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version**

October
1995

Requires WB2, hard drive

DFA 2.25

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Amiga creativity

October
1995

Requires at least WB2.04, 1Mb RAM

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personal
information
manager

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Play16 - 16-bit sample player
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PNG - All new datatypes

AMIGA
COMPUTING

PLUS

- Multimedia future
- Tune Builder
- Doubler A4000
- Speaker roundup
- Scala Mpeg card



9 770959 963077

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amiga 4000

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new



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A2000 68040 (0MB RAM)	£TBA
A2000 68060 (0MB RAM)	£TBA
4MB STANDARD ADD	£139
4MB GVP ADD	£159



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HC-8 SCSI CARD

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IO-EXTENDER



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MEGACHIP RAM

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A500 2MB RAM

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September

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Amos
The final part of the screen info program courtesy of Phil South

Publishing
A new version of PageStream and some add-ons for it

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DFAAddress

One of the best-known shareware address databases, and we've got it on our first CoverDisk

Our second disk is jam-packed this month with splendid tools and utilities:

PNG datatype; epoch Voyager; Yak; PS3M; Play16; Cyber Sound; Tiff datatype; Text datatype patch; Virus Checker; Converter Master; Lupe



Animation: The art of the matter

Adam Phillips goes
in search of pure
brilliance and finds
the geni behind
some of today's
best 2D
animations

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Help! Help! Never fear. We're here to give you a hand

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AMIGA

GUIDE

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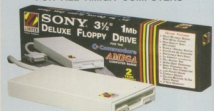
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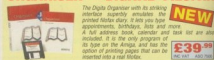


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SOFTWARE OFFERS

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Special Edition PRO for A1200
Low cost, true WYSIWYG word processor

By ADAM PHILLIPS

Amiga price shock

Any hopes that the 1200 would be released for under £200 have been well and truly quashed with the news that the relaunched model will cost £399. This means the machine will reappear at £50 more than when it left the marketplace in the summer of last year. The reason given for such an increase is the cost of higher charges for rushed manufacturing, casing, and the increased cost of DRAM.

The 68020-based 1200 is expected to hit UK high streets at the end of September with a maximum of 60,000 allocated to British distributors.

The biggest shock, however, are the prices rumoured for the re-release of the 4000T – after an American distributor announced that they were to sell the 4000T for \$3,500, Amiga Technologies fired back saying that this simply wasn't the case and no price had been decided upon yet.

Since then, a meeting has taken place in Philadelphia where several key figures from Escom/Amiga Technologies including Petro Tyschtschenko, Senior Vice President of Escom and General Manager of Amiga Technologies, and many distributors from round America, attended to discuss the Amiga's future in the US. Apparently at the top of the debating list was price.

The rumoured cost for the 4000T will be in the \$2700 region – the reason given was the expense of parts being put together costing that much.

A surprising plan also unveiled is that the 4000T will receive no advertising from

Amiga Technologies in the States on its relaunch – Tyschtschenko told *Amiga Computing* that any advertising would be handled by the distributors themselves.

There will be some 1200s winging their way to the US of A. Johnathan Anderson, the new general manager of Amiga Technologies UK, explained: "The States will be taking the 1200 in small numbers but we've found the American consumer prefers the lower-style type computer and not the look of the 1200."

As for the 4000T's relaunch into Britain, according to one UK company, White Knight Technology, they were told by Silica, the distributors, that the high-end machine will definitely be released in the 040 version at the confirmed retail price of £1,900 + VAT. It will come with 2 meg chip RAM, 4 meg FastRAM and a 1.2 gig SCSI 2 hard drive.

The fact that for this price there will be no monitor or CD drive included in the setup has drawn gasps of horror from both sides of the Atlantic. Also, the 060 version to be released later on is rumoured to cost an estimated £2,150 + VAT. No-one at Amiga Technologies was able to give a definite answer on pricing at the time of going to press.

Tyschtschenko also commented that they still weren't sure how they were going to market the 4000T on its arrival in the UK: "The US market is very buoyant and a good market for the 4000T, but we're still planning what we'll be doing for Europe – it's a very niche market for the machine."

Meanwhile, the manufacture of the

machine is taking place in a factory near Bordeaux in France by a company called Solelectron. For your £399, Amiga Technologies is throwing in software as part of a bundle to go along with the machine. The Scala MM300 has been announced as a package that will go with the system, but it's doubtful the package will ever appear for the floppy-based 1200. Anderson commented: "There's no point in including the Scala system with a floppy-based 1200 with no hard drive – it would be impractical. The 1200 with a hard drive though is much more practical and useful."

Questions are still being asked about the size of hard drive that will be provided – a figure floating around currently is 170Mb.

Bad news, though, came in the shape of the CD32 – apparently there are no plans presently for resuming the console in the States or the UK other than being possibly used as a key technology for kiosk displays. This was verified by Jonathan Anderson, but he hastened to point out that there are deals going on with various companies including a Canadian bank to use the CD32 in the commercial arena. The future of the FMV cartridge is looking decidedly shaky as well if reports are to be believed.

There was a meeting between the general managers of all the European subsidiaries on 3 August where many matters such as pricing, distribution and much more were resolved. Any official news will have to wait though until the press conference to be held by Amiga Technologies on 16 August. More news next month.



No Amigas in Escom shops

It has been confirmed by Petro Tyschtschenko, Senior Vice President of Escom and General Manager of Amiga Technologies, that the Amiga will not be appearing in any of the Escom shops dotted round the country. The reason for this decision was explained by Tyschtschenko: "We used to stock the Apple range in our shops but it was unsuccessful. We would need people who were Amiga educated but the Escom shop staff are very much geared towards the PC."

Instead, it looks like the main bulk of sales will be made through the independent retailers and any chain stores that decide to come on board.

New life for VistaPro

The much-heralded landscape package has received a useful ally in the form of GeoMorph. The utility is a landscape morphing program that allows the user to create surrealistic fly-by animations.

There are several types of morph available: Linear morphs where the entire landscape changes at a constant rate, accelerated morphs where the change accelerates or decelerates, and 'wipes' where the change starts at one side or corner of the landscape and sweeps across.

Grow or shrink trees, empty or fill lakes, change positions of rivers, make clouds that move and change, plus alter treelines, snowlines and sea levels on the fly. GeoMorph requires Vista Pro 3 and a system with hard disk and a minimum of 4 meg. Costing \$69.95, interested punters should call Chaoticy on 001 805 925 7732.



GeoMorph: Bringing new life to VistaPro

New Amigas on show

If you're desperate for a sneak preview of the up-and-coming Amiga machines, the "Internationale Funkausstellung" fair is being held in Berlin and Amiga Technologies, together with Escom and Virtual Products, have booked their own booth. This is the first time the Amiga will be given its official airing since Commodore crashed.

Held from the 26 August to 3 September, the 1200 and 4000T with different configurations and several applications will be on show for Amiga fanatics to

gaze over. Also rearing its head are the much talked about Virtual I-O's i-glasses. Exclusively distributed by Escom in Europe, the glasses are a virtual reality headset that will allow computer images and television pictures to be displayed in them, and is fully compatible with the Amiga. Apparently, the glasses have received positive feedback from the industry with IBM and Microsoft committing themselves to support the new hardware.

Virtual I-O's i-glasses: Virtual reality in home takes a step closer

Amiga Technologies UK team

After the failed attempt by David Pleasance to buy Commodore UK as an on-going concern, the new face of Amiga Technologies based in Maidenhead near the old headquarters of C=UK has appeared on the second floor of a high-street rented office. Heading the team is Jonathan Anderson, ex-Product Marketing Executive for C=UK, with support from five other former Commodore employees including national account manager Bob Burridge and sales manager John Smith.

Anderson is quick to point out that "it's a real team effort here. We're working together to make the Amiga an absolute success on its relaunch."

And for those wondering what happened to David Pleasance and Colin Proudfoot, former managing directors of the UK subsidiary, Anderson sheds a veiled light on the subject: "They were offered a package and subsequently declined the offer."

Amiga architecture

The Amiga is continuing its saturation of all walks of life - this month sees the merger between Delphus Visuals, a graphics and animation house, and Visual Space and Illustration, an architectural computer modelling consultants.

The end result is a collaboration that'll produce animated walkthroughs and fly-bys primarily for the architectural community and property developers. Using the Cyberstorm 060 accelerator, the company has big plans for the future using the Amiga.

For more details on how to see your dream home turned into a virtual reality, contact Simon Wilson on 01633 613300.

Multimedia on the increase

After the announcement of ImageVision from ImageLab last month, another company in the form of Optonica are on the verge of releasing a multimedia package in September to rival Scala's. There are two versions up for grabs - MM Experience and MM Experience Pro.

The former is aimed at home users allowing the combination of graphics, animations, music modules, text, sound samples and CDXL video into standalone presentations or productions. The package comes with a free distribution player so that any end results can be circulated among potential viewers.

The MM Experience Pro is suited to the professional developer wanting to create CD-ROM-based projects, point of information, and point of sale projects and interactive TV interface systems. Featuring all the facilities of the standard version, the more advanced additional functions include animated menus, optimisation for CD, project management facilities, CD32 controller support, ISO prep and ISO build functions, project chaining and more.

The MM Experience retails at £39.95 and the Pro version at £249.95.

Also announced is InfoNexus 2, the file management system, with a host of improvements and new functions at £29.95. For more details on any of these products, contact Optonica on 01455 558282.

MM Experience: The latest in multimedia products
MM Experience: The latest in multimedia products



News briefs

TUC on-line

In a distinctly tongue-in-cheek move, the Trade Union's Congress are planning to open its very own Cyber Canteen at the forthcoming Congress from the 11-15 September in Brighton. They are also unleashing their own web site as a forum for debate and information. The address is: <http://poptel.org.uk/tuc>

Make a movie

Visitors to the Museum of the Moving Image between the 11 and 29 October are being offered the chance to contribute to an animated short film called Going To The Pictures as part of the Get Animated event being held there. In conjunction with the Art Councils web site, The Hub, Internet users will be able to download the film as it is made. The web address is:

<http://www.ace.mdx.ac.uk/Hub/Hub.htm>

The home page

Already receiving a warm welcome from visitors, Amiga Computing's home page is waiting to be perused. For the latest news, previews and reviews, simply type in:

<http://www.demon.co.uk/amigacom>

New browser on the way

While Netscape aren't exactly on the verge of releasing an Amiga version of their now world-famous navigator system, P.Jami is a new browser based on the still-in-development HotJava which has been winning some acclaim for its unique features. Developed by Sun Microsystems, they are making the source code available to anyone wishing to port the program over to another format.

To have a chat with the development team, send some e-mail to the following address: amiga-hotjava@mail.iMNet.de

Dops

In our article on Colchester Zoo last month, we gave the impression that Optonica's authoring system Interplay had been written by Premier Vision. This is not true and the package was solely created by the bods at Optonica.

Quad speed for 1200

Quad speed CD-ROMs are beginning to infiltrate the Amiga market, ushered along by the arrival of Silica's Overdrive Quad Speed unit for the 1200. Connected through the PCMCIA card slot, the CD-ROM is IDE-based and capable of holding up to 650Mb of information with a transfer rate of 600K/sec.

The makers claim that the Overdrive is also compatible with the majority of CD32 software and has Kodak PhotoCD and multi-session compatibility. The kit will set you back £249 and can be ordered from Silica on 0181-309 1111.



Quad-speed CD-ROM: Offering fast transfer rates and compatibility with the majority of CD32 software

Aspirations

Cyberscribes wanting to be the next David Mamet, Alan Ackybourn, or Caroline Churchill, can now visit Allied Domecq Internet site where information on its arts initiative can be found. The international drinks and retailing company has recently set up a competition for a new playwright somewhere to win a £5000 development grant for the most promising script outline.

After winning, the writer will be given expert advice to complete the play and then with extra funding, the script will be turned into a reality and performed on stage.

For more information on the Allied Domecq 1995 Playwright Award, access their site:

<http://www.demon.co.uk/hyperinteractive/playwright.html>

More Amiga products

This month sees the announcement of a host of products for the Amiga from Gordon Harwood. First up is the new ProGrab Plus package featuring S-VHS compatibility. Also included is the new version 2.5 software and the real-time colour frame grabber and digitiser costs £129.95. For existing users an upgrade is available for £4.95.

For users wanting more power to their Amiga, Harwood have also announced several products for customer perusal. The new 1230-IV board features 50MHz 68030 technology and the Blizzard 1260 Turbo Board apparently brings the performance of the Cyberstorm 060/50 accelerator to the Amiga 1200. The prices for the former are £199.95 and for the latter, £599.95.

For more info, contact Gordon Harwoods on 01773 836781.

Over the rainbow

Cybersystems have a limited quantity of the excellent Rainbow III RTG graphics card for sale. The Rainbow III comes with 4Mb of super fast VRAM and runs under the EGS system. These boards are available for only £275 from Cybersystems on 01843 292150.

News briefs

A fresh start

The maker of award-winning monitors Iiyama have launched two more in the new family of redesigned display units. The 17" and 21" Vision Masters come with a new set of controls featuring just three buttons that allow a variety of differing functions. With an on-screen display and ergonomically designed cabinets, the 17" MF-8617E (available in September) costs £575 and the 21" MF-8221E (available in October) retails at an expected £1229.

More details can be obtained from Iiyama on 01438 745482.

Twisting your arm

You should approach friends who are members of the Special Reserve Discount Club with care – the Club has announced its 'Summer Membership Drive Arm Twister' that is offering a fiver to any current member who can introduce a new member for more than a year. The money will be accredited to their accounts with the Club and can be put toward a purchase.

The offer ends on the 30 September and for more details, contact Special Reserve on 01279 600205.

1200 expansion

CeV Design have announced the arrival of Zorro 3 Expansion for the 1200 in the shape of the New Model 4B Chassis. Due to ship this Autumn, the unit offers five Zorro III slots, two Zorro II slots, and a keyboard interface for an external keyboard to make the 1200 into a full tower case. There are also two video slots and a CPU 4000 slot plus four PS/2 Simm sockets for memory additions.

For more info, contact CeV Design on 001 617 942 0209.

Blitzed

For those interested in Blitz Basic 2, a new disk magazine has been unveiled called Blitzarama. Aimed at beginners and experts alike, a free copy of the first issue can be obtained by sending a SAE to: Blitzarama, 8 The Deepway, Quorn, Loughborough, Leicestershire LE12 8HG.

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The price isn't right

USA



news

*Denny Atkin reports on the US market's
uncertainty about the new Amiga
package and price*

The US Amiga market is cautiously optimistic about Escom's prospects for reviving interest in the Amiga on this side of the pond. New Amiga 4000Ts are on the way for US customers, but it appears at press time that Escom don't believe there's enough interest in the A1200 over here to justify releasing an NTSC version in North America. This has a large group of dedicated Amiga followers anxious to upgrade to AGA but unable to justify an A4000T upset.

Rumours of a stratospheric \$3,500 price for a basic A4000T unit hit the nets in July and nearly caused even high-end Amiga users to panic. However, Escom issued a statement that no price had yet been set, and it appears that the units will sell for under \$3000. Even at that price, though, it appears that Escom views the A4000's North American market as strictly

high-end video. Despite the Amiga's superior OS, it's hard to justify spending \$2995 for a 25-MHz, 6Mb A4000T with a 540Mb hard drive and no monitor, when the same money will buy a name-brand 120MHz Pentium system with 16Mb, 1.2Gb of hard drive space, a 17-inch monitor, and a quad-speed CD-ROM drive.

Despite a growing concern that Escom have not only picked up Commodore's hardware line, but also their marketing prowess, a number of US companies are still working hard to

provide new products for Amiga users. DKB has a 68060 board in the works (look for details next month), Final Writer 4 just shipped, and Oregon Research has updated Termite, the only commercial terminal program available in the US.

Gnawing on a New Termite

Oregon Research have updated their popular Termite comms software (distributed in the UK by HiSoft) to version 1.10, which sports a number of new features and bug fixes. Among the improvements are built-in Zmodem (the program still supports external XPR protocols as well), built-in ANSI and VT102 terminal emulations, as well as XEM-based support for the RIP graphics terminal emulation popular on PC BIOS systems, much faster scrolling, and a multitasking review buffer.

Other enhancements include chat window history, an improved dialer support for multiple palettes, AREXX support in the macro subsystem, and an improved manual and quick-reference card. Most of the nagging bugs that plagued the initial release have been squashed - I have yet to see a crash in this version.

The update price in the US is \$10 for a new disk and quick reference card, or \$15 with the improved manual as well. For more information, contact Oregon Research, 16200 SW Pacific Hwy., Suite 162, Tigard, OR 97224 USA; phone (503) 620-4919; fax (503) 624-2940; or e-mail orres@teleport.com. (Contact HiSoft for U.K. update information.)

SoftWood branches out

SoftWood, once the tiny publisher of a few top-notch productivity programs, are branching out to become one of the big players in the US Amiga market. The company recently purchased the assets of now-defunct New Horizons, and now they've announced that they'll be carrying Phase 5 hardware products in North America, including the Cybervision 64 graphics card, Blizzard 1230-III accelerator and 1220-4 RAM board, Fastlane Z3 SCSI card, and Cyberstorm 060 accelerator for the A4000. Other exciting news is that SoftWood have hinted that the company will be working with Phase 5 to bring 68060 accelerators to the A1200, A2000, and A3000 series as well.

In the meantime, Final Writer is seeming to be an oddly inappropriate name for the company's word processor. SoftWood has now released version 4 of this 'Final' program. The updated version now sports an improved user interface with click-tab access to pages, sections, and requester areas, making many functions a click or two away and saving the trouble of working through layers of requesters.

Casual writers will appreciate the addition of a

professional grammar checker to the program, as well as the ability to pull up readability statistics. And if you've cursed Final Writer's mechanism for selecting bold and italic text, you'll be happy to know that it's finally been made simple. The upgrade's only \$30 from any previous version.

In the US, contact SoftWood at (800) 247-8330 (voice); fax (602) 431-8361, or e-mail 75300.670@compuserve.com for more information. European users should contact their local distributor.



Final Writer 4 sports an improved user interface, as well as a grammar checker

Breakup of the CIS

The CompuServe Information Service (CIS), home to four Amiga forums and the only US online service with easy access from the UK, has announced dramatic price cuts. The network's hourly rates have dropped from \$4.90 an hour to \$2.95 per hour, and the \$9.85 monthly fee now includes five hours of access to all services.

Revamped software is on the way for the Mac and PC, but it remains to be seen

whether CIS will support Amiga developers who want to create front-ends for our favourite computer. Hopefully they will, as it appears CIS isn't going to update the text-based portions of its services, but rather concentrate on building its Mosaic-like graphical user interface.

CompuServe also announced that they're going to create a second service, code-named WOW!, that will be geared more towards novice computer users.

Jonathan Potter says he won't carry on. Games publishers say it's the reason they've dropped the Amiga. Big Amiga names like ASDG, Gold Disk, New Horizons and Digital Creations have all dropped below the horizon for one reason or another. It's not necessarily all connected with piracy, but it has to be said that piracy on the Amiga is rife.

Sometimes people use piracy as an excuse because the only way they can get to see a piece of software in these Amiga shop-free days is to get a dodgy copy of it from a friend. This is particularly true of serious software – shops are pretty much guaranteed to be able to sell a £25 game, but a piece of software retailing at £250? They aren't likely to want to take the chance it doesn't sell.

The software companies can get around this to some extent by making more demo versions of their software, limited time versions, save disabled versions, versions where you can only use a tiny area of the screen. It would help people make the decision to buy and would probably result in increased revenue for the company. They will, of course, still have the problem of ensuring a wide distribution of these demo versions, but with magazines panting for new material and the Internet becoming ever more popular, only the insular of companies will find themselves with difficulties.

But the area hit hardest is certainly games. People rip games off left, right and centre. It's not just an Amiga phenomenon – every week in the leisure computing trade mag CTW, some company or other is claiming they have lost millions of dollars (billions in some cases) in revenue owing to piracy. This is sometimes because a pirated version of a game is in some way improved, giving the player endless lives or the ability to install the game onto a hard drive, and I may be in a tiny minority, but I won't buy a game that won't take advantage of extra RAM, processor power or additional floppy drives.

I'm also not keen on games that don't install on a hard drive. Perhaps it's about

The final version

*If Commodore hasn't
killed the Amiga, perhaps
piracy will. Ben Vost
looks at an ever more
dangerous problem*



time games companies looked to the somewhat higher end of the market. After all, who's more likely to buy a game – a person who actively expands their Amiga and is willing to spend money on it, or someone whose only investment has been a joystick?

Escom need to have a concrete software strategy in place. It's all very well getting the hardware back in place, but without companies like ASDG and LucasArts back in the fold, serious and games users of the Amiga may as well give up now and get that Mac or PC. Perhaps, like Microsoft, Escom need to have an in-house software team creating new word processors, games and image processing packages. They could afford to get the best programmers out there, particularly those in the public domain and shareware fields, and really bring some quality software back onto our beloved platform.

Added revenue from software sales could help to bolster R&D budgets, pushing the Amiga back towards the forefront of computer technology – where it belongs and was ten years ago. We are getting faster base level machines with a greater capacity for RAM, and hard drives

are becoming more and more commonplace, but there are no staggering advances in the graphics, sound or operating system technology that powers the Amiga.

The operating system could definitely stand a little more game-friendliness. If you give programmers the tools they need to rapidly scroll screens, play back animations, or manipulate bobs in the OS, publishing houses wouldn't need to reinvent the wheel with every game they write. This won't improve the situation vis a vis piracy, but it might attract some of the game publishers back from other platforms where these things are, or will soon be, taken for granted.

So who is this Jonathan Potter? He's the guy that spent the last four years developing Directory Opus, only to threaten to give it all up because his software is available from every pirate BBS in the world.

The AC team

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Card No: <input type="text"/>					
Expiry Date: <input type="text"/>					
Issue No (Switch Only): <input type="text"/>					
Dept: ACCO					

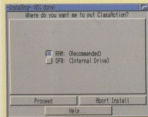


Extracting CoverDisk files

If you have already booted this month's CoverDisks, you may have noticed a slight change to normal. We are now using Commodore's installer utility to try and make extracting the archives as easy as possible for you.

To extract any single archive, simply double-click its icon and follow the on-screen instructions. If you want to quickly 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 now be found in your RAM disk.

You also have the option of using a floppy disk. If you pick this option make sure you have a blank formatted disk at the ready, and if you only have one disk get ready for lots of disk swapping and a long wait.



The Amiga installer needs to be told where to extract the files to. Simply click on the appropriate destination

THE Cover

Amiga Computing brings you another double dose of disks, crammed with the best utilities around

Address your

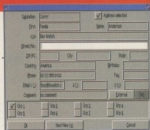
DFA

Author: Dirk Federlein
Workbench: 2.04

Everyone has an address book of one sort or another. Generally they are fairly tatty things with plenty of scribbles, corrections, and different hand writing styles. What you need is a program to keep all your loved ones' and friends' addresses and phone numbers stored in a convenient place.

DFA really is the perfect solution. The program is split into a number of smaller parts, so the main executable is small enough to keep in your WBStartup drawer. If you ever need to find someone's address DFA has an Appicon, so a quick double-click is all that is needed to pop up the main DFA screen with a list view of all the people in your address book.

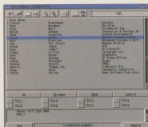
To install you should really use the provided installer script as it is a little complicated and a number of tool types have to be set correctly. Other than that, it should be quite painless as virtually all the DFA files are held together in a



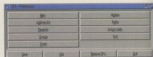
This is where you enter all you favourite people into your bulging address book

single directory. The first thing you will notice when you run DFA is that it has a very handy tool bar across the top of its window. All the more common commands are accessible via this tool bar. If you are not sure what each icon means, just place the mouse pointer over the relevant icon and its functions will appear in the information box at the top right.

Adding new entries is very straightforward. Click on the New icon, which is the little folder icon. This pops up another window with a number of fields. The form is fairly standard allowing you to enter, among other things, the person's name, address, phone number and up to three e-mail addresses. You can cursor between each field, and each



The main DFA window - all your friends and contacts can be grouped and listed from here



DFA is extremely configurable. Its fonts, window position and appearance can be changed

-Disks

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Please allow 28 days for delivery

DISK 2

epoch Voyager

Author: Jack Pritchard
Workbench: 2.04

Is your life a mess? Never know what you are meant to be doing next? Always forgetting about loved ones' birthdays, weddings or bar mitzvah? Well, epoch Voyager can help you get back on track.

This is a fully-featured Personal Information Manager, so if anyone asks you know what to tell them. Voyager allows you to store all your coming appointments, special events, deadlines or whatever you need reminding about.

The main screen of Voyager is a diary which allows you to select a specific day from which you can enter a start time, an end time, a category, an occasion, a location and up to nine pages of text. You can also have a daily planner with up to 50 lines of text in each entry.

Whenever you run epoch Voyager, it will check the next seven days to see if you have any entries in your diary. Along with the plain diary, it is possible to add anniversaries so every year you will be warned of impending birthday or wedding anniversaries. Along with these features you can also add simple reminder messages. By entering a date and a + - days amount, you can jog your memory on a daily basis - hopefully never forgetting some important task.

For a wider view of things, a year

planner is provided where every day of the year is available. Just click on the appropriate day and all the relevant entries for that day can be viewed. If that was not enough for you, there are two separate address books. It is possible to search between the address book and you diary for any coincidences. Consequently, if you wanted to know what appointments you have with Fred Bloggs, there is no problem.

Play16

Author:
Workbench: 2.04

When the Amiga first arrived ten years ago, its custom sound chips were state of the art, and even today the sample quality produced by the Amiga is superior to the PecC's basic Sound Blaster and Ab lib boards.

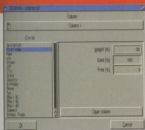
The fact that other platforms have realised that people might actually want their computers to make some sound has meant that over the last few years a number of incompatible sample formats have emerged.

Along with the Amiga's own IFF-BSVX format there is Wave, Voice, Sun Audio, Maud, AIFF and not to mention plane raw sample formats - most of which can handle 8 or 16-bits, mono or stereo, and additional sample compression.

Play16 will allow you to play all the above mentioned sample formats and more. There are a number of ways to use Play16, the simplest being to run it and use the file requester to choose a sample. Play16 will then auto detect the sample type and play it.

There are some more advanced options available which can only be accessed from a shell. Two of the more interesting ones it provides include direct Maestro Pro output, if you own such a board, and also that it supports a new sound driver system called Cyber Sound.

needs



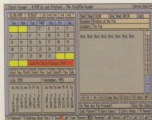
From here you can change which columns of the address listview display what information

person can be placed in up to eight different groups.

Once you have a few people entered into DFA you can cursor up and down the list on the main window. A selection of their details is displayed in a small window at the bottom, or you can view their entire entry by pressing return or double-clicking.

DFA comes with a fairly comprehensive preference program, along with the fairly normal window positioning and a choice of the fonts it uses. You can change exactly what information is displayed in both the main address listview and also the smaller panel listview that is at the bottom of DFA's window.

A couple of DFA's more unusual features is that it has been designed with network use in mind. Therefore, a number of people can share the same address book over a network without any of the usual read/write conflicts. The other unusual feature is that if you have a modem attached, and then a phone connected to your modem, you can get the computer to phone up a particular person.



