

ST Applications

The Magazine for Users of Atari ST, STE, Falcon and TT Computers

Issue No. 47, November 1994

Sonic Adopts Feline Friend!

It has been announced just as we go to press that Atari and Sega have agreed to an out of court settlement with respect to a legal battle which has been raging on for several years. Atari had maintained that Sega infringed numerous registered patents belonging to them in the technology used on their Mega Drive games console, something Sega had strenuously denied until now.

The out of court settlement saw Sega buy 8% of Atari Corporation stock at a total cost of \$40 million in a pre-paid deal. They are also to pay for the rights to use more than 70 of Atari's patents at a cost of \$7 million per year over the next seven years. The news sent Atari share prices rocketing within a matter of hours! It's no secret that Atari were short of cash following the posting of considerable losses for their last financial year. Jaguar sales have greatly improved their financial status, increasing sales by 43% in the second

quarter of this year as compared to the same period in 1993. However, this still left a net loss of over \$3 million and Atari are not expected to be back in the black until after the peak Christmas selling period.

The settlement with Sega allows Atari to make a concerted push towards marketing and manufacturing the Jaguar on a worldwide scale. Sega have obviously seen the potential of the Jaguar and want a cut of the action, so to speak. As for Atari, all that was stopping them making a major impact on the world market with the Jaguar was lack of finance, so the deal had a lot to offer them too. The mutual accord reached by Atari and Sega also means that a number of Sega titles will be developed for the Jaguar and vice versa.

So what does this mean for all us ST, TT and Falcon enthusiasts? Yes, you guessed it, absolutely nothing at all! The settlement will go directly into stepping

up the production of the Jaguar for both the American and European markets in order to meet the ever increasing demand. I do remember reading something on one of the GENIE roundtable discussions about Atari top brass saying that they would plough more resources into the Falcon once the Jaguar had become established.

Leading Atari stockists have cut the price of the Falcon by around £100 across the range and it is now a more attractive buy with an average street price of £399 for a 1 Meg machine with no hard drive and £799 for a 4 Meg machine with 127 Meg hard drive. Every dealer has a different configuration on offer and Gasteiner's £299 and £679 respectively for the above systems seems to be the best deal around. Having said that, a 1 Meg Falcon is roughly comparable to a 256K ST (some of these were actually released in 1985!), in other words you can't really do anything with it, so be warned and go for at least 4 Meg and a hard drive unless you know a cheap supplier of SIMMs and/or IDE drives!

Jaguar News

Atari have recently launched the Jaguar Helpline in association with US Gold. The helpline will hold details of all the latest Jaguar titles and be able to offer helpful hints to players who require a little assistance. As well as the Jaguar Helpline, Atari have also launched The Jaguar Owners' Club, a user group dedicated to Jaguar owners. For details of either, call US Gold on 0121 356 3388.

Following the success Rumbelows are having with the Jaguar, several other High Street chains are said to be talking to Atari about the possibility of carrying

stock in the run up to Christmas. Despite the stepping up of production as a result of the Sega settlement, demand is still expected to outstrip supply over the Christmas period, so if you want a Jaguar for Christmas, you are advised to buy early!

Atari are blowing their own trumpets over the release of Alien vs Predator on the Jaguar, which is expected any day now. It is being described as their biggest software launch in ten years and will be backed by advertising on satellite TV and several dedicated computer gaming magazines. Alien vs Predator has a £59.99 price tag and has been over a year and a half in the making.

This Month...

Quill Graphics Software.....	6
SpeedoGDOS v5.....	8
Kandinsky.....	11
Avalon.....	14
Shareware Column.....	16
Going On-Line.....	17
Desktop Discussions.....	18
Forum.....	19
Programmers' Forum.....	23
Classified Ads.....	28

FaST Club

For users of Atari ST & Falcon computers

7 Musters Road - Nottingham - NG2 7PP
Tel: 0602-455250 - Fax: 0602-455305

Software

- | | | | |
|---|-------------|--|--------|
| <input type="checkbox"/> Address 1.6 | £12.95 | <input type="checkbox"/> Imagecopy 1 (Mono) | £ 9.95 |
| <input type="checkbox"/> Astronomy Lab | £24.95 | <input type="checkbox"/> Imagecopy Colour | £14.95 |
| <input type="checkbox"/> C-Font2 | £ 9.95 | <input type="checkbox"/> Key Master | £ 6.95 |
| <input type="checkbox"/> CalAssistant | £19.95 | <input type="checkbox"/> Molgraph 2 | £24.95 |
| <input type="checkbox"/> CalAssistant SL | £29.95 | <input type="checkbox"/> Mouse Master | £ 9.95 |
| <input type="checkbox"/> Clip Art Catalogues (2) | £ 4.00 | <input type="checkbox"/> Mouse Tricks 2.15 | £ 9.95 |
| <input type="checkbox"/> TW Clip Art Catalogue | £ 2.95 | <input type="checkbox"/> Multiprint | £ 9.95 |
| <input type="checkbox"/> TW Clip Art Sets | £ 8.50 | <input type="checkbox"/> PageAssistant | £29.95 |
| <input type="checkbox"/> Catalogued Clip Art | £ 8.95 | <input type="checkbox"/> Redacteur 3.15 | £99.00 |
| <input type="checkbox"/> Easy Text Plus DTP | £19.75 | <input type="checkbox"/> Redacteur Lite | £69.00 |
| <input type="checkbox"/> Easy Text Pro DTP | £34.95 | <input type="checkbox"/> Redacteur Junior | £39.00 |
| <input type="checkbox"/> EdHack | £ 9.95 | <input type="checkbox"/> Trimfont | £ 9.95 |
| <input type="checkbox"/> Fontkit Plus 4.1 | £24.95 | <input type="checkbox"/> Ultimate Virus Killer 6 | £12.95 |
| <input type="checkbox"/> Fontpac Plus | from £ 6.95 | <input type="checkbox"/> Universal Item Selector III | £14.95 |
| <input type="checkbox"/> Fonty: Calamus Font Editor | £11.95 | <input type="checkbox"/> Warp 9 | £29.95 |
| <input type="checkbox"/> FontGDOS and Drivers | £ 2.95 | <input type="checkbox"/> X-Debug | £24.95 |

Calligrapher Tamed

- Mastering Calligrapher £29.95

The Hypertext Personal Guide for Calligrapher that offers quick referencing to all commands with concise screen summaries and tutorials, including tips and tricks.

Mastering Calligrapher is ideal for both novice and advanced users alike. Novice users will find the simple step-by-step approach an easy way to lessen the learning curve, while advanced users will benefit from the referencing feature.

Each command is explained in detail with all of the necessary information given on how to use it correctly. Tips and tricks are offered throughout the guide to give you ideas on how to exploit each command to its fullest. Just a few of the topics covered are: quick print, header, footer, define several clipboard buffers, page numbering, text alignment, drop capitals, and more. Requires a hard drive. Also available from the same author Mastering Atari Works, price: £29.95

Textstyle

- Textstyle £19.95

Another cracking program from Jeremy Hughes, author of Imagecopy. Enter your text into Textstyle, select a Calamus or GEM font, add text effects and justification, and the resulting picture file can be imported into a whole range of packages. Great for generating headlines for wordprocessors like First Word Plus, Redacteur or Write ON; or use it with an art package such as PixArt to make posters, banners, greetings cards, etc. Thousands of applications.

- Textstyle bundle £14.95

Order Textstyle at the same time as Imagecopy or PixArt and save £5.



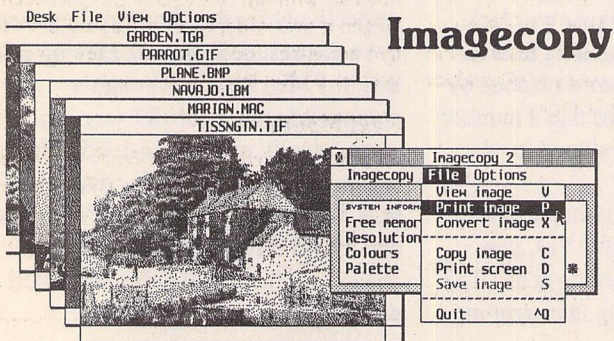
ST Applications

For the last four years we have been publishing a monthly magazine for ST users. Full of informative and authoritative articles ST Applications is an essential read for all Atari users who are serious about getting the best out of their machine.

- 12-issues: £15.00
 6-issues: £8.00
 3-issues: £5.00
 Sample issue: £1.50

New lower prices!

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



- Imagecopy 2 £19.95

There is no better way to grab, view, convert and print images on your ST or Falcon. Supports 9-pin and 24-pin Epson compatibles, Cannon BJ, HP DeskJet and LaserJet mono and colour printers. Many more features - write or phone for details.

- Imagecopy 3 Upgrades:

Upgrade D: from Imagecopy 1.xx: £22.95
 Upgrade E: from Imagecopy 1.5x: £17.95
 Upgrade F: from Imagecopy 2.xx: £12.95
Return master disks for upgrades please.

- Imagecopy 3 £29.95

New features in Imagecopy 3 include: many new image formats supported including JPEG, new user interface, improved conversion options, batch processing, slide show, option to print a catalogue of images, improved colour reduction, improved dithering, greyscale option, variable print-quality option, and an increased range of halftone filters. Write/phone for a full feature list.

"An essential Atari program ... no serious Atari user should be without", Atari ST User, Aug '94.
"A quality product ... essential", ST Review, Sept.

Photo2Disk

- Photo2Disk Info' FREE

For the same price as an enlargement you can transfer your photographs to disk so that you can use them in your art and DTP software. Write/phone for details.

Big Blue ST

- Gemulator

Prices start at just
£135.00

Stunning emulator that allows Atari ST software to be run on your IBM compatible PC. Needs a 386 or 486 PC with HDD, 4MB RAM, and one free expansion slot. Write or phone for a copy of our Gemulator InfoPack and details of the most recent versions of the Gemulator software. Loan boards also available.

- Gemulator InfoPack Free

Only the best

- View II £14.95

View text, picture and animation files, play sound samples, and even view and extract ARC and LZH files all from the desktop. "The most useful utility ever written" said ST Format.

Books

- Users' Guide to 1st Word £ 6.95
 ST 3D Graphics Programming £22.95
 Atari ST Basic To C £18.45
 ST Disk Drives: Inside And Out £18.95
 ST Machine Language £18.45
 Atari ST Programmer's Guide £22.95
 Desktop Publishing: The Book £ 6.95
 Introducing ST Machine Code £19.75
 Midi and Sound Book for ST £17.25
 Musical Applications of the ST £ 5.95
 Tech Ref Guide Atari ST Vol 2 £19.95
 Tech Ref Guide Atari ST Vol 3 £22.95
 Guide to Timeworks DTP £ 9.95
 Your First Basic £14.95
 C-Manship Complete Atari ST £14.94
 ST Assembly Lang' Workshop £14.95

PD and Shareware

- FaST Club Catalogue Free

Probably the most comprehensive catalogue for the ST. Details on hundreds of PD and Shareware disks plus specifications of all of the products listed in this advert.

Disks cost £1.25ea; or just £1 for subscribers!

24 hour Catalogue Hotline

Phone 0602-455250 to request a copy of our latest catalogue (52 pages A4)

Great fonts

- Calamus Font Set #1 £8.95
 Calamus Font Set #2 £8.95
10 DS disks of PD and Shareware fonts in a box.
 PageStream Font Set £8.95
10 DS disks of PD and Shareware fonts - includes four disks of PostScript fonts.
 STC Fonts Catalogue £2.95
Our professional quality range of Calamus fonts.

Ordering

... Tick the items you require and send this advert, a photocopy, or just a list on a sheet of paper with your name and address, along with a cheque or Postal Order, to us at: ST Club, 7 Musters Road, Nottingham, NG2 7PP. Please allow up to 4 days for your goods to reach you. Sorry, we do not take credit card orders or telephone orders.

Overseas Orders Welcome - Please request a copy of our Overseas Price List. Membership - You do not have to join or subscribe before you can buy from us, and you are not under any on-going obligation to buy from us when you do subscribe.

£ _____ Cheque/PO enclosed.

From:

.....

.....

.....

.....

.....

.....

...Delivery: £1.25 for orders under £20

...VAT included in all prices

...Catalogues & Telephone support FREE

CONTENTS

Regulars

- 3 News
- 16 Shareware Column
- 17 Going On-Line
- 18 Desktop Discussions
- 19 Forum
- 23 Programmers' Forum
- 28 Classified Adverts

Reviews

- 6 Quill
- 8 SpeedoGDOS v5
- 11 Kandinsky
- 14 Avalon II

CREDITS

Typeset on an Atari ST using Timeworks Publisher v2, with some help from Page-Stream v2.2 and Textstyle.

Text Preparation: Redacteur 3.
Final output on HP LaserJet 4.
Printers: Wiltshire (Bristol) Ltd.

Contributors:

Mark Baines
Joe Connor
Graham Curtis
Jon Ellis
William Hern
David Howell
Carl Löfgren

Contributions

The articles in *ST Applications* are written by users for users. Everyone reading this magazine will have something to contribute; even if you do not feel able to do a full-length review or article there is the Forum section for short hints, tips and questions. If you are interested in writing for *ST Applications* - regularly or irregularly - please write for a copy of our terms and conditions. We always do our best to reward quality work with appropriate remuneration.

Changes at ST Applications

With the Atari market continuing to decline—and Atari showing no obvious concern or interest in having a future in the computer market—the time has come for us change the look and feel of *ST Applications*. Here's a summary of the major changes:

Size: Down to 32 pages.

Price:
Down to £1.50; £5 for 3 issues; £8 for 6 issues; £15 for 12 issues

Content:
Here is a summary of the major changes that will be taking place over the next couple of issues of *ST Applications*:

Reviews:
We shall continue to print good solid in-depth reviews.

Articles:
The range of DIY, 'how to ...', and 'getting the best from ...' articles will continue to appear regularly.

News Pages:
With little in the way of Atari specific news these days we'll be running news items on the front page only. In most cases a brief product outline and phone number is enough.

FaST Club Adverts:
Far fewer of these.

Programmers' Forum:
By far the most professional programming series for users of Atari computers will continue to appear each month.

Shareware Column:
Continues to present and support new high quality shareware software.

Catalogue Update:
Monthly updates on PD and shareware releases.

Forum:
The most vibrant and best informed letters pages.

Classified Adverts:
Still the best place to buy and sell Atari kit.

The main victims of this rationalisation are the regular columns, especially those which cover ground already well covered by *ST Review* and *ST Format*. Over the next few issues we will be phasing out or changing: *Beginners' Forum*, *Classroom Computing*, *Graphic Arts*, *Going On Line* and *Desktop Discussions*.

Writers Wanted

We are still looking for new keen writers for *ST Applications*. As well as reviewers, we need writers who can give useful hints and tips on getting the best from Atari hardware and software. You can expect to be paid around £20 for each page of your work that we publish.

If you are interested in writing for *ST Applications* just write or phone for a copy of our guidelines for reviewers. If you want to persuade us of your writing ability and knowledge then send us a short (around 200 words) article about a piece of software, or a tip, that you find particularly useful. We are looking for short pieces of this type to fill in the half pages free at the end of articles that used to be filled with *FaST Club* product advertisements.

Alternatives

ST Review is now an essential read for serious minded *ST* users and it is no accident that the new-look *ST Applications* does not try to overlap with the content and style of *ST Review*. Instead, we are aiming to make *ST Applications* truly complimentary to *ST Review* with an emphasis on publishing longer more in depth reviews and articles that are either too technical or too specialised for *ST Review's* readership.

Next Month

Columns carried forward from this issue until next month are: *Beyond GFA*, *Beginners' Forum* (TOS Patches), *Personal Profiles* (David Hardy), and the *PD and Shareware Update*.

Subscriptions

Existing Subscribers get expiry extended @ 1:1.6 (as £1.25:£2):

Issues left	New issues left
1	2
2	4
3	5
4	7
5	8
6	10
7	11
8	13
9	15
10	16
11	18
12	19

Read Me 1st

If your subscription to this magazine has expired with this issue, you will find a renewal form included in this mailing.

Information

Publisher: Paul Glover
Editor: David Smith
Sub-Editor: Nicky Wilson
Layout: David Smith

Published by:

The FaST Club
 7 Musters Road
 West Bridgford
 Nottingham NG2 7PP
 Tel: 0115 945 5250;
 Fax: 0115 945 5305

Advertising

There is a limited amount of space for commercial advertising in each issue of *ST Applications*. Contact Nicky Wilson on 0115-945 5250 for further details and to request a media-pack. Subscribers can place free classified advertisements - see page 27 for details.

© The FaST Club, 1994.

No part of this magazine may be reproduced without written permission of the publishers. Whilst every care is taken in the preparation of this magazine, the publishers cannot be held legally responsible for any errors.

Subscription Rates

United Kingdom:

12 issues : £15.00
 6 issues : £8.00
 3 issues : £5.00
 12 issues plus 6 Disk Mags : £27.00

Air Mail to

	Europe	World
12 issues :	£18.00	£23.00
6 issues :	£10.00	N/A
12 issues + 6 D/Mags :	£31.00	£37.00

Subscription and Order form will be found on page 30.

Overseas Distribution

We no longer use Worldwide Magazines. Overseas readers and retailers should contact us for details of new distribution arrangements.

Disk Mags

These are bi-monthly compilations of the best PD software to come to our attention in the preceding couple of months - not magazines on disk. The next Disk Mag, DMG.44, will be dispatched with issue 48 of *ST Applications*.

Floppyware Success

Floppyshop's new licenceware scheme has come to the end of its first quarter with both authors and end users reportedly happy with its achievements to date. In contrast to *Budgie* (who are still supported by *Floppyshop*), the 'Floppyware' scheme pays out royalties to each author based on sales of his own titles, rather than as a proportion of the sales of all titles belonging to the scheme. This means that the best selling titles pay the best royalties, encouraging authors to strive harder in order to produce even better programs. There are now over thirty titles in the *Floppyware* range from various authors and the aim is to increase this to around fifty within the first twelve months of the scheme. These range from arcade games and graphic adventures to a full blown assembler, software to manipulate digitised images and an educational package aimed at GCSE and Higher mathematics students.

The disks are split into two main categories, Gold and Silver, with many of the Gold titles being of semi-commercial standard. Some titles are full registered versions of Shareware programs and others are former low end commercial titles. However, the majority of software is new and one or two titles have been written specifically for *Floppyware*. Gold titles sell at £3 each and Silver at £2.50, with £1 and 50p respectively going to the authors for each sale. There is a third category, Platinum, but this is reserved for multiple disk sets and the prices on these are variable.

The scheme does not accept just any title. It has to be at least up to the standard of a top of the range Shareware release. If you have written any programs which you feel fit into this category and would like to know more about *Floppyware*, contact *Floppyshop*, PO Box 273, Aberdeen AB9 8SJ; Tel/Fax: 01224 586208.

Compo's Latest

TrakCom is a new release from Compo on the music front. It is based on the Sound-tracker type programs but has several differences over these. *TrakCom* only runs on the Falcon but instead of supporting four track music (or eight tracks in the case of the Shareware program *Octalyser*), it has the capability of handling up to ten tracks. *TrakCom* is not a sampler, you will need to source your samples from the dozens of PD sound sample disks around, or use a direct to disk sampler such as *WinRec* to record your own.

TrakCom works on the same principle as *Soundtracker* programs by loading up sampled sounds, typically a few notes from a musical instrument is sufficient, and assigning these to keys on the Falcon's keyboard. The individual samples can be transposed and replayed at varying pitches. The music is then built up into patterns which go on to make up a song, the finished article. *TrakCom* relies on the DSP to process its data and as the DSP has a maximum throughput, the amount of data which may be processed in real time has an upper limit. The result is that the higher the sampling rate, the fewer the tracks that can be processed in real time. You are talking about getting six tracks when using samples at 44Khz and eight tracks at 25Khz, with ten tracks being the maximum allowed.

Because it uses the Falcon's DSP,

TrakCom can handle 16-bit samples at up to 49Khz and is specifically designed to support the 44.1Khz and 48Khz sample rates used for CD and DAT, but you will require additional hardware (also available from Compo) in order to support these rates. A digital interface will allow you to record and play back your masterpiece at professional quality. The end result can also be saved to professional quality DAT tape devices. *TrakCom* is available now at a cost of £79.

Compo's *ScreenBlaster 2* software has recently undergone an upgrade. The main improvement relates to a new video mode generator. This allows you to generate your own custom screen resolutions rather than having to select from a predefined list. The result is that if your monitor is unable to handle a predefined resolution, it is now no longer necessary to choose the next resolution down. Instead, you can test out intermediate values and by trial and error, determine the absolute maximum resolution (pixel precise) that your monitor is capable of handling. *ScreenBlaster 2* costs £79 and includes a copy of *NVDI*, the upgrade is available to existing users for £10. Contact *Compo Software Ltd*, Green Farm, Abbots Ripton, Huntingdon PE17 2PF; Tel: 01487 773582; Fax: 01487 773581.

News In Brief

Now It's Pro Vector 2

zzSoft have just announced the availability of *Easy Text Pro Vector v2.0* at £39.95. The latest version supports the loading of up to 20 fonts (subject to memory), is fully compatible with SpeedoG-DOS 4 & 5 and allows all fonts to be displayed on screen in a dialog box. True Type and Postscript Type 1 fonts are also supported if you have SpeedoGDOS 5 installed. *Easy Text Pro Vector 2* is currently the only Atari DTP program which supports SpeedoG-DOS (not included). Users of *Easy Text Pro Vector v1* can upgrade by returning their master direct to zzSoft along with the £5.00 upgrade fee. For more details, contact zzSoft, 114 Sparth Road, Clayton Le Moors, Accrington, Lancs. BB5 5QD; Tel: 01254 386192.

No Joy For The Glossies

ST Format recently published their ABC (Audit Bureau of Circulation) figures for the period January to June 1994 and their monthly sales have gone down from 43,469 copies to 38,671 when compared to the previous six month period. No audited figures have been released by Europress for ST Review and the now defunct ST User. Their last published ABC figures were 17,579 and 19,579 respectively. Europress recently gave out a print run figure of 19,500 copies per month for ST Review, although it is likely that this will be increased to take account of ST User's departure from the scene.

MAC Clones On The Cards

Following the release of the PowerMac earlier this year, Apple have decided to license Macintosh technology to third party manufacturers. This will mean that cheap Mac clones should be appearing in the High Street in the near future. IBM and Olivetti are among several major manufacturers who have already expressed an interest in applying for a license.

Future Buys MEMS

Future Publishing, the company behind ST Format, recently announced that they have purchased the Midi and Electronic Music Show (MEMS) from Westminster Exhibitions. The event is generally regarded as the UK's premier music event and is the normally place where new music products are unveiled to the UK market. Chris Down, Show Manager of Future Events said, "We are delighted with the purchase of MEMS. Future's involvement will ensure that MEMS continues to grow and evolve, capitalising on new market opportunities." MEMS '95 takes place at the Wembley Exhibition Centre, London, from 21st to 23rd April 1995.

Falcon Memory Board From Gasteiner

Gasteiner Technologies have announced the immediate availability of a 14 Meg RAM card for the Falcon. It uses a single 16 Meg Macintosh SIMM (although only 14 Meg can be addressed on the Falcon) and fits neatly inside the Falcon's casing without the need to cut the shielding. The RAM

card costs £499 but users can 'trade in' their existing 4 Meg memory module and get £100 off the price. Contact Gasteiner Technologies, 126 Fore Street, Upper Edmonton, London N18 2AX; Tel: 0181 345 6000; Fax: 0181 345 6868.

Live And Kicking!

News International's Live '94 attracted a massive 182,000 visitors (an increase of more than 30% on last year) over its six day run in September. Live '94 is modelled on the Consumer Electronics Shows in The States and covers not just computers but every aspect of consumer electronics. Having said that, the main emphasis is on computers and other multi-media devices. This is only the second event of its type to be held in the UK, the first having been held at the same time last year. Plans are afoot to make Live '95 even bigger and with over 90% of this year's exhibitors already having signed up for next year's event, this should not be difficult to achieve. Live '95 takes place at Earls Court 1 and 2 from 19th to 24th September 1995.

