

Issue 117 ■ October ■ 1997 ■ £4.99

# AMIGA

## COMPUTING

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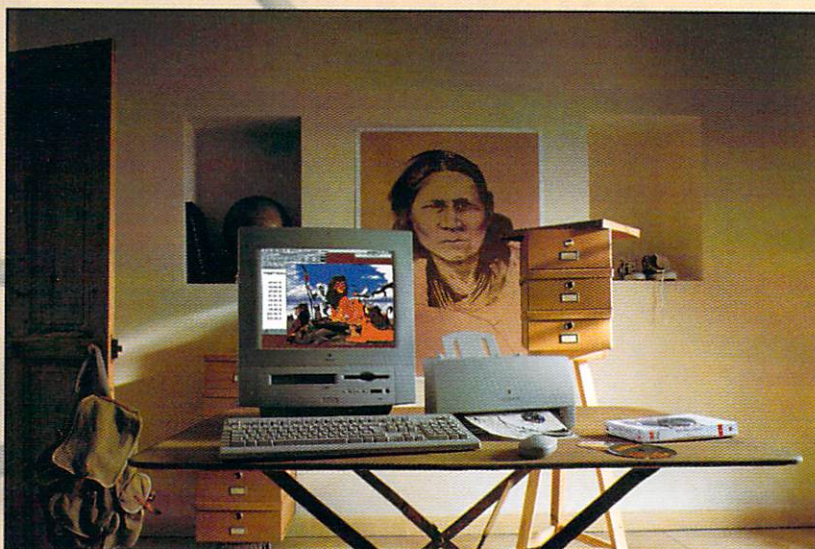




# Why Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen prototypes and heard promises... we all hope to see new Amiga developments.

If you can't wait and need more performance today, without paying the earth - there's only one real alternative to consider... There's never been a better time to think Apple!



Only Apple offer you both desktop and portable computers that truly match the ease of use the Amiga brought to your desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off-the-shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.

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- 180MHz
- 16Mb RAM
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- 15" Integral Colour Monitor
- 28.8Kbps Modem
- Design Keyboard
- 'Family' Software\*

### \*FAMILY PACK SOFTWARE INCLUDES...

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- Thinkin' Things 3 • Full Throttle • PowerPete • The Best of European Soccer
- Claris Works • HyperCard Player • Acrobat Reader • MailLink Plus • At Ease
- Apple Internet Connection Kit • Apple Telecom 3.0

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SHOWN BELOW IS JUST A SMALL SELECTION FROM THE VAST RANGE OF APPLE MACINTOSH COMPUTERS WHICH ARE CURRENTLY AVAILABLE...

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PM5400	180	603e	16	2.0Gb	x	✓8	15" Integral	x	x	x	✓28.8	Design	£999	FAMILY PACK
PM5500 Rack Mac	225	603e	32	2.0Gb	x	✓12	15" Integral	✓	✓	x	✓33.6	Design	£1820	FAMILY PACK
PM6400	200	603e	16	2.4Gb	x	✓8	15" AV IAS	x	x	x	✓28.8	Design	£1292	HOME OFFICE
PM6500	250	603e	32	3.0Gb	x	✓12	15" AV IAS	x	x	x	✓33.6	Design	£1938	HOME OFFICE
PM6500	275	603e	32	4.0Gb	x	✓12	15" AV IAS	✓	✓	x	✓33.6	Design	£2525	CREATIVE STUDIO
PM4400	200	603e	16	1.2Gb	x	✓8	15" MVS	x	x	x	x	Design	£1280	x
PM7300	166	604e	16	2.0Gb	x	✓12	x	x	x	x	x	Extended	£1643	x
PM8600	200	604e	32	2.0Gb	✓	✓12	x	x	x	x	x	Extended	£2407	x
PM9600	233	604e	32	4.0Gb	x	✓12	x	x	x	x	x	Extended	£2819	x

\*FAMILY PACK software is as detailed above (see 5400/180 offer) • CREATIVE STUDIO software is as detailed above (see 6500/275 offer) • HOME OFFICE software pack includes all the 'Family Pack' software PLUS... Claris Impact and Claris Organiser

## Portable Macs

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1400cs/117 12/1000, DS	£1350
1400cs/117 16/1000, DS, CD	£1585
1400cs/117 16/1000, DS, CD, StyleWriter 2200, Carry Case	£1761
1400c/133 16/1300, AM, CD	£2583
3400c/180 16/1300, AM	£2936
3400c/180 16/1300, AM, 12 Speed CD, Ethernet	£3171
3400c/200 32/2000, AM, 12 Spd CD, Ethernet, SoftWindows 3.11	£4111
3400c/240 16/3000, AM, 12 Speed CD, Ethernet	£4699

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Manufacturers' specifications and GH prices are correct at time of going to press, however, they may fluctuate and we therefore reserve the right to amend them - please confirm prices before ordering. Software/Product packaging for bundled systems/items may not be included and is shown for illustration purposes only.



## Performance:

All Macs are PowerPC based. Even entry level desktop systems run at 160MHz or 180MHz, with 275MHz powerhouses and 200 MHz multi-processor systems at the top of the range. Even portables offer 240MHz!



Apple is the only mainstream computer company who has been able to make the transition from the older CISC (complex instruction set computing) processors to the newer and faster RISC (reduced instruction set computing) processor technology - whilst still retaining full backward compatibility with previous software. Remember 486, Pentium/Pro & 680X0 are merely CISC!

## Software choice:

Over 1,800 native software packages (written specially for PowerPC Processor Macs) have been shipped since Power Macs were launched in 1994 - plus there are thousands of existing programs which can also be used. Industry standard programs such as Word, PageMaker, Word Perfect, Page FileMaker Pro, Excel, Quark Xpress, Photoshop and many others have all been developed for the Mac.

## Creativity:

- Macintosh still dominates the creative world with an 80% market share in colour publishing.
- 65% of post-production video editing is on Macs.
- Macintosh is the most widely used system for the creation of Internet web pages.
- Most magazines (probably the one you're reading right now) are created on Macintosh.

## Multimedia:

- Apple is the World's No. 1 Multimedia PC vendor.
- All desktop Macs have a fast CD-ROM drive as standard (many portables have internal CDs too).
- In 1995, 42 of the top 50 selling CD-ROM titles worldwide were developed on the Macintosh.
- Many Macintoshes have built-in TV with teletext so TV clips can be recorded directly to disk as QuickTime movies.
- Many Macintoshes have built-in video in and out, for direct recording to VCRs.
- Several Macintoshes have internal digital video editing facilities as standard and many others can be upgraded to include this facility with ease.

## The Internet & Communication:

- All Macs are Internet ready; many include a 28.8 or 33.6 modem with full send/receive fax and answerphone management facilities.
- Industry standard web browsers, Netscape Navigator and Microsoft Internet Explorer, were developed for the Mac. Both give full access to all Web sites with new Internet page layout features like auto-tables and on-screen movies.
- The Internet's standard format for video files, called QuickTime, or QuickTime for Windows, are both Apple products. Of course QuickTime comes as standard with every Mac.

## Connectivity & Expandability:

- All Macintoshes have networking built in as standard, so connecting systems together and adding shared printers etc. couldn't be easier.
- All Macintoshes have an external SCSI connector as standard - adding external drives, cartridge drives, scanners etc. really is Plug-and-Play.
- Low-cost digital cameras can be plugged into the Mac for instant real image input.
- Inexpensive industry standard PCI cards can be used in all desktop Mac systems.

## Education & Edutainment:

- Many quality Macintosh titles are widely available. Doring Kindersley offer superb titles like The Ultimate Human Body and History of the World whilst Microsoft publish Encarta, Cinemania and Dinosaurs.
- Because Macintosh is the preferred system within many educational establishments, high quality software is assured.

## Recreation & Games:

- Top games like The Ultimate Doom, Myst, Rebel Assault II, Dark Forces, Descent, Afterlife, Lost Eden, Legend of Kyrandia, Full Throttle and The Dig have all been developed for Macintosh.

## Output & Presentation:

- Connecting and using colour printers (from Epson, HP, Apple and others) to Macs is so easy and the results are truly outstanding.
- Many software packages are available offering image manipulation and superb photo quality output.

## PERIPHERALS

<b>MONITORS...</b>		
Apple 15" AV MultiSync	£351	
Apple 17" 1705 TCO MultiSync	£469	
Apple 17" 1710AV TCO MultiSync	£645	
Apple 20" MultiSync II	£1056	
<b>LASER PRINTERS...</b>		
Apple LaserWriter 4600PS - A4, 600dpi	£586	
HP LaserJet 6MP - A4, 600dpi	£727	
Apple LaserWriter 12/640PS - A4, 600dpi	£939	
<b>INKJET PRINTERS...</b>		
Apple StyleWriter 1500 A4 Colour	£116	
Apple StyleWriter 2500 A4 Colour	£175	
Canon BJC 4550 A3 Colour	£352	
Epson Stylus 600 A4 Colour	£269	
Epson Stylus 800 A4 Colour	£387	
Epson Stylus Photo 6 Colour	£410	
Epson Stylus 1520 A2 Colour	£704	
<b>CAMERAS...</b>		
Apple QuickTake 200	£445	
Kodak DC20	£187	
<b>SCANNER...</b>		
UMAX Astra 600S - PhotoShop LE	£206	
<b>GRAPHICS TABLE...</b>		
Wacom ArtPad II with Dabblor	£116	
<b>STORAGE...</b>		
D2 Quantum 2.1Gb External HD	£293	
D2 Quantum 2.1Gb External HD	£293	
D2 JAZ Drive inc. Cartridge	£163	
D2 2400 16 Speed CD Drive	£234	
Micronet 2400E CD Drive	£234	
(with 5 great software titles)		
<b>COMMS...</b>		
Global Village TelePort Internet	£135	
(33.6, inc. Global Transfer share)		
<b>ACCESSORIES...</b>		
Apple Design Speakers II	£58	
Macally Joystick	£38	
Macally Gamepad	£26	
RightStick Pro Joystick	£100	
Gravis Firebird Joystick	£100	
Jetstick	£45	
Apple One Year On-Site Maintenance Warranty	£18	
<b>LOTS MORE PERIPHERALS - CALL!</b>		

## SOFTWARE

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Illustrator 7.0	£328	
PhotoShop 4.0	£465	
KPT/MetaTools Actions	£52	
MetaTools Soap	£58	
KPT Bryce II	£163	
KPT Goo!	£49	
FreeHand 7.0	£363	
Allen Skin Graphics 3.0	£89	
CorelDraw Suite Upgrade	£116	
<b>BUSINESS...</b>		
Microsoft Office 4.2	£422	
Microsoft Word 6.0	£288	
Classic Works 4 Internet	£88	
Classic Works 4 Internet	£88	
Classic Works to MS Office Upg.	£210	
Class Emulator 2.0	£49	
Class Organizer 2.0	£69	
MYOB (Accounts) 5.0	£175	
SoftWindows 3.0 (CD32 5.1)	£88	
SoftWindows 354.0 - CD	£129	
<b>UTILITY SOFTWARE...</b>		
Norton 3.5	£87	
After Dark 4.0 CD	£19	
Adobe Acrobat Pro	£187	
D. Solomons (with 111 Upg)	£41	
RAM Doubler 2.0	£41	
Speed Doubler 2.0	£41	
<b>EDUCATION SOFTWARE...</b>		
Griener's Encyclopedia	£35	
Doring Kindersley	£28	
20th Century Chronicle	£28	
The Way Things Work 2.0	£28	
Encyc. of Space & The Universe	£21	
Ultimate 3D Skeleton	£28	
Ultimate Human Body 2.0	£28	
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Descent Hunter or Earth Quest	£226	
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Music Central	£16	
Thinner Things 3	£22	
<b>LEISURE SOFTWARE...</b>		
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PLEASE CALL TO CONFIRM AVAILABILITY BEFORE MAKING A LONG JOURNEY TO VISIT US.

## Why Harwoods?

Gordon Harwood Computers was founded as a specialist Commodore dealer in 1982 and we're still supporting Amiga users today. We began supplying Macintosh systems in 1991 when it became clear that Commodore was failing to capitalise on the technological advantage it had. We needed to have products available that fulfilled the needs of our customers who were demanding...

- Systems with a future
- Systems with outstanding performance
- Systems with unsurpassed ease of use
- Systems without the problems and disadvantages associated with DOS/Windows, which still persist and trouble users even now.

Today we have grown to become one of the largest Apple Authorised Resellers in Europe. Our extensive product knowledge and solid support facilities emphasise our status as one of a select group of Apple Authorised Service Centres and accredited Apple Higher and Further Education Alliance Resellers.



# C Contents

## AMIGA ACTION

### ACTION NEWS 52

I'm sure there is some games news this month, exactly what I cannot say. Perhaps turning to page 52 might help

### CIVILISATION 54

Hugh is a man in control of his own destiny, now whether he should be in control of anyone else's is another question

### LIVE MEDIA INTERVIEW 56

Last month's we had news on a company bringing Mac games to the Amiga, now we probe the developers

### SHADOW OF THE 3RD MOON 60

Bloody hell, that heading only just fits in. Why can't they give games proper names anymore, no matter how good it looks

### BIG RED ADVENTURE 62

Part two of part one, crack this great adventure with Amiga Actions continuing solution type guide thing

### DUKE 3D 64

Duke Nuke 'Em on the Amiga surely not! Well no, but being able to walk around any Duke level is a damn good start in my book



### GUNSHIP 2000 65

Now I'm sure there will be mention of Hugh's big chopper at some point, so there I got it out the way right at the start, ooh err misses, f'nar f'nar, nudge nudge

### SIX SENSE 66

A brand new game! Can you believe it, those crazy East Europeans they must be on drugs

## REVIEWS

### MINI OFFICE 12

Has Guildhall over stretched itself by stepping into the world of serious software with this latest re-release of Eurosoft's Mini Office?

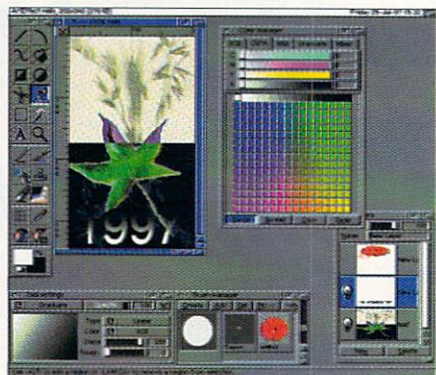


### NEW YORK 25

Just what the Amiga world needs right now, a brand new newsgroup reader, joy and rapture

### ART EFFECT 2 26

Neil Mohr gets all arty which makes a change because he is normally he is just farty. This latest version get put through the mangler until all the nasty bits show up



## FEATURES

### BROWSER WAR 14

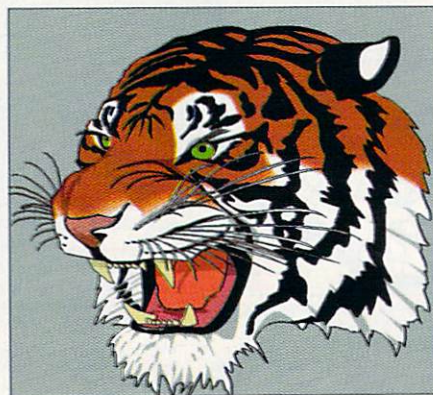
It's time to stand up and be counted, Amiga Computing takes the latest three versions of iBrowse, Voyager and AWeb to see which one comes out on top

### SASG 18

After being around for three years and a year on-line, the standard Amiga software group provided virtually every possible form of software ordering under the sun

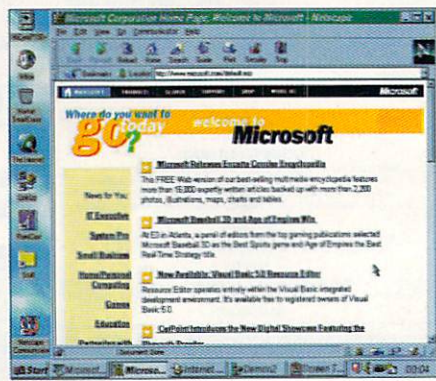
### POSTSCRIPT 17

Have ever wanted to display or print off a Postscript document? Well now you can, and for next to nothing to boot



### WINTEL WORLD 21

Dave Cusick is not generally known for being an aggressive type, but this month he's kicking arse with his size tens





## THE COVERDISK

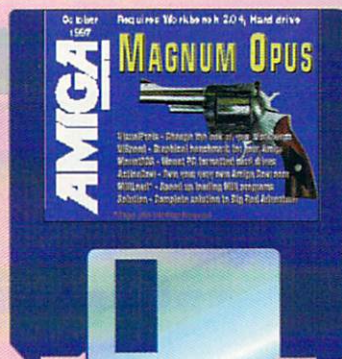
### MAGNUM OPUS 2

The ultimate add-on for Directory Opus 5 users. Every file type, icon and backdrop you would ever need is in this massive collection

### Includes:

Action Cow - Have your own cow, mooooooo  
Big Red Adventure - Complete solution  
MountDOS - Mount PC hard drives  
MUILoad - Preloads all your MUI libraries

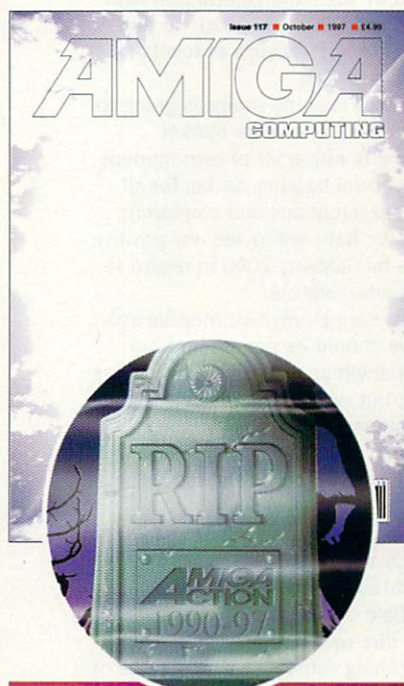
WaitGUI - GUI replacement for the wait command  
Super83 - Top Super72 replacement  
VisualPrefs - Configure Workbench's looks  
MultiView - Multi-filetype viewer front end



## COVER STORY

### THAT'S ALL FOLKS!

Time and tide wait for no man, and sadly **Amiga Computing** must pass on, to a better place. Enjoy the final issue as we walk off towards the light/pub...



## REGULARS

### NEWS

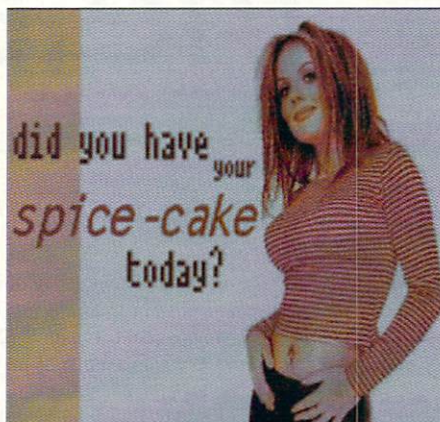
8

Controversy! Gateway 2000 is disputing the sale of Amiga patents to a Far East company by another company, read all about it here

### ESP

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A final look back over letters from the last nine years of Amiga Computing, but not the one from that American nutter woman



### ACAS

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Top 10 tips for a better computing life, you won't find better anywhere else

### PUBLIC SECTOR

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Sniff, Dave Cusick has been getting all teary eyed in the final Public Sector ever, waaaaah

## AMIGA GUIDE



Techno Sound Turbo 2 Pro is reviewed once again by Paul Overaa

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Tables baby, learn them, use them, love 'em. What more do you need?

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Translating C to assembler is easy, Paul Overaa show you with ByteRun 1 compression

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Random access to files is always good and Paul Overaa loves it too

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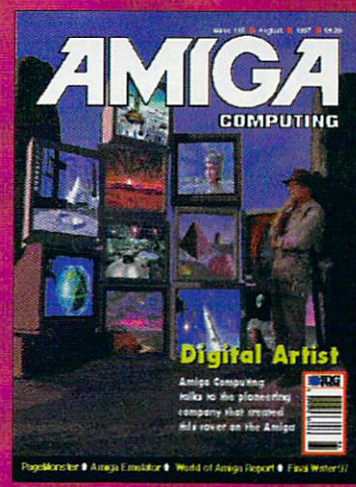


Draw images with Intuition, it so easy and Paul is the man to explain

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## BACK ISSUES

Missed out on an issue of Amiga Computing? Turn to page 32





**I**t's kind of odd, here I am, two years to the day that I started working on Amiga Computing. From lowly cover disk editor to editor to ex-editor in under 18 months. It seems a little ironic that at a time where there is more optimism and possibilities for positive change in the Amiga world that Amiga Computing should close.

As I write, the PowerPC boards are just beginning to ship. They have yet to prove themselves, but at least they should provide a stop gap until a true PowerPC machine can be developed.

To me, the Amiga story is littered with missed opportunities and broken promises. Even today, with the Amiga owned by such a large and powerful company as Gateway 2000, no one can be completely sure as to what will happen next.

The only way the Amiga is going to make it back as a mass-market machine is with a lot of commitment and financial backing. So far, for all the good intentions and comforting words we have yet to see any positive moves by Gateway 2000 in regard to Amiga International.

I was saying only two months ago that we should be patient and not expect anything incredible in the near future, but where are the hardware and software engineers? I think Amiga International may find it difficult to write a new operating system with just the tea lady.

Once upon a time the Amiga industry was populated by visionaries, individuals with great ideas and incredible expertise. Over the last few years, due to a variety of factors such as declining software sales, the rise of the PC and most importantly the almost complete lack of continuity and strategy in Amiga hardware sales and development, these visionaries have for the most part left the scene. If this is the end of the road for the Amiga, it is a sad fate to befall such a once-magnificent machine; but it

# amiga comment

## This is the end...

After over nine years in publication,  
*Amiga Computing* bows out

seems hard to imagine the situation improving in the immediate future unless Gateway 2000 can pull something truly exceptional out of its well-resourced hat.

I would like to thank all our readers for their loyal support over the years. Even though Amiga Computing may not have been the best selling magazine, it has managed to cover a broad range of subjects and has brought you interviews with the likes of Aardman Animations and the creators of Babylon 5, not to mention in-depth reviews and features.

I would like to thank everyone I have worked with on the magazine, I've had a lot of fun and learned a lot from you all. For the last few weeks there has been a steady flow of e-mail from people saying how much they will miss Amiga Computing, and it is good to know that, in some small way, we've been able to touch so many people's lives. My arse we have.



Neil Mohr  
Editor

## The AC team

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USA Standard \$40

For nine years Amiga Computing has been the leading magazine for Amiga enthusiasts. Amiga Computing promises to inform, educate and entertain its readers each month with the most dedicated coverage of the Amiga available



## Amiga Mice

Replacement Mice	£4.95
MegaMouse 400	£9.95
MegaMouse Plus (3 Button)	£10.95
Optical Mice	£29.95
New Golden Image	
TrackBall	£19.95
Pen Mouse	£12.95
(ideal for CAD)	
New Black Mouse	
for Amigas	£9.95



## Ram Boards

### RAM CARDS A1200

A1200 with clock and 4Mb (not upgradeable)	£49.00
A1200 with clock and 8Mb	£65.00
A1200 with clock, 8Mb & 33Mhz FPU	£80.00
33Mhz FPU inc. crystal	£15.00

## Controllers

Catweasel for A1200 - allows you to connect High Density Disk Drives	£55.00
Catweasel for A1500/2000/4000	£55.00
Buddha IDE Controller for A1500/2000/4000	£55.00
Catweasel plus Buddha for A1500/2000/4000	£79.00
Oktagon 2008 SCSI controller	£99.00
Multiface III	£79.00
PCMCIA Controller for CDROM for A1200	£69.00

## New GI-Quattro Buffered Interface for A1200

(Successfully launched at World of Amiga Show '97)  
Buffered Interface for A1200 with IDEfix'97 software allows to connect 4 ATAPI devices to A1200

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## New AlfaQuattro Interface

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Amiga Joysticks	£9.95
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- Use Internal IDE port with GI-Quattro buffered interface if you have 3.5" Hard Drive (will be with full IDEfix software).

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Six speed CD ROM for	£159.00	£129.00	£139.00	£119.00
Eight speed CD ROM for	£169.00	£139.00	£149.00	£129.00
12 speed CD ROM for	£179.00	£149.00	N/A	£139.00
16 speed CD ROM for	£189.00	£159.00	N/A	£149.00

\*for A500/A500+ Alfapower hard drive controller and Hard Drive is required. A1500/A2000 supplied with IDE controller & software. A4000 supplied with AlfaQuattro interface & Full IDEfix software.



## Floppy Drives

External Floppy Drive for all Amigas	£39.95
Internal Floppy Drive A500/500+	£28.00
Internal Floppy Drive A600/1200+	£28.00
Internal Floppy Drive A1500/2000	£28.00



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80Mb	£69.00
120Mb	£79.00
170Mb	£79.00
250Mb	£89.00
340Mb	£109.00
420Mb	£119.00
540Mb	£129.00

## IDE 3.5" Hard Drives

IDE 3.5" Hard drives come formatted and installed with Workbench. Cable, screws, software and instructions supplied. (please ring for availability)	
1.0Gig	£130.00
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"Amiga Format Gold Award August '97"	

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## Miscellaneous Products

44pin 3 connector cable	£5.00
44pin 2 connector cable	£3.00
40pin 3 connector cable 90cm	£5.00
AlfaDuo 44pin to 40 pin interface & IDE cables	£20.00
AlfaQuattro 3x40pin interface & IDE cables	£39.95
DD floppy disks (50) (including multicoloured disk labels)	£13.00
DD floppy disks (100) (including multicoloured disk labels)	£25.00
3.5" Hard Drive Kit for A600/1200 + install software	£15.00
Diskbox to hold 10 discs	£1.00
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Optical Mouse Mat	£5.00
2 in 1 Scanner/Mouse Pad	£3.00
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Amiga Power Supply 4.5 amp	£15.00
Plain Wristrest	£2.00
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CD Rom Cleaner	£3.00
Automatic CD Rom Cleaner (battery powered)	£6.00
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1230 33Mhz + 4Mb	£135.00
1230 33Mhz + 8Mb	£145.00
1230 33Mhz + 16Mb	£175.00
Viper MKIV 42Mhz 4Mb (not upgradeable)	£80.00

## Viper MKV

1230 50Mhz + 4Mb	£159.00
1230 50Mhz + 8Mb	£169.00
1230 50Mhz + 16Mb	£199.00

## Accelerator for A600

Viper A630 40Mhz 4Mb (not upgradeable)	£110.00
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# news

By Hugh Poynton

## AMIGA NETWORK SOLUTION

**G**olden Image UK Ltd has announced the release of ConneXion, a new Ethernet adapter that allows any Amiga 1500, 2000, 3000 or 4000 to be connected up to a standard Ethernet network.