Keep your life in order, and never miss another date with epoch Voyager



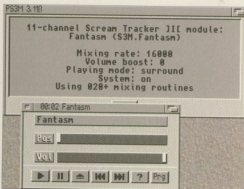
PS3M

Author: Jarno Paananen
Workbench: 1.2

There are more tracker players on the Amiga than fish in the sea. Well that's probably not true, as there are not too many fish left in the sea, but that's what you get for having an unmanaged natural resource.

Anyway back to PS3M – what does it do I hear you cry? Well, it could have been just another typical pro tracker player. But what PS3M does is support the new PC tracker formats, specifically,

P53M will handle anything up to 32 channels - if your computer can take the strain



Scream Tracker 3, and the scream tracker file extension is 'S3M', hence the name PS3M.

Even though trackers were invented on the Amiga, the emergence of high-end sound cards for PCs has meant that PC trackers now support up to 32 channels at 16-bit. It might sound impossible for the Amiga to reproduce this feat, but an A1200 with fast memory will happily manage 16 channels at about 24KHz.

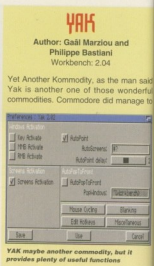
One of the interesting features is that you can specify what speed the samples should be played at, and this ranges all the way down to 4KHz - although any thing above 20KHz gives good results. Along with the normal support for ProTracker and Scream tracker modules, PS3M will also handle 6-8 channel Fast tracker, 1-32 channel style Protracker, and finally multiTracker modules.

You are not just restricted to the typical mono or stereo sound output either. PS3M has support for fake surround sound, or even real surround sound for all you people with Dolby Prologic decoders, and if that was not enough for you, PS3M can replay at 14-bit quality. A word of warning, however. If you want to use all these features, do not expect to have much processor time left.

Virus Checker

Author: John Veldthuis
Workbench: 1.3

This is another favourite that should reside in everyone's WBSStartup drawer. Those nasty viruses are always on the prowl, so a good virus checker is essential. The latest version adds more of the nasty blitters to its armoury, so you will have even more protection than before. Sounds like a good under arm deodorant.



Tiff Data Type

Author: Bert. Wynants
Workbench: 3.0

Tiff is a widely-used image format in the computing world, even though it has never really been used on the Amiga - probably because IFF is a good all rounder. It is about time someone did a Tiff data type, because it was about the only major picture format that was not supported by them.

This is compatible with version 6 of the TIFF specs and supports 1,2,3,4,5, 6,7,8,24, and 32-bit depth images along with line art, grey scale, palette images, 24-bit colour RGB, and finally 32-bit colour CMYK

To get the best out of the data type you really need 2 meg, and a hard drive to store temporary files.

PNG Data Type

Author: Cloanto®
Workbench: 3.0

Yes, it's another data type, and for a file format you may never have heard of. This is going to be a very important file format in the future because if you did not know,



PNG is the best lossless picture format around



The Cyber Sound calibration allows you to fine tune the 14-bit replay

lets Cyber Sound accommodate the slight variations that exist in all Amiga sound chips. Doing the calibration will allow Cyber Sound to produce the best output quality possible.

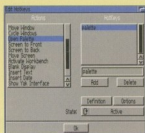
If you want to use the 14-bit output of Play16 you are going to need the Cyber Sound device, and being the nice chaps and chappesses that we are, here it is. Cyber Sound allows your Amiga to produce sound output at 14-bit quality, at speeds of up to 60KHz, depending on what system you have. The drawback is that it requires more processor power and is only really usable with an 020.

This miraculous feat is achieved by mixing two channels; one playing at maximum volume, the other at minimum – so producing a stereo output uses all four channels. The end result is that playing a 16-bit sample produces a lot less 'hiss' than the normal way of cropping it down to 8-bits.

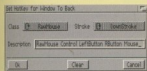
To get the best results, a calibration preference program is provided. This allows you to test the Amiga's sound chips over its entire sound range, and

do a couple of things right after all.

Yak has been around for a good while now and works along the lines of MultiCX. It provides lots of useful little additions to Workbench. The main part of Yak gives you better control over your windows. You have all the usual click to front/back and screen cycling, along with a very comprehensive hot key function which allows you to more or less assign any type of function to a certain key combination – such as Execute a CLI Command or an ARexx script, Insert text, Insert date, Close/Zip/Shrink/Enlarge windows, Move/Cycle screens and windows, Activate Workbench, Blank display, Pop up a palette, or add a Menu shortcut,



like using right Amiga d for delete. One of the neat features of Yak is the way you define your hot keys or mouse presses. All you do is press the key combinations or mouse buttons you want, and viola, the hot key definition is automatically produced for you. This is very handy, especially for some of the more complicated mouse button combinations, such as left button double right.



Unisys started charging people for the use of the Lzw compression algorithms. This meant that anyone writing a program that could read or write GIF files would have to pay royalties.

This rightly angered a lot of people, as GIF is one of the widest used file formats. So Compuserve got a group of smart programmers together who went about creating a new improved, son of GIF file format.

PNG is the fruit of their labours. It has a large number of features such as support of true colour depths of up to 48-bits, and alpha channels. One of the most important is that PNG is thought to be completely royalty free, so hopefully can be freely used by one and all.

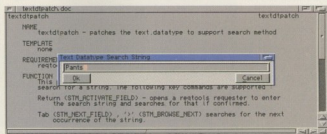
The PNG data type is by those lovely people at Cloanto, and it supports all parts of the PNG format. At the moment, the only PNG image you may have is the test.png that came with the archive. However, this format will gain a lot of support – Image Studio and Person Paint already have external loaders that allow them to read and write PNG files, and more programs will follow.

So install the data type and help PNG become the default loss less image format.

Text Data Type Patch

Author: Stefan Ruppert
Workbench: 3.0

This is fairly straightforward and basically adds extra functions to the Amiga's Text data type. Whenever you read a document using Amiga guide or Multiview, pressing return will pop up a text requester, into which you can enter words to search for. Using tab, you can then search forwards, and shift and tab will



search backwards.

To get the patch to work insert the line:

```
run >ll: textdpatch
```

into your s:user-startup file, and copy textdpatch into the C: directory.

FMS

Author: Matt Dillon
Workbench: 1.3

Another tiny utility for hard drive users, or for someone with a few megs of RAM.

Converter Master

Chris Krivitski
Workbench: 2.04

This is one of those little utilities where you think, why would any one need that? Then about two weeks later you find yourself throwing half the stuff off your desk trying to find a copy of it.

Converter Master will convert between all the more common measurement scales, such as Celsius and Fahrenheit, feet and meters. All you do is select the type of measurement you wish to convert and enter the value into the appropriate box. All the other values in that category will then instantly be displayed.



Converter master will handle all the normal measurement conversions

Lupe

Author: Frank Toepper
Workbench: 3.0

If you knew any French or German, you would already know what Lupe does. It is a magnifying glass which will jump onto any public screen and has adjustable zoom, all the way to 20x. It may not sound much more than a little toy, but they do come in useful for positioning icons or magnifying parts of pictures.



Look there, there's a pixel out of place. What do mean you can't tell?

This allows you to create a virtual disk drive on a hard drive partition. Therefore you get a disk drive that can be accessed almost as fast as a hard drive. For people like ourselves who are compiling disks, this is an absolute god send, as you are completely unburdened from the drudgery of waiting for the disk drive to copy or run files.

It also makes it possible to DMS straight to the hard drive, so if you have a CD full of DMS files, you can go through them in a fraction of the time compared to using a floppy drive.



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For the majority of Amiga users Mpeg is generally perceived as nothing more than a rough and jerky anim format. But as the CD32 has already proven, full-screen real-time digital video is well within the reach of the Amiga, offering a cost, storage and transfer time-effective means of delivering digital video at or about composite quality.

Not surprisingly, Scala haven't wasted any time in recognising Mpeg's potential for presentation. As a result, the Scandinavian multimedia men have fine tuned the Amiga's only dedicated Mpeg encoding and decoding card for direct application within Info Channel, MM300 and their latest creation MM400.

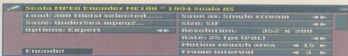
Although originally known as the Peggy card, the same hardware has now been reincarnated as the MD100, complete with stylish packaging and a degree of ease of use within both the controls and utilities that have made Scala a multimedia giant. The main reason for incorporating hardware directly into a primarily software-based system is, of course, to minimise the demand for even more hardware. At present the expense and hassle involved in incorporating traditional video into multimedia productions simply doesn't make it an option for most multimedia productions.

PROVISIONS

In the past, Scala offered provision for incorporating traditional video and even laser disks into presentations via their EX standard. However, both methods had their limitation. Laser disks offer little in the way of interaction as well as being very difficult to master. Traditional tape offers many of the same problems plus the evils of hardware maintenance, slow interaction and, of course, degradation of the tape.

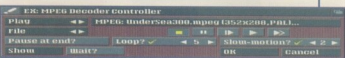
With the arrival of the MD100, Scala finally has full frame or partial digital video that will never degrade, unlimited video clips with no tape swapping, hardware that is unlikely to need any maintenance, and it's all in one box.

Once the hardware is firmly entrenched in the Amiga's video slot and the appropriate cable linked either to a composite video, S-VHS, or RGB outputs, plus an Mpeg audio out on the rear of the board, you effectively have a traditional genlocked video single directly beneath the Scala presentation. Unfortunately as it stands, Mpeg audio is only available via pre-recorded Mpeg movies, primarily from CD - CDs being supported directly in the control software. As a result, direct encoding Mpeg



All the options you need to customise your creations

Full screen or in a window, Mpeg import has all the options, a little slow to implement



DU on the desktop

Paul Austin explores video on demand - Scala style



video is the only option, although audio accompaniment is still available thanks to Scala's sample and mod playing abilities.

The ability to connect up to such a wide variety of display media is a real bonus, and should provide enough scope for pretty much any production. Obviously, quality Mpeg streams doesn't exactly grow on trees. As a result, after initial set-up, encoding an Mpeg animation is likely to be the first step.

Assuming you've installed the Mpeg EX software in the Scala start-up drawer, a quick trip to the system menu will reveal the encoding side of MD100. From here you simply select a sequence of frames to import and where to save the new Mpeg file, adjust the resolution and setting as required, and click on encode. Now it's time to make lots of coffee.

Although the end results are impressive, it must be said that encoding is a slow process. The example 300 frame anim listed took roughly an hour and a half to encode from full video-res frames. Originally exported from a PAR card, they were then scaled and converted into the Mpeg format and resolution.

Slow import and the lack of real-time capture is perhaps the only chink in MM100's armour. Unless you're lucky enough to have either a PAR card or a VLab Motion, your Mpeg productions are likely to be limited to traditional computer

All the usual Scala goodies plus full frame digital video, impressive by any standard, and only 1.1Mb to store the entire 300 frame animation

graphic animations. After selecting an existing Mpeg or creating your own, its addition to the production simply means clicking on the newly acquired Mpeg box in Scala's main layout.

A quick click reveals the Mpeg decoder controller, and it's from here you can control the Mpeg action. The first step is to select the file, at which point you're provided with an impressive array of customising options.

As you can see from the screen grab you can play and pause, add a definable or infinite loop, apply definable slow-motion, and even make the Mpeg wait when you hit the appropriate point in the production. Tape deck transport controls allow instant scans of the Mpeg stream and once you're happy, a simple OK adds the Mpeg and play settings to the production.

During testing I had at least five separate Mpegs, combined with mods, samples, wipes and all the other Scala classics with no appreciable drop in overall performance.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



Zorro video slot

The bottom line

Product: MD100 Mpeg encode/decode
Supplier: Scala UK Ltd
Price: £599
Tel: 01920 444294

Ease of use	9
Implementation	8
Value for money	8
Overall	8

Roll the credits

Needless to say, MD100 is a product dedicated to serious multimedia production, and if you're looking for the ultimate in Scala impact it's arguably the ultimate addition. Full frame genlocked 24-bit video at 25 fps, amidst all the other goodies that Scala can throw into the action - it has to be tempting for animators and multimedia types alike.

Zoom

A joint project from Active Software and Ground Zero, Zoom is a new release that claims to feature their best PD from over the past six months. It distinguishes itself from other general collections, however, by an impressive looking interface that promises the sort of ease of use that Amiga CD needs.



When it comes to the crunch, however, Zoom fails to beat the Amnet CDs that have set the standards in accessibility. One major reason for this is that most (if not all) of the files are archived using DMS, which means they have to be extracted on to floppy disks.

In practice this means that when it comes to using the file you've extracted you have to leave the interface and go to the workbench. Though this is not really much of a problem with files that fit on one floppy, it becomes off-putting when dealing with larger programs – especially since it's impossible to know which are worth the effort.

EXTRACTION

In contrast, Amnet predominantly features LHA files which require less trouble to extract. This weakness on Zoom's part is a shame because in other respects the package works very well. It's large contents summary box is one good idea, for example, that would make a welcome addition to other collections in the future.

Unfortunately, the actual contents aren't on a par either. There are huge amounts of babe pictures padding the CD out, and though these are obviously popular sellers, they're of little use for anything computer related. Games take up a significant proportion of the disk, with around 70 card sets for use with Klondike III patience included as part of the collection. Considering the amount of space available on CD, it would have been nice if these hadn't been compressed so they could have all been used directly from CD.

More serious users will at least find some interest in the Ground Zero Imagine 3D collection, and there's also some 20Mb's worth of Magic WB data to choose from. DTP users will find the addition of themed mono clipart another worthwhile addition.

What finally undermines Zoom, however, is the fact that despite its competent interface, the disk contents have not been organised into helpful categories. In fairness, the CD's fun emphasis and colourful front-end do make a welcome change, but the flaws mean it doesn't make the top league.

The bottom line

Product: Zoom
Price: £19.99
Supplier: Active Software
Tel: 0117 9741462

Ease of use	7
Implementation	7
Value for money	8
Overall	7

Laser guide

Giga Graphics



Image collections on CD have been popular from the outset, but Giga Graphics gains an instant edge by virtue of its sheer size. For just over £30, the package comprises of four CDs packed with more than 10,000 pictures plus a few handy utilities to allow buyers to make the most of its contents.

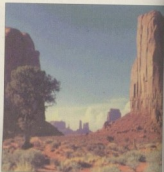
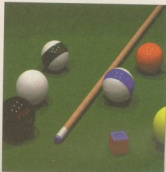
Considering there's over 2Gb of information here to search through, it was to be hoped that there would be proper categorisation of the images. It's unfortunate, then, that the images are simply organised alphabetically, which as usual makes for an almost hopeless mix-up of subject matter.

To give an idea of the problem, out of one of the randomly chosen 'C' drawers came these pictures which followed one after the other: a fantasy painting of a woman, Captain Kirk from Star Trek, Capital Hill and a rendered car. In other words, finding what you want isn't always easy; on the other hand, guessing why some of the pictures are in a

particular location makes for an entertaining game when bored.

Thankfully, the collection is largely redeemed by the inclusion of a thumbnail preview catalogue, so though the pictures are rather jumbled, at least skimming through the disc contents is greatly speeded up.

Given the product's size, a fair assessment of all the contents is impossible in the space available. However, it quickly becomes clear that the breadth of subject matter covered is very wide ranging indeed. Whereas many collections have concentrated too much on



Guidance

Gareth Lofthouse returns with our regular CD column.

*This month yields the latest general collection plus
a huge graphics collection and a dusted off
multimedia encyclopaedia*



science fiction in an area which is already overpopulated with the same Star Trek and Babylon 5 pictures, this collection is more like a general image bank.

All the standard fare is included, but fortunately there are many other fields to choose from. Pictures of supermodels and swimsuits do, however, crop up all over the place, but at least there's some fair play thanks to the inclusion of a number of muscle-bound hunks as well.

Cars, trains, space, planes – as you'd expect, there's an abundance of material to keep the most voracious anorak happy. But there's also a great deal of useful material too. Sunsets, world locations and landscapes are available in huge quantities and often the quality of the photography is high. Similarly, close-ups of roses and flowers could be put to a number of different uses.

PROS AND CONS

There are numerous painted backgrounds available, while photographs of stones, bricks and other textures are there for 3D fans to wrap onto their objects. Considering the size of the collection, LightWave and Imagine users may be disappointed to find it lacks any actual models; in my view, however, the collection benefits by concentrating on being a definitive 2D image bank.

Flags, famous album covers, military

equipment, ray-traced – the list goes on and on, and only occasionally does the quality drop to below average. Fans of fantasy artist Boris Vallejo will be pleased to see a huge amount of his arguably pornographic but certainly talented paintings covering a sizeable section of the first CD.

One further complaint does need raising however, that being the amount of image duplication in the collection. In fact, the Vallejo collection is a good case in point, with the same pictures cropping up three or four times in close proximity.

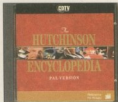
The images are generally in IFF format. In addition to all the pictures, Viewtek has been included so that everything required to look at the images is included with the package. The inclusion of Personal Paint is also welcome, since users will be able to load up images and work on them.

It's a shame, then, that it's an untranslated German version, making it difficult to use for the majority of us. The slapdash way in which some things are thrown onto some CD collections – and this is not an unusual example – does not bode well for the Amiga's future CD market.

So overall, Giga Graphics is not short of flaws. Anyone who can find uses for a wide range of imagery, however, cannot help but be impressed by the value for money such a huge and far reaching collection offers. In short, it should make a worthwhile buy.

The Hutchinson Encyclopaedia

The appeal of having an entire encyclopaedia stored on a single compact disc is obvious, so it's no surprise that many suppliers are selling out of the Grolier CD reviewed a few months back. In its place, the equally old Hutchinson electronic encyclopaedia has resurfaced, so we decided to see how well it's stood the test of time.



Though it was originally designed for use with the CDTV, most new purchasers are likely to be using emulation software on their A1200s, so it's good that Epic have included alternative keyboard controls. Unfortunately, however, this is not enough to overcome every compatibility problem. For example, though the instructions stressed that it was essential to boot from the disc, this proved to be impossible using our Squirrel. We did manage to run it from workbench, but the text appeared in such a small font it was difficult to read – on the CD32 the articles are much more readable.

There are also problems using the encyclopaedia because the A1200 lacks a control pad, and navigating the interface requires combinations of Amiga keys, ALT keys and the cursor arrows. Sometimes users can get stuck in one article and it's not at all clear how to get back to the main menu.

Basically, this makes it impossible to recommend for Squirrel users, but it does seem to work perfectly well on the CD32. With over 25,000 entries plus pictures and soundclips, for those who own the console the Hutchinson CD still sounds like a worthwhile product.

In comparison to the Electronic Grolier, however, The Hutchinson doesn't seem to work so well. The first problem is the peculiarly flickery screen which makes using the disc painful on the eye.

Though there are 2000 photographs and 250 sound clips, they are sparsely distributed among all the plain text articles. Considering this is supposed to be a multimedia product, the information is often blandly presented to the point where most people would rather use the traditional paper version.

With searching tools that also seem inferior to the Grolier, this CD unfortunately doesn't cut it in the modern multimedia age. It's only its price, plus the fact that the Grolier is hard to get, that makes it even worth considering these days.

The bottom line

Product: Giga Graphics
Price: £32.99
Supplier: Active Software
Tel: 0117 9741462

Ease of use 8
Implementation 8
Value for money 9
Overall 8

The bottom line

Product: Hutchinson
Encyclopaedia CD
Price: £14.99
Supplier: Epic Software
Tel: 01793 490988

Ease of use 7
Implementation 5
Value for money 7
Overall 6

World of Clipart

Desktop publishing is no longer the sole preserve of people who can afford expensive packages like Pagemaster 3, with word processors now offering drawing tools and the option to import pictures as standard.

PD collections have always been a good source of clip art, but finding the right material to suit your documents and, equally importantly, your printer, was not always easy. A CD with over 40,000 mono and colour images therefore holds an instant and obvious attraction.

World of Clipart is particularly large thanks to the fact it's spread across two CDs, and there's a huge and diverse range of subject matter to choose from. Furthermore, the material appears to have been well selected to suit the bulletins, pamphlets, fanzines and newsletters the CD will probably be most used for.

There are large drawers dedicated to business and education, for example, as well as general symbols that will be useful for just about anybody. There's also work for computer and technology categories which should please those who want to write about their Amigas as well as use them.

Natural world drawings are always popular in clip art collections and unsurprisingly, this CD has a good range of dog, cat, insect and seafife pictures to choose from. Transport, Christmas and people are categories that are similarly well represented. Pictures range greatly



in size, with some of them only suitable for printing in a very small scale. Others, however, are about five times larger than your Amiga's display, making them suitable for large scale use with printers boasting high DPIs.

The standard of many of the drawings is exceptionally high, with a lot less hit-and-miss quality control than some of the product's rivals. Some of the images are highly accurate and detailed, but the inclusion of well drawn but simpler pictures and caricatures proves equally important.

WIDE SCOPE

For those who want to print in colour there's also a huge number of colour pictures covering almost as many categories, and once again the quality remains high. In terms of breadth of coverage, therefore, World of Clipart is hard to fault.

So far so good, but unfortunately there are a few complaints that have to be raised. Categorisations into drawers

has been done consistently, but the actual file names are inexcusably unhelpful. With only numbers distinguishing each individual picture, finding the right picture can be unnecessarily time consuming. It was also strange to find pictures in the IFF drawer had bits missing for some reason.

Of course the CD is padded out by duplicating images in just about every image format available, but this is a plus point when it comes to flexibility. What's more, a program called Transition has been included to allow Amiga owners to convert file formats.

The odd flaw aside, this is a high value, high-quality collection that beats any of the competition I've yet seen. Useful for just about anybody, World of Clipart comes recommended.

The bottom line

Product: World of Clipart

Price: £19.99

Supplier: Epic

Tel: 01793 490988

Ease of use	7
Implementation	8
Value for money	9
Overall	8

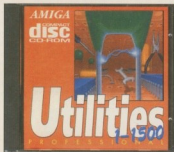
Utilities professional

There are some Amiga users that have absolutely no time for games. As a recent survey proved, the inclusion of the smallest PD shoot-'em-up on the cover disks will have some people criticising what they see as a waste of space.

Such serious users might therefore sit up at the prospect of a dedicated utilities CD, and that's exactly what this PDSOFT product is about. Business software, graphics production, hard drive tools, virus killers, DTV – you name it, if it's anything to do with productivity computing it's here on the disk.

The CD has been around for a while now, however, and in some ways it's beginning to look rather dated. In terms of organisation, it really is a pain to use in just about every way imaginable.

Basically, the CD consists of 1500 floppies worth of files and programs transferred onto disc. Searching through the drawers just brings up thousands of identical, nameless icons with no clue to their contents. This means you have to go to the alphabetic directory in a separate text file, seek out items of interest, and then take a note of the relevant disk number. Even the numbers on the program drawers are made peculiarly difficult to read. It's another bunch of DMS programs



as well, which leads to the same slow transfer on to floppy you get with Zoom. It's worse here because you have even less of an idea of what you're going to get in the end.

This is all a bit of a shame since many of the contents will please the more serious Amiga users out there. On the educational side, there's a Language Tutor that provides an effective vocabulary tester for French, German and Spanish. For video there's a titler program, for

music there are the usual PD music editors plus a collection of reasonable quality sound samples to expand your repertoire. Databases, sports selectors and disks for HAM radio enthusiasts give an idea of how much material is available.

Frankly, however, I just couldn't be bothered spending hours trying to find the good stuff. This one is reserved purely for the most patient of the techies.

The bottom line

Product: Utilities Professional

Price: £19.99

Supplier: PDSOFT

Tel: 01702 466933

Ease of use	4
Implementation	6
Value for money	7
Overall	6

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As I start this article I am dreading being able to finish it. I'm not worried about going over the top in terms of copy, I am worried about being able to fill the page with pertinent information. The main reason for my worry is that the Sonnet Doubler is so simple it defies belief. Simple in its operation and simple to install.

It arrives in a small cardboard box which also contains a tool that looks a bit like a small comb for removing the 68040 chip from your 3640 daughterboard, an earthing strap, a sheet of instructions and the doubler itself. The instructions give you guidelines on removing your existing 68040, covering all the different setups like the epoxied heatsink, the clip-on heat sink, and the paper-clip type spring clip heat sink. Once you have tremulously removed the heart of your machine and pried the living soul from it, you can then insert the Sonnet Doubler.

It consists of a board roughly twice the width of one 68040 socket, with pins on its underside at one end to insert into your now empty 68040 socket, and the new 68040 at the other end of the board sitting under a combination heatsink and fan. There only appears to be one chip on the board, other than the '040 of course, along with a couple of resistors.

OVER-CLOCKED

Motorola only make 68040s clocked up to 40MHz as far as I know, so the heatsink and fan have to work even harder to cope with an over-clocked CPU. The fact that it is running hotter than the normal '040 seems to make little difference and certainly didn't cause our machine to crash any more than normal.

Owners of machines other than A4000s may have trouble fitting the Doubler owing to the increased height requirements – it stands about an inch and a half proud of the daughterboard. You might be able to fit it into a 3000T but, unless they are willing to make serious modifications to the case, A3000 owners will probably be out of luck.

What speed does it run at? Well, SysInfo, that notoriously unreliable benchmark, gives us a rating of about 38.13MIPS and 9.66MFLOPS. Running it

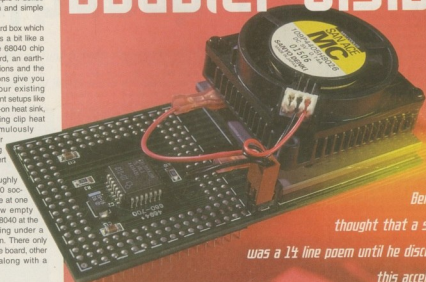
ZIF a dee doo dah

Nearly all PC motherboards these days come with what is known as a ZIF socket for the CPU to sit in. ZIF is an acronym for Zero Insertion Force and works by having a socket with overwide holes in it for the CPU's pins to go into. There is a lever on the side of the socket which, once you have inserted your Pentium or whatever, you pull over until it locks once more.

This basically locks the pins of the CPU in contact with a conductive layer inside the socket. No more fiddling about trying to pry a chip out of its socket, levering it this way and that with a small screwdriver, hoping you won't bend any pins – just flip the lever back and the chip will just lift out.

As to why there aren't any ZIF sockets on Amiga motherboards or accelerators, I can only surmise that this is because the 680x0 range of processors isn't so swiftly obsolete (either that or the sockets cost too much).

Doubler vision




*Ben Vost
thought that a sonnet
was a 14 line poem until he discovered
this accelerator*

Too warped to fit?

I asked Blittersoft whether the Sonnet Doubler would work on any other 68040 accelerator card but it seems that most other accelerators don't use the 68040 at 25MHz, they all over-clock to 28MHz. This means the Doubler will unfortunately not work as it actually relies on there being a 25MHz clock rate.

through AIBB gives us results of around twice the speed of our standard 040 rating. But is £399 too much to pay for doubling the speed of your Amiga? It's certainly on the edge of acceptability as far as I'm concerned when you could have a machine that is at least four times the

speed for about a grand. Admittedly, that is over twice the amount the Doubler costs, but you would also have your original 3640 board to sell, and they fetch somewhere between £300 and £450 for the right buyer.

That brings the cost of the CyberStorm down to between £550 and £700, a much better proposition, especially when you consider that you will get better memory access and an optional SCSI-2 controller. Of course, if you can't afford that extra dosh then the Doubler does represent a good way of increasing the speed of your machine for relatively little outlay. 