Introducing Atari ST Machine Code

This is an excellent book and disk combination that takes the reader step-by-step into the secrets of programming the ST in its native language: 68000 assembly language. You get a complete programming environment for the beginner to intermediate ST applications programmer - no need to buy a separate assembler or resource kit!

The book has over 40 complete assembly language examples, with an index, and a glossary. Its 24 chapters introduce the gamut of ST applications programming from formatting a disk to constructing drop down menus and dialog boxes.

The accompanying disk features:

- * A complete symbolic 68000 assembler and linker.
- * A resource construction kit, for the easy creation of drop down menus and dialog boxes.
- * A symbolic debugger.
- * An integrated fully featured GEM text editor - assemble the source code and run the executable program from within the editor!
- * All the source code from the book ready for assembling.
- * Comprehensive listings and example of all BIOS, XBIOS, GEMDOS, AES and VDI assembly language calls.

```

Desk File Search Options Program Help OptionsZ      15:25
D:\INC\GDOS1.S
Number of lines: 200 Column: 1 Line: 1
GDOS1.S
# Loads a GEM/SDOS screen font from disk and displays the
# letter 'a' on screen, 12 points high, a rectangle is also
# displayed
#HEADER
move.l a7,a5
move.l #us0k,a7
move.l 4(a5),a5
move.l 12(a5),d0
add.l 28(a5),d0
add.l 28(a5),d0
add.l #9100,d0
move.l d0,-(sp)
move.l a5,-(sp)
clr.w -(sp)
move #94a,-(sp)
trap #1
add.l #12,sp
  
```

New
Low
Price
£14.95

FaST Club
7 Musters Road
Nottingham
NG2 7PP

Subscriber Specials Introducing Atari ST Machine Code

just £11.99

(Old RRP: £19.95!)

See advert opposite for details.

**Recycled disks
reformatted (82/10/2)
with labels
Just £5.00 for 20**

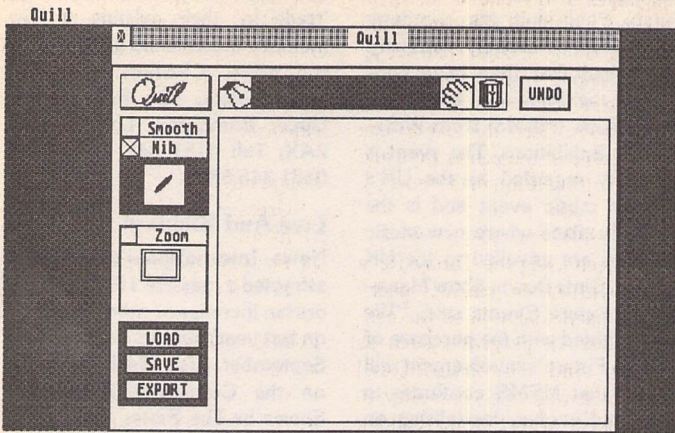
Both offers expire on 22nd November 1994

Look out for the next set of Subscriber Specials in issue 48

Subscriber Benefits include:

- * Exclusive opportunities to make huge savings on software, accessories and hardware
- * PD and Shareware disks at 20% discount, from just £1 per disk
- * 12 copies of ST Applications, the best Atari magazine anywhere
- * Guaranteed delivery to your door every month
- * PLUS, you save £3.00 on the cover price of ST Applications

ST Applications: still more to read than any other ST magazine!



This is the main screen of Quill. From here all drawing functions can be selected. Clicking on the nib window takes you to the nib set-up screen which allows the nib attributes to be changed at will.

Setting up

The package comes on one single-sided disk that is copy protected with an installation programme having to be run first. This embeds your name in the program file, which should make you think twice before giving your friends a copy. The manual is slim, running to fifteen pages, but it does give you a thorough introduction to the software and its use with the Tabby. Of course, if you prefer—or haven't got a Tabby—then the standard mouse can be used. It is advisable however to get a Tabby if you can, as mouse control isn't fine enough to take full advantage of the program. CGS are now bundling Quill with Tabby at a very attractive price, so getting hold of the two won't put too much of a dent in your pocket.

Setting up is simply a case of copying the program file over to your hard drive, or you can run it

direct from the floppy. You also have the choice of running the software as a stand-alone program or as an accessory. If you have a Tabby driver already installed this will need replacing with the one supplied with Quill. Any NVDI users will also need to run a patch program first before running the Tabby driver. Quill will run on any machine in either high or medium resolution. This includes the Falcon but not in its True Colour mode.

Working

The working area of Quill consists of just one screen. From here all of Quill's functions can be accessed as well as the set-up menus for Tabby. This allows the user to sit back and hold the Tabby as if it were a pen and paper, which is the philosophy behind this type of drawing. There is on-screen help in

Freehand drawing is less than an enjoyable experience with the mouse. A short time ago we saw the introduction of the Tabby graphics tablet which went some way towards addressing this problem. The tablet worked well with graphics packages but freehand drawing was still less than satisfactory. We now have Quill which aims to address the remaining problems of accurately transferring your pen movements to the screen.

Review by David Howell

Quill

that each of the icons that the pointer passes over is explained fully in an information line across the top of the screen. This seems to be very fashionable of late and is one of the innovations that I welcome, as it adds to the program's ease of use.

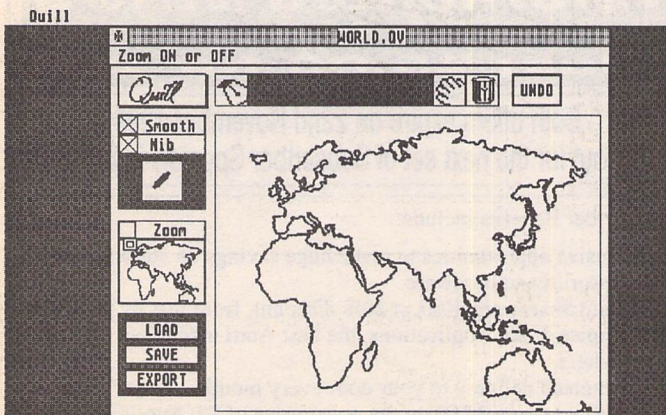
Quill mimics pen and paper to a fine degree. The drawing nib that you use can be adjusted for thickness and rotation. Its shape can also be switched between a round or square nib. You may also flatten the nib until you have the shape that you desire. Lastly you can also alter the structure of the line that you draw. If you want a striped line, this is possible by editing

the strip band that is directly below the nib window.

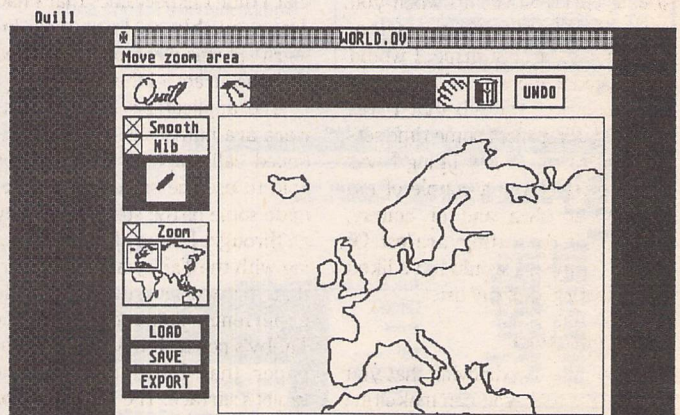
Drawing

Ease of use is the name of the game. The main window of the work area is a duplicate of Tabby's active area. This gives a one-to-one relationship between the pen and the drawing area. In practice this gives a great deal of accuracy which is important when tracing graphics for instance.

Tabby's speed settings come into play here. The pointer's speed can be set up to your liking, but for freehand drawing 'bounce' would seem to be the ideal setting. When drawing freehand your



Here a graphic has been loaded. Notice that the 'smooth' box has been activated. This in association with the 'bounce' setting allows very accurate and smooth lines to be drawn, something you would be hard pushed to emulate with a standard mouse.



The same graphic displayed with zoom enabled. This gives a clear idea of the quality of the drawing that is possible and indicates the smoothness of line.

movements tend to be continuous, with the pen moving over the tablet quite quickly. With the pointer in bounce mode the jitter that you may experience with slower settings is eliminated. Also, Quill itself has a smooth setting that can be adjusted. This, as its name suggests, allows you to smooth out any bumps in a line that you have just drawn.

One last area that should be mentioned is the way in which the right mouse click is set-up. Quill exits from its current drawing mode with either a right click or by pressing the space bar. The space bar option I found inconvenient as I had to reach to the keyboard too often. This can be annoying as I sit back away from the desk when I am using the Tabby. However, the Tabby driver has the answer in that the right click can be set up to occur when the Tabby's pen is lifted more than 1cm above the active area of the tablet. Also there is an optional audible beep when this operation is completed. This is the ideal set-up for me, and allows a very relaxed posture to be taken up when drawing.

Drawing is simplicity itself. Just click on the pen icon at the top of the screen and away you go. The nib takes up whatever characteristics you have set in the nib set-up dialogue box. Experimentation is the thing to do here. A great degree of variation can be achieved with experimenting with nib thickness and its angle of rotation. Anyone who wishes to use this hardware and software for calligraphy will appreciate this feature.

A number of nib shapes and styles can be set-up and switched between via the swap button. The revert button on the other hand moves you back to the first nib setting that you set up when you started this drawing session. Herein lies the first gripe. I would have liked some way of recording the settings of the nib that I was using. Having spent some time setting up the nib to my liking I was only able to have a couple of nib settings at once and of course, when I exit, the settings are lost. Of all the features I would have liked to see this is top of my list.

Manipulation

Once you have a drawing that you are happy with you can make fine adjustments by invoking the zoom mode. This can be positioned over any section of the drawing that you choose. Moving from full view to zoom is simply done via

one click of the pen. The drawback of this mode, of course, is speed. If you enclose a large section of the graphic and then zoom in this can have quite a marked effect on the speed in which your commands are carried out. However I found that the loss of speed wasn't that noticeable.

Any element of the graphic that you have drawn can be picked up and moved about the screen. You do not need to enclose the entire line with the rubber band box that you draw to move it. Just enclosing a portion of a line is enough to select it. Quill will intelligently look at the line and find its end. The line is then constantly re-drawn as you move it around the screen. Fixing is with another pen or mouse click. The entire graphic, or just a section of it, can be deleted by rubber banding it in the same way after clicking on the waste bin icon.

Quill has its own format that it can save your graphics to. It will also (at this time) only export in IMG format. As most graphics and DTP software support this format these days, getting your graphic into another package isn't a problem. I loaded my signature into a graphic frame of Calamus 1.9n without and problems.

The Verdict

Overall the feel of Quill with the Tabby is that you have a proper drawing tool. The Tabby of course gives Quill the ease of use that it deserves. The mouse cannot be controlled with enough accuracy for this type of drawing. I liked the one-to-one relationship that you have with the drawing area. I was expecting to have difficulty placing another line on the page once I had exited drawing mode. This turned out not to be the case. I also expected a speed penalty in that I didn't expect lines that I had drawn quickly to keep their integrity: I was pleasantly surprised at the accuracy of this feature.

The applications for this software are numerous. I have mentioned calligraphers who may be able to use the software to automate some of the stages that they go through. I have also tried tracing with the Tabby and can report that this works quite well. I did experience some drag on the Tabby's pen as I moved across the paper that I had taped to the tablet's surface. The pen caught on the rough surface of the page and stalled. But for creating clip art this method is ideal.

Lastly, I asked a friend who speaks many of the Indian

languages to try and write Urdu or Hindi with the Tabby and Quill. She found that once she had set up a fine enough nib and got the rotation right she could write quite effectively. Here the one-to-one relationship of the pen to the page is of the ultimate importance.

Conclusion

I had been using the Tabby for a while with other graphics packages. I particularly liked the control I had in programs such as PixArt and TouchUp. Quill brought a welcome versatility to freehand drawing that was lacking somewhat up to this point. Things do take a little time to get used to,

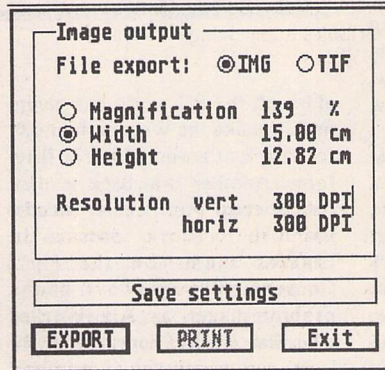
but once you are there, you will find that the Tabby/Quill combination brings a welcome change from your mouse, and opens up new possibilities for you to explore.

Points For:

- ✓ Greater accuracy than with a mouse
- ✓ Feels more like pen and paper
- ✓ Ease of use

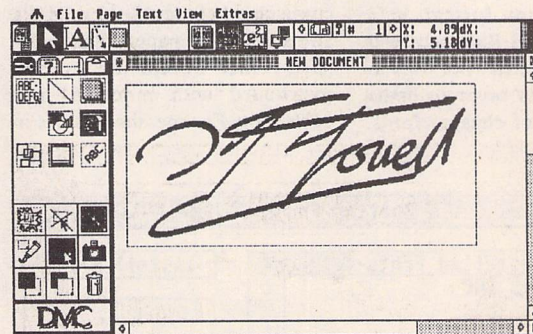
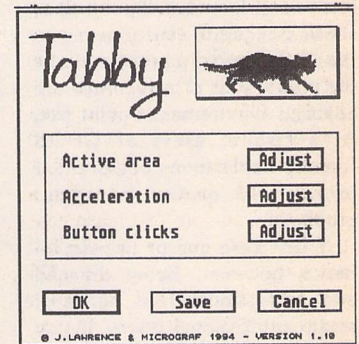
Points Against:

- ✗ Nib set-up a little hit and miss
- ✗ Cannot save the nib settings
- ✗ Nib changes are applied to the whole drawing; cannot select a line to change



The all important export dialogue box. At the moment IMG format is all that is available, with TIF files coming at a later date. This should not cause too many problems as most graphics and DTP packages can handle this format with ease.

Clicking on the Quill logo takes you to the Tabby set-up dialogues. From here the Tabby itself can be adjusted to give you the optimum performance.



Signatures are only one of the ways in which Tabby can be used. Here one has been saved from Quill as an IMG file and imported into a graphic frame in Calamus 1.9n.

Product:.....Quill
 Supplier:.....CGS ComputerBild, 231 Northborough Road, London SW16 4TU
 Tel:.....(0181)-679-7307
 Fax:.....(0181)-764-7898
 Price:.....£29.99 (bundled with Tabby at £69.99)
 Manifest:.....One DS disk and 15-page manual
 System:.....Any ST, including Falcon

SpeedoGDOS

The Sequel

We all struggled along with bitmap fonts, watching Atari go into decline as other manufacturers and systems began to take off. Then, with the Falcon, and potentially a new tomorrow, came SpeedoGDOS. For once, Atari had thrown in their lot with a proper supplier of professional font handling systems. This was a culture shock on two counts. First, here was a piece of software that worked. Secondly it provided ST users with a font system and quality which was second to none. The Bitstream™ Speedo outline fonts were of exceptional quality in all sizes. Even small point sizes showed exquisite clarity owing to the use of hinting, a process where the proportions of a typeface are adjusted at extremes of point size. At a stroke, users of GDOS friendly applications could enjoy professional quality document production.

There were one or two drawbacks, however. Being dragged into professional font handling, meant professional prices, if you needed any additional font packs. The Speedo font format is a closed system and Bitstream will not give details of its font files to third parties. This severely limits the introduction of cheaper fonts,

Version 5 reviewed by Graham Curtis

although the PC world has given us things like the Wordperfect 6.0 font pack at around £30 for fifty fonts. Another drawback is that the Speedo font scaler needs memory to store fonts as it creates them 'on the fly'. Consequently Speedo-friendly programs such as AtariWorks, Wordflair II and Papyrus need, at least, two megabytes of memory for comfortable operation.

Just as things were beginning to die down, and Atari computers had taken a back seat to the trendy Jaguar, it looked as if SpeedoGDOS had followed many other Atari 'good ideas' into oblivion. Not so. Those committed and industrious people at Compo have created SpeedoGDOS v5.

As a user of SpeedoGDOS 4.1 I was eligible for an 'upgrade version' of SpeedoGDOS v5, which comes in a simple plastic wallet containing two double sided disks and a small A5 manual. I am quite happy that Compo do not go overboard with manuals, and packaging. For me, the value is in

the software and the effort obviously goes into the meat of the software and documentation rather than the frills. At £29.99 the upgrade fee is reasonable considering the extra facilities offered.

Briefly, SpeedoGDOS v5 adds the following to the existing outline font package.

Font Formats

As well as the excellent Speedo vector format, Compo have added Postscript Type 1 and the TrueType format made popular by PC users. This has increased the variety of available fonts immeasurably. TrueType fonts, in particular, are available in vast quantities from Bulletin boards and on give away magazine CD-ROMS. You should never be stuck for a particular font for your masterpiece.

Printer Support

Compo have added long overdue drivers for the Laserjet 4 at 600 dpi, and colour Deskjets, as well

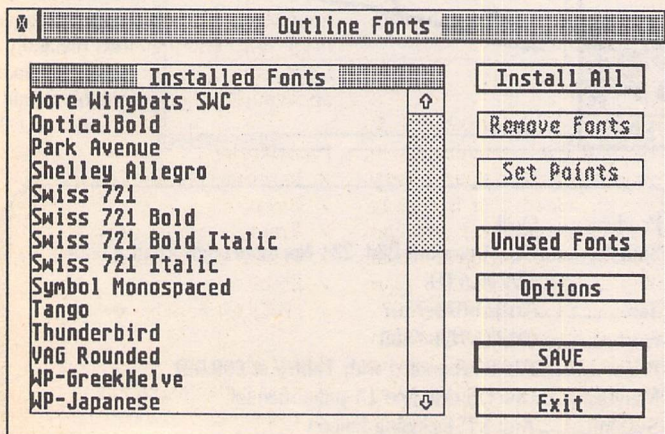
as the newer Epson printers: LQ 1000,1050,500,800, Stylus and LX8000.

Additional Fonts

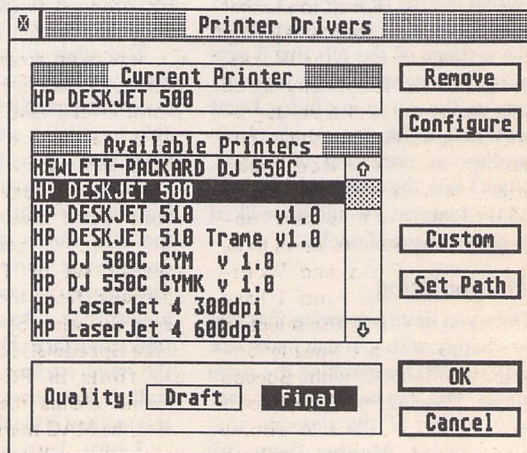
To add further value to the upgrade, Compo have included eight extra Speedo fonts to the package compared with version 4.1. As mentioned above, I have the upgrade pack. If you order the full version, the cost is £59, for which you will receive the full package with 22 fonts and installation program.

What it All Means

For those readers who have yet to take the outline font plunge, it is worth describing SpeedoGDOS. If you are already a user, send off for the upgrade and skip the next paragraph! As mentioned above SpeedoGDOS is the latest version of Atari's hopeless Graphic Device Operating System, which was notable mainly for its awkwardness and lack of truly good quality professional fonts. SpeedoGDOS comes with an installation program and two utilities for making the business a truly painless experience. A comprehensive set of Bitstream fonts come with the package, and new fonts in any of three types can simply be dropped into your font folder.



Utility programs make font and printer management simplicity itself.



Assign.sys is still there, but you need never look at it.

The installation program will create a font folder for you, and install the two utilities as accessories, if you have plenty of memory, or programs, if you haven't. The two programs handle printer drivers and font loading respectively.

OUTLINE.ACC searches your font folder for fonts and indicates those which are loaded into your system. Modern Speedo-friendly programs only need to know that a font exists so that it can request 'on the fly' fonts scaled to any size. Older GDOS programs require that you set up pre-set sizes, so that the program can call up ready scaled fonts. Outline now treats all fonts the same so the user is unaware whether he is working with Speedo, Postscript or Truetype fonts. For the curious, clicking on the 'point sizes' button reveals the full font name and type. Fonts can be installed or discarded at will, and Outline will advise you on the settings required for the various font caches. When you have set the system up to your own taste, the settings are saved out to ASSIGN.SYS and its younger sister EXTEND.SYS.

DRIVERS.ACC is the printer management tool. Again all present printers are displayed for you to choose from. Once a device is selected, it can be configured via a simple dialogue. Default options will be saved out to ASSIGN.SYS, if you are interested.

SpeedoGDOS 5 in use

Surprisingly, the additions to SpeedoGDOS have been integrated without added complication in the user interface. The improvements are completely transparent in use. Apart from the new sign-on message at boot time, incorporating a credit to the NO! software team, it is difficult to see that anything has changed at all! My usual software, AtariWorks, Wordflair II and Kandinsky are all perfectly happy with their upgraded font system. The single bit-map font which Kandinsky needed to overcome a bug in SpeedoGDOS 4.1 is now unnecessary. Speed does seem to be improved in Works and Wordflair, and the new fonts I have scrounged appear in the selection panel alongside the Speedo originals. Compared with Speedo fonts, the Postscript Type 1 fonts are noticeably slower to display on screen, although the quality is excellent.

Another invisible improvement, is a font cache which SpeedoGDOS 5 creates in your main font folder. This is intended to store frequently used fonts so that initial program startup is improved along with font scaling speed. Wordflair II already has its own system for this, but I have not noticed any conflicts between the two systems.

On the subject of font folders, SpeedoGDOS now allows a separate folder for each font type, if you wish, although it is quite happy to have them all in the same one. Any number of font folders can be identified using the XPATH =[PATH],[PATH].... in your extend.sys file. The outline fonts utility will, however, only allow you to edit the first two interactively.

For hardened users, several other variables have been provided for use in extend.sys. OUTMODE defines rasterisation quality at low resolutions, LOWMEM allows you to adjust the way SpeedoGDOS caches font data, AUTOINIT determines when SpeedoGDOS performs its initialisation routines and STOP controls the way the sign-on message is displayed on boot-up.

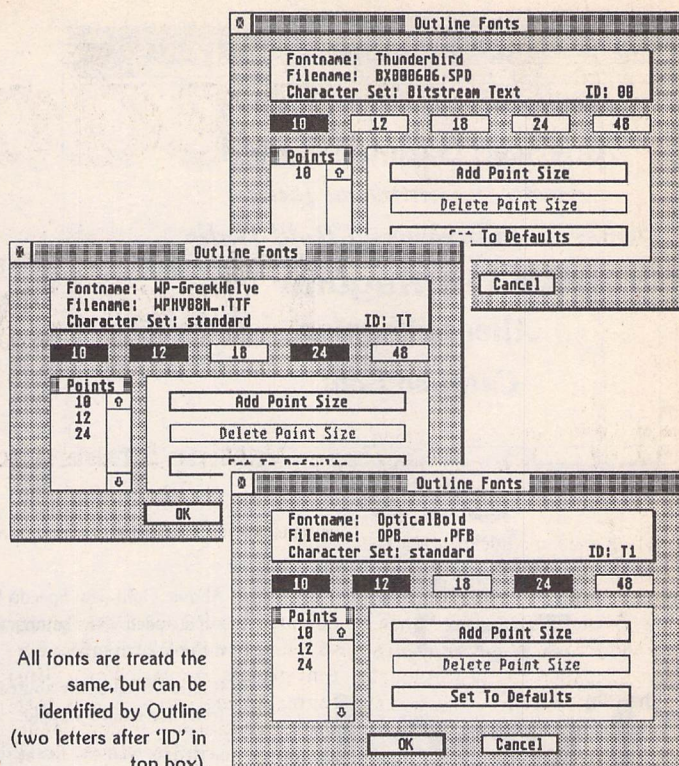
Printing

One of the most welcome additions for Atari users must be the support for colour printers, and lasers with extended resolution. I have been very impressed with the output from my DeskJet 550C at work, and will be saving my pennies in the hope that upgrade fever grips the authors of AtariWorks and other GDOS packages. I do not have access to a Laserjet 4 but SpeedoGDOS output at 600dpi should be stunning.