ConneXion offers a fast 10 Mbit Ethernet link and autoboots via Netzwerk, the in-built boot Rom, avoiding the need to install additional drivers. The card employs a 32K - 16 bit on board cache so as to boost performance and avoid any loss of processing speed, as often happens over Ethernet connections.

The ConneXion adapter retails at £175.00 and is available directly from Golden Image. For more details phone: - 0181 900 9291



## MAKE CD 2.4 RELEASE

German Software developers Angela Schmidt and Patrick Ohly have announced the release of their latest software package. Make CD 2.4 is the first CD writer software with CD-RW support and the software can now completely erase and rewrite CD-RW media. CDs can be erased up to 1000 times without any deterioration in quality.

Make CD 2.4 offers a host of extra features to v2.3 including improved drivers and bug fixes. The latest ver-

sion of the software also offers Swedish, Norwegian, Hungarian and Italian user interface. The English manual has apparently been improved but is not yet completely finished. A slightly limited but freely distributable version of Make CD is available on the Internet on the MakeCD home page at <http://makecd.core.de/>

Make CD is available at HiSoft and its dealers, and directly from the authors. For direct orders contact: Angela.Schmidt@stud.uni-karlsruhe.de

## CYGNUSED SOON TO BE RE-LEASED

Schatztruhe, the German based Amiga software company, is to re-release the popular Amiga text editor, CygnusED. Schatztruhe has collaborated with the text editor's original author's, Bruce Dawson and Olaf Barthel to update the program and fix long standing bugs. Schatztruhe and

CygnusED's authors have decided to poll Amiga owners on the development of the project. The text editor should be released by the end of this year.

If you're interested in influencing the development of the editor send your suggestions to: [schatztruhe@cww.de](mailto:schatztruhe@cww.de)

## COMPUTER CITY TO DISTRIBUTE IN BELELUX

Amiga International Inc. and the Rotterdam based computer retailers, Computer City have agreed on a deal which will enable the Dutch firm to market the Amiga in the Benelux countries. The deal, which was formalised on 15 July will allow Computer City to sell new Amigas and peripherals and software support for existing models.

"This activity will help us to reinvigorate the Amiga market place in the Benelux. Our basic of success is to work together with partners to build up the former market places and to find new ones and to be ready for new product distribution", said Petro Tyschtschenko, managing director of Amiga International, Inc.

Computer City was founded in 1988 and has since then been dedicated to catering for the Amiga market in the Benelux counties. According to the company, it believes that there has been, and still is, a substantial market for the machine in Benelux and the rest of the world.

For more information contact:

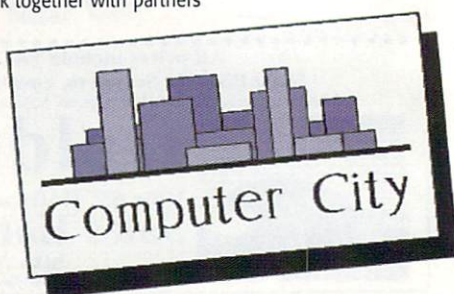
Ron van Herk

Computer City

Fax: +31-10-4517748

E-mail: [info@compcity.nl](mailto:info@compcity.nl)

Web: <http://www.compcity.nl/>





## WEB HACKER STALLS THE INTERNET

Hacker, Eugene Kashpurreff, plunged the Internet into chaos last month with the most spectacular hack since the 1988 Internet Worm paralysed the Net.

Kashpurreff claims to have exploited a loophole in the Domain Name Service software normally used to look up addresses of Internet sites which allowed him to add his servers to the official list of Internet domains and 'top-level' servers.

The hacker's actions were apparently a protest against InterNIC's monopoly on top-level domain names and prevented Internet users all over the world from connecting to their desired sites.

Cerbernet was one of the few ISPs to escape the chaos. According to

Cerbernet's Technical Director, Justine Kerry "The Internet still depends on a level of trust and community. The InterNIC's monopoly on domain naming runs contrary to this spirit, and yet depends on co-operation by all ISPs in that we must all choose to use the official root name servers. Most ISPs don't even realise they are effectively bolstering the InterNIC monopoly. Sadly the whole Internet has suffered the consequences of unilateral action taken by AlterNIC to smash this monopoly by overriding our name server choices".

For more information take a look at <http://www.alternic.net/protest.html>

## GATEWAY 2000 FIGHTS AMIGA LICENCE CLAIM

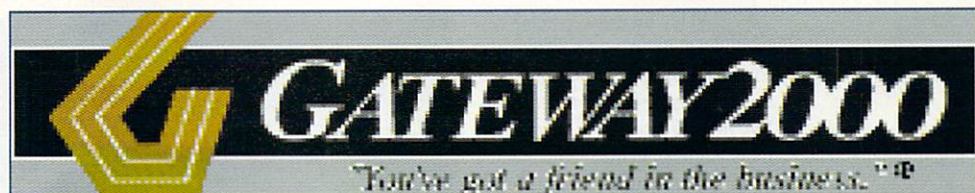
Gateway 2000, the Fortune 500 company that now owns the rights to Amiga International, disputed Rightiming Electronics' bid to sell and develop the Amiga in the far East this month.

On 23 July Lotus Pacific, a public company listed on NASDAQ Bulletin Board, announced it had signed a co-operation agreement with China's largest TV producers, the Sichuan Changhong Electronics Group Corporation of China, to produce 200,000 units of the Wonder TV A6000.

Rightiming Electronics, a direct subsidiary of Lotus Pacific, purports to hold a licence to use Amiga patents, trademarks and copyrights in China, Taiwan and the parts of the former Soviet Union. The deal with Sichuan Changhong includes supplying the company with product specific chip sets and other key components.

Gateway 2000 responded the next day by issuing a press release to the effect that it disputed any claims by Rightiming Electronics about owning a licence to produce Amiga technology.

"We dispute its license, its right to sell any license and we dispute any claims it has made with respect to Amiga patents, copyrights, or trademarks. Gateway 2000 owns all Amiga patents, copyrights and trademarks world-wide and will continue to license Amiga technology to qualified companies", said Gateway's press release.



## NEW MEDIASOFT TITLES

MediaSoft, the UK publisher of Amiga Review, has announced that it is to split the magazine into two individual parts to fully cover the various aspects of the Amiga. Amiga Review will be focused largely on hardware and 'serious' applications, with Amiga Gamer being geared towards the Amiga games market.

Amiga Review will be halved to £1.60, while Gamer will be sold for £1.50. People who took out a subscription to Amiga Review will receive both magazines for no extra charge. Both magazines will be only available through mail order.

The split has come about because of the resurgence of interest in the Amiga computer platform and the increased number of games that are being developed and produced. Readers can send orders by sending cheques or postal orders to MediaSoft Magazines, Communications House, Isle of Wight, PO37 7LU.

For more information take a look at Amiga Review's Web site at: <http://www.mediasft.demon.co.uk/ARMagazine/arindex.html>

**AMIGA** Get AR.  
Got an Amiga? **REVIEW**

## ICPUG SUMMER OFFER

The Independent Computer Products User Group has announced that it is to cut its six month subscription



rate to £13 (including one share) for UK members and £15.50 for Eire and Europe. Overseas airmail rate for the offer will be £18.

ICPUG was formed back in 1978 to provide help and advice for owners of Amigas, PCs and other home computers. ICPUG is regarded as being about the only remaining source of information for 8 bit computers.

The membership offer includes all the ICPUG journals for 1997, a free PD software library for the Amiga and all other Commodore machines and a PD library for the PC (Windows and DOS).

For more details phone John Bickerstaff on 0181 651 5436, or take a look at the ICPUG Web site at: [www.icpug.org.uk](http://www.icpug.org.uk)

## AMIGA APACHE

The new version of the Amiga Apache Web server software has been released. Amiga Apache 1.2.1 httpd daemon is downloadable from the Apache Web site <http://www.dsdfelt.nl/~apache>. It's fully compatible with the original Apache Web server which can be found at: <http://www.apache.org>.

The Amiga Apache project is completely staffed by volunteers and Amiga enthusiasts under the leadership of Bert Vortman.

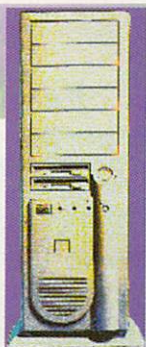
## CHROMA ANNOUNCES NEW DIY A1200 TOWER CASE

Chroma, the specialist Amiga hardware supplier, has announced the launch of the A1200 DIY tower case. The Chroma DIY tower is, so Chroma boast, the cheapest tower case available in the UK.

It will take an A1200 motherboard complete with internal PSU or 'powerbrick' for motherboard power. The PCMCIA slot is still accessible for use with a Squirrel or similar device. The tower will also allow the user to install a complete PC system or Zorro slot array.

The Chroma tower has 10 drive bays and comes complete with 230 watt PSU, UK mains plug, screws/spacers/cable ties/2-part stand/guide. To complete a tower system, a keyboard+adapter and floppy drives+adapter are required along with any IDE or SCSI peripherals/interfaces.

The tower is available, either fully converted (£105.99), or in its cheaper DIY format (£79.99). For more information contact Chroma at: [chromanet@aol.com](mailto:chromanet@aol.com) or on: 01328 862693





## EXTRACTING COVER DISK FILES

Before putting the cover disks anywhere near your computer, write protect them by moving the black tab in the top corner of the disk, so you can see through the hole. Doing this makes sure you cannot damage your disks in any way. There is also no reason why the cover disks need to be written to, so even if the computer asks you to write enable the disks, don't do it.

To extract any single archive, simply double click its icon, and follow the on screen instructions. If you want to extract the program to Ram, select the NOVICE level on the welcome screen, and press proceed once on the current screen, and then again on the next. The program can then be found in your Ram disk. Normally most programs need further installing, so read the documents on how to do this.

## HARD DRIVE USERS

Hard drive users do not have to boot with the first disk, but you must make sure you have the Amiga's *Installer* program in your C drawer. To make sure your hard drive has the correct files in place double click on the SetupHD icon. This will check if you have the Installer program and if not will copy it across. Do not worry as it will not write over any existing files.

All you hard drive owners will find MultiExtract very useful. It is a separate method of extracting the cover disk files. It allows you to extract a number of files in one go, to your hard disk or Ram.

When you run MultiExtract, you will be presented with a number of check boxes, each representing one of the programs on that cover disk. Just de-select all the programs you do not want extracting, and then press proceed. All the selected programs can now miraculously be found in the selected destination.

## FAULTY DISKS

If you should find your Amiga Computing CoverDisk damaged or faulty, please return it to:

**TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.**

**Please allow 28 days for delivery**



Another great selection of Amiga utilities to make life easier

## MAGNUM OPUS 2

Author: Richard Lane Requires Directory Opus v5.5

Why can't life be more simple? Why can't there be just one picture format, one sound file type and one document style? But no, every man and his dog has come up with their own stupid format, and where does this leave you the user? I'll tell you where - confused and bemused.

Help is at hand however, for Opus 5 users at least, in the form of Magnum Opus version 2. This add-on for Opus 5 will save you hours of frustration trying to set up and configure Opus 5 to use all those different file types. To back up the predefined file types there are a whole host of icons for use in Directory Opus and there are configuration files prewritten to take advantage of both the new filetypes and new icons.

You have two routes to installing Magnus Opus. You can either use the supplied installer that uses the normal Amiga installer, all very lovely or, for more experienced users, you can try



*Well Magnum Opus may not win any artistic awards, but as it save you hours of work you can't complain*

doing the installation by hand. If you already have an earlier version of Magnus Opus installed this will of course replace many of those files so don't worry.

To start you should rename the original filetype directory in the Opus drawer to filetype\_original and then copy the new filetype drawer from the Magnum Opus directory. Next copy over the new images drawer and also the contents of the other drawers to there respective Opus directories. When you restart Directory Opus it will take a little longer than normal but this is perfectly normal.

## BIG RED ADVENTURE SOLUTION

Author: John Barnsley

Requires Big Red Adventure

Well, we started so we'll finish. If you have been looking forward to completing the Big Red Adventure with the help of our solution and are panicking now it has stopped, with this being the last issue and all, don't worry yourselves. Here is the complete solution for this rather nifty point and click adventure. As you will see the whole thing is rather long as so even with the solution will take you ages to finish, enjoy.



*If anyone says I look like him they get punched, alright?*

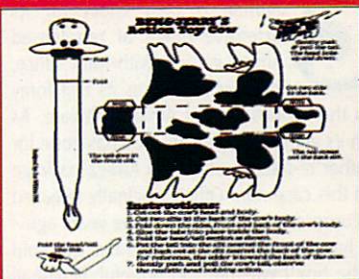
**AMIGA COMPUTING**  
OCTOBER 1997



## ACTION Cow

**Author: Ben and Jerry** ● Requires Scissors and Printer

There is a story behind this. When it was announced that Gateway had bought Amiga Technologies I was searching around the Internet for a nice picture of a cow, but the Internet being what it is I couldn't find sack all. I then came across Ben and Jerry's action cow and a bit of joy entered my life. Just load the gif into your favourite paint package and print it off. With the supervision of a suitable adult, cut out the cow, sniff some glue, tape the beast together and lo and behold, you will have your very own Gateway/Amiga/Ben and Jerry Action cow type thing, groovy.

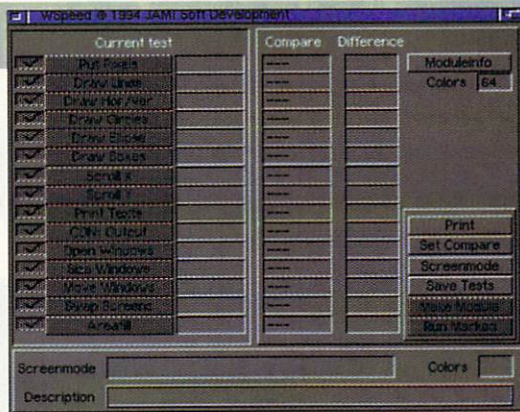


## WSPEED

**Author:**JANI Soft  
Requires Workbench 2.04

If you got last month's great issue, and it was great, you may have read little Dan Winfield's (and he is little) comparison of the Picasso IV and CyberVision 3D boards.

In the review Mr Winfield used a program called WSpeed to do some straight forward speed comparisons, and for your pleasure here is the very same program so you can try it out and see how much slower your AGA and ECS systems are in comparison.

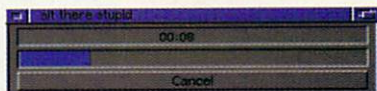


**WSpeed - as recommended  
by Mr Winfield**

# WAITGUI

**Author: Dirk Tíe**  
Requires Workbench 2.04

If you ever need to delay people on a computer it is a good idea to let them know why they are sitting around doing nothing, and how long they are going to be exercising their posterior. This tiny program replaces the original Amiga Wait command with one that pops up a small window that has a progress bar along with a count down. It is all very easy to use and looks a lot better.



# Mount DOS

**Author: ??????????????**  
Requires Workbench 2.04

This tiny little program that adds a handy function to Workbench and your Amiga operating system. What is this amazing function I hear you cry. It simply recognises and mounts PC hard drives connected to your Amiga. These drives can either be IDE or SCSI drives, and it may actually recognise any type of media including Jazz and Zip drives, but I cannot guarantee that as I have never tried it.

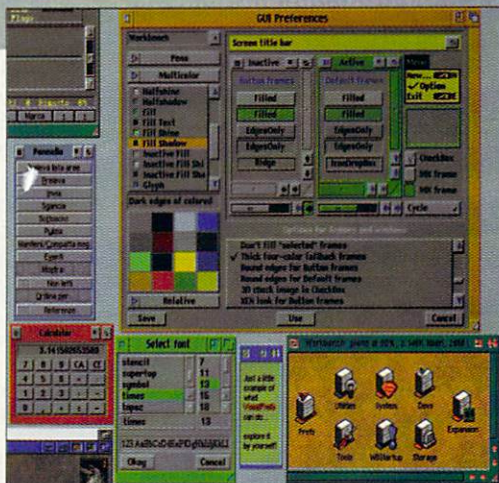
Before you can use MountDOS you need to change a few of its tool types so click on its icon and select the icon information. You will need to change the device and unit numbers so MountDOS knows what drive it should be looking for. You will also need to take the mount command out of the brackets so it will actually mount the drive.

## VISUAL PREFS

**Author: Massimo Tantignone**  
Requires Workbench 3.0

One thing that has been made accountable for putting people off the Amiga is the interface. With the flash and shiny interface of System 8 and Windows 95, the old Amiga Workbench is looking rather shabby and dull. But this does not have to be case, over the last year or so, programs like Sysihack and MCP have shown that there is no reason why the interface cannot be updated quite simply, and so look a lot better.

Visual Prefs takes the whole thing to the extreme allowing you to alter almost every part of Workbench. The result is a much better looking interface, as you can see from the grab. The program is also simplicity to use. A preference program lets you configure the interface and to actually get these changes in place put the line `run :nil: visualprefs` in your startup sequence just before the `!Prefs` command is run.



***Now doesn't that look much better than before?***

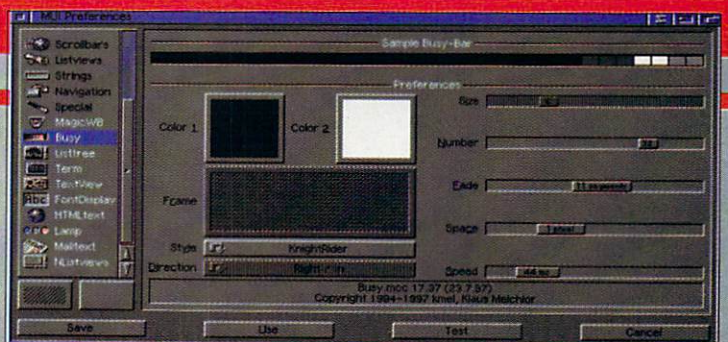
## MUI EXTENSIONS

Author: Gilles Masson/Klaus Melchior ● Magic User Interface

One thing that makes MUI so good is its modular design that allows separate parts to be added or just updated at a later date. On the disk are two new parts for MUI: one is an update to the busy single that many programs use, while the other is a replacement for the list view that is much

more advanced than the original one.

Just used the supplied install scripts and everything will be copied across as for you, you should also restart you machine before trying them, to make sure that the libraries are not resident in memory.





**G**uildhall is best known for its extensive range of re-released Amiga games. With mini Office, however, it makes its first foray into the serious side of Amiga software. As with its games efforts, Guildhall has gone for another re-release of an old Amiga package – in this case mini Office, originally released by Europress Software some five years ago.

I have to admit that when I first got hold of the box I was not too hopeful. Guildhall can get away with releasing old Amiga games as for the last few years there has been very little progression or development in that area (take F15-II that is nine years old but it still plays well). When it comes to utilities, however, it's a whole different ball game.

The "serious" software side of the Amiga has been far from stagnant the last few years. Haarge and Partner came to the forefront of development and long running Amiga programs such as Wordworth, FinalWriter, Turbocalc – to name but a few – continue to be developed.

Mini Office comes on four disks; one contains the front-end and file manager program while the other three have the database, spreadsheet, wordprocessor, spell checker and graphic programs. As the programs are written in AMOS and were made five years ago, they are designed for 1Mb floppy based Amigas and, as a result, there is no HD installer. The programs can be run from the hard drive, you just have to copy the contents of the files into a directory and assign each disk name to this directory.

The wordprocessor is somewhat of an early '80s throwback. Even the basic ED program could give it a run for its money. We are talking minimalist programming here – you can type text, make it bold, italic or underline it, add left, right and centre justification, adjust tab positions and that really is about it, apart from the spell checker.

Onto the spreadsheet. Again, this is a basic program with the minimum of editing tools available. You can cut and paste individual or blocks of cells and, while using formulae, you can still select cells and a range of cells, making creating formulae easy. The number of

Guildhall dusts off another ancient Amiga program, but perhaps this one should have stayed in the crypt

# Old, old Office

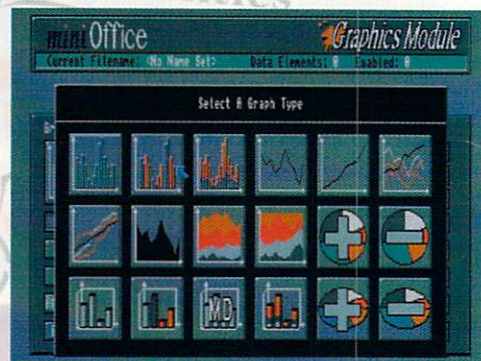
formulae covered is fairly extensive, including logarithmic and logical expressions.

The database module is a minimalist flat database. You can set up a template form and a few records, search those records and print them off. If you need to catalogue anything, such as your CD collection, you have far too much time on your hands, but it is possible with this database.

This leaves the graphics module; not so much a paint package of any description, but really an extension to the spreadsheet and database modules. Quite simply this will let you import a group of statistics or enter them manually and produce a chart of your choice. Again, there are no real surprises here: Bar, pie and line charts are available along with stacked, area and 3-D versions. Up to four separate data sets can be used in the same graph at any one time.

At the end of the day, for 20 quid, you are getting a five year old AMOS program so you can't expect too much. The weakest part is the wordprocessor module which is very poor, the spreadsheet and database modules are passable and the disk manager and graphic programs are helpful additions.

The real decision you have to make is whether you would be better off spending another 25 pounds and getting the Wordworth Office CD, but then if you only have an A500 then this is as good as it gets.



## Bottom line

### REQUIREMENTS

RED essential BLACK recommended

**1 Mb**

RAM

### PRODUCT DETAILS

Product	Mini Office
Supplier	Guildhall
Price	£19.95
Tel	0891 227 355
E-Mail	Guildhall@glukok.demon.co.uk

### SCORES

Ease of use	90%
Implementation	50%
Value For Money	75%
Overall	65%





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INTEL CHIPSET TX/512	£69.00	£81.08

## SOUND CARDS

	Exc Vat	Inc Vat
16 BIT	£13.00	£15.28
32 WAVE	£39.00	£45.83
SOUND BLASTER 16	£39.00	£45.83

## FAX/MODEMS

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# Tale of three browsers

**A**miga Web development seemed to jump out of nowhere. I remember, just over two years ago, being thrilled that AMosaic could display both text and images and in version two, forms were supported. Looking back, Amiga browsers have come on as much as the HTML they display.

At that time Web sites were boring, the first version of HTML was still the only version widely used, and this led to simply designed single column pages interspersed with graphics. So what happened? Well, Netscape 2 appeared and introduced new table tags and frames, along with progressive decoding, transparent GIFs and a bunch of new tags for site designers.

Bang, suddenly every magazine was talking about the on-line experience – cyber this, cyber that and cyber the other, and we are still going strong. Can you blame us, before the advent of fast modems and low cost ISPs we were stuck with using BBSs. I'm not knocking BBSs, I have used them in the past and they offered a good, if limited, service. The Internet provides everything the BBS can, but a million times more and on a world-wide scale.

Suddenly the Web became the glitz and

New versions of AWeb, iBrowse and Voyager. I'd say that calls for a head to head feature

bright lights and everyone was interested in it. AMosaic was dumped and from those ashes rose iBrowse – a very competent Web browser with table support, internal image decoding and complete forms support. And the Amiga Computing team looked upon iBrowse and saw that it was good and made their own table based Web site, and when Ben learned Photoshop properly we got the white buttons and not the dodgy orange ones.

So here we are today, table, frames, internal image decoding and Javascript and Java are just around the corner and I thought it was about time to see how the three remaining Amiga Web browsers shape up.

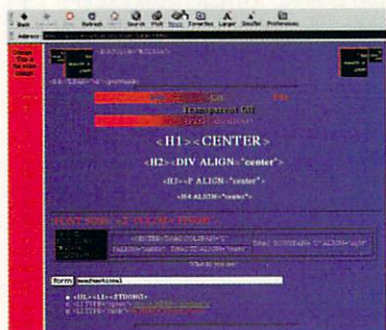
Testing Web browsers is not the most straight forward task. Looking at features all three have pretty much the same features. Things like bookmarks, cache browsers, definable buttons, quick links, grey scale output, printing, URL history are found in all three.

AWeb is the obvious program when it comes to missing features, such as no internal mail or image decoding. It cannot even handle animated GIFs as it is restricted to using Datatypes. It is however very stable, in fact AWeb has never crashed while in use. Something you can expect iBrowse and Voyager to do once or twice a day.

