet@demoen.net
THAT DEMON SOFTWARE IN FULL

The kit supplied by Demon consists of the TCP/IP software KA9Q, e-mail software, Usenet software, finger, Telnet and an ftp program.

All of this software has been converted from original DOS programs on the PC, which means that there's a distinct lack of GEM functionality when you use the Net software. Although this may seem to be a drawback at first, after using the software a few times you quickly get used to using the various utilities.

The shell program, DEMON.TOS, enables you to run all the ST Internet software supplied by Demon from a single menu. In that you don't have to mess around loading the separate e-mail programs for ftp, Usenet and Usenet. There are complete document files for all the programs supplied with DEMON.TOS, and the latest versions of each are uploaded to ftp.demon.co.uk/atarist on a regular basis. Technical support for the ST KA9Q/NO5 software - the communication protocols that enable your ST to talk to other computers on the Internet - is handled in the newsgroup demon.tos.support.atarist.

These ST programs are public domain software, and you enable you to connect to the Net using a (reasonably) local phone number called a point of presence (POP) supplied by Demon Internet. You just call the number of your nearest POP and you are connected to the Net via their dedicated leased line, enabling you to talk to the rest of the world for the price of a reasonably local call.

You make Internet access even easier on your ST should you run a multitasking operating system like Magic, which enables you to download software and grab e-mail in the background while you get on and do something else.

KA9Q provides inbuilt 'daemons' for ftp, Usenet and e-mail transfer, telnet, finger and rtems, a simple user-to-user direct chat. This means all the common communications protocols for Internet access are contained in the software. A crude version of gofer is possible, but lack of good terminal emulation means you'll have problems connecting/retrieving gofer files. Telnet and ftp are also multi-session capable.

The Demon Internet software shell is a small TOS program using a batch file processed by TomShell CLI. You can use the Configuration option to change your password, username and any other parameter. News Utilities enables you to subscribe or unsubscribe from newsgroups and delete articles and postings you downloaded at an earlier session.

Demon's e-mail module handles all your electronic mail, keeping track of mail sent or you, notifying you of any new mail that has been sent to you since the last time you connected to the Net. You can switch between mailboxes if you have more than one username, or when you reply to messages you can include quotes from the original e-mail sent to you. You can save e-mail messages as text-files to disk, and you can even forward your e-mail on to someone else who may be interested.

KA9Q/NO5 is a multi-session ftp client - you can connect to more than one ftp site simultaneously and retrieve files from them. Starting a session is as simple as typing "ftp ftp.address.from". Multiple sessions continue to work even when they're not displayed on screen, downloaded from the background while you work on something else. A word of warning, if you try to run too many ftp sessions at once, a standard 8MHz ST slows right down to a crawl.
THE WEB AND THE ST

The World Wide Web is a new area of the Internet that enables you to move from area to area by using hypertext links in documents. Specific words are highlighted in a page of Web text, and when you click on them using the mouse you are transferred to the linked page—what could be easier than that? The Web can even display graphics.

It all sounds too good to be true, huh? Well, it is too good because there’s no usable World Wide Web software for the ST at present. There is a Lynx text-only browser—as used by UNIX terminals—but this doesn’t display graphics and it only works when MultiTerm is running. It doesn’t work very well because Lynx was originally designed to work with VT100 terminals, and the VT52 terminal emulation on the ST just can’t cope with it.

A version of Mosaic, an Apple Mac and Windows Web browser, is under development already, and should be ready in the next few months. So, you’ll just have to be satisfied with the enormous areas of the Internet that are currently usable with the current ST software. Sigh.

Remember that the World Wide Web is only a year old, so being able to use the Web is very new even on the computers that have browser software available.

for it exists in one of the 6,000 newsgroups on Usenet.

Usenet has two main functions. Basically it’s the world’s biggest bulletin board, with millions of people accessing it daily—chatting, leaving messages, posting information and answering questions. Secondly, Usenet acts as a relay for distributing news and information—a kind of on-line news service. Special areas called newsgroups upload information daily.

All Usenet newsgroups are open to everyone. To take a look at the postings in a newsgroup, just enter the name of the newsgroup you want to look at in the ST_NEWS program (again, see the panel on the next page for more information about this program). All the messages within the group can be viewed or downloaded. If you want to reply to a message, select the ‘reply’ option; if you want to post a new message on a different subject simply select the ‘post article’ command. If you don’t want to post a public message then you can reply by e-mail, either from within the ST_NEWS software or you can take a note of the address and send whoever it is a normal e-mail. Pretty flexible, huh?

But there’s more

The Internet is the new kid on the block but computer users have been using modems to send messages, data and all manner of stuff to each other for years. This scene, comms, hasn’t faded away. It’s there. It’s hugely useful and it’s yours. Read on for more modern fun!
MORE INPUT!

Right. It's all very well buying a modem but what can you use it for? If you want to know about the Internet, read the main feature, but you'll also need to know about systems called 'bulletin boards' or 'BBSs'.

Bulletin boards have absolutely nothing to do with the Internet. A bulletin board is simply a computer in someone's home, which is linked up to a dedicated phone line, and acts as a large database. It enables you to send messages or files to anyone else using the same bulletin board. It's not linked to the Internet in any way – BBSs are completely different systems.

The Internet is like the British Library – in that it has outlets all over the country. Should you want a book that's currently residing in Newcastle, you can request it and they'll ship it down to your local library. It's a big, interconnected thing. A BBS is more like a bloke setting up an independent library in his front room. If the library doesn't have the book you want, try another library – there's no higher structure. If your book isn't here, you're stuffed.

But this bulletin board system idea is a good one. It has no real costs (apart from rental on a phone line, though all the calls are incoming), and users aren't charged. If you can find something on a BBS it's yours for the taking. People thus contribute more than they normally would, because everyone benefits.

Once the UK was full of BBSs, Fidonet came along. Simply, Fidonet meant that at pre-arranged times the BBSes ring each other up and pass mail on. So, just like the Internet, you can send a message to someone using a BBS hundreds of miles away, by simply calling your local board. This is still nothing to do with the Internet, though, it links bulletin boards as opposed to universities. These bulletin boards are still easy to get on to, using the comms packages powerd elsewhere on these pages. You'll find enormous lists of boards to call just about anywhere you look. Even if you only manage to find one board (such as AdLib on 0191 370 2699, the BBS that ST FORMAT like to hang around on), it'll contain a list of several hundred others.

So when you do get yourself a comms setup, give a few boards a try – if you can find a good Fidonet board at a local level, you'll have nothing to lose. Failing that, if you feel like dropping ST FORMAT a line, try out AdLib.

Comms Software

You've got a modem, a hard drive, even a Net account. But there's another pile of files to explore. You just need some comms software.

Freeze Dried Terminal (Fizzydizz)
Slowly becoming the most popular ST comms package, Fizzydizz manages all kinds of file transfer protocols (from X-modem to Z-modem), as well as being an offline text editor for creating messages to spool off later, a 48 number auto-dailer, and an automatic log-on macro creator (to save hassle when you're logging on to the same board twice).

As one of the easiest programs to get the hang of, Fizzydizz is the perfect choice for absolute beginners, because nearly all important functions are run from a one-screen menu. But it's more it's absolutely free to try out, being shareware. The full version will set you back $25, but the limited version comes courtesy of Merlin PD (01453 882793). Worth a look.

Stalker
Although it's a full-price package (£40 from COMPO Software), Stalker carries its price tag well. Even as a full-price package, Stalker has a slight edge. The most popular option in America, Stalker works with a GEM-style interface, with some heavy customisation.

Stalker has the full range of transfer protocols, and an impressive spooling system, using a virtual window as opposed to a throw-away text display system.

Singing its praises yet further, Stalker can work in background, emulate VT52, VT100 and PC-ANSI terminals, work well with the ODDS system, work easily in conjunction with NeoDesk 3, and works on absolutely any machine.

TeddyTerm
Available most readily from AdLib BBS, or most PD libraries (it's free to try, and £5 to register), TeddyTerm is a good package if you don't want to mess around. The program starts up and runs from the terminal screen, meaning you don't have to mess around with different screens or settings.

Being largely automatic, TeddyTerm comes with an easily-viewed help file, giving less-than-helpful documentation on the various features, amongst which are spooling, just about any baud rate, ANSI emulation, automatic everything, and automatic-flickin' everything.

ICE three one wonderful little
comms software package. Give it a try today. No – go on. No, really.

CoNnect and Flash

Much as I'd like to go around stealing other people's thunder, CoNnect and Flash are reviewed on pages 20 and 21, so we won't cover them here. Read the reviews, though - these are packages well worth considering.
CoNnect 2.46

The Internet may be all the rage but all these other comm's packages just keep getting more and more powerful – here's one to try.

Look, before we start can we just make one thing clear: they really do spell CoNnect with a capital N in the middle. It's not our fault, it's not a mistake, it just is. Okay? Anyway, getting back to the review.

CoNnect 2.46 is the latest incarnation of a shareware terminal package from Germany, distributed and registered in the UK by System Solutions. In common with most German programs, it's actually more than it first appears to be – but more on that later.

CoNnect uses an enhanced version of GEM as its interface. Absolutely everything is in a window, from the terminal itself to the dialup boxes, making its use under a multitasking system like Geneva or Magic a joy to behold. Standard GEM is also enhanced by keyboard short cuts in dialogues, and you can redefine keys for menu items to suit your own style. The main terminal window also boasts menus of its own, other normal drop-down or Mac-like pull-down.

Configuring the terminal for your modem and machine is simple too, with all the possible options presented in pop-up boxes within each dialog. The end result is that dialog boxes are compact, and quick and easy to navigate. Extra ports on the Mega ST and TT are supported, as is the MIDI port for local connections. The terminal offers VT52, ANSI and <7 emulations, and the ANSI mode is probably the fastest we've seen even on a standard ST. Incoming text from the modem is displayed very fast, and you won't find you're waiting for the screen to catch up with your modem. CoNnect even has a 'smooth scroll' mode, where text is scrolled upwards by pixel rather than line, but this tends to be a bit gimmicky, and slows screen updates slightly. A much more useful option is which file transfer programs are measured. Protocols available include the usual X, Y and Z-Modem as well as the CompuServe specific B and B+. In use the transfers performed admirably, with excellent transmission speeds on both low and high speed modems.

CoNnect has a script language too, called CoShy. Actually, it's much more than that – it's a full command line interpreter capable of calling batch files on or offline, as well as handling your log on procedure automatically. A dynamic 'learn' function takes the pain out of script creation, as your every action is recorded and stored for use as a script. This is brilliant, and much easier than wading through a manual just to create a simple log on script.

Speaking of manuals, you can leave CoNnect's on the shelf. An on line help system is provided in a hyperbrite style – clicking on highlighted words looks up the entry for you. A full index is provided for checking individual commands, and the help system is context sensitive – pressing 'Help' will bring up the relevant page, depending on where you are in the program.

If you have a Zyxel voice capable modem, CoNnect is also able to act as a 'voice-mail' system. It even integrates with a digital answering machine based around your Atari – one of the few pieces of software in English that currently does it.

If you're after a fast Terminal with excellent ANSI emulation, or you multitask a lot (as it were), then CoNnect is for you. The great help system means that you'll soon be navigating cyberspace without endless hassles, and the sheer speed of it is hard to beat. It has more features than you can shake a wet kipper at, and comes highly recommended.

FRANK CHARLTON

CoNnect 2.46
£29.95 System Solutions
01753 832212

Highs
■ Rip snortingly fast
■ Built-in hyperbrite 'Help'
■ Superb hyperspeed 'Help'

Lows
■ We're thinking...

What else?
■ Flash 2.2 (see review facing page)
■ Stalker 3 E 359.99
COMPO 01487 77582

85%
Flash 2

ConNect was pretty impressive, but can Flash beat it? Can comm software really get much better?

One of the best comm packages from the STs infancy was the legendary Flash from Artistic Publishing. It's now received a long-overdue update - Flash 2. Australian programmers Sunsoft secured the rights to the name, and re-wrote the ST conversion of their 8-bit program MegaTerm Professional to incorporate features from the original Flash. The result is a modern and streamlined terminal program, which still manages to be compatible with the old favourite.

Flash 2 comes on a single disk, which needs to be registered before you use it, and a custom program takes care of everything for you. The manual is easy to follow, and written with a fair amount of humour. Even if you're a complete comm novice, the helpful sections on modem configuration and use will help you without bogging you down in technical jargon.

Flash 2 has two main screens: Editor and Terminal. The Editor is well-featured, with word wrap, and also captures a copy of your on-line sessions. You can use it to compose messages off-line, and either sessions of text or the whole buffer can be uploaded later. The capture buffer stores all control codes, so ANSI or VT52 graphics can be replayed later using the "Review" function, which plays back your sessions for as long as you were online.

The Terminal screen is where you interact with the remote modem. Unlike some programs, it's not in a GEM window, and isn't happy about running under a multitasking environment either - the forthcoming version 2.3 will run in a window and multitask properly. Flash 2 offers a healthy selection of terminal emulations, with CompuServe's Vixen sitting alongside the more standard ANSI, VT52, VT100, VT220. The options available for configuring the terminal are the best we've seen in any comm software. Terminal speed at higher baud rates is respectable but not blistering. The emulations perform well, with the exception of PC-ANSI, which suffers from a lack of speed when displaying complex ANSI graphics. RS-232 options also enable you to configure the serial port to suit your modem, and the extra ports on the Mega STE and TT can be used.

Up to 40 phone numbers are stored in each auto-dial file, and you can change files on the fly to access more numbers. Each entry is separately configurable, and it will even keep track of call costs, how long you spend on-line, and how many files you've transferred.

File Troughing Ahoy!

Jurassic's Law states that the first thing a new user on a BBS will do is head for the file sections and download lots of juicy PD. Flash 2 offers an excellent selection of file transfer protocols, with rarities like SeaLink, Kermit, WXModem and Modem7 sitting alongside the usual X,Y and Z-Modem. CompuServe users also get the benefit of their own CIS B- program. Passwords are handled internally rather than with a separate program, and we couldn't get them to misbehave no matter how hard we tried. An Auto folder program called Silent Line enables file transfers to work in the background, and operates with all protocols except Z-Modem and CIS B. You can even quit Flash 2 after starting the transfer and come back when it's finished.

In the Script

One of the favourite features of Flash was its comprehensive and powerful scripting language, where you could write scripts to carry out repetitive tasks automatically. The most obvious use is to automate the log-on procedure for your favourite BBS, but Flash 2 offers much more. The script language is almost a version of BASIC, and you can use variables to store responses and even use GEM Alert Boxes during a script. The scripts are even powerful enough for you to write a simple BBS system.

While Flash 2 may not be as pretty as some terminals, it's very stable in use. The sheer number of options available might seem intimidating, but the manual explains everything sensibly. Flash 2 is ideal for beginners, yet powerful enough for hardened data-surfers. Future support looks excellent, and you won't grow out of this one in a hurry.

FRANK CHARLTON
Modem Round-up

You've read our extensive guide to the world of telecommunications, and now you want to get on-line. To do that, you'll need a little box to help your ST talk down a telephone line. If you're looking for a modem, then here are a few little boxes to consider.

**Supra FaxModem V32BIS**

FIRST CHOICE COMPUTERS

☎ 01132 319444

PRICE: £175.60

ORIGINAL RATING: 93%

A slightly expensive option, this modem works at speeds of up to 14,400 baud, but it has built-in compression, effectively giving rates of up to 57,600 bits per second. It also features fully automatic speed adjustment (it automatically finds the highest speed of the other modem). With less in the way of flashing lights than the rest, it doesn't look quite as good in a darkened room, though. It also veers away from Hayes standards in places, which can be a problem.

**STF RATING: 90%**

**2400 Smart One Fax Modem**

HCS ☎ 0181 777 0751

PRICE: £139.99

ORIGINAL RATING: 82%

This is another cheap 'n' cheerful modem in speed terms - it goes as high as 2,400 baud and stops there. However, this is a modem with a 9,600 baud fax system, making it the obvious and cheapest choice if you're primarily concerned with sending and receiving faxes with your ST. With the right software, this modem can perform miracles with faxes. The option for turning them into bread and fish may be especially useful.

**STF RATING: 85%**

**Supra 2400**

FIRST CHOICE COMPUTERS

☎ 01132 319444

PRICE: £58.75

ORIGINAL RATING: 90%

You might not want to send faxes. You might not want to transfer huge amounts of data. You might not want to run a bulletin board or even let your modem have the free run of a separate phone line. If you just want to occasionally call a local board and pick up your FidoNet mail or something, you might find this appropriate. With very few features it's a perfect, cheap introduction to comms.

**STF RATING: 92%**

**Ladbroke FaxModem**

LADBROKE COMPUTING

☎ 0772 203166

PRICE: £159.99

ORIGINAL RATING: 85%

Now we're getting there. Reviewed last month, the Ladbroke modem has just about any ability you'd expect from a modem, up to the minute, pie-setting modem. It has a fax facility, and a variable speed modem system, working with Hayes commands for total compatibility. Lots of winky lights indicate when it's doing things like auto-dialing, auto-answering, waiting, sending and receiving - functions that it performs admirably. And comes in a tasteful black box with lots of ridges. Compared to the other modems reviewed here, the Ladbroke model gains a mark or two, partly due to the price.

**STF RATING: 90%**

The thing about boxes like modems is that they're incredibly difficult to rate. Some people would never use a modem that ran below 9,600 baud, whereas others are happy to trundle around at 2,400 and don't particularly want to shift huge amounts of data around. Some people really like the sound of fax facilities, while others find no real point in the exercise. It all comes down to what you want from a modem. A few points to consider:

**Speed** - if you don't think you're ever going to need a stupidly fast modem, don't buy one. The faster these boxes get, the more they cost and that extra money could be needless expense for a few daily minutes of e-mail collection. If you want to push software around, though, you'll need 9,600 or more - anything slower is just silly.

**Fax** - do you want fax facilities? For a feature that can add extra figures on to modem prices, you might like to consider going without - faxes are impersonal, horrible things anyway. If you don't ever want to deal with faxes from your ST, don't get a fax modem.

**Clever bits** - modems also come with auto-answer, auto-speed selection, and lots of other extra, potentially pointless features. If you plan to run a bulletin board or anything else that requires a powerful modem these features are essential, but for a normal user, they're not at all necessary, simply adding to the final price.
SpeedCOM
FaxModem

There’s a new modem on the loose, from Siren Software. But haven’t we seen this somewhere before?

Dad ju is a funny thing indeed, readers. Just when you think you’re happily treading through time in a linear, day to day fashion, you go through a sequence of events that you’re sure you’ve experienced before. Some say it’s a leftover from our underdeveloped conscious-ness side, while others attribute the phenomena to temporary synaptic spasms. Personally, I think it’s all to do with branding.

Last month, I reviewed a modem from Ladbroke Computing, a high-speed faxmodem, capable of so many bits per second, etc., that I was pleased to see another modem available for review, this time from Siren Software. When the box arrived on my desk, I eagerly slid the cardboard away to reveal another compact, black box, this time swapping sharp edges for smooth curves. Looking at the front of the modem, I noticed something familiar about the arrangement of lights on the front panel, the location of the control button and the arrangement of the plugs on the back. I noticed something familiar about the specifications, about the manual, and about the packaging. And then I realized – only the colours have been changed.

It’s exactly the same. It’s all exactly the same. This is the Ladbroke modem in a slightly different case. This is the modem that’s quite obviously being sold in more forms than baked beans.

In fact, the only way in which Siren have deviated from the norm is in offering three different versions, starting at the SpeedCOM-B, through +Et and finishing at the -Et. For the basic, 14400 bps model you know and love, the specs are the same as those in last month’s Ladbroke review. As the modems themselves get faster, just increase the speed figures.

If possible, could any hardware companies reading this please make sure all releases are reproducible versions of previous releases. It’d make my life so much easier. Thank you.

SIMON FORRESTER

YUP, IT’S JARGONBUSTERS

Jargon can be a horrible thing. If you’re baffled by none of the words, phrases or terms you hear daily, this whole ‘surfing the Internet’ type thing, look no further – the ST FORMAT’s phrasebook is here. How to get around the Internet without people thinking you’re a complete idiot.

Address – Either the address of a user on a system listed as an e-mail address or the address of a site on the internet.

Analogue loopback – A self-test mode for modems, to determine frequency.

ANSI – American National Standards Institute responsible not only for ANSI codes but for a few other standards of data exchange.

Arc – The verb meaning to create a compressed archive of files.

Arch – A system for finding publicly available files over the Internet.

Ascii – A message area, as found on high-end systems like FidoNet.

ARPAnet – The network the original Internet was born from.

ASCII – American Standard Code for Information Interchange. The system of assigning codes to characters in a manner of numerically storing text, as used by computers since the 1950s.

Band – A speed rating for modems referring to data bits per second through network (not always.

Baud – A speed rating for modems referring to data bits per second through network (not always.

BBS – Bulletin Board System.

Blimpware – All that jazz and more.

Bounce – An e-mail return, on failing to deliver.

Bridge – A system connecting networks and managing data packets between them.

Buffer – An area of memory used to store information before it’s saved.

Carrier – The actual signal passed between telephone lines, the main reason why people mainly refer to the line phone term.

CID – ComputerServe Information Manager, which is the official e-mail reader and navigator for CompuServe.

CIX – CompuServe Information eXchange, the largest conferencing system in the UK.

Confidential – A subject used in the message area on a system such as CIX.

Ctrl – Characters per second.

Crash – System failure.

CRC – Cyclic Redundancy Checking. It’s error detection basics.

Davison – A program that sits on a system waiting to perform a specific task.

DARPA – The people responsible for ARPAnet.

Data compression – The shrinking of files to transfer them easier to transfer, to be expanded (decompressed) at the other end, when they need to be used.

DNS – The Internet system for converting names into numerical addresses.

Domain – Not working.

Download – A file from an online system.

Drop – The communications system capable of carrying a signal in both directions.

E-mail – Electronic mail, mail sent across the Internet.

FASTNET – A local area network (LAN).

EUNET – European Unix Network.

FidoNet – Worldwide bulletin board system.

Flame – An abusive or personal attack on the sender of a message.

Frame – A message on an online system.

Frame – Full block of data, complete with headers, etc.

FTP – File transfer protocol.