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



68040

The bottom line

Product: Sonnet Doubler
Supplier: Blittersoft
Tel: 01908 261466
Price: £399

Ease of use	9
Implementation	9
Value for money	7
Overall	9

For those who missed our initial preview in *Amiga Computing's* July issue, Tune Builder basically offers a totally unique approach to musical production on the Amiga. In the past, producing music to accompany either video or a multimedia production was both expensive and time consuming, and more often than not both.

Fortunately with its arrival, custom-built, pro-quality CD sound, is within the reach of quite literally anyone. And there's no need for any musical equipment, talent or studio facilities.

As any videographer will tell you, quality pre-recorded music is expensive, and even when you've got the basic working material you're still looking at a big investment in time, money and effort to edit and incorporate the music into your production. Even then you're by no means guaranteed that the end results will fit perfectly into the overall production – crescendos in the wrong place, quiet sections where you want a bit of excitement, the list goes on.

Fortunately, Tune Builder puts all these problems to the sword by providing a fully interactive customising process that allows the user to create music of precise length, tailored throughout in the style of your choice. Whether you need a change of mood or a dramatic crescendo, the exact slice of music you need can be slotted exactly in the right spot and repeated as often as necessary.

The question is, how can a combination

The bass line

Aside from the ease of use, time saving and all the other point bonuses for Tune Builder, the overriding must for any library is the overall quality of the music. All too often, libraries consist of innumerable synthesiser specials with the inevitable 'chicken in a basket' overtones that make for more of a novelty item than a serious production tool.

In Tune Builders' case there is a slight cheesy feel on the odd track, but in general the collection is truly excellent with vocals and guitars blended with believable brass and impressive percussion. Better still, all the major sampling formats, options and rates are supported across Amiga, PC and Mac and others. There's even a direct support of the Toccata card.

In short, Tune Builder is nothing short of essential for anyone involved in serious video or general multimedia. It will literally save hundreds of hours of hard graft while improving your overall production quality. If you can afford it, and can envisage a return on your investment, you can't really afford to be without it.

CD quality cut

of a musical illiterate, some software, and TB's accompanying CD's create pro-quality music that normally would keep a professional musician busy for hours if not days. The simple answer is that although you have control over the construction, the tunes themselves and all the hard graft that went into them has been done on your behalf by a team of professional musicians.

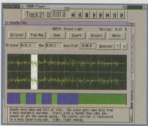
Obviously, the process of transforming a musically inept computer jock into an instant impresario all hinges on the skill of those lovely people who put TB's Arpeggio CD collection together. During what must have been a nightmare production process, the musos behind the music built multiple edit points directly into each tune, which were then picked up by the accompanying software. As a

consequence, the software can take a slice out of this digital loaf and cut, copy and paste it back in anywhere you need it. As any muso will tell you, simply taking a random slice out of a song and slapping it down elsewhere is a recipe for disaster. Unless you're either very gifted or extremely lucky the timing, the key, and overall continuity will be shot to bits.

LARGE AND SMALL

During testing I dissected and totally reorganised entire tunes, shrank them to a tenth of their original size and expanded others from 30 second originals into minutes. Every time the end results were perfect, no clicks, no pops, no agonising key changes or obvious continuity faults – well perhaps one or two...

As you may already be aware, one



Drag and drop simplicity amidst incredible sound and production quality



Just about every sample format imaginable from 8-bit mono to full 16-bit CD stereo

Mix and match

On initial boot-up, the first port of call is the Library section where you audition and select from the 344 assorted tunes spread over the 12 accompanying CDs. Needless to say, some form of filtering, not to mention auditioning, is essential, but fortunately both areas are something TB is particularly adept at.

Initially, the library presents you with the complete list and you're free to scan the collection and read the notes appended to each track – regardless of whether the CD is actually in the drive. If you find something you like the sound of, either during a browse or a dedicated search, it can be tagged and will then always appear in the search window regardless of subsequent search parameters.

If time is of the essence, or perhaps you already have a firm idea of what you're after, the obvious step is to

forego browsing and go straight into a search. As you've probably gathered courtesy of the screen shots, filtering the 344 tunes is particularly well implemented. The first step is to select a style or even multiple styles. If this doesn't trim down the selection sufficiently you can narrow the selection further by searching by word, defining preferred tempos and/or a range of beats per minute. Even track length, using greater, less or exact parameters is an option.

DELIVERIES

During a complex search a click on the button will usually deliver three or four tunes. The next step is to audition your selection and to do it you'll need to fire up your CD-ROM drive. As you select each track the software provides a brief overview in the form of an editable note, the ID of the track, and the CD on which it's stored.

If you then select the CD Player preview from the pull-down, a tape deck control pops-up ready to assist the

band paste

*Paul Austin auditions Tune Builder - arguably
the greatest advance in Amiga music in years*



The ultimate in pick and mix. With 344 tunes to choose from there's no chance of running out of ideas

minute of stereo CD quality audio translates into roughly 14Mb of storage space. As a result, actually producing 30 minutes of CD quality sound internally would bring even the best equipped Amiga to its knees. Consequently, TB offers a unique approach to production by importing the original 16-bit data for the selected tune, and from this it creates a more manageable 8-bit dummy. And it's this 8-bit clone which TB uses for preview during production.

As you'll discover later, you do have the

process on either searches or during browsing. Alternatively, if you simply double-click on the selected track the CD drive will automatically locate it and start playback direct from the CD.

Obviously there's a chance that not all your selections will be on the same CD. Fortunately, if you double-click on a track that isn't on the current CD you'll be prompted to insert the correct volume. And as an added safeguard, each track which is on the current CD will be highlighted with a star in the selection window.

Assuming you've found one or more tracks you're particularly keen on, you simply tag them and click on the project button. At this point you'll be asked what you want to import - either the currently highlighted file or your complete selection. That done, the software sets about importing the 16-bit data and generating its 8-bit doppleganger. Assuming you've imported all the tunes you require, simply select one and click on the all important Tune Builder button.



Make your selections and import. But bear in mind you could need 600Mb of disk space for the necessary 16 and 8-bit data

opportunity to audition the available tunes in 16-bit prior to editing, so you should have a good idea of the overall quality beforehand. For the purists, 8-bit may seem like a worrying compromise, but in reality the clone is more than adequate for basic edit decisions.

Once your designer tune is complete, the software reverts to the imported 16-bit data and compiles your master tune in the format and sound quality of your choice.

Tune Builder provides a fully interactive customising process that allows the user to create music of precise length, tailored throughout in the style of your choice

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



The bottom line

Product: Tune Builder
Supplier: AirWorks Media
Price: \$999 none broadcast
Price: \$18,999 TV and broadcast
rights
Tel: 001 403 424 9922 (Canada)

Ease of use	10
Implementation	10
Value for money	7
Overall	9

legato lego

Once inside the editor you're presented with a waveform of the entire tune segmented into numerous individual edits, and it's these seamless cuts that are the key to the whole process.

Although the principle is inspired, the actual production process is embarrassingly simple. To audition the tune simply click on the Play Original button, and if you're perfectly happy with things as they are you can export the tune in the rate and file format of your choice.

The next option is to interact a little more by specifying a user-defined length for the tune you require - either larger or smaller than the original. If you add the length you need and click on generate, TB automatically interpolates the existing track to produce a custom-built tune that will fit your time parameter - usually to within one second.

If you don't like this initial mix you can click again and TB will produce a new variant. You can repeat the process as often as you like and then toggle between the variations with the adjacent arrow keys. If this still doesn't quench your thirst for interaction, there's still lots of scope. The next option is to use a combination of shift and mouse clicks to select individual sections - more than once if necessary. The selection is then played in sequence to generate a completely custom-built tune. If you like it, again a simple clicking on the Export will generate a new master.

INTERACTIVITY

The final and, without doubt, the most flexible method is to opt for a full-blown edit session by getting interactive with the Assembler Bar directly below the waveform. To use it you simply click on a section you like, drag it across and drop it on the bar. To create an entire tune you just keep clicking, dragging and dropping until you have exactly the arrangement and length you need.

To audition your creation you can click on the Play New button or shift and drag over the section you want to hear. As you select a new block from the waveform, its counterparts in the Assembler window light up, so it's easy to construct repeats or verse/chorus sections.

You're also free to drop blocks in-between existing selections and delete others. In short, complete drag and drop control. If you need to fade the volume, a click on the join between any two blocks evokes the Dynamic Adjustment Requester which allows you to add space for voice-overs or fade out tunes that perhaps slightly overrun the require run-time.

CD-ROMS seem to be quite in vogue at the moment. You would have a tough time trying to buy a PC or Macintosh which is not fitted with one, but it's not like Amiga owners have been left behind, with Squirrel SCSI CD-ROMS flying off the shelves quicker than the hottest hot cakes.

The options available for A1200 owners are quite straightforward – get yourself a Squirrel setup. Big box Amiga owners have a much wider choice – slap in a SCSI interface and take your pick of all the SCSI CD-ROMS that are out there.

Both the Plextor and NEC drives are internal drives so require a little more work to fit than an external one. You connect both to the SCSI board via a 50-way ribbon cable, making sure the red wire goes to pin 1. The CD audio can be piped through a four-way connector at the back and connected internally to your Amiga, allowing any CD sound to be mixed with the normal Amiga audio – even though a little surgery had to be performed to make the provided lead fit at the Amiga end. All that is left to do is power up the CD with an IDE power connector.

Both the Plextor and NEC drives use caddies. I think they are a pain but they do allow you to use the drives on their side – if they are external drives – and protect the discs. They also have the usual array of controls that appear on CD-ROMS – headphone socket, volume controls, and an eject button. All pretty thrilling stuff.

The Plextor drive is a quad-speed unit and, when sysinfo is in a good mood, returns a transfer rate of more than 600k a second. It appears to be a SCSI 1 device, but this is no real disadvantage because even the fastest CD-ROM is not exactly pushing SCSI 1 to its limits.

INSTRUCTIVE

The manual that comes with the Plextor is jam packed with installation instructions, but unfortunately these are for the PC and Mac. Having said that, a lot of this is relevant stuff, but probably the only thing you will need to know is how to change the SCSI ID number.

Another feature the Plextor drive has is that it is possible to put it into audio/CD-ROM mode. When you first turn on the computer, if you hold the eject button down for three seconds the drive can then play audio CDs. Any music CD you put in it will be played, and you can skip tracks by tapping the eject button. Unfortunately, the only way you can get the CD-ROM back is by turning your computer off again.

As for the NEC, it does seem to be of a slightly better construction, and is a sextuple speed, SCSI 2 device. Again, when sysinfo is in a good mood you can get a transfer rate of over 900k a second. The only other major feature the NEC has over the Plextor is a digital out connector, which would allow you to get perfect samples off any CD. If you have the facilities to use this I am sure it will be very welcome.

Having said that, the CD door on the NEC can be locked open. This might

Internal combustion

Neil Mohr takes two of the latest CD-ROMS for a spin



sound a really trivial point, but when you are flinging CDs in and out of it all day, it is actually really useful not to have to bother messing about trying to prop open the CD door when inserting the caddy.

In practice, there seemed to be very little difference between the two drives, even though the NEC is a sextuple-speed mechanism. The Plextor does have a 1Mb buffer and a random access time of 220ms, which could be the reason for the Plextor beating the NEC drive at the Amintet Search. It is also difficult to spot the speed increase of the NEC when doing directory listings and animation replays.

At the end of the day, whether you choose the NEC or Plextor will come down to how much you are willing to spend. There is a very noticeable difference between using a quad-speed over a dual-speed CD-ROM, but whether the extra 70 pounds for the NEC compared to the Plextor is worth it is something you will have to decide.



SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



SCSI controller



CD-ROM driver

5 1/4 inch bay

The bottom line

Product: Plextor PX43cx
Supplier: First Computer Centre
Price: 239.99
Phone: 0113 2319444
E-Mail:
sales@firstcom.demon.co.uk

Ease of use 7
Implementation 8
Value for money 7
Overall 8

Product: NEC 6Xi
Supplier: First Computer Centre
Price: 312.99
Phone: 0113 2319444
E-Mail:
sales@firstcom.demon.co.uk

Ease of use 7
Implementation 8
Value for money 6
Overall 7

Speed statistics

For all you stat freaks, a little selection of speed comparisons:

Drive	Sysinfo	Copy File	AminetSearch
Aiwa aCD300	305k	28.8 secs	5.0 secs
Plextor PX43cx	610k	16.6 secs	3.8 secs
NEC 6Xi	910k	12.6 secs	4.1 secs

Speaker's



Tina Hackett and Gareth Lofthouse round-up and review some of the many speaker systems available for your Amiga

AIWA Multimedia Active Speaker System



too much space. Three control buttons are situated at the top and as well as the usual power button, there is a Surround control which, in theory, gives you more of a stereo effect due to the Front Surround Circuitry. However, when tested it didn't actually alter the sound a great deal.

From such small speakers you do get quite a powerful sound, although bass sounds don't come across all that well, and unfortunately, although it claims 'Dynamic Super Linear Bass', it still sounds fairly tinny.

At this price the Aiwa still feels like a durable, sturdy system, and if you're not too fussy about deep bass sounds then the Aiwa provides value for money.

Product: Aiwa SC-C55

Price: £49.99

Supplier: Aiwa

Tel: 0181-897 7000

Sound quality	6
Features	7
Build quality	8
Overall	7

Given Aiwa's reputation for top-quality equipment such as their latest CD-ROM drive which received a Blue Chip Award last month, high hopes were held for their mid-priced speakers.

The Aiwa speakers, although quite compact, are stylish in design and because they are slim, fit nicely by the side of your monitor without taking up

SONY SRS-PC50

Probably the most ugly speakers on the market, the Sony SRS-PC50 are designed to be attached to the side of your monitor, although rubber feet do allow them to be placed on your desktop.

Featuring built-in amplifiers that give a total of 5W, they are also

magnetically shielded to prevent distortion on your monitor. The controls are placed on the side of the speaker so when mounted they would face forward allowing ease of use. A bass control can be adjusted to give deeper sounds and the quality overall is good.

Product: Sony SRS-PC50

Price: £79.99

Supplier: Gem

Tel: 01279 442842

Sound quality	7
Features	7
Build quality	6
Overall	7



corner

Yamaha YST-MS Powered Monitor Speakers



The cheaper of the Yamaha set, the YST offers only a three Watt per channel output, but as we've seen before this is usually irrespective of the sound quality you get. However, in this case the sound is very feeble and reflects the low wattage.

Design is rather questionable too. Apart from looking like an upmarket air freshener, the speakers don't feel as if they'd survive any knocks or bumps. The controls are front-

mounted which makes them easy to reach, but because of the lightness of build you have to have both hands free to support the speaker while you make your adjustments. Their size also makes them fiddly and even those with the most nimblest of fingers are going to have problems.

Feature wise it comes complete with an extra output socket to allow it to be connected to something like a very impressive sub-woofer. A presence dial allows you to change the amount of treble you get but unfortunately this wasn't all that responsive. For this sort of price, you're better off going for the Power Speakers or the Aiwa which both feel like they should last a lot longer and provide better value for money.

Product: Yamaha YST-M5

Price: £49

Supplier: Yamaha Kembls

Tel: 01908 366700

Sound quality	5
Features	5
Build quality	4
Overall	5

Zydec ZY-F1 Pro 2

Zydec may not have the brand image that Sony and Yamaha products carry, but this arguably accounts for their lower pricing. The question is, can they match the big boys in terms of sound quality?

The first noticeable point is their strange, and some would say tacky, styling, with the pink and wobbly power button standing out like a sore thumb. However, their upward tilt makes some sense considering they'll

be set on a desktop well below ear level. Unpretentious but comprehensive controls include volume, bass and treble, though they are rather stiff to use. Combine this fact with the unit's lightweight and not very solid look and feel and the Zydec begins to look less durable than some of its more expensive rivals.

Sound quality is not at all bad, and high volumes are attainable without too much distortion. The bass has impressive depth and mid-range clarity is reasonable considering the price. The trade-off between bass and size is less impressive, however, than with the more compact Yamaha speakers.

If you're not bothered about looks and ergonomics - and let's face it, it's not as important for computer applications as with a hi-fi - then the Zyfi offers a perfectly decent sound solution for standard Amiga purposes.

Product: Zy-fi Pro 2

Price: £46.99

Supplier: Special Reserve

Tel: 01279 600204

Sound quality	8
Features	7
Build quality	5
Overall	7

Sony CSS-B100



An all-in-one set designed to fit snugly underneath your monitor, this unit from Sony is at the higher end of the computer speaker market. Magnetically shielded to prevent distortion of your monitor picture and boasting an unusual array of extras, on paper it already looks like one of the tidiest audio solutions.

The Sony's large base is designed to support monitors up to 25 kg, and though it looks big when removed from the box, it actually takes up less desk space than having a couple of small speakers wired up next to the computer. The only possible problem might be that when used with big box Amigas, the Sony will put your monitor at a neck-straining height.

In terms of sound quality, the Sony was a strong performer. Of course it suffered from the same limitations you'd expect from cheap mid hi-fi's, such as a lack of depth in the sound, but to expect much more for under £100 would be unfair. At least the bass was substantial enough to avoid too much tinyness, providing the bass booster was turned to full.

A downside of having everything located neatly beneath the monitor is that the speakers are too close to properly benefit from stereo. In fairness, though, few computer users will be overly bothered on this count.

The Sony scores points for efficiency, for although it has a low wattage, high volumes can be achieved with distortion only occurring at the very highest output - which is a lot more than can be said for many of its rivals.

Connection to the computer is made using the standard left-right channel audio jacks, but more unusual are the secondary set of ports hidden behind a flap mounted on the unit's front. These allow for the connection of video, a microphone and a Discman or Walkman. Not only is it good to have these available, but the fact that users won't have to fiddle around behind the unit too much is also a welcome feature.

Finally, it has to be said that paired with the right monitor, the Sony's smart fascia can only make your kit look more impressive. Strong on sound and features, this sound system is a high calibre contender, and only its price will make serious users have second thoughts about buying.

Product: Sony CSS-B100

Price: £85

Supplier: GEM

Tel: 01279 442842

Sound quality	8
Features	9
Build quality	7
Overall	8



The Yamaha M10s are a pair of 10 watt speakers from another reputable brand name which boasts unusual and elegant styling to match some impressively named special features including pure spruce wood cones and the exclusive Active Servo Technology.

The latter facility is another way of giving the bass surprising depth considering how compact this pair of speakers actually is. Having said that, however, similarly priced

Yamaha YST-M10 + Subwoofer

systems in the round-up fared equally well. Front mounted controls veer from convention slightly with a knob to control 'presence' rather than treble or bass. Roughly speaking, however, this seems to perform a similar function to the standard treble control, whereas bass didn't appear to be very adjustable at all.

Clarity of sound was highly competitive in its class, and the inclusion of a port to allow the connection of a subwoofer will make them very appealing as components of a highly serious multimedia sound system. The inclusion of jacks and adapters make an encouraging bonus since they allow minimal fuss connection to be made with anything from your Amiga to your hi-fi. This is instantly preferable to having to go through a monitor headphone jack as is the

case with some of the alternatives.

The only complaint might be that these speakers ought to be a bit cheaper, and as standalone's their sound is not quite on a par with the Sony's. Still, some buyers won't mind paying extra for Yamaha build quality, and when connected to the Yamaha subwoofer this system is so far unbeatable.

Product: Yamaha YST-M10s

Price: £69

Subwoofer: £116

Supplier: Yamaha Kembls

Tel: 01908 366700

Sound quality	8
Features	8
Build quality	8
Overall	8

Primax Soundstorm 240 Watt



The Soundstorm range are a new collection of computer speakers designed to establish their makers, Primax, as a top developer of multimedia peripherals. Boasting 240 watt power, this top of the range pair promised much in comparison to the 5-10 watt average in its rivals.

Unsurprisingly, they are rather large and will prove an encumbrance on desk already straining underneath the weight of printers, hard drives and CD-ROMs. In terms of appearance, they bear the closest resemblance to standard hi-fi speakers thanks to their box-like, basic design.

The standard audio-system similarities are also borne out by the inclusion of 4 woofers and 2" tweeters for more convincing bass and treble sounds. Like all good computer speakers, however, they include a built-in power amplifier.

The controls are comprised of the standard treble, bass and volume but they're top mounted which makes adjustments slightly more convenient than when knobs are located at the base of the speakers.

High volumes certainly are attainable with these speakers - though the increase over 10 watt rivals is far less dramatic than you might expect. The real problem, however, is that the volume doesn't have to be pushed up that high before the sound becomes badly distorted, which obviously makes that excess power practically unusable.

Even if volumes are kept within a low to medium range, the speakers were still none too impressive considering the price. Amiga owners would be well advised to either buy something cheaper or go for the Yamaha top-range speakers if they want real power paired with accuracy.

Product: Primax Soundstorm 240 Watts

Price: £74.99

Supplier: Primax UK

Tel: 01235 559922

Sound quality	7
Features	7
Build quality	6
Overall	7

HiQ Hi-Fi quality speakers

Boasting a hefty 80 watts and priced at only £49.95, these speakers from HiQ seemed too good to be true, but putting them to the test we found that our cynicism wasn't in the least bit justified.

Mounted on their own stand, they are a lot bigger than the others we looked at and the space conscious may find their bulk off-putting. Similar in size to the Primax giants, if style is an important factor then the HiQ ones win hands down.

While the Primax speakers had sturdy top-mounted switches, these have some rather flimsy switches situated on the front. Although they allowed for some accurate alterations to be made to the volume, bass and treble, they did feel that any heavy handling might just snap them off.

Overall though, for the user who requires a good quality sound at a very affordable price, these come well recommended.



Product: Stereo Speakers

Price: £49.95 (+P&P £7.00)

Supplier: HiQ Limited

Tel: 0181-909 2092

Sound quality	8
Features	8
Build quality	8
Overall	8

Primax 60 watt

considering the price, but like its big brother it tends to overstretch itself with distortion apparent after the volume has been raised by just over a third of its capacity.

Still, they will prove perfectly adequate for games playing and the like, and compared to rival unit's they have a reassuring weightiness that suggests higher than average sturdiness. In short, they're a low budget offering that's worth considering.

Product: Primax 60 watt

Price: £39.99

Supplier: Primax UK

Tel: 01235 559922

Sound quality	6
Features	6
Build quality	7
Overall	7



Competing at the lower end of the market, the 60 watt Primax speakers still supposedly have loads more wattage than far more expensive speakers. By now, however, you're probably beginning to realise that this doesn't seem to count for much in terms of sound quality.

This pair is very small and simply styled, with magnetic shielding to prevent picture distortion if they're used in close proximity to the monitor. Simple controls include volume and bass, while connection is only possible to the Amiga via a monitor's headphone socket - unless you buy an adaptor, that is. Sound quality is perfectly adequate

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19.49

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28.99

FIRST ENCOUNTERS
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AMIGA 30000
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Get writing - so I did

Our first letter this month comes from an obvious madman who... well, let him tell it in his own words:

I was prompted to write to you by the little snippet you placed on page 46 of issue 88, namely "GET WRITING." One single letter won't exactly give you your requested sackful, but if you print this in its entirety, then, what with your answers, you'll have at least a couple of extra pages to fill!

Firstly, I must thank you for your excellent magazine which I have followed carefully and with pleasure ever since issue one. I am so very glad (as I'm sure are a good many others) to see from your well-balanced coverage that Esom are about to rekindle the glowing embers of our old 'friend' C+. I am sure they will help...

...I next got my itchy fingers on a 1k Acorn Atom, which was held together, as I remember, by much black adhesive...

...Then at last, I got my eager hands on a WB1.2 Amiga 500 complete with "Hi-res" 1084 monitor, bought on the strength of...

...Enough of the lovely dove's sentimentality though, and on to my first ever cry for help from your good selves...

I've loved the idea of computers for as long as I can remember (I dreamed nightly of ENIAC and COLOSSUS for months)...

...I have the ubiquitous 1Mb 3.5" floppy drive (df0: Anticlick provided courtesy of Magic Workbench. A replacement for DF1: should be on its way by the time you read this), one 40Mb Quantum P405 SCSI hard drive... I have 1Mb ChipRAM as standard with 2Mb FastRAM added, plus 4Mb of 32-bit wide SuperFastRAM on an SSL A5000 68020 accelerator board... I also have an MFM hard drive, formatted to 29Mb, on the far side of an A2288 bridgeboard...

...I also upgraded to WB2.1 about a year ago. In retrospect, I have found this to have been quite a wise move, although I sometimes wish I had waited for v3.1 to arrive...

...the MFM drive now acts as my DH2, named 'Archive', formatted as a single OFS partition with the standard WB format command (Yes, I did see the warnings about IDE drive low level formatting before undertaking the task!). For a couple of years all was fine...

...The drive was to all intents and purposes dead. Finally, I checked it through with QBTtools, again without much success...

...I salvaged what was possible and again re-formatted. All subsequent system checks showed up as OK - no read/write errors being reported. This same failure has now occurred three times in the last three months and happy is no longer my middle name! Each time the system fails it reports a "Read/write error on track xxxx"...

...use the bay that would free up for an

**£50
prize
letter**

internal CD-ROM drive. They are obtainable quite cheaply these days, are they not?...

...On the subject of DTP, I run ProPage 4.0 but CacheEdit gives me an 'Out of memory' error when launched from the Workbench...

...perhaps I should have stuck with PageStream, 'cos from what I've seen of WordWorth it's

m.u.c.h. t.o.o. s...l...o...w...! Mind you PPage doesn't exactly zip along does it? Thank heaven for the Article Editor...

...Oh how I wish I had my old Star LC10 colour printer back. Considering its age, it seemed to be able to 'turn its hand' to anything and everything I threw at it - and I sometimes did!

... Finally, if you've read this far, thanks for bearing with me and I look forward to a, doubtless abridged (you're not kidding - ed), version of this letter appearing...

Long live the Amiga and Amiga Technologies GmbH! May their bytes never fail to bits.

Simon Smalley, Lincoln

Mr Smalley, who is apparently 50 going on 15, sent us a total of 2720 words, accompanied by several sheets of print out detailing his assigns, Workbench, Kickstart and DOpus version numbers, and Sysinfo printouts of the performance of his machine in several areas. In answer to your queries, Mr Smalley, I only have room for very curt answers now, so pay attention:

1. It's probably because your MFM drive is so old that you are having so many problems. Your best bet would be to ditch it as soon as possible and get a sensible size SCSI hard drive for your machine. I believe you should be able to use a partition for the bridgeboard, although it might be a little tough to set up. You should be able to pick up a 500Mb drive for around £150 these days and you can never have enough hard drive space.

2. The MegaChip is good but, yes, I think you would have problems fitting it along with the A5000.

3. It's been a while since I last used ProPage, but I thought that CacheEdit was part of ProPage 3 and made redundant in version 4. As you say, try switching back to PageStream. Frank Nord tells me the latest version is pretty impressive.

4. Not much you can do about a print head for a dot matrix other than replace it unfortunately.

Lastly, thanks for your letter, it brightened up the office on a dull day and I hope you will be able to put the £50 prize money to good use in upgrading your machine.



es EZRA SURFS **POSTBAG**

*Your views and questions aired
and answered by our man of
letters, Ezra Surf*

Helping hand I

I have just bought a second-hand Amiga 500 with hard drive, Workbench 2.1, etc. and I was given some of your magazines. You gave away Personal Font Maker on the cover of your March 1994 issue number 73. Do you have a back issue of that number that I can buy?