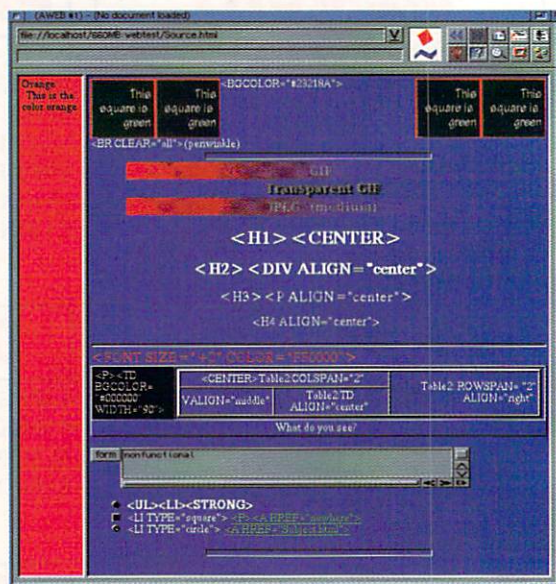
When it comes to layout quality, I would say AWeb does the best job, but its palette selection and dependence on Datatypes ruins any chance it has when it comes to graphics quality. Generally I have found that Voyager and iBrowse give the same sort of performance both graphically and techni-

cally.

Which one wins then? I could sit on the fence and say, "At the end of the day the real winners are you and the Amiga," but that would be copping out. So, taking a look at each in turn – AWeb technically provides by far the best page layout and understands more tags than the others, but it is greatly let down by its very poor image handling and clunky interface.

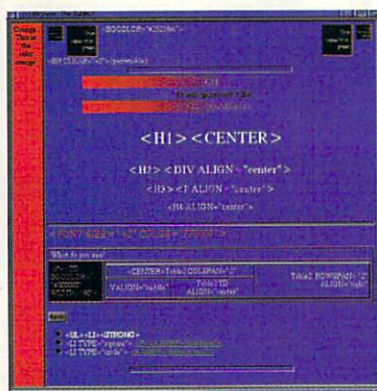


Just for comparison, here is Internet Explorer 3 on the Mac. Every part of this page is correct, even down to the text area being correctly shown as a single text line, and not the three or four that all the Amiga programs display



Widely accepted as the trailing program in the browser wars. As you can see, AWeb displays almost every part of the page perfectly. The big exception is the image scaling part – the top two corner images should be a quarter of the size, and also the top GIF image is an animation GIF that AWeb cannot support due to its dependence on Datatypes





The main thing that hits you is that iBrowse decided not to display the text area form. Apparently if there is no name attribute, iBrowse just ignores the form. Also you can see that iBrowse does not seem to support the list shapes even though it does have alternatives, but otherwise everything is hunky dory

iBrowse was once way ahead of the rest on all fronts, and I still think the layout and design of the front end are the best. It has its own progressive image decoder and can use Datatypes if need be, and it passed just about all the HTML tests.

Generally, Voyager is taken to be the

superior browser and I would have agreed, but having carefully tested Voyager it does seem to make a poorer job of HTML handling than iBrowse or AWeb. On the plus side it has the best image decoder, though its dithering and palette selection could be better (not a problem for graphic card users), and uses less memory than the other two.

So, on efficiency and speed, Voyager wins. On design, iBrowse still leads and on technical merit it has to be AWeb, with iBrowse and Voyager an equal second.

## TESTING TESTING

It is always difficult trying to comprehensively compare two programs, and with Web browsers the number of tags and possible combinations out there make it an almost endless task. So one possibility would be to look at a few general sites and see how the browsers handle them, but you could always end up missing some important tag.

For a more formal task I used a prewritten test page found on [www.threetoads.com/Browser/main.html](http://www.threetoads.com/Browser/main.html). This takes the most regularly used and important tags and techniques on Web sites and puts them into one page.



A major eyesore here is that Voyager has spat out the embedded table. I have to say though, that I have put tables in tables and Voyager has displayed those fine, so I'm not exactly sure why it doesn't like this one. The only other thing is Voyager ignores the size attribute for the horizontal rule

The page tests frames, tables, imbedded tables, lists, heading and fonts sizes, image formats and scaling, forms and various other formatting commands. Generally, if a browser can display everything on this page, it should have no trouble in the real world.

## FEATURE COMPARISON

As you can see, feature for feature, there really is very little to tell these three browsers apart. The biggest omission is for AWeb – its dependence on Datatypes really does leave it trailing behind the others. Otherwise it would be keeping up with the "big two" quite well.

For the memory tests I ran the programs on a 64 colour 800x600 screen and loaded up the Amiga Computing main page. Using the avail command I measured the amount of memory before and after each program was run. So you should remember that MUI and ClassAct are also included in the values.

URL completion is rather nice and is offered by iBrowse and Voyager. The simplest form works as for Netscape where you do not have to type the whole [www.cnn.com](http://www.cnn.com) only the [cnn](http://www.cnn.com) part and the browser fills in the rest. They also offer history based URL completion, so the browser tries to guess the URL you want as you type it, but usually gets it wrong.

The times at the end of the list shows how long it took the browser to reload the Amiga Computing homepage, with no memory cache and two connections. As you can see, iBrowse is surprisingly slower than the other two at 18 seconds, turning the palette selection to fast and removing the secondary dithering does reduce this to 10 seconds.

Browser	iBrowse	Voyager	AWeb
Datatypes	yes	no	yes
Prog. GIF	yes	yes	no
Prog. Jpeg	yes	yes	no
Prog. PNG	no	yes	no
Scaled images	yes	yes	no
Animated GIFs	yes	yes	no
H/VSpace	yes	no	yes
Tables	yes	yes	yes
BG colour	yes	yes	yes
BG gfx	yes	no	yes
% Widths	no	yes	yes

Frames	yes	yes	yes
Hidden	yes	yes	yes
Moveable	yes	yes	yes
Lists	yes	yes	yes
New shapes	no	no	yes
Ordered	yes	no	yes
HTTPs	yes	yes	no
Middle align	no	yes	no
Forms	yes	yes	yes
URL completion	yes	yes	no
Connections	32	32	256
Mozilla spoofing	no	yes	no
News	no	yes	yes
Mail	yes	yes	external
Drag and Drop	yes	yes	no
Bookmarks	yes	yes	yes
Printing	yes	yes	yes
Keyboard	yes	yes	yes
Arexx	yes	yes	yes
Cut/Paste	no	yes	no
Chip Mem	740Kb	630Kb	776Kb
Fast Mem	1.5Mb	1.2Mb	1.2Mb
Total Mem	2.2Mb	1.8Mb	2.0Mb
Javascript	planned	soon	?
Java	?	coming	?
Time	18 secs	7 secs	15 secs



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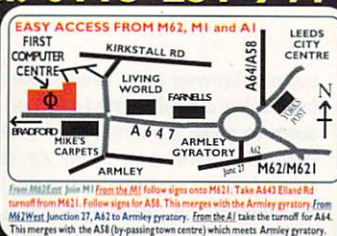
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# Ghosts in the machine

**A** few years back when I was still at university I came across some Postscript documents that I needed to read and, more usefully, print out. At the time I had no software that could handle Postscript files and I was not in a position to run off and buy any, so I took a quick look through Aminet.

I saw two possible programs, one used the Post library but I could never get it to work, while the other was a program distributed under the GNU licence and had the odd name of Ghostscript. But who cares what it is called when it can display and print Postscript files perfectly?

Postscript is a page description language thought up by Adobe. As Adobe wrote the industry standard page layout software, Quark Express, Postscript has itself become an industry standard. It simply allows computers to define how a page, screen or picture should look, but in terms of straight lines, curves and shaded areas. OK, it is a little more complicated than that, but those are the basics.

Ghostscript is pretty straight forward to use. From the shell, supply the Postscript filename you want it to display. It will then, page by page, create each, well, page. For EPS images it just draws the image in colour if you tell it to use its own screen.

**Neil Mohr** takes a look at a free program that gives everyone easy access to Postscript documents

The one important thing you need to remember is to increase the amount of system stack available. To do this before you run Ghostscript you need to type stack 20000 into the Shell – this makes sure the program has enough workspace, otherwise it can crash. If at any time Ghostscript does crash, the stack being too small is more than likely the culprit.

As Ghostscript is designed to work with

many different computer systems it handles the output – whether it be to a printer, window or screen – in much the same way. All this has to be selected through the Amiga's Shell using the DEVICE switch.

So, for instance, if you want to tell Ghostscript that you want it to run on its own custom screen you have to use the DEVICE:amiga\_custom switch. When you run Ghostscript it will pop up a screen mode requester from which you can select a screen mode. So, depending on which processor version of Ghostscript you are using, you would type the following:

```
gs_000 -DEVICE:amiga_custom examples/tiger.ps
```

Using this technique you can also tell Ghostscript to output a document directly to a printer. Using the -DEVICE:amiga\_printer switch it will use the built in Amiga printer driver, but Ghostscript has internal handling for quite a large number of printers such as Epson, deskjet and laserjet printers – standards that many printers can handle. To find out which are supported, type gs\_000 -h for a complete list.

## WHAT TO GET

The Ghostscript package is freely available for Amiga users from Aminet. So if you are on-line you can download the package yourself. Both the main executable and data file add up to just over 1Mb, so downloading should take about 10 minutes. Otherwise it should be on either the Aminet set box or the latest Aminet CD release, you could also use one of the PD house that offer download services.

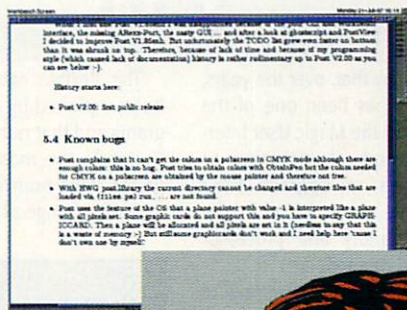
So if you are interested in Ghostscript, FTP to your local Aminet site and go to the gfx/show directory. All the Ghostscript related archives start with gs followed by the version number, currently 501.

If you want the main program itself you have to know what processor you have, as there are a number of different

versions compiled specifically for certain processor types. If in doubt just get the one called gs501\_000.lha as this will run on any Amiga. If you know what processor you have and if it has an FPU, go for the correct archive.

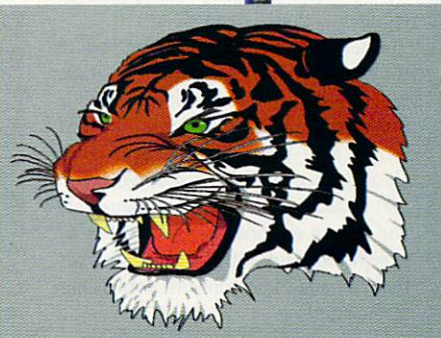
Along with the program archive you need the data archive called gs501\_data.lha. With these two archives you can get Ghostscript up and running. Extract both the archives and make an assign to the Ghostscript directory called Ghostscript – so the program knows where to look for its files.

You should also consider getting the fonts archive that has all the Postscript fonts you will need. The archive is called gs501\_fonts-std.lha and is 1.5Mb but is worth getting if you are going to view a lot of text files.



Viewing or printing text documents is the primary use for Ghostscript

Coloured EPS artwork can be used by Ghostscript without a problem





# Share and share alike

One thing you will notice if you have spent any time downloading programs from Aminet or have tried them out from the CDs is that, nine times out of ten, the person who wrote the program does not come from the same country as yourself. This is somewhat of a tribute to how wide-spread the Amiga community is, and how the Internet has managed to keep it knitted tightly together over the last few troubled years.

This may give you a warm glow inside, but if the program in question happens to be a crippled shareware product that you have to get your hands on, payment to foreign country is not simplest or cheapest thing to achieve.

Your first choice is to send off a cheque or better, a cheque drawn under a foreign bank, but this could cost you or the payee more than the payment itself. So perhaps you could get the foreign cash from a bank and send that off in an envelope – doesn't cost you too much, but there is always the risk it could go astray in the post. Lately, some authors have started to accept credit cards but do you really want to give out your credit card number to some stranger on the other side of the world?

This was just one of many reasons SASG – the Standardised Amiga Shareware Group – was formed in early 1994. Shortly after Commodore went bankrupt, a couple

Amiga Computing takes a look at the long running shareware organisation, SASG, as it enters its third year

of well-known shareware authors got together and their aim was to create a non profit making organisation that would support both the programmer and end user.

Its first objective was to set up a system that would allow the programmer to receive 100 per cent of the registration fee. This system guarantees that software programmers do not get exploited and end users can register high quality applications for around £15.

As the price is low, more end users are

*I recently registered my demo of MUI, and was very impressed with the speed and service. If all shareware was so easy to register, I would do it at least once a month! All shareware should be brokered through SASG!*  
**Dan Carmack, Missouri**

willing to register and support the development of the product. This results in a better maintained product with lots of new features. More recently, SASG has started to offer reduced prices not only to reward users who upgrade to later versions of their registered software, but also for general supporters of shareware.

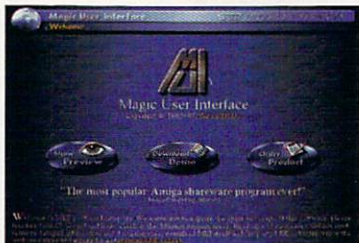
By the time you read this the organisation's Web site will be just over one year old and has easily topped the 100,000 hits mark, so congratulations are due. SASG

## MAD FOR MUI

I think it's safe to say that, over the years, Amiga Computing has been one of the strongest backers of the Magic User Interface. Being the sort of magazine to encourage readers to upgrade their machines, we were never put off by the slightly higher memory and processor requirements MUI needed.

Essentially, MUI filled a gaping hole in the Amiga operating system – a simple way for programmers to add a scaleable, font sensitive interface to their programs – but MUI went beyond even this. Through its object oriented design, each part of MUI is independently upgradable and can be extended by third parties by straight forward MUI plug-ins libraries that can add almost infinite possibilities to the interface.

The flexible nature of MUI has now been exploited by a vast number of programs and that number continues to rise. Currently, the most publicly visible programs come from Vapor Software and its incredible range of Internet software.



As Magic User Interface is a SASG backed product, it has its very own page in the beautiful site style

## GET CHEAP STUFF

Well you have read about all the great stuff that is available from SASG and I'm sure you may thinking well I would love to get a registered copy of MUI or MagicWB. In conjunction with the lovely people at SASG Amiga Computing readers who are on-line can register SASG products on-line and receive a 20 percent discount.

All you have to do is get on-line browser to <http://www.sasg.com>, select the product you want and go to the ordering page. At the bottom there is a cycle gadget from which you will be able to select Amiga Computing. When you have entered all your details the password you need is

Tusken





has not been slow to take advantage of its Web presence – with a Web site you give people all over the world access to your products and any services that you care to provide.

SASG has been quick to explore all possible alternatives and it can now offer almost every type of ordering including conventional mail and fax services. A basic e-mail service that allows users to e-mail their credit card number to SASG is also present and additional protection is avail-

able in the form of PGP protected mails.

For an even more secure form of ordering, there are now facilities to use an SSL capable browser to safely send your credit details in an encrypted message. For added peace of mind, a final option is to use FirstVirtual. This is the first Internet bank, providing a near 100 per cent secure system of ordering products over the Internet using a credit card.

FirstVirtual is so safe because your credit card details are never actually transmitted



over the Internet. When you apply for an account with FirstVirtual you are supplied with a PIN number, this being an alias for your credit card number. Whenever your PIN number is used to make a purchase, a confirmation form is e-mailed to you and you must reply yes, no or fraud before the transaction is made. So if someone does try to use your PIN you will know straight away and purchases cannot be made without your consent.



## THAT'S MAGIC

I think MagicWB is really a very cleverly disguised computer virus. If you look at how quickly it can jump from machine to machine, there could be no other explanation. To quote Amiga Magazine, "You'll think you have just bought another computer!" MagicWB transforms your lifeless two dimensional Commodore icons into more dynamic 3-D ones, with a general stone granite feel to them.

One last note. If you were wondering who the artistic genius behind MagicWB is, it is Martin Huttenloher the same person who designed the SASG Web site, so it is no wonder they both look so impressive.

*No wonder the whole site looks so good, it is done by the man behind the MagicWB icon set*





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preview  
We look at  
Max Rally

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# Worldwide

## Wintel?

**Dave Cusick** assesses whether the Amiga can realistically play a significant role in the computing world of the future

Anyone who happens to read *The Times* or *The Daily Telegraph* or their on-line equivalents may have heard of a chap called David Hewson. He's a novelist and computer journalist who wrote a column for the former publication which was subsequently published on the Internet. In this he managed to anger just about every non-Wintel computer user in the world by claiming they all used "Zombie" machines which should have been buried years ago.

Every remaining Amiga user knows that the onslaught of the Wintel "standard" has been frighteningly rapid and overpowering. Users of platforms like the Amiga and the Macintosh know their machines have a lot left to offer, but the vast majority of newcomers to the computing world have no knowledge of the vital roles these machines played in computing history and the user-friendly alternatives they offer to Wintel clones.

Hewson claimed that "a tiny minority" of computer users are foolishly ignoring the "industry standard" by refusing to switch to Windows PCs. Although the *Telegraph* subsequently identified the machines in question ("Acorn computers, the Atari ST, PCs running Linux or OS/2, the Amiga"), Hewson insists that the original article referred primarily to Acorn machines – possibly highlighting further his curious ignorance of the machine we all love.

Hewson doesn't pull any punches. As the *Telegraph* feature pointed out, in the past he's called Linux a "nasty piece of digital scurf" and a "program from hell" suitable

only for "bug-eyed computer users" whose idea of fun was to "dream in hexadecimal". He's also criticised the Apple Macintosh extensively, and has even gone so far as to call Acorn users "Confused, wacky people, a little like the Tranmere Rovers supporters' club, only less numerous and twice as mouthy". Rather harsh assessments of genuine computer enthusiasts and sweeping generalisations like these have, unsurprisingly, helped ensure his e-mail in-box has been full of flames over the last few months.

Hewson claims that these days there is no valid reason for not investing in a Windows PC, and that the non-Wintel fans who say otherwise are kidding themselves. Some unlikely candidates have leapt to his defence too – including Stewart Campbell, the former managing editor of Amiga Power magazine, who told the *Telegraph* that



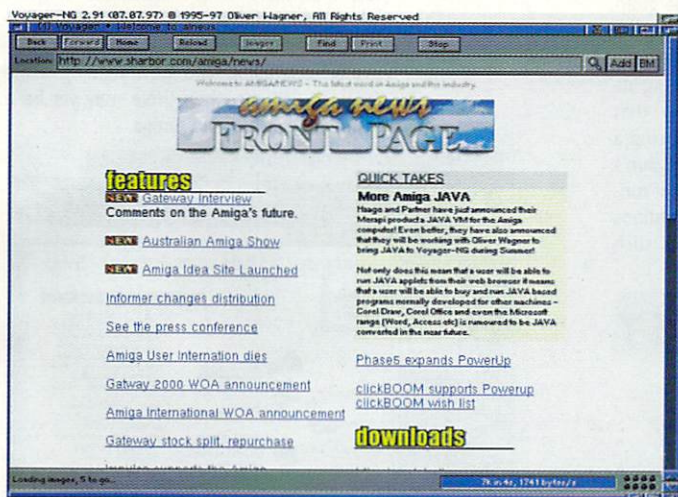
Merapi could help the Amiga adapt to the modern computing world

many Amiga fans have a "siege mentality" that is "over the top".

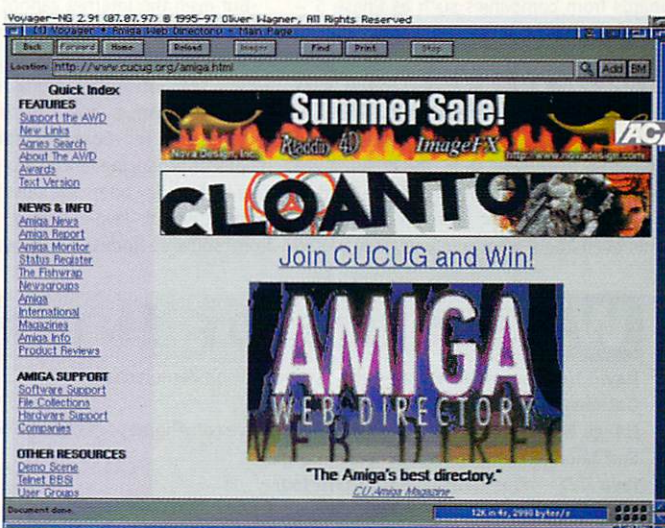
When I originally found out about Hewson's ranting I e-mailed him and pointed out several reasons why I believe that he is wrong to write off machines like the Amiga, and some of these points I feel are worth raising here.

As a former writer for ST User magazine I've been around when a machine has been in its death throes, but the situation regarding the Amiga is rather different. Thanks primarily to the continuing loyalty of genuine Amiga fanatics, a hard core of companies that still develop for the machine and the vocal Amiga community on the Internet, the machine still has a presence – even if it is far less than at the height of its popularity.

As Macintosh users will testify, it's not just stubbornness that prevents non-Wintel users from embracing the Microsoft dream

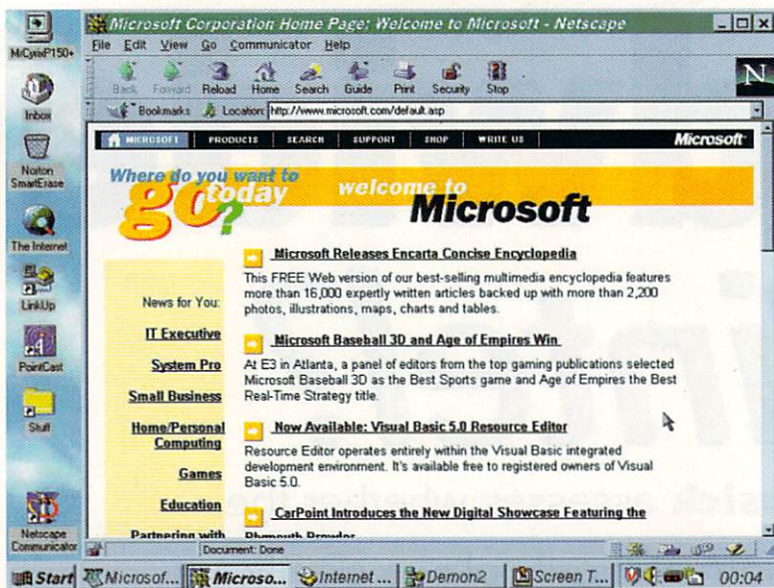


Amiga News is a great on-line resource you might want to turn to after AC has gone...



...as is the Amiga Web Directory





Although it may pain loyal Amigans, it's time to accept that Microsoft has become too strong to simply dismiss, or even to challenge head on. In the future Gateway 2000 is going to have to find new strengths upon which to base Amiga marketing

of total uniformity, it's also a genuine belief that the computer world should not ignore a machine which, if not technically superior any more, remains more intuitive, more user-friendly, more flexible and less power-hungry.

Whereas the constant-upgrade mentality and "Bloatware" are now accepted in the PC field, Amiga developers still thoughtfully write software which, while making the most of advanced machine features where available, will run perfectly happily on relatively inexpensive systems.

Admittedly the Amiga is in need of technical development, not having moved on significantly for five years now. But the new Amiga owner, Gateway 2000, is the first company since the Commodore era with sufficient resources to fund this development (even if Commodore did rather less development than it ought to).

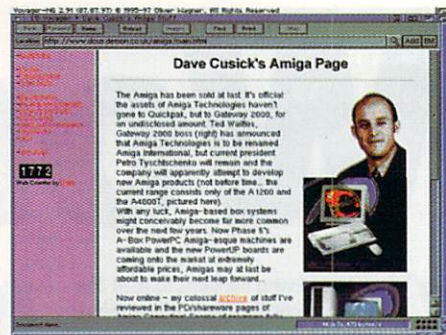
There will always be enthusiasts eager to upgrade their machines using specialist boards from companies such as Phase 5 – and I'm one of them, hankering after a PowerUp board for my A1200 – but these boards are not going to appeal to the mass market or those who aren't "in the know".

If a potential buyer was to walk into a high-street computer shop, the chances are they wouldn't see a single Amiga – and in the improbable event that the shop assistants even knew what one was, they would

be unlikely to be able to lay their hands on anything other than a plain vanilla A1200, a machine which originally appeared in 1992 and has not been updated or improved since. The only other machine in the currently available Amiga range is the almost-as-ancient A4000, and there are probably now only a handful of mail-order firms in the UK which could supply one.

Having said that, even today the standard A1200 represents reasonably good value for money. It's not possible to get on the Internet with a low-end Pentium PC for less than around £800, but you could pick up an A1200, a 33k6 modem and a copy of Net-connect for a little less than that and, if cash was tight, you could always skimp on the monitor in favour of a television set. Indeed, it is the Internet which I believe has been a key force in helping the Amiga survive this long, and which I think must play a significant role in its future if that future is going to be a bright one.

But even the Internet cannot alone guarantee the survival of the Amiga. In common with an increasing number of Amiga Netizens I see Sun Microsystems as being its potential saviour, however unlikely that might sound. Far more than simply being a means of producing fancy Web pages, Sun's Java technology offers the possibility of running powerful Java-authored applications from software industry heavyweights such



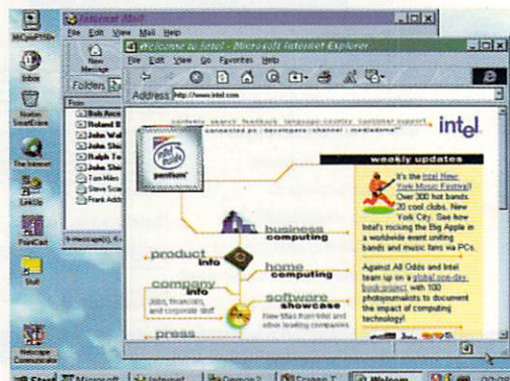
If you get really desperate for information you could always check out my Web site...

as Corel and Microsoft on any system for which a Java Virtual Machine (JVM) is available.