Font Compatibility

I found a couple of Postscript Type 1 fonts on a magazine cover disk, dropped them into my font folder and within moments had the results on screen with AtariWorks. TrueType fonts from WordPerfec 6.0a for Windows got as far as the outline utility which was happy to accommodate them, but none of my applications would show them in their font selection panels. Strange. Another set of Truetype fonts borrowed from the PC operated perfectly with SpeedoGDOS 5. While SpeedoGDOS 5 is happy to use fonts in PC format, the manual claims the any sourced from the MAC must be converted before they will work.

What all this means is that I



All fonts are treated the same, but can be identified by Outline (two letters after 'ID' in top box).

now have a font folder containing some ninety five, high-quality fonts and can switch between them at the drop of a hat. The fact that I only ever use four of them in anger is neither here nor there. They are there when I need them! Once in the system, all fonts are treated equally. All can be given the standard effects such as outline, bold and italic. The only difference between the types seems to be speed of display. Speedo fonts are true to their name, while Truetype and Type 1 fonts take noticeably longer to display. Type 1 fonts, in particular, can leave you with an embarrassingly blank screen for several moments after setting a new style.

On the subject of speed, SpeedoGDOS 5 is now NVDI aware, so users can benefit from the considerable speed enhancements available.

Conclusion

The beauty of SpeedoGDOS 5, for me, is that it is unnoticeable in operation, yet the output is very noticeable indeed. This is exactly how things should be. No longer do you have to get dirty hands playing around with fonts if your sole objective is to produce quality output. SpeedoGDOS just gets on with it and version 5 adds even more facilities without straying from the simplicity of the original. The involvement of the German NO! team and Compo should

surely get other developers moving. We might get a completely universal Atari font-handling system yet.

The extra font compatibility is nice, but the slow down compared with the original Speedo fonts makes me think twice when choosing a new font style. Of course, the massive availability of Truetype and Type 1 fonts, compared with the expensive Speedo format, will swing the decision for most users.

Wish List

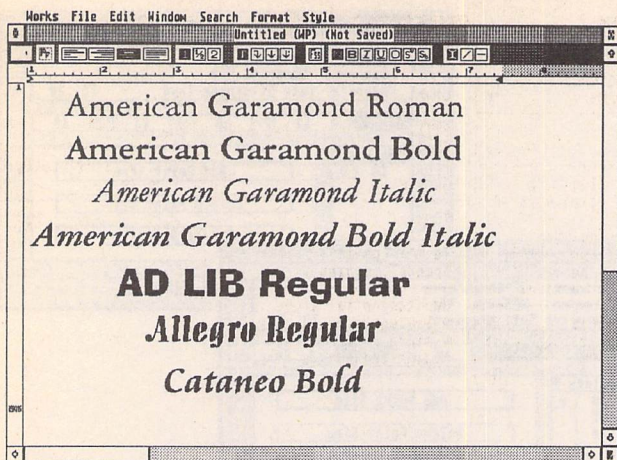
Now that Compo have shown their commitment to SpeedoGDOS, it is worth asking for one or two enhancements for version six! My first would be a font preview facility for the Outline font utility. With a font folder containing a hundred fonts, it is a long winded process, adding fonts, rebooting then running an application to see the result.

Points for:

- ✓ Improved printer support
- ✓ Colour
- ✓ Transparent operation
- ✓ Increased font range
- ✓ Stability
- ✓ NVDI Compatibility

Points against:

- ✗ Font collecting can be additive
- ✗ 520ST owners need not apply



Type 1
Type 1
Type 1

Type 1

Type 1

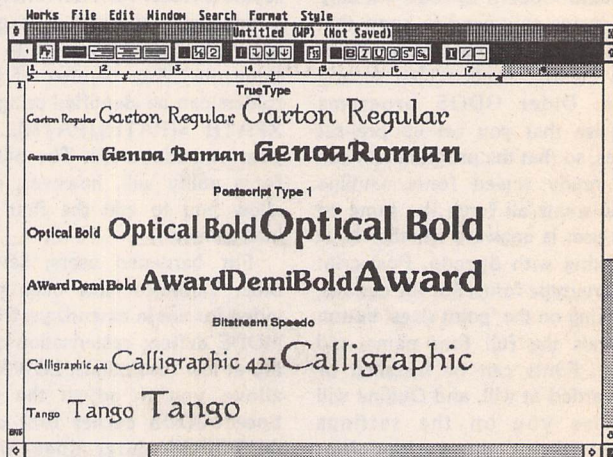
Type 1

Above: Eight new Speedo fonts are supplied with the upgrade, making 22 in total.

Right: Whatever the source, all fonts are treated equally.

Left: TrueType and Postscript Type 1 fonts can be scaled on the fly.

Product:..... SpeedoGDOS v.5
 Supplier:..... Compo Software Ltd
 Unit 3 Green Farm
 Abbots Ripton
 Huntingdon PE17 2PF
 Tel:..... 04873 582
 Fax:..... 04873 581
 Price:..... £59
 Upgrade:..... (from SpeedoGDOS 4.x) £29
 Compo can also supply packs of Speedo fonts.



TRUE MULTITASKING - THE SMS2 OPERATING SYSTEM

THE DAWN OF A NEW ERA

SMS2 IS A POWERFUL OBJECT-ORIENTED, OPERATING SYSTEM WITH BUILT-IN GUI, HOTKEY SYSTEM AND NETWORKING. SMS2 TRANSFORMS EVEN MODEST ST'S INTO REAL-TIME SYSTEMS WITH WORKSTATION CAPABILITIES

But what does this all mean to the user? It means that you can use your computer in the way that YOU want to use it rather than in the way that it forces you to use it. Suppose that you want to use your ST as a fax machine. If a fax call comes in, you are still able to carry on using your word-processor and /or database and/or spreadsheet program. The fax is simply received in the background.



For the programmer, this provides endless possibilities. You can be running your program under development at the same time as editing the source code at the same time as re-compiling a later version. SMS2 is a wonderful environment to work in.

SMS2 comes on a plug-in cartridge for the ROM port of all the ST range and supports the high-res mono mode. There is no complex setting up or installation. You just plug it in, switch on and 9 seconds later you have an SMS2 system

which is ready to network without any expensive hardware add-on's. The system comes in PEROM form on the cartridge so if you want to change the startup configuration at all then it is simple to do so. This also means that any enhancements to SMS2 can be provided on disc without the need to return the SMS2 cartridge.

It must be pointed out that SMS2 does not run GEM or TOS programs. It is a distinct and separate operating system which provides a powerful and yet flexible form of computing. There are already a number of commercial programs and a good range of PD software which is available now and is SMS2 compatible.



SMS2 is ready now for only \$135.00 by cheque or eurocheque from:

Furst Ltd, Delta House, Garfield Road, Bishops Waltham, Southampton SO3 1AT, England.

Telephone: + (0)489 894674

Facsimile: + (0)489 895765

C & P Rossiter

For the best prices on hardware and service, contact the experts. TOS 1.4, TOS 2, Blitters, memory upgrades, repairs, hard discs, scanners etc.

Repairs start from £25 and are on a 'no-fix no-fee' basis

ST-E memory upgrades start from £18 all others available at the best price

Please phone, write or fax for a price list

C & P Rossiter
 48 Park Drive, Hucknall, Nottm.
 NG15 7LU
 ☎ (0602) 681870

File	Edit	View	Object(s)	Attributes	Settings
New... AN	Undo: not possible UNDD	Show entire page OF2	Convert to... OU	Colour... OC	Window... OW
Open... AO		Previous zoom OF3	To foreground AF	Write node... OZ	Various... OO
Merge... AD	Cut AX	Zoom mode OF4	To background AB	Line... OL	Screen... OS
Save AS	Copy AC	Zoom percentage... OF5	Group OB	Fill... OF	Printer... OP
Save as... AM	Paste AV	Scale... OF7	Ungroup OD	Shadow... OS	PostScript... OS
Save as template... AMH	Delete BS	Unit... OF8	Define align area OG	Marker... OM	Size proportionally OS
Close AU	Select all AS	Grid... OR	Display align area OH	Text... OT	Size text OS
Inpart... AI	De-select all AS	✓ Bézier tangents F2	Align... OI	Vector text... OV	Save settings F10
Export... AE	Clipboard Info... OK	✓ Show coordinates F3	Align to polygon OJ	Text alignment... OA	
Page format... AP	Text entry... FS	✓ Use crosshair F4	Equispace horiz. OM	Speedo™ kerning... OK	
Print... AP	Display active font... FD	✓ Show print area FR	Equispace vertical OE	Non-tangential segments F6	
Info... AI	Cycle windows AM		Mirror horiz. OX	Allow vertices to move F7	
Quit AQ			Mirror vertical OY	Visible Bézier curves F8	
			Rotate... OJ	Bézier segment to line F9	

Graham Kurtis comes out!

Konfessions from the Kandinsky Kloset

I have written in these pages before that I am a GEM and GDOS enthusiast. When SpeedoGDOS was released, I went through all my software to find out what would work and what wouldn't. Calligrapher went, to be replaced by Wordflair II and laterly AtariWorks. For some time though, I soldiered on with EasyDraw. I had become accustomed to it over several years and could knock out a quick diagram at a moment's notice. Some parts of EasyDraw I found infuriating: why do some packages insist on changing the mouse double click speed? Musicom is another offender here. GEM Draw (particularly the 'plus' version) on the PC was much easier to get on with, although I tried not to admit it in public.

The death knell for EasyDraw came when its Speedo capabilities appeared less than I had hoped. Even when things were working OK, displaying justified Speedo text was hopelessly slow. Thanks to Joe Connor and ST Applications, I discovered Kandinsky by Ulrich Rossgoderer. As those who read Joe's column will know, Kandinsky is a shareware vector drawing package, based (although the ancestry is now a little hard to see) on GEM Draw for the PC. Big plusses for me are the excellent Speedo support with 'on the fly' font scaling and adherence to

standard GEM file formats. This latest version (1.70e) will also load and display IMG files within a vector drawing.

The Package

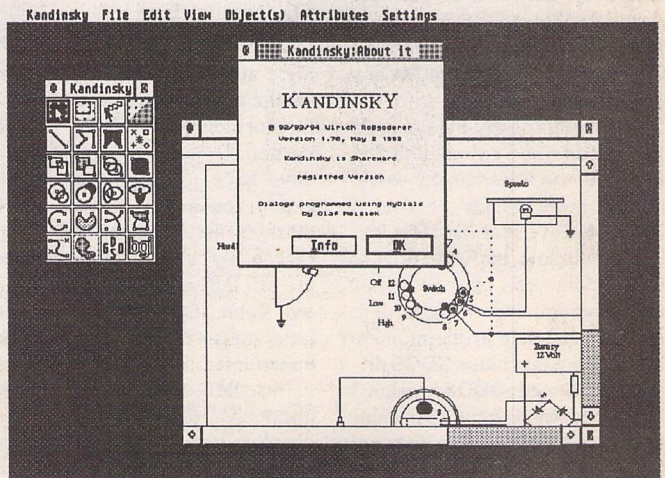
Kandinsky is distributed as shareware and can be obtained from the ST Club on a single disk (GR.205). The unregistered version is without manual and one or two functions, but is perfectly usable so that you can give it a trial run before you part with your registration fee. Version 1.70e now comes with two versions of the program; the standard version, and a special release for owners of machines with maths coprocessors. Registration has been made simple by Joe Connor. Just send Joe £15 and a blank disk and you will get the latest version of Kandinsky, the full manual (on disk) plus a personal code for unlocking the 'reserved' features. It couldn't be simpler. Upgrades to the latest version are available if you send a blank disk. As well as handling registrations, Joe has translated the manual into English, doing us all a great service.

Enough preamble. Let's have a look at Kandinsky and see if it lives up to its promises. Bucking the German trend, Ulrich has struck a sensible balance in his use of icons. The toolbox icons are the standard functions that we all know and love, and, more impor-

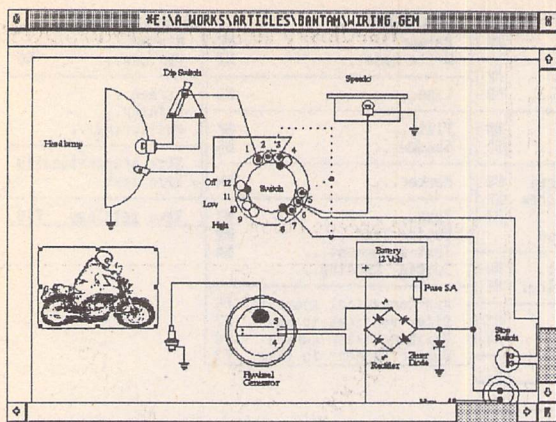
tantly, can understand. The more esoteric options are available from the menu where words are more obvious to the novice.

All of the usual drawing tools are there; line, polyline and filled polygon, filled and unfilled circles, ellipses and rectangles. Menu options are available for changing colours and other attributes such as line style or fill pattern. Every menu item has a keyboard shortcut and these are the standard Atari ones where appropriate. For instance, cut copy and paste are handled with the familiar CTRL X, CTRL C and CTRL V respectively.

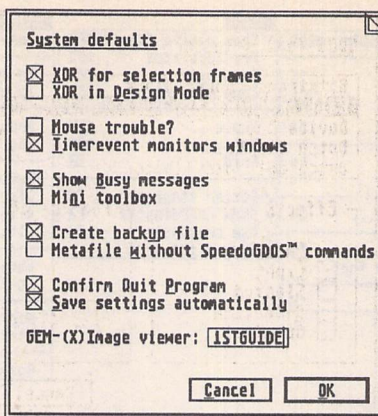
Most of the tools are used in a familiar click or click and drag manner. Only the move object function is a little strange for long time users of EasyDraw. Once an object is selected with the left button, a click on the right button selects the 'move/size' icon. Now the left button latches whenever it is pressed, so you no longer have to hold it down when moving an object. One click holds the button down and a further click at the end of the operation de-selects it. This little trick applies to both moving and sizing objects and can become quite natural, eventually. I feel though that it is a bit late to



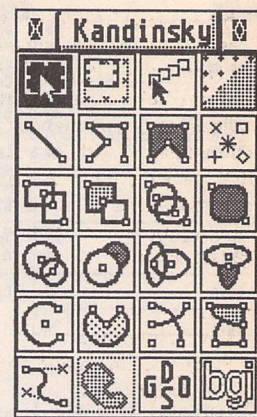
Kandinsky in action



Kandinsky can now import and display bit images



Kandinsky has a myriad of defaults for the user



Kandinsky's icon interface

re-educate some of us old timers!

One problem that is frustrating with EasyDraw is the selection of an object which is obscured by others. Kandinsky solves this by allowing you to repeatedly click in the same area, and each local object will be selected in turn.

Another useful option allows you to preserve the scale of an object when scaling it. With 'size proportionally' selected, four of the handles on the selection box disappear preventing you from squashing your object out of shape. Nice...

I was particularly interested in Kandinsky for its textual abilities. It swallows up all my Speedo fonts with ease. These can be sized in one point increments, although I have noticed that the kerning seems to get a little muddled at larger point sizes. A Speedo kerning option is available on the attributes menu, but I have failed to notice any effect this has. BGI (Borland Graphics Interface?) vector fonts are supplied with Kandinsky, but seem of little use when you have GDOS fonts to play with. Text can be rotated in 1 degree steps, and coloured in any of 16 colours.

I normally run my Falcon in 16 colour mode, so I switched to 256 colours to see if Kandinsky would provide more choice of colour. Sadly, I believe that the 16 colour limit is built into the GEM VDI so more colours can only be gained with programming trickery. It is perhaps academic at the moment for there are no colour GDOS drivers until SpeedoGDOS version 5 is released by Compo. Speaking of GDOS, I noticed that some of the on screen line styles were not evident on the printed output. Dotted lines are printed as solid ones on my Deskjet 500. I am

tempted to blame this on SpeedoGDOS but Ulrich may know more about the problem.

Line thicknesses can be set in 0.1mm increments so you can have full control of the appearance of your drawing. Unfortunately the effect of line thickness is lost at minimum zoom levels so you must zoom in to see what is going on.

The zoom facilities are very intuitive. Select zoom mode from the menu (SHIFT F4 for Marvo the Memory Man) and draw a box around your prey. SHIFT F3 will take you back a level and SHIFT F2 show the full page again when you get lost in all the detail. If you prefer, a preselected zoom percentage can be chosen.

Bézier curves are supported for the really sophisticated user. I must confess to being a duffer with these, so limit my diagrams to straight lines and arcs where I can. You can certainly draw some sensuous curves and control their shape very easily.

File Import/Export

I am only really interested in GEM files, and Kandinsky is able to handle all flavours of GEM metafile, including GEM 3/PC Artline version. Drawing programs these days have to offer import and export routines to survive. Kandinsky's list is rather small but reasonably useful. Import types are just IMG and Comma Separated Value (CSV) data files. The latter means that a diagram can be constructed from a list of data points. IMG file import is more impressive than that of Supercharged EasyDraw. The graphic image can simply be dropped onto the drawing where it can be moved and sized as any other object.

There are also two Export options: Postscript, which makes up for the lack of a SpeedoGDOS Postscript driver, and Tektronix 4014. This must be a rather rare format these days, but useful where Tektronix terminals are used on mini computers. Our old VAXstations used this format, but I haven't seen it for a while.

Printing

Kandinsky uses your installed GDOS driver to print with, although many options are selectable via dialogue boxes. I struggled to get an A4 drawing to print on A4 paper. I read the manual several times but only succeeded in printing bits of my drawing across, rather than down the page. I accept that I may be an incompetent fool, but I can usually get a printout from other programs at the second attempt. I think Kandinsky may be allowing the user too much control here as both page size and portrait/landscape settings can be selected along with margin size. A 'size to fit' option like that of GEM outprint would be very handy as a start. Kandinsky's 'show print area' function served only to confuse, a print preview would be more useful, and would save paper. I eventually got my drawing to print by importing it into one of the demo pictures.

User Interface

Like many new packages Kandinsky uses movable dialogue boxes. For multitasking compatibility, the dialogues are displayed as windows. To speed the programs up they can be shown as simple dialogue boxes, but still have a little handle for moving them to one side when you look at the effect of your selection. The

toolbox has its own window, so can be positioned anywhere on screen. Wherever you put it, Kandinsky will remember for you at your next session.

Screen redraws are much quicker than EasyDraw, particularly when text is involved. One almost too clever feature is the automatic 'topping' of windows as you pass over them. This can be a little unnerving when you are not working on the window you thought you were. Thankfully the feature can be disabled if you wish.

Support

There have been many words uttered about the shortcomings of shareware users and developers. When I began using Kandinsky, I experienced difficulty when loading its GEM metafiles into WordFlair, although AtariWorks coped well. Joe Connor identified this as a problem with differing versions of the GEM file format and promised to pass my comments on to the author. Ulrich has taken this on board and the latest version now has the option to save 'early' type GEM metafiles. All this happened in less than one month! Try getting Wordperfect Corporation to respond in this way!

Conclusion

As some of the commercial packages fade from the scene, it seems that shareware authors are intensifying their efforts. Kandinsky sets out to be a comprehensive vector drawing package for the ST and Falcon. In my opinion it succeeds very well and the author should be commended for producing a package which is faithful to the GEM standards. The registration fee is reasonable and, thanks to Joe Connor, is easy to

deal with.

Kandinsky author, Ulrich Rossogoderer, has restrained himself from 'going it alone' and has produced a package that both novices and experienced users will feel happy with as a standard GEM package. One or two areas could do with a little more polish, but the program is heading in the right direction.

Pluses:

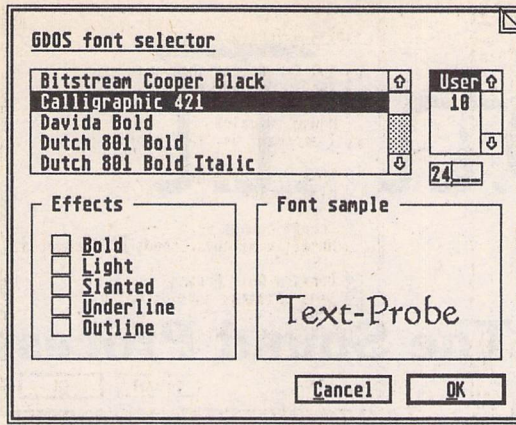
- ✓ Lovely interface
- ✓ Faithful GEM implementation
- ✓ Postscript export
- ✓ IMG handling
- ✓ Support

Minuses:

- ✗ Strange printing behaviour
- ✗ Non-standard move/size procedure

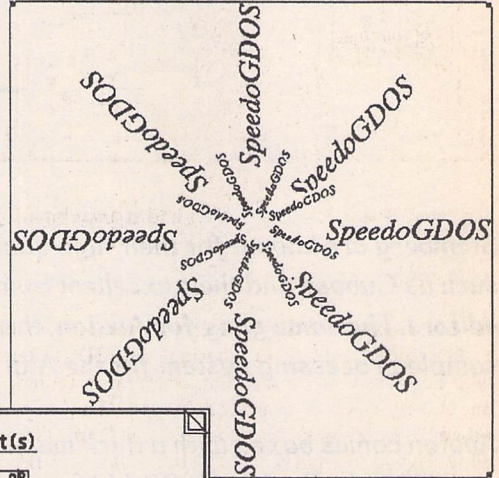
Availability & Support

Registration fee: £15
 Send cheque and blank disk with SAE to:
 Joe Connor, 65 Mill Road, Colchester CO4 5LJ, England.
 Email:
 jconnor@cix.compulink.co.uk

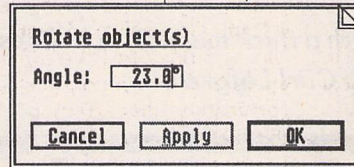


Kandinsky supports SpeedoGDOS!

Left: The Speedo dialogue box



Right: SpeedoGDOS text can be rotated and sized with ease



Imagecopy

Version 3.5

Imagecopy 3.5 CD

Imagecopy 3.5 CD can load Photo CD images in any of the five standard resolutions: 128x192, 256x384, 512x768, 1024x1536, and 2048x3072 (memory permitting), and can also load blocks from any resolution, without having to load the complete image. Blocks are selected from a thumbnail image using the mouse or by typing coordinates.

New features in Imagecopy 3.5 include:

- ☛ A thumbnail option displays miniature thumbnails of a set of images within a single window. This is useful for looking through a disk of images or for creating disk catalogues.
- ☛ Screen images can be scaled so that they fit on screen or within the current slide-show window, making the slide-show option much more effective on low-resolution screens.
- ☛ Random print dithering can be selected as an alternative to halftoning and other print options. This is slower than halftoning, but gives better definition.
- ☛ Popup image menu, with options including the ability to flip and rotate images and nine zoom levels from 1/16 to 16x.
- ☛ Aspect ratio correction. Imagecopy automatically defaults to the correct aspect ratio for the current screen resolution, so images look right in resolutions with non-square aspect ratios (ST medium, TT low etc.) Aspect ratio can also be adjusted manually.
- ☛ A 'dither brightness' option gives improved monochrome dithering on screen.

- ☛ Improved memory allocation: Imagecopy 3.5 uses about 50k less memory than Imagecopy 3.0, despite having about 50k of additional code.
- ☛ Faster colour processing: the colour saturation option is 20 times (!) faster than previously, and other colour processing options have also been speeded up.
- ☛ Compatibility with the Matrix graphics card.
- ☛ The 'slide show' dialog contains an option to select any image in the slide-show list as the next slide-show image.
- ☛ The 'image information' dialog includes information on the resolution of an image.
- ☛ Images can be displayed against a white, grey, or black background.
- ☛ A 'print density' option allows for detailed control over print quality.
- ☛ A 'black balance' option improves CMYK print quality on Deskjet printers.
- ☛ 720-dpi Epson Inkjet driver (for use with the new Stylus Color printer).

- ☛ New image formats: in addition to previous formats, Imagecopy 3.5 can read SunRasterfiles, and XGA files; true-colour IMG files can now be saved in 16-bit, 24-bit, or 32-bit format
- ☛ Time-out option for single-button alerts.
- ☛ RSC images can be copied from any video mode, including true colour.