K Stevens, Belper

You can certainly write in for a back issue, we do have issue 73 in stock. The address is the same as cheques or postal orders should be made payable to IDG Media and made out for the amount of £4.40. Alternatively, if you have a CD-ROM drive you can buy the Personal Font of programs on CD for only £3.95 from our Personal Paint cover story offer.

Helping hand II

I am the proud owner of an A500+ with 4Mb RAM, a 120Mb hard drive and PC card as well.

After rearranging my hard drive files managed to lose the software that runs

the PC card and it's driving me mad trying to find the correct software, so I was wondering if you could help me in my quest?

The PC card is a product called the KCS PC PowerPacker. I hope either you or a fellow reader may be able to help me.

Julian Sorfleet,
13 Kershaw Avenue, Little
Lever, Bolton BL3 1QS

Hopefully there's a kind reader out there who would be willing to help Mr Sorfleet out as KCS seem to have disappeared into the ether.

Letters please

You asked for more letters pages, but what you don't seem to realise is the fact that you have to write into us. To give you a further incentive, we will offer £50 from Adam Phillips' wages to the best letter written. But please keep quiet about it, as Adam doesn't know...

Helping hand III

I am a newcomer to the Amiga having recently purchased a second-hand Amiga 500 Plus in 'as new' condition and in its original packaging.

The machine came with a RocGen genlock with a test disk. However, when this test/demonstration disk is inserted after Workbench 2.04 all goes well with the colour bars test, but every time I try the SCRIPT icon I get the message 'Software failure.'

I am unable to refer back to the original owner who has moved house, so could you please inform me who the agents are for the RocGen genlock and/or where I could obtain another (uncompromised) demo disk.

Also with this kit, there is a strip of Amiga fax cards, all with the suffix 3. On the Music 3 card it states that other fax cards were issued with the June and July issues of *Amiga Computing* and

Musical instrument doesn't interface

I have spent a lot of time, effort and money trying to get a good Midi kit together, only to find that the device meant to run it all is incapable of the task by design. I don't know if any of your readers has had similar problems with the CD32/SX-1 but I would like to make them aware that the CD32/SX-1 module is not compatible with MIDI interfaces and does not come with any Workbench disks.

The advertisement placed by Silica states quite categorically that the SX-1 turns the CD32 into 'a fully functioning Amiga 1200 compatible computer.' This is not the case. I have asked for a refund from Silica and I will get back to you if I encounter any problems.

Roy Sharp, Liverpool

Yep, I've just checked Silica's ad and it does still say that. I expect the best that can be hoped for is that you get the refund and that other people can learn from your example.

that back issues are available. Could you tell me if that is still the case and if so what the price would be.

A E Lott, Reading

Again, any readers who can help Mr or Ms Lott with their problem should write into me and I'll pass the information on. As to the Amiga fax cards, they were printed a fair while ago and I'm afraid our back issues don't go back that far.

My wife won't let me

I have recently purchased an Amiga 600 upgraded to 2Mb. My problem is with expanding the system. I was originally planning to fit a hard drive and an external floppy, modem and printer. However, every time I go to the local computer shops they keep stating that I would be wasting my money and that I should buy a PC. What I would like to

know is whether this is true and if not, what size hard drive would you recommend as a minimum. Also, is the Internet accessible to my computer and Workbench 2.

If you recommend buying an A1200, that would unfortunately be out of the question as my wife is already nagging me about wasting money on the A600.

Andrew Brooks, Rochdale

It might have been better for you to have bought an A1200 in the first place, Andrew, but no you don't need to ditch the 600 and buy a PC. The minimum size for a hard drive is whatever you can afford, but try to get as large a drive as possible - it'll soon fill up.

Once you've got a hard drive and a modem (preferably 14.4k or 28.8k) you will have the minimum setup necessary for Internet access, although to be able to use Mosaic to browse the World Wide Web properly you will need Workbench 3.x.



Escom advice



While it is good news that the Amiga has finally come out of limbo (having finally been bought out by German company Escom) I have some fears which I would like to voice:

1. Once Escom begin producing the A1200 again, I hope they will take their time to do so instead of just rushing it out. After all, look at what happened when Sir Clive Sinclair attempted to meet demand with his Spectrum in the 1980s - they were not even tested before hitting the shelves and consequently, many machines included serious faults.
2. Will many of the software developers who decided to quit the Amiga when they believed it to be a lost cause actually come back to it again? Some of them seem to have made up their minds already and just don't give a damn about the A1200's future any more.
3. How can we be sure that Escom don't make the same mistakes Commodore did with regard

to the launching of new machines and keeping its customers informed? I hope they do not intend to blitz the market with a fleet of 'super machines', as a more sensible option would be to just create one and let it be the basis of all future developments. The original A500 is a prime example of this and even today it is still a grand machine - I know, a friend of mine still has one!

- 4. Do Escom intend to fully support the Amiga with a vigorous advertising campaign and perhaps show it as a 'serious' computer and not just something for the kids to play on?

David O'Conner,
Dinnington, South Yorkshire

We will undoubtedly continue to get a lot of mail about the Escom situation, so let's go over David's points one by one.

1. Escom are a very large company with massive manufacturing resources unlike Sinclair

Research in the days of the Spectrum, so I think it's unlikely that you'll ever see Amigas with as many problems as those early Spectrums. However, I do agree that Escom shouldn't just rush things through. They need to pay attention to bundling deals, packaging and advertising to ensure the A1200 and A4000T regain their place in the computing hierarchy.

2. Certainly you will see the re-emergence of Amiga developers, distributors and retailers. As mentioned in this week's CTW, retailers are crying out for all things Amiga, but they can't get new games or serious software to meet the demand.
3. I think that Escom actually do need to diversify the Amiga range in order to capture the niches left for it. The A500 was a great machine as you say, but it's time to move on.
4. We'll just have to wait and see.

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CD Dilemmas



In the near future I am going to upgrade into the world of CD by adding a CD drive to my computer. I have taken a fancy to Power Computing's dual drive, but have just noticed the price drop in the CD32.

I am now wondering which to buy, as I know the CD32 can be attached to the A1200. Will the CD32 act in the same way as a CD drive? I do not want to use the two separately for CDs and floppies, but want to use the two as one.

I have seen some CDs that are only CD32 compatible, and also know about the FMV option, which inclines me to buy the CD32. I will be using the CD drive for CD32 games, audio CDs, public domain, and the odd encyclopaedia. Which would give me the greatest access to the huge world of CD?

Just one more quick question – how do I get OctaMED sound files to play from my startup-sequence?

Andrew, Northamptonshire



As with most things in life, which ever decision you make will involve compromises. If you must have 100 per cent CD32 compatibility, then the only real option is to buy a CD32. You can then use something like the CommunicatorII to allow you to access the CD32 via parnet.

Basically, you get an icon on the Workbench and can access the CD32 like a normal device, such as a floppy or hard drive. The major down side to this is you will only be getting around 20 to 40K a second transfer, which is not much better than floppy access.

Your other option is to go for the Power Computing offering. That consists of either a dual or quad-speed CD, and the excellent Squirrel SCSI-II interface. The CD32 emulation might not be perfect, but most recent CD32 games, and hopefully all future releases, will be written with these CD32 emulators in mind. Therefore, future compatibility should be much better.

The other thing you should keep in mind is that with the last option you are getting a SCSI CD-ROM and a PCMCIA SCSI-II adapter. This means that there is a good possibility that they could be used on a future Amiga, or any other computer, with the right software, and the fact you have a SCSI interface means it is possible to fit up to another six devices onto the SCSI chain.

The biggest benefit, however, is that you can access the CD at its maximum transfer rate – 300k a second for a dual-speed drive. That is around 15 times faster than the Communicator II, and if you are planning to use PD discs a lot then this could be quite an important point.

I would go for the Power Computing system. You get a SCSI CD-ROM that could be used with any other computer with a SCSI interface. The CD access on the A1200 side is infinitely faster, and on top of all that you have got a SCSI-II interface.

When you say sound files, do you mean samples or complete modules? To play a module, edit your user-startup file, found in the S: drawer, and add 'Run >NIL: <NIL: OctaMEDPlayer -Path and Module Name'. Make sure a copy of the OctaMEDPlayer is in your C drawer, or on the path list.

If you mean a sample, do exactly the same but instead of the OctaMED player you will need to use a sample player.

PC. Could you please tell me if it is possible to utilise it in any of the current A1200 memory expansions. Finally, the button menu utility you gave away is marvellous, but certain programs will not run, even though the path entered is an exact replica of opening the program using the mouse. Why is this?

John Cleator, Liverpool



I would be inclined to say you do not have enough memory for Final Writer to create the entire page, but if this was the case it would simply produce an error message. All I can suggest is you reduce all the margin values in the page and section menus to zero. Set the page size to A4 and draw a couple of boxes, one inside the other, in the bottom two inches, and see how much you are

then losing. I use Final Writer with an HP550C and find it will allow me to print up to 11 inches. After that the printer cuts the rest off.

Unfortunately, the SIMM you have appears to be a 30-pin SIMM, so is only 16-bit and cannot be used in any of the A1200 expansion cards.

As for your last query, many programs require what is known as an Assign to be made – simply just running the program is not enough. They use the Assign to find other files they require to run. Galaga, for example, uses a Music assign which points to the directory containing all its music modules.

Assigns are not very nicely implemented on a basic Amiga, being hidden away and only changeable via the shell. A program such as MCP or



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Final Writer woes



My situation has now reached desperation stakes and I am in serious danger of taking a hammer to my Amiga 1200 and the HP520 that is attached.

I am running Final Writer 2.1, and the problem is that I cannot print past 10.5 inches – anything after this is being ignored and not carried over to the next page. I have exhausted all the options in the program and in the Workbench preferences.

Also, I would like to expand my memory via a trapdoor board. I recently acquired a 4Mb SIMM from an old 386

A600 keyboard



I have recently acquired an Amiga 600 and I am annoyed by the lack of a numeric keypad and would like to attach one. I have several PC keyboards lying around. What I need to know is if the A600 will support a real numeric keypad?

R Ried, Fife



The A600 has the same type of ROMs as used in the A500+, so will support a numeric keypad. I do feel, however, that the biggest problem is how you will attach the PC keyboard.

As the A600 uses a ribbon cable the same as the A1200, it will be quite a task to convert the PC keyboard's 5-pin connector to the Amiga's ribbon. If you do manage it, there is a program on Amnet to help remap PC keyboards for use with the Amiga.



Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your Amiga software or hardware to behave properly?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a thorough description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP. Or email us at ACAS@acom.demon.co.uk

AssignPrefs gives you a nice GUI front-end to add, change and remove assigns, which makes looking after your assigns a lot easier.

A500 expansion



I have an A500 and would like to know what is involved in upgrading to OS 2.04 or 3.1. I know you can buy ROM kits and that they come with fitting instructions, but are they easy to understand by a complete novice like me? Do they need special tools, and do they come with the Workbench disks as well? Is it also possible to use the 3.1 ROMs in conjunction with a ROM switcher?

At some point in the future I would also like to fit a hard drive, but there seem to be so many different sorts I don't really know which one would be best.

Rose Hasted, Oxon



With regards to upgrading your A500's Kickstart chip, I would suggest you went for the OS 3.1 kit. How difficult this is depends on what revision your A500 is. Basically, if your

Any questions?

Amiga is no more than six-years old it should be a revision six machine. The only way to find out for sure is to open your machine up, remove the metal shield by carefully bending all the tabs up, and somewhere on the mother board, normally on the right-hand side, there will be the revision number.

If it is an earlier version than six you are going to have to do a bit of amateur electronics, and depending on how adventurous you are it may be best to get a qualified electrician to do the job. If, however, you have a revision six machine, fitting the ROM is a case of carefully prising the old ROM out of its base – a flat head screwdriver pushed carefully between the chip and the base at each end should do the trick – and then replacing it with the new ROM, making sure you place it the correct way around. There are clear markings on the chip and its base, so this is obvious.

It is possible to use a ROM switcher, but why do you want to? I am sure once you use 3.1 you will wonder how you ever managed using 1.3. When OS 2 first appeared there was a legitimate use for ROM switches, but nowadays every program will run under OS 3.

As for fitting a hard drive in the future, five years ago you could not move for Amiga 500 hard drive adverts, but now A500 stuff is getting pretty thin on the ground. The easiest way to add a hard drive to an A500 is to choose any of the ones that fits into the side expansion slot. You should also consider getting some extra memory, as each hard drive partition uses up some memory and

A1200 ethernet



Is there an ethernet adapter available for the A1200 which plugs into the PCMCIA slot or the parallel port? I know these are available for the PC, but I have not seen any advertised for the Amiga. I hope to buy an A1200 when I go to university and would like to connect to the campus network, if I can.

Philip Chung, Cambridge



You will be glad to hear that there is such a card available called the i-Card. This is only half the story, as you have to find out what type of network the university uses so you can purchase the correct network and driver software. Unfortunately, the card is expensive at £249. If you give White Knight Technology a call on 01920 822321, I am sure they can help.

There is another option, but this involves more work. You could get hold of a PC PCMCIA ethernet card, which is much cheaper, but you then need the driver software and a copy of AmITCP. The problem here is the driver software for the card. Apparently, Erik Quackenbush has written a driver, but I have been unable to get hold of him – I'll keep you informed.

you will be stretching 1Mb to the limit. You can normally fit extra memory into the hard drive, but it is something worth checking before you buy one.

Workbench blues



I have an Amiga 500 and a ROM switcher fitted with Kickstart 1.3 and 2.05. I have just increased my hard drive from 40 to 350Mb and have a Megachip installed. My problem is that on the initial start up I am getting the message 'pure bit not set'. What is this pure bit and how do I set it?

If I switch to 2.05 and boot my system, everything becomes very slow and jerky. I am told this is because it is still booting Workbench 1.3. How can I get my system to detect which ROM I have selected, and automatically boot the correct Workbench?

Finally, when using Pen Pal I find it very useful to use the CMD function to redirect the output to my hard drive, and then print later. This always worked fine, but since changing the hard drive, every time I use it I get a blank screen and a redirecting data message. When I then quit Pen Pal I am left with just the blank screen and Workbench cannot be found.

M Dennett, Somerset

Workbench release



Bigger, better and faster. Every aspect of Workbench 3.1 is an improvement over the now decrepit 1.3



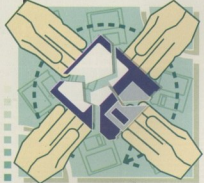
Normally, the pure bit error is associated with the pure protection bit of a file not being set. A quick cure for this is to simply type from a shell, 'protect C:~? +p'. This will set all the pure bits of all the programs in the c: directory. However, running the 1.3 files under Kickstart 2.05 should not make any difference to the speed

of your computer. The error message you are getting, and the fact your computer is running slower, is indicative of a keyboard problem.

It could be that when fitting the Megachip you dislodged the keyboard connector. Does your caps lock light flash when you boot your computer? If it does then this definitely means you have a keyboard problem. All I can suggest is that you check the keyboard is correctly connected and make sure none of your keys are trapped by the computer casing. As for your problem with CMD, are you running Pen Pal under 1.3 or 2.05, and which OS version of CMD are you running? Earlier versions of Pen Pal do not run under version 2, but it is possible to upgrade to either the last version of Pen Pal, or the much more recent Final Writer.

I do wonder why you are still using 1.3. If it's just to run Pen Pal then you really should upgrade and dump all the 1.3 stuff on your hard drive. If you have to run 1.3 then there are a number of small CLI utilities that can detect which ROM you have running, and then execute the correct startup-sequence.

public



sector

Your hard-up host Dave

Cusick puts more low-priced

lovelies under scrutiny

Having escaped some of the hottest summer weather in years by clearing off abroad for a fortnight of quality cloudbathing, I was greeted on return by a PD pile of office-swamping proportions. Fortunately, although wading through all the disks was an extremely lengthy process, the high standard of most ensured it wasn't too tedious an ordeal.

Better still, there were only three Lottery programs this month – and one of them wasn't even a predictor. Anyway, Public Sector has now received so many Lottery Predictors that next issue a brief comparative round-up could be in order – and then I'll hopefully be able to forget about them for a couple of months and concentrate on more imaginative offerings.

Internet Utilities

Programmed by: Various

Available from: 17 Bit Software
Disk No. 3724 (£1 plus 50p P&P)

Unsurprisingly given the title, five of the six programs on this disk will only be of interest to comms' buffs. AmiTALK, for instance, is a Unix compatible talk program – which to two-thirds of the Amiga community will mean absolutely nothing but should prove useful for the rest. There's also AmiTCP Helper, written by Amiga Computing's very own Ben Vost, and Control Panel which offers a simple graphical interface for AmiTCP functions.

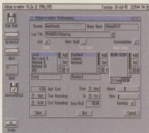
AmiWatch keeps track of when your friends or indeed enemies are logged on to the net, and when their name is

Premier League

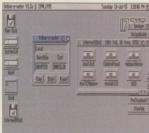
Programmed by: David King
Available from: F1 Licenceware
Disk No. F1-092 (£3.99)

This is a football game with a difference; it's actually a card game. After you've selected a Premiership football team to guide through a 42-game season, 18 cards are dealt out. You and the computer then take turns at selecting cards which signify match events taking place; fouls, free kicks, penalties, substitutions and goals. One of the cards also brings the half to an end.

What stops everything being totally



Configuring OnLine-o-Meter is a simple and swift operation...



...and then you can see exactly what each telephone call is costing you

listed, indicating they are on the net at that time, you can click a button to talk to them. Finally, GUIF is basically a graphical front-end to the AmiTCP Finger command.

However, while Comms' fans are the target of the sixth program too, its appeal is slightly broader. Online-o-meter tells you the cost of a phone call. It can either be used by simply clicking on the call start and end buttons, or from comms software using ARexx. It calculates the exact cost of each call, taking into account factors such as differing charge zones, minimum charges and time and cost rounding. It is supplied with British charge details for BT, Mercury, and Nynex, so getting the whole thing set up takes just a couple of minutes. Since this is also a useful program for anybody who happens to have a telephone near their Amiga, I'd recommend getting hold of this disk even if you aren't an Internet addict.



Premier League: Premier Picks minus the but

dependent on luck is that prior to each half, the player gets a chance to sneak a peek at between one and six of the

Magic Assistant

Programmed by: Various

Available from: KEW-It Software
Disk No. U1142

It's all very well, this computerised desk top lark, but doesn't everyone occasionally miss things like notepads, address books and so on? Not any more, because to the rescue in its very best underparts outside-trousers superhero manner is the collection of six assorted utilities.

Let's start with the least impressive programs. TolleUhr is a resizable vector clock, with the option to twiddle the rather horrific default colours and suchlike. Slightly more useful is MegaNote, a multi-page notepad which would be a good de-

Duck Dodgers

Programmed by: David Worswick
and Lee Martin

Available from: PD Libraries

It's a while since there's been a good PD platformer but it was worth the wait. Fans of tough arcade action will be at home here with plenty of taxing levels.

Duck has to toddle around each screen zapping beasts with his freeze gun and then pushing them into large vats before they thaw. Much be-billed bravery is in order because on some levels, new creatures are created as fast as you can trap the original one. To top it all, each level has to be completed.



Take on the role of Duck Dodgers, space-age stamper-out of those guilty of foul play

cards. This memory test aspect is what makes the game pretty enjoyable and addictive. Remembering where that Goal card was might be simple enough, but once you've snatched the lead you won't want to forget where the Full Time card was located.

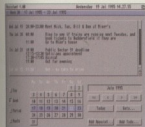
And that, in a nutshell, is Premier League. The author was apparently inspired by a PD game called Premier Picks which worked along the same lines – or rather, didn't work, having a tendency to crash on him with alarming regularity. Fortunately, far from scoring such Lee Dixon-type own goals, Premier League is a veritable Paul Ince of a game – dependable, frequently impressive and (much like Andrei

LEAGUE TABLE	PL	HD	SH	LD	FD	AG	PTS
1st MANCHESTER UNITED	17	17	17	17	17	17	17
2nd LIVERPOOL	17	17	17	17	17	17	17
3rd NEWCASTLE UNITED	17	17	17	17	17	17	17
4th ARSENAL	17	17	17	17	17	17	17
5th SHEFFIELD WEDNESDAY	17	17	17	17	17	17	17
6th LEEDS UNITED	17	17	17	17	17	17	17
7th NOTTINGHAM FOREST	17	17	17	17	17	17	17
8th MANCHESTER CITY	17	17	17	17	17	17	17
9th SHEFFIELD UNITED	17	17	17	17	17	17	17
10th BURNLEY	17	17	17	17	17	17	17
11th SHEFFIELD WEDNESDAY	17	17	17	17	17	17	17
12th LIVERPOOL	17	17	17	17	17	17	17
13th NEWCASTLE UNITED	17	17	17	17	17	17	17
14th ARSENAL	17	17	17	17	17	17	17
15th SHEFFIELD WEDNESDAY	17	17	17	17	17	17	17
16th LEEDS UNITED	17	17	17	17	17	17	17
17th NOTTINGHAM FOREST	17	17	17	17	17	17	17
18th MANCHESTER CITY	17	17	17	17	17	17	17
19th SHEFFIELD UNITED	17	17	17	17	17	17	17
20th BURNLEY	17	17	17	17	17	17	17

(Click left mouse to return to Menu)

Manchester United back where they belong

Kanchelskis, if you happen to be reading, Fergie) quite hard to live without.



Planning the week ahead with Assistant

easier to use were it not also still in German. Still, you can jot notes on it and print them out, and I can't imagine what other features a notepad program might need. IconCalendar basically displays the



Duck Dodgers: A multi-level platform extravaganza, or something

played within a strict time limit.

The presentation is excellent throughout, the visuals are attractive, and the sound isn't bad either. Occasionally, harsh collision detection aside, the gameplay is slick and addictive.

Duck Dodgers is quite an achievement, especially considering the fact that its programmer lives at one end of the country and its graphic artist at the other. Although the two have apparently never met, for over a year or so they have been sending one another stuff in the post and the end result is this rather playable platformer. Be warned, it's not easy. However, for gamers after an enjoyable challenge, I'd heartily recommend Duck Dodgers.



MegaNote, Icon Calendar and Teller in action

date in an Applon. Very nice, but I'm not quite sure what the point is – I expect most people who regularly want to check the date already have a titlebar clock which displays it. When I ran it on the 20 July I was informed that this is the author's birthday – fascinating, but why? A calculator program which runs as a commodity, ACalc is perfectly usable if a little simple.

Right, that's the moaning over, because the two remaining programs are actually pretty good. AddressBook impresses because of its general simplicity, and because it is British it talks about Postcodes and not Zipcodes. It can store names, addresses and telephone numbers, and it can search for a record by name or address and then dial the appropriate phone number.

Finally, the most impressive program on the disk is Assistant, a computerised diary with the added advantage of being able to provide daily, weekly or monthly pages. Again there are no fancy features, but the emphasis is on functionality and as a consequence, Assistant is very pleasant to use. Coupled with Address Book, it should render the conventional office rather redundant.

Lottery Player

Programmed by: Don Darden
Available from: Darden Designs
(£4.50)

It appears that these days the world and his uncle have written Lottery prediction programs. Fortunately for my sanity's sake, Don Darden is keen to point out that this is not a predictor but a harmless

You are the everything...

I want to hear from you if you have any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenseware, if you feel it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. I promise I'll at least look at your work.

Please clearly label the disk, and include a cover letter supplying a description of the disk contents, price and some basic instructions. The magic address is:

Dave Cusick
PD submissions
Amiga Computing
Media House
Adlington Park
Macclesfield SK10 4NP



Lottery Player: It's cheaper than the real thing...



...and you can tilt the odds in your favour

bit of fun, being essentially two Lottery games in one package.

The first game is basically a straight copy of the National Lottery. Starting with anything up to £100, each week you can choose numbers from as many cards as you like and see whether you win anything. The second game works in reverse, so after you have selected seven numbers the computer will produce sets of six balls and if your selected numbers match these, you win.

The high score table can be saved to disk and if you aren't winning very often,

UTILITY

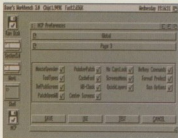
of the month

MCP 1.04

Programmed by: Alien Design
Available from: Pixel Digital PD
(£1 plus 50p P&P)

First there was MultiCX, the commodity that replaced your usual screen blanker and workbench title bar clock while adding numerous features such as the floppy drive click stopper, the black workbench border, a mouse accelerator, activation of the front screen, and so on. Now from Alien Design comes Master Control Program, which hopefully will prove rather less hostile to other programs than the MCP of Disney's Tron which presumably inspired the name.

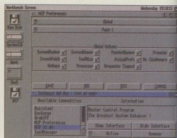
All of MultiCX's most useful features are duplicated here, along with plenty of newbies. These include AssignWedge which allows you to Assign or Mount whenever those "Please insert ??? in any drive" type requesters appear; AppChange, which



MCP is easily configured from its own Preferences program

allows you to change the workbench AppIcons that some programs cause to appear; and the option to change the workbench title bar message. Not all the features on offer are useful, and indeed I thought the animated Movewindow and Sizewindow were awful. But the beauty of programs like MCP and MultiCX is that they can be configured to suit anybody's tastes.

MCP also scores because the authors have selflessly made it Freeware rather than Shareware, meaning that once you've got it you



MCP is brimming over with options - three screenshots of them in fact

don't have to pay a bean. And since it was actually on last month's Amiga Computing CoverDisk, regular readers will already have MCP.

It's not all roses though - it has to be said that MCP has caused a couple of crashes during the time I've been using it, which is something MultiCX is not guilty of. But this is only version 1.04, and stability is liable to improve in future releases. If the authors at the same time implement some of the features on the To Do list in the ReadMe, MCP could become the ultimate Workbench commodity.

you can increase your chances by altering the number of balls in each draw. Leave things as they are, however, and you've got a cost-free National Lottery simulator which, while perhaps not matching the real thing for excitement, will certainly be a lot kinder on the wallet.

Play this for half an hour, take a look at the money spent and money won displays, and you'll realise, if you haven't already, that the Lottery is certainly not a good bet from a gambling point of view. A better alternative might be to buy this and give a few quid a week to charity.

Alien Bash II

Programmed by: Glen Cumming
and Myles Jeffery
Available from: Pixel Digital PD

A shameless copy of Bitmap Bros classic The Chaos Engine, Alien Bash II is undoubtedly one of the best PD shooters I have ever clapped eyes on. Although this is only a one-level demo of what will eventually be an eight-level epic, and features such as weapon upgrades and an equipment shop have not yet been implemented, there is enough here to see that this is an absolute corker.

The gameplay is beautifully simple, consisting of wandering around the huge map slaughtering all manner of alien beasts and rescuing their prisoners along the way. The well-drawn graphics are very much in the style of those of The Chaos Engine, but the lack of originality is, in this case, forgivable because the quality is so high. The frantic blasting action is accompanied by suitably meaty sound effects. These are to be further enhanced on AGA machines in the final version, but are nevertheless pretty impressive here and add considerably to the experience.