With the imminent release of Haage & Partner's Merapi, the Amiga will have its first JVM before even Windows 95 has a reliable and popular one. If Haage & Partner get it right, the Amiga could find a new niche as an affordable machine on which to run heavyweight applications without the need for heavyweight hardware. This will give the Amiga an advantage over the similarly-priced NetPCs now being pushed by companies such as IBM and, of course, the Amiga will still be able to do everything a "proper" PC can do, whereas NetPCs won't. Gateway 2000's role must surely be to seize the opportunity and push the Amiga as it hasn't been pushed for years.

David Hewson is right when he says that universal compatibility is the way forward, but he's wrong to claim that switching to Wintel boxes is the only way of achieving this compatibility. Java technology means that users can select the native operating system of their choice, and yet still make use of cutting-edge, heavyweight applications – even Microsoft has seen this, hence its rumoured moves to produce 100 per cent Java versions of industry standard packages such as MS Word.

If the computer world wakes up to the fact that there is an affordable machine which can run that package, while simultaneously splitting CPU time between raytracing an animation and downloading a file from an FTP site, then there may yet be a future for our beloved Amiga.



The Wintel revolution has been frighteningly fast

## WEB SITES OF INTEREST

David Hewson's Web Page – <http://www.hewson.demon.co.uk/>

Gateway 2000 UK – <http://www.gw2k.co.uk/>

Haage & Partner – [http://ourworld.compuserve.com/homepages/Haage\\_Partner/](http://ourworld.compuserve.com/homepages/Haage_Partner/)

Sun Microsystems – <http://www.sun.com/>

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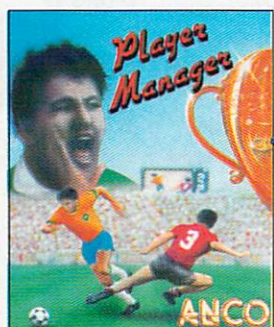
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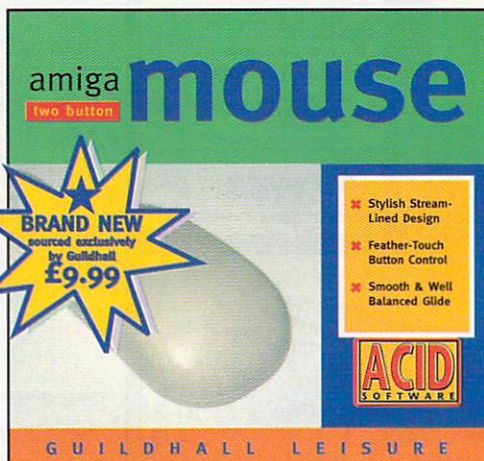
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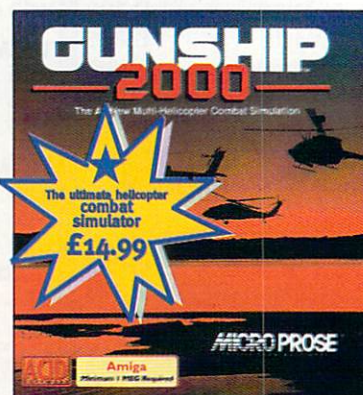
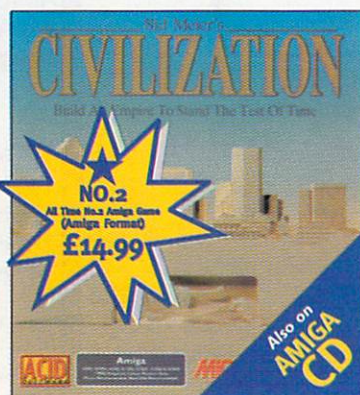
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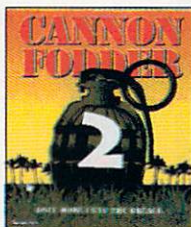
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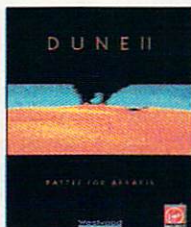
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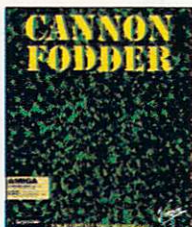
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I think it is a sad reflection on the current Amiga scene that so much time and effort is being put into developing these Internet tools. I forgive the mad dash for an Amiga browser, that is as exciting as the Internet gets but really, a news reader?

In reality there are only three real reasons people use newsgroups. Firstly to get dirty pictures, the best way to get people to register a news reader is not to allow them access to the alt. groups, as discovered by the writer of NewsAgent. The second reason is to allow small minded people to argue with each other over the most trivial of points. I wouldn't mind but most of the people that inhabit newsgroups cannot even put together a coherent argument, never mind respond correctly to one.

The final reason is quite a respectable one, to get information or answers to a question. As newsgroups are an open forum, however, one of the lovely people from group two could always jump in. If they do, just ignore them, think of them as that drunk on the bus.

This review is of New York, a new Class-Act based newsgroup reader. I would expect most people to be using either Tin, NewsAgent or a combination of the two for their news browsing pleasure. Together they do make a good combination, Tin for off-line reading and NewsAgent for batch downloading or on-line browsing.

Batch downloading is an important ability for a news reader as it allows dial up users to log on, get all the messages they are interested in, log off and then read the downloaded articles. This obviously saves time being on-line, as you can then take your time reading and replying to articles while off-line.

So New York does have a bit of competition to contend with. From the start you can tell this is not an off-line reader as you have to have to be on-line before it will run, bit of a give away that.

In use as an on-line reader, the current version of New York does a reasonable job. You can subscribe to groups added either

What the hell, I can mention the Spice Girls if I want, it's the last issue. I like Victoria I do

# Spice Girls

from a downloaded groups list or a group's name entered by your good self. You can then get a list of subject headers and, from there, read and reply to postings, or if it is a binary uuencoded file the file will be decoded to the New York directory.

If you can be bothered, New York will download a complete newsgroup list. While this can be helpful to track down some of the more unusual groups, it will take at least 15 minutes as there are tens of thousands of groups, and even the file containing their group headings is over a megabyte.

Once you have the list, New York does makes a good job of displaying it. Using a cascading style list, groups under the same heading are grouped in collapsible folders, much the same as Mac list views.

New Agent works alright as an on-line reader, but really I am not very keen on the single interface. The view for the groups and subject headers is far too small and you cannot resize it, either through the interface or via the preferences, but a separate window would be best.

The lack of any batch downloading and off-line reading abilities is a shame and is something that does need addressing. If it comes to spending 10 minutes downloading files or spending an hour on-line, I think you may go for the first option.

What annoyed me about this news reader is its handling of multiple parts binaries. I have yet to see a browser that makes a good job of collecting these parts together, or generally automates the downloading and decoding of the parts, but then that is a general fault of most news readers and not just New York.

So, New York, this is version one so there is a long way to go. To be honest, adding the simple batch downloading of NewsAgent would make a big difference.

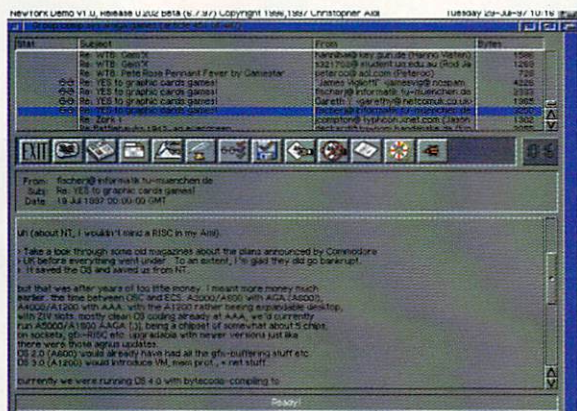
## Bottom line

### PRODUCT DETAILS

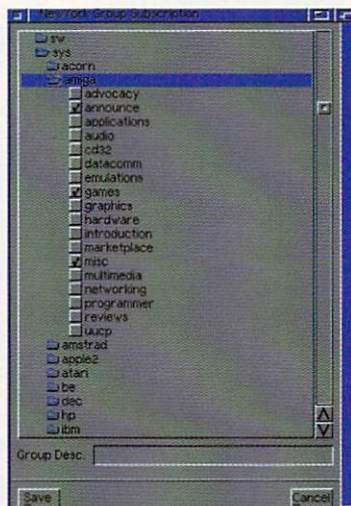
<b>Product</b>	New York
<b>Supplier</b>	Finale Development
<b>Price</b>	\$35
<b>E-Mail:</b>	Info@Finale-Dev.com
<b>WWW:</b>	www.Finale-Dev.com/

### SCORES

Ease of use	90%
Implementation	60%
Value For Money	65%
Overall	70%



New York's single interface makes it easy to navigate but a little harder to flip through the subjects



Flipping through news groups has never been so easy



**L**ast month I was going a little crazy over ArtEffect. From the quick look at the preview it seemed pretty incredible, but now I have managed to have a good old dig around and get a proper idea of just how good, or bad, ArtEffect 2 really is.

Version 2 adds a couple of very important new features. Firstly it has internal virtual memory, essentially this should allow you to work on images of any size. Unfortunately this does not work quite so well in practice for AGA users, as there still are chip RAM limitations – limiting you to around 800x600 pixels. The second new part is layers, but you should read the box out to learn more about them.

One part of ArtEffect that needs work is the way selections are handled. Currently, selections (and also layers) are very much static – in no way can you move them. It is always useful to be able to 'nudge' selections, particularly when superimposing layers, as you are never happy with the first position.

True enough you can go through the brush manager to pick up a selection as a brush and then position it that way. This does work very well, but seems an odd way of

# Arty farty

Some bloke called  
Neil reviews  
ArtEffect 2

going about it. In my humble opinion, a move tool would do the job much better – it works for Photoshop.

If you take my layer tutorial for example. Once you have slapped down the flower image it is pretty much stuck in place (unless you are prepared to cut the image back off the layer and reposition it). If you could copy

over the selection and move it around everything would be so much easier.

You may have noticed that my enthusiasm for ArtEffect has subsided a little as some of the limitations become evident. ArtEffect has a lot of potential, all the right elements are in place, it just needs a little more spit and polish before it is a first class program.

## Bottom line

### REQUIREMENTS

RED essential

BLACK recommended

3 Mb

RAM



Hard drive

16 Mb

RAM



30Mb Hard drive



RTG card



040 CPU

### PRODUCT DETAILS

Product	ArtEffect 2
Supplier	Blittersoft
Price	ArtEffect 1.5: £59.95 ArtEffect 2: £119.95
Tel	01908 261 466
E-Mail	sales@blittersoft.com
WWW	www.blittersoft.com

### SCORES

Ease of use	90%
Implementation	80%
Value For Money	85%
Overall	85%

Everyone seems to be comparing ArtEffect with Photoshop, which is fair enough and, with the addition of layers, the likeness will be even more obvious. It's one thing to say ArtEffect is like Photoshop, but it is as good as Photoshop?.

Sure, the interface is court-inducingly close to Photoshop's, so it has the look, but has Haarge and Partner re-created the feel of Photoshop? The best way to find out is to try and reproduce a picture done with Photoshop.

I have used one of the more advanced tutorials from the Photoshop 3 manual that involves knocking together a picture using a few layers and makes full use of the program's selection and drawing tools.

The actual project is to be made up of a number of separate images from the Photoshop CD. Originally most of the images had transparent backgrounds but, as these can only be used in Photoshop, they had to change to flat Jpegs which makes using them a little more complicated.



### PART 1

Well, here we are at the start of the tutorial. I have all the pictures on hand (four in all) and I have the Photoshop tutorial in front of me. Initially, the picture that is going to be the background is loaded and a new layer can be added to the picture in preparation for the flower image that will be the first to be overlaid.

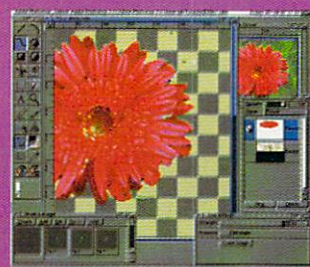
Next I load the flower picture. The first task is to cut out the flower from its green background. Like Photoshop, ArtEffect offers a number of selection tools, for this task the colour selection tool is chosen. This allows you to choose specific or general ranges of colours

from a picture and mask them out. As the flower is generally red on a green background, by using the dropper tool, you can select a range of greens from dark to light and mask out the background

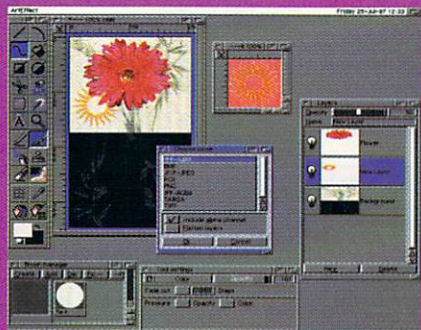
### PART 2

When it came to transferring a selection from one image to another, I ran into a little problem. ArtEffect simply refused to copy the selected area to the clipboard, it just said it could not. The only way to get the selection is to grab it as a brush and transfer it to the main picture.

This applied to every picture I had to add, as you can see with the next sun image. Load in the pictures, use the magic wand selection to remove the white background, grab the unselected sun area as a brush and then paint this onto a new layer underneath the flower picture, but still over the main background image



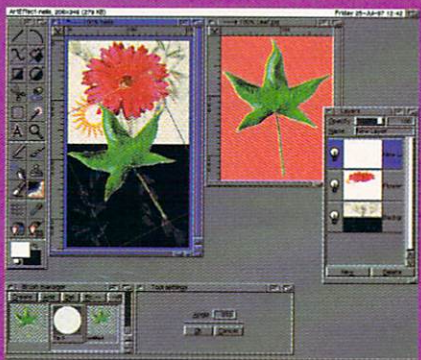




### PART 3

What's all this about then? Well an interesting point is that ArtEffect still uses what looks like the normal IFF-ILBM to save its layered pictures. This means a program such as FastView can still view the background image, but the other layers are stored in the file as a new alpha block that are simply ignored by programs that do not recognise them, very neat but then the IFF file format is very neat.

One other point – if you notice in the layer window the opacity of the sun layer has been set to 50 per cent, this allows you to make the layer more or less see through. If you look at the times in the top right of the screen grabs, you will probably notice that it took me the best part of a day to do – it's all the ruddy interruptions I get all day



### PART 4

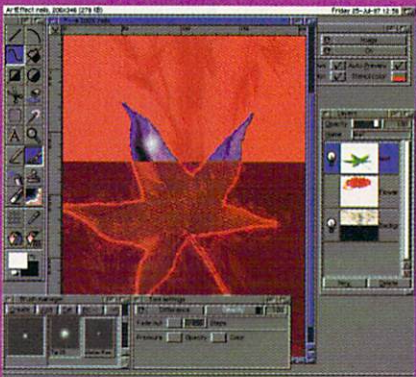
The next step is to add the leaf to the picture, so you just add a new layer, right? Well in Photoshop, yes, but in ArtEffect no. ArtEffect can currently only handle a maximum of three layers, which seems a touch limiting if you ask me. So before the leaf can be added, a layer had to be freed up, this requires us to merge the flower and sun layers. Very straightforward, just drag the sun layer to the flower layer in the layers window.

Now the third new layer can be made – the usual shenanigans of cutting out the leaf and adding it to the new layer. In Photoshop the leaf would still be a selection you could rotate, but with ArtEffect everything has to be handled as a brush, but this works pretty well. The white outline of the leaf is my fault, I should have expanded the selection by a pixel or two to get rid of it, ho hum

### PART 5

In this part a couple of things are going on. Firstly, if you take a look at the layers window, you will see that I have hidden the flower/sun layer, this means any further changes will only affect the leaf and background images. You do this by simply clicking on the light bulb icon.

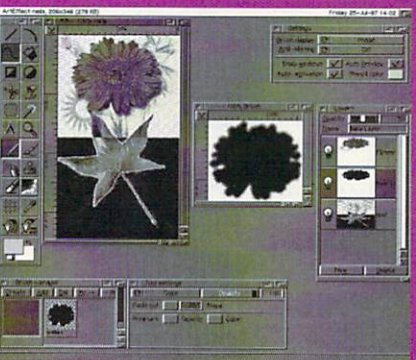
The second thing going on is that currently the only effect that can be applied between layers is the opacity, in Photoshop a much larger number of operations can be performed. So if you want some sort of image processing performed between images on different layers you have to do it all by hand. Using the magic wand and selection tool made it easy to single out the over-laying leaves



### PART 6

To help highlight the flower from the rest of the picture, a drop shadow needs to be added underneath it. Now in Photoshop this is a piece of cake, or pie, if you're Russian (watch 2010, or read the book it's better). With Photoshop everything is on its own layer, you can easily grab the flower's outline as a selection, paint it black on a new layer, blur it, merge the shadow and flower layers and Bob's your father's brother.

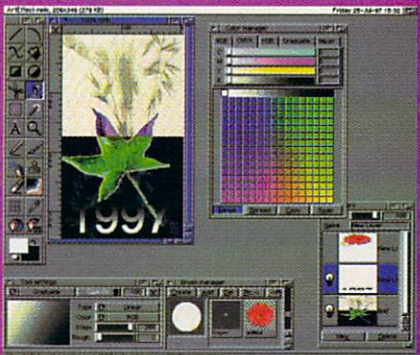
With ArtEffect all this has to be performed as a separate project, then copy the shadow image as a brush to the new middle layer, sorry I merged the leaf and background layers to free the third layer up. Oddly, filters did not seem to work on the layers, only the background base layer. This meant the blur had to be performed in a separate project, not a good feature



### PART 7

The final step. This involves adding the year to the bottom of the pictures and applying a white to transparent gradient to the text. Sounds simple enough – click text tool, choose CGTriumvirate sized 95 and bold for extra thickness, drag the new text into position and press space to fix the text to the new layer. So far so good, now for the gradient.

This is where a problem cropped up, how do I do a gradient? Now it is probably my own fault for not looking hard enough, but to set up a gradient you first open the colour manager select range, drag and drop the colours you want in the range. Go to the fill tool, switch to graduate, click where you want the gradient to go and then select the gradient direction. Transparent gradients do not seem to be possible, so a white to black range had to suffice.



### PART 8

The finished picture, the ArtEffect version is on the left and the original Photoshop one is on the right, if you hadn't guessed. To start with the white outline around the leaf is my fault and wouldn't be there if I did this again.

Due to ArtEffect's limitation on moving layers and selections, the position of the leaf and sun are wrong and to move them afterwards is very difficult. The last major problem is the text, firstly it is not anti-aliased, giving the jagged outline and also no transparency could be applied.

So the main problems encountered are due to the poor selection handling and the current limitations of the layer system. Remember that this was my first attempt to do something substantial with ArtEffect. If I had another attempt the finished product would match the Photoshop version much better, save for the text transparency





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of the present and words  
for the future. Nine years  
of reader letters with  
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## ISSUE 2 JULY 1988

### Mistakes

I enjoyed reading issue one, especially the bit about Workbench 1.3. How much is it anyway? There was an error in the Plain Man's Guide to CLI. the author said that it is important to use capital letters. He is wrong, it doesn't matter whether you use upper or lower case. The Amiga treats it the same.

Now on to the hidden messages. For the last message, you omitted to mention that you must hold down the function key while you eject the Workbench disk and replace it with a none Workbench disk.

*Leszek Wolnik-Kurjanowicz, Ealing*

### Piracy problem

I was very interested to read in your first issue about the sales of the Amiga catching up with those of the ST. I work in a shop in London where we sell all kinds of computers, and the Amiga runs only to Amstrad PCs. But ST software outsells Amiga products. I attribute this to the lack of really good Amiga games and the huge amount of piracy on the Amiga.

## DON'T WRITE IN!

Well thanks for all your letter over the years, most have been very complimentary, others have been quite constructive, while others have been down right abusive, even so brought a wry smile to all our faces.

If you have any comments on the Amiga or Gateway 2000 why not send them to Amiga Doormat as I'm sure Mr Ben Vost will be more than happy to listen to all your gripes, oh yes he will.

Most of the games are straight ST conversions. If I wanted an ST I'd have bought one, but the Amiga has far better graphics and sound. Piracy is a serious problem, and I implore Amiga owners to buy their games and not copy them.

If you have a stolen game which you play a lot, go and buy the original to show the software house how much you appreciate the game.

This is the only way that software houses can be persuaded to carry on supporting the Amiga. One good thing is the

bundled software which comes with the ST. Every Atari comes with loads, which will cut down the number of new games ST owners will buy, and so makes the Amiga sales look proportionately better.

Your first issue was great, keep rooting for the world's best computer.

*Alex Walsh, Newbury*

**This issue an external drive cost £100, an A500 cost £400, 512K cost £105 and a 20Mb hard drive would set you back £625**

## ISSUE 5 OCTOBER 1988

### Hard discount

At last a top quality magazine specifically to support a top quality computer. Congratulations on your first two issues, and good luck for the future.

Why is it that I can buy a 20Mb hard disk for an IBM PC compatible for about £200, whereas a similar product for the Amiga costs £500? OK, so I know that there are economies of scale and that some components are different, but the majority of the components must be broadly similar – the disk, the controller and so on – but 250 per cent more?

Now if somebody could develop a cheap (£100?) board that would allow

an IBM hard disk card to run on an Amiga...

*Martyn de Young, Kent*

### Hop to it

While on holiday this year doing the rounds of the amusement arcades, I could not get my wife away from a game called Frogger. She normally hates the arcades but loved Frogger. I own an Amiga 500 computer and was wondering if you would know how I could obtain this.

*D P Bowles, London*

## ISSUE 20 JANUARY 1990

### Narrow minded

Why isn't the Amiga better known? I bought a modem and was having trouble with using a bulletin board. So I asked the sysop for help, telling him I was using an Amiga 2000. Displaying as much intelligence as a boiled potato, he asked if that was a PC or a modem.

Of course I explained that the Amiga is an advanced 68000 based multi-tasking system with graphics and sound processors which make the IBM look like a bad dream Sir Clive once had. But how do we get it through to the people in suits that the world of computing is much more exciting when you wiggle out of the big

blue straight jacket?

*Gerry Hall, Antrim.*

**This issue an external drive cost £75, an A500 cost £290, 512K cost £40, a 20Mb hard drive would set you back £300 and Commodore launch the A2500.**



# ISSUE 10 MARCH 1989

## Girls in computing

I am fed up with the way women are treated in computing. I've got a BSc in computer science and know what I am talking about. However when I go into a computer shop to ask about Amigas, the sales men all talk down to me. I am told how I could use Superbase Personal to keep recipes and how educational it could be.

I know these things. What I want is advice on what compilers are available, what the operating system is like and how to really get the most from an Amiga.

In the end I bought a machine from a cut price mail order company. I would have paid the full price, but only if the company offered decent back-up.

Tanya Al-Rais, Kent

## Pircay is not a crime

Most decent games cost over 20 quid. My friends and I get about half that every week in pocket money. The only way we can afford games is by clubbing together.

But I'm not going to fork out a fiver when my mate Rob gets to take the game home and I don't get to play it. So we copy it. If we didn't we wouldn't buy the games. I don't see why this should be illegal.

## Starglider shield

Do I detect slight radiation from the planet Argonaut in reply to Omar Farooq's query (Starglider slug January 1989) as to why Starglider II runs slightly slower on the Amiga than the ST?

If you treat the Amiga like an ST it will run slightly slower. It is more sensible to treat it like an Amiga. The whole point about the blitter is that it will co-process with the 68000 if the code is properly written. Used in this way it is very much faster than native 68000 code at screen operations.

Writing portable code to make life easier when you move programs from one machine to another makes commercial sense, but does not have a profound effect on the hardware.

To put it another way: My neighbour's push bike is a hell of a lot faster than my XR3, so long as I don't turn the engine on!

Jim Hawkins, London

# ISSUE 82 JANUARY 1995

## Art for arts sake

For some time I have been growing increasingly disenchanted with Amiga Computing, for a number of reasons:

The indiscriminate use of irrelevant electronic symbols linking text and headings. To anyone with the slightest knowledge of electronics, the apparent random use of symbols such as a battery, a transistor, a capacitor or other components when completely irrelevant to the text is simply nonsense and misleading.

The typeface generally used for the headings is also irritating and interrupts smooth reading. X and H appear very similar, to mention but one detail, and the whole affect is most unattractive. Your review of PageStream 3 makes me wonder whether I am using the same program. When my copy arrived a couple of weeks ago it was a disaster, to put it mildly, although after two updates from the Net it is a little better.

In addition, the arrival of December issue in mid-October seems utterly ridiculous.

Your review of PageStream 3 makes me wonder whether I am using the same program as you are. When my copy arrived a couple of weeks ago it was a disaster, to put it mildly, although after two updates taken from the net it is certainly a little better.

I have been using PageStream with various updates for some years and have found it excellent until version 3, but surely your marks in 'the bottom line' are somewhat over-enthusiastic to say the least?

**This issue an external drive cost £55, an A1200 cost £240, 1Mb cost £20, and a 200Mb hard drive would set you back £200**

# ISSUE 86 MAY 1995

## A helping ear!

I have only been using my Amiga 1200 for a year now and have tried reading numerous magazines. Out of all of them I prefer your magazine as it is easy to read and you give away some excellent disks.

However, I have encountered problems on two of your disks, Easy Amos and Anim Workshop. These, I think, could have been cleared up in a matter of minutes but instead I have to write in with the problem and wait for a reply.

Why don't you have a helpline so you could make things easier for everyone? This is the only reason I have not subscribed to your magazine. Please consider this...

Brian Goodfellow, Northumberland

In the past Amiga Computing ran a coverdisk helpline as a permanent feature. However, over recent months we've been running without a full-time coverdisk editor and unfortunately, until this situation is resolved I'm afraid the coverdisk helpline will remain inactive.

However, when a replacement is found, rest assured the helpline will be reactivated. If anyone out there is interested in the job feel free to send an application. Please mark your letter RE: coverdisk editor application.

Editors note: So I did apply, and I got the job, and here I am today. Funny old world isn't it?