Upgrades

XICG: From Imagecopy 3	£6.95
XICH: From Imagecopy 2	£15.95
XICI: From Imagecopy 1.5	£20.95
XICJ: From Imagecopy 1	£24.95

XICK: Add £5 to the above upgrade prices if you want Imagecopy 3.5CD. (This includes the cost of Photo CD royalty payments.)

If you are upgrading from version 3 and you bought imagecopy 3 direct from us there is no need to return any master disks. For all other upgrades you must return the program master disk.

Prices

XIC3: Imagecopy 3.5	£29.95
X3CD: Imagecopy 3.5CD	£34.95

FaST Club
 7 Musters Road
 West Bridgford
 Nottingham
 NG2 7PP

Avalon II

– The Sound Processing Software

Steinberg are known for their high quality software, such as Cubase and their excellent Synthworks editors. The same goes for Avalon, their universal sample processing system for the Atari.

Avalon comes boxed with a thick manual, two disks and a dongle. Review by Carl Löfgren.

Installation

The installation is very easy. Just copy the disk's contents into a folder on your hard disk, or make a copy of the disks and run Avalon from them. Plug your dongle into the cartridge port and start Avalon. To save memory you can choose the sampler(s) you are working with, otherwise all sample-drivers will be installed.

Manual

The manual starts with a very interesting chapter about "sound theory", and it's a good thing to read before you start to use Avalon. The whole manual is well organized, and very easy to read. The program is very user-friendly, so you don't actually have to read through the whole manual from the beginning to the end. But it's there, and you can always pick it up and read if there is anything you don't understand about the program.

One thing I found that I was a bit disappointed with, was that the manual only covers Avalon's functions and capabilities, but there is no help or guidance in sample-editing or synthesis, and how they actually work. Swim or sink. If you are experienced you probably know what FM/AM/KSS are about, but for the novice these things could turn out rather confusing.

The Interface

The interface is very much like GEM, and it's therefore very easy to learn. You drag, point, click and double-click just like the way you are used to. You can move all dialog boxes like FlyDials, so if a box covers anything important, you just move it.

Time Domain Editor

In this editor you can edit the sample almost in the same way as in a wordprocessor. You can copy, paste, cut and delete the whole sample or just a part of it. Avalon has got a very sophisticated auto-loop function which will search for the best loop-points in the sample. To get really smooth loops you can make a crossfade loop. Other really useful features in the Time Domain Editor are for example the Pitch Detection (Avalon will examine the sample and tell you the exact pitch of it) and the Time Correction (also known as Time-Stretching, from the Akai samplers): take for example that you are working with a track that's going in 120BPM, and that you would like to use a sampled beat going in 130BPM. Avalon can actually recalculate the sample so that it will be played in the same pitch(!) at 120BPM. Magic? No, but a very advanced calculation. You will also find basic functions such as

reverse, optimize level, fade in and fade out.

Frequency Domain Editor

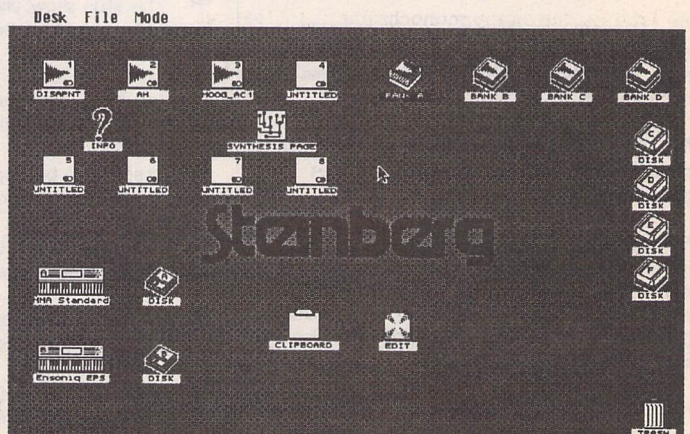
All the used frequencies are displayed here in the FD-Editor. This editor is different from the TD-Editor—you can't loop anything here. Instead you can manipulate the desired frequency or frequencies. You can affect the sample in a number of ways by using the pre-programmed "macros" (such as the Pitch Shifter, the 3D filter and the Frequency Mixer). Here you can see what the highest used frequency is, which can be very useful if you want to save memory. Take for example that you have sampled an electronic bass drum at 44,1kHz, and when you then examine the frequencies you notice that the highest frequency is 12,5kHz. At that point can you go back to the TD-Editor and resample the sample so it will only use the frequencies up to 12,5kHz. In this way you can save A LOT of memory that instead can be used for other samples. By using the "rubbers" you can do a macro of your own. You "draw" how the frequencies are going to be modified. These rubbers can be

stored, so you can create a library with different rubbers.

Synthesis Page

This editor is close to heaven for the experimental user. You can describe it as a very advanced software synthesizer. To create a new sample you can choose any sample in Avalon to be used as a waveform and you can let Avalon create basic waveforms such as Sine, Sawtooth and Square. You can even create "fractal waveforms", where you decide how the fractal should look like, and Avalon converts it into a completely new waveform. Then you can mix these waveforms, modulate them with each other, filter them, EQ them, let them run through FM, AM or Ring-Modulation to create completely new samples.

One thing that will save voices in your sampler is that you have for instance a MOOG-Bass sample. If you want it to sound more "fat" you could use the same waveform twice, and de-tune them a bit. This usually makes sounds sound a whole lot better. Unfortunately, there is a catch: the program now will use TWO voices instead of one. You can now load



This is the Mapping Page, the "Desktop" in Avalon.

the bass into Avalon's Synthesis page, and de-tune them there. The output will be ONE sample that will only use one of your voices, but sound as it were two voices active. Then you can do the same thing again, but with the new waveform. The possibilities are endless.

The only thing that I found that I was a bit disappointed with in the Synthesis page was the fact that it sometimes makes Avalon crash. But after using Avalon for over a year now, I have discovered how to avoid this.

Other things

Avalon's editors (and some memory-hungry functions) are separate modules, so you you can configure Avalon to suit your needs. Brilliant if you don't have much memory.

The program has got a good mouse-accelerator, a clock, and a screen-saver built in.

Support

Avalon currently supports the following samplers : MMA Standard, AKAI S700/S900/S950/S1000/S1100, CASIO FZ-1/2, DYNACORD ADS/ADD-2, EMU Emax, Emax II, ENSONIQ EPS/EPS16+, PROPHET 2000, ROLAND S330/S50/S550, YAMAHA TX16W.

SCSI-sample dump is supported on AKAI S1000/S1100 and DYNACORD ADS/ADD-2.

The SCSI-support is very valuable because it makes it a whole lot quicker. Take a sample that's 4 seconds long, sampled at 22,3 kHz. It would take 192 seconds to complete the MIDI-transfer. When using SCSI it would go from 225 to 250(!) times faster, so the same sample would take something under a second to do with a SCSI-transfer.

The file format in Avalon is unfortunately unique just for Avalon. It can, however, export and import samples in Sound Designer format (*.SD) used on the Macintosh.

I ran Avalon on my monochrome SM124 monitor, together with the STe screen expander DOUBLE2 which gives 640x800 interlaced, and everything worked as it was supposed to. So working with larger monitors shouldn't be any problem.

A quick test showed that it works (in single-tasking mode) together with Gribnif's Geneva.

Updates

Avalon 2.0 does NOT support the Falcon030 (and probably not the TT either), and that's sad because of the hardware in the Falcon. I doubt it will work together with an accelerator, but I can't say anything for sure, as I haven't tried it myself. Version 2.0

was released 31/5/91, and no updates have been made since then. Rumours are saying that a 3.0 update is on its way. With lots of new capabilities (such as using your hard disk as virtual memory), drivers and fully support for the Falcon030 hardware. I spoke with the distributor of Avalon and they said that an update is very likely to happen. Let's hope the rumours are true.

Other Editors Available

The other editors available are mainly GenWave by Barefoot (Binary Sounds nowadays) and the very-soon-to-be-released Zero-X. I haven't used GenWave more than a few minutes, and I didn't choose it as my sampler-editor. I wasn't impressed with what I saw, but maybe something really powerful is hiding under that dull surface.

Zero-X isn't really a sampler-editor, but it's said to have some basic editing functions, plus (what they say is) a very powerful auto-loop function. From what I have understood, Zero-X can convert samples from and to lots of different sampler-formats, such as Cubase Audio, DAME, Avalon, and AVR. I spoke with the distributor and from what I've understood Zero-X should be regarded as a complement to Avalon.

Conclusion

Editing samples on a sampler can be anything from hell to heaven, but with Avalon things get much clearer. You can actually see what's going on (What You See Is What You Hear?). THIS is the software for your sampler. The competition isn't even close. If you ever are going to invest in software for your sampler, take a look at Avalon. You won't be disappointed. This program is filled with features and worth every penny.

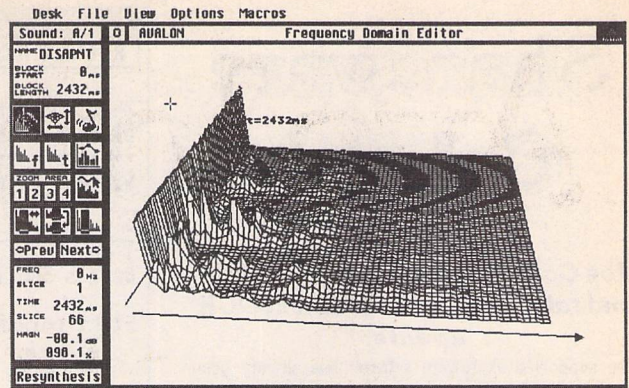
Points for:

- ✓ Very easy to learn
- ✓ Many powerful and useful features

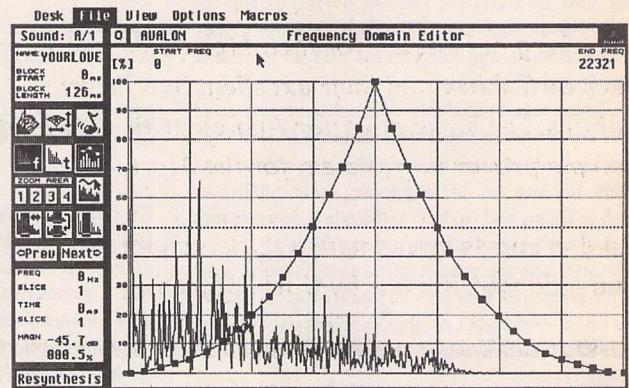
Points against:

- ✗ No tutorial
- ✗ Crashes sometimes in the Synthesis Page

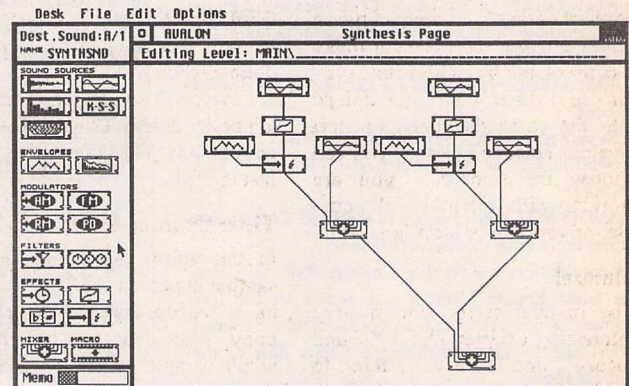
Product:.....Avalon
 Version:.....2.0
 Supplier:.....Harman Audio
 Telephone:.....081 207 5050
 System:.....ST, STF, STFM, STE,
 MEGA ST, MEGA
 STE, STACY



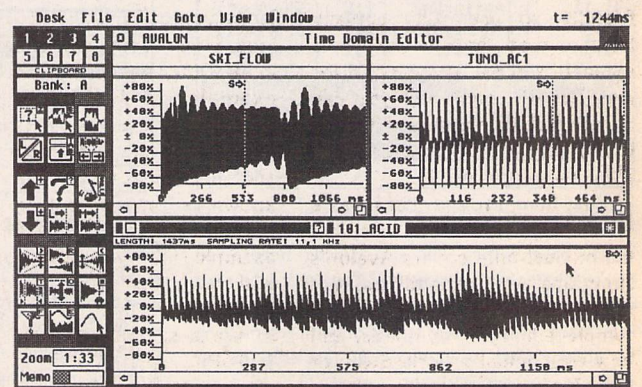
The Frequency Domain Editor (FDE).



An example of a rubber in the FD-Editor.



The Synthesis page. This is Avalon's built-in "synthesizer".



The Time Domain Editor (TDE).

Here most basic functions are found.

Shareware Column

Joe Connor introduces ST-Guide and takes a look at the latest OCR update.

The supported shareware scheme has already been running over a year and I've been overwhelmed by the level of support from Atari enthusiasts, many from around the world including Canada, the US, Italy, Sweden, Australia and Nepal. Recently Everest became the first to sail through the 100 UK registered users landmark and Kandinsky and Selectric look set to achieve the same dizzy heights.

It's been fun but much more work than anyone could have anticipated so rather than dilute the level of support I've concentrated on improving the existing products. It's also encouraging to see other enthusiasts such as Danny and Andrew getting their own schemes up and running and I wish them every success, ST-Guide was too good to miss, partly because most of the programs I look after include ST-Guide support, but mainly because it's another knockout piece of software Atari users have done without for too long—I just couldn't resist it!

UK Support & Update Service

OCR is Freeware with a suggested voluntary contribution between £8-12. ST-Guide is Fairware with a minimum contribution of £5. You can register either in the UK as follows:

- Make a cheque payable to Joe Connor for the desired amount.
- Be sure to include your name and address.
- Send to: 65 Mill Road, Colchester, Essex CO4 5LJ, England.

Please do NOT send cheques to the FaST Club as this causes unnecessary delay and expense.

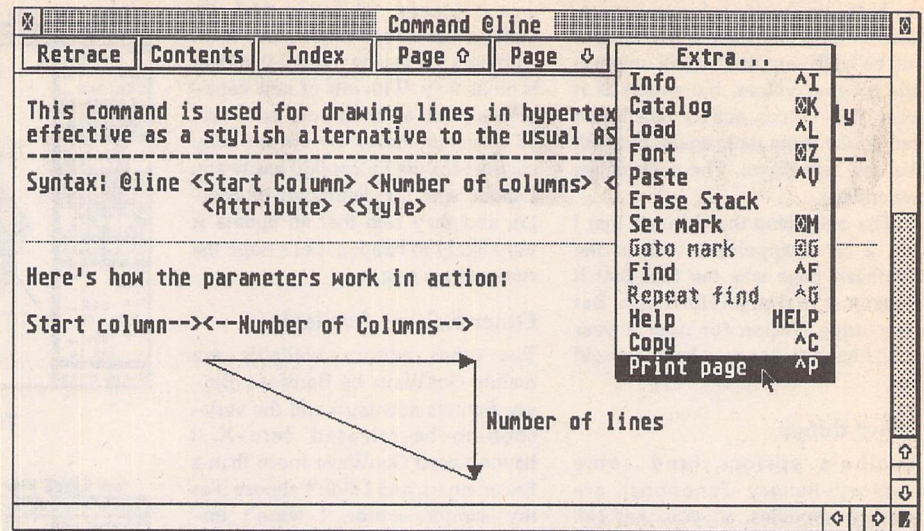
All contributors will receive a master disk containing the latest English Version and access to the free upgrade service. To obtain an update send a Stamped Addressed Envelope enclosing a floppy disk to the address above.

Version	Software	UK-Fee	Status
V1.70e	Kandinsky:	£15	Shareware
V1.10e	Selectric:	£13	Shareware
V1.11	Two-in-One:	£10	Shareware
V4.8	GFA Flydials	£13	Shareware
V3.3e	Everest:	£10	Shareware
V1.52i	Égale:	£10	Shareware
V4.8	GSZRZ:	£13	Shareware
V1.3b	OCR	£8-12	Freeware
V01.07.94	ST-Guide	£ 5+	Fairware
V3.51e	Idealist	£13	Shareware
V1.83e	Address	£15	Shareware

OCR V1.3b Update

If you haven't tried Optical Character Recognition you're missing out on some fun! You don't even need a scanner to take OCR for a test drive as a sample scan is included. There's a real feeling of getting something for nothing after converting your first IMG format scan into editable ASCII text.

Alexander asked me to pass on his thanks to all the people who contributed and wrote in with suggestions and as a result this version offers performance surpassing most of the commercial Atari alternatives, not bad for a humble Freeware package. Here's a rundown



ST-Guide: Atari hypertext standard?

ST-Guide is a complete hypertext creation and viewing system which benefits both programmers and end users alike. Programmers can spruce up their on-disk ASCII manuals and with the minimum of hassle produce a context-sensitive hypertext file including illustrations, text effects and pop-up boxes. At last non-commercial software can provide decent documentation without the overhead of a printed manual. If you really can't cope with reading manuals on screen, ST-Guide can even print the pages out for you.

The ST-Guide hypertext system includes:

✓ ST-Guide Viewer: Used to view hypertexts (or any ASCII format text). Can be installed either as an

application or desktop accessory.

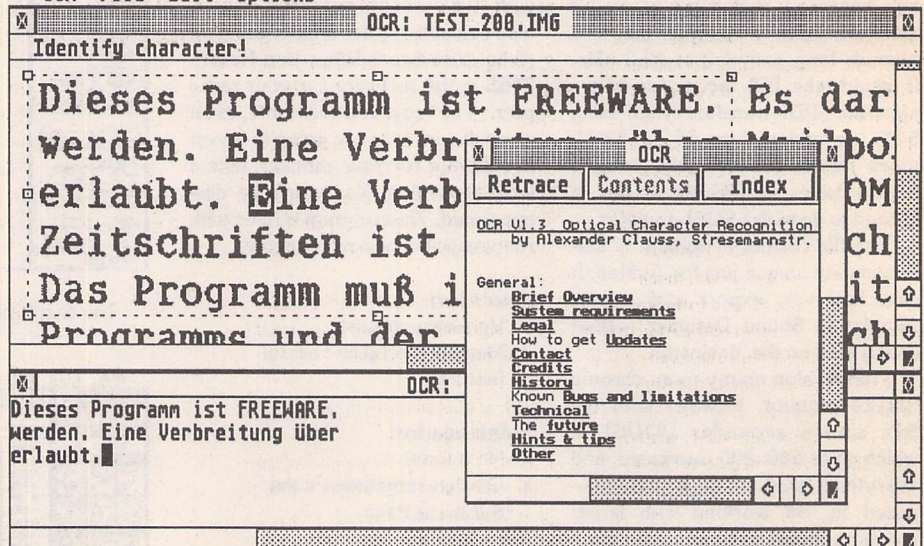
✓ HCP (Hypertext ComPiler): Compiles ASCII format hypertexts along with any illustrations into a single compact hypertext HYP file based on the popular LHArc algorithm.

✓ Reflink: Used to keep track of all the cross references between hypertexts so that the ST-Guide viewer can move seamlessly from one hypertext to another as the reader selects links.

✓ Tools: A collection of utilities useful for converting other documents or hypertexts into ST-Guide format.

Order FaST disk AP.172 to try ST-Guide.

OCR File Edit Options



of just a few of the new features to whet your appetite:

✓ ST-Guide (and 1st-Guide) format context-sensitive on-line Help provided

✓ The 'Identify character' dialog can be turned off during recognition. In this mode unidentified characters are displayed in reverse video ready for identification. After identifying the character by pressing the desired key recognition continues automatically. This is a much faster method of working than using the 'Identify character' dialog which needs an extra [Return] key press after

identifying each character

✓ The dialogs have been overhauled—dialogs can optionally be displayed in Windows, keyboard shortcuts have been added and checkbox options can now be selected by clicking on the accompanying text as well as the checkbox itself

✓ Several enhancements designed to improve the recognition rate, even with poor quality scans, have been implemented

If you'd like to try the latest release version of OCR order FaST disk WP.204.

Going On-Line

Mark Baines

Danny at HENSA, part 2

1. How long have you been interested in Ataris?
Since 1991, when I got my STE.

2. What computer kit do you have yourself?

4Mb 1040 STE, switchable TOS 1.06/2.06 in a Tower case with 245Mb hard disk, SM125 mono monitor, Philips CM8833 Mk 2 colour monitor and LaserJet 4L printer. Essential software includes NVDI, Let 'em Fly, GEMRAM, WINX, Shell Buffer, FONTGDOS, MasterBrowse, Selectric, LaserJet Remote Control CPX and Superboot.

3. What other experience do you have?

At University—PCs, SUNs, UNIX, Mac. School teaching—Archimedes. General interest—Spectrum, Oric1, BBC Micro and Amiga.

4. With all this experience, why did you pick Atari?

A friend of mine has owned one since 1985 and someone who worked for my Dad told me how easy they were to program.

I knew for sure that I did not want a PC, and Macs were just too expensive. That only really left me with the Archimedes, Amiga and Atari. I decided the Archie was too expensive and all serious software for the Amiga was much more costly than serious software for the Atari. I also preferred the Atari user interface to the Amiga one. Even now, I just cringe when I look at the Amiga mouse pointer ;-)

So I decided I wanted an ST—actually, it's one of the best decisions I have made in my life (even though I did not know it at the time).

5. What computers and operating systems do you work on at HENSA?

Most of the time I work on a PC but only really use it as a terminal on the UNIX system network. I mainly have Mosaic running on the Mac all day for WWW access. I wish I had a SUN terminal like a colleague! All installations are done in UNIX. For testing, I use a Mac Ix and a Mega ST2. There is also an Archimedes A5000, an

Amiga 2000 and 1200 here. We will be getting a Falcon shortly. Toolkit distribution database is done under Windows for Workgroups on the PC.

6. Which do you prefer?

I absolutely love UNIX, it is so powerful. I even have Minix running on my ST at home and am currently trying to set it up as a multiuser computer under MiNT.

When using UNIX I like to use the X Window system. This allows you to have multiple ftp sessions going at the same time within different windows. However, UNIX is definitely not for beginners. I must be a weird ST owner: I like command line interfaces! X and UNIX give me a windowed, graphical environment as well as a command line. They work very well together.

7. Does Atari hardware satisfy you after spending all day at HENSA?

Yes, definitely. However much I like UNIX, I like my Atari. I run UNIX on really powerful machines at work. The ST can't really compare to them, it wasn't designed to. The ST is a 'Home' computer.

I use the Atari for my CyberSTrider work and can do everything on it that I can do on the PC at work.

8. What else are you involved in in the Atari world?

I have a UK Shareware support scheme under the CyberSTrider label, similar to Joe Connor's and Graeme Rutt's schemes. Also, together with Joe Connor, I am bringing Gemini to the English speaking public soon. I also support Michel Forget's MasterBrowse (brilliant text viewer) and ESS-Code; Randy Hoekstra's PGP Shell (makes Pretty Good Privacy easier to use) and Grocery Lister; Donald Bork's HP LaserJet 4 Series Remote Control and Alan Richardson's Guitar Reference Program.

A lot of Shareware does not earn anything because people find it a hassle

to send money abroad. With my support scheme I am in contact with the authors frequently and it is easier for people to register with me. Many people do not use German software because it has not been translated into English. I hope to provide this service as well. If Shareware authors do not receive any money then their programs will not be updated and they will quickly lose interest and probably move on to other platforms. We, as Atari owners, can't allow this to happen, especially with the current state of the commercial software market.

I also have formed with two other people, Steven Taylor and Dave Haider, the Manchester Atari Group (MAG), but we are by no means a Manchester only group. Anyone is quite welcome to join. It is very important for Atari owners to have other Atari contacts.

9. How do you see the future of Atari and their computers?

This is a bit tricky to answer. I think that Atari are doing the right thing at the moment by putting all their resources into the Jaguar. If it takes off, then we may see Atari computers being carried on, maybe newer Atari computers. But, if and when the Jag does take off, why should Atari come back to the computer market place, in which they failed with the TT and Falcon, when they can do brilliantly in the consoles market?