GET – A file request.

FTP – File Transfer Protocol – A system of defining how files are to be transferred.

Gateway – A system for transferring data between two incompatible networks.

Gopher – Internet exploration software.

Hack – Someone who explores the areas of computer systems that you’re not supposed to be able to get to.

Handshaking – The process of two computers communicating to make sure they’re going to keep them timed together correctly.

Hayes – A language for communicating to your own modem, before you even think about making a call.

Header – The chunk of a data packet that defines where the packet is going, how large the packet is, that sort of thing.


JANET – The Joint Academic Network, linking colleges, etc., across the UK.

JIS – Japanese Unix Network.

Kemet – A file transfer protocol with a silly name.

LDN – A file containing a list of names whose e-mails and messages will be passed, normally.

LAN – Local area network.

Network – A connection between two sites.

Netfilter – A reference on the phone line, canceling corrupted data.

Netgear – Someone who listens, learns, but never contributes.

Mailing list – A discussion group whose messages are distributed by e-mail.

MOD – Message handling system.

Modern – MODulation/DEModulation. It’s the bit that connects your computer to the phone line so you can do all the stuff in the first place.

Netriver – Someone who watches over a message area.

MUD – Multi-User Dungeon, an online text adventure for several players at once.

Node – A computer attached to a network.

Notepad – A list of modem codes.

null modem – A cable that pretends to be two modems connected together, usually used with RS232 interfaces.

Office – Not connected to any systems.

Off-line reader – A file program enabling you to read mail, etc., while not connected to a system, heading down fast afterwards.

Packet – A chunk of data.

Phoning – Making a call with the phone system to get free calls, or generally mess things up.

Post – Send a message of some kind.

Protocol – Standards relating to information interchanges between machines.

Public Domain – Freely copyable software, that’s copyrighted.

QVX – A system of packing mail into bundles to be sent off line. Used mainly on FidoNet boards.

RFT – An encryption system occasionally used on UNINET messages.

Service provider – A company offering connections to the Internet or a part of it.

Shareware – Software you can buy before you buy.

Sympa – A font, created from ASCII characters, such as ‘.’ etc.

Telnet – Dial-up Internet service.

Terabyte – A large, smallly slabbed piece of... You know, the Post Office.


TCP – A transfer protocol on which the Internet is based.

TLA – Three-letter acronym, such as PDO, PDF, ASPAR (four-letter, too)."
Hard Drive round-up

You're ready to scour BBSs and the Internet for the very best ST software, but where are you going to keep all the data you drag back? On a hard drive!

MiniS Tower Drives
SYSTEM SOLUTIONS
01753 832212
ST 120MB YBYES - £289
FALCON 120MB YBYES - £249

There's not much you can really say about hard drives, but the MiniS tower drive lends itself to description. It's not just for the rich and reliable, but the wrong way up. No more hassle fitting all those boxes on your desk - they're beginning to take up much less space. As well as being nicely designed and built, these aren't too expensive, which makes them a good choice.

STF RATING: 93%

Protar Series 2
ANALOGIC COMPUTERS
0181 546 9575
120MB YBYES - £299.95
240MB YBYES - £449.95

Built for the serious power freak, these drives come with through ports for chaining more hard drives on to the machine at once. With room in the case for you add another drive or whatever (and probably damage things), they're handy things to have. But you might feel a little let down by the driver software.

STF RATING: 82%

Gastaineer Drives
GASTEINER 0181 3456000
T/T FALCON 170MB YBYES - £259
ST 170MB YBYES - £299

Witness, reader, the classic struggle of hard and software portrayed in this humble hard drive. The drive is well-built, fast and efficient, sitting in an upright case and making it on the Desktop easier, struggling to work while being bogged down by not-so-good software. The drive itself is a masterpiece, though.

STF RATING: 91%

ICD FaST Drives
FIRST COMPUTER CENTRE
01532 319444
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<td>XRAM UNPOPULATED 520 to 2MB</td>
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<td>520 to 2MB</td>
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<tr>
<td>Auto-Correct</td>
<td>Learn from your typing errors and next time correct them automatically</td>
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<tr>
<td>Abbreviations</td>
<td>Expanded as you type</td>
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<tr>
<td>Capitals</td>
<td>Sentences and proper nouns</td>
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<td>Preview</td>
<td>Shows a full page just as it will appear</td>
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<td>Graphs</td>
<td>Works on such a screen mode</td>
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<td>Fonts</td>
<td>Shows different size fonts, bold, italic, underline, sub/superscript and graphics</td>
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<tr>
<td>Features</td>
<td>Unrivaled printer support including PostScript (over 400 printers listed)</td>
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<td>Fast Spelling</td>
<td>Checker and thesaurus</td>
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<td>Graphics</td>
<td>Import and viewer</td>
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<td>Flexible</td>
<td>Find and replace function works across multiple files</td>
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<tr>
<td>Hyphenation</td>
<td>Styles with scalable font and colour support (printer permitting)</td>
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<tr>
<td>Index/Contents</td>
<td>Footnotes * Indent tabs * Files sort/convertion * Add column</td>
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<td>Multi-column printing</td>
<td>* Up to 36 documents open * Programmed mail merge</td>
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<tr>
<td>Compatible</td>
<td>With Falcon 256 colour mode and graphics cards</td>
</tr>
<tr>
<td>Value</td>
<td>Last year Protext cost £152.75. Today, though it is better than ever, it can be yours for just £74.95. Upgrade prices are also down. See below.</td>
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"The most powerful word processor for the ST... leaves the competition gasping" ATARI ST USER, Oct 1994

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

Protext 6.5 £74.95

Exfile, the Magazine for Protext users

Exfile is now the essential read for all Protext owners. Relaunched and being edited by Armno, Exfile includes

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<tbody>
<tr>
<td>Authority</td>
<td>Articles by the programmers of Protext</td>
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<td>Contributions</td>
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<td>Readers technical</td>
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<td>Hints</td>
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<td>Programs</td>
<td>And macros</td>
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<tr>
<td>Ideas</td>
<td>To help you make the most of your printer</td>
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6 issue subscription costs only £16. Back issues £3 each.

"The Protext Companion"

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CONTENDER: 
Protext v6.5
PURSE: £74.95
MANAGER: Armor
☎ 01733 68909
LAST FIGHT: STF 63, 85 POINTS

In the Red corner, it's Protext 6.5. This dangerous old British pro from Peterborough has been around for ten years or so, and is content to slug it out on his own, largely non-graphical terms. He knows every textual trick in the book and is unusually fluent, with a huge dictionary and well-developed thesaurus. Having started his career so long ago, his style is rather Spartan - none of those fancy on-screen fonts for him. But he packs a powerful punch, and is fast on his feet. His image has been updated by manager Armor lately, and he's even adopted a couple of limited graphical moves from his newer competitors. But he doesn't go along with all that windows or GEM malarkey, it slows him down too much, he says. Although he's always won Gold in his previous fights, version 6.5 scored 85%. Protext is actually the favourite among many ST journalists who have grown to love him over the years, and at £74.95 is the cheapest of the three. But is he getting tired and stale?

CONTENDER: 
That's Write 3
PURSE: £129
MANAGER: COMPO
☎ 01487 773582
LAST FIGHT: STF 63, 91 POINTS

In the Blue corner is That's Write 3, who hasn't been around as long as Protext, but isn't a newcomer either. Owing to its good all-round performance, this chap has become popular. He has that smooth continental flair, but is living near Cambridge now and speaking perfect English, Manager COMPO is gradually building him up, and sees a long career in front of him. A nice looking fellow, That's Write 3 has a talent for drawing pictures, and can write in many a delicate hand while you watch. His favourite ploy is being able to smack you in the face with any Speedo/DOS font you want - no extra purchase needed! At £129 his purse is heavier than Protext's, but he's prettier, although he lacks the finesse. He impressed the judges with a recent 91 point win in STF 63, but is he a match for the third even newer boy?

The word processing scene for the ST has never looked so good, with three major releases - Protext 6.5, That's Write 3 and Papyrus Gold - having just appeared at once. But which one's for you? Peter Crush presides over the big fight.

Now it wasn't long ago (back in issue 60, in fact) that ST FORMAT looked at all the word processors available for the ST, from cheap public domain packages to expensive document processors. Since then things have moved dramatically, with three major new packages hitting the market: Protext 6.5, That's Write 3 and Papyrus Gold, all reviewed in issue 63. Forget simple text processing - these three are all powerful, top of the range programs - in fact they're more correctly referred to as 'document processors'. All of them can work with multiple fonts and pictures to give you almost desktop publishing power, but if you intend to fork out a hundred notes or more you want to know who boxes clever.

“You'll need plenty of RAM, possibly a hard drive, and a decent inkjet or laser printer if you want to obtain the best results”

If all you ever do is write the odd letter, a simple, inexpensive PD program like 1st Word is all you need. This happily drives a cheap dot matrix printer, and is fine for the average user. If however you have pretensions of grandeur, and want to produce more impressive illustrated documents like brochures, fanzines, or even books, you need something more capable. That's where a document processor comes in handy, but bear in mind that you'll also need plenty of RAM in your ST, possibly a hard drive, and a decent inkjet or laser printer if you want to obtain the best results. The highest quality obtainable now (especially with the advent of Speedo/DOS 5, reviewed in issue 63) is quite stunning, and if you're after professional standards, a DP is for you.
CONTENDER: Papyrus Gold
PURSE: £129.95
MANAGER: HiSoft/AVR
= 01522 718181
LAST RIGHT: STF 63. 91 POINTS

In the end, Gold corner, Papyrus, the new kid on the block, who appeared from out of the blue after a short advertising campaign. He crashed in and won a superb 91 points on his first appearance in STF 63. If you want him in your ring you need to be one of the big boys yourself. Unless you can boast at least 2MB of RAM and are equipped with SpeedoG DOS he's really not interested. He's now in the HiSoft stable, speaking faultless English like his bosses. Papyrus' instant display of sophistication is a revelation in such a new contender, and he outlines even That's Write 3 in his presentation. Starting, being a dab hand at all kinds of DTP tricks and the most highly charged graphical contest. On the other hand, he's lacking in the thesaurus department, like That's Write 3. He's certainly not cheap to boot, at almost £150 plus £30 for SpeedoG DOS, but he's quite a crowd pleaser and a force to be reckoned with.

documents in memory at once and cut and paste text between them. Papyrus' spelling and thesaurus facilities are the most comprehensive, and you can edit your own user dictionary from within the program as well as using its massive standard dictionaries, including legal and medical supplements.

That's Write 3 can simultaneously handle nine documents, each in its own enhanced GEM window. It boasts a reasonably good dictionary, which works in a user-friendly manner and, like Papyrus, can auto-correct as you type. Shame there's no thesaurus, although promised future versions of the software may include this.

Papyrus Gold can operate with up to six documents in its GEM windows at any one time, and its dictionary contains all the usual features. Papyrus, however, lacks a thesaurus, which keeps Papyrus well ahead on points in the pure text-handling stakes, important if you use your WP for really serious writing. Each program imports text from other sources like Word, ASCII and RTF. Papyrus being the most capable.

Let battle commence
OK, enough boxing metaphors. But it's a tough market out there for new word processors, and it's hard to choose the best one. We've put the three through a series of tests, directly comparing and contrasting our champions.

ROUND 1
System requirements and setting up
The first consideration is whether your ST setup can satisfy the system requirements needed to operate the software, and how easy each program is to get up and running. Papyrus Gold is the most demanding program - it only works on a mono display, needs 2MB of RAM and, because it requires SpeedoG DOS, it's more or less dictates that you have a hard drive too, although it will just about work on a twin floppy drive setup.

All three programs run beautifully on a Falcon, looking smarter on your monitor, although final output quality isn't any better than that produced by an ST. Setting up all three is fairly straightforward - each has its own installation program, which takes care of everything for you, and good user manuals are provided.

ROUND 2
Processing them words
What do these programs actually do? What is their word processing prowess like? What about their dictionary and thesaurus features?

Papyrus can do almost anything you want with words, enabling you to hold up to 36

ROUND 3
Knowledge of all fonts
All WPs and DPs can handle straight text to a greater or lesser extent. But what about the way they present it, utilising alternative fonts to jazz things up?

Papyrus can use any fonts unless they're already available on your printer, not much good if you only have a cheap dot matrix printer, but great if you've got a laser printer with scalable fonts. On screen Papyrus shows all text in the ST's system font, which means that it's definitely not What You Get is What You Get (WYSIWYG), although the new Preview feature gives you a small representation on screen of how your printed pages will look.

TW3 is a different kettle of fonts, and shows a proper on-screen version of your text as you type. The fourteen Speedo fonts provided can be printed out at any size up to two inches, no matter what printer you have, and there are plenty of extras available. TW3 is able to utilise Speedo fonts without out needing SpeedoG DOS, a bonus if money is tight.

ROUND 4
Colour and pictures
Papyrus is also WYSIWYG and can use any Speedo, Gem or Signum fonts, both on screen and on the printed page. You will however need version 4.2 of SpeedoG DOS to access Speedo fonts – it's available from HiSoft for £30 if purchased with Papyrus. The ability to compose and view documents as they will look when printed is obviously a great advantage, and Papyrus suffers here, although its printed output is just as good.

Papyrus is a well-rounded program, and gets high marks for its user-friendliness. The program is easy to use and the manual is comprehensive. However, the lack of a thesaurus and the need for a hard drive may be a drawback for some users. Overall, Papyrus Gold is a strong contender in the market.
## ROUND 5

### At the printers

A vital consideration is how easily your document can be printed, as well as the thorny question of printer drivers. **Protext** has literally hundreds of separate printer drivers built-in, and it's easy to switch between them. **Papyrus** needs this strength because it can only use the fonts and capabilities built into your printer. In contrast, **TW3** has a smaller range of printer drivers - you just specify which one you want during the installation process. Because **TW3** produces most of its output graphically rather than by using your printer's built-in fonts, the generic printer drivers included are suitable for almost any machine from 9-pin dot matrix to inkjets and laser printers. The same is true for **Papyrus**, which uses an included set of SpeedGDDOS printer drivers. Either way, there's no worries with all three programs and each publisher is good at providing support as new printers appear.

### ROUND 6

#### The showdown

How do all the individual features come together? How fast and easy to use are our three document processors, and what do the results look like? To evaluate this we used each program to produce the same dummy magazine page, complete with headings, subheadings, body text and graphics. This also illustrates how you could use the software to produce different documents - straight text-based output (an article or essay), illustrated reports or brochures including text and graphics, or even more complicated semi-OTP type pages using multiple formats and styles. We imported a picture into **That's Write 3** dead simple, and you can move it about and resize it with ease. You can even type text either side of it, with a lot of fiddling about.

#### All three are superb packages, and excel in different areas

The **Protext** people have been working on their line for longer and are still the best at their job, especially in user interface. **Papyrus** has a more powerful text processor but uses much older technology. **TW3** is new and innovative and has a lot of features that make it easy to use. The choice depends on your needs.
UPGRADE YOURSELF

If you lack the readies to buy your chosen package don’t despair - there may be a more affordable way. The following upgrade bargains are on offer, but check with each publisher for the exact details - you normally have to return master disks, for example.

Protext 6.5 only costs £74.95 now, thanks to a recent price cut. If you have v6.0 you can upgrade for £29.95, from v5 it’s £39.95 and from v4.3 it’s £49.95 to upgrade. And the cost new of v4.3 itself is now only £29.95 - a veritable bargain.

That’s Write 3 costs £129, but if you have v2, an upgrade is just £35. If you have the original That’s Write then it’s £64.99 to upgrade. The upgrade from v2 is excellent value for the extra features it offers.

Papyrus Gold is the dearest of them all, but if you have Timeworks Publisher 2, Calligrapher, Calligrapher Gold or WordMaster 2 you can upgrade to Papyrus for just £89.95. Cover Disks of these programs are not accepted for trade-in.

Let your mind up time

If you intend to use your WP for formal, business or purely textual purposes, Protext is ideal - it’s tremendous value for money, has the best dictionary and thesaurus facilities, runs on a modest ST system and yet is extremely powerful. No doubt Arnor’s continuing development of Protext will gradually introduce more graphical abilities in time.

That’s Write 3 is a solid product, has a good turn of speed and gives you an instant WYSIWYG display. There are plenty of powerful WP features built in, and if you want a word processor with graphical abilities it may be just what you’re looking for. Its use of Speedo fonts without SpeedoGDDOS is ideal if you lack memory and money, and it’s slightly easier to use than Protext. And if you have a modest printer it can deliver good results and multiple fonts where Protext can’t.

Papyrus is the hottest of the three in terms of presentational power - it really does set a new standard in ST software. But you are looking at £180 for Papyrus itself plus SpeedoGDDOS, and you need plenty of RAM, which makes it a power-user’s toy. If HiSoft were to add colour picture import, Papyrus could seriously challenge some DTP software. The manual is well written and produced too.

All three are superb packages, and excel in different areas. None of them would disappoint, so why not contact the suppliers for more info and demo disks if you’re really interested in becoming a document processor? stf
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StormTracker is the first MOD editor on any computer to ditch the cryptic code method and allow you to get on with writing your music.

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- Samples Disk Included
- 100 Page Illustrated Manual

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The follow-up to the popular version 1, with more features and loads of new effects

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All Prices include UK carriage

Goodman’s (Dept STF)

16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW.

Tel: 0782 335650 Fax: 0782 316132

Programmers: For maximum circulation, forward your work direct to Goodman’s for inclusion on future catalogue updates.
Mortimer is a butler that promises to make your life easier by doing almost all those unpleasant, boring, repetitive little tasks on your ST for you. Once installed you can call it from within any program using a simple combination of keypresses. It can easily be banned when not required, and takes up just 64K of your memory. This might cause problems if you’re running really memory-hungry programs on a machines with the minimum memory configuration, but if you’ve got RAM to spare then Mortimer should pose you and your ST no problems.

“Mortimer works by accessing various sub-menus, which then enable you to perform your changes effortlessly, By Your Lordship.

Mortimer is further complemented by an editor program, which you can redefine to your own preferences. You can alter all the menu commands, perhaps replacing the Hard Drive Ship option if you aren’t fortunate enough to own such a miracle of storage capacity with something more relevant to your immediate needs (a calculator function to calculate your lack of funds, perhaps?).

Will you hire or fire Mortimer?
Mortimer’s a difficult program to recommend unreservedly. It’s certainly useful, but it fails to provide any more than basic functions. You can format disks, but with no more flexibility than if you were to select Format from the Desktop menu. The virus checker, too, is crude but effective... possibly too effective if you’re not sure what you’re doing. For example, when decompacting Personal Pascal from last month’s Cover Disk with

“Yes, there is something you can do for me Mortimer. Get me another girlfriend. You can’t Call yourself a butler, man?”

MORTIMER DELUXE
Hot on the heels of Mortimer is the enhanced Mortimer Deluxe, the Jeeves of all Desktop butlers. Apart from being TOS 2.06 compatible, it also boasts extra features not available in the cheapo’ cheerful version.

New features promised in Mortimer Deluxe include a more controllable file selector, with which you can find out details like file sizes, dates and attributes as well as sort the file selector to your requirements. You can also convert pictures between PAC, PIC, Degas and IMG formats, or even search files for specific strings (such as “I am now a bitter and disillusioned Disk Editor” in letters to ex-girlfriends). Mortimer Deluxe will also feature a calendar and alarm facility, so you can give yourself a five-minute warning before the world ends (enabling you to quickly save all your data before Armageddon).

With all that and more, it sounds like it could be worth the £4.95 asking price. Keep your eyes peeled (no, not literally) for a review in ST FORMAT soon.
Everyone loves high-quality graphics on their machines, don’t they? But one of the main problems with using an interface such as a Desktop is that you tend to run out of room. Looking at three different windows at once is impossible if you’re using low-res mode, and only slightly easier in medium. This is because as the pixels get smaller and smaller the amount you can fit on to the screen increases directly with it.

Compo Software have developed Screenblaster 2 to address this problem. Screenblaster claims to increase your Falcon’s resolution by up to 300 per cent. When you go into scanty-high-res, provided by Screenblaster, the amount you can fit on screen increases by terrifying amounts, giving you what the Falcon honestly believes is a screen approximately three times the size of the normal one, on a normal sized monitor. Screenblaster is more than just a piece of software, though. It’s a machine extension — modifications like this actually alter the way your machine operates. In this case, it directly affects the data written to the monitor, replacing the original image with its new, more detailed signal.

**Insanely effective**

Like most other machine extensions, Screenblaster consists of a hardware modification and some software to make use of this modification. The system works well — because the hardware is all external there’s no need to rip the lid off your machine, and definitely no need for things like soldering irons. The only hint that this might be an insanely effective little modification is the improvement in resolutions now available — after all, a screen with 1,152 by 832 pixels is what we call a definite improvement.

The only problems you’re likely to come across will be caused by your monitor rather than the Screenblaster itself. Although the Falcon doesn’t exactly run in low resolution anyway, you should consider the possibility that your monitor just isn’t capable of displaying pixels that small — while, at worst, things might be a little hard to read. If, however, you decided to do your Falcon justice by purchasing a high quality monitor with it (we use a Memorex Telex which works absolutely wonderfully), you shouldn’t experience too many problems with Screenblaster.

**Softly, softly**

The software driving the system works simply. Resolution is either set at startup or from a Desktop Accessory, accessed with the Desk menu. Not only can you select the resolution, but you can also choose the

---

**SCREEN**

**VIRTUALLY THERE**

As well as the increase in screen resolution (and logical screen size), Screenblaster has facilities for a virtual screen. "Er, but what's a virtual screen?" Well, a virtual screen is a screen that isn't actually there.

Visualise a screen (for the sake of this explanation) as a large piece of cardboard with a square cut from it. The square has the dimensions of the screen. Normally, this piece of cardboard is aligned with the screen so that you can see the whole picture. A virtual screen is a sheet of paper larger than the hole in the cardboard, sitting underneath the hole. You can draw on the parts of the paper that aren't visible, and move the cardboard window around the sheet of paper.

The screen, or piece of paper, is much larger than the hole through which it's viewed, but when you move the hole, you're effectively scrolling around the larger screen. Virtual screens are terrifyingly handy for good scrolling effects. Er, so now you know.
WHO NEEDS IT?