# ISSUE 69 JANUARY 1994

## Cream crackered

I hate cream crackers, I really do. Apart from the fact that they always fall apart when you try to butter them and they stick to the roof of your mouth, their butter-smear flakes are a hell of a job to clean off floppy drives.

I hate four year-old sprogs playing with my disks even more. "OK son, just leave my disks alone or you'll break them. Where's the rest of your cream cracker, the bit you haven't spread all over my disks?"

The next day I found the soggy cracker when I tried to load a game into my Amiga. Yep you could say the disk drive was literally cream crackered.

The guilty party was confronted with the evidence. "But son, why did you do it?" I asked. "Well," came the reply, "it's the same shape and it did fit." Huh! "Anything fits if it's covered in butter, I muttered."

Mother acts for the defence: "Well if you

won't let your kids play with real disks, what else can they play on the Amiga with?" Good grief! I really do hate cream crackers.

Steve Clarke, Kempston.

## Impossible upgrade

Will there ever be an upgrade kit for the A500 to make it into an A1200? There was the ECS chip set upgrade and Kickstart 2.04 chip to make it into an A500 plus, so why not another jump up the ladder?

I don't want to get rid of my beloved A500 if I can avoid it, as I have too many peripherals which use the DMA slot. These would be useless on the A1200 unless someone was to produce an adaptor. Any chance of this?

Colin McGrain, Aberdeen

**This issue an external drive cost £55, an A600 cost £190, 512K cost £20, and a 200Mb hard drive would set you back £300**



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NetConnect is, of course, fully supported and the modules contained within Net Connect will be supported by the authors with minor upgrades, enhancements or bug fixes.

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We pride ourselves in offering superb after sales support to all our NetConnect/Internet users. We guarantee you will not get better free Internet related support from any other rival company. Support via telephone (Mon-Fri 10am-6pm), e-mail, mailing list (general NetConnect forum) and the web site ([www.amigaworld.com/netconnect](http://www.amigaworld.com/netconnect)).

Our aim is to help users with their Internet connection after they have purchased Net Connect and we understand that the Internet can be a daunting experience for the beginner.

Issue 2 of our Internet magazine 'Internet Informer' should be available within September. This is a quarterly magazine with the latest information about the Internet and your Amiga - NetConnect users receive this magazine free of charge!

## NetConnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple, with version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! **Amiga Format** concluded about NetConnect v1 (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features. NetConnect v2 is available on CD-ROM and floppy disk. **Specifications include:**

- **New AmITCP** - NetConnect v2 users will be the first people to use a version of the new AmITCP! We have added a number of changes to this new version - the main additions are the new Wizard, MUI based dialer and 'events' control.
- **AmITCP Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic! This is true Windows95 style connectivity! See the two example pictures - point and click Internet configuration!
- **New programs** - NetInfo and X-Arc (X-Arc is a brand new WinZIP style archive management tool. Downloads lha/lzx files from Voyager/AmFTP/Microdot-II, auto-extracts them into X-Arc's GUI and allows you to control the files).
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras** pre-configured MIME types (CD only), datatypes (CD only), online help files etc
- **Updated, latest versions of the modules** (Voyager, Microdot-II, AmIRC, AmFTP etc)
- **Printed installation/introduction guide** - install NetConnect quickly and easily
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NetInfo is a new program by Oliver Wagner to search the net - traceroute, ping, services etc.

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### X-ARC

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STFax Professional is new commercial fax program for the Amiga containing the sort of advanced fax features you would find within commercial PC fax software. STFax has been in the shareware for the last few months, and the brand new commercial "professional" version offers even more advanced features plus some voice control for voice modems.

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- ARexx port
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## TOP 10 TIPS

Having used an Amiga for the last seven years or so, Neil Mohr has picked up a little knowledge about them. Before he disappears into the editorial wilderness, he would like to bestow this knowledge to you, our beloved readers, oh yes he would, so shut up and bloody listen.

### 1. Wait for ALL disk activity to STOP

This must have killed more files, disk and hard drives than anything else. Before you pull out a floppy disk or reset your machine, or just go on to use another program, wait for your last program to finish writing to the disk. The classic is pulling out a floppy disk before a program has finished writing to it and usually results in lots of read errors and a reformat of the disk, so no big problem.

The big problems start when you interrupt writing to your hard drive, either by resetting it (naughty) or a program happens to crash while another is writing to drive (annoying). This will general result in the drive becoming invalidated, and more often than not the file system cannot fix the fault itself.

The only way to fix this is to resort to a third party program such as DiskSalv or AmiBack. These will scan your hard drive and fix or remove any problems they come across.

### 2. Have an emergency recover disk

Related somewhat to tip one. If you have a catastrophic hard drive problem that destroys your boot partition you are going to need an escape route allowing you to get your drive back up and running as easily as possible.

The simplest way to create this type of disk is to make a copy of your original Workbench disk. To do this insert your Workbench disk in internal floppy drive, select the disk icon and from the Icon menu select the copy item. You of course need a blank floppy before you do this. The only program you really need is your file recovery program, either DiskSalv or AmiBack. Both are around 200k, so before they can fit, a few files need to be removed from the copy of your Workbench disk you have just made.

Right, we're going delving around the Workbench files. Double click the disk icon, select the window that has just opened and from the Window menu choose show/all files. Next delete the Utilities drawer, don't need any of that stuff.

Open the System drawer, select and delete; FixFonts, Format, NoFastMem, REXXmast and DiskCopy as none of those are really needed. Now go into the Libs drawer and delete, rexxsyslib.library, rexxsupport.library and amigaguide.library. Finally, from the C drawer you can get rid of Ed and Edit, you should now have more than enough room for either DiskSalv or AmiBack.

If you want more room you can delete the following quite safely; everything found in the L drawer; amigaguide.datatype in the Classes/Datatype drawer and the printer.device from the Devs drawer. The whole idea is that if the worse should happen you always have something to fall back on, so keep the disk in a safe place – but not so safe you forget where it is.

### 3. Constantly save your work

No matter which type of computer you use this tip will always hold true. I do not trust computers, there are so many reason why they can just stop working and take all the work you have done that day with it. So every time you stop to think press that right Amiga and S key, I just did then. If the program supports autosave then use it, but even so save regularly yourself. It is a good habit to get yourself into, sometimes I find myself saving work after the end of every sentence.



This month's ACAS has been unexpectedly taken over by the surprisingly sober Neil Mohr



AmiBack has saved the Amiga Computing hard drive many many times over the years

### 4. Get to know your Amiga

Again, this is a tip that holds true for any type of machine. Try and learn a little about your Amiga, you do not have to know everything, but by reading problem pages you will start to recognise symptoms for common problems that arise. Things like assigns, wrong library files, badly configured DOSDrivers are common problems that are easily fixed if you have the basic knowledge and skills. So if you come across the problem, you can diagnose and fix it yourself.

### 5. People without hard drives

For anyone that bought their Amiga (and is still using it) without one, a good tip is to go out and buy a hard drive right now. You have no idea what a hard time you are putting yourself through. If you own an A1200 I'm sure you could pick up a second hand 40 or 80Mb IDE drive for next to nothing from a PC shop. For modern PCs, drives of that size are useless but Amiga users can still get away with such small drives. Personally I would still recommend going for at least 500Mb, but then my Workbench is 100Mb.



## 6. Separate Workbench partition

One way to save yourself a lot of grief is to make sure you have all your important Workbench files stored on a separate partition, then have all your program and data files stored on another partition. This reduces the chance that you could destroy your boot Workbench partition, so making it impossible to boot your machine, as you are more or less exclusively using your work partition.

Here at Amiga Computing towers, we have a separate 120Mb Workbench drive and a 1.2Gb Work drive and I cannot remember once losing the internal drive to validation errors – the external drive is another story, at one point it was going down several times a day.

## 7. Upgrade your machine

It is the one thing I have never regretted doing. Through all the years, whenever I added to my Amiga, the pay back was always instant and obvious. With my A500, extra memory allowed me to do more, and an external hard drive let me do it more quickly.

On my A1200 more memory made the machine twice as fast and allowed me to use much larger documents and graphics. A monitor allowed me access to 1:1 ratio screen modes and a larger work area. The Surf Squirrel greatly improved Internet access and the access it gave to external SCSI devices such as Zip and CD drives made my life much easier. Finally, with a fast accelerator, a half gigabyte internal drive and access to virtual memory I am never left wanting with the A1200.

## 8. Get these programs

As there has been no development of the operating system since the A4000 came out back in 1992, the Amiga still lacks some fundamental necessities and more general points that would make it a polished product. To get around these limitations I suggest you get the following programs (all these have been on past Amiga Computing disks, but if you have missed some here is the list). They are all PD so will not cost you an arm and a leg.

**MCP or MultiCX** – Either of these will do, personally I go for MCP but many still prefer the simpler and smaller MultiCX that also does an admiral job of fixing all those little holes in Workbench and AmigaDOS

**MagicMenu** – simply makes those dull pull down menus a much more pleasant experience

**ToolManager** – Whether you use version one, two or three this is the best way to add menus, Applcons and even docks to Workbench

**WBStartup+** – Adds extra control to your WBStartUp drawer

**ClassAction** – A multifile recognition program that allows you to handle all your different file types through a single program icon

**SwazInfo** – Replaces the rubbish Workbench icon information window with a much better one

**PowerSnap** – Written by Nico Francois, PowerSnap gives as close to global cut and paste as the Amiga is going to have

**KingCON** – Replaces the old Amiga Shell with a far superior version with menus and a scrollable buffer

## 9. Backup your files

One thing that is mentioned more than any other but rarely per-

formed is backing up your program and data files. There are a few ways to go about it. Either back your entire drive up, this takes ages and is not really necessary. Secondly, you can have a single drawer in which you store all your data files and simply back this up. This is very quick and as long as you store away all your original program disks if you do lose your drive you can get back your all the important files.

The final way is to rely on the Amiga's archive bit, every file as an archive attribute bit attached to it. A backup utility will set it and if at any time after your last back up the file changes the bit is unset and next time you do a backup this is noted and the new version is backed up again. Personally, I go for the second option.



***ABackup is a wonderful backup program***

## 10. Get on the Internet

Magazines like Amiga Computing are all very well and good, they do provide good expert information of the latest Amiga products as well as tutorials, tips and news, but anything that appears in print is generally at least a couple of weeks old before you get your hands on it, simply due to the printing process.

If you want to get the latest Amiga news, information and programs you need to be on-line. Internet services such as IRC allow news to be passed on almost instantly, and superb Web sites such as the Web directory and Amiga Flame give a central hub for the collection of Amiga related news and developments.

The Internet also offers the best way to get hold of the latest PD and shareware programs from Aminet and, with just about every company now on-line, it is easier than ever to get product support via e-mail and downloadable program updates from their related sites.

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Updated July 19th 1997

Don't forget the World of Amiga press conference audio files are still available from [Lance](#) and for people with slow connections a [text only version](#) is now on-line

As usual everything has been updated for the September issue, that you should be able to pick up on July 27th.

Best wishes,  
*Ned*  
Ned Mohr, Amiga Computing

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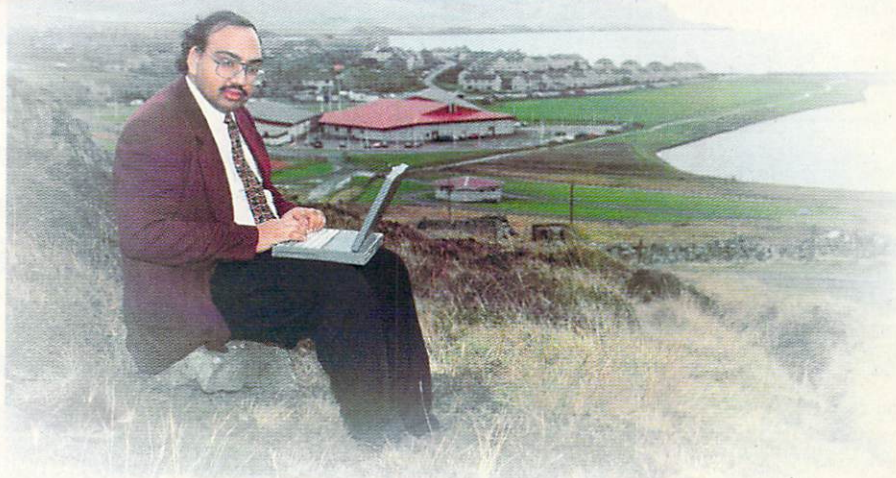


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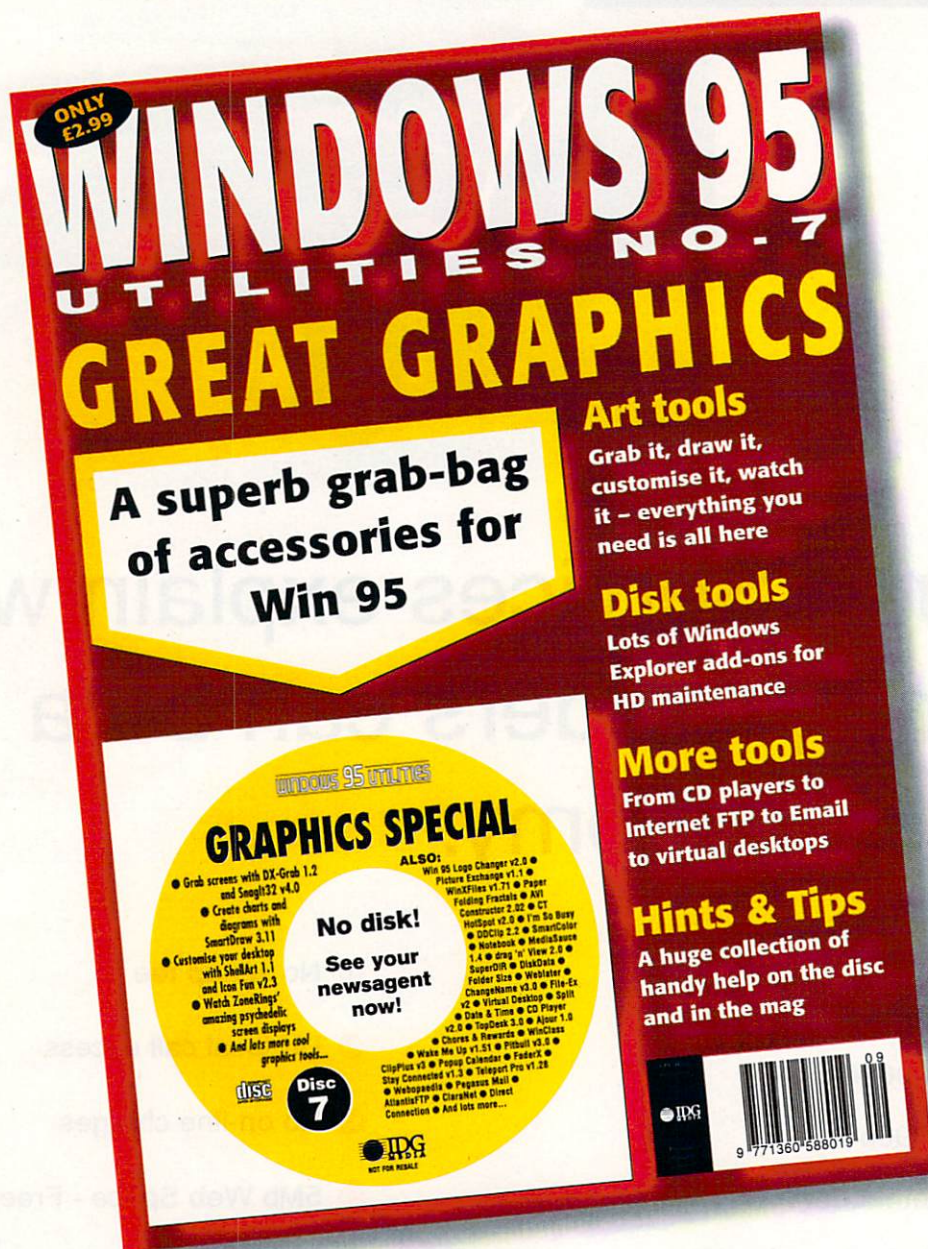
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**C**ome in, number nine, your time is up. Since this is the last ever Public Sector, in addition to a handful of the latest and greatest releases, I've decided to share with you not only a selection of the most indispensable PD and shareware utilities ever, but also a collection of my thoughts on the future of our beloved machine. A fond farewell to all, and, as Dave Allen used to say, may your God go with you



And in the end, the love you take is equal to the love you made. **Dave Cusick** takes his final stroll down Shareware Street, and sits thoughtfully contemplating life after AC on a memorial bench in PeeDee Park

## STAR BOY

Programmed by: Fire Fly Productions  
Available from: Saddletramps PD  
Disk No: G77

Although it owes more than a little to the classic platformer, James Pond II: Robocod, Starboy is probably the best game of its kind to appear on the Amiga for several years, even if full commercial releases are taken into account. Available as a full licenceware release but with a PD demonstration version also obtainable for just 80p plus postage, Starboy is a colourful, entertaining and absorbing platform romp. I've only seen the 11 level demo, but it's enough to convince me that purchasing the full game would be a worthwhile investment.

The appealing main sprite has an array of moves at his disposal. As well

as leaping from one platform to another to progress through the levels, Starboy can throw stars at the baddies that block his way, press switches to lock or unlock doors and even swing from ropes so as to get across chasms.

In an effort to inject added longevity into what might be considered a fairly passé genre, in addition to the standard platform-based levels there are a smattering of graphically pleasing, horizontally scrolling, blasting stages too.

With glorious parallaxing visuals, decent sound effects and a bouncy title tune, the presentation of Starboy is impossible to fault. It's also chock-full of small puzzles, helping add a

## GAME OF THE MONTH



**Dynablaster:** This is how all computer games should be made

genuinely addictive edge. The full version of the game includes 55 levels of action, with five different graphical themes, and is available for £3.99 plus 50p postage.



Starboy offers some truly addictive gameplay...



...even if it is an unashamed clone of Robocod



## OUT OF SPICE

**Produced by:** Kinky  
**Available from:** SaddleTramps PD  
**Disk No:** D38 A&B

They've taken on the establishment, and doubtless shocked many old Sage pensioners. They wear revealing cloves in which more sweet and innocent girls would feel a mite chilli. In the short thyme that they've been around, they've already broken a host of chart records and changed the chives of many pre-pubescent girls. They seem to be cumin more popular by the day. This autumn you may find that a lads' Friday night out no longer consists of a coriander few beers; instead

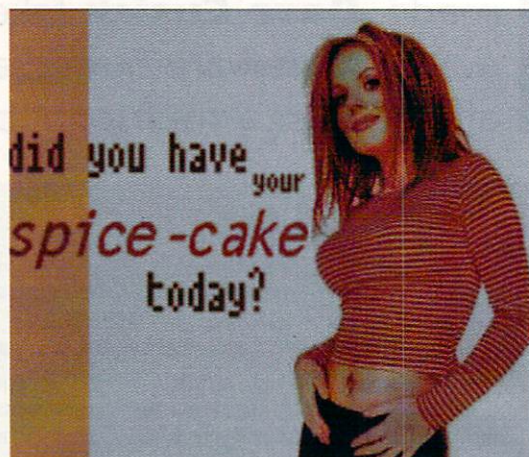


they will be nipping down the local cinnamon to see Spice Girls: The Movie.

In a few years, the Spice Girls will have been and tarra-gon, and much like this column they'll be nothing more than a dim memory in the minds of the masses... then we can all be chervil. In fact, I do confess that I mar-jor-am reviewing these disks parsley because there was orega-no way I could miss the opportunity to pack as many poor spice puns as I could think of into one of my final Public Sector reviews. I just couldn't keep the temptation at bay. I do apologise; I shall end your saffron now, dear reader.

Out Of Spice is an AGA-only demo featuring a fairly tuneful sample of

the famous five, a few slightly grainy scanned pictures of selected Spices, and the usual smattering of moderately impressive visual effects. It does not last for a particularly long time but, unlike the vast majority of demos, you might actually want to dig it out of your diskbox more than once to show people. Or then again, you might not.



## CHRISTMAS CARD MAKER

**Produced by:** Classic Amiga Software  
**Available from:** Classic Amiga Software  
**Disk No:** PA118

I realise it's a little early to be thinking about the season of good will, but AC won't be around when December comes and, as Lord Baden-Powell was keen to emphasise to young boys everywhere, it pays to be prepared.

Christmas Card Maker is an example of an extremely good idea which should inspire creative types to produce some genuinely impressive results. It is a collection of small Christmassy images and verses which can be pasted onto a supplied master page using any decent paint package. The image can then be printed out to make an extremely cheap but nevertheless reasonably good-looking Christmas card.



...it's the season of love and understanding; Merry Christmas everyone



Snow is falling all around me, children playing having fun...

There are five verses, several "Merry Christmas" messages and a dozen or so snowy scenes, which can be combined very easily in DPaint, Personal Paint or any one of a wealth of other packages.

A potential problem with the bitmapped image-based approach Christmas Card Maker takes is that such graphics can, unless created at an extremely high resolution, tend to look jagged or blocky when output. Although the snowy scenes provided are all only around 320x256 pixels and have to be output at a size of around 115x70mm, the finished cards don't actually look too bad. The results obviously aren't going to be on a par with commercially available cards, but they look a whole lot better than Blue Peter-esque hand-made efforts.

As I have already suggested though,

the most important quality of Christmas Card Maker may actually be that it will inspire many Amiga users to have a go at designing their own cards – even if they do so using graphics from elsewhere, or a DTP program as an alternative to an art package so as to obtain higher quality text output. As such, this represents another in a long line of simple but sensible disks compiled by Classic Amiga Software, and although some of the images and verses supplied are a little disappointing, there should be enough here to really get your creative juices flowing.



And here's the finished product. Impressive, most impressive



# FAYOH

Programmed by: NC Gamez  
Available from: Classic Amiga Software  
Disk No: G528

This is a cutesy platformer in the mould of the massively successful Mario series available for the Nintendo consoles. Fayoh is still under development, and so this disk only contains a 5-level demonstration version of the game.

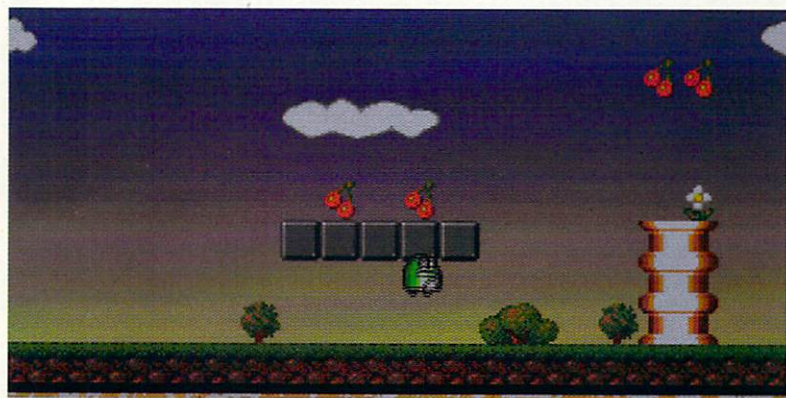
The titular hero Fayoh is in actual fact a green fruit gum, who has lost his heart to a "pink 'n'cute" female fruit gum. Unfortunately, he's lost her too, and so he must traverse a colourful platform landscape to find her once

more.

The graphics are extremely bright and attractive. In addition to the pleasant gradiated backdrop there is even a simple parallax scrolling effect, making the game especially pleasing visually. The music is suitably cute and inoffensive, although I doubt that you will find yourself whistling it in the shower.

I feel that I ought to be extremely fond of Fayoh, but I have a couple of reservations about wholeheartedly recommending it. Firstly, perhaps owing to the fact that Fayoh was written in Blitz Basic rather than in C or Assembly language, on a standard A1200 the action

is a tad pedestrian, although on faster machines things become slightly more frantic. Secondly, the game crashed a couple of times during testing (although admittedly this only seemed to happen when the program was started from the Workbench, and not when I booted from the Fayoh disk). Still, Fayoh has not yet been completed, so perhaps the bugs will have been ironed out of the finished version. The full game is set to include 28 levels and various different graphical styles, and will be available to those contributing a shareware fee of between £6 and £10.



Fayoh offers cutesy platform fun for all...



...although it's not yet complete, so there are only five levels to explore

## THE DLP COLLECTION

Programmed by: David L Papworth  
Available from: Classic Amiga Software  
Disk No: G527

This is a collection of David Papworth's gaming creations of the last few years.

Mad Bomberman is a fairly simplistic game but will nevertheless provide a few minutes of entertainment. At the top of the screen the eponymous bomberman peers over a wall and drops a series of bombs which you must collect in a blue container. If any bombs get past you, you lose a life. If you manage to collect them all, then he drops another series of bombs, except this time they'll fall faster and there will be more of them. It is not the most intellectually demanding of games, but I've certainly seen worse.

Obliteration is a Pang clone. You take control of a Turricon-like sprite packing a directable firearm, and you must destroy several asteroids bouncing around the screen. Larger asteroids split into smaller ones when hit, so if you are not careful you can end up with a large number of rocks hurtling around the screen. Unsurprisingly, if your warrior is hit by an asteroid then he will lose a life.

Atom Smasher is a cracking maze

game which reminds me of an old Acorn Electron game called Pengi. You (and a friend, if you've got one) take control of a little robot chappy wandering around screen after screen populated by meanies which can only be destroyed by pushing blocks into them. With beautifully smooth graphics and an impressive turn of speed, this is hugely enjoyable, frantic fun, especially when played in the cooperative two-player mode.

Super Obliteration (originally reviewed in issue 81) is, unsurprisingly, an enhanced version of David's earlier effort. It is not radically different from the original, but the graphics seem a little tidier and there are a host of new levels to try.