For the future, Atari will have to produce powerful computers and bring back the term "Power without the Price". Macs and PCs, according to their power, are cheap compared to Ataris. I would still buy an Atari, though. I like Macs as well. The price of these has fallen through the floor and are comparable to the Falcon. The public will go where the demand can be met. Say, if a PPC can do Atari emulation, as well as be a Mac and a PC—which will people go for? These PPCs are getting faster all the time.

10. How do you see the future of

Atari PD and Shareware?

These are the things which will keep the Atari alive and all Atari users happy. These will carry on thriving as long as Atari machines or compatibles are around and for around five to six years afterwards IMHO. This only really applies if machine-specific and powerful commercial software is not around.

With the decline in the amount of commercial software for the Atari line, PD and Shareware are really what is keeping Atarians going. Where else but in the PD can you get STE specific software? Where else can you get Falcon, or even TT specific software? Something that people will have to learn, though, is that they SHOULD pay the Shareware fee. If people don't learn this then the Shareware market will dwindle. Most of the best software for the Atari range is from the PD and Shareware sector.

11. I agree wholeheartedly. Thank you once again Danny for your time and thoughts. Where can you be reached?

danny@micros.hensa.ac.uk (private)
pddanny@micros.hensa.ac.uk (for HENSA stuff)

E-mail:

Internet:

msbaines@cix.compulink.co.uk

FidoNet:

2:259/29.10@fidonet.org

NeST:

90:105/5@nest.ftn

TurboNet:

100:106/0.10@turbonet.ftn

DESKTOP DISCUSSIONS

Coming Home

On return to Britain, William Hern was faced with the task of buying a replacement ST system. Should he opt for a Falcon or TT, or was there an alternative?

It's all my fault that the best British summer in years ended prematurely. Having spent the best part of eight months out of the country, I arrived back in the middle of August and that very day, after months of dry and hot weather, the rain began to fall. It's hardly stopped since, leading my family to suspect that I must be some sort of rain god. Donations towards keeping me out of Britain for the whole of next summer can be sent to me c/o the magazine.

Anyway, on arrival back in Britain one of the first things I had to do was to find myself an ST system. Before I left for Canada I had been offered a price I couldn't refuse for my old setup so I was now faced with the task of buying another. And quickly – an ST columnist without an ST is liable to run out of topics to write about rather fast.

Early on I decided that I would buy a second-hand ST. Scanning through the classified advertisements at the back of ST Applications I noted that prices had dropped a little while I had been in Canada but they still seemed high in comparison to what STs in North America were going for. (The Canadian ST system I bought comprised a 1040 STF upgraded to 2.5 megabytes of memory and colour and monochrome monitors, yet only cost me about two hundred pounds.)

First I had to decide what

sort of machine I would go for. Having owned an STE for four years, I wanted a more powerful, hard drive equipped machine. The Falcon was tempting as was the TT but their somewhat limited compatibility with ST software was a problem. Having been an ST owner for almost nine years I've built up quite a library of software and I was loathe to discard parts of it. While I definitely wanted a faster machine, compatibility with my existing software was a higher priority.

After much consideration I decided that the best match for my requirements was the Mega STE. Thanks to its 16MHz 68000 processor, the machine has considerably better performance than a standard ST and yet offers excellent compatibility with all STE software. Fortunately just such a system was advertised for sale in ST Applications. A couple of phone calls and one drive up to Newcastle later, I was the proud owner of a four megabyte Mega STE equipped with a forty-eight megabyte hard drive and a 68881 maths co-processor.

The Mega STE has always been one of the lesser known members of the ST family. At launch it was considerably more expensive than the STE and its performance was overshadowed by that of the TT. Looking back through the back issues of ST Applications, I was unable to find a review or any other sort of article that featured the machine.

This is a pity as the machine has a number of enhancements over the standard ST design which merit closer examination.

The most obvious improvement is the faster processor which runs at twice the speed of the one used in standard ST/STEs. For the benefit of speed critical software (such as games) the processor can be switched down to run at the standard 8MHz. The socket for the 68881 co-processor makes adding the chip very easy for those who want to carry out heavy duty number crunching tasks.

The Mega STE also features a 1.4 megabyte floppy drive. Unfortunately Atari's implementation is rather half-hearted. The manual makes no mention of the higher capacity drives (very early Mega STEs were in fact shipped with the 720 kilobyte drives) and there are no checks made to prevent a double density disk being formatted as high density. Disks formatted as such are extremely unreliable and the system really ought to at least warn users against doing this.

The machine is extremely well endowed in the interface department. In addition to the standard ST DMA and parallel ports, the Mega STE has a total of three serial ports. The machine also includes one industry VME slot, albeit of the less common half-size variety.

The overall construction of the machine is excellent. The distinctive casing is identical to that of the TT except that it is in grey. I prefer the colour – the TT's off white casing showed up dirt rather too well for my taste. The

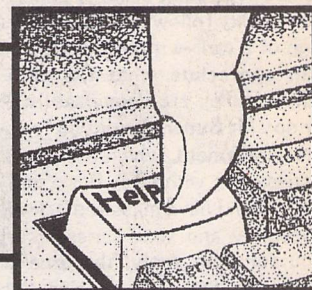
separate keyboard is extremely good and it's great to have non-slanted function keys. Finally they can serve as more than just decoration. The final noteworthy point is that the joystick and mouse ports are conveniently located on either side rather than being buried deep underneath as they have been on the all-in-one STs ever since the STF was introduced.

In short the Mega STE feels like a design where the engineers tried hard to learn from the mistakes of previous STs. There are lots of little improvements and these, although seemingly minor, do make a big difference to the degree of pleasure when using the machine. The Mega STE is the ST 'done right'.

The Mega STE became outdated when the cheaper Falcon was released and was quickly dropped from Atari's product list. Now the only way that you can get one is through the second hand market. They're worth seeking out however. The construction is excellent, it's easy to replace parts such as the floppy drive and the hard disk and the 16MHz 68000 coupled with a 68881 co-processor can deliver a decent amount of processing power.

After months of being on the road and using a Macintosh as my only machine, tonight I sit at my new ST writing this piece with my favourite word processor. Afterwards I'll dial into my computer account to find out what's new on the Usenet ST groups. A stack of new PD software sits beside me waiting to be investigated. Gee, it's good to be home.

FORUM



HiSoft Basic

Martin Burroughs - Forum STA 42

I Martin bemoans the lack of interest and coverage of the HiSoft Basic family. As this is a subject dear to my heart also, could I suggest that you publish this, together with my name and address, in order that Martin and any others could contact me. We could then swap code, etc., to our mutual benefit.

Peter Benson.

57 Longleat Crescent
Chilwell, Nottingham NG9 5ET.

NVDI V2.5

Q NVDI V2.5 appears to contain a bug when drawing circles with `v_circle` in ST



he Forum pages are a regular feature of ST Applications, enabling readers to exchange ideas and help each other out with problems. Whilst we attempt to briefly answer questions here, if you have additional information or ideas please do submit them for publication. What you consider to be trivial information can often be of considerable use to other readers!

Please send your letters on disk if possible. Disks will be returned with a PD of the writer's choice. Longer submissions may appear as articles, in which case you will receive payment at our standard page-rate.

Key:

The following codes are used for each Forum entry:

J Pringle - Forum STA 20: Author who first raised the subject, and in which issue.

Q Question

A Answer

I General information or 'Input', advice, discussion, hints and tips, etc., with or without reference to previous Forum pieces.

● Editorial reply

medium resolution. Ellipses are drawn instead. Does anyone know a way round this problem? Does the same problem occur with NVDI V2.51 and V.3?

J White

Hard Drives

Andy Wood - Forum STA 44

I My recent experience in trying to reformat a SH204 leads me to believe you are better off using an old version of the Atari HDX program.

Sector 0 had become corrupted and I never did manage to format it with the latest ICD Pro utilities (which I am otherwise very pleased with). I also had a lot of trouble with some newer HDX versions. In the end I succeeded with HDX V3.

One interesting discovery in the process was that SH204s may contain different Seagate hard disks to the original ST-506. If your disk is labelled ST-125 or ST-225 (on drive inside the case) then it has an additional 3 cylinders (615 as opposed to 612) and you can modify HDX.PRG's WINCAP file to format to a slightly higher capacity (about 100k more)... though this is hardly worth the bother.

The new line for the WINCAP file reads:

```
# New line to gain an extra 100k for SH204s
containing a ST125 or ST225:
```

```
20 Mb :mn=ST-225:cy#615:dp#8x6cdb:
```

Then when running HDX you select the 'ST-225' menu entry.

Oliver Skelton CIX #681

Programming Overload?

Keith Powell - Forum STA 44

Jon Ellis - Forum STA 45

Mark Butler - Forum STA 45

J F White - Forum STA 45

Guy Patterson - Forum STA 45

Nicholas Lintott - Forum STA 46

Derek Fountain - Forum STA 46

Jonas Möller Nielsen - Forum STA 46

I Firstly, I really like the magazine and have subscribed to it since before its new name, but I too had a good think before renewing my last subscription.

My lack of drive to do so was twofold. Firstly, I recognise Keith Powell's point about programming and some of the arcane subjects

covered. I am no sort of a programmer really and I am quite happy to admit that sometimes I don't even understand the subject matter, never mind follow the logic of the solutions. This does not bother me at all, in fact I quite like having a magazine that is prepared to deal with queries in depth. However, I did enjoy the series on GFA Basic and followed it with interest. It ended, I thought, just when it had started to get useful. It had dealt with the very basis basics but there seems to be a massive gulf between where that series left off and the 'easy bits' from Programmers' Forum.

The other thing is that I wonder about my dedication as an ST enthusiast, I am afraid I am becoming just another computer user: I bought my ST years ago not because I gave a hoot about Atari but because I wanted a Mac and couldn't afford it. Like most other people, I suspect, I have looked at other machines and wondered if I should be buying a PC or a Mac and have come to the rather boring conclusion that my ST does everything I need. Even the software I use is fine with me - none of it the latest version. Basic word processing is First Word Plus or increasingly often Protex. If I want fancy fonts and layouts it's Calamus. I have yet to see anything to do my work better on any other machine. Colour is no use to me and whilst I am sure the Falcon is a nice computer, I don't know how its features would make much difference to me.

I have tried to want more and better programs but can't quite do it. I bought Mortimer and liked him at once but Protex didn't like him and even the normally placid Superbase wouldn't run from his Ram disk so gradually I returned to my mixture of Turbo ST, UIS III, a PD mouse accelerator and occasional ram disk.

The same happened with shareware titles. I tried Kandinsky and was pretty underwhelmed. Idealist is very clever but in practice I don't use it. So you see that the problem is not whether ST Applications is too boring for me but whether I am too boring to benefit from it.

Nicholas Lintott

I I would like to comment on the letters published in reply to my previous letter. That letter was far too long, so I will try to keep this one brief.

To Mr Mark Butler, I would say that my adverse comments concerning the first part of your GFA Assembly series were entirely

groundless and should not have been made. I unreservedly withdraw them and apologise to you. The series is proving most interesting, and although I cannot claim to understand it fully, I can readily follow it. This, in my opinion, is the sign of a well-written article, when all readers can appreciate what the author is saying whether they are conversant with the subject or not. Mr Butler, thank you for your words of encouragement, which are appreciated. I am persevering with GFA Basic and perhaps one day, when I have mastered it, I will turn to GFA Assembly and your series of articles. Thank you for your reply, the tone of which was similar to the one in which I thought I had written my original letter. I appear to have failed miserably!

What a contrast is the tone of the letter from Mr Ellis, who has found my letter inadvertently offensive. It is a great pity that a magazine reader apparently cannot criticise or express sincerely felt concerns without receiving a disgustingly vicious personal attack from a well-known contributor. Over the years, there have been many letters of criticism published in ST Applications, but I cannot remember any instance where a letter has generated such a vehement outpouring in a reply as mine has.

In his letter, I find that there are several interesting points, some rather peculiar statements (at least one of which appears to confirm that I have grounds for my concerns), and some totally erroneous accusations levelled against me. In normal circumstances I would try to discuss them with him. However, as things are I will not do so, as I have no intention of laying myself open to the possibility of another personal attack. Instead, I would like to end with two editorial extracts from ST Applications. As these have been penned by others, I hope that I am standing on safe ground.

1) STA Issue 37, Readers' Survey Results: "too much knowledge/ expertise taken for granted, especially in programming and the use of jargon and acronyms."

2) STA Issue 45, comment at the foot of my letter: "After reading a few installments of Programmers' Forum it's unlikely that many readers are going to write in with 'simple' problems when it seems to them that column is aimed at readers a few ladders ahead of them. An appropriate move may be to tag an Advanced label onto the existing Programmers' Forum pages and run a (down to earth) Programmers' Forum alongside it."

I have tried to make my points known, and in doing so have been subjected to a vicious attack from one of your contributors, apparently for daring to criticise. I will not write again on this subject.

Keith Powell

STA Content

Jonas Möller Nielsen - Forum STA 46 et al

I Just to say I'm grateful for Beginners' Forum and suchlike. I guess I knew most of the TOS info in STA 46 but it's sure useful to have it laid out to refer to. I was also grateful for the

article on inkjet printing, which finally taught me how to refill a DeskJet cartridge—I buggered the last one I tried.

Keep up the excellent mix of 'beginner' and advanced material!

Laurie Wedd

● Although the Beginners' Forum is being phased out as a regular series we remain committed to printing 'beginner' and introductory articles. Suggestions for topics and offers of articles are both welcome!

Atari Portfolio

Paul H Finch - Forum STA 46

A Portfolio Connection. I did subscribe to the Portfolio connection, and they did do some interesting Portfolio things. I have not heard from them since last year.

Portlink. I tried to get a copy of this from Evesham Micros but it came without the special cable, and was their last one. I would dearly like to know how Mr. Finch has managed to do transfers with the parallel interface!

Serial Communications. All that is needed is a serial 'null modem' connection (9 way to 25 way for STE) and a comms program at the STE end. STorm is very usable and simple to get on with. The Portfolio can be set up to print to the serial port, and if the STE is set to the same baud rate, the file can be captured by the comms program. It is also possible to reverse the process by using a DOS copy command on the Port. i.e. COPY AUX: filename. If the STE is set to transmit the file it should appear in the relevant place on the Portfolio.

As Mr Finch has XTERM2 then the process is much simplified, as each machine can be set to XMODEM protocol which will transfer binary and ASCII files.

Transfer method/speed. Although the parallel peripheral is used for transfers to the PC, communication is done serially and is quite slow. A 19k2 serial link would be much faster, but you would lose the nice master/slave interface.

I would be interested if Mr Finch would contact me via ST Applications so that we can discuss Portfolio matters to our mutual benefit.

Graham Curtis

Desktop Discussions

William Hern - STA 41

Graeme - Forum STA 44

William Hern - Forum STA 46

I In response to Graeme's letter in STA 44, I have to say that £500 for a computer with a Power PC chip is a little optimistic. A large part of computer costs are the peripheral interfaces (keyboard, SCSI, disc drive etc.) and, I would hope, for this new computer, VRAM. I think £800 is a more reasonable price.

Alexis Read

● As it will be the middle of next year before Atari have enough funding to start serious work on a new computer this whole discussion all very academic. Time will tell... A Power PC running TOS (and other OS's?) with a built-in Jaguar would be fun!

Mega STE Scanner

Q Thank you for supporting the best computer, the Atari ST. I have had an STE computer for three years, then last month someone offered me a second hand Mega STE with 4MB memory and a 47MB hard drive plus some software. After a time running the Mega STE I found I could not use my Golden Image hand scanner with Touch-Up v1.65 nor with v1.8—the program runs so that I can use the drawing functions, but I cannot get the hand scanner to light up! I have tested all of the above with my old STE (TOS 1.62) and it all works. Also a friend lent me a Macintosh emulator to test my cartridge port and that works.

P H Finch

Wish Lists

I One or two queries for people. Is info on the Falcon hardware mod's obtainable! If so can someone tell me where from?

Would it be possible to do a Programmers' Forum on sample playback, formats, channel doubling as in Octalyser and Cubase? Preferably not just in C.

Networks and protocols: Falcons, TTs and Mega STes seem to have an obsolete interface. It would be nice to see it used, maybe with MIDI networking for STs. Publish and Subscribe on the Apple Macintosh is a good idea also.

A decent sample sequencer with the added ability of acting as a synth for MIDI programs (wavetable synthesis or just sample playback). Plus good programming documentation.

A boost to the games front (people can graduate to serious use) - obsolete games on cover disks perhaps, send your games to reviewers. I don't know, but something to stir up more interest in the games market.

Alexis Read

Classroom Computing

Matthew Townsend - STA 46

I The article on STs in the classroom was very interesting. There was, however, a slight inaccuracy—you can have STs and PCs on the same network if you use BioNet. We have a mixture of Mega STs, Mega STEs, a Falcon and PCs working together. Even greater compatibility has been provided by Papyrus. Documents produced by Papyrus and saved in RTF can easily be loaded into Word for Windows with all formatting intact! Pupils can thus start a document on an ST and finish it on a PC, or vice versa. Papyrus is a great pro-

gram when used with Speedo. When you think of the development costs and the huge difference in the volume of sales expected, how come you can get an ST program as sophisticated as (or even more than) Word for Windows, a program costing three times more?

David Waller

SpeedoGDOS

Q One irritation with using SpeedoGDOS fonts is that with <'> you can produce an apostrophe or single close quotes, but there is no way to get at a single open quote mark. It would be nice to get double open and close quotes too.

I asked HiSoft about this who said "To obtain these characters you have to feed the font a 16bit character ID; currently no applications use 16bit character IDs with Speedo. As you are buying NVDI3, one way to obtain the quote characters would be to edit a True Type font with a vector font editor and map the quotes on to another character; however I don't believe any are available on the ST but if you have access to a Mac or PC then there are numerous available."

Full marks to HiSoft for helpfulness, but sadly I've no idea how to go about this. Has anyone else succeeded in accessing Speedo characters outside the standard Atari character set? I'd much appreciate any advice.

One of the reasons for getting NVDI3 is that it replaces SpeedoGDOS, with which I have endless problems. I'm working with Wordflair 2, and in your review a few months back you mentioned problems with long documents (crashing etc). Disable SpeedoGDOS and all these problems disappear! In my experience Wordflair itself is excellent.

SpeedoGDOS output is great, but the program is big, it's crashy and it keeps coming up "Congratulations! Beta version". Maybe version 5 will address some of these problems, but I for one will give NVDI3 a try first.

Anyone else who hates SpeedoGDOS may want to contact HiSoft who are running a special offer for upgrades from SpeedoGDOS to NVDI3. NVDI3 is RSN, apparently.

Laurie Wedd

Spelling Checker

Q I'm looking for a spell-checker that I can use with Everest v3.3. Any ideas?

Carl Löfgren

● Thunder! from the now defunct Canadian software house Batteries Included should do the job. Thunder could be used as a ACC from within most GEM applications to do real time spell checking or it could be used as a stand-alone program to check and correct ascii text files. If you can't find a secondhand copy of Thunder then there are a few simple spelling checkers on disk WP.203 that will spell check ASCII files.

ST Applications Index

Q Please can we have an annual index of the contents of ST Applications? These magazines are a mine of information, and I constantly find myself thumbing through a pile of back issues looking for possible information on different subjects. This is very time-consuming, especially to cover all the topics in Forum. With all the Index making facilities now available in word processors, would not the provision of an index be a relatively straightforward job for you? - and a boon to your readers!

Geoffrey M Brown

● Not as straightforward as it sounds to you! There's no easy way of automating the process when dealing with DTP files and Forum entries—but we'll add this to the To Do list. Any volunteers?

Slanted?

Q May I seek some clarification? In your listings of STC Font Sets for Calamus typefaces, you freely use the word italic. Do you really mean true italic every time, or should it often read oblique (i.e. slanting non-italic)? There is a big difference between these two, and it is important to distinguish. I am particularly interested in purchasing Set 4, and this contains 21 references to the word italic, and so you see why I ask.

Geoffrey M Brown

● All of the italic fonts in the STC font sets are true italics and not slanted Roman faces.

Multi-tasking

Q I have no great use for the running of several separate programs simultaneously, as provided by multi-tasking, but I do have a wish to be able to print a document with my word processor in the background while I get on with the preparation of another document on screen. My WP is That's Write, and it does not accept an ordinary printer spooler for this task. Therefore, the question is: can a multi-tasking program such as MagiC be simply used for this process? I have never seen anything said about this in any reports on multi-tasking.

Geoffrey M Brown

● I suppose it would be possible to run two copies of That's Write in a multi-tasking environment and have one printing a document whilst the other is being used to create a new document. Check compatibility with suppliers first and remember that on a standard ST the overheads of a multi-tasking system, along with the processing work being done by the version of That's Write dedicated to printing, may result in the second That's Write being so slow as to be useless. It'd be a lot better if That's Write were less easily upset by print spoolers and screen clocks.

SpeedoGDOS

and Publisher 1

Q Correspondence about the use of SpeedoGDOS and Timeworks Publisher always seems to concern Version 2 of the latter.

Does anyone know how to get Version 1 to work with SpeedoGDOS? Fontwid.App runs OK, but I keep getting "Internal Error No 1" when running the DTP subsequently.

J White

● No. Publisher 2 just about works with Speedo because the package was developed to work with FSM GDOS, Speedo's ill fated predecessor. Had Atari got FSM sorted out then the ST version of Publisher 2 would have had more features than the PC version!

Rise and Fall

I Much doom and gloom has descended on the Atari camp in recent months with many users resigned to the seemingly inevitable demise of their much loved machines.

How this state of affairs has come about is a complex issue; one that has taxed the best brains in the industry. Speaking as one who has personally seen B.Bytes Computer Systems and B.Ware Software sink almost without trace, I hope to bring a view of some experience to the problem.

Boom and Bust seems to be the way of the home computer market. The last such cycle included such classics as the ZX81, ZX Spectrum, Oric Atmos, etc. With the arrival of the first serious and affordable 16-bit machine shops sprang up like mushrooms, staffed in the most by enthusiasts eager to convert the whole country over to the new wonder machine. Users were able to buy, secure in the knowledge that whatever problems they encountered they were only a quick phone call or visit away from its solution.

As the market grew it came to the attention of more hard headed business people who were able to set up large mail-order based companies. Their purchasing power was such that they were able to sell computers for less than the small retailer could buy them! For a while the box shifters and the enthusiasts co-existed.

Then things started to go wrong. The recession hit the country, and those users left with any money for luxury items were interested in saving every penny. Human nature being what it is, it didn't take long for users to realise that they could still receive back-up from their local dealers providing that they made a token purchase now and then, while buying their major items over the phone.

This state of affairs couldn't last for long. One by one the local shops were forced to close, leaving a lot of very disgruntled and out of pocket vendors all too ready to stick the boot in where Atari was concerned. It also had the effect of breaking up the Atari support structure as users were cut off from those with the knowledge to help them.

This is what I believe to be the main cause of the current down turn in Atari fortunes.

Magazines and Atari clubs battle bravely to keep the machine alive. But having your problems solved in the Forum pages several months after you were brought to a complete halt by them isn't good enough. You need the answer tomorrow if you aren't to give it up as a bad job. Most clubs tend to attract the more experienced users who are on the whole more than capable of getting themselves out of trouble. When I'm stuck I can normally find the answer in the library of books that I have built up over the years.

What is needed is the rebuilding of that original support network throughout the country so help is on hand to whoever needs it. Well, that's all right isn't it? Problem solved and happy every after!

Not quite! There's the little matter of money. Esteemed and possibly cheated off members of the Atari community aren't likely to want to spend great chunks of their valuable time sorting out problems for nothing.

Unfortunately for the user it's going to work out rather more than the few quid that they saved by going mail order. By buying from a local shop and paying that little extra the user was effectively buying an insurance policy in backup. Those who hardly ever used it were propping up those less able.

A fair price for such a service is a difficult question. It is easy to barter with close friends, neighbours and family. So far I have received quantities of Beer and Spirits, D.I.Y. materials and a Baby Bouncer and Bath for services rendered. Total strangers though have to be dealt with in hard cash. £5, £10, £25 an hour? Who knows? It can be difficult to strike such a deal. Users, especially ones that may remem-

ber you from your small shop days, tend to assume that you are willing to give your knowledge and time freely. Whether you have to travel to and from the user will also have a bearing on costs. Call-out fees?