The question that immediately springs to mind is that of practical use. Under what circumstances, other than using the Desktop, would you want a screen of such massive proportions? Games aren’t written to take advantage of this extension because they write to the screen directly, not worrying about silly things like GEM. This also means that any serious utilities that ignore GEM will also ignore Screenblaster. Sounds useless, then?

Not necessarily. If you’re into programming, making extensive use of things like GEM windows, Screenblaster drastically increases your machine’s capabilities from the user end. For instance, if your word processor works with GEM windows, you can not only edit two documents at once, but you can edit one of them in a large, easy-to-handle window while viewing the other in an equally massive, easy-to-handle window. Great.

Monitor data

Monitor: SVGA Multiscan
min. Line frequency: 31.80 kHz
max. Line frequency: 60.00 kHz
minimum refresh rate: 60.00 Hz
maximum refresh rate: 60.00 Hz
min HBlank-Length: 0.00 ms
max HBlank-Length: 0.00 ms
min VBlank-Length: 0.00 ms
max VBlank-Length: 0.00 ms

Screenblaster Monitor-Installation

Monitor Connect: VGA

SVGA Multiscan
Atari SM124
Atari SM144/46
Atari SC1224
Atari PTC143x
Amiga 1084
OverScan GENLOCK

Hor-Freq: 31 - 60 kHz
Vert Freq: 60 - 80 Hz
Monit.Type: Multi Freq.

Triggering: Paddle Port A

Configuration...

Screenblaster Resolution Selection

Colors: 2 Colors
Selection: 16 Colors

Virtual:

Colors: 2 Colors
Selection: 16 Colors

OK Cancel

Configuration...

Screenblaster 2

£79 COMPO Software
114827 775582
Falcon only

Highs
- Massive resolutions
- Creates a usable desktop (at last)

Lows
- Hangs off the back of your Falcon
- Slightly unhelpful manual

What else?
- There’s nothing else like it

The only real problem comes with the manual, which is, well, terse to say the least. But then, manuals are always a problem, aren’t they? You get the sneaking suspicion that installing and operating an entirely new graphics system on your Falcon should take a few more than 11 pages, particularly considering the fact that no explanation is given regarding how you should go about making full use of this virtual screen in assembler. Or any other language, for that matter.

For straightforward use you can’t go far wrong, though. You’re taken through every step of the installation with or without a hard drive with close keypress guidance, right down to selecting your resolution and KHz rate. Be warned, though—certain amount of technical knowledge on your part is assumed by the author, and you don’t find too many explanations. At the worst you might get the Screenblaster installed, working, and impressing all your friends, except you won’t have a clue what it’s doing and why. At best, you’ll have Screenblaster up and running, and you’ll be able to take advantage of this excellent system. And impress your friends.

So?

At the end of the day, this is a little box that your Falcon needs. The Falcon’s capabilities as a home computer are exceptional, and the Screenblaster, although simply a graphic enhancement package, expands these capabilities yet further, increasing the size of your Desktop so that it’s no longer just a screen with several windows crammed tightly on it. If you want enough room to get some proper work in, Screenblaster is a good option.

ST SIMON FORRESTER
ScreenEye

You too can capture real-time video and impress your friends. All you need is your Falcon, ScreenEye. Er, and a VCR or camera.

When the Falcon first arrived on the Atari scene, it was worshipped on several counts. The first and definitely foremost feature was its sonic capabilities. Next came the processing speed, aided with enough hardware backup to blow most other home computers clean out of the water.

But the other hyped feature of the machine was its graphical capabilities – it could supposedly handle true-colour palettes as well as high-resolution displays. Unlike the sound and speed, this video capability hasn't really been pushed to the full extent. Other than some really rather natty JPEG animations, nothing's happened on the video front.

Until now. ScreenEye, available primarily from COMPO (but developed by Overscan for the German company Matrix), is a video digitiser with a difference. Whereas machines like the ST are capable of grabbing frames from video and manipulating them, the Falcon is one of the few machines actually capable of stealing whole real-time sequences at a high frame rate. This task, although theoretically simple on a machine as powerful as the Falcon or PC, has so far only really been mastered by the Falcon to any realistic degree.

Digital nightmares
The ScreenEye system comprises an internal board, which is slotted into the standard extension bus, and software to drive this hardware. The board itself is smaller than tiny, not so much fitting inside your Falcon as falling into it.

But what exactly does it do? Well, ScreenEye works in three main ways, furnishing your Falcon with the following abilities:

- The ability to display real-time video on screen.
- The ability to capture short video sequences to disk.
- The ability to grab top-quality true-colour images from video to disk.

Once you've installed it (there's a panel below covering that bit), you have a Falcon looking exactly the same as it did before, except for a small piece of wire trailing out of the cartridge port with a plug on the end. This plug then fits into your video camera or other video input device (with a little work), leaving the software to do the rest.

What's it like? Eh?
The quality of the video this package can produce is excellent, making full use of the Falcon's true-colour system. Working with over 100 frames of data at roughly ten frames a second means that you can store some fairly lengthy film clips (about 170 frames with a bit of hard work).

The software matches up to the video quality – it too is excellent, giving you not only live video action, but frame-by-frame editing and full graphic manipulation capabilities. And with the ability to deal with variable image sizes, display quality and input sources, every angle has been covered by ScreenEye.

In short, if you want to get into video, and you've got a Falcon, you really do want to get hold of ScreenEye. It's fast, effective, and of a magnificently high quality. If you want to match your machine's graphic ability with the already excellent sonic, ScreenEye is a must. stf

SIMON FORRESTER

WIRES 'N' STUFF

Now this is the scary bit. To get ScreenEye working well with your Falcons, Screws have to be unscrewed, and Circuit Boards have to be fitted. It gets progressively scarier from there on. The manual advises you to either take the whole lot to your Atari dealer or a qualified technician, or attempt the job yourself with the instructions provided.

In the true spirit of home computing, we decided to fit it ourselves.

After all, you can't call yourself a proper Atari nut until you've sat with a cold feeling in the pit of your stomach for half an hour, trying to work out how to put the several bits of identical-looking circuit board back together.

The fitting was, however, fairly hassle-free, except for trying to remember where everything went. Just remember, don't touch anything that looks even vaguely fragile.

ScreenEye £23.49 (including Studio 2) COMPO Software

Highs
- Excellent software
- Amazing quality
- Fast frame updates
- Easy to use
- Takes a camera, video, or anything else you can plug into it

Lows
- Err...
FALCON FROM ONLY £399!

Digital Signal Processor:
- Motorola 68010 DSP operating at 32MHz
- 256K bytes ROM, 32K bytes RAM
- 16x16-bit input DAC

Interfaces, Ports & Expansion Slots:
- 16-bit ISA bus expansion slots
- 2 ISA-EE Port with Direct Memory Access

High-speed 802.3 Ethernet, 500Mbit media converter

Computer for video, graphics, video editing, or broadcast production

B-Directional parallel port

INCREDIBLE POWER
At the heart of the Falcon 200 lies two powerful hearts: the super fast 68010 processors running at 4.0 million instructions per second and the Motorola DS8010 processor. Working together, they give processing speeds up to 10 times quicker than any other multimedia system at a comparable price. The Falcon 200 also boasts an impressive array of interfaces for linking peripherals.

THE IMPACT OF COLOUR
The Falcon 200 produces images of breathtaking realism from a real picture displayed on your CRT. Every pixel on screen can be shown in a different colour and 865,536 colours can be displayed at once from a palette of 262,144, producing a true colour display of the highest quality. SUPERB VIDEO
The Falcon 200 can be used to create special effects, expression, and animation, as well as direct video and special effect techniques, all of which are easily affordable.

CO-QUALITY SOUND
The Falcon 200 is complete with a stereo input into which can be plugged a microphone, a microphone interface, or a hi-fi sound system. To reproduce the sound, a converter mixes the eight 16-bit channels, with each output driving a stereo out with digital output. The Digital Signal Processor with direct-to-disk capability, means that the Falcon can store sound samples, including the human voice, on hard drive and play them back in real time.

- 2 PROCESSORS
Motorola 68010, 32MHz, 500Mbit (DS8010) interface
- Unique 32-bit ISA (Optical Slave Port)

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

BRILLIANT GRAPHICS LIKE REAL PICTURES ON TV
VGA, SuperVGA, & 16-bit colour
640 x 480 x 256 colours

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

OFFICIAL ATARI MOUSE
- Quality 2-button mouse
- Official Atari drive
- Fully ST compatible

LOGITECH PILOT MOUSE
- Quality 2-button mouse
- Fully ST compatible
-x,y axis (axes 1 - 9)
- Free Accessories Disk

£399 £599 £799 £899 £1399

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HiSoft's latest database *Twist* aims to be champion database of all time. Does it succeed?

Twist is for the serious database user. If you just want to keep tabs on names and addresses then Dynamic Address Database (on Cover Disk 63 — page 85 if you missed it) is perfectly acceptable for the task. If, however, you want to use a database for a multiplicity of tasks, from home to business, Twist is the answer that you're looking for.

At £90 it's not particularly cheap, but if you need a database for use at work, this is the one for you. The manual is excellent, and features a step-by-step tutorial that introduces all the functions and features of Twist at a level that never leaves you wondering what's going on.

All the usual database functions are included, but what really gives Twist its extra adaptability is the variety of extra features on offer. Once you've played around with it for a few hours you'll realise just how powerful a package you have at your fingertips.

**“If you want a database for a multiplicity of tasks, from home to business, Twist is the answer”**

---

**FIELDS OF DREAMS**

There's so much you can do with your fields in Twist, short of ploughing them like:

1. Enables you to force the field to contain a specifically defined piece of data.
2. You can make fields to be the product of calculations, saving you time and patience working out certain figures.
   - You can create text fields of a predeterminate length...
3. ...or, if you prefer, numbers...
4. ...or even integer fields.
5. Why not create a field containing dates (such as when an England side last won a Test series)?
6. You can assign specific attributes that are largely self-explanatory to a field.
7. Index enables you to store all the data for that field in ascending or descending order.

---

**For some unknown reason you can edit the way your form list is displayed in Twist. You can even replace the pattern background with an IMG picture if you so wish. Why? Because you can. And what's more, it's fun. Okay?**

**Find those records**

You've entered all your data. Perhaps you've decided to set up a PD library and you want to keep details of all the disks in your library so that you can make queries concerning your collection. A customer may want to know what games your library features or, more specifically, he may want to know what high-resolution art programs you have that will run on his S12K machine.
Rather than spending hours manually wading through your disk or paper catalogue, marking each program you find individually, you could use Twist's powerful search functions to look for certain parameters that you can set in a fraction of the time. You can then enhance your reputation by sending him a printout of all the programs that fit his requirements — attracting more custom for yourself (hopefully) as well as saving precious time.

Twist enables you to search specific fields for a variety of reasons. Using the example provided in the manual's tutorial you might want to find out how many orders you have processed that have brought in £100 or more. No problem. Using Twist's highly flexible expression option you can select your search criteria according to a set of calculations involving your fields — and the values and operators you can set seem to cover just about every question you could ever ask. For example, the equation "InStr(Customer_number, "SE")" will search for all records that contain the term "SE" in the "Customer_number" field. It's a simple example, but one that you can make as complex as you require it to be.

Sorting records enables you to keep them in alphabetical or numerical order depending on the criteria you set (a database of names and addresses would require sorting first by surname and then by forename). All good databases offer this, and Twist is no exception.

It's pretty too
Twist should also appeal to the business user because it offers many and varied options regarding how you display your databases, either on screen or as printouts. You can create a multiplicity of record layouts that display your data in exactly the way you want. Twist features full GDOS and SpeedoGDOS support, enabling you to spruce up your displays and give them a more professional feel.

According to the manual you can even link files together, enabling you to keep customer details on one disk and current orders on another. This is done by creating a report that joins both together, so that you can determine who's ordered what, how often they use your company and so on. This is a difficultly to implement however, and even following the manual's tutorial to the letter failed to produce the results promised. A pity, because until this point Twist had exhibited many of HiSoft's trademarks: powerful features belied by a comprehensive manual and easy-to-use interface.

This criticism aside, Twist admirably carries out all the other tasks assigned to it, and features even more nice touches to enhance its credibility as a professional piece of software. You can edit the record form to your heart's desire, adding shading, boxes and even background pictures to make it more visually appealing. Whether this has any practical use is debatable, but if looking at a picture of your favourite television show makes it easier for you to enter and amend your records then it's got to be a bonus.

Finally, Twist has full mailmerge capabilities, enabling you to create ASCII files (letters to your customers, perhaps) and import the relevant data from your database (their names and addresses) into the document you wish to send. You can also update your data regularly enabling you, for example, to keep a close eye on how certain products have sold recently. In fact, you could probably terraform a dead moon using Twist — it's just a case of working out how.

So what you're saying is... yes, Twist is excellent. It's difficult to justify the price tag unless you have big plans involving databases, but if you're after a database for business use, you'll find that Twist more than meets your requirements. There are a few minor quibbles, however. The program had trouble linking two or more databases together to produce an integrated report, and it creates far too many data files, which can quickly lead to a cluttered file selector. It would be far better if each database was restricted to a few larger data files: one for the data itself and another dealing with all the various options available to it. Having said this, moaning at such a minor point highlights just how difficult it is to fault the program.

Nevertheless, Twist will still excite you with its power and versatility — just follow the manual's tutorials to quickly and effortlessly discover how much depth there is to it. The price tag is a little high, especially considering the fact that its big brother, Superbase Professional (last reviewed ST 46, 86%) is only £10 more and supports graphics as well as text. That said, Twist offers power without too much hassle involved. If you need a straightforward but powerful database, then Twist should be the answer to your prayers. sff

NICK PEERS

Twist 2
£89.95 HiSoft
\(01525 \ 718181\)
All STs with 1MB of RAM, TT, Falcon

Highs
- Powerful yet easy to use functions
- Fully comprehensive manual
- Supports GDOS and SpeedoGDOS fonts

Lows
- Expensive for the casual user
- Fiddly in combining databases

What else?
- Superbase Professional, £99.95, also from HiSoft.

Supports graphics, but is more complex

83%
**Data Pulse**

- Very quiet, no fan necessary.
- Dual SCSI Port
- Internal Power Supply
- Device number selector
- 2Mb PD Software free
- Free HD Turbo kit

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**Hard Drives**

- All Data-Pulse Plus Hard Drives are fully Auto booting/Auto parking and are formatted, partitioned and tested before despatch, ready to 'plug in and go'.
- Full metal case measuring 250mm x 290mm x 58mm (wxdh), ideal for monitor stand.
- Only brand new, highest quality mechanisms used (we do not use refurbished or second-hand mechanisms).
- All drives come with full 12-months warranty and free expert help and advice over the phone.
- Configured with SCSI port for FALCON compatibility etc.

Data-Pulse + 260Mb £349.99
Special Offer Data-Pulse + 353Mb £399.99 (Now including ICD LINK 2)
Data-Pulse + 540Mb £699.99
Free HD Turbo Kit with all drives, prices include ICD LINK for the ST.

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**Star**

- Star LC100 Colour £119.99
- Star LC24/100 Mono £139.99
- Starjet SJ48 Bubblejet £215.00
- SJ48 Ink Cartridge £19.00

**Citizen**

- Citizen Swift 240 Colour £250.00
- Citizen ABC 24Pin Colour £179.99

**Hewlett Packard**

- HP DeskJet 520 £250.99
- HP DeskJet 580 Colour £425.99
- HP DeskJet 310 £239.99

**Thermal Colour**

- Star SJ144 £369.99
  - 144 Element print head
  - Colour 14 page per minute
  - 360 DPI resolution
  - Emulates Epson LQ800, IBM Pro Printer & NEC graphics

**Ricoh**

- LP1200 £599.00
  - 2MB RAM
  - 400 Dpi
  - 12 months on site warranty

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**SIMMS Upgrades**

- All RAM upgrades come packaged with full fitting instructions/test disk.
- 512 SIMM's STE £4.99
- 2MB SIMM's STE £49.99
- 4MB SIMM's £99.99
- 2 x SIPP to SIMM adaptors £3.00

---

**Hand Scanner**

- Zydec Hand Scanner €100.200, 300, 400 Dpi Resolution
- 1 Letter mode, 3 photo modes.
- 105mm scanning head.

**Zydec Hand Scanner ST £99.99**

---

**3.5" External Drive**

- Ladbrokes 3.5" External Floppy drive. Includes own external power supply.
- £57.99

---

**Falcon 030**

- 16MHz 32 bit 68030 Central Processor, 16MHz Blitter, 32MHz
- 56001 Digital Signal Processor.
- 144Mb 3.5" Floppy, up to 14Mb RAM. Displays 65536 colours from 262144 palette.
- 8 Channel, 16 bit, high quality stereo sound sampling.
- FALCON 1Mb No HD £499.00
- FALCON 4Mb No HD £899.00
- FALCON 4Mb 64Mb HD £799.00
- FALCON 4Mb 127Mb HD £989.00
- FALCON 4Mb 209Mb HD £989.00

**Marpet Upgrades**

- Marpet upgrades for the ST are plug-in and require no soldering. They are compatible with most motherboard layouts and come with full fitting instructions. These boards accept SIMM boards and are upgradeable at a later date. Please check that MMU and Shifter are 'socketed' before ordering.
- Unpopulated Marpet board £24.00
  - See SIMM prices below.

---

**ST Mouse**

- High quality 290 dpi mouse with microswitched buttons ST/AM.
- £9.99

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**STE Packs**

- 1Mb RAM STE £199.99
- 2Mb RAM STE £254.99
- 4Mb RAM STE £319.99
  - Phone for pack details.

**PC Emulators**

- Dataview Hi Res Monitor £109.99
  - High quality 14" SVGA Monitor with ST adaptor (includes sound). Fully compatible with all ST Hi-Res Programmes with bit/aview.

**Microvitec 1438 MultiSync £229.00**

- ST Multisync switchbox £19.99
- Falcon VGA Adaptor £9.99
- Falcon ST monitor Adpt £9.99
- Philips SCART to ST/STE £9.99
- 8803 Mk1 to ST/STE £9.99

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**Monitors**

- Dataview Hi Res Monitor £109.99
  - Hi quality 14" SVGA Monitor with ST adaptor (includes sound). Fully compatible with all ST Hi-Res Programmes with bit/aview.

**17" Multisync Monitor. £629.00**

- 26 dot pitch.
- 20" Multisync Monitor. £759.99
  - 31 dot pitch.
- Colour SVGA Monitor £239.99
  - High quality colour SVGA Monitor, 28 dot pitch includes Falcon adaptor.

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**Printers**

- (0772) 235166
- Fax: (0772) 561071
- Tel: 9.00am-6.30pm (5 Lines)

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CALAMUS

UTILITIES

Three more additions to the Calamus support range.

Fast Club have always been excellent supporters of the Calamus range of desktop publishers on the ST, and these three new releases confirm their commitment to the program. Neatly coinciding with JCA’s recent price cuts to both Calamus v1.09m (now £59) and Calamus SL (£199), all three enhance the usefulness of the Calamus range, while offering value for money.

FONTY (£11.95)

You really have to be enthusiastic about Calamus to want to create your own fonts to use with it. If however you can’t find a font from the hundreds available from both commercial and PD sources, Fonty enables you to create your own.

It’s a powerful program, enabling you to either create a font which are very legible and proper. There are so many varieties that they’ve been archived and require decompacting before you can access them. Although the process can be tedious, it is at least straightforward, and you’re given the impression that you have got your £15-worth. Although volume six loses out in the quantity stakes (about 18 fonts here), three rather interesting fonts are supplied: Egyptian, Monopitch (a kind of type-writer style script) and Script (for writing prose you’d rather no one could read). Less fonts, excellent quality.

STC CALAMUS FONT

SETS 1 AND 6 (£14.95 EACH)

Two font collections, each of which consists of three disks packed with fonts for you to use in Calamus or other compatible programs like DA’s Vector Pro.

The first font pack contains a variety of Geometric and Humanist style fonts (about 75 of ‘em) all of which are very legible and proper. There are so many varieties that they’ve been archived and require decompacting before you can access them. Although the process can be tedious, it is at least straightforward, and you’re given the impression that you have got your £15-worth. Although volume six loses out in the quantity stakes (about 18 fonts here), three rather interesting fonts are supplied: Egyptian, Monopitch (a kind of type-writer style script) and Script (for writing prose you’d rather no one could read). Less fonts, excellent quality.

CAL ASSISTANT SL (£29.95)

Hot on the heels of Cal Assistant (STF 57, £33.8m) comes this new release for users of the colour SL version of Calamus. Like the original version, Cal Assistant SL offers a vital lifeline to new users who don’t know where to turn.

Although it’s £10 more expensive than its little brother, the only bonus is that it deals with the SL version of Calamus. It runs as a Desk Accessory and is therefore easily accessible from the menu bar. As well as being extremely easy to use, Cal Assistant bears more than a passing resemblance to Know-how, the Help Accessory for DA’s Vector Pro, which we gave away on the Cover Disk last month. Running in a GEM window, everything you might want to know is available using a series of pop-up menus and sub-menus – yet another example of how straightforward to use point and click can be.

Unfortunately, Cal Assistant requires 145K of memory to run, which means you can’t use it with Calamus SL if you only have 1MB of memory which makes it a pointless purchase for those of you with the minimum setup. If you have the necessary hardware it’s an excellent tutor, especially if you’re new to the excellent Calamus family of desktop publishers. STF

STF RATING: 82%

CALAMUS Utilities

STC Cal Assistant SL (£29.95)

Fonaty (£11.95)

STC Font Packs 1 and 6 (£14.95 each)

Fast Club

01135 455250

Highs

Each program is more than useful if you have Calamus or Calamus SL...

Lows

...if you haven’t, however, there’s not much point in getting any of them.
FLEXIDUMP PLUS 3
THE COLOUR SOFTWARE FOR YOUR COPIER PRINTER
NO MORE BANDING!
NO MORE WHITE LINES!
Yes, true the new Flexidump Plus 3 will remove banding and white lines from dot matrix & bubblejet printers. You can now have excellent quality on dot matrix and bubblejet printers. Now you need to print in colour, including superb software. The colour kit is simple to use, the ribbons fit exactly in the same way as your black ribbons so it will not affect your guarantee. Also in all modes based on bitmaps alignment is automatic, you do not have to manually align. PRINTS AS GOOD AS COLOUR PRINTER. If your printer is not listed below, please phone, Matrix Flexidump kit for Star LC30, LC80, all Star 24 Pin, Epson LQ800/LQ800, LQ850, Epson FX, LQ800, etc. Citizen 1700, NEC, EPson, etc. - £99.95. These Flexidump kits come complete with coloured ribbons and software.