In addition to Vector Battle Ground, a reasonable enough tank game, there is also a demonstration version of David's Licenceware classic, Outfall. This is a clone of the Megadrive gem Mean Bean Machine, and it is undoubtedly one of the greatest two player games available for the Amiga.

If you don't already have Atom Smasher, Super Obliteration or Outfall, this disk represents an essential purchase. Catering for a wide variety of gaming styles, it comes highly recommended.

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# COME TOGETHER

Every month for around a decade, Public Sector has tried to bring you the very best in PD and Shareware. Over the 39 issues in which I've been in charge of the column, there has been a constant stream of submissions both from Public Domain libraries and from individuals, and I'd like to thank you all for your support. As Neil joked to me the other week, there have been times in recent months when it has seemed like this column has contained the only new software arriving in the AC office. Writing the last ever Public Sector has been quite a sad experience; I would like to think that this column, into which I've poured more of myself than anything else I've written for a magazine, has provided some amusement over the years as well as helpful information and opinions.

Although we all hoped this day would never come, for a while now it has seemed something of an inevitability. The good ship Amiga Computing has sailed its final voyage; the crew must toddle off to pastures new and those who enjoyed the precious bounty it bore must now find an alternative purveyor of provisions. So what will you do now, dear reader? Will you abandon the Amiga altogether, convinced that the end of AC marks the final nail in a coffin within which our beloved machine has been languishing for some time? I would hope not; and if you are to follow the flock and purchase a PC, then I would at least suggest that you keep hold of your Amiga... just in case. At least then you'll be able to return if the possible Power Amiga revolution materialises, and even if it doesn't, you'll find the PC is not a beast which is easily tamed.

That said, I strongly suspect that, if you've stuck with the Amiga this long, you will be willing to carry on the fight after our departure. It could be that you will turn to one of AC's competitors... whilst this is not the first Amiga magazine to wave a fond farewell, it isn't the last either, and there are others still flying the flag. (One of them is now home to erstwhile AC editor Ben Vost, and indeed yours truly will continue to churn out PD and Internet pages for that publication for as long as he can).

On the other hand, you might decide to follow a large number of dedicated Amigas onto the Internet. There are so many excellent Amiga resources on the Net now that you should always be able to keep up to date with the latest developments in the software and hardware markets (and my Public Sector web-pages at <http://www.dcus.demon.co.uk/> will remain in place for the foreseeable future). With any luck, at least some of these sites will be championing the Amiga long after this humble column has become but a distant memory in the minds of computer users everywhere.

## I WANT YOU (SHE'S SO HEAVY)

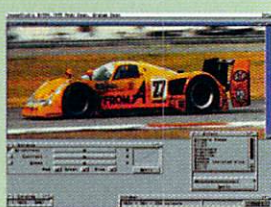
I know it's a tad corny, but I couldn't resist the temptation to award some sort of Public Sector awards to the best pieces of software to have been reviewed in these pages. In issue 114 I ran through the best in PD and shareware games, so here, for your deliberation, cogitation and digestion, are a handful of "serious" programs no Amiga owner should be without. If you don't already have them, ring up your favourite PD library and order them now.

## MAGIC USER INTERFACE

I've currently got v3.8 installed, although by the time you read this that could easily be out of date. This is without doubt one of the greatest pieces of software ever written for the Amiga. As means of providing programmers with extremely easy-to-produce interface routines and providing users with a highly configurable, not to mention extremely attractive, front-end, MUI is simply in a league of its own. Some will say that ClassAct uses less memory, or BGUI is more compact. To those people I say that several thousand Amiga users and literally hundreds of Amiga programmers simply can't be wrong. Get hold of a copy, register with SASG, and enjoy.

## IMAGESTUDIO 2

Everyone needs an image processor, and they don't come a lot better than ImageStudio 2. Programmed by Graham and Andy Dean, whose latest masterpiece DrawStudio is available commercially through LH Publishing, this is the definitive shareware graphics package. It can read and write every image format you'll ever need to deal with, and it boasts a stunning arsenal of effects too.

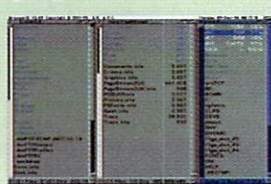


## MASTER CONTROL PROGRAM

The commodity that does everything, MCP is an absolute essential for any self-respecting Workbench user. It demands a fair bit of memory, a fact which has led some to use MultiCX instead; but that is an inferior program in terms of features and, let's face it, most Amiga owners these days own powerful enough machines to run MCP on.

## BROWSER II v3.09

If you can't afford Dopus Magellan then, at least until Workbench 4, WorkbenchNG or a similar replacement Workbench appears, this is probably the single most dramatic change you could make to your daily file-handling. It won't be to everyone's taste, but it is user-friendly, highly configurable and has the potential to radically increase your productivity.



## NEWLCONS 3

Not everyone fancies Magic Workbench, particularly if they have a fancy graphics card which is capable of running Workbench in a plethora of colours. Newlcons 3 offers a rather more bright colourscheme, and although icons will look completely stupid on non-patched systems (they'll appear as a tiny blob), on suitably configured systems they look extremely attractive. They're a tad slow on lesser Amigas however. Newlcons 3 won't be for everyone; but it's one of those programs that if you don't hate, you'll love.

## TOOLMANAGER 2

There's a newer version, but if anything the new user interface overcomplicates what was already an immensely powerful, if slightly illogically designed, user interface enhancement. You can add items to the Workbench Tools menu and you can configure icon docks, with the end result being a far more sophisticated Workbench in which all the most powerful applications are available within a couple of clicks.



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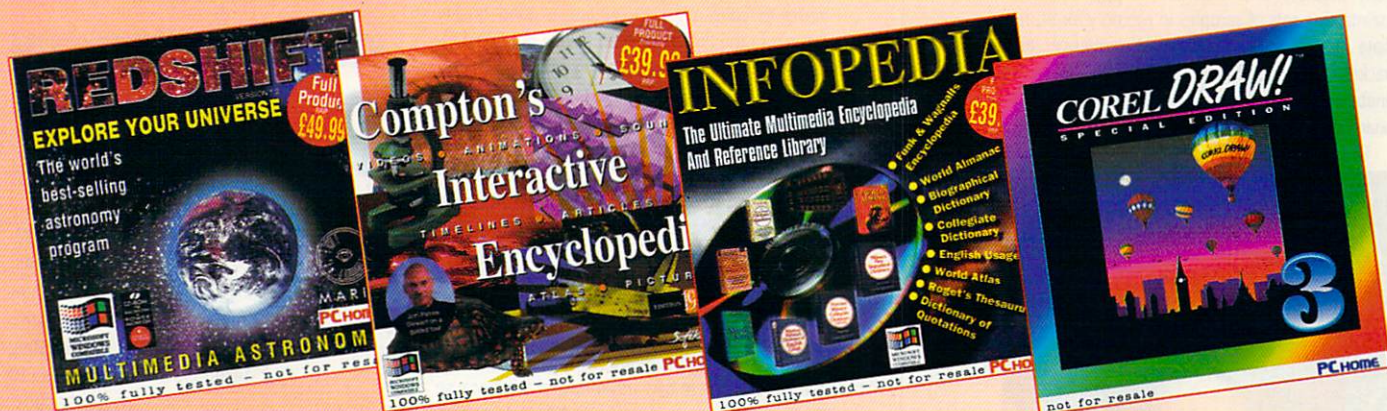
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Paul Overaa brings you up-to-date on a sampling package



# TechnoSound Turbo 2 Pro

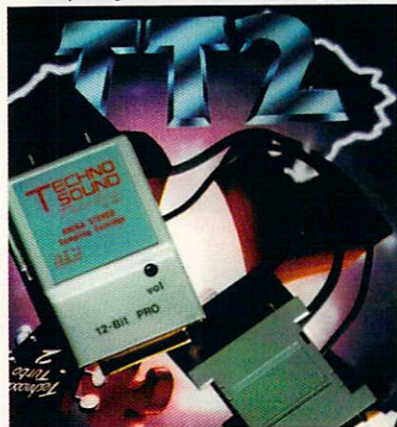
**W**hile other platforms seem to have almost discarded 8-bit sound sampling (or at least keep very quiet about it), like it or not the 8-bit world is still the norm for most Amiga users. One company that has been making samplers for almost as long as the Amiga has been in existence is New Dimensions, and early last year it brought out an updated 'Pro' version of its popular TechnoSound Turbo 2 sampler.

One improvement was the move to 12-bit sample processing on many internal routines. Although the main reason for the higher accuracy routines was to allow the software to be used with New Dimension's own 12-bit sampler (which is now no longer available), the extra accuracy did however reduce potential quality loss even when manipulating 8-bit samples, so overall these new enhancements were of benefit to everyone.

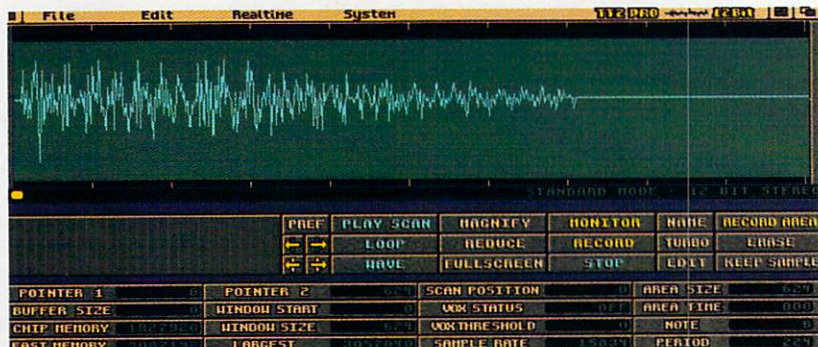
I should also mention that not all processing carried out by the software is being performed using 12-bit calculations. You've still got 8-bit direct to hard disk recording, and real time effects like phasing, echo, delay and the special Funtime 'novelty' effects (e.g. Pinky & Perky, Dalek and so on) are also performed in 8-bit mode because high conversion speeds are needed.

The TurboSound software itself is fairly comprehensive. As well as the main range of digitising, sample editing and manipulation functions, there's a 'ramscan' option for grabbing samples directly from memory and 'edit list' arrangements for maintaining sets of samples in memory for immediate use. There's also integral sequencer and tracker facilities and a useful Midi module which enables samples to be triggered using a Midi keyboard or external sequencer.

The package has some nice filtering routines



New Dimension's 8-bit sampling cartridge



TechnoSound Turbo's software has undergone various improvements over the years

and a facility for editing individual channels. Digital filtering essentially means applying certain mathematical transformations to the digitised waveform – you can, for example, use a low pass filter effect to remove unwanted hiss from a sample. TechnoSound Turbo can apply low pass, high pass and band pass filtering using either the Butterworth or Chebyshev filter equations. You can view frequency response graphs that show predicted amplitude attenuation and even get a display called a Z-Transfer plot.

Now all (this unless you are actively involved in the world of digital signal processing techniques) is likely to sound a little high powered (the theory behind it certainly is). The best thing to do is just let your ears be the judge, remembering that it's far better to concentrate on getting a good quality sample in the first place than to rely on digital filtering to improve things. Having said that, there's no doubt at all that TechnoSound's filter and real-time effects are good fun to experiment with!

## ON THE LINE

Despite the fact that nowadays the TechnoSound Turbo Pro 2 software is only ever bundled with 8-bit hardware, this makes an excellent basis for conventional 8-bit sampling. Talking of hardware, one alternative to the TechnoSound offering is of course HiSoft's Aura sound sampler. Make no mistake, this package is good (very good) but not everyone is able to take advantage of this because the Aura hardware requires a PCMCIA slot. In short, this effectively means that the Aura option is only available to A600/A1200 owners and users of other Amigas must follow different pathways.

It's also worth remembering that anyone with earlier versions of the TechnoSound Turbo sampler can, for a modest fee, still upgrade their software and this is clearly a worthwhile option.

Let's face it, despite the 16-bit or nothing 'hype', for many purposes 8-bit sampling is perfectly adequate and samples are inherently smaller in size than their grown up 16-bit relations. Of course when you combine hardware such as is provided with the TechnoSound package with other music software (such as the OctaMED Sound Studio), then the door really opens. Time and time again musicians have shown that combinations like this can enable you to produce tracker modules second to none.

## Bottom line

### REQUIREMENTS

RED essential BLACK recommended




### PRODUCT DETAILS

Product	TechnoSound Turbo 2 Pro
Supplier	New Dimensions
Price	TT2 Pro software with 8-bit hardware £39.99 Software upgrade for existing TechnoSound Turbo users £10
Tel	01291 690901

### SCORES

Ease of use	80%
Implementation	90%
Value For Money	80%
Overall	80%





# Random Access Files

```
field names:
sizes (bytes)  20      20      10      10
```

```
surname=surname||Left(surname,20,BLANK)
```

```

InitialiseMain: Procedure
arg filename, record, record_count
if Open(main,filename,'w') then
do
do i=1 to record_count
call WriteRecord(main,record,i-1) end
Close(main)
end
return

```

```
record=record||Left(' ',field size,BLANK)
```

**Try using the `setup.rexx` program with your own file definitions then look at the created files**



Neil Mohr has  
some horrible  
flashbacks to his  
school days



# Learn your tables boy

**R**ight, tables. These are one early addition to the HTML standard that was desperately needed. With a little bit of planning you can get quite complex layouts that would be otherwise unattainable using the normal HTML tags available.

A table allows you to define a rectangular space in an HTML document. This space can be split into any number of rows, which themselves can have any number of cells held in them. It is in these cells that you can place text and pictures. The easiest way to think about tables is as a grid, and each cell can contain text or pictures.

Before I describe the various tags associated with tables I should say that the way you go about creating tables is very important. Once you have started, you define the table on a row for row basis. That is, you start your first row, say what cells you want in it, then go on to the next row.

```
<TABLE
WIDTH = "pixels|percentage"
BORDER = "..."
CELLSPACING = value
CELLPADDING = value
CLEAR = left|right|all
BGCOLOR = value
NOWRAP>

<CAPTION></CAPTION>
<TR><TR>

</TABLE>
```

Quickly looking at the table attributes -

WIDTH allows you to say how wide the table should be in either pixels or a percentage of the browser window. Most people only use a 640 wide window, so you could constrain table to, say, 600 pixels wide.

Cellspacing and cellpadding allows you say how many pixels should be left blank between cells and around the cell's contents. CLEAR stops text flowing around the table. Only one caption tag is allowed within a table.

A new table is defined by using the <TABLE> tag, the end of the table is shown with the close tag </TABLE> the table definition has to be contained within these two tags. To add a new row to the current table, use the <TR> table row tag, within this you can add as many <TD> table data cells as you like. These two tags do have corresponding close tags, but generally browsers automatically assume them closed when they come upon another occurrence of the same tag. So when a browser comes across a second <TD> tag, the first is closed. Quick example:

```
<table border=1>
<tr>
<td>cell 1
<tr>
<td>cell 2
<td>cell 3
</table>
```

This creates a small table with three cells in it, one on top and two below. The browser will automatically size the table - to precisely fill the cells. This is how the generic table works. Creat-

ing tables like this is a good way of testing them before you add the clutter of image and text tags.

So, as you can see, basic table use is simple. It allows you to place graphics and text a little more neatly on screen, and of course using the <P ALIGN= ... > tag you position it on screen to some extent.

To make tables more flexible in how they lay out the cells, a number of attributes are provided in the <TD> tag.

```
<TD
NOWRAP
ROWSPAN = value
COLSPAN = value
ALIGN = left|right|center
VALIGN = top|center|bottom
WIDTH = pixels|percentage
BGCOLOR = value>

body text

</TD>
```

Straightforward tags such as VALIGN and ALIGN allow you to force cell contents to middle or sides of a cell. Again, with width, you can try to force the browser to restrict the size of individual cells, but this may not always be possible. BGCOLOR lets you specify a value such as #ffffff, for white, and so colour individual cells.

This leaves ROWSPAN and COLSPAN - two very useful attributes that allow you to break up the otherwise grid like layout. One example would be if you inserted COLSPAN = 2 into the first <TD> tag in the previous example. This makes that cell spread across the top of the other two.

ROWSPAN is a little more tricky as you have to make sure your following HTML corresponds to the number of rows you have stated. This allows you to create a column in a table - great for running blocks of text down your page.

Again, adjusting the last example, change the COLSPAN to ROWSPAN and make it equal 3, and insert a <TR> between the <TD>Cell 2 and next <TD> tag. Reload the page and you will see the first cell runs down the left side. (By the way setting ROWSPAN or COLSPAN to zero means span all rows or cells.)

Oh dear, it seems I've run out of space and out of issues, for good use of tables check out the AC Web site at [www.idg.co.uk/amigacomp/](http://www.idg.co.uk/amigacomp/) The index page is fairly complex and the ACAS page adds margins that look better.

## I NEED MY OWN SPACE, MAN

Just before I go for good I think it is worth mentioning one little technique that I have come across a few times on my travels around the Web. Commonly known as the single pixel GIF 'thing' it gives you a way to get more accurate layout outs, well essentially pixel perfect layout.

Before you can start you need to create your self a transparent single pixel GIF image, either Personal Paint or Photogenics 2 should do the trick. So what use is that you may be asking yourself, well using this in conjunction with the IMG tag's WIDTH, HEIGHT or HSPACE and VSPACE attributes you can space to your Web site or white space as it is known in the Publishing industry.

So how do you use this then, well say you want to run a margin down the side of some text, all you would do is at the start of the text insert the line:

```

```

Now there are a couple of things to consider here, firstly AWeb does not support image scaling, so in AWeb this would not work. So the alternative would be to use the spacing attributes which would look like this:

```

```

Remember that the space adds the same amount to either side, so only half the number of pixels need to be used. Again this will work in AWeb and iBrowse but not in Voyager, but really it is the more correct way of using this technique, how hum, I sure this will added soon.



Paul Overaa uses  
Electronic Arts'  
cmpByteRun1  
compression to  
provide a few tips



# Function Conversion

I had an e-mail from a guy called Ian Howle a few weeks ago who, though heavily into 680x0 coding, was having problems displaying IFF pictures. The data in these files is normally compressed using a technique called cmpByteRun1 compression and the difficulties related to the decompressing of ILBM body chunk data prior to jamming the resultant graphics bytes into a screen's bitplanes. In short, some 680x0 code was needed to handle the decompression work.

The standard way of doing this is to use a routine called unpackrow() which was placed in the public domain by Electronic Arts. Like many coders, I wrote my own decompression routine in the early days in order to make sure that I really understood how the cmpByteRun1 scheme worked and, once I had written it, have tended to use it in place of the standard code. My version was written in C and it was only when the above query cropped up that I sat down and produced a 680x0 version.

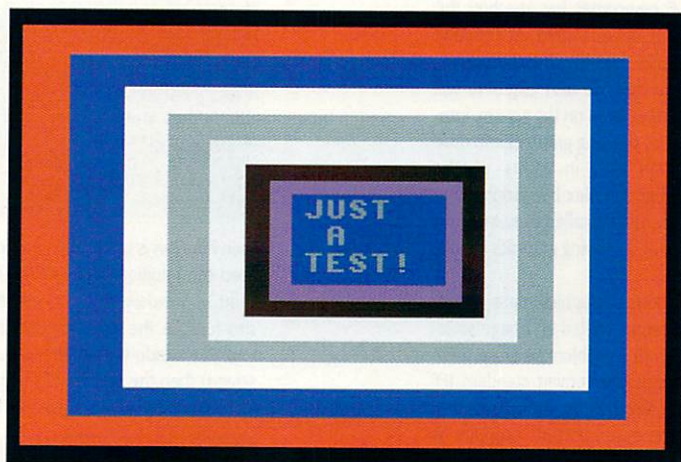
The translation of a C routine into a 680x0 equivalent is not usually that difficult. The most important thing, as you might expect, is to have a detailed understanding of what the C code is doing. Luckily the algorithm for the decompression in this case is simple: You read through the IFF body chunk data looking at each byte treating them as "signed" numbers.

If, while reading the source info, you find a value between 0 and 127 you then read and copy one more than that number of subsequent bytes to the chosen destination. Reading a value of 10 therefore means you copy the next eleven bytes of the source (i.e. the body chunk) to the destination (a bitplane).

If, on the other hand, the byte read is negative you do one of two things: If the value lies between -1 and -127, instead of copying bytes you disregard the sign and duplicate the next byte that many times plus one. Values of -128 are even easier to

```
do
get byte n
if n >= 0 {
  increment n and update current row length
  copy (n+1) bytes
}
else {
  if n != -128 {
    negate n, increment n and update current row length duplicate
    (n+1) bytes
  }
}
}while(condition);
update original pointer values
```

Listing 1: Basic framework of the  
C code (excluding error handling)



Here's the  
little test  
program used  
to check the  
680x0 routine!

deal with because you simply ignore them!

The normal reason for producing a 680x0-based version of a C routine is either to gain additional speed or to allow for easier use in assembly language programs. That said, whenever I do any of these translations I always code it initially as though the routine will be used from C. Why? - because in most cases this enables any new equivalent 680x0 version to be tested using the same program that the routine was taken from. You simply comment out or delete the C routine (keeping the function prototype of course) and instead link your C code with the object code produced by the assembler.

If, for simplicity, we ignore the problems of error handling (which involves checking to see that oversized screen display rows are not produced) then the basic framework of the routine in C-ish pseudo-code is that shown in listing 1. Creating a 680x0 version just requires us to produce the same overall structure - you can see how I've done this in listing 2. Once this plan is available translation becomes simply a matter of hanging suitable code onto each of the sections and you'll be able to get these details from the coverdisk example code.

I've also put my C version of the cmpByteRun1 unpacking routine, UnPackRow.c, on disk and you'll see that it has this function prototype:

```
BOOL error=UnPackRow(BYTE **source_p, BYTE  
**dest_p, WORD rowSize)
```

Notice that the first two parameters are 'pointers to pointers' - in other words this routine expects to be passed the addresses of the source and desti-

nation pointers. The reason is that the routine needs to modify and update the source and destination pointers each time it is called and it can only do this if it knows whereabouts in memory those pointers are kept.

For the parameter passing, incidentally, I've opted for the conventional stack-based approach and you'll find that the new 680x0 version collects the source, destination, and row size parameters in a0, a1 and d0 in this fashion:

```
_UnPackRow move.l 4(a7),a0  
move.l 8(a7),a1  
move.w 12(a7),d0
```

The reason for the 4, 8, 12 offsets is that C parameters are pushed onto the stack in right to left order so we end up with the word-sized 'row size' parameter lying furthest away from the return address.

And that's pretty much all there is to it. Once the routine was complete I assembled and linked it into a C program for testing, and the job was finished. Needless to say plenty of byte-saving could now be done but for me the time for doing such things is always after the routine has been written and tested. During the initial writing period the only consideration I'm interested in, and you'll see this from the example code, is keeping the structure and purpose of the code clearly visible!

```
do_while_loop: move.b (a2)+,d1  
d1=original 'n' variable  
cmp.b #0,d1  
blt.s n_less_than branch if n
```

Listing 2



Paul Overaa  
provides some  
notes on Intuition  
Image drawing



# Displaying Pictures

Once the C newcomer has reached the point where he can open an Intuition window and identify IntuiMessages, chances are that the next objective will be to learn how to draw things on the screen. Intuition's arrangements for drawing graphics into multiple-bitplane displays are, in terms of the underlying ideas, rather complex but luckily there is a pre-written library routine called DrawImage(), which makes the job of displaying graphics a piece of cake.

DrawImage() requires graphics data to be described using something called an Image structure, but even this is not a problem because there are various utilities that can convert standard IFF pictures and brushes directly into these structures. Morten Eriksen's Shareware PicCon program is particularly useful, as is the BrushCon utility written by Ken Howe (which can be freely distributed).

Once this conversion operation has been done the Image structure is ready for use either by reading this graphics data directly into the source code of the program or by specifying the file holding the structure as a header file to be included during compilation.

You'll find the details of the DrawImage() routine and the Intuition Image structure definition in the accompanying box outs. To begin with, you will rarely need to worry about the internal structure details because the required data will be generated by the IFFImage conversion program. What you do need to know, however, is how to set up the parameters needed for the DrawImage() call.

## POINTERS

Pointers (variables which hold addresses), and especially pointers to system structures, appear frequently in Amiga code and the DrawImage() statement that you'll find in the example source, DrawImage(window\_p->RPort, &test\_image, 8, 15), is no exception.

The first parameter is a pointer to the window's rastport (drawing area) and you will have already

```
Function: DrawImage()
Description: This is Intuition's high-level Image drawing routine
Call Format: DrawImage(rastport_p, image_p, left_offset, top_offset);
Arguments: rastport_p pointer to a RastPort
            image_p pointer to an Image structure
            left_offset a general left offset which will be used with all of the linked Image structures of a
            particular DrawImage() call.
            top_offset a general top offset which will be used with all of the linked Image structures of a
            particular DrawImage() call.
Return Value: None
```

seen how this is obtained in previous examples that used the intuition library's PrintText() function. In short, if window\_p is the address of a Window structure (i.e. the software entity that represents the Intuition window that physically appears on the screen) then the address of the associated rastPort for that window will be given by the expression:

```
window_p->RPort.
```

For the second parameter, &test\_image, I've simply used C's address-of (&) operator to specify the address of a statically defined Image structure. For example purposes a brush was created and saved using DPaint (and as you'll see I'm no artist), then BrushCon was used to convert it to an image held in a separate header file called test\_image.h. All that was needed was a preprocessor #include statement

```
#include "test_image.h"
```

near the start of the main program source to specify that this extra file be read in and used during compilation.

As always, you'll find a runnable example and all associated source code on the coverdisk. The bulk of the code follows the same arrangements as ear-

lier examples and in fact the event handling loop is actually simpler than last month's offering because we are only detecting the use of the window's close gadget.