Knowledge is power, and hard won at that. The whole fabric of society is based on people exchanging their skills and goods either directly or via money.

There will have to be some form of registration. A fair price for good advice is the ultimate aim. What is needed is a national network of vetted consultants who can be contacted via a central office. They will put users in touch with their members depending on the locality and expertise required.

Membership of the organisation must be respected. Members who transgress its code of practice will face discipline or expulsion. Just as importantly, users who abuse the system will need to be blacklisted to stop them from working their way through all the members in their area.

Setting up such a network is a problem. It will take a lot of time and effort which will have to be paid for. Here is an idea for a bare-bones set up with low risk and cost.

1. Potential Consultants write in for Registration with a CV of their skills.
2. These are vetted and if successful added to a national database.
3. The existence of the consultancy will have to be advertised. This could start with mentions in News pages of all Atari magazines, and if successful future adverts could be paid for.
4. The central office will have to be funded by:
 - a) the Subscription of its consultancy members

- b) a payment of a percentage of the consultancy fees charged by its members
- c) a charge for the use of the national consultancy database to potential customers
- d) an unforeseen method or combination of these methods

5. Initially the service could be run by post. A constantly ringing phone is a real distraction to getting anything done.

6. This database will also have to be registered under the Data Protection Act. Another cost for the central office.

7. Complaints from Users or Consultants will have to be dealt with, possibly leading to the removal of consultants or the blacklisting of users.

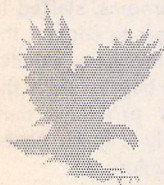
8. Insurance against possible legal action would also be an issue. Some form of disclaimer against any harm caused by a consultant would be one possibility.

Despite its age, the Atari ST is still one fine machine, perfectly suited to home and small business use. There are many more ST and STE's in circulation now than there were in the 'boom' years. So the potential is out there somewhere.

Well, I hope that this has given you something to think about. Don't forget to contact me via ST Applications if you have anything to contribute. If there is sufficient interest then I shall look towards setting up a pilot project.

Mark Butler

- There certainly are enough Atari users with the knowledge to help out those new users needing help getting their systems up and running. Feedback on the viability of this scheme from both potential consultants and potential customers will be much appreciated.



Falcon Forum

Falcon Tip

I With a large number of applications on my Falcon hard disks, many of these will only run in particular resolutions. I now write 'MYREADME' files to each application folder to remind me of special instructions.

N W Scott

One for the Archive

I Never use Atari Archive on a Falcon. It works fine on STs and Mega STEs but is a calamitous failure on the Falcon. Backing up 22MB of Superbase files on a Falcon we found that Atari Archive works fine until half way through its fourth HD disk, when it reports a disk error. Inserting a new formatted disk persuades it to complete the backup. When trying

to restore the backup Archive got confused over the fourth disk and gave up; better still, when backing up the files Archive had corrupted the originals of the files that it was backing up!

Grounded Falcon

Q I wonder if I could just ask a brief query regarding Flight Simulator 2 and the Falcon. I remember recently a list of Falcon compatible software published in ST Applications, which mentioned that someone had got Flight Sim to work OK. For some reason I cannot seem to run it.

My system is a Systems Solutions Falcon tower (030/PowerUp2/multisync monitor/Blowup). When I run Flight Sim on my Stacy I need to turn off NVDI and more or less anything else—however, even when I do this on Falcon, various problems arise:

In 16 colour/80/on (Blowup disabled)—the program runs, but only in mono with occasional flash across screen; in ST high resolution I get 11 bombs when running the

program; in other configurations I get bombs/lockups.

Ian Dean

Radio Falcon

Q Having been an avid reader of your magazine for some time now, I am writing to ask for help in the form of an inclusion in the Falcon Forum section of ST Applications.

As well as being interested in computing, I also have an interest in Short Wave Radio listening, particularly the data modes, where data is transmitted over the air from press agencies, weather centres and the like, in a way similar to that used by a normal modem.

Is anyone out there aware of any suitable software for the Falcon, preferably without using external hardware as the Falcon has more than enough brains for the job with its DSP?

Andrew Collins



Programmers' Forum

Sliding around

Returning to the slider bar itself, the arrows at the ends of the bar are animated by using the `Sl_arrow()` function pointer within the `XControl` parameter block. `Sl_arrow()` links the display of a slider bar to the value of a short integer (16-bit) value, allowing changes in the variable to be reflected as changes in the appearance of the slider bar. The routine takes a total of 10 arguments:

```
(*xcpb->Sl_arrow)(box, bar,
slide_sel, delta, left, right, var, dir, red-
raw);
```

The first three arguments ('box', 'bar' and 'slide') specify the object tree to be processed and the indices of the bar and slider objects respectively. 'sel' is the index of an object to be displayed **SELECTED** while the function is called. In this case the code specifies that the arrow clicked by the user is to be inverted. If this effect is inappropriate, a value of `NIL` (-1) can be passed instead.

The next four arguments determine the association between the bar and its controlling variable. 'var' is a pointer to the variable; 'left' and 'right' determine the range of values that the variable may take. When the value of the variable is equal to 'left' the slider will be at the left-hand end (or bottom) of the bar; when equal to 'right' the slider will be at the right-hand (top) end of the bar. It is acceptable for 'left' to have a larger value than 'right': this simply causes the variable to increase in value as the slider is moved right to left.

'delta' contains a value to be added to the variable as a result of the user's action. In the program in Listing 1, clicking on an end arrow alters the variable value by 1 for each click, so 'delta' is +1 for a click on the right arrow, and -1 for a click on the left arrow. The 'dir' argument should be either **HORIZONTAL** (1) or **VERTICAL** (0) to indicate the type of slider bar required. The final argument, 'redraw' is discussed below.

Scroll arrows are not the only incremental control available for moving the slider box. Clicking on the bar element of a scroll bar is normally interpreted as a 'page up' or 'page down' command. `Sl_arrow()` can also be used to handle such a request, as Listing 1 shows. First the position of the mouse pointer is determined, and used to calculate on which side of the slider box the click occurred (and hence which way to move the slider). `Sl_arrow()` is then called with a 'delta' value of +4 or -4 with the result that the slider moves in jumps of 4 for each click. There is no return value from `Sl_arrow()`: the variable addressed by 'var' is modified by the 'delta' value on function return.

Apart from clicking on arrows and the scroll bar, the other operation common to slider bars is grabbing the slider box and dragging it to a new position. `XControl` supports this action too, by means of the `Sl_drag()` routine (`Sl_drag()` for vertical sliders). These functions have a similar argument list to `Sl_arrow()`:

```
(*xcpb->Sl_drag)(box, bar, slide, left,
right, var, redraw);
```

These arguments behave in the same

In this month's edition of ST Applications' regular programming and column, we complete our exploration of CPX programming and include some readers' queries.

CPX odds and ends

To finish our initial venture into the realm of CPX programming, a few little bits. First, just as `XControl` provides support for pop-up menus, it also provides functions to animate another commonly-used idiom in GEM interfaces—the slider bar (see Figure 1).

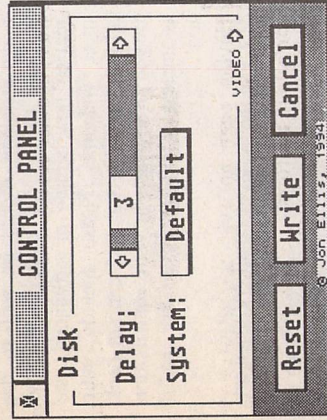


Figure 1: A new panel for the Falcon NVRAM editor, featuring a slider bar to control the hard disk spin-up delay.

The slider bar is used when a variable can take one of many discrete values. The most obvious example of their use is perhaps as the scroll bars that form part of standard GEM windows, allowing the visible window to pan over a larger working area.

To make a slider bar, all that is needed is an object to serve as the bar over which another object, the slider, will move. Conventionally, the bar is a shaded rectangle, and the slider is a box or some other object. In the example in Figure 1, the underlying bar is a filled `G_BOX`, and the slider is a `G_BOXTEXT`. The key requirement for pro-

cessing by `XControl` is not the type of objects involved, but their relationship: the slider must be a child of the bar. Also, it is normal to have arrows at the ends of the bar to allow step-wise movement of the slider. These are generally implemented as `G_BOXCHARS`.

`XControl` handles both horizontal and vertical bars: we will discuss only the horizontal variety, but there is analogous support for vertical bars. To animate a slider bar, all the various components (end arrows, bar and slider) should be made `TOUCHEXIT`, enabling the CPX to regain control from `Xform_dot()` when the user clicks on them.

Listing 1 provides fragments of C source for the code to animate the construct shown in Figure 1. This is a fourth panel for the Falcon NVRAM editor described in the last column, which allows the hard disk spin-up delay to be controlled. The listing details the new resource data, changes to the `handle_button()` function and also the new functions involved in supporting both the slider bar and the spin-up delay location in NVRAM.

Details of the NVRAM bytes involved in this feature were presented last month. Briefly, during a cold boot the Falcon waits for the internal hard drive to come up to speed. The duration of this delay is determined by the contents of byte 10 of the NVRAM block. Values more than 12 seem to produce a delay of (x-12) seconds. Smaller values cause the Falcon to skip both the spin-up delay and the memory check, and proceed immediately with the boot. Given this information, the operation of the additional code involved in `configure_box()`, `read_NVM()` and `evaluate_vars()` should be obvious.

way as those described for `Sl_arrow()`. The value of the variable addressed by 'var' is updated continuously as the user drags the slider around.

Real-time updating

All the slider bar functions so far have one parameter not yet discussed: 'redraw'. If this value is not NULL, it is treated as a function pointer, and the function called every time the variable associated with the slider changes value. This allows the screen display to be updated as the user moves the slider. This effect is used to animate the rotating head in the Falcon Sound CPX (Figure 2). In Listing 1, `redraw_delay_bar()` is called by this mechanism, and used to update the value of the delay printed within the slider box. As the user slides the box up and down the bar, the value changes in real time. A neat effect.

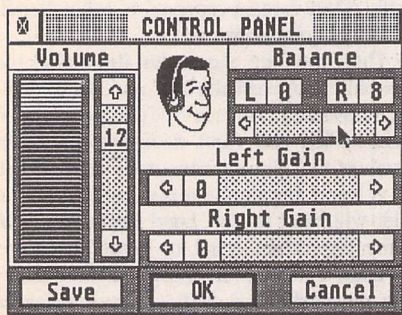


Figure 2: Real time updating of the dialogue appearance can be used for some cute special effects, such as rotating the listener's head to indicate the stereo balance setting!

Cleaning up

Of course, to make the interface work properly, we need a mechanism to ensure that the slider starts off in the right place. The service functions `Sl_x()` and `Sl_y()` (for horizontal and vertical bars respectively) enable the program to do this prior to displaying the object tree:

```
(*xcpb->Sl_x)(box, bar, slider, init_value, left, right, redraw);
```

Once again, most of these parameters have the same meaning as before. 'init_value' is an integer which specifies the position of the slider. Note that this is a value not a pointer. `Sl_x()` does not actually draw the bar on the screen, but just updates the object tree. In Listing 1, the function is called in `configure_box()`, along with the other code to prepare a panel for viewing.

One other slider bar function is also provided by XControl, but not used in the Listing 1 code: `Sl_size()`. This allows a program to alter the size of the slider object. This effect is used in programs where the range of values covered by the slider varies. For example, in a word-processor, the size of the slider on the vertical scroll bar might usually indicate the proportion of the document that is visible on screen. The `Sl_size()` service function looks like this:

```
(*xcpb->Sl_size)(box, bar, slider, total, window, dir, minimum);
```

'box', 'bar', 'slider' and 'dir' have the usual meanings. 'total' and 'window' are best explained by reference to the example above. In the word-processor, 'total' would be the number of lines in the document, and 'window' would be the number of lines on the screen. `Sl_size()` alters the width or height (for horizontal or vertical bars) of the slider object to reflect the ratio 'window'/total'. Obviously, for large documents and/or small window sizes, this ratio will approach zero. To prevent the slider disappearing completely, 'minimum' provides a minimum dimension in pixels, beyond which the slider will not be reduced. The maximum size of the slider is controlled by the dimensions of the underlying bar: when 'window' equals 'total' the bar is wholly covered by the slider. If your program uses `Sl_size()` and also has text contained within the slider, the centred justification attribute of `G_BOX-TEXT` is useful to keep text correctly positioned without the need for programmer intervention.

That's enough CPX for now - we have not yet examined all of the service functions provided by XControl, let alone the possibilities of event CPXs. With any luck, we will return to this subject in a future edition of the column.

Printer questions

And now.... something completely different. Stephen Kingdom writes from Athens about his experiences trying to develop a printer driver for printing in Greek:

While writing a [First Word] driver for the DeskJet 510 recently (to print in Greek) I was interested to note that PC users apparently have far more control over the printer than ST users.

1) From Windows on the PC users have options which I have never seen mentioned in the context of the ST. For example, in addition to Draft and Letter Quality, users of the DJ510, 500C and 550C have the additional option of Presentation printing, printing at a slower speed to obtain the highest quality. This appears to be a function of the printer rather than the software, since it is one of the "Printer Setup Settings", so it presumably has an escape code. Am I correct in this and if so what is the code? Does "Enhancement Control" have anything to do with this?

2) Similarly, Windows users of the DJ510 have options to optimise the printer for various media (Plain paper, Transparency, HP Glossy Paper). Do escape codes exist for these options, or are these options purely a function of the computer software? Incidentally, the default print quality for transparency and glossy paper printing is Presentation.

3) Other options from within Windows are for print intensity and different forms of dithering—Standard Black, Pattern, Cluster and Scatter. These look suspiciously like functions of the computer software rather than the printer to me. Is this so, or would there be, for example, a way of controlling print intensity by means of escape sequences?

Not having a DeskJet 510 (only a rather elderly, but reliable DeskJet Plus), I am not in a position to provide definitive answers to

Stephen's questions. His suggestions as to the source of the various options seem perfectly reasonable. In particular, I would be surprised if the printer did its own dithering—this does seem likely to be a Windows function. Conversely, trading off print speed against quality is a feature of many printers - most support a draft and a final- or letter-quality mode, selectable by escape code.

If anyone has any more precise information on the various options supported by the DeskJet 510, and particularly on the escape codes involved then do please write in and share them. Finally, Stephen has sent the completed First Word Plus printer driver to the ST Club for inclusion in the PD library.

Loading programs in GFA

On now to a GFA BASIC question. Jeff Barrow writes:

I wonder if you could help me with a small(?) problem that I have. I am using GFA BASIC 3.5e, I also have the compiler and assembler parts of the system. What I need to do is to write a small program which will load an introductory screen in the shape of an .IMG file and then load and run a .PRG file afterwards. I have been trying for several weeks now with very little success.

Next Month

Next month, *Programmers' Forum* will feature some more questions and tips from readers' letters. Keep the letters coming in - the more we receive, the better the column gets! Hints on any subjects, or questions about programming problems should be sent to the address below. All contributions, no matter how simple or advanced, are most welcome. Please include your address on the letter, so I can get back to you if anything in your contribution is unclear. Email addresses are useful too.

One last point, about email. Whilst I am very happy to receive contributions by email, please include your real name in the message, as cryptic alphanumeric user identifiers are not terribly useful. Please send a disk or email if there are large chunks of text or ASCII source code: I have no time to retype lots of material. Naturally, disks will be returned if an SAE is included.

Jon Ellis
 Programmers' Forum
 29 Ashridge Drive
 Bricket Wood
 St Albans
 Hertfordshire
 AL2 3SR

Email:
 jonellis@cix.compulink.co.uk

On my previous computers (Spectrum and Amstrad) it was relatively simple—just LOAD "", addr, SCREEN\$, LOAD "". I have managed to work out BLOAD, "file.IMG",XBIOS(2) which appears to load a file into the first couple of lines of the display area, and is totally unintelligible. When the next part tries to execute, GFA gives an error box "WRONG HANDLE" which is listed on page 484 of the GFA BASIC manual as a TOS error -37. My listing is as follows:

```
CLS
BLOAD,"NAME.IMG",XBIOS(2)
BLOAD,"NAME.PRG"
```

I haven't a lot of hair left, being one of the more mature ST followers. If you can't help perhaps you could print an appeal for donations towards the purchase of a wig.

How can such an appeal fail to move us? In the cause of preventing Jeff from further scalp damage, here is some help. The fundamental problem is that the ST is a much more complex computing environment than either the Spectrum or Amstrad. As a consequence, tasks such as loading programs are rarely as straightforward as they were on older machines.

The first aspect of Jeff's question relates to displaying .IMG files on the screen. BLOADing the data into the screen memory does not work because the .IMG files contain a compressed encoded version of the image, rather than a simple pixel bit-map. Displaying a .IMG file requires unpacking the coded data, and reconstructing the original image. The .IMG file format was discussed in detail in a recent edition of the column (STA 32), along with code to read and display images stored in this form, so this material will not be repeated here.

Similarly, the second part of the program (loading and running a program) is also more complicated than performing a BLOAD. On the Spectrum, machine code programs were stored as a block of bytes. Running such a program required that the block be loaded into memory at the correct address, and then executed by jumping to a specific location, usually by means of a RANDOMIZE USR xxxx command. By and large, this strategy requires that only one program is present in the machine at a time.

On the ST, life is more difficult, because there are almost always several programs in the memory at once—desk accessories and AUTO folder programs for a start. As a result, it is impossible to guarantee that a

program will be loaded into memory at any particular address. When a program is to be run, the operating system allocates it a block of memory, and loads it into that block. This creates a difficulty: how does the program cope with not knowing where it will be?

The answer lies in some extra data contained within the .PRG file. In addition to the code itself, the file also has instructions for the operating system that tell it how to alter the code to run at any address that may be needed. Loading a program therefore consists of allocating memory, loading the file, altering it to run at the given location, and then beginning execution. Further discussion of subjects related to this area can be found in the very first Programmers' Forum, way back in STA 2!

Returning to Jeff's program, it is possible to do this work manually, and under some circumstances it is even preferable to do so, but this is not a trivial task. Thankfully, the operating system provides functions to do the work for us, and these are available through GFA BASIC. Two of these, EXEC and SHEL_WRITE are of interest here. EXEC loads and (optionally) runs another program immediately, whereas SHEL_WRITE causes the Desktop to load and run another program upon termination of the present program (EXEC seems to be an interface to the GEMDOS call Pexec(), SHEL_WRITE is the GFA binding to the AES function of the same name).

For the present task, EXEC fits the bill rather better than SHEL_WRITE, if only because SHEL_WRITE clears the screen before running the second program, rather defeating the whole aim of the project.

However, life is not quite as simple as just calling EXEC: we also need to think about providing some memory for the second program to use. The issue arises because by default the first program will have been given, and kept, virtually all available memory, leaving none for the second program. To tone down this rather anti-social behaviour, the RESERVE statement can be used to limit the amount of memory used by a BASIC program, returning the rest to the system.

Some code

After all this theoretical discussion, some example code should make things more concrete. Listing 2 contains GFA BASIC source for a demo program that does some-

thing like what Jeff wants. It is not the most beautiful of programs (excuse the rusty BASIC!), but it should serve the purpose well enough.

To keep the code simple, I have chosen to have the program display uncompressed DEGAS format images (.PI1/2/3 for ST Low, ST Medium and ST High resolutions respectively). These are simple whole-screen bit-map images, prefixed with a short header block containing palette and format data. Code to handle the .IMG format could be developed from that supplied in issue 32. An image is loaded, displayed on the screen, and when the 'L' key is pressed, a second program is launched.

The program begins by returning all memory bar an arbitrary 16K to the system, freeing space for later. It then allocates blocks of memory for the DEGAS header section (34 bytes long) and the screen image itself (32000 bytes) using MALLOC. Names of image and program files are obtained from the user, and then the DEGAS file is read in two portions using BGET. The DEGAS header consists of 17 sixteen-bit words (INTs as far as GFA BASIC is concerned). The first of these has the value 0 for a low resolution screen, 1 for medium resolution, and 2 for high resolution. The remaining sixteen determine the palette.

The header information is checked to ascertain whether the image is of the right resolution before the data is transferred from the area pointed to by 'picture' into the screen memory using BMOVE. Finally, the appropriate palette is loaded from the header block. When the user presses 'L', the second program is EXECd. Upon termination of the second program, control returns to Listing 2, which frees the two memory blocks and then ends. To allow comparison of the difference between EXEC and SHEL_WRITE, the appropriate SHEL_WRITE command is provided, commented out.

One last point—Listing 2 has only been tested with the GFA interpreter (because that is all I have access to!). It exhibits a side effect that may be due to the interpreter environment. After the program EXECd by Listing 2 terminates, the interpreter sometimes crashes with a bus error (two bombs). Perhaps someone with the compiler can verify that a compiled version works satisfactorily.