T-SHIRT PRINTING RIBBONS
PRINT ON NORMAL PAPER IRON ON T-SHIRT

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COLOUR PRINTER RIBBONS

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Printer Ribbons
Don't throw away your plastic printer ribbon cases when the ribbon wears out, just take the top off, take out the old ribbon and reload it with a new one. It's simple, Full instructions supplied. Black reloads from as little as 99p each.

COLOUR PRINTER RIBBONS

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STILL ONLY £39.95 inc
UPGRADE FLEXIDUMP TO FLEXIDUMP PLUS 3, ONLY £44.95 inc. RETURN MASTER DISK

COLOUR KITS FOR MONO PRINTERS

PRINTERS

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NO MORE BANDING!
NO MORE WHITE LINES!

HOW TO ORDER: Envelope cheapest/PO made payable to:

Care THREE PACK will sell HPFS 906A Cartridges 3 times. The Canon BC1-984 Cartridges 3 times. Pack available in yellow, magenta, cyan, red, blue, green, purple, yellow, blue, black, red, black, blue, purple, yellow, blue, black. HPFS PACK 3-reels of yellow, magenta, cyan £7.95. CARE THREE PACK will sell HPFS 906A Cartridges 3 times. The Canon BC1-984 Cartridges 3 times. Three Pack available in yellow, magenta, cyan, red, blue, green, purple, yellow, blue, black, red, black, blue, purple, yellow, blue, black. HPFS PACK 3-reels of yellow, magenta, cyan £7.95.

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Drawing on your ST is difficult. Once you've mastered the basic techniques of art, you then have to master them all over again on an ST screen. Here's a tutorial package that might just help you do that.

You can either draw really well, or your people tend to look something like a cow giving birth to a bowl of fruit - much like mine. Yes, you too can be a member of the People Who Can't Draw Club, from which there appears to be no exit. You can't grow artistic ability like cress, you can only build on what's already there. If there's nothing there, you're stuffed.

Despite this, Markotek Software are determined to teach the ST world how to draw, with the third part of their DegasArt tutorial, a step-by-step guide to better Degas pictures. If you own the other two DegasArt tutorials, you'll find this one complements the other two. Whether or not that's a Good Thing depends on what you thought of the last two.

You see, art tutorials suffer from the same problems as art teachers - trying to explain how drawing is done to People Who Can't Draw usually results in phrases and instructions like, "No - you just, well, draw it, really," as the total explanation.

For example, one section of this tutorial purports to teach you how to draw people. It starts with a sausage man, then next to him is a rough line drawing over said sausage man, next to which is a perfectly drawn, immaculate little boy with his arms folded, exactly the right proportions, obviously. This is not really a tutorial for us People Who Can't Draw.

And, following the same vein, the rest of the tutorial consists of tips that aren't really tips and some 'handy methods' that take at least two hours to understand. They also tend to consist of two sentences and a screenshot, meaning that you arrive at the end of the tutorial knowing little more than you did when you started. Sure, there's pictures of things like the QE2 with explanations of how to draw portholes, but the wrong parts are explained - it doesn't tell you how to space portholes going into the distance around a curved surface, just which tool to use when you've done it.

To be fair, this is specifically a Degas tutorial. But although it is Degas-specific, it still doesn't go far enough to explain how to make the most of Degas, and is instead simply an extended explanation of a few, select tools. If the tutorial was a generic affair, covering basic techniques common to all art packages, it might have been worthwhile. Instead, each section of the tutorial, although impressively titled, consists of a couple of sentences and a screenshot, followed by a run of sections consisting of pictures that the author's drawn and a caption.

Confused? You will be.

But some of you might consider this a godsend. It does contain information on some of the more complex parts of Degas (though sparsely), and some well-drawn examples of these techniques in action, but no one seems to have made a decision as to whether this should cover general drawing techniques, or those that are specific to Degas itself.

At £6.50 you might like to give this a try, but you'll spend most of your time looking at techniques someone else has implemented, without really finding out how to do them yourself. There's definitely a need for this type of package for new artists.
PUBLIC SECTOR

Bought for the price of a disk, usually cheaper and nastier. But enough about Nick Peers. What’s new in the public domain this month?

GAMES

**DYNABUSTERS+**

AWF PD

Hands up those of you who have heard of Dynabuster, an excellent multi-player game that was a hit in the arcades a while back. Well, guess what? Dynabusters+ is the shareware equivalent and I’m afraid to say it’s rather minutes of starting to play). For this you need one of those four-player joystick adaptor thingies (WeServe 0 01705 647000), although three players can still jeopardise their friendships by using two joysticks and the keyboard.

Full instructions are contained within the game itself, but the aim of the game is simple: detonate bombs to clear the barriers between you and your opponent, and then try to trap them in a corner before blowing them to tiny bits. This is not as easy as it sounds, because it’s all too easy to trap yourself in a corner instead, leaving you cursing helplessly as the seconds tick away before you’re destroyed.

To aid you in your bloody task there are two bonuses, which increase the range of your explosions and the number of bombs you can lay at any time. Other items are less predictable, represented by skulls, question marks and bottles. They can do anything from increasing your speed, reversing your controls (so that up becomes down and so on), to teleporting all the players to random points in the maze. There’s nothing more exciting (or scary, if you’re like me) than suddenly finding yourself right next to one of your opponents. Your only option is to lay a bomb and leg it sharpish, which is probably what he or she will be doing at the same time.

This has to be one of the best multi-player games available at the moment, commercial or otherwise. It is shareware, so if you register you’ll increase the chances of an update – one option touted enables you to play over more than one machine via the null modem or MIDI ports, and if you’ve ever played Stunt Car Racer on two STs, you’ll know how exciting this can be. All that remains for you to do now is find five people you don’t particularly like, and prepare to hate them even more after a few hours of Dynabusters+. Let’s rock!

**DARTS 180**

MERLIN PD

Darts needs no introduction – it’s a game of darts pure and simple, coded in STOS. Surprisingly it’s mildly entertaining if you allow for the fact that darts can never be truly realised on the computer platform. Having said this, Darts 180

Their friendship almost irretrievably shattered, the two boys continued to blow each other to bits well into the night, long after the other four chaps had given up.

"You utter, utter cad!" spluttered Piggy as Hedlington-Smythe detonated the bomb that ended his existence, giving the bounder a one point lead.

And Beergut lines up against Smoker’s Cough in another stunning round of darts, the game that releases all that repressed violence in a, well, a silly kind of way.
**JET BIKE CHALLENGE**

**TRANSPARENT DREAMS PDL**

Jet Bike Challenge is a SEUCK game. There are already loads on the public domain, not many of which are any good. Can this provide any new slants on the genre, or is it best forgotten?

There is no documentation with the game, which is always a bad sign, and unfortunately the game itself looks instantly forgettable. The graphics, such as they are, are quite well-drawn, but, as in Dynamic shows, graphics aren't what makes a game. If you're a diehard shoot-'em-up fan, or you just have an insatiable desire to collect every SEUCK game there is, you might get something out of it (like five minutes entertainment, perhaps). Otherwise you should run screaming in the other direction.

**STF RATING: 48%**

---

**UTILITIES**

**FAMILY TREE V2.1**

**MERLIN PD**

If the idea of shelling out £20 for a genealogy program seems too much for you, you could always try Family Tree v2.1. It's freeware, which means you don't have to pay the authors a penny, generous people that they are. It also makes full use of GEM, meaning that you can access your favourite Desk Accessories from within the program.

Entering the data is easy, and wads of statistics can be produced for each person in your family. You can even write reams of notes for each individual member if you so wish, although there's unlikely to be a market for all your hard work outside of your own family unless you commission for other people.

Family Tree, like all genealogy programs, is really just a glorified database but with options that make it a vital addition to any genealogist with an ST.

Once you've entered all the members of your family in turn you can link them all up simply, by marrying them off and then giving them children from the lists provided. It's unbelievably easy to alter your family tree on-screen, but be warned, the final display is a little disappointing. Overall, though, this is a useful little utility if you want to take a dip in the sea of genealogy without getting your feet wet. (Sorry?)

**STF RATING: 80%**

---

**IMAGELAB**

**GOODMANS PD, DISK**

Imagelab comprises a suite of German utilities that enable you to turn colour GIF and TIFF files into black and white IMG files for use in DTP programs and word processors like Calcimus and Write On. The programs themselves are based around Imagelab's B_W format, and most busy themselves with converting file formats to and from B_W extensions.

You'll need to also have access to GEM-View and PicSwitch if you want to be able to use the program to its full capacity, and this is where it falls down. You and up finding yourself spending most of your time following between programs converting pictures to and from the various file formats. When you finally get your desired picture into the B_W format you'll probably want nothing more to do with it, ever again. Ever.

That said, the program does its job reasonably, and someone has thoughtfully translated the resource files into English to make it all a little easier. Not bad, but there are a host of Image processing utilities available in the public domain already. Imagelab can't quite lift itself above the crowd, but a nice effort all the same.

**STF RATING: 74%**
MISCELLANEOUS

ATARI MUSEUM
MERLIN PD, DISKS MUSEUM
1/2/3
The three disks consist of a grand tour of every single machine, be it computer or console, that Atari have ever released or even thought about. Rather than force you to sit through a slide show of pictures and text on each machine, you are presented with a menu that enables you to quickly find the machine you're interested in and access its details, and in most cases, bring up a picture of the machine itself. (Well, not actually 'bring up', obviously.)

The pictures themselves are functional, but a little basic and disappointing, while the text gives you information about the machine's basic specifications along with its release date and a few lines of comment about its history. Not all of the featured machines come with pictures and while this is understandable in the case of projects which never saw the light of day (such as the ST-based console), it's a pity that the author couldn't come up with a picture of two of the first STs ever to be released in the US (the 130 and 260 models).

Nevertheless, if you're interested in the history of Atari, these disks might be of interest, but it's hard to see them serving any purpose other than to while away the hours on a wet Sunday afternoon.

STF RATING: 66%

FALCON

FALCON UTILITIES
FLOPPYSHOP DISK F-4534
One thing that all of the programs on this disk have in common is that none of them (with the exception of the two utilities for POVs Raytracer) have anything in common with each other. It's a bizarre mix but it's still good.

Top of the class must be Easydat, a GEM database that's powerful and easy to use. Then there's the Falcon version of the Spectrum Emulator, enabling you to warp back in time to those heady old days of BEEP and attribute clash. One advantage of the ST version of the emulator is that it's actually quicker than the old Spectrum in places. Such a pity then, that the associated programs featured are all a load of rubbish.

Rounding the disk off are a reset-proof RAMdisk called Truedisk, Tocante, an Accessory clock to keep you constantly apprised of the time and a few other little ditties that I don't have the space or inclination to mention, including those two shells for POVs Raytracer. All in all a useful disk to own if you have a Falcon.

STF RATING: 86%

THE TIFF DEMO
FLOPPYSHOP DISK F-4621
Erm, yes. Why anyone would want to take pictures of nubile young women and then distort their faces into something best described as 'avant-garde' is totally beyond this reviewer. Nice soundtrack though. The other two demos, Plasma and Chaotic Easter Egg are only slightly less bizarre, but with good soundtracks all the same. Nevertheless, I'd really appreciate a demo that had a stomping rock tune behind it rather than these tame dance offerings. Get it if you have weird concepts of art and things.

STF RATING: 70%

PD TOP TEN

Now that the PD Directory has moved to the ST FORMAT Directory section of the magazine (see page 81), we've decided to fill the gap by printing a PD Top Ten from a randomly selected PD Library. This month it's the turn of New Age PDL:

1. Crack Art (Disk ART 51)
2. Spectrum Emulator (UTIL 55)
3. Grandad and the Quest for the Holy Vest (GAME 83)
4. Art utilities (ART 1)
5. Core SPX pictures disk one (ART 164)
6. Glass Buttock of Tharg (GAME 131)
7. GEM-View (ART 128)
8. 1st Word (WORD 4)
9. Games Compilation (GAME 16)
10. Spectrum Games (UTIL 79)

As Caroline Price of New Age so rightly says, "I cannot understand how a disk that turns your ST into a Spectrum can be the second-best-selling disk of all time, especially considering we have only been selling it for the past year!" Just try playing The Hobbit on a bog-standard 1Mbyte ST to see why.

PD Libraries! If you want your list featured here, just send it in with details concerning what period it covers, and we'll print it.
Once again, Simon Forrester nervously tiptoes around the seething hotbed of creativity, daring, originality, cooperation and people in trees that is the independents scene. And fits in quite nicely.

PLONKER

He’s done it again. Yup, after our brief selection of games from Dave Cobbedick (two) last month, as featured in Indies Corner, he’s sent us another one. But is it any good? Well...

style perfectly. It’s an incredibly simple ‘matching pairs’ game that’s cleverly hidden underneath about a megabyte of peripheral detail – daft characters, that sort of thing. For a start, the game is hosted by what itself a dangerous, devil-may-care card game of pairs, in which cards get turned, and potatoes scream to their deaths. Hang on. Was that pairs?

Wibble
The first thing you always seem to notice about DCS games is that the music isn’t exactly, erm, reserved. Fairground tunes blast out in computerised harmony, and it’s not long before you’re getting the feeling that your decision to buy an ST party on the basis of its sonic abilities is something of an alien concept to our Dave. Just to continue the in-yer-face (or down-yer-windpipe) theme, whenever you win congratulation comes in the form of “ooh, you little tinker” or other exclamations.

“The game is hosted by what looks like a potato in shades, who squawks instructions at you in a high pitched, northern voice.”

When the world of ST software suddenly seems a little too starchy, you can always rely on Dave Cobbedick to cheer you up. His games, although not the most technically advanced of their time, are always fun to watch. Plonker, DCS’ most recent release, follows Dave’s looks like a potato in shades, who squawks instructions at you in a high pitched, northern voice. The game looks...
CRAFTY CRAZY CAPERS

Now, live from ST FORMAT, we bring you news of an old but previously unexploited type of game - the 'lots of little ambiguous boxes' concept. This game is the format that the phrase "What the hell am I supposed to be doing?" was created for. And it's back, in style. No matter which of the four sections of the game you choose to play, Crazy Crafty Capers opens with a screen full of boxes. With some time and effort, experienced players may then be able to distinguish between the different games.

Give it a try
Manic Mind: this is based on Triplets, and is the first game you come across. It involves swapping triplets of squares with the exchanger, in an effort to find the target squares (each has a different colour scheme). In reality this takes the form of clicking buttons almost at random. Meanwhile the game makes strange noises and shows nothing on screen, or it moves things around on screen but doesn't acknowledge them. Depends what it feels like doing, really. It's odd, unintelligible, and a little dull.

Whizz Word: a simple anagram puzzle game, played by swapping letters either with the letter immediately to the right or one square along. Simple in concept, and simple in play, if a little dull. Crazy Maze: it's not a maze, for a start. You decide how many squares forward you'd like to move, and you move that many squares forward. There's a percentage mark that informs you as to the risk of the computer rejecting your move. Hazardous, eh? Dull.

Dice Magic: based on a six-dice game, the aim is to get as many dice as possible reading the same value, by either increasing or decreasing the value on each dice, or re-rolling single dice. Dice. Right. Dull.

Now I don't want to be at all discouraging here, but is this really the way to go? It's indie software, but it doesn't always have to consist of dice, anagrams, hangman or pairs. These puzzle games never catch on with anyone, because there's virtually nothing that couldn't have been done with a pencil, paper and some dice. Playing simple puzzle games may have been enough, but not 'crazy' ones.

'Crazy' is Noel's House Party. 'Crazy' is The Big Breakfast. 'Crazy' is Michael Barrymore. 'Crazy' is used for slightly weak, diluted, watery comedy that the Radio Times terms 'wacky'. Crafty Crazy Capers isn't Crafty, or Crazy, and it's certainly not a Caper. Come on, indie people - how about a real game every now and again? 

“With time and effort, experienced players may be able to distinguish between the different games”

Crafty Crazy Capers
£3.95 Nice Bytes, Flat 7, 64 Gwendolen Road, Leicester, LE3 3FE

Highs
- It's quite relaxing just watching the pretty colours move around at random

Lows
- Crazy
- Kooky
- Wacky
- Zany
- Er, not

20%
The year is 2044. On the far reaches of the galaxy an alien battle force assembles, their purpose, the destruction of the human race. The nations of Earth form DEFCON (Defence Control) in the hope to counteract the invading force. Taking the role of a newly recruited Space Hound, you are to be stationed in the front line piloting a 'Perseus' deep space fighter. The whole of the human race depends on you! ZERO-5's advanced polygon graphics engine is based upon the ST's and Falcon 030's BITTER graphics co-processor. It is capable of generating detailed objects in real time so the experience of alien squadrons rushing towards you is now a reality. Yet not all of ZERO-5's battles will be lost or won in space, some missions take place down on the surface of planets where 3D Landscaping routines create whole new worlds. All this is possible through ZERO-5's ability to detect and use extra hardware, such as the Falcon 030's 32-Bit 68030 chip, allowing it to deliver a faster and more detailed playing environment. The Atari DMA co-processor sound system is used to supply 16-Bit 25kHz, digitally sourced four channel music and heart stopping sound effects, and if your machine has more than 1Mb your ships status will be relaid to you using digitised speach.

Please rush me a copy of ZERO-5 for my Atari 1Mb STE or 4Mb Falcon030

I wish to pay by
☐ Cheque/Postal Order made payable to: Caspian Software Limited
☐ Access/Visa Card No: ____________________________

                      Expiry Date: ____________ Signature: ________________________________

Price: ZERO-5 is only £24.99 including UK post and packing.
EEC please add £1.00. Overseas add £2.00

PLEASE PRINT IN BLOCK CAPITALS!
Name: ____________________________________________
Address: __________________________________________
Postcode: _________________________________________
Telephone: _________________________________________

I have enclosed a cheque/ postal order/ please debit my credit card for £__________

Mail to: Caspian Software Limited, Block I.A., Lee Valley Technopark,
Ashley Road, London N17 9LN Please allow 24 days for delivery

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PC720B, the award winning external disk drive which includes a virus blocker, built-in Bitro Turbo and is able to boot from drive B.
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Slimline 3.5" SCSI, complete with interface, software & cables.
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540MB (ST/FM-e) ....... £549
1GB (TT/Falcon) ....... £799
1GB (ST/FM-e) ........ £849

DRIVE B CABLE
If you have an internal drive that is not compatible with 'boots from drive B', this cable will solve your problem.
Drive B cable ........... £9.95

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, that's more than you can switch between your disk drive and Blitz Turbo without disconnecting your Blitz interface. (1988 Copyright act applied)
Blitz Turbo ............... £25

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, that's more than you can switch between your disk drive and Blitz Turbo without disconnecting your Blitz interface. (1988 Copyright act applied)
Blitz Turbo ............... £25

SUPEMON
SuperMon comes with all the features of the 'Ultimate Ripper' and more. Some of the features included with SuperMon are:
- 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—disassemble programs and step through them. Intercept 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 sectors, hide files. Utilities—SuperMon also has many utility functions available, including reset proof RAM disk, mouse trap function, time display, screen snapshot and 50/60Hz toggle.

Ultimate Ripper ........ £25
Including SuperMon ...... £35

RING INTERRUPTION
Use with Ultimate Ripper or SuperMon. Stop games or programs in their tracks, search for infinite lives and hack with code. A press of the key and the program is terminated.
Ring Interruption ........ £15

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RUGBY LEAGUE

In Rugby League there’s only one thing more terrifying than tackling a 300lb Tongan prop forward, and that’s telling said man-mountain that he’s been dropped from the team. That’s your job, that is.

The Rugby League Coach obviously big Monty Python fans. You can tell because the main office interface has a real Terry Gilliam feel to it. All your actions are controlled by this extendable arm – you know the sort that would steal fig leaves from statue’s naughty bits. It’s odd, and it looks a bit silly, but it helps to make Rugby League Coach that little bit different, so that at least you know which game you’re playing. Which is more than can be said for many of its graphically limited football contemporaries, even if it does leave you half-expecting fish to ride past the window on bicycles.

Grasp this Dali-eske nettle though and it makes Rugby League Coach’s more ‘routine’ management trappings feel pleasantly familiar. Played from the manager’s desk, you get to control the training, the finances, the team and even the tea. By clicking between your diary, calendar, team sheet and even a spreadsheet, the aim is to guide the lowly Thorne from third division obscurity to the heights of the first division championship. Or, failing that, jump ship to a bigger club as soon as you can. You know the story. If not, go back and read the reviews of Premier Manager 2. Premier Manager, Championship Manager, Football Tactician, Football Manager 1-3, Brian Clough’s football and get sullied, just as you’d expect.

Fortune’s Player Manager – in fact any sports management game ever – The players get trained, get more skillful, get injured, get sold and get sullied, just as you’d expect. The fans are fickle and whinge about a 50 pence increase in ticket prices. The chairman gives you grief, even when you win the match. It’s all there, but to be brutally honest the sport itself makes little difference. It could be Rugby League, Rugby Union, Association Football or even full contact dominoes. The size and order of the team sheet and where it is to be played.

RUGBY LEAGUE, WHY?

As a Southern child I was always puzzled by four core facts concerning Rugby League. 1) Why did Grandstand insist on showing Rugby League live on the TV when there was football afoot? 2) There weren’t any obvious rules. 3) It was distressingly violent. 4) To be honest I was just about them ‘up north’.

Thanks to Rugby League Manager I have since realised the error of my ways. 1) Rugby league has a huge and active supporter base, including Jill. 2) The rules have been tailored to make the game as exciting as possible for the spectator, so it suits TV. 3) The apparent violence masks genuine skill. Honestly. 4) And no, in fact many of the best players come from places considerably more southerly than Kent – like New Zealand. Bit like cricket, then.
COACH

are the only real clues as to the sport you’re controlling.