At this stage it doesn't look as if there will be a multi-player option in the final version, which was, in the long term, a very appealing aspect of the Bitmaps' hit. Still, that's a small omission and there is plenty here to keep shoot-'em-up fans occupied for a long time.



The Chaos - erm, Alienbash 2, a top-down shooter if ever I saw one

It's worse than that, he's dead Jim

Trekkies and Trekkers the world over seem eager to surround themselves in and everything Star Trek related. A selection of disks from OnLine PD may therefore be of interest if you have such an affliction.

The Star Trek Guide (Disks OL7A-F) is a six-disk extravaganza which requires a whopping 4.5Mb of hard-drive space but contains details in AmigaGuide format of scores of episodes and all manner of related prattle.

The Magic Trek Pack is a selection of Star Trek pictures intended for use as Workbench backdrops. The images show spacecraft designs and while they are hardly stunning, they beat a dull grey backdrop hands down. Finally, the Starfleet Ships Library (Disks OL13A-C) is a three-disk guide to, erm, Starfleet ships. Or at least it would be, if I could get it to work properly. Anyway, fans of all things Trekful could do a lot worse than beaming these up.



Find the answer within...

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A

miga owners are used to talk. In an industry that seems to thrive on hot air and unsubstantiated speculation, no-one knows better than they that certain promises should be taken with a pinch of salt.

So when Manfred Schniitt stood up at the Frankfurt press conference to announce the Amiga's new key role at the head of his ever expanding multimedia empire, it's not surprising if everyone's scepticism didn't evaporate overnight.

Escom's plan to build on the Amiga's technological superiority as a multimedia platform was obviously encouraging, but a number of questions remained. After all, in the Amiga's absence the PC had been marketed so successfully it was almost synonymous with the term multimedia in the eyes of the general public. With even Escom themselves pushing PC multimedia solutions, could the Amiga ever regain lost ground?

Fortunately the promises seemed infinitely more credible thanks to the contribution of two companies; Scala and Viscorp. Both could justifiably claim to have invented their own brand of multimedia, and both teams have experience from long before PC owners had even encountered the winning term. If any third parties were needed to

kickstart the new wave, they were the ones. But are they really committed, or is it just more talk?

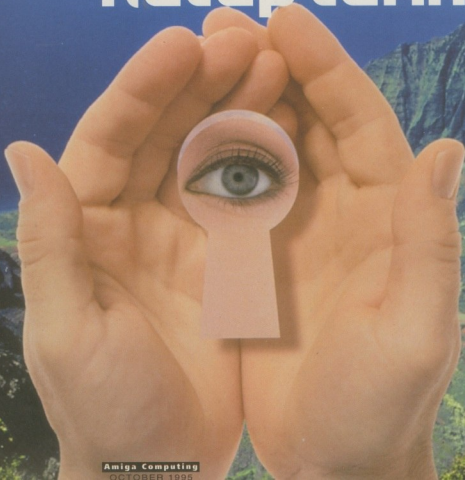
To take Scala first, their decision last year to move into PC development was so shocking to some Amigaphiles it was seen as a death knell. The relief of having the company that invented computer television back at the helm of Escom's multimedia drive was understandably intense.

As reported in our August issue, the first good news was the plan to bundle Scala's MM300 package with new A1200s. The fact that the software won't run on the bare machine, however, left some commentators puzzled. "What is the point," some said, "of giving away software that most new owners can't use?"

Barry Thurston, MD of Scala UK, thinks differently: "On the face of it it's a strange package," he conceded. "But it's for the A1200 into the multimedia environment and almost trying to encourage the purchaser to get interested - which is no bad thing."

No bad thing indeed, since the A1200 certainly needs to be

Recapturing



something different than the similarly priced super consoles it will be up against this Christmas. But Thurston is aware that more will be expected from the Scala-Amiga Technologies collaboration if the Amiga is to become a really profitable multimedia contender.

Encouragingly, despite their move into the PC market, Scala believe the Amiga can still lead the way to a future of computer television. Thurston explains: "In market areas like distributing information onto TVs, which is what we're about, the Amiga will still be the best machine. It's PAL compatible as standard, plug and play like they say Windows 95 will be, and once Amiga Technologies start producing the machines they'll still be the most cost-effective solution in the area."

It would be fair to wonder, however, how much this commitment is backed up by new Amiga

developments from Scala, which currently seem rather thin on the ground. Thurston explains that they've only really started pushing MM400 following the buy-out, as they've been building EXs which expand on the current product's functionality – most recently they've created drivers for the PAR card and Sunrise Studio 16.

The key to Scala's vision of the long-term future, however, is a multimedia standard that will thrive on all platforms, including the Amiga. Far ahead of the faddish approach that some PC developers have adopted, Scala have designed a state-of-the-art, object-oriented operating system called MMOS.

"Object-oriented programming," Thurston elaborates, "basically means that each function in a program is a separate object with hooks which allow it to link with other objects within the program. So whereas before with a Scala product

the main menu would be a whole series of things stuck together, now virtually every item is a separate object. It makes it a lot more flexible, pliable and easier to add to."

In fact, MMOS is so flexible it can grow to meet new requirements with the minimum amount of difficulty. Thurston gives the example of a customer that wishes to incorporate Scala into an editing suite; previously Scala would have written an EX for it, but now the customer could be given a development pack to create one themselves.

The good news is that though MMOS was developed for the PC, it adapts to the AmigaDOS environment much more readily. According to Thurston, the developers one day decided to port it back to AmigaDOS and were amazed by how quickly they did it. "If we talk in terms of man years to get it onto PC, it took a day to put it back

the vision

The Amiga has been promised a new multimedia future by the men at Escom, but they can't deliver the dream alone. Gareth Lofthouse talked to the third parties that will lead the way



Scala's InfoChannel, an Amiga multimedia champion



They say the Amiga in its current form is too slow, but using Shapeshifter it can run Mac's Quicktime faster than a LC III



The future of interactive television is Amiga based – or at least it will be if Don Gillebreath gets his way



This is ED, a Viscorp set-top currently doing well in trials in American homes. Gillebreath believes its Amiga-based successor will be even better

Don't believe the hype

Everyone knows the Amiga was the firstborn multimedia machine. If you were to believe the hype, however, it would seem that it has been left far behind by the PC's dominant brand of multimedia, CD-ROM.

Magazines have trumpeted PC interactive CD as if it were the dawn of a new age, with writers making huge claims along the lines of CD redefining the boundaries of entertainment. And if you asked the developers of such software about the Amiga, the best you could hope for was a patronising smile expressing sympathy.

But while the talk has definitely helped retailers

push multimedia PCs into the family home, the actual product is often disappointing. Anyone who's seen the average fare will know there's a lot of clichéd, bland material lurking behind arty interfaces.

If this sounds like the bitter whine of someone who's missed the boat, then you might be interested to hear a few statistics. According to CTW, the computer trade weekly, 90 per cent of the thousands of multimedia CDs that went on sale in the US last year sold less than 100 copies. Now that speaks volumes.

Even makers of acclaimed CD titles are finding it surprisingly difficult to survive, with Medio Multimedia, the makers of the almost benchmark CD called JFK Assassination, recently having to announce it was laying off 45 of its 75 employees.

With so many of the CD companies being small start-up businesses, some commentators believe that many will be hard pushed to survive.

Which all seems to suggest that a certain amount of the CD multimedia is not really impressing the public. Dressing encyclopaedias and cookery books up in hi-tech clothing does not necessarily make them into a new and exciting medium.

It's clearly foolish and immature to be overly partisan on this issue. The fact remains that many Amiga owners would jump at the chance of getting products like Microsoft's Encarta, and both hardware and software developers should be striving to match the PC's talents in this field. But it is equally important that we build on the Amiga's unique strengths, rather than jumping on a bandwagon heading for fool's gold.

onto Amiga," Thurston explained. "Which says an awful lot for AmigaDOS as an operating system."

"What that means for us," he continued, "is that cross compatibility between scripts will be easier, and it's highly likely that our next generation of Amiga products would be based around MMOS." Which, he went on to point out, will fit in very nicely with RISC Amigas that can emulate MS DOS.

The question remains, however, of what will give the Amiga an edge over PCs already running the system, but Thurston is confident. "It will be superior because it'll run AmigaDOS as well, and from that there will be a whole new range of products that are smoother, faster and more fulfilling."

It appears, then, that creative tools are still the key to Scala's vision. Now they're involved in the PC market, however, you'd think they might move

Scala success stories

Scala's record of success has put the Amiga home computer at the heart of some of the world's biggest corporations:

Ford, Esso, Trust House Forte, SAS International Hotels and Co-op Supermarkets.

in on the supposedly booming interactive CD scene as well. Thurston, however, is nonplussed by most PC CD-ROM.

"Somebody hit upon the idea of sticking a CD-ROM drive in the PC and including a sound card, and they said that was multimedia," he said. "Now, if ever there was a killer application that was it, because it's made an awful lot of

companies an awful amount of money."

"But in truth it isn't multimedia," he continued. "It just means you've got a large storage device that you can retrieve information from and you can play sound files but - oh, by the way, while you want to access information your sound is going to stop because your PC can only do one thing at a time. I think the general public on the PC has been cheated from true multimedia because of what various manufacturers have done."

Thurston does concede that the PC has certain advantages, the main one being the quality of games from which, in his view, the PC owner gets their taste of true multimedia. But it's still relatively expensive. "The Amiga is still the best machine affordable on the market," Thurston emphasised. "It's multimedia for the masses, if you like. Hopefully Amiga Technologies will be able to maintain that."

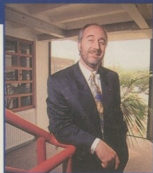
High hopes

If Scala can take almost sole credit for inventing the multimedia software environment on the Amiga, Don Gilbreath has an equal claim on pushing the hardware in a similar direction. Now Chief Executive of the American-based Viscorp, the inventor of the CDTV and CD32 is back with high hopes.

Following a deal struck shortly before the Frankfurt press conference, it is Viscorp that stand to benefit first from Escom's liberal approach to licensing by incorporating Amiga technology into a new set top box.

Interactive TV in the US is at a far more advanced stage of development than in Europe. Like his numerous rivals, Gilbreath is hoping to bring video on demand, home shopping and interactive entertainment into the family living room all under the control of a TV top unit. Unlike his competitors, however, he thinks he can do it at an affordable price - thanks to the Amiga.

Gilbreath explained that using Amiga



Barry Thurston, MD of Scala UK, outlines his vision for the future

feel that with the Amiga we can reach these target costs."

In Europe, the concept of the set top box is largely unheard of, so what could purchasers of Viscorp's model expect? According to Gilbreath, the TV-based technology will incorporate a video phone, a fax, Internet access, plus an all-in-one access point to a variety of different network services with everything controlled using icon-based menus via your remote control.

Clicking on one icon will allow the user to jump into a multimedia, potentially graphical, vivid world. Since it's Amiga based, Gilbreath also foresees the possibility of incorporating CD and authorised synchronised CD-based games.

Up to this point, however, the product sounds like an extension on typical computer-based product's technology. In fact the project is rather more radical than that. "We see a computer world which will versed in interactivity," Gilbreath

technology would cut down costs thanks to the way it used and encouraged writers to use memory economically. "What happened was that a lot of the entertainment writers didn't have the luxury of 16Mb main memory like you got with a PC," he said. "In a way it forced them to write efficiently and it forced applications to be efficient."

He continued: "That helps us because memory is the highest component cost in any set top box. You look at some of the set top offerings in this country: There were requests for bids for machines to be made at a certain price, but people were coming up with units that needed a crazy amount of memory - ten times what the Amiga would need! Which, of course, just killed the whole thing."

In general, it seems the whole issue of price could be the decisive factor in terms of who wins the race to bring multimedia to the masses. Outside the set top box field, Apple Mac's Pippin is just another example of an impressive spec machine that's been indefinitely delayed because they can't deliver the goods at an affordable level for home use.

The lesson is clear to Gilbreath. "To be successful the initial cost is the key. We



Elegant interfaces are the key to information access



"Scala lets us promote ready-to-use multimedia solutions. Escom now turns from a PC manufacturer and retailer into a multimedia company - we see this as a key to success." Manfred Schmitt at the Frankfurt Press conference

Tinkering with the engine

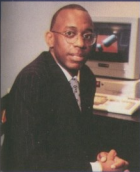
Positive though Viscorp and Scala are about the Amiga's prospects, the new machines have some catching up to do with other platforms if they're going to have a chance of competing. Fortunately, it seems Amiga Technologies are well aware of this – hence the commitment to a RISC-based Amiga.

In the nearer future, Barry Thurston agreed that bundling a CD drive with the Amiga was going to be important, and he added: "Hopefully it could spawn true multimedia products along the lines of Encarta, but obviously a lot more accessible and quicker." But though a CD-inclusive package was mooted at the conference, how long before it appears is another matter. Ideally, Escrom need to get it ready for Christmas, but by the sound of things we could be waiting until Spring 1995.

If Amiga users are going to get products like Encarta, however, a more fundamental change would have to be made at the heart of the Amiga. PCs and Macs are able to show video footage running in a small window next to text and other graphics, whereas the Amiga would have to cut to a different screen.

The reason for this is that the other computers use chunky pixel graphics which make 256 colour images move as fast as two colour images. By contrast, the Amiga uses bitplane graphics which become slower the more colours you use.

It's argued that the Akiko chip, which was incorporated into the CD32, was a way around this problem, but since nobody has exploited the technology, that remains to be seen.



Dennis Phillips, the joint MD of Scala's UK division

explained. "Then there's a whole community of TV people who may not have a computer. What we are driving towards is more TV centric hardware and software."

Thus, Viscorp's previous set top experiments typically had built-in genlocks to make them very television friendly. And if you think TV centric software sounds like no more than another empty buzz term, it's an eye-opener to see what Viscorp have already achieved with a non-Amiga-based box named ED.

MAX ED-ROOM

For example, ED already has an unusually convenient on-screen TV entertainment guide. It differs from a facility like teletext because users will be able to select programmes that interest them, and automatically set the VCR up to record them at the same time.

Then there's the matter of Viscorp's license to NTN, a company bearing rights to a number of key sporting events. NTN actually transmit live action to ED and users are given the opportunity of betting on a 'What happens next?' game.

"It's a way to get involved with the sporting event you're watching, and over the

whole country you could be playing with 20-30,000 people," Gilbreath said. "We see that happening with a lot of different TV shows."

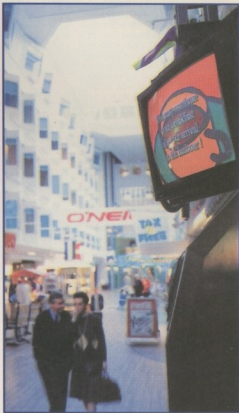
All of which sounds impressive, but one would expect that the new Amiga-based set top box would be a long way off in development time. According to Gilbreath, however, making the new product is the easy part. "Electrically, the Amiga-based product exists but we've not deployed it yet," he said. "Before we can do that it's about lining up a sufficient amount of roll out developers to have titles ready. The product itself is not a problem since it's based on a merging of our previous experience."

Gilbreath has seen radical technology flop before, including his own CD-TV, so he realises having a good base product isn't enough. "This is a very expensive business to be involved in," he explained. "If the battle was just about technology this box would be a very strong winner. But it comes down to content: if you bring out a new player you need enough supporting software on launch."

If anything gives the Amiga a fighting chance, it's not the hardware but the talent that can exploit it to the full – a fact stated by both Scala and Viscorp. Barry Thurston called the Scala programming team heroes of the Amiga world. Gilbreath is equally adamant that Amiga people are the smartest in the set top field.

"There's a base of software writers that know AmigaDOS and know television and entertainment," he argues. "We know of other computer-based companies doing similar stuff and television is not their normal playback medium. We think our people are better equipped to do the job."

A lot of promises have been made over the last few years, and lot of promises have been broken. With teams like Scala and Viscorp leading the way, maybe this time things will be different.



Computer television will become an everyday part of life, and the Amiga leads the way

Slowcoach myths

If people moan about one area in which the Amiga has been superseded by its rivals, it's processing speed. New PCs and Macs are just so much faster, it won't be possible to do half the things they're capable of until the RISC machines come through – or so they say.

Of course speed is very important, but for multimedia the Amiga is a lot more capable in this area than many realise. Interestingly enough, the Shapeshifter Mac emulator ran animations and video faster on an Amiga 030 processor than on many of the Macs in our office.

The fact that Escrom have dropped the IDE-based A4000 desktop in favour of the SCSI equipped A4000T will also prove a big help. Barry Thurston points to faster transfer rates as being vital when planning for the playback of motion video. Add to that the fact that it allows the connection of better quality peripherals, and more of them, and this will give the Amiga access to some very powerful multimedia tools indeed.

At the start of this year, Panasonic announced a new dual-function quad-speed CD-ROM drive. So what? Well, it was a quad-speed CD-ROM drive and – this is where it gets good – a 650Mb magneto optical drive all in the same box, but for not that much more than a standard quad-speed drive. The adverts started appearing and eventually we got one to look at for ourselves. So is it any good?

Let's start with the way it is built. The drive looks like any standard CD-ROM drive from the outside with the exception of the PD logo on the front panel. When you open that panel you will notice another difference. It has a tray within a tray kind of affair, one for the PD cartridge and one for a normal CD. Because of the height difference between a standard CD and one of these cartridges, this tray within a tray thingy becomes necessary – the interior tray moving upwards when it retracts if there is a normal CD in it.

The PD cartridge itself actually shares many of the same dimensions as a CD-ROM caddy – which you should have some familiarity with if you own an older CD-ROM drive. However, the PD cartridge will not work in caddy-based CD-ROM drives which is a great shame as it would certainly put this drive into my all-time top ten list of products.

SITTING PRETTY

The drive is nice and easy to install with jumper-based termination (rather than resistor packs which can be awkward to remove and replace) and sits quite happily in the top bay of my machine. Software installation is certainly a lot less complicated than the many disks of installation software for the PC and Mac included in the box would suggest.

If you are using an Amiga with a SCSI interface built-in like an A3000, nothing needs changing. However, the drive isn't particularly happy with all controllers – it does work on a GVP controller and also on our A2091, but it didn't like the A4091 SCSI II controller we use in our A4000 at work. If you do get it working then all you need do is load up HDToolbox, or its equivalent on your machine, and partition the cartridge the same way you would with any new hard drive. As for the CD-ROM

Four wheel drive

Ben Vost beefs up
his Amiga with
the new Panasonic
PD drive



side of things, using AmiCDROM is extremely simple and you can set up the PD drive as a CD-ROM unit with the same ease that you set up the cartridge side of things.

How well does the drive perform? According to SysInfo the cartridge runs along at a nice steady meg a second, although copying files to and from the drive in DOpus puts the lie to those figures. In a test I did copying roughly 10Mbs worth of 24-bit pictures, it took six minutes and 40 seconds to write all 10Mbs to the PD drive, and just one minute and 50 seconds to copy them from the PD drive back onto my hard drive (which, incidentally, is rated as giving me a little over three megabytes a second).

This obviously means that in real world terms the drive only writes at about a meg every 40 seconds, not quite as fast as SysInfo suggests. On the plus side it does mean that the drive reads at about a meg every eleven seconds – still not a great speed but at least better than its write speed. I should point out, though, that the speed for reads and writes does vary quite a lot and is not always as slow as the figures I have printed. The CD-ROM's speed is a lot more predictable. Seeing that the drive is supposed to be a quad-speed

drive, you'd expect to get around the 600k a second mark. And, no surprise here, that's exactly what you do get.

In conclusion, I would have to say that I wouldn't use the Panasonic PD drive as an everyday replacement for a hard drive, but if you are going to use it for archiving or as a final step before mastering a CD then this unit provides significant value for money. For users out there that haven't yet bought a CD-ROM drive, it is perhaps worth waiting for a bit and saving up that extra cash to get your hands on an additional 664Mb of hard drive space at the same time. As each additional 664Mb cartridge only costs fifty quid it remains probably the cheapest way of beefing up your Amiga at the lowest possible cost.



Compatibility crossroads



It is a shame, as I already said, that the cartridge system isn't a little more compatible. If it worked in the same way as standard MO drives there would at least be some cross-platform compatibility. As it is, the only drive you can read a PD cartridge in is Panasonic's own drive. It also has to be hoped that the PD drive is going to be more compatible in the future with hard drive controllers. Some of the SCSI controllers the PD drive does work with include the GVP hard card, HiSoft's Squirrel controller, the embedded SCSI controller in A3000s and thus Commodore's own A2091, and the new DataFier SCSI controller for the A1200.

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Computer 2D animation has been having a rough time of it over the last few years. After the eye candy niceties of LightWave, Wavefront and 3D Studio and its professional users, 2D is seen as something from the past that should remain there indefinitely unless produced by Disney. There's no less flare, no 2,400 lights illuminating the undercarriage of a space freight and no 3D chases through 24-bit deep space.

Indeed, computer animation is inherently seen as a 3D format of polygons, trapped textures and splicing because the medium lends itself so well to the genre and for the last few years has been seen as the best option for achieving the impossible. The likes of Jurassic Park and Lawnmower Man to Babylon 5 and SeaQuest DSV have created a myopic view of computer's potential throughout all areas of silicon art.

After this initial flux of enthusiasm in one area, it's now becoming more apparent that artists and animators from all walks of life are finding ways of turning the 3D legacy into something else far, far removed.

Amiga Computing thought it was time to turn the spotlight on the unsung heroines and heroes who are making real waves in the animation scene to ask them what makes their Amiga such a vital component in the production process, and what techniques they use to turn the ordinary into the extraordinary.

An anim for all seasons

Artists have an image problem. Judging from the media, it appears that there are two distinctive types. The commercial artist who's in it just for the money (to eat, clothe, live and so on) and the individual artist whose work apparently shouldn't be funded because it only appeals to a minority. While there are extreme cases of stereotyping in both areas that inflame public contempt and do more damage than good to the arts scene as a whole (witness Camelot's award of £55 million to the Royal Opera House and the subsequent backlash that has people muttering that money should be given solely to charities, never mind the Arts Council), many artists are genuinely trying their best to bring something fresh, original and individualistic to the small and big screens.

Despite the supposed black-and-white nature to the arts, the majority of people operating in the grey areas in between are working in both arenas and creating original and exciting work simultaneously.

Take Jonathan Hodgson. He's been animating for the past 15 years using a variety of media. His commercials include SAAB, Kilmeaden Cheddar and

Four animators and an Amiga

program intros for White Heat (BBC1), Kersplat (Channel 4), Nelson Mandela (Channel 4) and Classic Trucks (Channel 4). Originally an illustrator, Hodgson came across animation while studying at Liverpool arts school and decided that the moving image was far more interesting. As with many art schools, the slant was very much on the experimental – a tradition that Hodgson still swears by today.

He had his first introduction to computers, specifically the Amiga, only a year ago when he applied to the arts council for funding for a short experimental animation that'll be screened as part of the FourMotions series on its completion. Since that time, the computer has become a vital part of his animation process. He has since produced an intro animation for Channel Four's Classic Trucks series (detailed below).

MENTAL GRAFFITI

Meanwhile, Hodgson continues to work on his animation. Described as 'mental graffiti', using a variety of different medias from charcoal to video, the basic theme behind the film is what goes on inside someone's head while doing something as mundane as walking to work. The Amiga is being used as a vital part of the production with the now famous PARCard taking centre stage for

After looking at 3D animation in past issues, Adam Phillips talks to four 2D artists who are making Amiga animated art

the management and playback of all images (detailed below).

So impressed is Hodgson with the Amiga that he's planning to produce another film created solely on the machine. The appeal of using the Amiga is the speed of adding a variety of effects: "You can turn a photographic image into an outline image within seconds. Also, the potential for the likes of morphing is very exciting" commented Hodgson.

"While uses so far have been very obvious, there's lots of stuff yet to be

done. Take typography – a hundred new typefaces can be created by morphing a single typeface and creating subtle differences and changes. The same could be done by morphing two pictures together. There's an endless resource that's just waiting to be fully exploited."

Furthermore, the price of the equipment compared to the likes of a Quantel paintbox plus the hire charge of an operator has proved a strong selling point to many animators including Hodgson: "It's amazing that you can do so much on a system now. It costs a fraction of the high-end systems – it's a crude Harry (Quantel)."

There is a downside to all this enthusiasm though – at present, he sees the use of computer graphics as a little limited: "There seems to be too much emphasis on style and techniques and how realistic you can make something. A lot of 3D stuff bores me – there's a real lack of content usually and the concepts behind the images are generally science fiction-based."

Like any tool as well, he knows it takes time to get used to the computer: "There are so many options available that you can frequently find yourself disappearing up a blind alley and wasting time. The good side to this, though, is the potential for discovery as well."

Despite his own success using the Amiga, Hodgson can never see himself moving solely onto a computer platform. "Personally, the future of computer graphics is how they fit in with other techniques – that's when things are going to start getting really interesting."

Sounds like a recipe for multimedia to me.

What she always wanted

Channel 4's FourMotions series has shown some of the leading work produced in the field of animation and, last month, featured a program dedicated to the computer animators. One artist showcased was Ruth Lingford, a one-time occupational therapist turned professional animator. For those who saw her short animation entitled "What She Wants" they can hardly have failed to notice the sometimes shocking and sexually-oriented content.

Lingford's uncompromising style has won her acclaim and work on an increasingly large scale. Her love for animation didn't blossom during her teen years though – while she studied on an art foundation course after leaving school, her career before animation was dealing with mentally ill old people as an occupational therapist. One day, she realised she was simply running out of care – with a husband and two children to look out for in the evening on top of the already stressful day job, Lingford

Classic Trucks

For anyone who saw the Classic Trucks series on Channel 4, Hodgson designed the vivid intro sequence. He was helped by Dan Arnall who works for Marjut Rimmeneen, also interviewed here. What follows is a breakdown of the intro and how the various effects were achieved.



All the images here have been taken from different sources. The flyover, clouds, and trucks were taken from various books. The man walking across the frame is a friend of Hodgson and as his feet step into the post-production added puddles, splashes are formed. These were created in Brilliance and the whole scene was composited together using the package.



Hodgson took the shape of the fender and mapped on the reflection of the man as he appears to walk past the truck. The actual truck image was bent slightly to give the illusion of perspective. The bright palette was painted afterwards. All the work was done with Brilliance.



Big CU of the wheel was taken from a photograph. After putting the page on the computer, the live action of a man climbing into a truck was mapped on to the hub cap and wheel nuts. All the shots used in the intro were converted into a 16-colour greyscale instead of 256 which slowed down the hard drive and used too much space.



The blue in the top right-hand corner was added frame by frame using Brilliance's filled shape option to create the pulsating palette. That whole section was masked off to achieve the effect.



The various areas of different colours were traced off separately and filled. Brilliance was used to add more contour and shape to the splash. Finally, hard edges brought about by importing images were removed using smear and smooth options.



Two shots were taken here – one out-of-focus on the window and the other in-focus. After the frame of the window had been stencilled out, a variety of transparency layers were added using Brilliance – a man ordering inside the café, a building, a truck passing and in the section which becomes the Classic Trucks logo, a video of a lorry approaching the camera, its lights painted in and its number plate removed.

Hodgson morphed using Morph Plus to the in-focus shot because he felt that simply mixing would have seemed highly unrealistic as a focus pull. As we pull focus, the Classic Trucks logo comes into view. The shot took a week and a half to complete – there are seven different layers in all.