This month, incidentally, I've also included Ken Howe's BrushCon utility on disk so you can try replacing my test image with one of your own. Just create a similarly sized brush (or modify the window size details in the example's OpenWindowTags() function call to produce a window of a suitable size for the image you wish to display), and then convert that brush to an image structure called test\_image naming the file test\_image.h. Having done that, recompile the example and your new graphic will appear when the program is run.

Graphics data, such as is found in an Image structure, needs to be held in chip memory and from C this is normally indicated to the compiler by using a keyword such as chip or \_\_chip in the image data definition. Not all compilers are the same (although DICE, Storm C and SAS C all recognise \_\_chip) and so, depending on the compiler you are using, you'll probably need to manually edit the image definition file that BrushCon creates and insert a couple of underscore characters in front of the 'chip' keyword that you'll find. Other than that, everything should be plain sailing.

```
struct Image
{
    WORD LeftEdge; /* Left edge offset */
    WORD TopEdge; /* top edge offset */
    WORD Width; /* pixel width */
    WORD Height; /* pixel height */
    WORD Depth; /* image depth (bitplane count) */
    UWORD *ImageData; /* pointer to word-aligned data */
    UBYTE PlanePick, PlaneOnOff; /* plane selection/state */
    struct Image *NextImage; /* next image to render */
};
```

The Intuition Image structure: LeftEdge and TopEdge are offsets from the top left of the display element. The Width and Height fields indicate the size of the image and Depth tells the system how many bitplanes are in use. PlanePick identifies the planes in the real display which have been picked to receive the defined image data, and PlaneOnOff tells the system what to do with those planes that are not picked. NextImage is a pointer which allows any number of Image structures to be linked together and displayed with a single call to the Intuition DrawImage() routine.

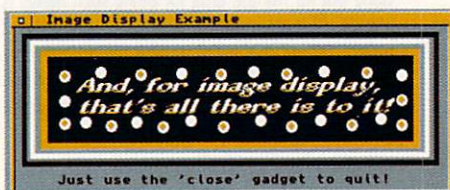


Image drawing courtesy of  
Intuition's DrawImage() routine





RIP

AMIGA  
ACTION

1990-97



# AMIGA ACTION

news

And now, the time has come, to face the final curtain...  
Yes it's the end of the road my friends. As TinkyWink would say, "Bye bye"

## FUTURE RELEASES

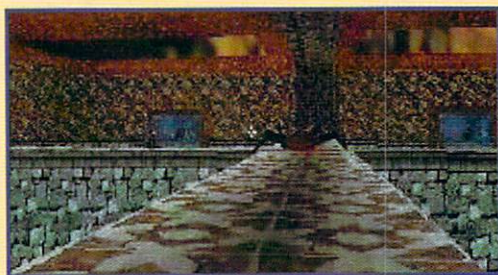
Although we're not going to be around to write about them, there are some excellent games coming along in the next few weeks. Imminent releases include *Myst* which is set to be released by ClickBOOM on the Amiga after proving to be a great success on the

Mac and PC. Expect its arrival in a few weeks.

Likewise, Epic is planning on bringing out *Flyin' High* any time soon. The fast and furious arcade racer will be on CD-Rom and floppy disk and should be available for order within about a month.

Oxyron has penned in a release date sometime in September for its latest project, the stunning looking *Doom* clone, *Trapped 2* and German games developers Titan Software hope to release the futuristic flight si, *Shadow of the Third Moon* at about the same time.

Amiga Action may be out for the count but there is still plenty of quality software on the way so you'd better start saving your pennie....



## TANK GOBLINS



Back in April we brought you news of Macclesfield developer Pandemonium and its new 3-D tank combat game, *Machines of the Wastelands*. Now, after months of coding and hundreds of cans of Cola and dial-a-pizzas, the game is ready.

Set on a desolate planet where tribes of Goblins fight each other for their world's last resources, the game involves directing a tank about a bar-



ren desert blowing up everything you lay eyes on.

It also involves an element of business as well – if you don't pay your crew enough, they will leave your employ. A novel gambling feature allows you to recruit crew for almost no cash if your lucky number comes up.

The game as yet doesn't have a publisher but anybody interested in finding out more about Goblin Tanks should phone: 0161 485 5231



## VULCAN 3D PLAYER

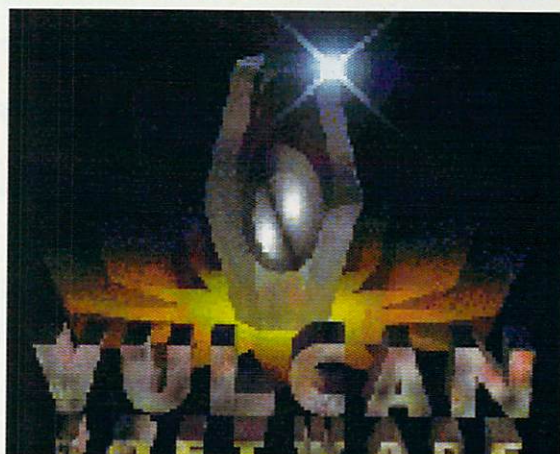
Vulcan Software has announced it is to release a game creation tool capable of creating true 3-D environments. The utility, the Vulcan 3D Player, will allow the user to create game environments with 360 degree rotation and up and down movements. Corridors, tunnels and crevasses can be built, windows and ledges positioned, and the walls and floors given surface textures.

Objects such as barrels, tables, drinks machines and crates can be added and enemies positioned. Enemies can be chosen from the default characters supplied, or you can create your own. Intelligence levels can also be determined.

Vulcan hopes that its tool will be used by Amiga aficionados to create their own Doom clones, with the finished results being posted on Aminet. Hopefully, custom created games and levels will become as widespread and well used as the custom Marathon and Quake levels currently available on the Internet.

Fingers crossed that there won't be any problems with compatibility – the utility also supports AGA and 90 per cent of all known graphics cards.

For more information contact Vulcan at: <http://www.vulcan.co.uk/>



## VALHALLA 5

Vulcan Software has announced that it is to continue the successful Valhalla series. Valhalla 5 will be CD-Rom based and will contain over 50 interactive characters and a vocabulary of 10,000 words.

There will apparently be four huge levels each with its own redefined visual screen with cinematic graphics. As with most Vulcan games, Valhalla 5 will be available in English, German, Italian, Spanish, Swedish, Norwegian, Finnish, Dutch and Danish.

## PULSTAR

A team of developers calling itself Fullspeed Creative Developments has just finished writing an old school style platform arcade blaster. Bearing something of a resemblance to the classic R-Type, Pulstar requires you to fly a starfighter through many different stages on various planets.



Game bosses are the order of the day here with some being so huge they don't fit onto the screen. Luckily you'll have the required firepower to defeat these giant sized bad guys – Fullspeed Creative Developments say that their game includes the biggest weapon system ever!

Apparently the game will be released on CD with animated movie sequences, hundreds of levels and music direct from CD (16 Bit).

Check out the Web site at: <http://home.tonline.de/home/fullspeed/>



## F1 BUYOUT

The two biggest Amiga licenceware companies in the UK have decided to combine their efforts to support the Amiga. After five weeks of negotiations, 5th Dimension has decided to buy out F1 Licenceware.

The buyout will result in the establishment of a new Amiga based licenceware company, F1 Software, which will be based in Goldthorpe, South Yorkshire. The two companies' product ranges will, for the moment be kept separate, but will total over 200 in number. As well as classic games and utilities, new products are under development.

The company will remain 100 per cent Amiga dedicated and intends to work on developing the American side of its operations.

For more details visit F1 Software's page at: <http://www.ware5d.demon.co.uk>

## ADIOS MY AMIGOS

Yup, I guess you know by now that this is our last magazine. I've been working here for nearly a year now and have witnessed the Amiga story change from one of woe to one of hope.

Amiga has got a rich and powerful owner and people all over the world seem to be coding some impressive games. BlackBlade is set to blow our socks off, Alive is set to release some of the best games in recent years and Vulcan is continuing to churn out quality game after quality game.

We won't be here any longer but, believe me, the future's looking bright. Anyway, so long everybody and thank you for buying the mag...



# ACTION REVIEW

## STRATEGY



### He's got the whole world in his hands... Hugh Poynton plays God for a day

Some God games let you run a city, some a business empire, some even let you dictate the fortunes of a country. Sid Meier's Civilization lets you run an entire race.

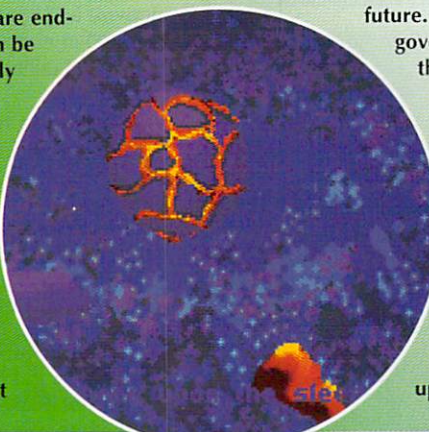
The simple aim of the game is to guide your chosen people through millennia of human history. It starts 6000 years ago when the world's first cities were established and you must guide your people through times of hardship, deciding whether or not to make war or peace with your neighbours, where to establish trade and strive to invent technologies that will give your race the edge. The game only ends when you send your people off to colonise the stars.

The decisions to make are endless – will your civilisation be a ruthless, totalitarian bully state that conquers and plunders to gain valuable resources? Or will your people be peaceful, achieving the lead by trade and scientific research?

Everything has been thought out in painstaking detail. Technological advancements and progress are all dependent

on the smallest things. Thousands of years ago the Mongol empire became one of the largest and most successful warrior civilisations because of its invention of the stirrup and hence the ability not just to ride a horse but to fight from it. The same goes for Civilization, master the art of horseback riding and you'll be given a golden opportunity to get one over on other civilisations. Likewise mastering other practices and technologies will transform your people from a primitive tribe to a prosperous empire, to (if you play your cards right) a space faring people.

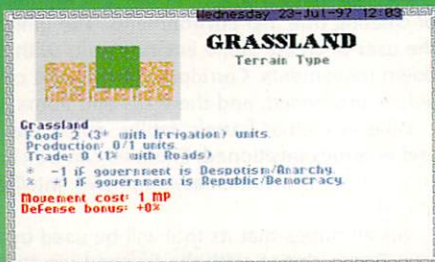
The way you govern your tribe will influence what happens to it in the future. Different models of government are included in the game. A system of Monarchy will mean that your rule is absolute. With the help of the upper classes or aristocracy your rule will be strong – however, the aristocratic classes will eat up much of your resources for the upkeep of their military



Emperor Hugh and his fledgling tribe – The Bobbins of Russia



Oh no! Deposed



Some useful info screens keep you well informed

units.

Just as past kings of England have found out, the aristocracy can be your greatest weapon and your worst enemy. Communism will cut down drastically on corruption but have a detrimental effect on trade. Run a republic and trade will boom, but senates can override any decision you may want to take. In a democracy the economic growth is very high, allowing you to plough resources into scientific research and improving the standard of living, but you must keep the populace happy or risk a revolution. It's all a valuable lesson in politics and a damn sight easier than reading Machiavelli's "The Prince".

Civilization is the God game. It'll take you months to master and you're going to have to wrap your head around some weighty concepts, but it'll be worth it. Other games require you to learn reams of stuff about fictional races and planets. Try your own, you might like it.

### THE LOW-DOWN

**PUBLISHER** Guildhall  
**DEVELOPER** Microprose  
**CONTACT** 01302 890000  
**PRICE** £14.99  
**DISKS** 1CD

<b>GRAPHICS</b>	80%
<b>SOUND</b>	86%
<b>PLAYABILITY</b>	94%
<b>DIFFICULTY</b>	Hard

### OVERALL SCORE

90%



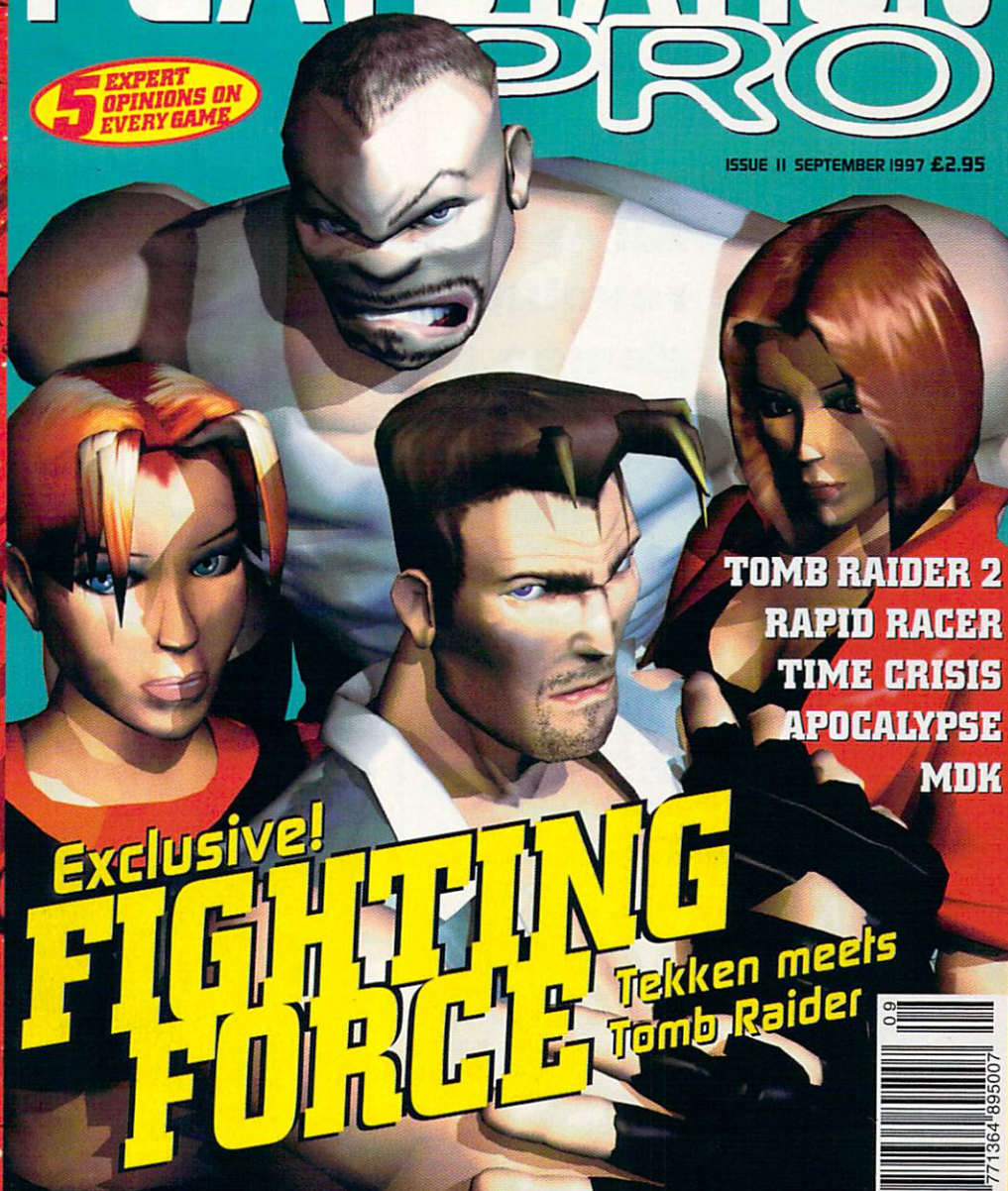
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IDG  
MEDIA



# Happy to be Alive

As I walked into the north-east London Pub where I was to interview Alive MediaSoft, the first thing that struck me was that they all had a look of eager anticipation that made them look like kids on Christmas Eve.

That isn't much of a surprise when you consider what the future holds for Alive MediaSoft. The brainchild of two die hard Amiga enthusiasts, Andy Reed and Stephen

**Alive MediaSoft looks set to revolutionise the Amiga games market – Hugh Poynton investigates**



Flowers, the new Amiga games company looks set to revolutionise the Amiga games scene in the next few months.

It is called Alive because of Andy's frustration at the endless stream of "the end is nigh, the Amiga is dead" articles appearing in the Amiga press. The company has a tremendous card up its sleeve – a new CD-based Macintosh emulator which allows you to play Mac games on the Amiga without having to ever see the Mac OS, programming the joystick or leeching speed from the game.

With other Mac emulators for the Amiga you need to create a separate file that works like a hard drive on which to install all the Mac info and then you need the latest system software and install it. Rather a lot of work just to play a game. Alive will sell Mac games with a special

emulator disk – all you'll have to do is click the game icon, and you'll be in. Everything has been designed to make the process as easy as possible. "It's designed for people who have never used an Amiga. We've made it as easy as we possibly can" says Andy.

"We have been talking to the various





companies who produced the original games and copyright isn't as much of a problem as you'd at first think. Because no code has been altered, and the CDs and CD packaging hasn't been changed, all Alive is doing in effect is buying the CD and selling it on", says Andy. Alive is, in effect, just planning to wrap the CDs in shrink wrap plastic that will have "For the Amiga" on. It's all totally legal and done with the original publishers', whether it be Sierra or LucasArts, full consent.

The beauty of the Mac emulator is, providing permission is granted by the various publishers, a huge wealth of games can now be released onto the Amiga. As long as the initial reaction to these Mac releases is good, Alive hopes to be able to bring out a new Mac game every month.

The company has a huge stack of games waiting for a release and eventually plans a release strategy unlike anything any other software company has ever attempted. Steve says, "We're going to put out a wish-list saying, look we have these games, what do you want? We are not going to release something that people are not going to buy. We will just that say we're willing to do these games, which do you want? If you want, say, X-Wing next month, you'll have X-Wing next month."

Alive, however, isn't just going to bring out Mac games. In addition to the excellent looking Haunted, it has got reams and reams of storyboards and ideas for its own games. It is also eager to sign any new developers for the platform - with the wealth of talented Amiga programmers about at the moment, they should have no difficulty. "The emulator will get us established," says Andy, "once we're established we can take on developers and publish their games. We've also got

loads of games ideas ourselves, we'd love to publish a 3-D fighting game."

Andy and Steve are thrilled at the prospect of launching a new Amiga games company, and rightly so. After months of exhaustive research and planning, Alive is about to embark on stage one of its master plan. The Mac emulator is ready, Haunted is almost complete, and the market is more than ready for them. "There are lots of utilities and hardware out there. There is not a great deal of game soft-





# ACTION FEATURE

## INTERVIEW

ware out there and, when you think about it, 70 per cent of people want to play games," says Andy.

Whether by design or by accident, Alive seems to have chosen the best possible time to start up. As the Amiga games market starts to shake itself awake after a couple of years in a coma, any decent Amiga game will make a killing.

Andy is excited about the rejuvenation of the market – rather than being concerned about his competitors' game titles, he is excited. "The games will stimulate the market, get more people buying. At the moment we have Vulcan's new game, we have Epic's new game...we have this little wave at the moment, but hopefully it'll become a big tidal wave – we want to be on the surfboard so we can catch that wave."

Which it undoubtedly will – Haunted looks set to be one of the best adventure games produced in years, with real-time rendered animated cinema sequences and proper FMV sequences. Like other recent Amiga games, the quality of Haunted actually exceeds that of many PC games.

Why has there been a sort of renaissance in Amiga games and why are we seeing a profusion of excellent quality games such as Shadow of the Third Moon? Andy believes that new titles are looking so good simply because they actually realise the full potential of the Amiga. In the past, the potential was never realised simply due to laziness.

"There were so many big publishers out there that had a perfectly good A500 game engine, when the A1200 came out they just



ported it over. Team 17 came along and brought out Alien Breed 3D and proved all the critics wrong with a decent Doom clone. Now you can't just rest on your laurels like a lot of the big publishers did. You've got to really sell yourself. You can now use the Amiga to its full capacity, what with all the accelerator cards and graphics cards. It's now running in the red limit zone. In the past it was just ticking along at a 1000 revs."

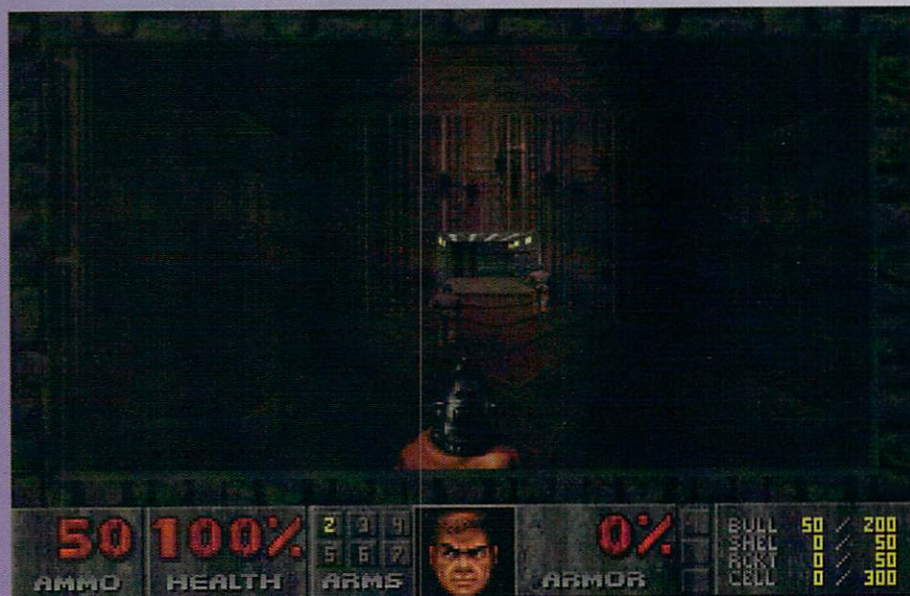
Alive is adamant it will not fall into the trap other Amiga games manufacturers have. It shares Vulcan boss Paul Carrington's belief that the future for the Amiga is to update and that its games must reflect this. "Our games will be CD based, they will support PPC," says Steve. When pushed as to whether Alive will bring out any PPC only games,

Andy says, "We've heard so many rumours about PPC, Amiga International is umming and ahing as to whether or not to go PPC. We are making all of them both 68k and PPC. If PPC is the Amiga, then we will be PPC."

So, is breaking into the Amiga games market an intimidating experience? Far from it apparently – it seems as though Alive's reception into the Amiga games market has been a thoroughly pleasant experience.

Andy and Steve have nothing but praise for just about anybody they've dealt with while setting up the company. Team 17's Andy Davidson in particular. "Team 17 was brilliant, Andy said he'd give me any help with Lightwave, if I needed any tutorials, videos or anything to do with Amiga" says Steve.

Likewise, Vulcan Software couldn't have been more helpful. Paul Carrington has offered the company advice and practical help – even down to offering to burn CDs for them. This friendliness isn't just Amiga enthusiasts helping each other out, it also





makes good business sense. "Everybody is willing to help everybody, because if there is no Amiga games market then everybody goes out of business" says Andy. Companies such as Vulcan want and need the competition.

Talking to Andy, Steve and the rest of the Alive crew, you get the feeling that the Amiga, and the Amiga games market, is set for quite a revival. Providing of course, Gateway and Amiga International play their cards right.

Although Alive is confident about the Amiga's future there is an awareness that things have got to be done right this time. "It's encouraging that the Amiga has an owner," says Andy about the Gateway buy-out, "but this is the third time the company has been bought and I think it'll probably be the last, if something doesn't happen now, they won't have another shot."

So what would be Alive's dream machine then? "We would both like to see both a big graphics machine, and also something that's smaller and cheaper than the average PC in Dixons that would attract mum and dad out buying a computer for Christmas. I'd like to see a £600 base machine, with an 030 mini-



mum, CD-Rom and plenty of expandability – 4Mb only costs about £15 now. A base computer with a little HD and 10Mb of Ram would be perfect.

Although it's still early days yet, Alive has a catalogue of games and a commercial battle plan that would make other, bigger software companies go green with envy. But they've got another hidden ingredient that more or less assures them success. "We will never give up" declares Steve. "We are passionate about the Amiga to the point of being obsessive, as long as there are people out there with an Amiga, we'll write games for them."

As I make my goodbyes and prepare to get the tube home, I can't shake the feeling that I'm going to hear a hell of a lot more about these guys and all of it's going to be good.

## So what has Alive got to offer in the next few months? We take a look:

### Phantasmagoria

Phantasmagoria will be one of Alive's first releases. Squeezed onto a monster 7 CDs, the game will require a minimum of an 030 processor, quad speed CD-Rom, 8 Mb Ram and 15 Mb of hard disk space.

### Doom

ID's legendary multiplayer shoot 'em-up will be playable with four times the screen resolution of the PC and 30 rock hard levels. You'll need an 030 accelerator, quad speed CD-Rom and 8 Mb of Ram.

### Haunted

Alive's 'baby', this game will use FMV, blue screen filming, and real-time rendered animated sequences. For this you'll need an 030 accelerator, quad speed CD-ROM and 8 Mb of Ram.



# Blackblade Beauty

We take a look at BlackBlade's  
long awaited futuristic flight sim

A few months ago, a Web site appeared belonging to a group of Italian coders calling itself BlackBlade. The Web site featured a series of screenshots that looked far too good to be true. Smoke trails, sleek, dangerous jets swooping down beautiful voxel modelled valleys. To quote Chris Evans, I thought, "Never gonna happen, never gonna happen".

The months wore on and eventually we managed to get hold of a beta test version of the game. Being a cynical sod, I never thought Shadow of the Third Moon would live up to the hype. I was convinced the thing wouldn't work and if it did it wouldn't be worth the code it was written with. The front end looked nice, very nice and was accompanied by some crisp clear slightly ambient dance music. That still didn't prove anything. I needed to actually play the game.

Believe me, it does live up to the hype. In its final finished form this game will be the finest on the Amiga - even in its beta test version it beats most hands down.

The graphics are stunning. They remind me of those computer generations you used to see on telly a few years back where they got pho-

tos and information from satellites and maps and then pieced the data together to create a 3-D representation of say, Mount Olympus Moons on Mars or the San Francisco Bay Area.