Wigan out
Rugby League Coach’s insistence on frittering away its primary asset is annoying. If being a rugby coach is important enough to be worth £30, then every aspect of the sport should force its way into play at every opportunity. Yet this feels more like Pan-Generic Manager than a specific Rugby League coach simulation.

As a result, the finely honed gameplay lacks bite, and it’s never clear where the heart of the game lies.

Because you’ve no direct control over the tactics – you can’t choose which strategy your team will use in Sunday’s game – your only effect on the match comes in the form of squad selection and substitutions. These are good, but just don’t offer enough meddling potential, when compared to the top-end football simulations.

As a rugby management simulation Rugby League Coach is at the head of the pack, but then it’s the only real contender. When it’s compared to the wider genre of football management games, there just aren’t enough buttons to push and levers to pull here. All the usual maths and tactical calculations are there but they’re hidden away and your direct control is limited.

Much of the fun of management games is in exploring the maze of (often redundant) options, and working out your own priorities. Without them you end up fiddling away time at your pixel desk, watching the boys train from your bit-plane window, while waiting for the chairman to call. The lack of control and the game’s slightly androgynous sporting feel tackle Rugby League Coach just short of the line. It gets damn close, but it just doesn’t quite score. Shame.

TRENTON WEBB

Rugby League Coach
£29.99 Audiogenic
0181 424 2244

Highs
- Slick (if silly) graphical interface
- A management game, that isn’t about footie!
- The game mechanics are all there...

Lows
- ...you just can’t put them
- Not enough Rugby League

75%

OLIVER GARRITY WINGER
As an explorer of new, harsh and hostile planets, you have to be tough. You have to be quick. You have to be bleedin’ stupid. Robinson’s Requiem might just sort out the men from the idiots.

Would you like to hear a story? No? Tough. I was babysitting for a friend the other day, and the kids were camping in the back garden. I opened the door, and asked them if they wanted me to make them any sandwiches (just like it says on the advert).

"Explorers don’t eat sandwiches," said the child in an incredibly annoying voice, holding up a string of raw sausages and a frying pan.

It was at this point that I was faced with a decision. I could either go back into the kitchen and make them a large plate of cheerful sandwiches packed full of crunchy vegetables and salad things, or I could leave the bloody, disjointed carcass of some large, wild animal by their door and let them get on with it. The babysitting work kind of dried up after that.

The kids were right, though: explorers don’t eat sandwiches. In fact, explorers don’t actually eat anything – the majority of them die face down in a jungle, dead from starvation, malaria or both. Alternatively, they come back and get involved in community youth schemes.

Robinson’s Requiem, the obvious link to all of this explorer talk, knows how to test its explorers (that’s you). It doesn’t give you any sandwiches. In this particular case it doesn’t give you anything, simply leaving you for dead in a crash on an unknown, prehistoric planet.

This is your situation. Have you enjoyed life?

The game starts with you standing on that planet, in a grassy valley furnished with trees, a stream, an incredibly violent bloke, and quite a large chunk of debris from the crash. As you start to move around, you soon realise that this is no ordinary game, and it’s certainly no ordinary game engine.

To start with, it’s on the Falcon. This is not only an excuse for flashy sound effects, but also a chance to do some serious graphic work. Requiem is a first-person 3D adventure, using a free 3D system that enables you to move where you want, looking in any direction, and stops it from being a linear, blocky, slow version of Dungeon Master. In fact, Requiem probably owes more to Doom than the way it moves, though admitted without the speed or fluidity.

The control system is straightforward, going for the Ishar approach of directional arrows and a set of iconic operations. These

**BILL T CAVE MAN**

You’re stuck on a prehistoric planet plagued by the dinosaurs of the time, and you’ve got nothing save what you salvaged from the crash. It seems fairly straightforward – you’re stuffed. Or not.

One of the most startlingly new elements of Robinson’s Requiem is the way you can use objects. You see, though a length of cord may be handy for strangling someone, and a stick may make a good poke, they’re both fairly primitive. The game has been designed in such a way that, being the creative type you are, you can invent new tools, manufacturing objects together. For instance, you could take your cord and stick and invent a bow, handy for shooting people.

If you find a needle and thread, and you happen to have some cloth lying around, you can make yourself some natty new threads (yellow is just so retro). And believe me, you’ll need to get inventing – it’s all very well punching out some bloke with an attitude, but you’ll have to take on all kinds of beasts throughout the game, and you’re going to have to be horribly well prepared. Get those creative juices flowing.
deal with manipulating objects, fighting, and other such activities.

And so you're left with your hero (Bob's a nice, holy name) to survive this hostile world, spanning three square miles and including ten different climates (odd planet, this). Ultimately, you're trying to escape from the planet altogether, but this requires two things: a plan, and a live Bob to carry it out.

**Survival of the Fittest**

Let's get this straight from the start: Robinson's not an exploration game. Though there are heavy elements of exploration in the gameplay, the emphasis is always on survival, spending more time with your medical computer than with your map, and understanding exactly how much a crocodile can hurt you if you leave it alone long enough. The maps and layout of some of the sections can get confusing at times, but there are never any mazes, and you'll never get lost. The auto-mapping facility seems to have decided exactly how difficult finding your way around should be, accurately mapping out the positions of everything from ferocious dinosaurs to interesting pebbles (no, shhh - don't mention the pebbles).

Robinson's Requiem is also not a linear game - you never come across any obvious pointers as to what to do next. Instead you find paths, caves, holes, beasts or whatever at your own speed. If you take two days to make your way out of the first valley, so be it - the planet will still be there when you finish, and everything will be just as it should be. There's no real time limit, and there's no real scoring system. You just wander about, take a look around. That's it.

The first thing to hit you about Robinson's Requiem is the fact that the programmers were very obviously aware that they were working on a Falcon. Everything, from the menu screen onwards, looks special. The game's intro is one of the best an Atari has ever seen, taking you through the ship's malfunction, via the atmosphere and out in the parachute, narrowly avoiding a pterodactyl as you fall. In fact, probably the only slightly dull element in the programming is the music which, compared to some of the work we've seen on both the ST and the Falcon of late, is a little under-produced on both technical and musical levels.

Sound effects? Well, Silmarils have obviously gone to great lengths to include as many sound effects as possible, from Bob's panting after heavy activity, through water effects as you wade across a river, right up to the individual screams of some truly terrifying reptiles. It's probably worth noting that the dinosaur roars seem to come from the Jurassic Park school - the larger the scary fling, the more it sounds like the hooter on the QE2.

But then there's the graphics. You might've thought that the Falcon has generally been underused when it comes to graphics, but that's all changed. As well as flaunting a high resolution and even higher colour scale, Robinson's Requiem makes the most of the Falcon's mathematical ability in creating some of the most effective polygonal scenery going. When it comes down to it, hills are merely a set of brown, flat polygons, but the system in Robinson's works in such a way that, when the incline of the hill levels off to the flat ground, and when a little path cuts into the side of a slope, it looks, well, right.

This is an odd game. When you're playing it, part of you wants to keep playing until you've pushed Bob to the limits of his physical abilities (you know, hacked every limb off), while the other half says 'yeah, nice game ideas, but, they don't really gel, do they?'. It's as though Robinson's has been created by a genius of a programmer, but you're never really sure whether you're having fun. It's a realistic survival game (well, as far as I could tell, with my limited experience) but survival isn't much fun, is it? But if you like the idea of an advanced, well-written survival-cum-adventure game, you can't get better than Robinson's Requiem. STF

**Simon Forrester**

---

**He's Dead, Jim**

You fall into a stream. Instead of climbing straight out, you decide to wade around for a bit (it makes a nice noise, y'kee). When you do get out, you keep your clothes on, and walk around in the cold air until you eventually dry off. This isn't wise. You hear your own congested breathing, sneezing and coughing. You've got pneumonia. Lots of it.

It's surprising to play a game and find your bloke has caught a disease along the way. It didn't happen in Saboteur when you went swimming, and it definitely didn't happen in Flashback. It happens in Requiem, though - your bloke is prone to the same diseases you are, and you have to learn how to treat him.

And so the next, amazing element of Requiem comes into play, in which you start to take care of your bloke. If you had the good sense to search the wreckage at the beginning, you'll have found a medikit. This little box contains various sets of pills, bandages and other medical paraphernalia that all comes in handy for the many things that can (and will) go wrong.

Armed with only a medikit and an advanced medical computer, you can cure Bob of some of the most messy diseases, wrap the most broken leg, or even amputate limbs at choice moments, accompanied by Bob's screaming. It's his turn, you have to use it to do it. Mmmmm.

---

**Robinson's Requiem**

£32.99 Daze Marketing
0171 372 7435

**Highs**

- Truly original concept
- Well implemented
- Amazingly slick presentation

**Leaves**

- A little slow
- No Kendal mint cake

**90%**
**ARC Ad Blaster, a game based on the original horizontal shoot-em-up game, Dropzone.**

**Jetpac** — a ridiculously good conversion of an utterly amazing Spectrum/VIC game. Though this version features new improved graphics and sound, it’s still Jetpac.

**Stf**

SIMON FORRESTER

**If you can’t get any fun out of these games then you’re quite obviously beyond help**

“Jetpac”

It may not have been the first game ever, but it’s still one of the all-time classics, and anyone who’s played this on the Spectrum will know why its been converted to the ST. It’s one of the most addictive platform shoot-em-ups ever. To try it for yourself, just look on the Cover Disk — instructions start on page 6.

The idea of Jetpac is to construct a rocket from the strewn pieces and fuel it, finally taking off, while being hassled quite heavily by an odd selection of aliens. Blurring the boundaries between shoot-em-up and platform game, Jetpac was one of the first big-time arcade games to originate on a home computer, although this success was short-lived. The game never really made it on to the higher formats, partly because Ultimate, the company responsible for the original release, did a nose-dive shortly before the new wave of hardware came along.

**Breakout**

Now this is one of the originals. When Breakout was first released, it was revolutionary. It was exciting. It was totally original, and it was created by today’s standards. It was still Breakout though, and this fact can’t be ignored. When you load up Arkanoid, or get horribly mutilated playing any one of the several other Breakout clones, you’ll know you’re really paying homage to the original concept, first employed in Breakout.

**Dropzone**

It’s one of the all-time original classics, and we managed to find an ST version (aren’t we good to you). If you load up Blaster, you’ll find a game that is, effectively, the grandaddy of the horizontally scrolling shoot-em-up. Everything, from R-type to X-out, was influenced by the style and gameplay rules that both Dropzone and Defender started.

The idea is that a group of aliens are creeping down to the planet’s surface to steal your livestock. Your job, armed with an enormous ship capable of immense destruction, is to stop them... without damaging the cows. In a stroke of genius, the control system means that you can fly in any particular direction at incredible speeds, turning the whole ship and thrusting in the other direction to slow down. Firing means, well, firing, but the directional and speed control is the part that really clinches it — Dropzone is an addictive winner.

**Tetris**

Whether you’re in a twosome, or on your own, Tetris is still a deeply irritating game. It’s irritating because although you probably have absolutely no interest in puzzle games, you can only watch someone else playing the damned thing for a maximum of ten minutes before coming to the opinion that they patently have no idea what they’re doing, and will have to be shown.

You then end up playing Tetris, despite the fact that you really have no interest in the game at all, while other people who also don’t want to play the game stand, mesmerised, watching you, thinking that you’re rubbish. That’s Tetris. Everybody gets annoyed by it, but that’s the way it works.

Developed by a Russian (had to be really, didn’t it?), the game has turned a poor student into a rich student, because millions of copies have been sold on all formats worldwide. Rumour has it that the author is now poor again, having blown his fortune on a loaf of bread and some jam.

But whatever your tastes in games happens to be, you’re bound to enjoy our ST FORMAT arcade selection. You’ve been playing them in one diluted form or another for years, and now it’s time to play the pure, original version... stf

**SIMON FORRESTER**

**If you can’t get any fun out of these games then you’re quite obviously beyond help**

The twist is simple — instead of a simple bat and ball game you’re playing squash. The wall, instead of being solid, is the idea being to break out of the court, through the wall.

Our version of this classic is, admittedly, a simple PD version, but it’s still true to the original, with a few additions but nothing to spoil the essential simplicity of one of the best computer games of all time.

**Breakout**

Now this is one of the originals. When Breakout was first released, it was revolutionary. It was exciting. It was totally original, and it was created by today’s standards. It was still Breakout though, and this fact can’t be ignored. When you load up Arkanoid, or get horribly mutilated playing any one of the several other Breakout clones, you’ll know you’re really paying homage to the original concept, first employed in Breakout.
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  Ten wonderful programs grace this month's disk. Subscribe, and you too can go around waving your Wonder Disk at other ST owners!
  
  **DARTS 180**: this month's subscriber-only game laughs at those who think darts just isn’t possible on a computer.

- **MUNCH**: last month's FORMAT Gold winner, now available for subscribers only! Named after a Norwegian (our mistake last month see below may have started a war in Scandinavia).
  
  **Car Registration** - find out where your car came from, and when.

**MUNCH** is named after a Norwegian painter, not a Swedish one as incorrectly stated last issue.

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ST ANSWERS

Clive Parker unplugs himself from FutureNet and takes a look at this pile of ST Answers.

Using icons

I have noticed in the features about icons you say that TOS 2 icons can only be used on STs with TOS 2.06 installed. I have been using TOS 2 icons on my STFM with TOS 1.4 for some time using Teradex, the PD replacement desktop.
Colin Thurlow, Canal Side, Scotland

Yes, you can use Teradex to display TOS 2 icons. Use icon juggler to sort out a set of icons and save the file with the name ICONS.RSC to your Teradex installation disk. Teradex can now use all the icons in the same way as TOS 2.06 does.

Upgrade misconceptions

What is the best upgrade for my 1040STE? I want to upgrade it to 4MB by so that I can use Xenomorf 2 but I only have £100 to spend. When I have 4MB will I be able to play Falcon030 games?
Scott Booth, Co Tyrone, NI

All you have to do to upgrade your 1040STE is remove the four 256K SIMM memory boards that are inside, and replace them with four 1MB memory boards. You can get 30-pin, 100ns (nanosecond), 1MB SIMMs from almost any computer retailer for about £25. If you don't have a local computer shop then contact Market Developments on 01423 712600, they can supply you with the SIMMs you need.

Upgrading your STE to 4MB enables you to use Xenomorf 2 to its full extent apart from the image display - your STE is still restricted to displaying 16 colours at most on screen.

Upgrading the memory doesn't increase the STE's imaging capabilities, although you can still use Xenomorf 2 to create 24-bit images - you just can't display them on a standard STE.

You can view images with more than 16 colours using Photochrome 4, an excellent PD image viewer and converter available from all good PD libraries - see page 46.

Adding extra RAM to your STE doesn't turn it into a Falcon030. The Falcon is a completely different computer to the STE, although it is compatible with some ST software. While you can run STE software on the Falcon030, you can't run Falcon software on the ST - there are just too many hardware differences. Take a look back at ST FORMAT S3 for full details of the Falcon's capabilities (and if you missed it turn to page 85).

Filemaster FD wanted!

I am looking for a MIDI editing program called Filemaster FD, designed to edit files for many different sequencers. Until recently it was distributed by Four Minute Warning in West Yorkshire but it is no longer available. Do you have any idea where I can get it from?
Daniel Affleck, Margate

If anyone has a copy of Filemaster FD by Mississippi Software they wish to sell then please contact Daniel at: 4 Godwin Bungalows, Godwin Road, Cliftonville, Margate, Kent CT9 2HQ. Or you can call him on 01843 232282.

Which printer?

I have just purchased an STFM and upgraded it to 1MB of RAM. I now want to buy a printer but I don't

STOS CORNER

Frank Charlton digs through the mighty STOS mailbag and comes up with a way to increase the palette of the STOS Sprite Editor on the STE.

Spritely fun

You can update the original STOS Sprite Editor to work with the enhanced STE palette, giving you 4096 colours to choose from instead of the original 512. You need to have the STOS STE Extension installed for this to work. Just follow these steps:

1. In the STOS interpreter, load the STOS Sprite Editor directly - not as a STOS accessory - by typing in the following command:

   LOAD "SFRITE.ACK"

2. Change line 35 to the following:

   35 for x=0 to 15 : PAL(x)=colour(x) : next x

3. Delete line 60.

4. Add the following line:

   90 for x=0 to 15 : e colour X, PAL(X) : next X

5. On line 30, change the value of RGBTX to 7.

6. Change line 850 to the following:

   850 for x=0 to 15 : e colour X, PAL(X) : next X : gosub 111300 : gosub 111375

7. Alter line 3530 to the following:

   3530 RGB= colour (0DLC) : RGB(0)=RGB and $F00/256 : RGB(1)=RGB and $F00/16 : RGB(2)=RGB and $C

8. Change line 3535 to:

   3535 for y=0 to 2 : locate RGBXY

   1.RGBXY=x*2 : print str$ (RGB(xy))$=".": next y

9. Change the last part of line 3565 to:

   If X=0 or X=15 then goto 3545

   10. After line 3570 to:

       3570 sprite C1, XM, RGBXY(1) 12 : RGBXY(2)=X : locate RGBXY-1, RGBXY+1 = ? print str$ (RGBXY(1))$=".": next y

   11. Change the last part of line 3595 to:

       e colour 0DLC, RGB

   12. Change the last part of line 6110 to:

       PAL(x)=e colour(X)

   13. Alter the beginning of line 6115 to:

       e colour X, PAL(X)

   14. After the last part of line 8236 to:

       e colour X, PAL(X)

   15. From the start of line 10650, delete these parts:
要知道哪一个适合。那些适配器可能会需要额外的硬件。

**J J Baker, Ripley, Derbyshire**

在你手中的任何东西，只需要在ST上使用STF即可。

**S T A N S W E R S H E L P**

如果你有一个9引脚的打印机，24引脚的打印机，那么你可能正在想将它与STF兼容。如果你有一个Citizen, Panasonic或Star打印机，那么你应该使用适配器。如果你有一个24引脚的打印机，那么选择一个STF即可。这些打印机都是完全兼容的。

**Spectrum 512**

在过去的一年里，你没有使用Spectrum 512的程序在你的显示器上。它是可能的吗？

**Eric Hawthorne, Northampton**

手动可以是15元钱的STF软件——给它们一个电话（01753 549442）看它是否还有任何拷贝。如果你仍然有这本书的后半部分，那么你可能需要在杂志上或网上寻找它。

**Bookworm**

我正在寻找《STUDIO》和《Sound Book》的STF拷贝——顺便说一下，现在不再印刷了。如果STF软件提供者有拷贝的话，他们可能也不卖。

**Mr L Russell, Ramsgate**

哎呀，当某人把垃圾从一个旧电脑上删除时，可能会有一些东西有助于我们——他就是Kent了！

如果有人有《STUDIO》和《Sound Book》的STF版，可以写信给Russett或Graffander或Ramsdale, Kent CT11 ONX。

你真的应该发送这种类型的拷贝给新的STF Reader Ads page — 分页82。不要忘记STF Reader ads是完全免费的。保持它们成本低廉，而且包邮。

**Corrupted disk**

上个月，我使用了菜单程序上的Cover Disk来解包软件。

**Steve Lewis, Milton Damerele, Devon**

总是，总是，总是要备份你的Cover Disk。如果你在你的Cover Disk上运行任何软件，它将丢失菜单程序。确保你的STF是安全的。

**Old, old problem**

经过数月，我解决了一些老问题。

**Keith Whitall, Oldham, Lancs**

你的主要问题是，你有一个旧的老电脑。Amstrad DMP 2000被专为使用旧8bit Amstrad电脑设计的。

在过去的十年里，控制命令被使用的代码应是最近才使用过的。这可能是一个问题。如果你没有这个问题，你应该更新你的STF Reader Ads page — 分页82。如果你有这个旧的8bit Amstrad电脑，你可以使用这些程序来产生打印输出的《STUDIO》。

**Jack Braun, Shelley**

**Missing Link registrations**

记住whizco Missing Link Extension的接口。如果你在STF Cover Disk上看到了“517”，那么它可能是517。如果你没有，那么它可能是一个更小的程序。你需要将一个小程序放入Auto Folders来完成工作。如果出现任何问题，你可以在你的Public Sector pages (page 46) 查看作者列表。

**Scott Evans, Cardiff**

**Stossel no more!**

我们正在运行一个故事，关于Stossel停止工作——除了最后的十分钟，我们才意识到它在最近一个月来是存在的。你应该看到新闻页面的全部。

**The Missing Link Extension**

在没有扩展的情况下，你可以使用GTA Basic。我最初使用的是GTA Basic，我注意到STOS在生成大量的文件之后，它会将它们保存。

**Pick a packer or two**

我有一个第二手的STOS拷贝，它是STOS Compiler的，所以我可以使用简单的游戏来为我的家庭提供。我使用的是GTA Basic，我注意到STOS在生成大量的文件之后，它会将它们保存。

**Scott Evans, Cardiff**

**whose Missing Link Extension we gave you on ST FORMAT Cover Disk? 517. The original programmers aren't handling the registrations any longer——instead Mike Goodman at Goodman International PDL! We now have The Missing Link and the Misty Extension. Both shareware fees are the same as before, but you need to get in touch with Goodman International.
good enough for printing text, there is no way that you can print out In Epson-style graphic mode because the facility just doesn't exist within your particular printer.

You need a modern Epson-compatible printer. I know you said in your letter that you don't want to buy a new printer but you really have no chance if you want to print graphics. You can get a new printer for around £100 - just take a look at the ads in this issue of ST FORMAT.

Upgrading idea

I have a $20STFM and I've been thinking of upgrading to an ST, and I also want to get the DeskTopper. Would it be possible to make an ST from just an ST motherboard, some parts from my old STFM, some SIMMs and the DeskTopper?

Duncan Holbrook, Ludlow, Shropshire

It's certainly an interesting idea, Duncan. After long and considered thought I've come to the conclusion that it is possible - but with a few qualifications.

You can certainly use the power supply and the internal disk drive from your STFM if it's double-sided - if it's single-sided then you need to buy a new drive. You can now use the base of the STFM to mount an ST motherboard because the fixing points are the same, although you'll have to cut out new holes for the analog ports, the Sound Out phone ports and some of the other parts that have changed position slightly. You may be better off buying a new ST base. Most of the major suppliers that advertise in ST FORMAT can provide the parts you need.