Feeling My Way

The film that Hodgson is working on currently, "Feeling My Way", is an experimental piece shot on Hi-8 and will last about seven minutes. Charting the mental outpourings and process of a worker on his way to the office, the whole thing is shot from his POV. Hodgson knows that the basic premise is hardly gripping, but from what I've seen of his animation additions the piece looks excellent. The process firstly involves shooting the Hi-8 material and then adding the effects on afterwards. What follows is a breakdown of that process.

decided that an alternative and permanent career move was needed.

With the financial support of her husband, she undertook a Fine Art degree course at Middlesex Polytechnic in the mid-'80s and came across animation quite by accident in the course syllabus. "It was one of those life experiences – I knew what I wanted to do when I grew up. With animation, you can make things do whatever you want. There are no restrictions" enthuses Lingford.

Because of her animation work, she was accepted into the prestigious Royal College of Art to do an MA in animation and in 1992, graduated. While there,

she had spent some of her time using the high-end Macs and software to create work and experiment. The first

immediate problem on leaving was where to find a computer that could replace the more costly methods of traditional animation.

In 1988, an Amiga 500 was bought for the children to do a spot of word processing. At the time, Lingford had a brief look at Deluxe Paint 4 but had not been impressed initially by its primitive look and design. On experimenting further, though, she realised the Amiga system did offer enough to make creating animation at home a viable proposition. The next





Video footage - starting in a house and then on to the streets of London, Hodgson has tried to capture exactly what you would see and look out for on the way to work - passing shops, looking at your shadow, moving through a busy crowd on the way to a train, and reading signs. After shooting a mass of material, it was all transferred on to the...



PARcard - where a logging sheet directory was created with times of the footage's position on each tape next to the file name for easy reference. All shots are loaded in a few G factor to save memory. Hodgson's original plan was to shoot on film and then get full size photographic prints of the appropriate shots. It proved to be impractical and costly. He heard about the PARcard and the rest is history.

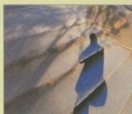
He creates an assembly edit of all the shots he wants to use and then reads those chosen ones in on a high G factor. Using Batch Factory and Image FX to organise and convert the images into IFF24, he then uses Studio software to print out each scene frame by frame on his HP1200C printer. Each scene takes 4-5 minutes to print out



Animation - with each frame printed out on special punched paper to fit an animation peg bar (holds the sheet in place on the rostrum), it's time to add the various effects with a variety of different media. Hodgson wanted to convey how we see the world as a series of focal points. In this example, a white stencil is placed over a road scene obscuring everything other than the sign. He then draws in, using pencil, outlines of key objects in the scene as passing impressions - as if we don't really take any notice of what we see unless focusing directly on it. Once done, the frame is recorded by the...



Hi-8 camera - and straight onto the PARcard, producing the finished animated scene



In this scene, we see the walker looking at his shadow as it changes and turns into a bizarre landscape



Jonathan Hodgson: "Personally, the future of computer graphics is how they fit in with other techniques - that's when things are going to start getting really interesting"

and The Mother, an adaptation of a lesser-known Hans Christian Anderson story. In fact, Channel 4 liked her storyboard so much that production begins in September with a budget in the £40,000 area.

Her other work shows the diversity available to animators. From producing short animated sequences for the CD-ROM version of the best-selling Griffin and Sabine trilogy now being produced by Peter Gabriel's Real World multimedia company, to a 20 minute training animation on how to deal with the problems of glue sniffing, her work is varied but boasts her own individual style. In the meantime, she has upgraded to a 4000 and the PARcard.

With a healthy portfolio of animation tucked into one video cassette, she sees computer animation as an ideal media: "What's happening now is very exciting. Back in the old days, we were all terribly scornful of computers. People at college now find they can do what they want with computers and aren't having their work affected by clumsy technology."

FUTURE THOUGHTS

As for the future, Lingford is equally optimistic: "Anyone will be able to animate - I don't find that thought threatening. At the end of the day, it's all about the idea behind the animation not the technique, and computers offer an ideal platform to get started."

She still believes, though, that people must learn the fundamentals of animation creation to give them the necessary knowledge to make a solid start. Her advice for budding animators is simple: "I'd just use DP4/5 and draw using the light box. Draw the movement first to get a feel of what animation is all about. The look can come later."

She also sees computers as offering an excellent way of learning the ropes. In between her animation work she has been teaching at the University of Humber and some days at the National Film and Television School.

"With something like walk cycles, you're always going to get it wrong to begin with. It requires lots of practise and I noticed while teaching that students have a tendency to be very precious when drawing with pencil and paper" Lingford explains.

"It takes them a long time as they painstakingly draw out each frame. The majority, though, end up with a walk cycle that doesn't work. With a computer, the investment required to produce a result is so slight that you're not as precious and can rattle off example after example. It's a very good learning tool."

Animate!

Anyone interested in possible funding for their animation should contact the Arts Council. Focusing on innovation in animation, Animate! was set-up six years ago by the council, with support from Channel 4 to fund artists producing risk-taking work. Currently there are 30 projects either underway or finished, and six of those involve digital technology - three specifically the Amiga.

For further information, contact Gary Thomas, the assistant film and video officer on 0171 333 0100 ext. 410.

step was to apply to the Arts Council for a grant to start work on her first animated short created entirely on a computer. The application was successful and with part of the money, she invested in a second-hand 1500 and a SummaSketch II tablet board. DP4 was selected as the package to do all the animation on and What She Wants (detailed below) was started.

The attention the finished piece

received won her a place at the Museum of the Moving Image as an animator in residence. Akin to being put under a microscope, Lingford sat in a room working all day while the public watched in from the other side of pane of glass.

The bonus to the experience though was a proper commission with real money and development time to work on her up-and-coming project, Death

What She Wants

For her first animation, Lingford wanted a challenging subject matter. The theme behind *What She Wants* is twofold. Firstly, she wanted to create an erotic animation – there has always been a school of thought that believes it's impossible to create such a thing because animation doesn't allow the viewer to become fully involved with the animated characters. Secondly, it was

reaction against the apparent increase in sexually-related material in the media – she felt as if she was being told that everyone should be having sex and thinking about it, almost as if a form of control. "It's a paranoid attitude to a certain extent but it seemed that sexuality was being manipulated to make us bigger and better consumers."

With this double-edged sword in hand, What She

Wants took nine months to fully complete and proves to be an animation that doesn't pull any punches. Her main process was to put a series of seemingly unrelated images together and come up with new ideas and connections – she feels the project was successful on the whole. What follows is a breakdown of the two main processes featured in the anim.

Black and white sections



Each image in this section was copied from a painting by Delacroix. The process is simple – this Romanesque man was created using the unbroken and broken line option in DP4...



...and Lingford drew in the relevant changes to turn the image into...



...a woman. Lingford didn't want to cut and copy in between because the end result would have appeared jerky. Also, morphing was ruled out simply because it would devoid the animation of any real style



The arm and body of the woman turn into a horse's neck and head. The process is very similar to the old tradition of painting on glass – take parts away and add new ones

Colour sections



The starting point was on DP4's lightable facility. The image was drawn up using the thick black line...



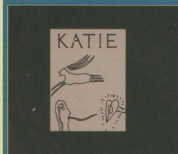
...Lingford then moved ahead by two frames and drew in the next step...



...Once done, she'd play the end result to see if it worked. If successful, she returned to the intermediate frames and drew them in



Finally, she would add colour and go over the black lines with the relevant background colour to produce an uneven and more hand-drawn effect



Lingford is currently working on the CD-ROM version of the best selling Griffin and Sabine trilogy being produced by Peter Gabriel's Real World multi-media company – unfortunately, the title won't be available on the Amiga on its release in Spring '96



A preview of the up-and-coming *Death and the Mother*. Lingford's Channel 4 funded animation is presently in pre-production. The visual style is based on German woodcuts of the early 20th century – note the lines left by the character's movement



Ruth Lingford: "With animation, you can make things do whatever you want. There are no restrictions."

Rimminen and son

Ucked away in a London terrace house on the top floor is an Amiga 4000 and Silicon Graphics side by side. The owner, Marjut Rimminen, has been producing animation for the last 20 years. An animation director by trade, computers have only just begun taking a very active role in her work. On board is her son Dan Arai, a computer operator and animator whose expertise has also helped Jonathan Hodgson.

It was in 1974 that she had her first experience with a computer; "I was in London to shoot a commercial with Electronic Arts and became involved because the media was interesting and new. Unfortunately at that time, the whole computer operation was in the hands of the engineers not the creatives due to the inaccessibility of the hardware and software" commented Rimminen.

Subsequently, she didn't return to the computer scene for another 20 years. In the meantime, she continued with her commercial work and has had various animations shown on Channel 4. Her next foray into computers was the Amiga 500, owned by her son, which came with Deluxe Paint 3. So impressed with the standard possible, she quickly invested in a 4000 and a PARCard. The machine is currently being used on another Channel 4 Four Nations anim in conjunction with the Silicon Graphics. With the mock-up created on the Amiga already, the bulk of the final version is being produced on the SGI.

RISKY BUSINESS

While some Amiga owners maybe fuming at the thought, Rimminen is quick to point out that one of the reasons for bringing in the SGI was the cloud of doubt hanging over Commodore's future: "We had planned to go with Amigas solely, but with such an investment in something that was looking decidedly shaky it was just too much of a risk."

Indeed, she sings the Amiga's praises: "I've worked with Macs as well and it has lots of interesting programs but it's still not a great machine. If the Amiga was developed in the same way as the Mac – easy to use in other words – it would be ideal."

Star of the show though, yet again, is the PARCard. While shooting the live footage at hired studios, they used a Hi-8 video camera and stored each frame directly onto the card which was set up nearby. The Amiga has also helped her puppet skills as well – while shooting a particular scene, Rimminen needed to film a doll rolling out a handbag. Instead of the usual painstaking set-up required to perform such an animation feat, she simply held the doll in the relevant position for each frame and then took out her fingers using Brilliance in post production. "I find the system very tactile which is unusual for a computer... it enables me to use my puppet skills and help in the process" she commented.

While the SGI takes centre stage in this production, Rimminen is obviously a true enthusiast: "While at a show recently, I met dozens of animators all singing the praises of the machine. Even after all this time, there's a real community spirit for the Amiga. If Escorn succeed, I think the future for the Amiga in the animation sector is excellent."

Many Happy Returns

A theme-heavy animation portraying how the present is both formed from the past and the future – because of our experiences and hopes, there's no such thing as objective reality. The anim explores this with a mixture of computer and live action.



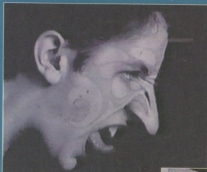
Dan Arai and Marjut Rimminen: "I find the Amiga very tactile which is unusual for a computer... it enables me to use my puppet skills and help in the process."



Rimminen was placed on a spinning chair in this shot. The live action was then altered and turned into an animbrush. The palette was changed and the final image stencilled into the live action foreground with... Brilliance!



In this scene, the birds in the venetian blind take off and fly across the screen. Rimminen's face was put over the top as a 20 per cent transparency with Brilliance. The birds themselves started as dots mapping their flight plans and then were subsequently drawn in with Brilliance with a slight transparency.



Other work

➤ Morph Plus was used to distort the face into a vampiric image. The tattoos on the face were sketched on with Brilliance by digital artist Jack Schuler

➤ In the background, bombs can be seen dropping – this effect was achieved by simply shooting a book page on video while tilting the camera down. The Houses of Parliament were composited over the top and edges were blurred to seem like. The broadcasters were taken from the video recorder and picked up as an animbrush and placed on top of the action



➤ After using MultiFrame as a compositor and drawing an alpha channel for each live frame of the actor, the rest of the shot was image processed with the line art option using AdPro and MultiFrame

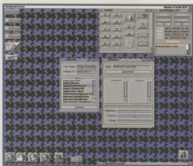
At last! Amiga net surfers have a graphical world wide web browser that is capable of dealing with forms. AMosaic v1.48 was launched onto an unsuspecting public in the early days of July and has a revamped GUI with a nice bouncing ball progress animation (much better than the pulsing radio button or the spinning clock hand) and Netscape-like gadgets for progress through the world wide web. Also included in this latest version is the ability to type into the URL address line, rather than having to open a requester and a built-in, hierarchically organised hotlist.

My overall impression is that this version is actually ever so slightly slower than Mosaic 1.3, but given its added benefits I'm willing to forego that extra speed. Funny enough, given that AMosaic now includes a truly animated progress button, graphical navigation buttons and the ability to construct forms, the executable's size is actually less than that of its predecessor.

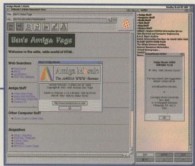
The way AMosaic now supports forms does seem slightly clunky, but I would imagine this is down to the way MUI and AmigaDOS work. What happens is that when you get to a URL that has a form, say the registration form for HotWired, The Electronic Telegraph or Yahoo, the Mosaic window disappears to be replaced by a little window telling you that Mosaic is constructing a form. The Mosaic window then reappears with the form in place, voilà!

When you leave a forms page, exactly the same thing happens. Scrolling within a forms page is a bit grinding, so some work obviously still needs to be done on that front. Another thing I miss from using Netscape at work all day is the MailTo: CGI script. This lets you click on someone's e-mail address on a home page and then send some mail, but I guess you can't have everything all at once.

Next up is a related bit of software, Bernd Ozceri's AMHotlist. This now also supports the hierarchically arranged hotlist entries. You can create sub-menus and simply put your existing entries within those sub-menus by clicking on the 'move'



ACUSeeme steadfastly refusing to connect to a reflector site



The latest versions of AMosaic and AMHotlist looking gorgeous and groovy on a 1024x768 screen

Net novelties

Ben Uost looks at the latest gizmos available for net users

button and then clicking where you want the entry. No more shuffling through an endless hotlist trying to find the page you want – stuff them all inside descriptively named sub-menus and all your cares simply fly away.

Well, perhaps not, but I do recommend using AMHotlist v2 instead of the hotlist in AMosaic itself because it is much nicer to use and can have a lot more entries visible at one time. Of course, if you are having to use AMosaic on a native Amiga screen, you might not have enough room to display them both and still have adequate room for the main AMosaic window.

VERSION UPGRADE

Lastly, there is a new version of the Amiga's sole videoconferencing tool available on the net. At the time of writing, ACUSeeme was at version 2.01, but I know that version 2.02 at least will be available by the time you read this. CUSeeme is a standard for Internet videoconferencing which gives you 'realtime' video and audio communications with another machine. This works great if you have a whole load of Unix boxes with cameras and mikes linked into an ATM network, but definitely leaves a little to be desired over a telephone line.

Because the Amiga doesn't have a camera or mike as easy system add-ons,

ACUSeeme will probably only appeal to lurkers because you have no way of replying to anything that is said or done at the other end of the link. This version actually interprets the reflector list that it comes with so you no longer have to type the addresses of the reflectors into a text gadget, you can simply select them from a scrolling list.

Reflectors are sites that carry CUSeeme traffic, be it solely audio or both audio and video, and behave somewhat like IRC servers in that they act as central gathering points for people to call into. ACUSeeme is also written by the prolific Mr Ozceri who seems to have no end to his talents.



Don't forget the MUI



All three of the programs I have talked about require Magic User Interface – MUI – to work, which is why the screenshots always look so groovy, but is also responsible for slowing down the programs somewhat. Ever since AMosaic was launched, there has been a backlash against MUI slating its size and slowness. The programmers of AMosaic and Mr Ozceri retort that what they created would have taken much longer by normal means and certainly wouldn't look as good.

I have no problem whatsoever with MUI. It has rarely crashed my machine, certainly no more than any other program, and provides a very good-looking interface for the numerous programs on my machine that require it. With Amiga Computing having given a registered version away with the July issue, there should no longer be any complaints about users having to pay to use it, so perhaps people should give MUI a break.

SYSTEM ESSENTIALS

RED = Essential BLACK = Recommended



MUI RTG card AGA Kickstart

The bottom line

AMHotList2_00.lha 16k
ftp://src.doc.ic.ac.uk/aminet/comm/net

acuseeme2_01.lha 64k
ftp://src.doc.ic.ac.uk/aminet/comm/tcp

AMosaic14beta_AmiTq.lha 146k
http://www.omnipresence.com/amosaic/

Not so long ago, the Amiga games market was awash with high-quality, innovative titles that sold in abundance. But after the collapse of Commodore, software companies unsurprisingly became very cautious when it came to releasing Amiga games. Some, after years of supporting the machine, were only too ready to abandon it and desert to the PC camp, others took a toe-dipping policy, releasing a couple of titles or even worse – second-rate PC portovers while many titles were ‘put on hold.’

But now, the latest news from Escom is that the Amiga is going back into production and an A1200 is promised for September. But with a higher than expected RRP announced at £399, a lot of people are going to take a fair amount of convincing that developing for the Amiga is, once again going to be a viable option.

And, not only have Escom got their work cut out for them in this respect, but the vicious circle of developers not making the games until retailers stock them, and retailers not making shelf space available until they see widespread commitment, must be broken.

GENERAL CONSENSUS

Amiga Computing talked to key industry sources to get the general opinion about the future of the Amiga games market and what they'd like to see from Amiga Technologies.

The Amiga has always been the cheap, yet quality home computer that not only could you buy the latest games for, but you could also create music on, compile a database and write a letter. The PC has always been priced over three times as much as the Amiga. The consoles, while available for the same price, were merely toys that could do no more than play games. But after a year off the market has it still got what it takes?

As it stands, the Amiga still has

There has been a lot of speculation about what the new Amigas will be like and the price at which they will retail. Incidentally, the interviews were conducted before Escom announced the price of the new A1200, and at £399, it's a lot more than everyone was hoping for.

Marcus Dyson, Team 17: "A1200 with an 030, 4Mb RAM (2 fast, 2chip) and a 120Mb hard drive for £299. This may sound a little unrealistic, but PC's are now so well specified and so cheap that Amiga has to really offer good value for money."

Andy Jolly, Binary Emotions: "The A1200 has to be around the £200 price range."

Michael Crook, Guildhall: "If the A1200 can re-enter the market at £349.99 or less they will immediately grab a healthy chunk of consumer spend this Christmas."

Simon Reynolds, Inter-mediate: "I would like to see a cheap (sub-£200) A1200 in the marketplace, to kickstart interest in the Amiga."

Tech spec



many strengths which the supportive software developers are only too keen to point out. A strong and loyal user base already exists and Escom need to cultivate this. As Chris Warrender from Grandslam points out: "Escom must listen to the users, both past and present, and give them what they want in relation to the machine rather than telling them what they need. They have a ready-made installed base to start from – they should not ignore these users, but should foster the relationship between user and developer and this base will, undoubtedly increase."

Amiga users have proved themselves extremely loyal, especially with

a generation who have grown up with the machine. Marcus Dyson, head of Multimedia at Team 17 states: "great thing about the Amiga was taught a whole generation of game players the fun of graphics, music and coding." Dyson also points out the Amiga being a user-friendly machine that is easy, even for novice to use.

"The Amiga comes out of a box, is ready to run in seconds. No tiresome and troublesome sound cards, graphics accelerators, I/O cards and mouse drivers to install. And Workbench 3.1 is superior to Windows '95, which is being steeped in praise because

Morta



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combat

There is a worrying trend in the Amiga games market with fewer titles being released. Tina Hackett investigates whether anything has changed now Escom have unveiled their plans

users have had to tolerate Windows 3.1 for so long."

Vulcan Software's Lisa Tunnah agrees: "The PC has a habit of doing really scary things when you least expect it, whereas the Amiga sits there displaying a very friendly looking workbench environment. Running software on the Amiga is so easy, whereas you need a degree in computer science just to install Windows on your average PC."

The Amiga has many other positive factors and having a good budget market certainly helps matters. As well as those available for around £10, the full price titles are also competitively priced. With cartridges and PC CD-ROM titles still costing around the £40 mark, and with full priced Amiga titles averaging around £25, the Amiga will still provide value for money on that score. A triple A title on the Amiga can still sell in abundance, and some developers are ready to point the finger

at some of the bad-quality games being released that are giving the machine a bad name. Jolly believes: "I think Amiga owners are fed up with paying out for poor quality software and are only willing to buy quality. For instance, Skidmarks 2 sold twice the number of the top console games in its first month."

However, distribution always plays a crucial part and if the retailers aren't convinced, then the software companies' hard work will go down the drain. Vulcan Software have found a way around this by distributing their games themselves through mail order. "We have decided to distribute our own products for several reasons. One is the declining confidence in Amiga products at wholesale and retail level. Vulcan couldn't change this sad

Dyson: "Any company developing for the Amiga but isn't doing CD32 stuff is out of its mind"

fact so we simply adapted."

Neil Boote, Head of Non-Music Product at Virgin Our Price, defended the retailers by saying: "Virgin Retail is committed to all games formats and as such, we stock Amiga products in the Megastores. Amiga was a very strong format three years ago and recently had a very successful Christmas in 1994. Demand has diminished since then, and as such we are keeping a close eye on the Amiga market and any developments that might affect it. We are aware that the Amiga still has over 1.5 million machines in UK households, and any deci-

sion we make will take this into consideration."

Simon Reynolds for Special Reserve is rather more pessimistic: "The demand for Amiga products is dwindling down to the fact that there has been no new hardware sales for a year, and after a year out of the market, and with the Saturn and Playstation looming, Escom are going to have to do something really special to succeed."

This time factor is also seen as a major problem that Escom will have to overcome. A year out of the market is a long time and in its absence the PC has taken the major foothold in the home computer market. Simon Jeffery, Vice President of Marketing at Virgin Interactive states: "Those who require a future-proof computer for education and a bit of gaming will be driven towards a DOS-based PC. Intel and Microsoft have increased the profile of the PC to the non-

hobbyist consumer to the extent that people equate the term computing with the names of those two companies. This delimits the Amiga to the hobbyist and design sectors, plus niche areas like video. So pricing has to be extremely aggressive."

The Amiga is also limited by being mainly a European platform – the Super-consoles will be international: "Their problem will be that the other platforms are truly international whereas the Amiga will be very much a British/European platform," said Michael Crook of Guildhall. Jeffery believes, too, that the Amiga will never be seen as a serious business machine: "DOS and Windows-based applications rule this area. Sixty million PCs will be sold this year – and

Will other platforms prove too much competition for the Amiga?



Berry Emotions, developers of Speria legacy, believe that Amiga owners are fed up of buying poor-quality software



After a meeting with Escom, Virgin Interactive will continue to develop for the Amiga



that's conservative. Sadly, I can't envisage the day when Microsoft publishes Amiga-specific apps." He finishes: "The Amiga is a wonderful hobbyist machine. To pretend it's anything more will be its downfall."

Apart from the hardware not being on the shelves for a year, the Amiga has also faced other problems. Piracy is cited as one factor that has led to the situation. One way around this would be to increase the amount of development on CD format. As Dyson puts it: "Any company that is developing for the Amiga but isn't doing CD32 stuff is out of its mind. Because CD piracy is still (relatively) uncommon, Amiga CD software sells in larger amounts than the CD32's marketshare would suggest. More Amiga owners are getting CD-ROM drives and if companies will release enhanced CD software, I'm convinced they will see that effort rewarded with sales."

"Personally, with faster loading times, less disk swaps and no need to take up hard drive space with full installs, I'd rather see all software issued on CD only."

ENHANCING

However, the CD32 in its current form is another bone of contention. Most games available for the CD32 have been port-overs from the Amiga with little or no enhancements, and the general feeling seems to be that the machine needs vastly enhancing and CD-specific titles need to be developed – especially with the imminent arrival of the Sony Playstation. Jolly backs this up: "We think that the CD32 in its present design will have a hard time if it goes back into production – unless Escom intend to focus it on a different market, i.e. a set-top box. They must produce an upgraded CD32, re-styled and renamed would be a good move, complete with a tight development schedule."

What software developers would actually like to see on the Amiga itself is wide and varied, but most seem to be in agreement that they'd like to see increased specs. Warrender replies: "I would like to see high-capacity hard drives, built-in CD-ROM, cross platform compatibility, a new high resolution monitor to coincide with a higher standard video output, a portable version,



Super Skidmarks proved that quality titles will still sell well



Vulcan Software have made the decision to distribute their own products through mail order

there has been no new hardware sales for a year, and after a year out of the market, and with the Saturn and Playstation looming, Escom are going to have to do something really special to succeed



Team 17 are still developing for the Amiga because they are all huge Amiga fans

In the pipeline

We take a look at what the software companies have in store now that Escom have revealed their plans.

Vulcan: "Our policy is to continue to develop for the Amiga regardless of Escom's plans. We sincerely believe there is a strong user base out there." **In development:** 'The Mini Series'.

Grandslam: "Our policy on the development for the Amiga has only been strengthened with the Escom news. We have always been an active supporter of the Commodore range since the early machines, and will continue to develop titles as long as Amiga users are still out there to buy them." **In development:** Basejumpers CD32, International Test Series Cricket, Gamer Gold, Ruffian, 7th Sword of Mendor

Virgin Interactive: "We had an important meeting with Escom recently, discussing our future Amiga development plans. Escom have certainly assured

us of a future for the Amiga, so appropriate projects at VIE will continue." **In development:** Sensible Golf, CD32 titles and Renegade's Z.

Binary Emotions: "Our plans have always involved the Amiga simply because it's such an easy platform to develop for, so Escom's buyout has enhanced matters." **In development:** Minskies Furr Balls, Nemo Syndrome, Spies Legacy 2

Team 17: "Escom's plans haven't really affected Team 17's attitude to the Amiga yet. They haven't approached us directly, we have had to approach them. This was always a problem with Commodore, who really had quite a shoddy attitude towards developers. We are still developing for the Amiga mainly because we owe much of our success to the machine and because many people here are huge Amiga fans rather than it being a particularly profitable market at present." **In development:** Spies Legacy, Final Out, Alien Breed 3D, Worms

and a newly designed Amiga mouse!"

Binary Emotions' Andy Jolly adds to this: "I'd like to see 2Mb FastRAM, new 32-bit blitter, fast 3D chip for polygons and texture mapping, 68030 25MHz base processor, sound improvement, and multi-player facilities."

Another possibility that some would have liked to have seen is the new Amiga put together as a complete package, much like how the PC is sold. Tunnah states: "The Amiga would benefit from 6Mb of RAM as standard, with an accelerator, CD-ROM and a large hard drive accompanied with a monitor. This would provide the end user with a state-of-the-art machine which could run the most sophisticated software."

As with all new machines, in-house development is very important, and

unless Escom have some software teams in-house then it could be very damaging for the future of the Amiga. Jolly stresses this: "You simply can't rely on third-party development, many in the '80s it was possible but in the days of intense competition you have to be crazy not to release exclusive in-house titles."

Taking all these points into account, Escom have a tough job on their hands and only time will tell if the Amiga can be born again. What is for sure, though, is that no-one wants to see the Amiga go, and for a machine that has been the market for a year there's still faithful following. And as Vulcan's Tunnah summarises: "They [Amiga users] are loyal people and deserve only the best."

Exciting! Interesting! Two words that really can't be used to describe filing systems on the Amiga. However, Fourth Level Developments have now released AmiFileSafe with the proud claim that it's the new de facto standard for the Amiga.