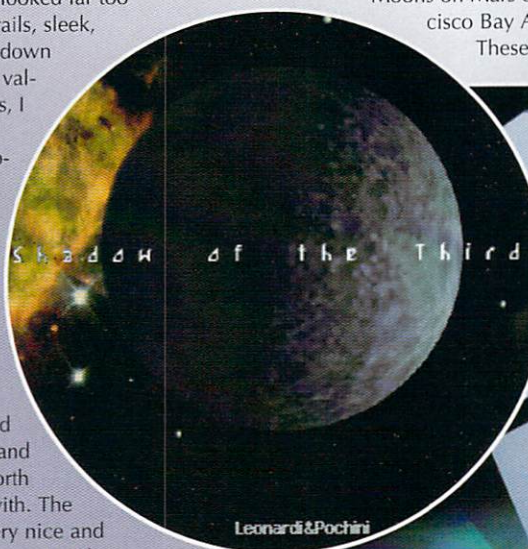
These amazing

graphics are created using a tool designed specifically for the game, BlackBlade's 3DTIS (Terrain Imaging System). This has allowed the BlackBlade designers to draw realistic landscapes with much higher definition than classic, chunky, A500-like vectorial graphics you see on a lot of flight sims.

The Voxel rendering allows beautiful valleys, peaks and lakes to be created with fantastic attention to detail. A lake isn't just blue, it's textured with white along the water's edge to represent the water lapping the shores of the lake.

The valleys and mountain peaks look just as realistic. Fly down a valley at top speed and it gives an impression of speed I haven't seen in other games. Other details that really grab your attention are things like the semi-transparent smoke that trails from a rocket or a damaged fighter or the photo-realistic sky.

The weapons effects are also top notch. The



The SoundWavers, creators of Shadow's ambient techno soundtrack





You've quite an stock of weapons with which to load up your fighter

closest comparison I could make with other games would be Terminal Velocity mixed with Comanche and a liberal dose of X-Wing for good measure.

Soundwise, you can't fault it. Obviously this is only an early version so not all the sound effects are in place just yet, but those I've heard so far bode well for the game. Unleash a rocket and you'll hear the roar as it streaks towards its target. Blow up an oil tank and you'll hear a huge, resounding boom. A la Wipe-Out and games of that ilk, your chaos wreaking will be accompanied with dance music. Unfortunately there's no Leftfield or Under-

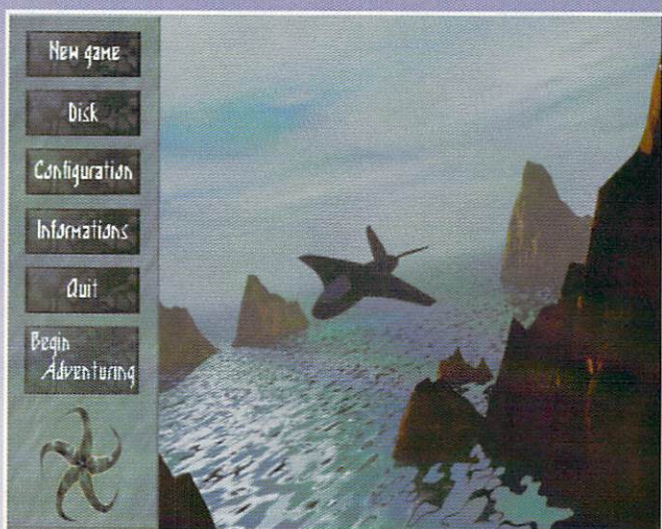
world here, but the coders who've done the music are still pretty skilled. Despite them something of a duff name (The SoundWavers), the tunes aren't bad at all.

The game looks the bees knees at the moment but, as it is still a beta test version, there is only one mission and that is against a ground based target with no aerial opposition.

This is fine for checking out the graphics, the various weapons and the control systems of the plane but it only hints at the game's full potential. This game could be immense. The long valleys and towering peaks would be

absolutely ideal for aerial battles – you'd have to take into consideration loads more tactics than the average flight sim because, in addition to belting along at a furious speed, your vehicle can hover and even fly backwards. You could have games where you hover behind a peak and pop up to take out the enemy.

Surprisingly the game isn't that system hungry. Although you will get the best results on a very high speed machine, the version we got our grubby mitts



Shadow's excellent looking menu combines simplicity and some excellent graphics



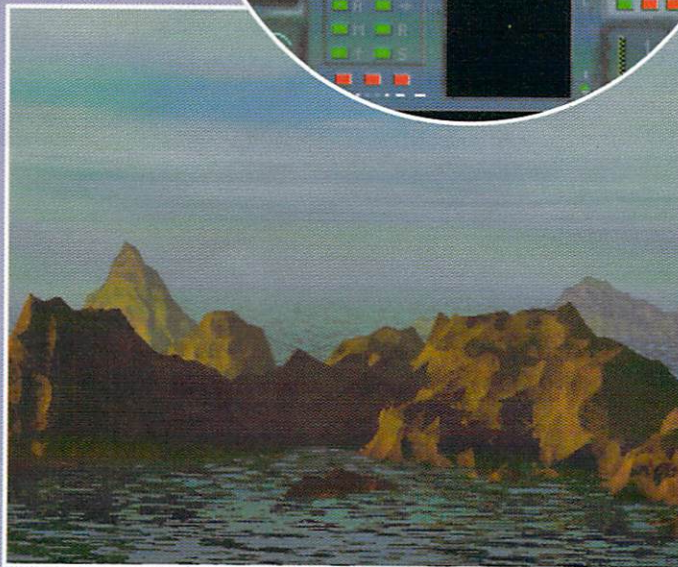
...can't see any ramblers though

on ran along at about 12 frames per second on our 040 A4000. According to the developers the game is perfectly playable at any speed above 6 fps. You should be able to milk that sort of performance out of an 030 processor with 4Mb of Ram. The game supports PPC and pretty much any graphics card you'd care to mention.

This really is the sort of game the Amiga needs at the moment. It looks as though it is going to be fantastic in its own right but it'll also be a showcase for the sort of games you can create for the machine and set a standard for other developers to aspire to. The release date is in August so upgrade your machine and



Crashed! Time to pick another plane



An example of what can be done with BlackBlade's 3DTIS



# Big Red Adventure

## Part two of our Big Red Adventure cheat guide

*The story so far – Doug has just completed two of the three questions he needs to enter the KGB TV quiz show.*

### The Park

Go back up to your hotel room and retrieve your computer. Walk off to Gorky Park with the computer – in the centre of the park you will find a small boy. He's playing a cheap hand held Russian game console. Swap your expensive computer for the cheapo console and wander off...

When leaving Gorky Park you will talk to a street hustler trying to sell you a knocked off watch. Don't buy it but remember where you saw him for future reference. Head off to the railway station and find the cash point machine. Stick the console cartridge into the card slot and you will be allowed to withdraw 100 roubles.

You will come back to the station later in the game, but for now head back to the park after noticing the KGB TV building is next to

the station. On your way to the park, stop by the huge queue and talk to the man with the big beard. Ask him to buy a tin of caviar in return for a loo roll. Go back to the park and buy some bog roll from the street peddler – this will cost you the 100 roubles from the cash point.

Once you have the loo roll, head back to the queue to swap it for the tin of caviar. Now examine the tin to find the answer to the final question on the free ticket. There aren't any Rs on the label! Now that you know all three answers, go straight back to the hotel foyer.

Once you arrive back at the hotel lobby, go up to the porter and ask to borrow a pen to fill in the ticket. Select the ticket to fill it in and then put the ticket in the envelope in your inventory, using the pen to fill out the address. Next, select the stamp from your inventory in order to post the ticket correctly.

Leave the hotel and go to the KGB Studios, located next to the Rail Station. When you get there, post the letter. Now rush back to the

hotel and ask the porter if there's any mail for you. He will now hand you your reply from the Studio.

Open the reply and discover an invite to The Russian Doll Show and the tickets. Don't waste time, get over to the KGB Studios and hand in the ticket to the receptionist. She gives you a badge and directs you to studio five for the show. When you arrive you will be put straight on air.

There are three questions about thieves to answer and, if you answer them correctly, you go on to answer the big question and win an air balloon. If you didn't answer all the questions correctly, you can still get through the game – just follow our handy hints:

### If you win

Go back to the hotel room and enter the toilet after collecting your prize and adding the studio lights to your inventory. This leads to a new scene high above the city in your air balloon. Fly to the museum and land on the roof. Once inside the museum, go to the crown room and switch on the lights near the crown. This blocks out the photo cells and stops the alarm going off.

Now go into the next room and combine the cassette with the recorder and use it. This



Wow, Big Red Adventure made me laugh



Buy the mags, you'll find them all useful



Doug Loiters in the beautiful Gorky Park



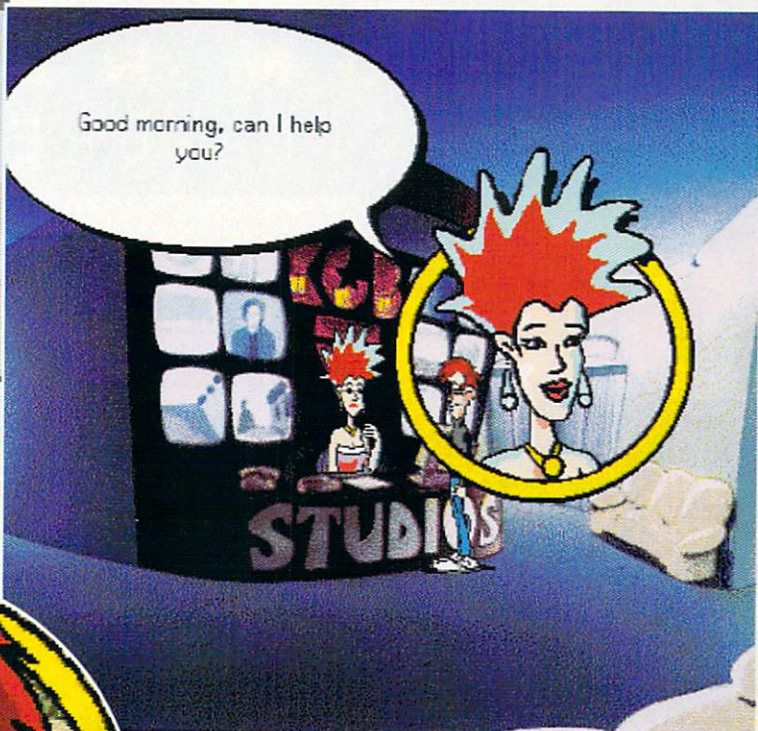
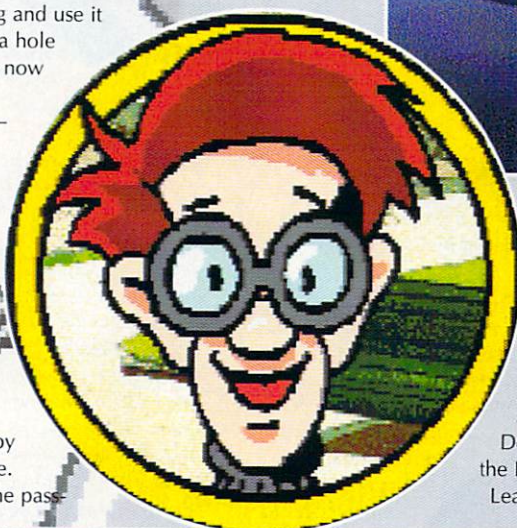


Time for some cash point fraud

will blast out the wonderful sounds of opera, breaking the glass cases in the process. Now pick up the ring and computer and go into the crown room.

Select the diamond ring and use it on the crown case to cut a hole in the glass. The crown is now ready to be snatched but unfortunately not by you – another thief suddenly appears and snatches the crown from under your nose.

You end up in your hotel room again, with your picture in every newspaper in Moscow. You have to get the hell out of here, but how? Firstly, go to the newsagents and buy a copy of Consolphobia magazine. Examine it and find that the pass-



Doug tries his charms on the receptionist

word for the Trotsky's mainframe computer is the name of the tenor who sings with Donna Catale at the Bolshoi. Leave the hotel

and head down to the burger place where you meet some dodgy friends, Alex and Kos. They tell you that they have a plan to break into the Trotsky software mainframe and that they want you to do it. In return they will give you a passport so you can leave Moscow before you're arrested.

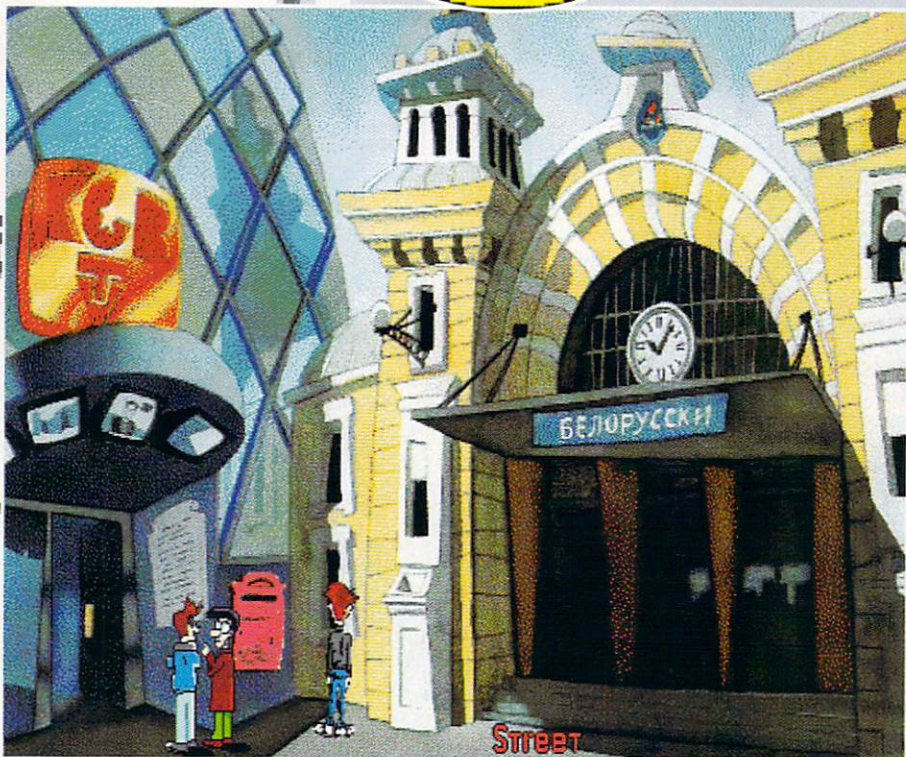
They go on to tell you that the mainframe computer is on the World-wide Communication Network and that their e-mail address is Lenin.Komm. Head back to your hotel room and combine the TV remote control with the tape recorder and then attach that to the ZX81.

You now have to find the mode number for the WWC Network. To do this, go to the KGB Studios and examine the reception desk to find a scrap of paper. Look at that piece of paper to gain the Internet address for the WWC Network, which is KGB.NET 007 6 1 0.

Now you can use it on the telephone in your hotel room to get the tape recording for Alex and Kos. Take the tape to Alex and Kos to get your passport and then head swiftly to the station and show your passport to the guard in order to board the Orient Express and get the hell out of there!

#### If You Lose The Quiz

You win a consolation prize of a keyring and you are left in the studio. Pick up the studio lights and use the keyring on the doll's head in order to enter a secret passage leading to the museum. Once inside the museum, go to the crown room and switch on the lights near the crown. This stops the alarm. Now go into the next room and combine the cassette and the recorder and then use it. From this point on, follow the procedures laid out in the 'If You Win' solution.



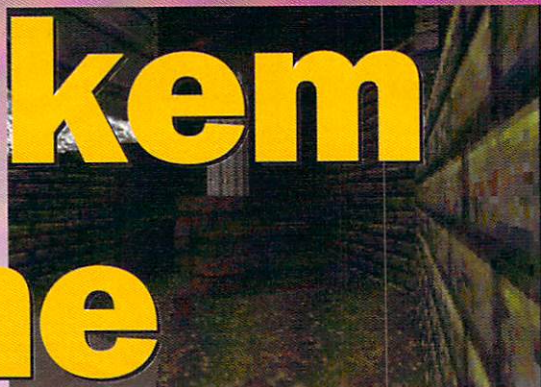
The KGB Studios



# ACTION REVIEW

## FEATURE

# Duke Nukem 3D Engine



Let's hope we see more of Duke on the Amiga

### Duke on the Amiga? Well, nearly...

You're either a dog person or a cat person. You either like the Rolling Stones or The Beatles. You're a Quake fan or a Duke fan. It's just one of those things, you can't like both.

Whereas Quake has always won fans because of its dark, sinister graphics and atmospheric sound effects, Duke is a lighter, airier, more tongue in cheek shoot 'em-up. The game has won legions of fans because of its fun, slightly tasteless take on the 3-D shooter. Your Ray Bans and machine gun toting hero spits out witty quips and one liners as he dispatches hordes of furry aliens and innocent bystanders alike.

The weapons he uses to do this differ from the rather serious Quake armoury by including a number of bizarre and downright stupid guns and bombs. The self explanatory Shriner Ray for example,

reduces the enemy to the size of an action man so you can defeat him just by stomping on him.

Getting Duke Nukem 3D (and Quake) onto the Amiga has been something of a Holy Grail to Amiga developers – and now, both have been successfully ported. A few weeks ago,

Amiga enthusiast John Selck announced that he had ported the Duke Nukem 3D games engine over to the Amiga.

Obtain a PC copy of Duke Nukem, pinch the group files and hey presto, you can wander about any Duke level at will. There's nothing to shoot

and it isn't a game by any standards but it paves the way for greater things.

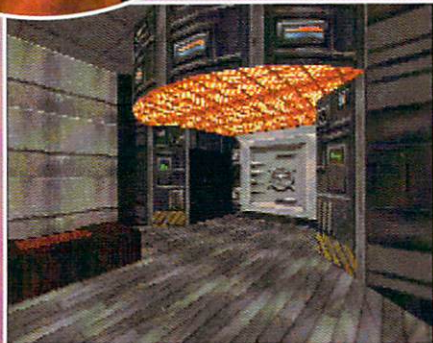
For a start it will convince those who thought otherwise that a PC game can work on an Amiga. Unlike the ported Amiga Quake (which ran so slowly you could see each and every bullet plod towards you at snail like speed), Duke ran on the on the office 040 A4000 at a perfectly smooth speed. However, the Duke walkthroughs don't contain any enemies, which is apparently the most system hungry single element of most games.

At the moment nobody knows whether the Duke engine will be developed any further. Although it is a fair bet that every major Amiga developer will be interested in a full port of Duke to the Amiga, the legal problems that haunted the Quake port could still trouble Duke.

However, with 3-D shoot 'em-ups proving to be a popular project for Amiga games developers, how long will it be before the platform has its own answer to Duke or Quake on the PC or Marathon on the Mac? If some of the new projects emerging come to fruition, such as Genetic Species or Brainkiller, the answer would have to be, not long...



As you can see, even in low res mode the Duke play environment looks fantastic



The walkthroughs run at a tremendous speed



By pressing the delete and help keys you can fly through the levels...



# ACTION REVIEW

## FLIGHT SIMULATOR

# Gunship 2000

**Hugh Poynton fiddles with his chopper (stock helicopter joke 1243...)**

Six years ago, you'd be forgiven for thinking that Microprose made nothing but flight sims. Retired Air Force colonel 'Wild' Bill Stealy seemed to be amassing his very own digital airforce. Any new game entering into the fray would have to be exceptional to have been noticed. Which is exactly what Gunship 2000 was.

Mixing the Microprose attention to detail and realism with the need for a fast and furious game, the chopper sim offered players the opportunity to fly one of six different helicopters in combat in six combat zones.

The six helicopters – the Blackhawk, Jetranger Kiowa, Hughes Defender, Apache, Commanche and Cobra all have different strengths and abilities. Each chopper denotes a different type of mission. Pick the Blackhawk and you'll be doing a search and rescue mission, pick a Jetranger Kiowa and you'll be doing recon. All the others are ideally suited to blowing the crap out of things.

To give the game an additional element of challenge, you must attain certain ranks before flying certain helicopters like the Com-

manche or Apache Longbow. Likewise, only two combat zones, the Gulf and Western Europe, are open to you until you have proved yourself in battle.

The graphics are, even by modern standards, excellent. Although lacking in texture mapping or detailed voxel landscapes,

Gunship 2000 uses thousands of different tiles to create an unevenly contoured playing arena. Because most of the action takes place at tree top level, the ground detail is superb, follow a road to you target destination and telegraph poles will flash past your helicopter.

The whole thing is very realistic and well thought out. Copyright protection, for instance, is weaved into the game. You've got to feed the correct numbers into your GPS system before you can get the helicopter off the ground. Unlike other sims of the time, Gunship also allows you to direct other units to the target so you can end up co-ordinating a big task force to the required area.

This attention to detail and the huge amount of options available means the game retains its long term appeal; no matter how

good you get, there will be still more to accomplish. Unlike its contemporaries, Thunderhawk and LHX, the game could take months to complete because once one helicopter and combat environment is mastered, there are dozens more to try. Get good enough at Gunship and you'll be flying a state of the art Commanche. In addition to this, difficulty levels can be toggled so there are adverse weather conditions and highly trained enemies to overcome.

Although probably not the game of choice for somebody who wants rather more arcade oriented action, Gunship 2000 is an excellent challenging and very absorbing sim. If you're a propeller head, go buy it.



As you can see the attention to detail is excellent – all those dial things do stuff!



The main options screen allows you to pick the helicopter and the ordinance it will carry

## THE LOW-DOWN

**PUBLISHER** Guildhall

**PUBLISHER** Microprose

**CONTACT** 01302 890000

**PRICE** £14.99

**DISKS** 4

<b>GRAPHICS</b>	92%
<b>SOUND</b>	90%
<b>PLAYABILITY</b>	92%
<b>DIFFICULTY</b>	Tricky

## OVERALL SCORE

# 92%



# ACTION PREVIEW

## ADVENTURE

# Sixth Sense Investigations

Hugh Poynton investigates Epic's new point 'n' click

Sixth Sense Investigations is the latest offering from Epic. As you might remember, Epic has decided to start releasing continental games in the UK and new releases from European developers. This offering comes from the home of dodgy bank accounts and the Milka Cow, Switzerland.

CineTECH, the developer behind Sixth Sense Investigations, has apparently taken its inspiration from the classic LucasArts point'n'click adventure games such as Monkey Island. Presented in a suitable cartoon style, the game follows a crazy young guy who has the ability to communicate with the spirit of a sarcastic man. A friend (who thinks of himself as a detective) profits from these psychic abilities. Quite predictably this leads them into crazy, funny situations which don't help in their quest to make money. All of which goes towards making the game sound utterly tedious.

Everything looks very nice. The graphics are bubbly and colourful and the characters and scenery all capture the attention. The main protagonist – the crap detective – looks suitably crap. Hunched over, hands in Mac he looks like a cross between the dou-

ble entendre laden detective from the Robinson's ad and Tosh Lynes from the Bill. Pipe in mouth, he scurries from crime scene to crime scene.

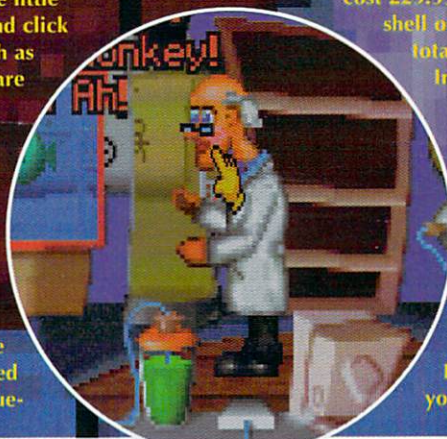
The various locations are fun – there's the rich American's Cheese Production Facility, a mad professor's laboratory and a toy factory. The finished game will boast 32 different location on three different worlds so there should be a fair amount of depth to the game.

There are some nice little touches – the point and click action commands such as "pick up" and "talk" are all messily scrawled across the bottom of the screen on what looks like a strip of lined paper from a note book with ink spots aplenty. The music puts you in mind of a bungling detective (Imagine the Detectives tune crossed with the Inspector Clue-

seau theme).

The game runs very smoothly. The AC office's 020 A1200 had no problem and the game characters zoomed around the screen like rabbits on amphetamines. According to CineTECH, the full release version of the game will happily chug away on any A1200 or 4000 with 2Mb RAM and a CD-Rom drive.

Pleasant though the game looks and plays, there are a few drawbacks. Firstly, it will cost £29.99 – a lot of moolah to shell out for a game. To be totally honest, Sixth Sense Investigations doesn't look as if it is worth £29.99 – it doesn't have the same wry humour or characterisation as Big Red Adventure and, more importantly, just doesn't look of the same standard. If point 'n' clicks are your cup of tea, give this game a go. If not, keep your wallet in your pocket.



The Private Detectives chaotic office – still it isn't as messy as the AC offices!



This is the Private Dicks stomping ground, a wretched den of scum and villainy



At the toy factory Private Dick quizzes a suspect who rants on about giant toys in pyjamas – nick him for possession!



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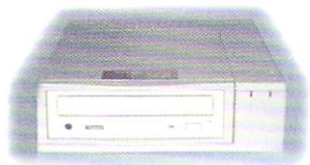
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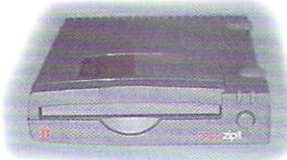
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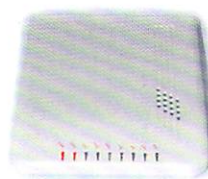
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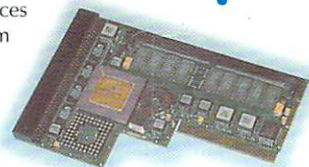
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