Bear in mind that by the time you have bought an ST mother board, double-sided drive, SIMMs and an ST base you could have bought a second-hand - or even new - ST.

Geneva conventions

In issue 55 you said of Geneva that "newer programs designed to be Multi-TOS-compatible run faultlessly with Geneva as long as they don't rely on the Falcon's hardware". Does this mean that any software for my Falcon that uses the DSP, the DMA and the Codec chip won't work if I run it under Geneva?

Petit Joseph, Namur, Belgium

No, all of the Falcon's hardware works perfectly when running under Geneva. I think you have misunderstood what I was saying. In the Geneva review. I reviewed Geneva on the Atari ST, not on the Falcon300 and the line you quoted refers to the the ST, not the Falcon. Perhaps it would have been clearer if I said "newer programs designed to be Multi-TOS-compatible will run faultlessly the ST with Geneva as long as they don't rely on the Falcon's hardware." Sorry for any confusion I may have caused.

The bigger, the better

I have a Falcon3030 that I have bought for multimedia and direct-to-disk recording. I am thinking of getting a hard drive - do you recommend an internal or external drive? What size should I get, and where can I get hold of it from?

Anthony Love, Cleveland

If you are thinking of getting a hard drive for direct-to-disk recording with your Falcon then you should get an external unit. In this way you can retain the internal hard drive for your software and use the external drive for storing your actual direct-to-disk recordings. Also, external SCSI hard drives are much faster than the internal IDE (intelligent drive electronics) drive and more suited to direct-to-disk recording where you need the fastest access times possible.

When it comes to storage capacity, you must remember that direct-to-disk recording takes up a huge amount of storage space. If you are recording at 44.1kHz in stereo then you're talking about 10MB of storage for each minute of direct-to-disk recording. That means that a 50 minute CD takes up 500MB of hard disk space, so there's not much point in getting a 50MB or even a 100MB drive. Your minimum target should be at least a half gigabyte drive - that's a massive 128MB.

If you want a good, reliable external hard drive for direct-to-disk recording, contact System Solutions on 01753 822212. Their Minist range of external SCSI hard drives are fast, small in size, quiet and totally reliable - and System Solutions offer just about the best customer back-up services you can get for the Falcon3030.

ASSEMBLY POINTERS

Tony Wogstaff shows you exactly how to use and abuse dialog boxes in this month's breathtaking instalment of Assembly Pointers.

Dialog Text

Could you please explain how I can read the text entered in a dialog box after it has been displayed. Also, can I set it to some default text before displaying it?

J. Worth, Brighton

setf: The text is displayed and edited in a G. FENT or G. FROXT text object in your dialog, as created with a resource construction kit. To see how you can read and change this text, you need to understand something of how each object of a dialog's object tree, or any object tree, is stored in memory, once the resource file has been loaded with rsc load. Each object, being a button, a box, or the editable text string you are concerned with, is represented by a 24-byte structure. You can use the instructions in obtaining information from this structure.

raset
ob_nr, ob_nr1, ob_width, ob_height, ob_depth, ob_color, ob_font
ob_nascade, ob_nascade
ob_text,
ob_text,
MUSIC AND MIDI

Andy Curtis steps out to the beat and gets his body in perfect shape for some more musical questions and answers.

Aerobics

I teach several classes of fitness freaks and dance students doing advanced aerobics and general fitness exercises to music, or more specifically to a beat. The problem is that the music usually runs out before we're done and we require music in a wide variety of beats and tempos. If we repeat the music track there is always a "clunk" and a gap while we try to join them together. It strikes me that our redundant ST could be put to good use to create music/rhythm tracks to dance to and the repeats could be made to go on as long as we need. Suggestions for a way to do this would be appreciated.

Adrian Naire, London

sstf: Your ST could well be the tool for the job you have, Adrian. There are a couple of different ways of approaching this, however. The first way involves no extra hardware at all, just a loud speaker or TV. Get hold of a package like ProTracker STE from your local PD library or BBS and you will be able to program real drum samples to fit the rhythms and tempos you need. Same each variation as a separate MOD file and simply load them in as you need them. They can easily be set to cycle continuously.

The other way to approach this challenge is to create a beat at a volume equal to the intensity of the dance and then encode it as a simple sequence of pulses. You could then programme the sequencer to trigger the beats in sequence, which is how I got the sound in my ST's Aerobics program.

Les Fields, Burnley

sstf: Sure we can, Les. You are missing one important link in the synchronization chain, the sync box itself. These vary in price from £100 upwards. The sync box connects a MIDI output from your ST music box to a patchbay and you then need a spreadsheet using my BJ10 bubble-jet. I mainly use Gencalc and Sheet 2.0 at the moment.

Lee Hopkins, Reading, Berks

A There's a couple of options you can try. You can't save a spreadsheet document as an image file in any of the spreadsheets we know of. However, you could get Imagegrype Colour 3 from the Fast Club (£115 945 5250) for £19.99 and take grabs of the screens generated by your current software, you could then import the grabs into Colamns for printing. The problem arises when a spreadsheet document is larger than the screen, you can't grab it all.

Alternatively, you can get K-Spread 4 -- an excellent spreadsheet with Epson compatibility. Change your printer to Epson mode and it will display the normal print options. You can get K-Spread 4 at the First Computer Centre for £74.99. HiSoft AVR -- who now own the rights to all Kuma software -- are working on an update to version five, they will then add to their list of printers. The prices start at £19.99 but you can use Epson dot printers, including Canon BJ10 printers. It costs £219.99 from HiSoft, including SpeedoGOS. Remember that to get the best results from AtariWorks and SpeedoGOS you need at least 2MB of memory, a high resolution monitor and a hard drive.

They're just not Falcon-compatible. Remember that you can format high density (HD) disks to 1.44MB from the Falcon's Desktop -- do you really need more disk capacity than that?

If you do, then the latest version of Fastcopy Professional has been upgraded to work with the Falcon030. You can use it to make extended format disks with storage capacities of up to 1.7MB. We recommend that you never format a high density disk to any more than 80 tracks and 20 sectors, to ensure that there is no data loss. You can get Fastcopy Professional from the Fast Club -- give them a ring on 01115 945 5250 for current prices and a copy of their catalogue.

Holocaust bombs

I read with interest the letter in ST FORMAT issue 69 about Holocaust from Cover Disk's 57 bomb on TOS 2.06. Is this the same as Rainbow TOS? The reason I ask is because I have Rainbow TOS in my ST and Holocaust bombs on loading.

Finally, does Captain Blucher keep the stamps from SAEs sent to him with problems? I ask this because I have written to him twice with SAEs enclosed and he hasn't bothered to reply.

Douglas Baird, Carnock, Dunfarmline

A Send your Cover Disk to: ST FORMAT, April Disk Returns, PO Box 21, Daventry, NN11

sstf: If your keyboard doesn't respond to changes in velocity when played on its own then when used as a MIDI output device it will still output a single velocity. However, if you can get an external, touch-sensitive keyboard to fire the sounds in your Soundwave via MIDI, you may well discover that they respond to the note velocity messages.

Are you sure there is a problem with MagiC, or am I perhaps doing something wrong?

Chris Tate, Newcastle

sstf: Unfortunately, at the moment, Cubase has a shortcoming that makes it unable to work with Magic. A little bird told us that Steinberg are aware of this and have approached the authors of Magic with a view to sorting the problems out. However, we can make no guarantees as to the time scale and it might well be sometime next year before anything is released. Watch this space, we'll keep you updated.

Velocity insensitive

I have a Yamaha Portasound keyboard with a MIDI socket on the back, but however hard I hit the keys it doesn't seem to go any louder. I use MIDI through it, will the loudness change, like a piano, according to how hard I hit the keys?

A Trench, Bolton

sstf: Your keyboard doesn't respond to changes in velocity when played on its own then when used as a MIDI output device it will still output a single velocity. However, if you can get an external, touch-sensitive keyboard to fire the sounds in your Soundwave via MIDI, you may well discover that they respond to the note velocity messages.

Are you sure there is a problem with MagiC, or am I perhaps doing something wrong?
**GFA TOOLBOX**

If you want to send your GFA queries directly to Mac Marsden, you can e-mail them to him at: mac@mentor.demon.co.uk.

**Timed-out!**

Is there a command in GFA Basic that would enable me to print the current system time on the screen? I would like to have it displayed in a program I'm writing. Also, is it possible to update this time on the screen throughout the running of my program?

---

Michael Dorn, Fort Augustus, Scotland

**sff:** Yes, you can use the built-in variable TIME$ to access the current time. The drawback with the variable TIME$ is that it is only updated by the computer every two seconds. If this is acceptable to you, then use a procedure PROCEDURE time. A list below to hold EVERY 200GOSU8 time $!

Place the following line at the start of your program:

```plaintext
DO ' YOUR PROGRAM HERE PRINT @T(1,1);"PRESS A MOUSE BUTTON TO END" LOOP UNTIL MOUSE$ PROCEDURE TIME LOCAL $ t:s = TIME$ $ s = SDATE$ EXIT: IF s = TIME$ = MJD$(TIME$) = PRINT PRINT closes files PROCEDURE with the done.
```

---

The following code is just one possible way of copying a file using GFA Basic:

```plaintext
PROCEDURE copy LOCAL $ A LOCAL3 $ print file $$ INPUTS(32000, $) SUB 8,32000 close $s 32000 print $b$ INPUTS(32000,$) close $b$ 32000 endif
```

**Coping**

I want to write a small GFA Basic program which would include a routine to copy a file from Drive A to Drive C. I have tried many times to accomplish this small task and failed miserably. Please could you print a few lines showing exactly what to do.

---

Jonathan Demmy, Swindon

**sff:** The following code is just one possible way of copying a file using GFA Basic:

```plaintext
PROCEDURE copy LOCAL $ A LOCAL3 $ print file $$ INPUTS(32000, $) SUB 8,32000 close $s 32000 print $b$ INPUTS(32000,$) close $b$ 32000 endif
```

**Hard drive connected?**

Is there any way in GFA Basic of detecting whether or not a hard drive is connected to my ST? I'm trying to write an installation program that would install my finished routines to a hard drive partition, if one were to be connected.

---

Mark Leonard, Pucklechurch

**sff:** You can check if a hard drive is connected using this small piece of code:

```plaintext
IF PEKB(65532) = 0 THEN diskOn = TRUE ELSE diskOn = FALSE ENDIF
```

If diskOn is TRUE then a hard drive is connected; if it's FALSE then no hard drive is connected, or if it is, it's not working.

---

**Touch up!**

I would like to update the time a file was saved to disk - is there an easy one word command? Or do I have to load it back in and then re-save it again?

---

William Levy, Thurrock

**sff:** The command you are looking for is TOUCH as shown in the example below:

```plaintext
OPEN "T",1,"A:\SFFORMAT.DAT" TOUCH #1 CLOSE #1
```

To begin with you must open the file. Then, using the command TOUCH #1, after the date and time, and then close the file. Good luck!

---

**PhotoCD**

I need to be able to read PhotoCD images, retouch them and then save them in a format I can import into Calamus SL. I have all the hardware I need for my Falcon30, including a CD-ROM drive - I just need the correct software now.

---

Andrew Lee, Basingstoke, Hants

**A**

There are a couple of good programs that can read PhotoCD images from CD-ROMs. First is Studio Photo from COMPO Software, which has almost all the functions you'll ever need for retouching PhotoCD images and can save in loads of image formats suitable for Calamus SL including TIFF and GIF formats. It costs £79, you can contact COMPO on 01487 773582.

The other program you could try is GemView 3, a shareware image viewer and converter that is fully PhotoCD compatible. In fact, GemView 3 is probably the best image conversion software available for the ST and Falcon30 and is updated almost monthly. You can get GemView 3 from any good PD library or download it from CmpuServe, CIX or from most BBSs. It does have a 30-day usage limit that disables some of the Save functions unless it is registered. Registration costs £18, full details are contained in the document files supplied with the GemView disk.

---

**Jaguar wanted**

I want to buy a Jaguar, but I don't know where to get one from! Also, could you improve the Jaguar coverage in ST FORMAT? No other magazine covers Jaguar software.

---

Lloyd Hannis, Walsgrave, Coventry

**A**

You can get Atari Jaguar games from several places. You can order a Jaguar from Silica Systems for £229 including Cybermorph by calling 0181 309 1111 and using a credit card. Silica Systems also have stores around the country in Devonhams - your nearest store is in Manchester or Sheffield if you want to call in. If you want Jaguar coverage take a look at our sister magazine: Edge, GamesMaster or the new Ultimate Future Games. All new Jaguar games are reviewed in detail with plenty of screenshots for you to drool over. We're here to serve... **sff**

---

Yeessssshh! Atari are claiming Alien vs Predator as the next generation of video games. It combines the thrill of the Wolfenstein perspective with a great film/movie tie-in.
The Gold Standards

Last month’s STF carried a round-up of the products that, over the years, had been awarded the accolade of an ST Format Gold. We were delighted to see that 22 of our titles achieved this high status, and 16 of them are still current products! Who else can give you the professionalism, the attention to detail and, above all, the commitment to the ST/Falcon market than the company that sets the standards...

Programming

Lattice C 5 90%

HiSoft BASIC 2 90%

HiSoft Devpac 2/3 95%/91%

Video/Music

VideoMaster 92%

Quartet 94% Replay 16 92%

Books

The Atari Compendium 91%

Modern Atari System Software 90%

Word Processors

papyrus GOLD 91%

Utilities

Diamond Back 2/3 92%/95%

Harlekin 3 94% XBoot 3 92%

SpeedoGDOS 4 92%

Diamond Edge 90%

A Golden opportunity...

Now for the best bit ... order any of our Gold titles and receive a free, golden gift according to your order value: spend over £30 and receive a 10 lb box of Terry’s All Gold chocolates; spend over £80 for a gold-plated carriage clock (worth over £15) and order over £120 of goods for a Lotus gold-plated bracelet watch (value at least £35). Order before 30 November 1994 and we will engrave the first two letters of your choice - a truly golden opportunity!

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HARRY V. Henry IV (part 1 & 2)
HARRY VI (part 1 & 2)
MACBETH - currently a school syllabus
BUS 6: Over 600 business letters
covering every aspect from accounting to employment.
BUS 22: Home Accounts + Payroll +
Checkbook - 3 useful file programs.
BUS 8: Compost Office Management
Program. An extraordinary program for a sole trader or home use.

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catalogue complete with free
P.D.L. software.

EDU 13: Francois: excellent French
language learning program.
EDU 16: Russia in the 1930's: Full of info
about Russia, great revision aid.
EDU 20: Atlas: super informative program
about the world we live in.
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Trekkies, lots of interviews,
facts and a slideshow
ODDS 29: ASSISTANT CHEF: super
program with over 120
recipes.
BOOK 16: SHERLOCK HOLMES
STORIES: 13 stories about the
master sleuth.
ADV 20: TEXT ADVENTURES: Crowleys
House, Dark Pearl, Starwreck,
Devilsnb, Defttastar. (GFA run
prog needed for last 2).
EDU 8: From Pits to Parliament: A
potted history of England.
BUS 16: FIVE DATABASES: Book,
Database, Atari Cash
Register, Cinema File
Manager, Class, Record
Base
ULT 27: Bootblock, Pock Ice, Hard Up,
Cheatre and lots more.
ULT 38: Pool Predictor, ST Sheet - a
spreadsheet, plus a host of
accessories.
GAM 37: COMBAT: Excellent game
the ultimate warshoot em up
GAM 31: Colour Clash, Entombed,
Dungeonz, Maze, Solitaire.
GAM 15: Allen Blockade, Spot II - excellent stuff!, Sim Pig another good game by
Asimathsoft.
GAM 26: Star Trek - the Klingon War: well drawn with good game play.
GAM 25: Entombed, Klawno, Lottoman (WOWY), Mr Dice, Plaxata, Froggy 2, Pong
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own puzzles or solve those
you are stuck with. 5 programs & 2
accessories.
ULT 16: Fuzzers Delight, 24 packs to
reduce disk space
ULT 19: 32 assorted bits and pieces ranging from drags through fonts and ramdisk to virus
killers.
Team's a soccer game that's only going to run on the STE and Falcon. Nick Peers and Simon Forrester ask the obvious question: why?

TEAM
WRITTEN BY: IMPACT SOFTWARE
PUBLISHED BY: IDS
PRICE: £24.95
MACHINES: ALL STEs, FALCON, 1MBYTE REQUIRED
DUE: NOVEMBER

Team looks set to follow HERO in firmly establishing IDS as a powerful new player in the ST games market. It looks like being the game that Goal should have been, but has been designed and coded by Impact Software who consist of three people: Ralph Lovey who did the coding, his brother Greg who composed the music and Jocelyn Dave-Vienne who created the graphics.

Having stolen an illegally fast company car, Nick and Simon, accompanied by Steven Raynes (ex-Aquila PD), escaped into the country for, er, some serious investigative journalism purposes. Finding themselves in Syresham in Northamptonshire, they discovered Ralph and his brother. Sniffing an interview, the three decided to team up and interrogate the two, and immediately got straight to the point:

That question
Why program another football game when Kick Off and Sensible Soccer have dominated the scene for so long? Ralph: “I thought the STE needed a football game because the others are so below par, considering the machine's capabilities. I was a fanatical Sensible Soccer and Kick Off supporter, but I feel Kick Off fans in particular have been putting up with some annoying glitches; the fact that players can disappear, flicking green rasters and goals that are only partially drawn, with the goalkeeper walking on the crossbar. On the other hand, while Sensible Software did a more professional job, I have less respect for them, because Sensible Soccer was in no way innovative.”

Team is STE-specific, and when you consider the use it makes of hardware, making the bitter, overscan and other STE-only features, it's not hard to see why. Ralph wants the game to be an accurate simulation in which the ball obeys physics, unlike Sensible Soccer “where the ball is like a blanket” when it falls”. Thanks to overscan mode, which expands the available screen by 40 per cent, the players can be larger and more detailed than they are in Sensible Soccer, without reducing the size of the pitch seen on screen. Ralph even manages to get 32 colours on screen at once from the STE's enhanced palette of 4,096, while the whole thing runs at 50 frames a second making the game run smooth and fast. “It was really hard to do – it took me a month just to get the entire screen thing working properly.”

Wot no STFM?
There are good reasons why Team won't be appearing on all STs. “Even on the STE the game is always close to the limit, and that's with the bitter and hardware scrolling. To do it on the STFM you'd have to do all the sprites using software routines, and copy the entire screen every time, which is why there haven't been any football games so far with a proper pitch. Although it is theoretically possible to do a form of hardware scrolling on the STFM, it takes up an awful lot of processor time and just isn't practical.”

But aren't there any more positive reasons for making games STE-only? Ralph thinks so. “As far as games go, the STFM has been pushed as far as it can. So much more is possible with the STE. Although a lot of people have sort of accepted that it's not a game machine, there's hope that with Team, HERO, Obsession and Stardust appearing, we can get people to realise that there's a new games scene developing.”

Impact are also producing Team for the Falcon. Although Ralph claims it won't be “earth-shattering”, it will boast 256 colours, 16-bit sound and high resolution graphics. Compared to Ishar and other games that have recently appeared for the Falcon,
Talking...

IMPACT ON ATARI

Ralph has been following events in Atari with quite a bit of interest, and has a few opinions.

"I think they're doing the Jaguar correctly and it's going to be a big success, but I think they're stupid turning their back on computers now, especially seeing as we've recently seen a nose-dive in consoles. Nothing can touch the Falcon for music and it's one of the best graphics workstations for the price. It's not like the ST - the STM particularly - where do seem inferior compared to the console versions. The Falcon could wipe the Mega Drive no problem if it had the chance, but overall there's no longer the innovation of the mid-eighties when the ST came out."

Ralph does have some interest in developing for the Jaguar at a future date, however.

"It's tempting, but it's not like making the jump from the ST to Falcon. There's a lot to be learnt all over again, but at the moment we'll just concentrate on the STE and Falcon."

And that's just fine by us.

PCs and Amigas too?

There's a good chance that Team will appear on the Amiga and the PC, but Ralph is very interested in coding it. "It would take a long time, in which we could be developing new games on the Atari. For a long time there've been port-overs from the Amiga and PC by people who only roughly knew what the ST's about."

By concentrating on the STE, Ralph has developed routines that he never thought possible, which he's used in Team, including "running all the blitter sprites in overcan mode, hardware scrolling 50 times every second and more than sixteen colours on screen. It's just something you learn from other programmers. There's no manual that tells you how to achieve what we've done with Team. You really have to experiment and teach yourself." Ralph won't be the one to write that manual however. "I don't think I have the patience, I just want to make games really."

Surprisingly, Team was produced on a shoestring budget. "I use DevPac for absolutely everything. All the graphics were done with Deluxe Paint and all the music with ProTracker. The only real investment was the Falcon, Ralph's brother, Greg, has only been using the ST and Falcon for musical purposes over the past year, but the many songs we heard suggest that the high praise Ralph has for him is founded on more than just fraternal affection.

Impact on IDS

Impact Software are developing Team for IDS, who entered the ST games world last month with the highly rated HERO (STF 64, 86%).

How did IDS and Impact meet?

"It was actually quite by coincidence. They came up with an offer that we liked and they also sounded far more enthusiastic about the project than the others." That's certainly true; IDS have demonstrated faith with the ST as a development machine. Indeed, Ralph's rapid rise to prominence on the back of Snackman is something IDS are keen to repeat for other budding ST programmers. That stretches to you, our readers, too. If you have a good idea and the means to implement it, write to IDS at: 1 Fordhouse Lane, Stretton, B30 2NH. As for Team, it looks like being excellent and we'll be reviewing the full version when it's available. That should be early December, so hold back that list to Santa a little while longer. stf
Last month we gave away a copy of Personal Pascal on the Cover Disk. Over the next few months Simon Forrester shows you how to use it to program your own applications.

PASCAL is a simple yet powerful language to learn, even though it wasn't specifically designed for beginners. Personal Pascal, the version that we gave away last month and that we'll be using for this series, is a particularly good version of PASCAL — it's unflawed, comprehensive (containing lots of useful commands, libraries, and examples), and easy to use. Any of course, it's yours for the price of a back issue (page 85) if you missed last month's Cover Disk copy.