First off, a brief explanation of what a file system is: It's a bit of software that sits in the system and maps files onto a disk or suitable medium, servicing requests for data. The Amiga has used FastFileSystem for the past few years but this has its faults, including speed and fault tolerance.

If you reset your Amiga while writing to a disk you'll know about it when you boot again — the disk thrashes around trying to re-validate itself. The bad news is that occasionally it can't sort itself out, at which point it's time to start praying that some extra utility can recover your files. This can take an inordinate amount of time and still fail.

AmiFileSafe's main claims are to never become invalidated and also to be nippier, which does sound too good to be true. The first hurdle I suspected was that installation would be a pain, but thankfully the manual is excellent so people who have no experience of this sort of thing will be fine. You'll need HDToolBox to follow the manual's instructions but RDPrep can be used to do the same job — one should have been supplied with your system. Due to the nature of the product, your disks need to be reformatted after installing the new filesystem onto them, but you'll already have a recent backup of your data, won't you?

STILL WORKING

Once in place and with data reinstalled, I was glad to see that everything still worked and that my machine definitely booted faster. AFS's claim of improved parallel access certainly seems to be founded and the seemingly endless thrashing when ToolManager and EGS battled for bandwidth has pretty much become negligible.

Time for the reliability tests — close eyes, copy large file and reset half way through. No troubles with invalidation. Group delete files and reset? Nowt wrong. Okay, time for the biggie. Unplug the SCSI cable while writing data and up pops a requester saying Write Error. Cancel that a few times. Aha! Gotcha! Replug the SCSI cable and the light starts flickering again. After a second or two, my 3Mb file has been copied and the disk is valid. No data had been lost! Unbelievable, and a possible scenario for those with an external disk farm.

On the data security side of things, I reckon it's safe to say that this is exceptionally good, but maybe the real word to describe it is bulletproof.

Over to speed now, AmiFileSafe's other big claim. 'Instant Directory Listings' claims the cover of the manual. Maybe I'm just cynical, but I think I've heard this sort of thing too many times before so I was expecting disappointment. I was wrong; instant is the word to use. The first indication of this was when I typed 'list' and found that my graphics card was the

Safe as houses

Nik Lines looks at a fast new filing system



bottleneck in displaying the data, despite the fact that it's a Zorro III 64-bit card! Benchmarking with DiskSpeed reveals that even on my humble A3000, 1837 directory entries are being thrown at the system per second. Good old FFS manages a stunning 198. FFS with directory caching manages 1421 but at the expense of data transfer speed.

Transfer speed is up on FFS too, whatever size file is being tested. On small buffers the write speed is up by a factor of five, yet the CPU availability is still at 44 per cent. Larger buffer sizes manage to return an increase in speed along with an increase in CPU availability, too. Suffice to

say, AFS is significantly faster than FFS paper.

The greatest difference, however, seen in everyday use as FFS disks keep on getting slower, whereas A keeps up its speed well. This supports explanation in the manual that fragmentation is kept to an absolute minimum. In fact, it's up all the time, not just on small, empty disks.

The only benchmark parameter that below FFS for AFS is a seek/read parameter which is around ten times slower than FFS. If this was relevant, I would have expected it to manifest itself in copying many small files (such as ENVARC RAM), but this operation is faster on AFS, reducing from taking three seconds with FFS to one and a half seconds with AFS. Perhaps it was just a spurious result or a parameter that really doesn't make much difference?

MISSING FEATURES

At the moment, MultiUser users will be able to fully work with AFS, but a upgrade is promised to version 2.1 which will support this. The only other missing feature (which the manual draws your attention to instead of trying to hide) is that there is no 'undelete' feature, but this is promised in version 2.2 (released in 12 months and free to registered users of 21).

This is an excellent product. I love speed, reliability and complete transparency of it. As yet unmentioned is the fact that there's a floppy version and an old version for machines with an 020 better. The floppy results are stunning (1800 directory entries a second compared to 37 with FFS-DC), but most will be interested in hard drive speed.

And now to the price. Seventy pounds may seem steep, but it's a small price to pay for pretty much guaranteed security. New Amigas need this reliability if they're to stand a chance in the commercial world. Are you listening Escom?

Testing directory manipulation speed

File Create	116 files/sec	CPU Available: 9%
File Open	86 files/sec	CPU Available: 29%
Directory Scan	198 files/sec	CPU Available: 33%
File Delete	344 files/sec	CPU Available: 16%

Seek/Read	810 seeks/sec	CPU Available: 12%
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Testing with a 262144 byte buffer. (LONG-aligned, MEMF_FAST)

Create file	605928 bytes/sec	CPU Available: 83%
Write to file	863157 bytes/sec	CPU Available: 89%
Read from file	906176 bytes/sec	CPU Available: 88%

Average CPU Available:	55%	CPU Availability index: 754
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Testing an FFS device on a Workbench 3, 68030-based machine

Testing directory manipulation speed

File Create	163 files/sec	CPU Available: 2%
File Open	283 files/sec	CPU Available: 0%
Directory Scan	1741 files/sec	CPU Available: 0%
File Delete	270 files/sec	CPU Available: 0%

Seek/Read	51 seeks/sec	CPU Available: 74%
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Testing with a 262144 byte buffer. (LONG-aligned, MEMF_FAST)

Create file	970903 bytes/sec	CPU Available: 84%
Write to file	1178647 bytes/sec	CPU Available: 89%
Read from file	1194950 bytes/sec	CPU Available: 89%

Average CPU Available:	52%	CPU Availability index: 714
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Testing the AFS device on a Workbench 3, 68030-based machine

SYSTEM ESSENTIALS
RED = Essential BLACK = Recommended



The bottom line

Ease of use	8
Implementation	10
Value for money	8
Overall	9



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REAL 3D (V3) for Alpine £1125 + VAT
LIGHTWAVE 3D (V4) for Alpine £ 637 + VAT

Performance Comparisons :-
Transactions per second

	Alpine 275	Cobra 275	ALR 90
CPU	Alpha AXP	Alpha AXP	Pentium
MHz	275	275	90
Integer	21.6	21.2	8.7
FPpoint	42.8	36.1	6.4

Typical Lightwave Frame
Amiga 4000/040, 25MHz, 18Mb 2h 10m 30s
Amiga 3000, 40MHz/040, 34Mb 43m 19s
Alpine 275MHz ALP-HA, 64Mb 6m 35s

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Is it a bird?

Super DTP Amiga

Unfortunately, our choice of software for the A1200 and A4000T is rather limited these days. Basically, you can have PageStream, or there's PageStream and if you don't like that you could always choose, erm, PageStream. ProPage is no longer in development, although you might be able to find a copy of it from somewhere. As for the others, none of them were really up to scratch apart from maybe PageSetter, on a limited basis, and yes, you guessed it, it's no longer in development either and is just as hard to find as ProPage.

So we'll go with PageStream 3 (perhaps it will be version 3.1 by the time you get to read this) as our main piece of software for both the A4000T and A1200. We still have another bit of software to get for both machines. I'm going to start a trend that says A1200 owners have less money to spend than A4000T owners. A stereotype? Maybe, but I think that if you are willing to spend about £2000 on a machine, you're more likely to be rolling in it than someone who only spends £400.

So for my other piece of super software for an A1200 I'm going to suggest that the best choice would be Studio II printer software and an HP Deskjet 660C for hardware. This new version of the excellent Deskjet 500C gives very high resolution mono output and great colour for a price that would have been unthinkable four years ago. Combine this with the superb output that Studio is capable of producing and you'll have a hell of a low-end set up. To top off my hardware choice I think a CD-ROM drive would be the most useful item to take advantage of the many CD-ROMs filled with clip art that are

Ben Vost checks out the ultimate Amiga upgrades and makes his own Super Amiga

available. As for the A4000T side of things, how about a nice HP Laserjet 5MP? This laser printer is capable of 600dpi resolution and has PostScript level 2 support. What about our other piece of hardware and software? If I could only have two more pieces of hardware I would get a nice graphics card, probably a Picasso II – especially as it has recently had a reduction in price – and a proper monitor like the Idek Iiyama 17" multiscan.

But I don't, so my other piece of hardware is going to be the new Artex Colour scanner, reviewed a couple of months ago. This sub-£400 scanner is an absolute boon to the DTP'er lurking within you. As for my remaining piece of software, what about ImageF/X 2.1 to process those scanned images.

Squirrel quad-speed CD-ROM drive

A1200

Software

PageStream 3, £174.95 from Emerald Creative – 0181-715 8866
Studio II, £49.95 from JAM – 01895 274449

Hardware

HP Deskjet 660C, £365.99 from First Computer Centre – 0113 2319444
Squirrel quad-speed CD-ROM drive, £259 from HiSoft – 01525 718181

A4000T

Software

PageStream 3, £174.95 from Emerald Creative – 0181-715 8866
ImageF/X v2.1, £249.99 (but look for special offers) from Wizard Developments – 01322 272908

Hardware

HP Laserjet 5MP, £914.99 from First Computer Centre – 0113 2319444
Artex ColourStation, £399.99 from Gastneier – 0181-345 5000

The Amiga doesn't promise to be all things to all men, and women in these politically correct times, but it is surprising the different uses people put their machines to. From word processing to video, from 3D animation to image manipulation, from genealogy databases to route planners. People even play games on Amigas, believe it or not.

This diversity of application for our favourite machine means there are always new spheres for users to break into. New users seem to tend to buy their Amigas solely for games playing, but the lure of all that other software soon takes hold. With the advent of ever cheaper SCSI hard drives and hard drive controllers, getting into the serious side of the Amiga has never been easier. Now all we need is a cheap, good quality monitor compatible with all Amiga screen modes.

Ah, but what of the ideal Amiga? I guess if you had an unlimited amount of money to spend and an unlimited number of PCMCIA, trapdoor or Zorro slots, you could get yourself a pretty amazing bit of kit. But seeing that most people are limited to one of the former and four of the latter, we don't want to go too crazy.

CRITERIA

So what criteria shall we apply. Well, I'll limit each category of machines to only two choices for hardware and two for software – that way we won't be spending excessive amounts of money.

I'll assume both our base machines – the new A4000T-040 and an Amiga 1200 – have got an existing hard drive of at least reasonable size, and that the A4000T has 10Mb RAM. Both machines can have a standard 1M42 or Microvite because I'm feeling generous, but that's it. No more.

Let's determine what the categories are going to be for our SuperAmiga. With only two pieces each of hardware and software, we can't possibly have the best Amiga of all worlds, so we try for the best Amiga for, say, DTP. Right, we've got one category, what about the others? Hmm, what's the Amiga good at...

OK how about... categories for graphics, video, 3D modelling, and music. I think that will do for now.

So let's start looking at those categories. We may as well go in the order I listed them (hey, it's my article, I'll do what I want). So without further ado, let's have a look at the ideal A4000T and A1200 for DTP.

Artex ColourStation

Super Video Amiga

If there's one area in which the Amiga excels more than in graphics, it is in video production. We have genlocks coming out of our ears and video tiling packages to match. Whether they are the high-end like Montage 24 or cheap and cheerful like Big Alternative Scroller 2, the overriding message is that if you want a machine for video use, then get an Amiga.

Our low-end Amiga is still a powerful production tool in its own right, so what are we going to pile onto it? Both our machines are going to need genlocks, although the A1200 does have a pretty good composite out. On the genlock front, the choice for many a user has long been the Rendale 8802 and variants, so that's the kiddie I'll pick for the A1200.

As for my other piece of hardware, I think it would have to be either a frame grabber or a scanner, to incorporate logo's and images, etc. into video work. So I'm going to go for the ProGrab again because it really is groovy.

On the software stakes, I think that you'd have to go a long way to beat the feature list in Deluxe Paint V which is particularly suited to creating flying logo animations but not necessarily scrolling text. For that I think we'll need Big Alternative Scroller 2 which is very simple but scrolls splendidly.

For the A4000T we're going to seriously beef up the spec. Because our machine comes with a fairly good SCSI hard drive, we're really going to test it to the limits by chucking a VLab Motion card into the mix. The VLab Motion is probably one of the best bits of hardware released for the Amiga this year. It can grab live video in realtime and play it back. With the optional Toccard you can add synchronised sound to your animations, but that isn't all.

VLab Motion also comes with a whole series of special effects and DVEs that can be applied to a whole Motion sequence. The only problem is that they can take quite a while to generate, so the other piece of hardware I am going to choose is the CyberStorm 060 accelerator card which should ensure that even the most complex of effects gets a kick up the backside speed-wise.

This 68060-based accelerator makes sure you have the fastest possible Amiga, and even takes the SIMMs from your motherboard so you won't need to buy new memory. This board should also guarantee that the two programs I choose for the software side of the deal will run as fast as possible.

For one of those programs I am going to choose LightWave, possibly the best video production tool the Amiga has in its arsenal. The other is going to have to be Scala Multimedia 400. This program is suitable for video tiling, multimedia presentations, and all manner of other things. At the price you have to pay for it, it offers one of the best deals for software available.

A1200

Software

Deluxe Paint V, £59.95 from Emerald Creative - 0181-715 8866
Big Alternative Scroller 2, £49.95 from Emerald Creative - 0181-715 8866

Hardware

Rendale genlocks, from £149-£299 from Rendale - 01604 790466
ProGrab 24RT Plus, £129.95 from Gordon Harwood - 01773 36781

A4000

Software

LightWave 4, £bc from Cybersystems - 01843 292150
Scala MM400 £299 from Silica Systems - 0181-309 1111

Hardware

CyberStorm 060, £395 from White Knight Technology - 01920 822321
VLab Motion, £399 from Cybersystems - 01843 292150

Super Graphics Amiga

Graphics is a bit of a toughie. There are so many excellent programs for creating and editing graphics on the Amiga that it's hard to know how to pick two. Right, roll up my sleeves and start on the A1200. Graphics hardware is definitely going to have to incorporate a frame grabber of some description and the ProGrab 24RT has been very well received by everyone.

Following on the heels of the Vidi range of products, the ProGrab can be used through either the parallel port or PCMCIA slot. It works with all AGA screenmodes for the higher possible quality grabs and has many built-in image processing features. It now comes with a Plus version including S-VHS input for the same low price. I think the other piece of hardware should probably be a CD-ROM drive again, particularly one with PhotoCD access, for all those graphics CDs.

As far as software is concerned, no super graphics Amiga would be complete without a paint package, so my nomination would be for Personal Paint. And because this A1200 has a CD-ROM drive, I'm going to plump for the Personal Suite CD-ROM which not only contains Personal Paint, but also Personal Write and the two Personal Font Makers, one each for mono and colour fonts, along with a whole host of art and fonts.

Since Personal Paint includes some image processing functions, I'm not going to choose an image processor as my second choice. Instead I'm going to go for a second art package, this time Photogenics. Photogenics is probably the software title of the year for most Amiga users.



CyberVision 64 graphics board

In case you've been living on Mars this year Photogenics is a 24-bit paint package which you can even use on a machine without a 24-bit graphics card by working in HAM-8. It supports a wide range of file formats and is ideal for retouching digitised images.

Super 3D Amiga

LightWave, LightWave, LightWave. We've even had letters of complaint from people saying we give it far too much coverage, but when all's said and done, there's nothing better for general 3D modelling and animation on the Amiga.

Imagine has much nicer textures and Real 3D is extremely powerful, but only LightWave gives the user a modicum of power for very little effort. It is ideally suited to commercial work and with all the add-ons that are available for it, there is a flow of new ways to use it. However, I hesitate to recommend it for use with an A1200 owing to the fact that it has pretty high memory requirements and we haven't included any memory in with our A1200.

I am going to choose an accelerator for the A1200, but I don't think it would be in the style of this article to furnish it with more than the fairly standard four megs of memory. So what am I going to choose as my rendering package for the A1200? I think it has to be the latest version of Imagine which, while overshadowed by its more famous rival, is still capable of some stunning renders.

My other piece of software would have to either be a paint package for creating

texture maps or a 3D object translator. But seeing that Imagine comes with many exquisite algorithmic textures, I think we can safely go for the object translator instead. I'll go with Pixel Professional v2 which offers the most facilities, including the ability to 'paste' polygons and import text as objects.

On the hardware side of things I think CD-ROM would come in handy again, all those CDs filled with objects and



CyberStorm 060

doesn't have any animation facilities, unlike Personal Paint, but it does have advanced image processing capabilities like warping and rippling.

That's the A1200 out of the way then. For the A4000T I'm going to 24-bit. First up on the hardware front would have to be a graphics board – the CyberVision64 springs to mind. Secondly, although it would be nice to get a better monitor so that full advantage could be taken of the CyberVision's capabilities, I'm going to go for a Wacom pressure-sensitive graphics tablet. This little gem responds correctly to the amount of pressure you place on the nib of the stylus so your airbrush flow gets more dense and your charcoal gets more coverage.

This tablet doesn't work with all software, so I'm going to have to pick a program that takes full advantage of its facilities. The program I'm going to go for is TVPaint version 3 which has multiple layers, a superb airbrush, and even some image processing functions – not to mention an ARexx interface.

I think the choice for the second piece of software is a toss-up. Photogenics takes advantage of the CyberVision's ability to open 24-bit intuition (Workbench) screens, and ManActor can compile animations in 24-bit or the most common foreign formats like FLC or DL. However, I think I'm going to have to go for ImageFX v2.1 again. This is another program that fully supports the CyberVision's 24-bit intuition screens so you can see exactly what you are doing to the images you are processing without having to go through the render modules required for other graphics displays.

ture maps. On the accelerator front, it's hard to choose one particular accelerator as there are so many available. But in keeping with our cost-cutting approach for an A1200 machine, I'm going to choose a relative newcomer to the field – The Apollo – which had, at time of writing, the

privilege of being the cheapest decent card for the A1200.

Our A4000T is a pretty fast machine to start off with, but even it could still do with more processor power. So let's punch in that CyberStorm once more and push the envelope that bit further. Now our LightWave renders should just fly out of the machine, for LightWave is the software I'm going to choose for our top-end machine.

But I still need another bit of hardware and software. LightWave includes several object translation routines furnished by Synthesis, so I think I should concentrate on an art package. However, because I've only got one piece of hardware left to me it's going to have to be a native mode graphics package, so I'm going to go for Photogenics again. As for my other piece of hardware, it might have to be a CD-ROM as well, an internal one this time and NEC do a nice 6-speed number.



Apollo Accelerator

A1200

Software

Imagine 3.x, £99.95 from Emerald Creative – 0181-715 8866
Pixel 3D Professional 2, £94.95 from Emerald Creative – 0181-715 8866

Hardware

Apollo Accelerator, from £99.99 – £93.99 from Visage Computers – 0115 9642828
Squirrel quad-speed CD-ROM drive, £259 from HiSoft – 01525 718181

A4000

Software

Lightwave 4, £tbc from Cybersystems – 01943 292150
Photogenics v1.2, £59.95 from Almathera – 0181-687 0040

Hardware

CyberStorm 060, £995 from White Knight Technology – 01920 822321
NEC 6X CD-ROM drive, £312.99 from First Computer Centre – 0113 2319444

A1200

Hardware

Squirrel quad-speed CD-ROM drive, £259 from HiSoft – 01525 718181
ProGrab 24RT Plus, £129.95 from Gordon Harwood – 01773 836781

Software

Personal Suite CD, £39.95 from Amiga Computing – 01625 878888
Photogenics v1.2, £59.95 from Almathera – 0181-687 0040

A4000T

Hardware

CyberVision64 2Mb, £329.95 from Gordon Harwood – 01773 836781
Wacom tablets, £469.95 – £999.95 from White Knight Technology – 01920 822321

Software

TVPaint 3, £349 from White Knight Technology (check for bundles with the Wacom tablet) – 01920 822321
ImageFX v2.1, £249.99 (but look for special offers) from Wizard Developments – 01322 272908

Super Music Amiga

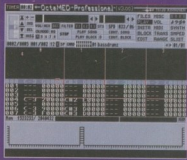
Music has long been an underrated aspect of the Amiga, but the sheer number of 'mods' available on the Amiga attest to the musical talents of our machines and their users. Any discussion of music equipment for an Amiga has to include Octamed and a MIDI interface, let alone a sound sampler.

So we'll start off by including Octamed 6 in the bundle for both our machines and a sound sampler. For the A1200 a Technosound Turbo 2 is in order. A venerable 8-bit sound sampler, Technosound Turbo has been around for a while and is probably the best-selling Amiga sound sampler outside StereoMaster. It has built-in effects, both for realtime manipulation of sound and for the sounds you have sampled, and operates in mono and stereo.

Octamed is also another long-running product. It was available first as a shareware product but it has now evolved into a full-blown commercial offering. At only £40 it really does represent excellent value for money and can bypass the Amiga's four channel limit for sound by multiplexing to offer eight, 12 or even 16 channels of sound.

Our A4000T sampler ought to be something a little more exclusive, so we'll go for the Studio 15 package which consists of a sound sampling card that can sample true 16-bit sounds at up to and beyond CD quality. It can play back from a hard drive and offers several channels for the sound.

Our other piece of hardware for both machines can be that MIDI interface I mentioned earlier. HiSoft do a nice one called the ProMidi Interface which comes with a Midi in, Midi thru and two Midi out ports. Our other piece of software? How about Music X 2 as a sequencer to make the best use of that Midi interface for the A1200 and Bars and Pipes Professional for the A4000.



Octamed

A1200

Software

Octamed 6, £40 from RBF Software – 01703 785680
Music X v2, £49.95 from Emerald Creative – 0181-715 8866

Hardware

Technosound Turbo 2, £28.99 from First Computer Centre – 0113 2319444
Pro MIDI Interface, £24.99 from HiSoft – 01525 718181

A4000

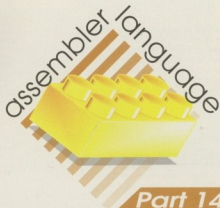
Software

Octamed 6, £40 from RBF Software – 01703 785680
Bars & Pipes Professional v2.5, £199.95 from Emerald Creative – 0181-715 8866

Hardware

Studio 16, £999 from White Knight Technology – 01920 822321
Pro MIDI Interface, £24.99 from HiSoft – 01525 718181

In a state of collapse



Part 14

*Don't worry, this isn't bad news
about Commodore - just Paul Oueras
on his assembly language trail.
This month he provides Intuition
newcomers with a useful window
arrangement tip*

You've doubtless all seen programs that start as a collapsed bar inside a screen or window's title area and then open to a full sized window when the zoom gadget is activated. The trick is often used by utility programs to allow them to remain permanently available for use while not taking up much screen display space. Luckily, it's not that difficult to do and this month, for the benefit of those of you new to Intuition coding at the 680x0 level, I thought it would be useful to explain how it is done.

Needless to say, the code used to perform this trick is fairly minimal, but in order to provide a runnable example it is necessary to incorporate the various statements into a fully fledged Intuition program. You'll find the source for this on disk as the file `october.s` and it is with the overall structure of this code that we need to start our discussions.

The program begins by opening the intuition and gadtools libraries using a tag arrangement. If you end up wondering why I use this method when just two libraries are involved, it's because it's a useful standard approach since it works for any number of libraries. This technique, incidentally, was first discussed in the September '94 issue of *Amiga Computing* (and then outlined briefly again in the April '95 issue). If you find this

section of the code at all mysterious then I'm afraid you will have to dig out (or beg, borrow, or steal) one of the above mentioned back issues. Failing that, you could always treat yourself to a copy from our back issues department!

Immediately after the library opening section comes a set of allocation/deallocation routines controlled by a series of subroutine calls. This code, again, should have a familiar ring to it since the approach has been used many times in past examples. A series of subroutine calls are made to lock the Workbench screen, get the VisualInfo data, open a window, and attach a simple (two-item) menu to it. If you've not seen this type of code before, here's a brief description of how it works.

ALLOCATIONS

All resource allocation operations (i.e. things the program needs to set up before it can be considered as truly up and running) are coded in such a way that, providing they are successful, the address of the corresponding deallocation routine gets pushed onto a special 'deallocation stack'.

When the program terminates, these addresses are removed and the associated deallocation functions executed. This method ensures that deallocation during closdown is always performed in the reverse order to that used during program

startup (for full details of this particular trick take a look at the October '94 issue). Once the program is up and running (i.e. all allocation routines have been successfully executed), control passes to an event handling routine. The sole job of this area of the code is to identify the various classes of events that Intuition has been asked to send the program, and take the appropriate action for each event that is detected.

Listing 1 constitutes the program's event handling code. This starts by performing an exec library `WaitPort()` call which puts the program to sleep until Intuition sends us a message saying something of interest has happened. How does the program tell Intuition what sorts of events are of interest? It's all done via the Window's tag list description - if you look at the tag entries in listing 2 you'll see that a `WA_IDCMP` tag is being used like this... `dc.l WA_IDCMP, IDCMP_MENUPIC KIIDCMP_CLOSEWINDOW`. This tells Intuition we want to receive notification whenever the user activates the menu or hits the close gadget.

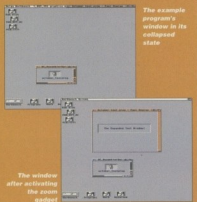
Remember, incidentally, that whenever any `IDCMP` (Intuition Direct Communication Message Port) tags like these are specified in a window definition, Intuition will set up the appropriate window message ports automatically, so this is not something our program has to worry about. What we do need to identify, however, is the address of the window's

Assembling the code

There's just a single source file this month. As mentioned earlier, it's called `october.s` and if you want to run it from the Workbench you'll need to assemble it to produce linkable object code (`october.o`) and then link this to some startup code. Devpac users will probably opt for using the `startup.obj` module for this purpose and the basic Blink command line needed in this case will be:

```
blink startup.obj october.o to october_testprog library
make.ltb
```

Obviously, you'll need to add file paths to reflect the various locations of Blink and the target files (but you're used to doing this, aren't you?). As usual, I've included a runnable version of the example program on disk as well, and to execute this all you need do is double-click on the 'october_testprog' icon!



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 <p>A huge collection of top quality professionally finished 3D Lightwave objects. Includes: Lord Hunter, Delta fighter, Vortan space ship, BS Station, 2 jumpships, Nebular space start and more. Requires Lightwave. Only £7.00.</p> <p>BF07-4. BABYLON 5 OBJECTS</p>	 <p>With this language tutor you could learn to speak other SPANISH, FRENCH, GERMAN, ITALIAN OR JAPANESE. Easy to use, and easy to understand!!!! Only £5.00.</p> <p>LTP8-4. LANGUAGE TUTOR</p>	 <p>A new replacement 2 disk Workbench that features: Sound icons, Soundclips, and amusing sound samples whenever you do anything wrong. Only £3.00.</p> <p>SCF7-3. STUFF COMMODORE FORGOT</p>	 <p>Classic Board games include: Army, Chess of Scotland, Monopoly, Cluedo, Backgammon, Chess, Othello, Tic-Tac-Toe, Cribbage etc. Only £10.00.</p> <p>BDG10-4. CLASSIC BOARD GAMES</p>
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Reviewed:

Super Street Fighter 2

Greeted with open arms - US Gold finally get around to releasing their long-awaited sequel

Gamer Gold Compilation

Nick Faldo's Golf, Bump 'N Burn and Jetstrike all make a joint appearance on Grandslam's latest CD32 package

Brutal: Paws of Fury

Gametek's Brutal gives a new dimension to violence. Have you ever wondered if your pets have a violent streak?

Gloom

Will a perfect Doom copy ever appear on the Amiga? Guildhall hold the best effort yet. Anyone else?