Listing 1

```
*****
/*
/*
** Listing 1.
** Programmers' Forum STA 47 (November 1994)
**
** Additional code for animation of sliders in
** a CFX window. Add this in to code from the
** STA 46 edition of Programmers' Forum.
**
** Compiler system: Lattice C v5.60
** Phase 1 options: -cargfku -aw
** Meaning: Enable ANSI mode, disable trigraphs, enable
** non-ANSI keywords, assume unsigned chars,
** type-based stack alignment
** Phase 2 options: -ms -v -y
** Meaning: Optimise for space, disable stack checking,
** force reload of a4 on function entry
** Written on 20 August 1994
*/
```

```
/*
** Symbols concerned with the NVRAM...
*/
#define DELAY_OFFSET 5

/*
** General symbols...
*/
#define LAST_PAGE 3
#define MIN_DELAY 0
#define MAX_DELAY 20
#define DELAY_BASE 12

/*
** Resource data...
*/
#define DSKCAN 2 /* BUTTON in tree DSKPAGE */
```



```

#define DSKWRITE      3 /* BUTTON in tree DSKPAGE */
#define DSKRESET     4 /* BUTTON in tree DSKPAGE */
#define DSKSYS       9 /* BOXTEXT in tree DSKPAGE */
#define DSKBAR      10 /* BOX in tree DSKPAGE */
#define DSKSLIDE    11 /* BOXTEXT in tree DSKPAGE */
#define DSKDOWN    12 /* BOXCHAR in tree DSKPAGE */
#define DSKUP      14 /* BOXCHAR in tree DSKPAGE */
#define DSKNEXT1   16 /* TEXT in tree DSKPAGE */
#define DSKNEXT2   17 /* STRING in tree DSKPAGE */

static TEDINFO rs_tedinfo[] = {
    .
    .
    .
/*16*/ {"\275 Jon Ellis, 1994", "", "", SMALL,6,TE_LEFT,0x1180,0,-1,18,1},
/*17*/ {" Default ", "", "", IBM,0,TE_CNTR,0x1100,0,-1,11,1},
/*18*/ {"Off", "", "", IBM,6,TE_CNTR,0x1180,0,-1,4,1},
/*19*/ {" Disk ", "", "", IBM,6,TE_LEFT,0x1180,0,-1,7,1},
/*20*/ {" VIDEO ", "", "", SMALL,6,TE_LEFT,0x1180,0,-1,10,1},
};

OBJECT DSKPAGE[] = {
/*0*/ {-1,1,6,G_BOX,0x0,0x0,(void *)0xff1101,0,0,256,176},
/*1*/ {6,2,5,G_BOX,0x0,0x0,(void *)0xff1141,0,128,256,48},
/*2*/ {3,-1,-1,0x400[G_BUTTON,0x7,0x0,"Cancel",176,16,64,16]},
/*3*/ {4,-1,-1,0x300[G_BUTTON,0x5,0x0,"Write",96,16,64,16]},
/*4*/ {5,-1,-1,0x200[G_BUTTON,0x5,0x0,"Reset",16,16,64,16]},
/*5*/ {1,-1,-1,G_TEXT,0x0,0x0,(void *)0xff1101,0,0,256,128},
/*6*/ {0,7,16,G_BOX,0x0,0x0,(void *)0xff1101,0,0,256,128},
/*7*/ {15,8,14,G_BOX,0x0,0x0,(void *)0xff1101,8,16,240,104},
/*8*/ {9,-1,-1,G_STRING,0x0,0x0,"System:",12,56,56,16},
/*9*/ {10,-1,-1,G_BOXTEXT,0x40,0x20,(void *)0xff1101,80,56,88,16},
/*10*/ {12,11,11,G_BOX,0x40,0x0,(void *)0xff1141,96,24,120,16},
/*11*/ {10,-1,-1,G_BOXTEXT,0x40,0x0,(void *)0xff1101,16,0,32,16},
/*12*/ {13,-1,-1,G_BOXCHAR,0x40,0x0,(void *)0x4fff100,80,24,16,16},
/*13*/ {14,-1,-1,G_STRING,0x0,0x0,"Delay:",12,24,48,16},
/*14*/ {7,-1,-1,G_BOXCHAR,0x40,0x0,(void *)0x3fff100,216,24,16,16},
/*15*/ {16,-1,-1,G_TEXT,0x0,0x0,(void *)0xff1101,16,0,48,24},
/*16*/ {6,17,17,0x100[G_TEXT,0x40,0x0,(void *)0xff1101,192,112,54,16]},
/*17*/ {16,-1,-1,0x100[G_STRING,0x60,0x0,"003",40,0,8,16]},
};

void redraw_delay_bar(void);
void update_panels(void);

/*
** Configuration variables...
*/

short delay; /* HDD spin-up delay */
int system; /* Index of system types */

/*
** Popup menu data...
*/

char *system_types[] = {" Default ", " TOS ", " UNIX "};

/*
** Function to handle the values returned from
** XControl's extended form do() routine. The
** arguments are a pointer to the button index
** returned by Xform do() and the message pipe.
** The return value is TRUE if the interaction
** is to be terminated, REDRAW to redraw the
** box, or FALSE to continue without a redraw.
**
** Usage: end = handle_button(clicked,pipe);
**
** int handle_button(short,short *);
*/

int handle_button(button,pipe)

short button;
short pipe[];

{
    int dclick, ext_type, code;
    short obj, mx, bx, junk;

    dclick = FALSE;
    if ((button != -1) && (button & 0x8000))
    {
        dclick = TRUE;
        button &= 0x7FFF;
    }

    ext_type = (box+button)->ob_type >> 8;
    switch (ext_type)
    {
        case CROSSBOX: (box+button)->ob_state ^= CROSSED;
            return(REDRAW_OBJECT);

        case NEXT: page = (page != LAST_PAGE ? page+1 : 0);
            update_panels();
            return(REDRAW);

        case RESET: obj = form_alert(1, "[|] [Clear NVRAM contents
?|] [Ok|Cancel]");
            if (obj == 1)
            {
                NVMAccess(NVM_RESET,0,NVMSIZE,(char *)NVMbuffer);
                read_NVM();
                configure_box();
            }
            (box+button)->ob_state &= ~SELECTED;
            return(REDRAW);

        case WRITE: evaluate_vars();
            code = NVMAccess(NVM_WRITE,0,NVMSIZE,(char *)NVMbuffer);
            if (code == 0)
                form_alert(1, "[|] [Preferences written to NVRAM.] [ Ok
]");
    }
}

```

```

else form_alert(1, "[3] [Error writing to NVRAM. |Reset NVRAM
and try again. |] [Cancel]");
(box+button)->ob_state &= ~SELECTED;
return(REDRAW_OBJECT);

case CANCEL: (box+button)->ob_state &= ~SELECTED;
return(TRUE);
}

if (box == &VIDPAGE[0])
{
    if (button == VIDCOL)
        popup(box,button,video_colours,NUM_COLOURS,&colours);
    else if (button == VIDMON)
        popup(box,button,video_monitors,NUM_MONITORS,&monitor);
}
else if (box == &KBDPAGE[0])
{
    if (button == KBDPMT)
        popup(box,button,keyboard_layouts,NUM_LAYOUTS,&keyboard);
    else if (button == KBDLANG)
        popup(box,button,keyboard_languages,NUM_LANGUAGES,&language);
}
else if (box == &DATPAGE[0])
{
    if (button == DATDATE)
        popup(box,button,date_formats,NUM_DATES,&date_format);
    else if (button == DATTIME)
        popup(box,button,time_formats,NUM_TIMES,&time_format);
}
else if (box == &DSKPAGE[0])
{
    if (button == DSKUP || button == DSKDOWN)
        (*xcpb->sl_arrow)(box,DSKBAR,DSKSLIDE,button,button==DSKUP ? 1 : -1,
            MIN_DELAY,MAX_DELAY,&delay,HORIZONTAL,redraw_delay_bar);
    else if (button == DSKBAR)
    {
        graf_mkstate(&mx,&junk,&junk,&junk);
        objc_offset(&DSKPAGE[0],DSKSLIDE,&bx,&junk);
        (*xcpb->sl_arrow)(box,DSKBAR,DSKSLIDE,NIL,mx<bx ? -4 : 4,
            MIN_DELAY,MAX_DELAY,&delay,HORIZONTAL,redraw_delay_bar);
    }
    else if (button == DSKSLIDE)
        (*xcpb-
>sl_drag)(box,DSKBAR,DSKSLIDE,MIN_DELAY,MAX_DELAY,&delay,redraw_delay_bar);
    else if (button == DSKSYS)
        popup(box,button,system_types,NUM_SYSTYPES,&system);
}

if (button == -1)
    if (pipe[0] == AC_CLOSE || pipe[0] == WM_CLOSED)
        return(TRUE);
return(FALSE);
}

/*
** Function to update the contents of the spin-up
** delay slider bar as the user interacts with it.
** The function is called by the XControl slider
** handling functions. There are no return values.
**
** Usage: void redraw_delay_bar(void);
*/

void redraw_delay_bar(void)

{
    short ox, oy, ow, oh;
    TEDINFO *tptr;

    tptr = (TEDINFO *) DSKPAGE[DSKSLIDE].ob_spec;
    if (delay == MIN_DELAY)
        strcpy(tptr->te_ptext,"Off");
    else stcu_d(tptr->te_ptext,delay);
    objc_offset(&DSKPAGE[0],DSKBAR,&ox,&oy);
    ow = DSKPAGE[DSKBAR].ob_width;
    oh = DSKPAGE[DSKBAR].ob_height;
    objc_draw(&DSKPAGE[0],ROOT,MAX_DEPTH,ox,oy,ow,oh);
}

/*
** Function to set the dialogue box according
** to the current state of the program variables.
** There are no arguments and no return values.
**
** Usage: void configure_box(void);
*/

void configure_box(void)

{
    TEDINFO *tptr;
    char *text;

    .
    .
    .

    tptr = (TEDINFO *) DSKPAGE[DSKSLIDE].ob_spec;
    if (delay == MIN_DELAY)
        strcpy(tptr->te_ptext,"Off");
    else stcu_d(tptr->te_ptext,delay);
    (*xcpb->sl_x)(&DSKPAGE[0],DSKBAR,DSKSLIDE,delay,MIN_DELAY,MAX_DELAY,NULL);
    tptr = (TEDINFO *) DSKPAGE[DSKSYS].ob_spec;
    strcpy(tptr->te_ptext,system_types[system]);
}

/*
** Function to set the program variables from
** the current contents of the NVRAM. The block
** is read into the program's buffer and then
** analysed. There are no arguments and no returns.
**
** Usage: int read_NVM(void);
*/

```



```
int read_NVm(void)
{
    int code, f;
    short disk, AKP_code, IDT_code, modecode;

    code = NVmaccess(NVM_READ,0,NVMsize,(char *)NVMbuffer);
    disk = NVmbuffer[DISK_OFFSET];
    if (disk & 0x0080)
        system = 1;
    else if (disk & 0x0040)
        system = 2;
    else system = 0;

    delay = (NVmbuffer[DELAY_OFFSET] >> 8) - DELAY_BASE;
    if (delay < MIN_DELAY) delay = MIN_DELAY;
    if (delay > MAX_DELAY) delay = MAX_DELAY;
    .
    .
    return (code);
}

/*
** Function to evaluate the current state of
** the program's variables, translating the
** results into a modified NVRAM buffer. There
** are no arguments and no return values.
** Usage: void evaluate_vars(void);
**/

void evaluate_vars(void)
{
    short disk, AKP_code, IDT_code, modecode;
    .
    .
    if (system == 1)
        disk = 0x80;
    else if (system == 2)
        disk = 0x40;
    else disk = 0;
    NVmbuffer[DISK_OFFSET] = disk;

    NVmbuffer[DELAY_OFFSET] = (delay + (delay > MIN_DELAY ? DELAY_BASE : 0)) << 8;
    .
    .
}
```

```
***
*** Listing 2. -- Programmers' Forum STA 47 (November 1994)
***
*** Crude GFA-BASIC fragment showing how to load an uncompressed DEGAS picture into
*** the screen memory, and then chain on to run another program.
*** Interpreter: GFA BASIC 3.5e -- Written on 6 September 1994
***

*** Start-up with decent memory management and allocate blocks to receive picture.

RESERVE 16384
CLS
PRINT "Simple DEGAS file loader"
PRINT
PRINT "Free memory: ";MALLOC(-1)
header = MALLOC(34)
IF header = 0
    PRINT "Could not get memory for header"
    END
ENDIF
picture = MALLOC(32000)
IF picture = 0
    PRINT "Could not get memory for data"
    END
ENDIF

*** Read in DEGAS file from disk, checking that it is in the right resolution.

PRINT "Enter name of DEGAS .PI";XBIOS(4)+1;" file: ";
INPUT a$
INPUT "Enter name of program file to run after display: ";program$
OPEN "I",#10,a$
BGET #10,header,34
BGET #10,picture,32000
CLOSE #10
IF INT(header) <> XBIOS(4)
    PRINT "Wrong resolution DEGAS file !"
    END
ENDIF

*** File has been loaded OK. Now interact with the user to display the picture
*** and to launch the program.

PRINT "File loaded. Press any key to display image."
PRINT "Press L to launch program"
-INP(2)
BMOVE picture,XBIOS(2),32000
-XBIOS(6,L:header+2)
REPEAT
    key = INP(2)
UNTIL key = ASC("L") OR key = ASC("L")
'SHELL WRITE(1,1,1,"",program$)
EXEC 0,program$,"",""
-MFREE(picture)
-MFREE(header)
END
```

Please insert the following advert for Issues under the following classification: / ST Contacts / For Sale / Wanted / General / User Groups. Adverts are free to ST Applications subscribers and boxed classified adverts cost £3.50 per issue.

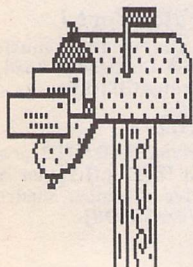
Warning: It is illegal to sell unauthorised copies of commercial software - All software offered for sale must be in the original packaging with manuals etc. Anyone found to be selling pirated software through the classified advert listings will be reported to the appropriate authorities. Software publishers do not normally offer user support or upgrades to users of software purchased second hand.

Classified Advertisement Copy

STA 47

Feedback

Use this space for any feedback you'd like us to read.



STA 47

For Sale

Colour Monitor unused CTM 644 fully converted with sound £85.00; will guarantee. Hand Scanner with Software £40.00; 0253 863517. (47)

Mega 4 £200, Protar 30MB HD £70; Reflex Card £60; SM124 £60; AOC 15" SVGA Mutisync £300; Seikosha 24 pin £60; Miracom 2400e Modem £60; Calamus S; Geneva; Technobox Drafter; NVDI 2.5, Warp 9, Stalker, Steno, CalAssistant SL, Bound ST World's, Books, Games etc. Call Ian on 081-671-8945. (48)

Mega 4 STE, TOS 2.06, High Density Floppy, 105mg Quantum, Perfect condition - £375. Reflex Graphics Card for Mega ST and STE £60; (081) 989 9672. (48)

EIZO 21" monitor, Fexscan 6500. High res mono multisyn multi input greyscale display. Ideal for DTP, Cubase, etc. Runs direct from ST or gives expanded display with graphics card e.g. Reflex (not included). Very little used, original packing. £950 ono. (new price £1760). Tel: 0635 248078 (London/Home Counties). (47)

Star LC 200 9 pin Colour Printer, little used - £95; NEC Pinwriter P5 (132 column) - £150; Pagemaster 2.1 incl. loads of fonts & clipart - £50; Superbase Personal - £20; Knights of the Sky - £10. Colin - 01793 828903 day/eve. (48)

Make me an offer: 2.5mb DS TOS 1.4 STFM, 2 long-life DeskJet cartridges, Timeworks 2, Write On, Fontkit+ 3, 4, Quick ST3, Imagecopy, Lemmings, Lemmings Tribes, Naksha Mouse, Sim City/Populous, Users' Guide to Timeworks DTP. - Cameron Marshall, Queen's College, Oxford OX1 4AW. (47)

270 Meg Mini-S Hard Drive cost £409 will sell for £300 with DMA to Scuzzi lead - boxed with 18 months' warranty. Ring Durham on 091 3881487 and ask for Paul. (48)

Mega STE 16Mhz, 4mb RAM, 1.44Mb FD, TOS 2.06, 52Mb Hard Disk, SM124

Classified Adverts

*Classified adverts are free to subscribers.
Please use the form on page 27.*

Mono Monitor, Latic C V5.6, X-debug, Warp 9 v3.8, NeoDesk 3, Harlekin 2, Multitos, etc. 7 Books (Abacus/compute). 170 + mags inc disks, Microprose F1, Dynablaster, Captive, Rainbow Islands, etc. 85 PD disks labelled £400 the lot, may split, Phone David 0952 416600. (48)

Ricoh LP 1200 Laser Printer (Emulates HP Laserjet 3 & Epson FX-850, etc). Perfect, 1 year old. £300 (Buyer collects). Tel Dave on 021777 1802 anytime. (47)

Canon BJ-200 printer, cables and switch box £90 ono; SM124, stand and switch cable £45 ono; Supercharged Easydraw, Hyperpaint, Art Studio, MasterCad £15; Knife ST, Superbase Personal, Word+ and drivers (including Postscript) £; Hisoft PowerBasic and Wercs £10; 120 Cover/PD disk Mouse Master £24, All Microprose simulations; Kennedy Approach, etc., and F29, Falcon MD, Flight Simulator, etc., £5 each. Please call David on 0604 586387 (after 6.30 pm). (48)

Lighthouse Tower System, STFM TOS 1.4, 4mb RAM, 16mhz accel. (switchable), ICD Host Adaptor, 48mb HD, two

internal FDD, Overscan fitted, SM124 monitor. £375. ICD Host adaptor, power supply, fan and case, ready for Hard Drive - £50; Vortex ATonce 16mhz emulator - £50; Lots of software including Geneva, Neodesk v3.04, SpeedoGDOS, K-Spread4, PFM+, PRO24, Redacteur plus many, many more, also big box full of games, magazines, cover discs etc. etc. All prices plus delivery. No! I'm not deserting, I'm rationalising! 0539 723190 (Kendal) Brian. (47)

Steinberg 16 + for Commodore G64 plus Midi Interface - £50 ono. Phone Pat 081 573.2736. (47)

STFM 1040 upgraded to 4MB, 100MB hard drive, 2 floppy drives, Golden Image scanner with TouchUp (unused), Videomaster (unused), Forget-Me-Clock, hundreds of pounds' worth of top quality utilities and games - no monitor. £400. Call Russ on 081 933 1272. (48)

1040 STFM with second 1MB drive; Philips CM8833 MK II stereo monitor; First Word Plus, Timeworks, Degas Elite, Personal Finance Manager Plus, Ultimate Virus Killer v6. Clock plus mags & disks. £440 ono. 0844 208951, Robert Shipperley. (47)

Falcon 030 4/65, ScreenBlaster, Mono and Multisync adaptors, NVDI, XBoot3, MultITOS, SpeedoGDOS, Dvepac3, Shareware/PD. £650. AOC 15" colour monitor £300. (0373) 451927. (47)

Mega STE, 4MB RAM, 110MB hard drive, SM144 mono monitor, lots of software, all boxed with manuals and accessories. Immaculate condition - £600. Contact Russell on 0277 373823. (48)

Casio VZ-1/VZ10M patches! EZ-VZ from Livewire in USA. Two banks: factory presets and the Livewire bank. £10 incl. S&H. Write to: Carl Löfgren, Arkov. 51, 121 55 Johanneshov, Sweden. (47)

Colour monitor - Philips CM8833, SCART input £120 ono. Also 1040 STFM, Atari colour monitor and extra drive all 110 volt but complete with transformer and leads £160; also 520 STM £50. 0425 628805. (47)

GFA Basic 3.5 & Interpreter & manual £20*; GFA Basic v3 Compiler & manual £15; GFA Basic 2 Advanced Programming manual & disk £5; GFA GEM Utility package (GEM Framework for GFA Basic 3 & manual) £5; GFA Mission Control (Shell) £5; GFA Raytrace 3D animation & Manual £5; K Resource 2 & manual £5; ST Wefax for Kantronics Kam and Atari ST (software) £5; Atari ST Technical Reference Guide vol 1 - VDI £10; Atari ST Technical Reference Guide vol 2 - AES £10; Atari ST Technical Reference Guide vol 3 - TOS £10; Atari ST Explored by John Braga £5; Atari ST Tricks and Tips by Abacus Software £5; Teletext adaptor & manual & software £35* (capture share prices, weather forecast or anything you like and save it to disk or print it. Has a through connector for the printer socket [ST only]). Items marked * please add £2 p&p; all other items add £1. All software original, not copies. Phone 0656 660907 before 8. (47)

HiSoft C Interpreter £15, War in the Gulf £15, Reach for the Skies £15, Digita Home Accounts £6, Bart Simpson Space Mutants £3. All absolutely mint,

Authorware If you would like to see your software featured in the ST Applications Authorware column please send us a review copy of the software and a rough outline of the advertising copy you would like to be printed.

Morse Master

The complete morse trainer and simulator. Send Cheque/PO for £29.99 payable to Boscad Ltd at: 16 Aytoun Grove, Balbridgeburn, Dunfermline, Fife KY12 9TA. Phone (3383) 729584 evenings for technical information.

Clip Art

Clip Art specifically for Christian and Community Magazines. Peter Kempley, KemCom Designs, 21 Chart House Road, Ash Vale, Aldershot GU12 5LS.

Calamus Manual

113 pages including: Loading modules. Colours and fill patterns. Frame drawing. Text Styles including lists. Page layout. Single and double page spreads. Formatting and rulers. Importing text and graphics. Text flow between frames. Text flow around graphics. Rotating and arranging frames. Raster area and

line frames. Master pages. Headers, footers and page numbering. Loading, saving and printing. Using PKS Write. Raster generator module. Price: £8 including postage from David Waller, The Sandon School, Molrams Lane, Great Baddow, Chelmsford, Essex CM2 7AQ. Cheques/POs should be made out to "The Sandon School". The guide for Calamus 1.09 is still available!

STTrack

Use up to four light beams with your ST. Invaluable for Science National Curriculum AT4. F.J. Wallace, 9 High Elms Road, Hullbridge, Essex SS5 6HB.

Graph, Euclid and Stack

GRAPH can draw simple functions, implicit functions, parametric and polar functions and display the gradient functions of any of these. EUCLID enables you to draw any geometrical configuration including conics, circles, perpendiculars, bisection

tors, etc. STACK is an arithmetic calculator (HP type) for use with very large whole numbers. Michael Girling, Camel Quarry House, Wadebridge, Cornwall PL27 7HZ.

Genealogy

Newgen, my genealogy program, runs on any ST(E) or TT and is easy to use. Large SAE for details or £17 for program. E G Richards, 2 Peckarmans Wood, London SE26 6RX.

Sonix Sound Sampling

We will sample your sounds from tape to disk. Write to: The Lodge, Dolly End, Hailey, Witney, Oxon OX8 5XD.

Educational Adventures

For ages 5-13. 88% in ST Format. £12 each. 50p per disk for demo's. CVS, 18 Nelson Close, Teignmouth TQ13 9NH. Tel: (0626) 779695.

Morse/RTTY Transceive

Atari STE - Morse and RTTY transceive. Write: V. McClure, 43 Roman Way, Seaton, Devon EX12 2NT.

Learning a Language?

ACADEMIC SOFTWARE supply several budget foreign language disks to help you in your studies. Call 0296 82524 any time for a brochure. Or write to 128 Ingram Ave, Ayles-

bury, Bucks. HP21 9DJ. For demo, just send 4 first class stamps or SAE + disk.

Scanner Manager

A specialised database system for all scanner owners. Stuart Coates. 9 Links Road, Kibworth Beauchamp, Leicester LE8 0LD.

DEGASART

Demo disk of the above compart tutorial is available. Please send a cheque/P.O. for £1 or a blank DS disk and an SAE to Keith Markland, 15 Stourton Road, Ikley, W. Yorkshire LS29 9BG.

Music Tutor Part 1

Teaches you to read music. A. Graves, 81A Cambridge Road, Girton, Cambridge CB3 0PN.

MultiCAD

Vector-driven CAD/DTP program for the ST/STE. J.H. Taylor at: 12 West Drive, Cleadon, Sunderland, Tyne & Wear SR6 7SJ.

SciSet

SciSet scientific font sets for Calamus. Dr. Graham McMaster, Retsum Computing Solutions, 12 High Street, Turriff, Aberdeenshire AB53 7DS; 0888 62328.