Whereas books can be unnecessarily complicated, and put you off right from the start, we're going to take you through using Personal Pascal the "isn't ST FORMAT good at explaining things simply?" way, over the next few months. At the end you'll be able to write your own utilites and applications.

Superunknown
PASCAL, like most other languages, relies on variables. Variables can be thought of as envelopes — easily handled packages that contain information.

When dealing with these envelopes you can either ignore or acknowledge the contents of the envelope. These variables can contain two basic types of information:

Strings: A string is a set of characters, or a string of characters as we call it. We'll refer to strings by enclosing them in speech marks, so an example string would be: "ST FORMAT".

Integers: If you've read the GFA tutorial this is a word you'll have found it hard to miss. An integer is simply a whole number. This means that 7 can be stored as an integer, but if you tried to store 4.276 as an integer you'd just end up with 4.

If you do plan to write in PASCAL on different machines, forget all thoughts of things like real values (like 3.141). They might get you into trouble, because PASCAL doesn't have any standards between packages.

What you really need to understand about variables is how they're used in a program. The slightly unintelligible part about variables earlier helps you with that concept. Last month, Nick wrote a little program that involved two people guessing numbers. The user had to input a number of his own choosing, which, once entered, was stored in a variable. This meant that although the listing could cope with any number entered, it didn't actually contain the number. Instead, it dealt with the envelope containing the number, which in this case was called 'num'. The listing therefore doesn't compare the number entered by the guesser with the correct number; it compares the guess with the variable 'num', which contains the actual answer. That's the value of variables — they can be used to process information by a program that doesn't even know what that information is. Nick's listing didn't know which number the user was trying to guess, it just stored it in a variable and remembered the name of that variable. Confused yet? Don't worry. All will become clear, eventually.

Program structure
The next bit you have to understand is the way programs are laid out. If you already have an understanding of BASIC, you're in for an easy ride, because PASCAL's layout is nowhere near as complicated. Program structure relates to more than just flow diagrams — you're going to have to learn several aspects of PASCAL at once for this concept. Fortunately, it's one of the few difficult steps — everything afterwards is simple.

The Personal Pascal library, in the kind of compressed form that enables it to sit in with your programs while taking up little space on your disk or in memory.
PASCAL

Programs in all languages work in one simple way: the instructions to be executed are laid in a row and the processor or interpreter works through them in sequence. Obviously, it's possible to jump to other parts of the program, and jump back - but you do quite a lot of jumping about in fact - but in essence your program runs in a straight line until it's told to stop.

PASCAL, although following this philosophy to a great extent, works in a slightly different way. It can be visualised as one line, most of which is fragmented. PASCAL works in blocks, and halfway through a program you jump to another block completely, when that block has finished its execution you jump back.

Programmers in other languages call these smaller blocks subroutines, but PASCAL calls them procedures. So, to recap, you build up your programs of blocks, each of which performs a different function. These blocks, which create a program of small, fragmentated chunks, can be linked together, the processor jumping from block to block on your instruction. Which leads us neatly to...

Your instruction
Aha, the difficult bit. Your instruction. Writing instructions in PASCAL is a lot easier than it seems, because PASCAL actually has very few commands. You'll find a full list of them further down the page. Your instructions are going to be one of the following classifications:

Manipulation: Moving variables from one to another block, or from one variable to another. For example:

\[
\text{begin} \quad \text{variable} \quad \text{assignment} \quad \text{end}
\]

Decision: This is where you use the contents of a variable to make a decision, usually for program flow, but effectively for absolutely anything you like.

\[
\text{begin} \quad \text{if} \quad \text{condition} \quad \text{then} \quad \text{statement} \quad \text{end}
\]

Program flow: Moving the processor or interpreter to a different part of the program. To the beginning or end of a procedure, for example.

\[
\text{begin} \quad \text{procedure} \quad \text{end}
\]

Action: It's all well and good being able to manipulate numbers and jump around your program like a blue-bumped fly, but your programs fairly useless unless it actually does something. In Nick's case, he had to ask for numbers and display them on screen. These are both actions.

Actions speak louder than...
Actions are truly scary things when it comes to PASCAL. If you use BASIC, you're no doubt used to commands like PRINT and INPUT, which are integral parts of the PASCAL language.

By looking at the contents of a variable or a block, you can make a decision, usually for program flow, but effectively for absolutely anything you like. You can make it do anything you like.

Begin

\[
\text{begin} \quad \text{begin} \quad \text{end} \quad \text{begin} \quad \text{end}
\]

In PASCAL, there are two types of variables:

- Scalars: Variables that hold one number at a time.
- Arrays: Variables that hold an array of numbers.

Arrays can be declared at the top of a block, and are used to store data that can be accessed at any time during the block.

\[
\text{var} \quad \text{array} \quad \text{of} \quad \text{integers} \quad \text{begin} \quad \text{end}
\]

Over the next few months you're going to learn the basics of how to use these commands, and learn how to utilise some of the other features of PASCAL that has personally added.

PERSONAL PASCAL

Did you miss last month's issue of "ST FORMAT"? Then you missed your Cover Disk copy of Personal PASCAL. All is not lost - turn to page 86 and order issue 64. On page 78 of that issue there's a special offer for the Personal PASCAL manual and product registration - for just £19.95 from HiSoft. Cut out (or photocopy) the coupon, fill in your details, write the cheque, slip it all gently into an addressed envelope, add a stamp of some description, pop it in the post and you're away. (Are we taking this step-by-step instruction thing too far?)

Getting on with it
Time to get writing a simple program to illustrate a few concepts. It's almost inevitably simple, and is the first program everyone writes in a new language, to print your name on screen.

\[
\text{write} \quad \text{("Hi, I'm Simon")}
\]

Here you've used the 'write' command (an additional command) and given the command the expression of a simple string: "Hi, I'm Simon".

The data retrieval listing that comes with Personal PASCAL and gets you started with writing your own programs.
More complicated, please

Try something a little more impressive – a loop. First, a loop that vanishes off into infinity, repeating forever, or at least, until you stop it by breaking the program.

```
loop
  write ("(Still going)");
end;
```

Dead simple, really. The 'loop' command tells the interpreter that everything until the 'end' statement must be repeated ad infinitum. You've already seen the 'write' statement.

Really complicated, then

Okay, you're going to write a password program. Like Nick's program last month, this program asks for a number and keeps looping until you enter the correct one.

We'll go through it line by line when we've written it. First off, here's the main program:

```
program (input, output);
var num: integer;
begin
  while num<>105 do guess;
end;
```

Now you're getting to the meaty bit. The 'while' command is followed by an expression, and finally by a procedure to execute if the expression is true. For instance, this command executes the 'guess' procedure, as long as the value of 'num' is bigger or smaller than (isn't, in other words) 105. As soon as it is, the program continues:

```
  readln (num);
```

And here's where you ask for the user's number, which you'll be storing in 'num', making use of that seemingly pointless wibble about envelopes.

As the lines become more indented, you know you're getting into program loops.

As you can see, you can set up several variables at once at the beginning of the program you're writing.

```
  var
    r: real;
    i: integer;
    f: char;
    s: string;
    path: path_name;
```

And finally, the line:

```
end;
```

You've seen this before, but this time it's not specifying the end of the program, so much as the end of this procedure. As you can see, the syntax is different (it's followed by a different symbol). Once again, this command correlates with the 'begin' command a little while ago.

Cheery bye

We've covered the basics of variables, program structure, commands, loops and routines. Next month, we're going to be dealing with more complex instructions, and starting to write a database.

For now, the best thing you can do is practice. Take a look at the programs supplied here, and the program Nick wrote – they're all in the same vein (it's easier for you to understand that way). If you want to fiddle about with them, do so – the best way to learn is by experimenting with these things yourself, and seeing where you went wrong.

Remember, it's impossible to damage your machine by making a programming mistake, so feel free to tie your brain (and the program) in knots, until we get a chance to mail your intelligence next month, leaving your brain suitably battered and bruised. hopefully.

Don't worry about things like packed arrays – you'll have to buy the Personal Pascal manual for that stuff.
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Back by popular demand!
If you want to get into programming, a good place to start is with GFA Basic. Over the next few months Simon Forrester teaches you how to use it to create your own programs.

GFA Basic is a great language if you're just starting to learn how to program. It's easy to understand, simple to use, and covers all the techniques you'll need to program in more powerful, lower level languages like C and 68000. Over the next three pages (and the coming months) we'll be starting with the basics of programming, finishing with completed, ready-to-run programs that should be useful to you as learning examples and, later on, things like disk utilities. This month we start with a gentle slide into the language, worrying about the complexities of programming full utilities in a few month's time. Right now, though...

How does it all work?
GFA Basic comes in two sections – the interpreter and the compiler. The interpreter is the part you need for creating your programs, and they can also be run from within the interpreter.

The compiler takes Basic programs that you've written and turns them into machine code, which the ST can run without needing any other software, including the interpreter. A compiler is essential for creating programs to be run from your Desktop for example. For now, though, you don't need to create standalone programs, so you only really need the interpreter. Be warned, though – we'll go into compiling at some point, but it's probably wise to wait until you know you're going to enjoy this programming thing before splashing out the extra cash - the compiler is an extra £30.

On the other hand, you can take advantage of our special offer in Reader Offers (page 83) – the GFA Basic package, comprising GFA Interpreter, GFA Compiler and GFA Shell, is available for the bargain price of £59.95.

Let's get on with it
Load up your interpreter, using the instructions provided. We're not going into the mechanics of editing listings and using the interpreter – these instructions are in the manual, and it is just a cut-down word processor with special modifications for editing program listings. What's important is what you type in, and why.

The first thing we're going to do is take a look at how a Basic command is set out. In the flesh, it looks a little like this:

```
'command' 'parameters'
```

So a line in GFA Basic might be:

```
PRINT "Hi there"
```

Yup – it's the first program that anyone writes in Basic. This line is so popular because, although it's simple in structure, it demonstrates the language perfectly. Breaking it up into our sections:

**Command** - the command is PRINT. This command is probably the most frequent in Basic because it displays things on the screen in text form. The parameters, which it is to display, are placed directly after the command.

**Parameters** - in the case of PRINT, the parameter is the text that's to be printed, but with the wide variety of commands in the

---

**STRINGS**

Strings are funny things. In essence, all they are is pieces of text, but they can be much more than that. In the PRINT command you used earlier, for example, "Hi there" is actually a string, being a string of characters making up the words "Hi there" (don't forget, that also includes the space between the two words).

Remember Derek? He can do many things, even strings, with the addition of a simple character. To demonstrate, give this simple program a try:

```
Derek$="Hi there"
PRINT Derek$
```

As you can see, Derek did his job well. He was told to represent the letters forming "Hi there", and that's what he did. It'd be more than his job was worth to be a number, because he's got a $ after his name. You can do maths using strings as well:

```
Derek$="No"
derek$=derek$+", really.
PRINT derek$
```

Instead of adding the values, Derek has simply added the string to the one he's already carrying.
Don't worry about the spacing – the interpreter inserts its own.

Line one contains the singular command DO. This marks this line as the start of what we call a 'loop'. The command DO simply tells the program to do the following, but when you come to the command LOOP, you're telling it to jump back to this point in the program and start again. Line two is our famous "Hi there" line; doing what it does best. And line three is the all-important command that line one's waiting for, LOOP.

This is, therefore, a program that prints the words "Hi there" over and over, without end, again and again. Ad infinitum. Boring. Let's make this whole thing a lot more complicated, by changing the subject completely.

A new subject as promised

Right, how about some variables? Just to confuse you, Derek is a number. This is because there is a line in a program that says:

```
derek=237
```

Now, whenever Derek is referred to by name, he insists that he is, in fact, 237. He insists this to such an extent that, when the line:

```
derek=derek+1
```

is issued, he assumes the number 238 instead. The command may as well have said:

```
derek=237+1
```

and, as we all know, 237+1 does, in fact, equal 238. (Maths 'A' level stuff, that.) When the command:

```
PRINT derek
```

comes along, the number 238 is displayed on the screen, because that's what Derek insists he is. Make no mistake though, he has no influence over the command:

```
PRINT "derek"
```

because his name is in speech marks, which means that the PRINT command assumes it's just a piece of text. This tells you two things – the PRINT command is a flexible command that can display more than text, and Derek is a variable.

Variables are important. They're what keep Basic programs running. For example, take a look at a simple program that gives you the times table for a number, which you have input. This program introduces a few new commands which we'll go through later.

```
INPUT t
FOR i=1 TO 12
PRINT i;"times";t;="";i*t
NEXT i
```

There. That wasn't so tough, was it? Starting with line one, you're dealing with a variable here. Like PRINT, INPUT is a command. It tells the computer to take an input from the user. Following it is a parameter, in this case the name of a variable to deposit the number into. The input can only be a number, as the variable is only capable of handling numbers.

Moving on to line two – remember that DO command? The FOR command is similar, only it has a few rules. What this version brought its biggest mates, in the form of some hefty parameters. The first is i, the variable that turned up in the FOR loop. The 'i' symbol after the variable signifies that there's more to come – and goes on to print a string of text, signified by the speech marks, then the number held in the t variable, then the word 'is', and finally 'i', a mathematical expression. The star signifies 'times' – multiplication is far too important in computing to be signified with an 'x'. The entire command works out what i times t is, and prints the result.

Finally, line four introduces the NEXT command, sending you back to line two, where the FOR command is waiting. Just as the DO command signified the end of the DO loop, the NEXT com-

```
OH >derek=237
OK >derek=derek+1
OK >print derek
238
OK >print "derek"
derek
OK >
```

mand signifies the end of FOR. Common courtesy dictates that the loop's variable, i, be placed after the command, though this isn't strictly necessary.

Ta-ra for now

In the space of two pages, you've learnt the basics of Basic. You've studied a little about the way programs flow and loop, and you've touched the surface with variables, learning how Derek can be any number or command that you want him to be.

To quickly recap what you've learnt so far, using your brand new techniques in different setups, you're now going to deal with prime numbers. Prime numbers have nothing to do with Basic, or indeed computers. They're a maths thing – a number's factors are all the whole numbers (integers) that it's divisible by. The factors of 6 are 1, 2, 3, and 6, because

```
So this Derek fellow can be a number as well, can he? Be careful never to encode him in speech marks, or you'll just print the word 'Derek'.
```
THE INTERPRETER

The interpreter is the main piece of software you'll be using to write and test your Basic programs. It's a simple little affair, into which you type your program, moving around the text with the cursor keys or mouse if you wish, altering pieces and generally having a good time.

When using the interpreter, you can only have one program in memory at once, though. That means that each time you start a new program you have to clear the memory by clicking on New in the menu bar. This tells the interpreter to clear all traces of the old program to make way for a new one. Bit like life really. No?

To test your program, simply select Run or Test, and your program will run. You can save your programs out using the Save option, and using the standard dialogue box that appears, and you can load programs in the same way.

You may notice that, when typing some lines, the interpreter refuses to accept your input as valid. This is because it has found a fault with your program, and sees no point in letting you type any more until you've fixed what you've already done.

So remember - go slowly and carefully. It makes more sense to get it right first time than to spend your valuable learning time wondering why your program won't do what it should.

If you want further details on compilers, assemblers, interpreters, and a broader understanding of this whole programming thing, you can find a general introduction to programming in issue 83. It's well worth a read. Mind you, I would say that because not only did I write the thing, but what they scrape together from back issue sales is loosely termed 'Simon's salary'. Only kidding.

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FREE ★ FREE ★ FREE ★
This month, Simon fails yet again to come up with a cheat for life itself, and instead has to make do with some of the most devious game cheats our readers could muster.

Another month, another set of games instantly depreciating in value as we strip the essence of mystery and difficulty away from them. I hope you're satisfied. If you've discovered any mind-bogglingly clever tricks, send them in to us at:

Gamebusters, ST Format, 30 Monmouth Street, Bath, Avon, BA1 2BW. You could win some cash, or you might just get the pleasure of seeing your name printed in this fine organ.

**MANIAC MANSION - COMPLETE SOLUTION**

For everyone having trouble with Monkey Island's granddad, Maniac Mansion (STF 49, 73%), Andrew Brown of Goole (eh?) has provided a complete solution and everything. For his trouble, Andrew will receive the Gamebusters Big Cash Prize (cue crowd reaction), as well as adoration by the thousands of stranded players that he's helping out.

Those of you who've never played Maniac Mansion and honestly never intend to can at least rest safe in the knowledge that you should ever be faced with any kind of breach to national security involving the game, the solution's right here. Phew, eh?

**Take note...**

Before we tuck into the meaty part of this solution, there are five things to read and remember.

- There are two ways out of the dungeon if you happen to get caught.
  - The first and easiest is to use the rusty key. If you've got two kids trapped there, you can place one by the doorknob, and use the other to push the loose brick just below the left-hand window. If you switch back to the first kid, you'll have time to get him through the briefly-opening door.
  - Don't eat yellow snow (bit of a tip for life as well, that one).

- There are two ways out of the dungeon if you happen to get caught.
  - The first and easiest is to use the rusty key. If you've got two kids trapped there, you can place one by the doorknob, and use the other to push the loose brick just below the left-hand window. If you switch back to the first kid, you'll have time to get him through the briefly-opening door.
  - Don't eat yellow snow (bit of a tip for life as well, that one).

**The thirty point plan**

Time to get to it. Make sure that your three kids (David, Syd and Bernard) are standing in front of the house. To get inside the house you'll find a key hidden under the doormat. Pick up the doormat and you'll be able to pick up the key. Use the key in the door and send all three inside.

1. Take Bernard to the library, open the loose panel directly below Chuck the Plant and get the cassette tape.
2. Move Dave to the kitchen. Edna should now catch Dave, which clears this route for the others. Dave can stay in the dungeon for now and should use the trick described earlier to let the others out when caught.
3. Take Syd to the storage room and pick up the fruit drink and glass jar.
4. Use Bernard to go to the kitchen and get the flashlight, then open the refrigerator and get the pepsi can.
5. Move Syd into the kitchen and give the glass jar to Bernard.
6. Take both Syd and Bernard to the painting room, where Syd should pick up the wax fruit and Bernard should get hold of the paint remover.

7. Send Syd up the next flight of stairs to the top just outside the darkroom, where he'll meet the green tentacle. Give the tentacle the wax fruit, then the fruit drink and he'll let you pass.

8. Switch to Bernard and send him here to get the dime. Then go left and climb the ladder to the green tentacle. Get the record on the shelf and find the yellow key behind the tentacle — get it.

9. Send Bernard to the piano room and put the cassette tape in the recorder, then put the record on the victrola. Turn on the cassette recorder and the victrola. Wait until the glass breaks, then turn both off. Clever huh? Get the tape again.

10. Send Bernard into the sitting room, where he can open the cabinet and put the tube in the machine there. Turn on the machine and the chandelier will shatter. Turn off the player and get the rusty key that fell from the broken chandelier (the dungeon key). Open the old radio on top of the cassette player and get the radio tube.

11. Send Syd, who may be in the dungeon by now, to the weightlifting room and have him use the Hunk-O-Matic machine. Then send him back outside the front door, to the left of the stairs. Pick up the bush there to reveal a grate, which you can open. Enter the grate, and walk to the right, eventually coming to a water valve.

12. Send Bernard to Edna's room and she puts him in the dungeon. Unlock the door with the rusty key, and make your getaway. Get the silver key that's next to the fuse box in the basement, then send him to the storage room. Unlock the storage room with the silver key and go to the pool ladder. Fill the glass jar with water from the pool.

13. Switch to Syd, and turn on the water valve. This drains the pool and exposes the reactor's cooling rods. You're going to have to move fast now (and maybe save your game).

14. When the Interval is over, send Bernard down the ladder to get the glowing key and the radio. As soon as he's safely back on the cement, have Syd turn off the water valve to refill the pool.

15. Send Syd and Bernard to the garage and have Syd open the garage door. Bernard should use the yellow key to open the trunk, then get the tools.

16. Send Bernard to the plant room and get him to use the paint remover on the paint blotch to reveal a door. Open the door and enter the broken wires room. Turn on the light, open the radio, use the batteries in the flashlight, turn the flashlight on, and walk to the wires.

17. Send Syd to Edna's room and she puts him in the dungeon. Send Dave push the loose brick to free Syd and position him in front of the fuse box. Now get Syd to open the fuse box and turn off the circuit breakers.

18. When the interval scene ends, Bernard should fix the wires with the tools. Then switch back to Syd and turn on the circuit breakers. The video machines are now powered on.

19. Send Syd and Bernard to the hall outside Edna's room and have Bernard open the door and enter. While Edna takes him to the dungeon send Syd into her room and go right to the ladder. Climb the ladder to the safe room. Turn on the light and open the painting to reveal the wall-safe.

20. Have Bernard use the rusty key so that he and Dave can both escape the dungeon. Send Bernard to the plant room and use the jar of water on the man-eating plant. Then give the Pepsi to the man-eating plant, and climb up it to the telescope room. Put the dime in the slot, then use the right button to move the telescope to the right.

21. Send Dave and Bernard to the door outside Edna's room and have Bernard give the glowing and rusty keys to Dave, who should open the door and enter. While Edna takes Dave to the dungeon, send Bernie into the room. Walk toward the piggy bank, open it, take another dime, then go to the telescope room.

22. Bernard should use the dime in the slot, then push the right button to move the telescope further to the right. He can then use the telescope to read the combination of the wall-safe. Don't forget it!

23. Switch to Syd and open the wall safe with the combination you've just discovered. Get the envelope open it and get the quarter. Now send Syd back down the ladder, where Edna catches him and locks him in the dungeon with Dave. Switch to Dave, who should walk to the outer door and unlock the top and bottom padlocks with the glowing key. Open the outer door to the secret lab and have Dave unlock the right dungeon door with the rusty key.

24. Send Syd into the arcade room and play Meteor Mess with the quarter. Note down the high score on the game.

25. Send Syd and Bernard to the doorway outside Edna's room. Have Syd open the door and enter. When Edna takes him to the dungeon, send Bernard to get the hamster and reveal the purple card key. Get this and send Bernard to the radio room (watch out - he may get locked in the dungeon first, though).

26. Switch to Dave and have him open the inner door to the secret lab, using the high score from the Meteor Mess game for the combination.