Order Form

To order, simply mark off the disks required:

<input checked="" type="checkbox"/>	EG.123	Disk Description
APPLICATIONS		
	AP.100	Databases
	AP.101	FastBase
	AP.102	Supercard
	AP.130	Sp Purpose Databases
	AP.140	Address Books
	AP.150	Spreadsheets
	AP.170	Hypertext #1
	AP.171	Hypertext #2
	AP.172	ST Guide
	AP.190	Personal Organisers
	AP.200	Graph Makers
	AP.210	Plotters
	AP.250	Label Makers
	AP.251	Label CAD
	AP.252	Sticker Ill
	AP.300	Mathematics
	AP.310	Chemistry and Electricity
	AP.320	Business #1
	AP.321	Business #2
	AP.340	Sport
	AP.350	Genealogy and Mag
	AP.360	Word Puzzle Makers
	AP.380	Astronomy #1
	AP.381	Astronomy #2
	AP.382	Astronomy #3
	AP.383	Astronomy #4
	AP.390	Miscellaneous
	AP.391	Calendars and Body
	AP.400	Demo's
	AP.900	Uniterm and Vanterm
	AP.901	Comms Terminals
	AP.902	Comms + FAX Software
	AP.910	Comms: Utilities
	AP.930	Comms: BBS Stuff
	AP.950	Radio Utilities #1
	AP.951	Radio Utilities #2
	ART - COLOUR	
	AC.100	Page3
	AC.101	Planets
	AC.102	Fantasy
	AC.103	Misc TNY #1
	AC.104	Misc TNY #2
	AC.105	Misc TNY #3
	AC.106	Freds
	AC.107	Doug Herring Portfolio
	AC.108	Misc TNY#4
	AC.109	Animal World
	AC.110	16+ Picture Show
	AC.200	Page 3
	AC.201	Misc SPC #1

AC.202	Photofile Demo #1
AC.204	Samantha Fox
AC.205	Samantha Fox
AC.206	Gigabyte Show
AC.250	Animals #1
AC.251	Animals #2
AC.252	Fantasy
AC.253	People #1
AC.254	People #2
AC.256	Things 1
AC.280	SPX #1
AC.281	SPX #2
AC.282	Hotbabes #1
AC.283	Hotbabes #2
AC.284	Hotbabes #3
AC.285	Hotbabes #4
AC.286	Hotbabes #5
AC.287	Hotbabes #6
AC.288	Hotbabes #7
AC.289	Hotbabes #8
AC.290	SPX #3
AC.291	SPX #4
AC.292	SPX #5
AC.300	GIF Pictures #1
AC.301	GIF Pictures #2
AC.302	GIF Pictures #3
AC.303	GIF Pictures #4
AC.400	Art of Tobias Richter
AC.401	Art of Tobias Richter
AC.402	Wildlife Slideshow II
AC.403	Photochrome Slideshow
AC.450	Amiga IFF Pictures
ART (CLIP ART)	
AM.101	Animals
AM.102	Animals
AM.103	Animals
AM.104	Animals
AM.105	Animals
AM.106	Animals
AM.107	Animals
AM.108	Animals
AM.131	Cartoons
AM.132	Cartoons
AM.133	Cartoons
AM.134	Cartoons
AM.135	Seymour's Sketches
AM.136	Seymour's Sketches
AM.140	Office Art
AM.141	Office Art
AM.151	Teddy Bears #1
AM.152	Teddy Bears #2
AM.160	Kids #1
AM.161	Kids #2
AM.162	Kids #3
AM.180	Christian #1
AM.181	Christian #2

AM.182	Christian #3
AM.201	DTP Items #1
AM.202	DTP Items #2
AM.203	DTP Items #3
AM.204	DTP Items #4
AM.205	DTP Items #5
AM.206	DTP Items #6
AM.250	Engravings #1 and #2
AM.271	Fantasy #1
AM.272	Fantasy #2
AM.273	Fantasy #3
AM.274	Fantasy #4
AM.290	Plants #1
AM.291	Plants #2
AM.301	Food #1
AM.302	Food #2
AM.321	Greetings Cards #1
AM.322	Greetings Cards #2
AM.323	Greetings Cards #3
AM.324	Greetings Cards #4
AM.351	Houses #1 and #2
AM.361	Music #1
AM.362	Music #2
AM.381	People #1
AM.382	People #2 and #3
AM.384	People #4
AM.400	Entertainment #1
AM.401	Pin Ups #1
AM.402	Pin Ups #2
AM.403	Pin Ups #3
AM.404	Pin Ups #4
AM.421	Sports #1 and #2
AM.441	Transport #1
AM.442	Transport #2
AM.443	Transport #3
AM.461	Work #1
AM.462	Work #2
AM.481	World #1
AM.482	World #2
AM.601	Clipit #1
AM.602	Clipit #2
AM.603	Clipit #3
AM.604	Clipit #4
AM.605	Clipit #5
AM.606	Clipit #6
AM.607	Clipit #7
AM.608	Cooper Clip Art
AM.609	Cooper Clip Art
AM.610	Cooper Clip Art
AM.611	Cooper Wacky Cartoons
AM.651	Misc #1
AM.652	Misc #2
AM.653	Misc #3
AM.654	Misc #4
AM.655	Misc #5
AM.656	Misc #6

AM.657	Misc #7
AM.658	Misc #8
AM.659	Misc #9
AM.660	Misc #10
AM.661	Misc #11
AM.662	Misc #12
AM.663	Misc #13
AM.612	Grin Clip Art
AM.613	Grin Clip Art
AM.614	Lise Bis Jensen Portfolio
AM.615	Panthersoft Smart Art
AM.701	TNY #1
AM.702	TNY #2
AM.703	TNY #3
AM.704	TNY #4
AM.705	TNY #5
AM.900	EPS #1
AM.901	EPS #2
AM.950	GEM Art #1
AM.951	GEM Art #2
AM.952	GEM Art #3
AM.953	GEM Art #4
AM.970	CVG Clip Art
DISK MAGS	
DM.30	July '92
DM.31	September '92
DM.34	March 1993
DM.35	May 93
DM.36	July 93
DM.37	September 93
DM.38	November 93
DM.39	January 94
DM.40	March 94
DM.41	May 94
DM.42	July 94
DM.43	September 94
EDUCATIONAL	
ED.101	Education #1
ED.102	Education #2
ED.103	Education #3
ED.104	Education #4
ED.105	Education #5
ED.106	Education #6
ED.107	Education #7
ED.108	Education #8
ED.109	Education #9
ED.110	Education #10
ED.111	Education #11
ED.112	Education #12
ED.113	Education #13
ED.114	Education #14
ED.115	Education #15
ED.116	Education #16
ED.117	Education #17
ED.118	Education #18
ED.201	Languages

ED.301	School Stuff
ED.401	Death of a President
ED.402	Death of a President
ED.403	Death of a President
ED.402	Search
ED.404	History File
ENTERTAINMENT	
EN.100	Games:Flying and Sports
EN.110	Games:Casino & Quizes
EN.120	Tetris
EN.121	Tetris Clones
EN.130	Word Games
EN.140	Strategy Games
EN.141	Strategy Games #2
EN.150	Puzzle Games
EN.160	Card Games
EN.170	Board Games
EN.200	Llamasoft Games
EN.210	Game Menu 1 and 2
EN.211	Game Menu 3
EN.212	Games #1
EN.213	Games #2
EN.214	Games #3
EN.215	Games #4
EN.301	Mono Games #1
EN.302	Mono Games #2
EN.801	Adventure Games #1
EN.802	Adventure Games #2
EN.803	Adventure Games #3
EN.804	Adventure Games #4
EN.805	AGT Adventure Games
EN.815	Grandad 2
EN.840	Michaels Big Adventure
EN.861	Dungeon & Dragons #1
EN.862	Dungeon & Dragons #2
EN.871	Adventure Game Help #1
EN.872	Adventure Game Help #2
EN.890	Games Help
EN.900	Demo Disk #1
EN.901	CyberStudio
EN.902	Lost Boys Definitive
EN.903	Demo Collection #1
EN.980	California Beach Girls
EN.981	Golden Girls
FONTS	
FN.100	Font Utilities
FN.101	Fontkit v3.31
FN.201	PageStream Fonts #1
FN.202	PageStream Fonts #2
FN.203	PageStream Fonts #3
FN.204	imageArt PageStrm Fonts
FN.301	PostScript Fonts #1
FN.302	PostScript Fonts #2
FN.303	PostScript Fonts #3
FN.304	PostScript Fonts #4
FN.305	PostScript Fonts #5

FN.306	PostScript Fonts #6
FN.401	Calamus Fonts #1
FN.402	Calamus Fonts #2
FN.403	Calamus Fonts #3
FN.404	Calamus Fonts #4
FN.405	Calamus Fonts #5
FN.406	Calamus Fonts #6
FN.407	Calamus Fonts #7
FN.408	Calamus Fonts #8
FN.409	Calamus Fonts #9
FN.410	Calamus Fonts #10
FN.411	Calamus Fonts #11
FN.412	Calamus Fonts #12
FN.413	Calamus Fonts #13
FN.414	Calamus Fonts #14
FN.415	Calamus Fonts #15
FN.416	Calamus Fonts #16
FN.417	Calamus Fonts #17
FN.418	Calamus Fonts #18
FN.419	Calamus Fonts #19
FN.420	Calamus Fonts #20
FN.421	Calamus Fonts #21
FN.501	GEM Fonts 300-dpi #1
FN.502	GEM Fonts 300-dpi #2
FN.503	GEM Fonts 300-dpi #3
FN.504	GEM Fonts 300-dpi #4
FN.550	GEM Fonts 360-dpi #1
FN.551	GEM Fonts 360-dpi #2
FN.552	GEM Fonts 180 & 360
FN.580	GEM Fonts 9-pin
FN.601	That's Write 300-dpi #1
FN.602	That's Write 300-dpi #2
FN.603	That's Write 300-dpi #3
FN.604	That's Write 300-dpi #4
FN.640	That's Write Fonts
FN.650	That's Write Fonts 360
FN.680	That's Write Fonts 9-pin
FN.701	Signum Fonts 24-pin
FN.702	Signum Fonts 300-dpi
FN.703	Signum Fonts
FN.800	Screen+Degas Fonts
FN.810	HP Softfont 300-dpi
FN.820	Fontpac Fonts
GRAPHICS	
GR.100	Paint Packages #1
GR.110	Crack Art 1.0
GR.111	Synthy v2.026
GR.112	Kozmik 4
GR.150	Mono Paint Packages #1
GR.151	Mono Paint Packages #2
GR.152	PAD 20
GR.153	PAD 24
GR.200	3D Graphics & CAD
GR.205	Kadinsky

boxed, with manuals. Tel: Dave, Notts (0602) 397354. (48)

ST games £7 each or nearest offer: Graham Taylor's Management, Speedball 2, Lemmings, Mercenary 3, Storm Master. £8 or nearest offer for Football Crazy (Kick Off 2, Player Manager and Final Whistle); £5 each or nearest offer: Blood Money or Puzznit; £3 ono: First Division Manager, North and South, Flip It and Magnose, Onslaught and Asterix. Phone 021 351 4909 eves only. (48)

TW2 + "Companion" (brilliant guide) £35. Superbase Personal 2 £35. Touch Up v1.84 £25. Equinox Small Business Accounts £20. CalAssistant £12. Hyperpaint £8. Falcon F16 £8. Spellbook 4-6 £5. All originals with manuals. Keyboard case with coiled lead (separates ST keyboard from computer) £20 - all post inclusive. Jon 0785 46783. (47)

Books: Atari Graphics and Sound, Atari Peeks and Pokes, Atari Basic Training Guide, Atari Tricks and Tips, as new, £25 the lot. Phone Evelyn Mills on 0275 854693 after 6pm. (48)

Canon 105K + sheffield £160. Spectre GCR £150. GI Opto-mech mouse £8. Cumana CSA 354 £35. K-Spread 4 £50. Superbase Pro £40. Lattice C v5.04 £30. UIS III £10. UVK v5.9 £5. View II £10. Oxford Chess 36. Stargilder 2 £5. Mega STE SCSI host adaptor £40. CManship Complete £8, Users' Guide to Time-works £5. All as new with manuals, etc. Phone Ray on 051 929 3129 weekends. (47)

TT 030: 8 Meg RAM, 200 Med Hard Disk, c/w Proscreen TT (A4) high res mono monitor. £1000 - no offers please. Phone Bryan Cox on (0298) 78071. (47)

Calamus 1.09N with 9 Font Disks and Manual: Offers (081) 989 9672. Reflex Graphics card for Ste and Mega ST. (48)

MiniS 85 MB autobooting, self-parking and self-powered hard disk complete with ICD link to connect to DMA (ACSI) port on ST/TT/Falcon and ICD hard disk software and manual; still under warranty. Reason for sale: I'm buying a bigger one! Cost new £309, yours for £220 including delivery charge. John Bowsher 01304 369405. (47)

ProGate R44 SyQuest 44 MB removable cartridge hard drive complete with three cartridges. 132 MB capacity now, no limit to how much you increase it. Complete with cable to connect directly to DMA (ASCII) port on ST/TT/Falcon, its own power supply and all the necessary Protar hard disk software and manual. £360 including delivery. John Bowsher 01304 369405. (47)

Mega ST upgraded to 4Mb (TOS 1.04) £200, SM124 Mono Monitor £50 (or both for £230), DaataScan Professional 400dpi H/H Scanner £50, AT Speed (8Mhz 286) fitted in Speed Bridge Board for fitting in Mega ST (inc DR Dots) £60, Golden Image Mouse £10. If you think I'm asking too much, make me a sensible offer!!! Phone Adam after 7.00pm (0932) 829822 (NW Surrey). (47)

Timeworks Publisher v2 (inc Users Guide to...) £30, Fleet Street Publisher v3 £40, Protext v5.5 £50, SpeedoGDOS £15, NeoDesk v3.02 £15, Personal Finance Manager Plus £12, MultiDesk £10, TurboJet (Neocept) £15, FontKit v3 £12, Textstyle (inc extra font sets) £12, Universal Item Selector III £10, HyperDraw £8, HyperPaint £8, Chess 2015 £10, Your 2nd Manual to the ST £5. If you think I'm asking too much, make me a sensible offer!!! Phone Adam after 7.00pm (0932) 829822 (NW Surrey). (47)

2.5MB 1040 STFM 1986 vintage (Frontier Xtra RAM fitted), SM124 with enlarged (10" diagonal) display £150 the pair. Protar 80MB series 1 SCSI hard drive, utterly reliable, 50% full of quality PD £200. Roland CM32L synth module £100 inc. editor software. Please haggle. All well cared for, boxed with manuals. Delivery negotiable. K.J. Wood, Crawley (0293) 884039 (home). (47)

Datapulse Plus 52MB hard drive and ICD software £175. Zydec ext. floppy drive £35. Zydec Trackball £16. Power Blitz Turbo Copier £6. Alphadata hand scanner + TouchUp software, used twice, offers on £80. NeoDesk 3 £10. Diamond Back 2 £15. Page Assistant £15. Image-copy £5. Deluxe Paint £15. UVK6 £6. Typewrite clipart sets 1, 2 & 3 with catalogue £18. Lots of PD, mags and books. Ted: 0983 294247. (47)

Mega ST 2, 2MB RAM, 40MB internal hard drive, SM125 hi-res monitor, 100+ disks, magazines, £240 ono. Stereo Replay sampling and Stereo output cartridge £25. Remote control joystick £6. Home Accounts £3, Digical Spread-sheet £3, Flairpaint £5, Steve Davis Snooker £3, Greenpeace Rainbow Warrior £3, Backlash £2, Starwars £2. 0323 500910. (47)

Calligrapher Professional with manual - full version, 5 disks, with Flextext, formula editor and indexer. £35 inc. postage. 0737 210794 evenings (Tim). (47)

Mastersound 2 sound sampler. Software and cartridge £10. Metacomco Cambridge Lisp £10. Protext 5.5 £25. 0738 637165 evenings. (47)

Parallel data switch box 3-way and lead £15. 0709 372970. (47)

Calligrapher Gold £45, Tempus 2 £10, games from £1 each. S.A.E. to Gary Hawtin, 2 Eden Road, Crawley, West Sussex RH11 8LZ or tel. after six 0293 534415. (47)

RGB monitor: Amstrad CTM 640 plus lead for ST (see STA 40) £40 + carriage. P. Farmer, 0872 865176. (47)

Videomaster (ST) with RGB electronic splitter, hardly used, 3 months old: £45 plus post. A bargain. Ask for Leon. 0443 409373. (47)

STFM 4MB RAM, hd disk drive £150, work in mono only. STFM 1meg plus 100 cover disks £200. Lattice C 5.51 £30. HiSoft C £15. HiSoft Basic 2 £20. Hand scanner + OCR £80. Tel Eric 0302 531725. (47)

Kawai KY or Kawai K1 patches. 832 Kawai KY patches - £19.95; 608 Kawai K1 patches - £19.95. Incl. S&H. Midi-Quest Junior Universal MIDI bank manager, includes the latest drivers from USA: £19.95. Write to: Carl Löfgren, Arkov. 51, 121 55 Johanneshov, Sweden. (47)

Wanted

Complete Psion Series 3 Serial Link for Mac or PC - will swap for BJ-200 or SM124 (or even cash for Mac link). Please call David on 0604 586387 (after 6.30 pm). (48)

Digidesign Turbosynth software for Atari. Write to Martin Seychell, 24 Triq Dun G. Zammit Hammet, Balzan BZN 08, Malta. Fax: (+356) 236237. (50)

Hard drive wanted, fully operational, up to approx. £100. Paul Farmer 0872 865176. (47)

Signum II 0709 372970. (47)

TurboJet printer driver for use with Timeworks HP DeskJet 500c - Peter Benson, 0602 436946. (48)

HP DeskJet cartridges for school use.

Singles/doubles/triple colours. New only. Tel eves 0522 752458 (Robin). (48)

For Atari Portfolio a parallel cable, 256K card and manual. Tom Williams, 0843 842050. (47)

AdSpeed/Turbo 16/20 accelerator for STE, 1.44MB drive kit, Marpet +8 board, scanning tray, Merge It, Datalite 2, Forget-Me-Clock, GFA Basic and Compiler, Laserjet III Technical Ref. Manual. Swaps, deals, w.h.y. Let's talk! Jon 0785 46783. (47)

BBS

DNA BBS. Ireland's first, only and best Atari BBS. On line specialist technical and MIDI help. High speed callers especially welcome. Instant access on first call. A Ratsoft/ST BBS. Call (24hrs) +353-1-549029 (V32BIS). (50)

Protocol BBS. Three free to enter competitions currently running. With 'free' commercial software for your ST, PC or Amiga. 15 ST file areas online with plus PC and Amiga areas. Got any Game Save files? We have a Game Save file and message area. Upload some Game Save files and win a competition or download someone else's and help them out, or just see if you can do better. Give it a try! Full details online, friendly Sysop. Call 0642 596597 - 24 hours - 300 to 14400 bps. (R)

The Confederation BBS - Support bbs for all "HITCHHIKER" software releases and GFA programmers. All the latest PD/Shareware from Europe and USA as well as Netmail message areas. On line each evening 10.00pm to 7.00a.m., at all speeds up to 2400. Give us a call today and you will not be disappointed as we are the most friendly BBS in the country - dedicated ST BBS only. 0533 413443.

Call the Fractal BBS on 0305 266304. 14400+bps. Now running RATSOFT ST 2 fresh from the States. Any time after 9pm. (R)

I'll Try That Once! ST-based BBS. Loads of file areas, 60-70 message echos, 10 on-line games. All speeds V326 V426. Give it a go! on 0453 765378 8pm to 8am. (R)

Crystal Tower BBS 081-447-8244 24hrs 300-2400 Baud (Towernet System) Atari ST, PC, Languages, Comms etc + much more. All welcome. (R)

General

CRC Printing Service, 15p per A4 page - high quality 600dpi HP4 output. All high and Atari and PC packages catered for. Scanning, OCR and litho printing services also available. Ring, write or fax for further details - BC Design & Print, 20 Somerset Close, Buxton, Derbys. SK17 9XB - 0298 78071. (51)

Back up your HD to CD Rom for £50 + p/p. Re-use space you didn't realise you had! Also, CD disk containing the Atari archive in USA only £30. The CD has 480MB of compressed PD/SW, inc. some of the very latest. If interested, phone 071-873-2894 (after 11.00am) or 081-693-9325 (after 7pm). PD library enquiries welcome. (My daytime phone is restricted to London access only for dial out.) Ask for Simon. (49)

Calamus 1.09N/S/SL (please include fonts used) and That's Write/Write On files printed on HP Laserjet 4P @ 600dpi. Send A5 SAE to: K. Hornby, 33 Ingleton Drive, Lancaster LA1 4RA for further details. (51)

Calamus S and 1.09 output on HP Laserjet 4 at 600dpi - 20pence per sheet. Please include fonts with disk and SAE. Stephen Russell, 67 The Avenue, Camberley, Surrey GU15 3NF (0276) 21469. (54)

Cheap Litho printing and scanning service. Send SAE to Stephen Russell, 67 The Avenue, Camberley, Surrey GU15 3NF (0276) 21469. (54)

PDP magazine: a non-profit making venture for the Atari and Amiga owner. A serious publication covering reviews, general computer talk, programming, graphics and lots more. A new international look for 1994. Only 70p for a trial issue: 22, The Birches, South Wootton, King's Lynn, Norfolk PE30 0JG. Make cheque payable to J. Briggs. (53)

Membership of the Cheshunt Computer Club is the essential accessory for your Atari. If you live within reach of Herts then give me, Derryck Croker, a ring on 0923 673719 with your name and address and I will send you details. (R)

Guide Dogs for the Blind Appeal - Please send used postage stamps to help this worthy cause to: 19 Dunloy Gardens, Newton Abbey, Co. Antrim, BT37 9HZ. (R)

Professional typeset from 1st Word disks. Over 100 Faces. Output to high quality PMT. Much better than laser. Also cheap printing A5/A4 single colour. Contact: AZTRAL Games, PO Box 8, Lowestoft, Suffolk, NR32 2AS. (R)

'Alternatives' fanzine - Quarterly, £1 per issue. Issue 9 out now (Autumn), Issue 10 out soon. Send £1 (which includes p+p) and address to Alternatives, 39 Balfour Court, Station Road, Harpenden, Herts. AL5 4XT. Writers, visionaries, artists needed. Details to the above address.

Contacts

Atari ST contacts wanted in Coventry - Warwicks. area. DTP/printing interests. Call Steve on 0203 386656.



Falcon FacTT File

The Falcon and TT User Group

The Falcon FacTT File is a free-to-join Membership Club set up to encourage users to help users. Application forms can be obtained by sending a stamped self-addressed envelope (or International Reply Coupons f outside the UK) to:

FFF, 11 Pound Meadow, Whitchurch, Hants. RG28 7LG. UK

When completed return the form with a High Density disk and return postage. Your details will be added to the FFF at the next monthly update and your disk returned with a selection of the best Falcon PD and Shareware to fill the disk.

May the FFForce be with you!

Analogic Computers (U.K.) Ltd.

Unit 6, Ashway Centre,
Elm Crescent
Kingston-Upon-Thames, Surrey KT2 6HH

Mon-Fri. 9am to 6.30pm Sat 9am to 5pm
Tel: 081-546-9575
Fax/Tel. 081-541-4671

ANALOGIC
ANALOGIC
ANALOGIC

Official Atari Repair Centre

❄️ COMPUTERS ❄️ MONITORS ❄️ REPAIRS WITHOUT DIAGNOSTIC FEES

520/1040 ST/STM/STF/STFM/STE

£59.95

} Including
delivery back
by courier
service.

Monochrome, Colour Monitors Excluding CRT, L.O.P.T.

£59.95



We pick up computers for repairs and memory upgrades for Next Day delivery to us by Courier Service for only £6.00 + VAT.

MEMORY UPGRADES

Marpert Developments Official Xtra-Ram Deluxe Installers

520 STF/STFM to 1 Meg	£ 59.95	520 STE to 1 Meg	£ 17.95
520 ST/STM/STF/STFM to 2.5Meg	£ 79.95	520 STE to 2 Meg	£ 59.95
520 ST/STM/STF/STFM to 4 Meg	£129.95	520 STE to 4 Meg	£114.95

PROTAR PROFILE SERIES II HARD DRIVES

Quantum/Maxtor Mechanism with Cache

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

Profile 50DC & 85DC	£POA	Profile 170DC	£289.95
Profile 120DC	£249.95	Profile 240DC	£349.95

-- POA for Higher Range of Profile Series II and SCSI Bare Drive --

Gold Award Winner Protar Profile Series II Hard Drives have features such as: * Auto-Booting * Auto-Parking * Read/Write Access * Password Privileges * Selectable Boot Partition * DMA Thru Port * Quiet Fan * Device Number Switch * Hard Disk Management Software package * Full Utilities package and De-bugging Software * 45 Watt PSU and all necessary wiring in place to mount another Bare Hard Drive in elegant housing.

SCSI BARE QUANTUM HARD DRIVES With Cache

50Mb & 85Mb	£CALL	170 Mb	£199.95
120 (Maxtor) Mb	£179.95	240 Mb	£329.95

STFM, STE, FALCON 030 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

STE TOS 2.06 ROMs	£39.95	STE TOS Switcher + 2.06 ROMs	£59.95
STE TOS Switcher	£39.95	STFM TOS Switcher + 2.06 ROMs	£59.95

MONITORS

AMITAR

£129.95

High Resolution Monochrome Monitor

Including VAT
excluding delivery

Power Supplies

STFM/STE Power Supplies (Service Exchange)	£25.95
New STFM/STE Power supplies	£49.95

Accessories and Emulators

STE/STFM Scart Lead	£14.95	Mouse Mat	£ 4.95
STE/STFM Lead to CM8833	£14.95	10 Blank Branded Disks	£ 9.95
Philips CM8833 Dust Cover	£ 6.95	10 Blank Unbranded Disks	£ 5.95
Twin Joystick Mouse ext Lead	£ 5.95	Forget Me Clock	£ 21.95
290 Dpi mouse	£14.95	PC Speed	£ 59.95
Dust Cover	£ 4.95	AT Speed 8	£134.95

Disk Drives

1 Meg 3.5" Internal Drive	£39.95
High Density 3.5" Internal Drive	£49.95
High Density 3.5" Internal Drive + Module	£69.95

PRINTERS - HP310/510/550 Colour - POA

* All prices include VAT and NEXT DAY DELIVERY subject to availability

* 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

* Please allow 5 working days for cheque clearance.

Guaranteed Same Day Dispatch (subject to availability)

PROTAR HARD DRIVE PRICES SLASHED
FREE TOS SWITCHER FITTING WITH ANY REPAIR/MEMORY UPGRADE

Special Offer
For a limited period

Professional Service with no surcharge

WHILE-U-WAIT!!!

Memory Upgrades ♦ TOS Upgrades ♦ Disk Drive Upgrades ♦ Emulators ♦ many Repairs.