27. Switch to Bernard in the radio room and have him use the radio tube in the tube radio. Read the poster, turn on the radio, and use the radio to call the meteor police, using the number you got from the poster.

28. Now send Bernard to Ed's room so that he's taken to the dungeon. Wait for the meteor police to arrive and take out the purple key switch.

29. Switch to Bernard in the dungeon, get the badge on the floor and go into the secret lab. Give the badge to the purple tentacle and, when it runs away, enter the Zom-B-Matic room. Walk right and use the purple card key in the key slot to enter the meteor room, and turn on the light switch.

30. That's only 29. Hmmm. Go and make yourself a coffee?
LETHAL WEAPON

The first in our mixed bag of tips comes from Nick Hine of Devon who, God knows how, managed to find this handy keypress cheat for Lethal Weapon (STF 43, 62%). No one mention film tie-ins.

To select a level to play, press [Alternate], [Y] and any number from 0 to 9. Also, if you press [Control], [Left Shift], [Alternate], [Y], and any number from 0 to 9, you'll find your ammo increasing by ten each time. Once you've got 99 cartridges, you'll see your lives increase. When a 'plus' sign appears next to your lives, it indicates another row stacked, invisibly, on top of them.

Finally, to give yourself loads of bullets use [Shift], [Alternate], [Y] and any number. Thanks, Nick - that should ruin everyone else's enjoyment of the game nicely. Good job.

SPIRIT OF EXCALIBUR

He's back again, this time with a cunning little discovery that might aid in the completion of this medieval side. On the game disk, you'll find a file called STORE.DOC.

BACK TO THE GOLDEN AGE

It's Rhys from Wirral again, and he's got another cheat. This time, it's for the Game That No One's Ever Heard Of (STF 17, 52%). Simply find a shop selling explosive vials, and buy the one with the most units. For some reason your money will now increase. Great.

CANNON FODDER

Shelton Thacker, Lowestoft's finest soldier, has come up with a rather handy little cheat for Cannon Fodder (STF 57, 93%). Sensible Software's stormer of a war game. To promote the leader of your squad to a general, wait until the start of a mission and select the Save Game option and save your game as J00LSRIP. You can only have one general at a time, but they're still handy to have around. Thanks. It now has no challenge at all. Cheers.

FRONTIER

Look - it's just a quick one for Elite, the old classic (STF 55, 91%). If you're having trouble hitting people with missiles simply turn the star dreamer time control up to full and your missile will hit every time. Simple but elegant, this tip is courtesy of Ben Bowen of Mid Glamorgan. You won't even have to bother aiming now.

PRINCE OF PERSIA

Rhys Timson of Wirral, no less, has a few tips for the Brother-Bund classic (reviewed in STF 31, 90%) that redefined platform graphics. Pity it didn't do much for the gameplay. Anyway, on level 9, when you're faced with the guard that doesn't advance towards you, there's something you can try. When you're face to face with the geezer, pull down to put your sword away. As soon as the guard advances press [Fire] twice and you'll draw your sword and hit him.

Meanwhile, on level 12, when you have to fight yourself (happened to me in a dream once), run to the other side of your enemy. When he stops trying to go for you, put your sword away and run into him, quickly. Positively enhanced that one, methinks.

GHOSTBUSTERS 2

Guess who. Yup, Rhys. He's got a solution to the last level of the rather excellent film licence - as reviewed back in issue 7, scoring 62%. But there's no way we're going to let him spoil the surprise of what happens. So, for anyone who's got this far and got stuck (I know I have), you might find the following, cryptic messages helpful.

Yanosz - Use the slime gun. Keeping using the slime gun. It'll work in the end.

Vigo - As soon as he turns up on the scene in solid form, flatten him again (if you see what I mean) with two proton gunners.

Ray - Use the proton gun. Okay?

ISHAR

Waaay back in issue 61, if you can remember that far back, Ashley Taylor was having a problem getting Ishar (STF 37, 90%) to work from his hard drive.

Every time he tried to save his game to Drive C, he got the 'Disk full' message, despite having 15MB of space free. Tex from Northumberland has solved the mystery for him, though.

The trick is to keep Ishar on either Drive C or D, but no higher. That'll be because the programmers didn't bother programming it for any other partitions. Honestly - what is the world coming to? I ask you. Blame it on TV, myself...

Yeah - an aversion to strange people. Right.

We don't really like strangers round here...
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FEEDBACK

When all your mail is in red and hails from BT, SWEB and Access it’s bad news. When it’s from dedicated ST fans asking questions, making points or having a pop it’s good. Trenton never reads post sent to his home.

Ashes to ashes

I write this letter calling for the re-birth of Stosser, the STOS related disk magazine. Stosser died on 20 September when it reached its 16th issue.

Stosser was there for STOS users who needed help, advice or even wanted to make new friends. With new software and extensions given away with each issue, it helped users build up their STOS library. Yet it was not the authors of Stosser who killed it but the lack of contributions. Stosser was read by over 500 STOS fans but only a few submitted material or articles.

The lads that created Stosser made no profits – in fact it cost them money to produce every month. All I want from you is a letter telling Stosser that you support it and will send in a routine or something else created with STOS. Anything will do, honest! Send me a letter calling for the re-launch of Stosser and I’ll pass all of them on to its creators (a fine bunch of lads!). If they decide to re-launch Stosser then I will let everyone know by sending another letter into ST FORMAT.

RIP Stosser, you were taken so young.

Lee J Round Durham

Candyman (x5)

Dear Feedback

I know your technical editor is a bit strange (you’re telling me – Trenton) but did he really direct the films Hellraiser and Nightbreed? Or am I barking up the wrong tree?

Robert Jones, Birmingham

stf: Blast, another deafious ruse spotted! We thought Clive had effectively buried his past when he cunningly changed his surname from Barker to Parker. Tak, tsk, and we would have gotten away with it too had it not been for those meddling kids.

Omega Format

Dear Trenton

Just thought I’d correct a couple of mistakes in your FORMAT Gold round-up (The movie Candyman. The game Nightbreed was reviewed in STF 16, but we’ve sold all those issues. Sorry.

FastCopy PRO and Fonty) we would be commissioning and publishing many of the new and interesting programs that you bemoan the lack of on the reverse of the Wonder Disk flyer that’s sent out to subscribers.

I’m not saying that every issue of ST FORMAT should contain a two-page spread on the evils of software piracy – a smattering of anti-piracy messages littered around each issue is much more effective at making your readers think about the consequences of their actions. With so few active souls left in the Atari market we need all the help we can get from big influential organs like yours. How about urging readers to go through

LONG BUT CONTAINING SOME DAMN GOOD POINTS

Dear Trenton

Oh dear. The last time I wrote a letter to ST FORMAT it was in response to the one from Steve Carey, who was bemoaning the fact that LPs never fitted on to one side of a C90 tape. Quite true of course, but highly out of place in a magazine that condemns piracy at every turn and warns its readers that continuing to rip off software would kill the ST. (We’ll keep the ‘piracy never did PC/Mac sales any harm’ discussion until next year.)

Trenton Webb seems destined to follow in at least one of the footsteps of Steve Carey left behind, as the appearance of Tape Squeezer on this month’s Wonder Disk and the accompanying write up illustrate most wonderfully. OK, so Tape Squeezer – a tool for organising bespoke tapes of songs copied from CDs that you and your friends own – does at least bother to devote a paragraph of its text-file to warning users against depriving musicians of royalties, but it’s probably not the sort of thing that an influential magazine like ST FORMAT should be distributing. Would you cowerment a program that enabled users to make compilations of copy-protected games?

The major complaint comes from the following sentence from the subscribers’ flyer that accompanies the disk: “So now you’ll be able to organise your gross breaches of copyright to a professional level – if I’m allowed to say that?” Trenton, you do know that Editors are allowed to delete sentences as well as adding witty asides?

Fact: despite what it says in the Tape Squeezer text-file, the copyright warnings on CDs are invariably very explicit and make no exceptions for home recording or any other breaches of copyright. There is no ambiguity there – any copying at all is a breach of copyright.

Yes, we know that everyone does it, but how the hell do you expect software publishers to develop new and innovative products for Atari computers when the biggest selling ST magazne prattles on about how it is helping its readers to “organise your breaches of copyright to a professional level”?

For the last eight years we at the FaST Club (aka ST Club) have been publishing low-cost software for the ST market. Within a week or so of any product launch we invariably get reports that copies are circulating on pirate BBS systems and on disks of ‘cracked software’. If we had received just ten per cent of the revenue lost when users illegally copy and use our programs (such as Imagecopy, Mouse Tricks,

[Image: File Commands Runners Options Info]

Select which CD to alter

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STF 63). Zone distribution do not handle KCS Omega any longer and Tiger Cub is not distributed by MCMXCIX. All Dr T products, with the exception of KCS Omega 2, are distributed by Key Audio Systems, Unit D, Robjohn’s Road, Chelmsford, Essex, CM1 3AG. KCS Omega 2 is handled by Avalon Music developments (it’s yours truly). I also provide all technical and educational support for all Dr T’s programs throughout Europe. The reader offer for Omega 2 still stands, and you can still get technical support on the Cover Disk from me. AMD is now based at 23a Northroad Street, Glastonbury, Somerset, BA6 8JJ. If you missed it still stands. Offering a complete Desktop music MIDI system, it’s one of the best ST FORMAT Cover Disks ever. And with the offer to upgrade to Omega 2 for just £99 it also offers a saving of a mere £176. Like, wow!

It’s all over!

Dear ST FORMAT

Great stuff – how to buy second-hand – let’s grab the goodies! But surely spares aren’t going to get expensive for a few years yet – I was even thinking that the ST might enjoy something of a revival on the back of the Jaguar. Our local computer store had a 1MB byte STFM with Discovery Pack for just £167 alongside the Jaguar in its window.

Chas Stoddard, Glastonbury

STF: Sorry about the slip there and thanks for letting us know that the upgrade offer on KCS Omega (on Cover Disk 61 – see page 85 if you missed it) still stands. Offering a complete Desktop music MIDI system, it’s one of the best ST FORMAT Cover Disks ever. And with the offer to upgrade to Omega 2 for just £99 it also offers a saving of a mere £176. Like, wow!

We’re all doomed!

Dear Trenton

Could you please tell me, are the Doom episodes coming out for the ST? If so how much will they be? If not, why not?

Robert Marsh, Rugby

STF: Sadly the Jaguar will be the only Atari format to see Wolfenstein, Doom and Doom 2. The only other formats that currently feature them are the PC and

Bob! If you’ve just got an ST pack you’re going to need stacks of back issues. Page 85 times!

their disk collections and either buy or delete programs that they have not bought legally? With so many software packages appearing on Cover Disks, some guidance (and lists?) on the differences between freely distributable versions of programs and commercial versions could be useful. Programs like 1st Word and 1st Word Plus, FastCopy 3 and FastCopy 4 are really confused, with users inadvertently distributing commercial software as if it were freeware.

Regards,
Paul Glover, FaST Club

STF: First Paul, apologies for cutting the second half of your letter where you a) say nice things about the mag and b) prove that I can’t count, but I really wanted to address the points you raise.

Yes, copying CDs to tape is breach of copyright. The Tape Squeezer though is not a utility that suddenly makes this possible – which is what disk-copying utilities that enabled you to make backups of protect software are – it merely enables you to organise the order of tracks from the CD, should you decide to do so. Also, as a shareware product its usefulness is drastically limited to a number of (dead)full CDs. If you want the full version, you have to register.

We were merely informing ST customers of this software’s existence and giving them a chance to test it before registering.

I must admit that I hadn’t fully considered this issue from your particular standpoint when I approved Tape Squeezer’s inclusion on the disk. ST FORMAT doesn’t condone computer, audio, video or high seas piracy in any form and it is regrettable that we could be perceived as promoting it. Similarly while I would quite happily put a National Lottery or Football predictor program on the disk (anyone out there got one?) I would be concerned if anybody took this as an incitement to gamble.

As for my comment – and the “organise your branches of copyright...” line was one I personally added – it was deliberately sarcastic, intended to remind users of the fact that they would be breaching copyright laws by using the software. Tape Squeezer is a clever piece of coding and great fun to play around with, which was enough to merit inclusion on the subscribers’ Wonder Disk.

You are correct about the problems faced by shareware, licenceware and otherware products. There is without doubt piracy on a large scale. In fact it is an issue we are already looking into and will be running a full feature in the January issue. As one of the country’s foremost ST publishers you have obviously suffered in this respect and the journalist compiling the report will be in contact soon for your input, opinions and ideas on the matter. Anyway cheers for the plug for our subscribers’ letter and disk.

ST vs Jag II

Dear ST FORMAT

I was reading Feedback in the last issue of ST FORMAT when I came across a letter entitled ST vs Jag. Being interested in the Jaguar I took a look and found that I couldn’t agree more with Dr and Mrs L Jacobs.

I note your comment that “ST FORMAT is by definition an ST magazine”. So why, if it is an ST
DESKTOPPER - WE STAND CORRECTED

Dear Editor,
ST IN DISGUISE by Simon Forrester, ST FORMAT, Nov. 1992
System Solutions is the most active publisher of hardware and software for Atari computers in the UK. In 1984 we have already published more than ten new products with many more to follow. By consistently supporting the Atari we have grown to be the market leader.

However, the amount of space given to System Solutions in reporting on new products has always been inadequate and many products have never been mentioned.

We hoped that the recent and complete change of editorial staff would result in positive action. But the opposite appears to be the case. The language used by your staff writer Simon Forrester in his feature “ST IN DISGUISE” is unfair, defamatory and shows poor command of English. We feel that the content of this feature is damaging to our good name and has passed our standards of editorial practice.

Our complaint centres around:
1) The DeskTopper is a clever design, developed by System Solutions, for all ST, FMB and Falcon computers. To call it “a new lump of metal” is an insult to LightHouses, the designers and manufacturers you can summarise us.
2) To claim that with the DeskTopper fitted “the whole lot will probably give you a serious headache due to electrification” is an unsubstantiated claim and untrue claims about the blackness of the footprint which Mr. Forrester should have been thoroughly tested by your readers. These facts and other objections clearly demonstrate the lack of proper research by Mr. Forrester.

Our reactions have been to do a full price check in a similar manner to ST Review.

I have chosen to write a personal letter rather than leaving this matter in our soliciot’s hands, because I feel that it would be a disservice to our readers to waste resources in legal wrangles which could include complete withdrawal of our review material and advertising.

We challenge you to substantiate your claims and expect you to publish this letter in full. I hope you will retract the defamatory content in your next issue.

We will monitor future issues of ST FORMAT with particular attention to editorial content. I sincerely hope that we will see an improvement. Your readers deserve a higher quality of journalism.

Karl Brandt, System Solutions.

stf: Karl, thank you for your letter. First can I just reiterate the fact that we really liked the DeskTopper. We awarded it 90% and commented in conclusion that it was “One nice neat box” and that “Everything’s easily accessible.” We loved it. It is good. As for your more specific points, I will address them individually:

1) "Lump" was a deliberately downbeat way of describing the DeskTopper parts of the DeskTopper and I agree that it sounds particularly harsh when taken out of context. When you read the whole sentence, however, the point of this ‘derisory’ description becomes clear. “With this new lump of metal you can turn your neat, damaged ST into a smart, sharp and tidy set of steel boxes with all the ports and switches the disk drives handy at all times and lots of space available.” The intention was to show a transformation that the device can do. It is not that important.

2) You are absolutely right. The additional metal in the DeskTopper decreases the amount of electromagnetic radiation. Our joking inference that such an increase could potentially increase was absolutely wrong. We apologize, once again.

3) This again depends on the context. If this were the closing sentence in itself, it would be wrong - the DeskTopper in no way represents a physical health risk. However, when viewed in the context of both the sentence it was taken from and the paragraph it concluded, the reason for this clause’s inclusion becomes clear. The intention was to make it clear that the DeskTopper in kit form requires you to take your machine apart into pieces. While such disassembly would cause no qualms to many ST owners, it would certainly alert you.

stf: The paragraph was to outline both the reasons why you would want to buy a DeskTopper and the reasons why you should give such a purchase thought. Simon’s logic was that if the idea of taking the lid off of your ST doesn’t cause anxiety attacks and you’re sick of awkward parts, insufficient expansion space etc then you should “get a DeskTopper immediately.” If the fitting of unscrewing the casing of your machine makes you “unhappy” though, then it becomes a “health risk.” A phrase that can be misconstrued and perhaps Simon would have been better advised to use “it’s scary.” The real error was in not mentioning the impression service offered by System Solutions.

4) Again you are right. The pictures should refer to the product. The text mentioned features of the DeskTopper: alone DeskTopper costs £99. Standalone FreeKeys costs £39. Bundled together they cost £99. System Solutions supplies the various permutations of the DeskTopper/FreeKeys range, prices are available on request - it varies from system to system.

magazine, do you devote such a large part of it to the Falcon? I know that it has the same case as an ST but inside it is different. Either keep the magazine exclusive to ST’s or include more than one page for the Jaugar.

Simon Newton, Lancaster

stf: The Falcon is a TOS-based computer, hence it can be considered one of the ST ‘family’, which explains the machine’s coverage. The Jaugar as yet is an untitled format, and this coming Christmas will be its big chance. As its fate is critical for the continued success of Atari and may even spawn a whole new generation of computers, we believe it is of interest to ST users, which should help explain our regular updates on its sales and software. The primary interest of both ourselves and, we believe, the vast majority of our readership is in TOS-based machines. Hence these machines get the majority coverage in ST FORMAT.

Job Finder

Dear Mr. Webb,
As the manager of Transparent Dreams PDL, I would like to congratulate Simon and Nick on their reviews in Public Sector. They are a lot better than before.

I am starting college soon and I am going to study for a BTEC National Diploma in Media Studies. Will I have a good chance of getting a job on a magazine with this?

Simon Osborne, Manchester

PS Where has Jonathan Nash disappeared to?

stf: Thanks for the comments on PD. We try our best. As for the career advice, yes, any qualifications – especially in relevant fields – a la Media Studies – will stand you in good stead. There is however no guaranteed route into magazine journalism. Nick (our most recent recruit) studied for a History degree and was an ST fanatic; Simon was a freelance programmer and voluntary worker before he landed a job on Amstrad Action; Jill worked for a PC manufacturer and I worked in the offices of Avon County Council Just write when ever you get the chance – for local newspapers, the college magazine, anything, and then you’ll have a good portfolio of work to impress everybody with.

PS Upstarts!

stf: Jonathan Nash, out STF: now Amliga Power. To read some of his finest work just go back a few issues, see page 88...

Zuqdogow

Dear ST Format
Word Quirks 4 (STF 61) I am able to copy, unpack and load this software but when it comes to running the disk, the whole thing just seizes up and I get two bombs on screen. I have tried to run the program through a RAMDisk with plenty of memory but all I get is the same two bombs. I have an STFM 520 with 2.5MBbytes of RAM, a separate 1MBByte DDS and I used new, branded disks.

stf: Sorry about that. It was discovered after the disk was compiled that Word Quirks used the blitter, a chip which most STFM’s don’t have. Nick is testing a ‘blitter-less’ version for a future CoverDisk as we speak. Here’s hoping! stf

Oh, so is that it? Do I have to go home again? Can’t I just have read some more nice letters? Oh please! Look folks if you don’t keep sending in your pertinent points and witty comments about the magazine to: Feedback, ST Format, 30 Mount Pleasant, Bath, Avon. BA1 28W I’m going to have to go home and see all those horrible final demands, summars, Reader’s Digest Prize Draw announcements...
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TWILIGHT ZONE

In the limbo state between the back cover of the magazine and the interesting bits is the Twilight Zone.

Remember the werewolf from last month’s Pixel Painting? Winning yet more cash (jammy blighter), Paul Matson of Cheshire has produced this groovy picture of an angry little ogre. Again, he turned to Canvas for the extensive tools the package offers, and left the rest to his artistic side. Man.

Working in a different order to last month’s contribution, Paul started with the ogre itself as opposed to the background, spending most of his time getting the ogre’s body outline and proportions exactly as he wanted them.

Next, he went to work on the more complicated parts, filling in the fine detail, changing the palette, adding extra shading and colouring in textured areas such as the club. As a point of interest, the club was defined using Canvas’ K-line facility, drawing lots of thin lines to give the impression of grainy wood.

The backdrop for the character, the cave, was drawn using the Spray function, working mainly with greys. After getting this effect right, the ogre was pasted on to the final image and that was that.

Congratulations again, Paul. £25 is winging itself your way.

WE HAVE A WINNER

WHEN READING ST FORMAT, YOU may occasionally come across a place of cardboard asking your opinion of the magazine you’re reading. When you fill out this form and send it off, you’re automatically entered into a prize draw, in which you can win £100-worth of software for your ST. Every month, one lucky customer wins the prize, and this month it was an ST FORMAT reader, Mr D Glibson of Nottinghamham, who’s won the cream of the crop of ST software.

We offer this prize for a reason – we value your opinions on the magazine, and the forms are an easy way of getting the best idea of who our mass readership is and what they want. So if you want to get your hands on £100-worth of goodies, fill the dammed form out.

KEEP SMILING

WHEN YOU LOOK AT THE COMM scene with the kind of hindsight we have here in the Twilight Zone, you realise that the entire Internet, the thousands of miles of fibre optic cabling, the gigabytes of information, and the thousands of electronic mailings, were all devised for one purpose only – smiles :) The culture’s so popular that there’re now hundreds of different smiles.

And so it’s competition time. With a closing date of 13 December, it’s ‘design your smiley’ time. Design the best smiley ever, scribble it on the back of a postcard or a stick-down envelope, and send it to: Keep Smiling, ST FORMAT, 30 Monmouth Street, Bath, Avon, BA1 2BW. Alternatively, e-mail your entry to stformat@futurenet.co.uk.

You’ll need a few rules:
• Entries without the entrant’s name and address are invalid (it’s silly).
• Standard ST characters only (1-0, A-Z, @#$%^&*;", etc.).
• The editor’s decision is final.
• This is all a bit too serious really.

In case you’re interested, here are the ST FORMAT team’s smileys:

Trenty ( [:]) (biker)
Jill (>;) (evil)
Andy (=;|) (punk)
Sarah (|) (asleep)
Nick (>:-) (bitter and twisted)
Simon (-) (merry)
Clive ( :\) (broken nose)
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