Budgets

Those of you who are a bit strapped for cash can check out four new budget releases

Features

Tiny Troops

We preview Mindscape's latest strategy puzzler. Will it be as successful as Cannon Fodder?

Citadel

Two Doom clones in one issue! Arrakkis Software from Poland are the second guilty party

CD-ROM Games

We give you the low-down on CD-ROM compilations. For £20, you could pick-up 500 bargain games

Center Court

A tennis game? At last, the summer is nearly over and we've got a tennis game!



news

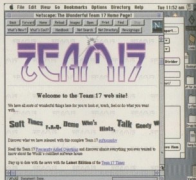
By Tina Hackett

Don't give a FAQ

Team 17 have just become one of the first UK games companies to establish a presence on the World Wide Web. Following the news last month that Team 17 have just set up their On-line games division, they have now announced their new site which can be located at <http://www.team17.com/>.

It contains everything from a Team 17 softography to The Team 17 Times - a newpage containing details of all their forthcoming releases. It will also have a demos page with both PC and Amiga demos of old and new Team 17 titles, and an FAQ page which answers all those burning questions people have always wanted to ask them.

You will also be able to download hints and tips and view a letters page which allows browsers to e-mail them and then see the letters on the Team 17 web pages.

Team 17 are located at <http://www.team17.com/>

Mortal Manga

Manga Publishing, responsible for such titles as The X-Files, Tank Girl and Street Fighter 2, have just announced the release of their new monthly comic, *Mortal Kombat*. For 95p, fans of the license will be able to catch up on character profiles, fan trivia and competitions. This has been timed to coincide with the film, so followers of the beat-'em-up will also be able to catch the movie this Autumn starring Christopher Walken.

Also on the subject of Manga is the latest news that they are launching Manga Books, with the first five titles being, AD Police, Applesseed Volume One, Crying Freeman Volume One, Dirty Pair, Bio hazards and Bubblegum Crisis.

Manga video clips are also the latest trend to be used in music videos. Following an agreement between Manga Entertainment and record company TVT (they who launched Nine Inch Nails), one of their American bands, KMFDM, are using Japanese animation in

their latest video. *Patlabor 1* has been used, intercut with footage of the band. Another musician to use this is Michael Jackson who used Akira and Vampire Hunter D in his latest single, *Scream*. And over here, the British animation studio in Newcastle-Under-Lyme has produced the comic-book-style animation in U2's *Hold Me, Thrill Me, Kiss Me, Kill Me* video.

Mortal Kombat fans can catch up on the news in *Manga Publishing's latest magazine*

No business like show business

The industry's bi-annual bash is all set to take place at the Grand Hall Olympia. The European Computer Trade Show plays host to many exhibitors from all over the world who take the opportunity to show their latest hardware and software. This Autumn's event is set to attract a record number of visitors, and exhibitors will include Warner Interactive, 21st Century and Virgin.



The European Computer Trade Show is the platform for the latest software and hardware



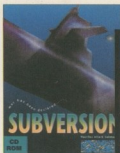
Manga Books are releasing the Japanese comic book hits in paperback

Cheap thrills

Gulldahl Leisure and CDS have two more games to add to their strategy war games series. One is Subversion, where you play the Commander of attack submarine 'Nautilus'. You have only two ships and by careful management of your resources, must obliterate all enemy vessels.

Their other is Bravo Romeo Delta, where you have to take command of the US Strategic Forces just before a Soviet Nuclear Attack. You must defend your country and at the same time plan a Counter strike.

Both releases will be available this August, priced at \$9.99.



Bravo Romeo Delta provides serious war simulation

Play the Commander of an attack submarine



Bug free

The good news for all Sensible World of Soccer fans is that it has now been fixed and the bugs removed. A bug free version of Sensible World of Soccer will soon be in the shops and those who bought the original and sent off the registration card should receive their new copy very soon.

Speed freaks

The rumour mill has it that yet another Street Fighter game is in the pipelines to follow Super Street Fighter 2. Called Super Street Fighter 2 Turbo, it's not actually being developed by US Gold, the company behind the previous titles, but a totally different team. Gametek, the company behind Frontier, Elite, and other classics have undertaken the task and this particular edition has already proved very popular on the PC.

An Autumn release is planned and as yet, Gametek are reluctant to reveal too much.

Therefore, we can't tell you what the differences will be, but graphically it should be quite impressive and will play with some terrific speed.



A sequel to Super Street Fighter 2 will follow

Plane spotters

Flight sim fans will be pleased to learn of Thalion's latest release, Approach Trainer. Rather than using all the aspects of flying, Approach Trainer, as you've probably guessed,

teaches the art of approaching an airfield. It's not everyone's idea of heaven, admittedly, but for those who are after an accurate simulation - including accurate ILS Approach Charts - then this is for them.

Plotting the aircraft, you will have many different problems to overcome such as day and night approaches, variable weather conditions, and long and short approaches. The game is out at the moment and is available for \$29.99.



Approach Trainer won't suit action fans but those who want an authentic simulation should keep an eye out for it soon

Fantasy football

Domark's in-house development team, The Kasmir, are working on a new football game. Called Total Football, it promises to 'look as good as it plays,' and features will include all-weather matches, multi-directional scrolling and action replays. Players can also take their pick from 50 teams and can take part in International and World Cup Competitions.

Visually, it should be quite impressive with over 2500 player animation frames and over 50 player movements. An animated crowd and atmospheric sound effects will add authenticity. Expect a release around Autumn time.



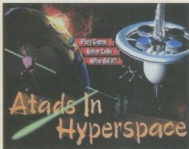
Domark's Total Football promises to be visually impressive

Weird things in hyperspace

Curious things are happening in Norway. This morning's post contained a letter from a new Norwegian team called Borderline Developments and screenshots from their hopeful new offering 'Atads in Hyperspace' (what 'Atads' actually are is anyone's guess). It's an AGA adventure which will feature a raytraced intro and will be available for the A1200, A4000 and CD32. At the moment they are considering making it CD-ROM only because of its size. As of yet we no little more than this about the new team, but hopefully we'll bring you a full review soon.



Atads in Hyperspace promises to be visually appealing



Unfortunately, we don't no much about the game at this stage - but a safe bet is that it takes place in space

review

GRAPHICS

50%

SOUND

48%

GAMEPLAY

80%

OVERALL

75%

PUBLISHER

US Gold

DEVELOPER

In-house

PRICE

TBA

DISKS

6

HD INSTALL

Yes

SUPPORTS

A1200

Following hot on the heels of all the hype surrounding the film, the latest addition to the Street Fighter titles is finally here for the Amiga. Called Super Street Fighter 2, it features four new players each with an additional setting. Now you will also find Cammy (played in the film by Kylie Minogue); Dee Jay, Fei Long and T Hawk, plus all the old familiar ones. They have also been improved with extra moves and new touches.

However, the first thing that strikes you when you load up the game is how dated it all looks. A few years ago this would have been quite acceptable but now after Mortal Kombat 2 and Shadow Fighter have passed, it does look its age. And a very amateur introductory animation is quite laughable. But the gameplay is what counts and this, fortunately, works well.

You can either play against the computer, choosing the level of difficulty, or a human opponent chosen from a number of characters. Each has their own set of special moves which are surprisingly easy to execute. The moves can be put together to perform a number of 'hit combos' and each charac-



Why did they leave this appalling intro in?



ter is different enough to provide varied gameplay. E. Honda, for example, is a large character who relies on his bulk, whereas Cammy is small but agile and has lightening fast reactions.

The game can also be dramatically altered by changing the speed you play at. The Turbo option can be turned up to high which speeds everything up - including the music - and means you have to think fast and move quickly to avoid the blows from other players.

What is particularly nice about this game, that it supports a joystick. This works a lot better than using the one-button joystick as you get

Move closer

Super Street Fighter allows you to put a very able combination of moves together. Each character has a good range of kicks, punches and special moves.

Dhalism - the stretchy limbs of Dhalism allows you to attack your opponent and keep out of their reach.

Blanka - uses electricity to keep his opponents at bay.

Chun Li - despite being one of the smaller fighters, this works to her advantage as she can move quicker than, say, Zangief.

E. Honda - uses his sumo size to launch his powerful weight against his rivals.



You can pull off a satisfying range of moves



Black borders become irritating after a while

Battle of the beat-em-ups

Super Street Fighter 2 as it stands is a good, playable title, but compare it to the likes of Mortal Kombat 2 with its bloodthirsty graphics or Shadow Fighter and it does start to look rather limp. Mortal Kombat 2 managed to create an authentic atmosphere and had some fantastic and original special moves.

Shadow Fighter was also a particularly rewarding and addictive game, with well-designed characters which looked very clear and detailed for this type of action.



The static backdrops fail to impress

Super Street Fighter 2

separate button for either a punch or kick. You can also use a two-button joystick on this same principle.

As I mentioned before, though, the graphics are very dated – such as the bland backdrops which don't do anything to create atmosphere. And what's worse is that they look flat and two-dimensional and there's been no attempt to make them interesting with the use of animation. Okay, so this may have slowed the game down but other games manage this successfully and it would certainly have made for a more polished looking title.

Another flaw is the size and detail of the characters themselves. I'm sure they've been intricately designed but they're just too small too see any detail or, sometimes, what is going on properly. Huge black borders around the screen don't help matters either and although you can change the screen mode from Pal 50 hertz to

NTSC 60 hertz to speed things up and get rid of some of the blackness, it never disappears completely.

Music and sound effects don't really enhance the game either, with feeble death noises and dismal music. Oh, and some of the characters have some very strange verbal expressions when they launch an attack, such as 'Had-o-ken' or some other weird saying which does nothing to increase the competitive atmosphere. However, what really let the game down was the amount of disk swapping involved. Thankfully it is hard disk installable, otherwise it would be completely unplayable with a ridiculous six disks to access each time.

Reviewed by Tina Hackett

SSF 2 does have a few negative points but when it comes down to gameplay it works extremely well – especially if you have a joystick,

Final word

After reading all this, it may sound like the game is a complete letdown. This isn't the case. Yes, it does have quite a few negative points but when it comes down to the gameplay it works extremely well – especially if you have a joystick. Two-player mode works particularly well too, and there's never a situation (unlike Rise of the Robots) where you can corner your opponent and bash them to death with the same tedious move.

An A500 version is also planned, although this won't support a joystick. We'll bring you an update on this in a future issue.



The many characters available keep things varied

review

‘Nick Faldo’s Championship Golf was released rather a long time ago and received a **highly creditable** award in most magazines,



Gamer Gold

CD32

Reviewed by Andy Maddock

GRAPHICS

81%

SOUND

76%

GAMEPLAY

83%

OVERALL

84%

PUBLISHER

Grandslam

DEVELOPER

Grandslam/Rasputin

PRICE

\$29.99

Squirrel?

No

The Gamer Gold is a compilation courtesy of Grandslam, containing Jetstrike, Bump 'n Burn and Nick Faldo's Championship Golf. A flight simulation, racing game and a golf

game? Will it work?

Firstly, Jetstrike was released about a year ago on the CD32 format. It was basically a flight sim that adopted a different way of playing. Instead of the usual cockpit view, Jetstrike was viewed side on – a lot like Chaplifter from many years ago. The idea is to select an aircraft from a huge array and take it through many different selected missions. These range from taking recon photographs of the enemy's positions to landing on the opposing side's runway to rescue some hostages.

The floppy disk version, which was released around two years ago, was very difficult as well as being slow and jerky. Fortunately on the CD32, none of these problems have been resurrected.

You can select from a vast amount of planes and helicopters, and every plane you could possibly think of exists within Jetstrike. Spitfires, Falcons, Vulcans, Bombers, and Apaches are all available for selection. Jetstrike is well presented, has good gameplay and packs a real challenge. Certainly a good start for a compilation. Nick Faldo's

Championship Golf was released rather a long time ago and received a highly creditable award in most magazines. On the CD32 format, nothing has changed – it's still one of the most playable and realistic golf games available. The new instantly recognisable feature is the caddie. Although they made an appearance on the floppy version, they weren't that much use.

Now though, they will gladly hurl abuse at you or praise your shots extremely vocally. Bill, the particularly sarcastic caddie, will do anything to make you angry. The actual animation of Nick Faldo taking the shot has improved too. On the whole, all the graphics seem to have had a tweaking to iron out any glitches. What makes it a pleasure to play is the fact it does play like real golf. There are plenty of challenges and courses to keep you going.

Bump 'N Burn isn't that well known among Amiga owners – I'm sure only a handful have actually played it. I think it was released when racing games were in their prime, and because of this Bump 'N Burn didn't even get a sniff.

Basically, it's a racing game whereby you have to survive the Bump 'N Burn championships. There are several tracks of Toonia's seven kingdoms and through these you will be expected to get better and better until you are ready to compete against Count Chaos – the unbeaten champion.

Bump 'N Burn is nothing special. The graphics don't particularly boast quality, and it doesn't run as smoothly as it should, but as it's on a compilation with two other great games, you can't really complain – not for \$29.99 anyway.



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review

From the title and the screenshots, I can guess what all you readers are expecting. It looks like Doom and sounds like Doom, but more importantly, does it play like Doom?

There's no escaping the fact that the 'in' game at the moment is Doom... on the PC. Everyone seems to want to make a close version of it on the Amiga - it's rumoured there are many more to come.

Some people believe Doom on the Amiga is just not possible, and I agree with them. Others believe or hope to believe that Doom will grace their Amiga screens soon. I feel it will never be reproduced on the Amiga because of the technical differences between the PC and the Amiga. However, if Escom do produce a PC that's Amiga based then I'll have to believe it when I see it. Until then, I won't be holding my breath.

Gloom is basically a 3D shoot-'em-up that contains the most violence ever witnessed. There is an option to switch it to either meaty or messy. If messy is selected, as soon as you fire a bullet at one of the opposing soldiers they will burst into little bits and leave an awful mess on the floor which you will have to walk through. You can imagine after shooting quite a few soldiers that the floor won't remain in its shiny, polished state.

You are basically thrown into a futuristic Space

Doom and Gloom

Other games following this genre are Alien Breed 3D, Fears, Behind the Iron Gate, and more recently Citadel from the Polish team Arkis Software - previewed in this issue. Gloom has a fair amount of competition to get through and each one is looking excellent. Can Doom finally be reproduced on the Amiga? From what we've seen of these efforts already, it's getting there. I'm beginning to change my mind completely.



These two human players are staring straight at each other. However, one of them is invisible

Hulk maze which looks remarkably like the scenery used in the film Aliens, and the idea is to get out - alive. This is not such an easy task because there are literally hundreds of foot soldiers and bare chested madmen to plough through. These and huge robots will stand in your way, firing bullets ten times the power of your own.

Throughout the game bonuses are available

GRAPHICS

85%

SOUND

80%

GAMEPLAY

84%

OVERALL

81%

PUBLISHER

Guildhall Leisure

DEVELOPER

In-house

PRICE

\$29.99

DISKS

2

HD INSTALL

Yes

SUPPORTS

A1200

Reviewed by Andy Maddock

Gloom



The graphics do appear very blocky here, although, thankfully, the screen resolution can be changed



Reducing the size of the window speeds up the game immensely

Your team leader will advise you what to look out for. Don't take his advice! Hide in a corner somewhere instead



‘as soon as you fire a bullet at one of the opposing soldiers they will burst into **little bits** and leave an awful mess on the floor,’

for collection which can affect your health and firing power. A huge gun with a full weapon boost is essential for disposing the bigger robots.

There are plenty of options to choose from before you begin the game, including a two-player split screen where you can chase your opponent around a sealed maze with only yourself and a gun. You can also play Gloom through a serial link connecting two Amiga's together, so you can both play using a full screen.

The Amiga 1200 has, in the past, been able to churn out some quite speedy graphics, although something has to be sacrificed for this. For more speed, the variety or amount of sprites usually deteriorates immensely. In Gloom's case, the variety of sprites is lacking and during the later levels the amount of sprites does affect the speed.

There are three main locations and in these there are some sub-missions where you have to reach the exit. There are no real missions such as giving colleagues which is a shame because it gives the game a plot and a storyline, which Gloom unfortunately hasn't got.

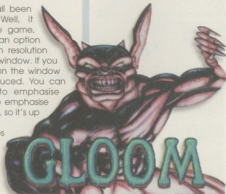
As said before, the level of violence is quite

high. After shooting someone with a bullet they won't be content with falling to the floor and disappearing, but throw themselves violently into the air while spreading their various organs over the wall. On occasions I have noticed that if you get too close to an exploding body, it will squirt spots of blood on to your own face. By the end of a particularly nasty level you will find that your face will be covered in blood, partially covering the action.

Now, the bit that you've all been waiting for - the speed. Well, it depends you see. During the game, pressing escape will bring up an option for you to change the screen resolution and size of the actual playing window. If you choose a high screen resolution the window size will automatically be reduced. You can play with a small window to emphasise speed, or with a full screen to emphasise the action. They both work well, so it's up to you.

The actual character sprites do appear very blocky when you get reasonably close - although to increase the speed, the floor and ceiling graphics can be switched off.

The title screen sets the scene delicately. Are you ready to slice some bodies up and eat their remaining entrails? Not here



Final word

Although the whole idea of these games is to get on a par with Doom on the PC, as I've said before there's absolutely no way I am going to compare the two. There's no point in saying 'Ooh, it's rubbish, it looks nothing like Doom on the PC' because it's not supposed to. I'm not going to give it a low score because it doesn't match the PC version of Doom - I am going

to mark it purely for Gloom itself, as a game. The graphics are the best yet for games of this genre. Gloom is completely packed with smooth graphics, a huge challenge and most of all, action and excitement. It's certainly the best attempt yet, although with other similar efforts only weeks from completion, only time will tell which one will rise above the rest.



You have to be very careful when attempting to open one of these doors. Lots of bare chested madmen will appear

preview

The fun strategy puzzlers are usually met with an enthusiastic response from the games playing public, and you only have to look at the success of Cannon Fodder and the many Lemmings games to see this. So it is perhaps a little curious that there hasn't been a whole host of these titles flooding the market, employing this simple but highly addictive concept.

That is until now, with both Gametek and Mindscape spotting a potential gap in the gaming world. Gametek's title, Baldies, (previewed a couple of months ago) is near to release and Mindscape are well into production of their

Reviewed by Tina Hackett

Tiny Troops



A two-player game should provide an amusing challenge



Control your army of troops through the icon-based interface



Graphics promise to be colourful and imaginative



The computer opponents learn from their mistakes, providing longevity

‘Tiny Troops puts you in charge of a small army and it's down to you to direct them to do certain tasks,’

offering. Tiny Troops. Tiny Troops puts you in charge of a small army and it's down to you to direct them to do certain tasks. There are two warring factions, the Klutes and Furfurians, who have been in battle for 450 years. This has caused serious damage to their planet, so rather than continuing to wreck their home they travel to Earth to continue with their dispute.

You are given a top-down view of the scenario, enabling you to see exactly what is going on in each battle. To control the game you use an icon-based interface, clicking on the relevant icon to carry out your orders. To speed things up you can access a small map which means you can move your troops around quickly.

Objectives will vary in strategy from complete destruction to rescue attempts to assassinations. Armoured vehicles can also be used which will provide variety.

The finished game should feature a massive 72 different battles spread over a variety of colourfully designed levels and as well as these missions, the player will also have to face six progressively harder end-of-level baddies.

As you can see from the screenshots (PC - but the Amiga version will look almost identical), graphics opt for a fun feel and by enlarging everyday objects - such as the plugs and so on - you do get a very appealing style.

Expect Tiny Troops around October.

Midget gems

The usual one-player mode will be available but this sort of action lends itself nicely to a multi-player game. Mindscape have catered for this so you will be able to link two Amiga's for a bigger multi-player game or compete in a head-to-head battle on one machine. In single-player mode, the computer opponents learn from their mistakes, so will act more intelligently and effectively, making for a tough challenge.

THE EPIC SENSATION



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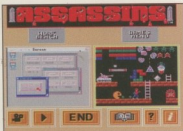
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SYSTEM feature

Assassins Ultimate Games

Supplier: Weird Science
Price: £17.99 CD32: Yes

The Assassins have been one of the premium PD companies around, producing compilation after compilation of excellent PD games. Weird Science have managed to put



together a CD full of games and utilities that have previously been released before.

The floppy disk collections from 1 to 200 are all archived on to the CD and require dearchiving via Workbench - although the actual games can be run immediately from easy-to-use menus. There are a bundle of games all categorised into sections and then alphabetical order, and these range from arcade games to card, puzzle and quiz games.

The utilities are all packed as DMS files which need to be dearchived on to floppy disks. A disk masher program is included but the UNDMS command will still need to slide into the C: directory on your hard drive. The utilities are a selected bunch of audio and graphic disks, featuring mods and anims. As



mentioned before, there are a tremendous amount of games on the CD - archived and otherwise. However, all of them have previously been on Assassins floppy disks, so I must advise you that if you do happen to own a large quantity of Assassins' PD disks already, I suggest you look elsewhere.

At £17.99, the CD is priced quite high, but if you want quality it looks as though you'll have to pay for it.

87%

CD-ROM go

Arcade Classics

Supplier: Epic Software
Price: £9.99 CD32: No

I can guarantee that you will have played most games on this CD, as several versions of them are still knocking about in a dark corner of a pub somewhere in the world. During the '80s these games were flying around all the best arcades in the country. Oh, how we hate advances in technology!

Frogger, Space Invaders, Defender, Tetris, Missile Command and Pacman are all included on this CD, along with 500 others. Each one is an actual variation on the original, so it won't be an exact arcade copy but a close Amiga version. Incidentally, a couple of goes on Galaxian on the arcade would probably have set you back about 10p. Nowadays, with the addition of virtual arcades, £3.50 is the set price - just for one measly go.

It's astonishing how the games have advanced so much, yet classics like Space Invaders still have greater playability and challenge than some of the brand new games in today's market. The best game in the arcade had to be Frogger, a game I'm sure you'll remember. You had to guide a

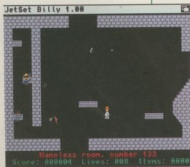


small green frog across a very busy road and then a rushing stream containing floating logs. One of the premium classics, I'm sure you'll agree.

As this Arcade Classics CD-ROM is the first of many - being Volume 1 - there could be a whole host of old classics gracing your Amiga screen soon. For £9.99 you can't go wrong, and although it may not appeal to the younger gamers out there, it will certainly please the older among you.

Comparing today's market prices, £9.99 seems like absolutely nothing at all. Five hundred games for absolutely nothing at all seems a real bonus to me.

87%



Specy Sensation

Supplier: PD Soft
Price: £14.99 CD32: No



Looking back over the last ten years – sitting now with an Amiga 1200 with a hard drive and a CD-ROM drive – you can finally forgive and forget. No more worries about a 10 minute loading duration only to find a tape loading error flashing boastfully across the screen. Oh, how those days are forgiven.

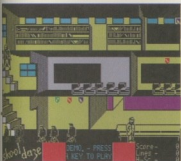
All your old favourites that you'd gladly wait a lifetime to load are now brought gleefully onto the CD-ROM. Five hundred titles that will have you reminiscing with your friends within minutes. The greats such as Manic Miner, Skool Daze, ATV Simulator, Saboteur and Everyone's A Wally are all included – loading up instantly via an easy-to-use menu system.

One problem that can be experienced when running Spectrum games on the Amiga is that the games are exceptionally slow. This is because of the different processing speeds between the two machines. However, the games on this CD don't seem to slow down and as said before, load in seconds.

People who used to use the Spectrum frequently will get the most out of this CD. 'What's the point, though?' I hear you say. People tend to leave these CDs alone, maybe because their experience with the Spectrum wasn't a good one, or they still have their and claim that if they want to play the games they'll fish them out from a box in the corner of the attic.

Don't bother – for £14.99 you may as well save yourself the trouble. I can guarantee you'll slide deeply into old times.

91%



es public

Reviewed by Andy Maddock

Power Games

Supplier: PD Soft
Price: £7.99 CD32: Yes



Power Games from PD Soft is another games CD-Rom containing Public Domain and shareware games. Once again they are categorised into headings, such as sport, action and puzzle, etc. There are more than 500 games all available to you through one of the most unfriendly menu systems ever. Once you've found a game it will take you a while to actually select it because you'll find yourself looking at instructions or other information when you thought you'd selected the game itself.

This is because when you select a particular box, the highlight around the outside is very faint and it's difficult to see what you've selected. Although the CD claims to be compatible with the

CD32, some of the games fail to work which seems very pointless. Also, you will recognise or have heard of some of the games, but others you will have no idea what they are – and most of them aren't really worth the time of day. There are 500 Public Domain games included on the CD, but there are not many of outstanding quality – however they are reasonable none-the-less.

The menu system, as mentioned before, is very unfriendly. It gives the game's name and a short description, along with the creator's name. Although it may seem that a lot of time has been spent putting this CD together, it is clearly very rough around the edges. The unfriendly menu system together with the exceptionally bad choice of games makes this CD only just worth its asking price. Having said that, there isn't much else knocking around for only £7.99.

54%



It's astonishing how the games have **advanced so much**, yet classics like Space Invaders still have **greater playability** and challenge than some of the brand new games in today's market,

review

Like Hollywood sequels, the software industry will churn out game after game based on the same tried and tested formula. It's not always a bad thing - after all, some sequels make vast improvements over the originals - but there comes a time when repackaging the same goods is going to leave the audience jaded.

In gaming, no genre is more repetitive in its content than the beat-'em-up. The popularity of its most impressive incarnations has lead software houses to come back for more rich picking with games that vary little apart from slightly enhanced graphics and bloodier special effects.

Years after the beat-'em-up's birth, however, even the laziest developers have been trying to give their new combat games a vaguely fresh twist. Spectacular metamorphosing finishing moves, international locations and a greater range of bizarre characters have been wheeled in to inject new fighting spirit into the proceedings.

With robots and streetfighters behind us, Gametek are going for a new angle with a game featuring cute but deadly critters as its muscle-bound contenders. Named *Brutal: Paws of Fury*, this new title steers away from the realistic visual approach of *Mortal Kombat* in favour of more humorous, cartoon-like caricatures.

The simple storyline bears a Far Eastern flavour with lots of sayings from bogus mystical teaching padding out the ten characters' backgrounds. Choosing from creatures like Kung Fu Bunny, Tai Cheeta, or Kendo Coyote, players fight it out in a competition to find the world's best fighter.

Graphically, *Brutal* is only slightly above average, with reasonably well drawn characters playing out the action against varied but unimpressive locations. In compensation, however, the game's contenders have been made more lively with the addition of characteristic gestures and moves.

Anyone who experienced the ludicrous

PANTHER		CAC		RHEI RAT	
PUNCHES	001	ACCURACY	001	PUNCHES	019
KICKS	000	HEAD	001	KICKS	000
OTHER	000	BODY	000	OTHER	000
BLOCKS	000	LEGS	000	BLOCKS	000
COMPUTER		RHEI RAT		AVERAGE FIGHT CAC BEATEN RHEI RAT	
PUNCHES	019	ACCURACY	000		
KICKS	000	HEAD	001		
OTHER	000	BODY	000		
BLOCKS	000	LEGS	014		

At the end of a fight this screen gives accuracy statistics while commentary scrolls across the bottom



The Bear may be fat, but it's one of the tougher opponents players will face

disappointment of *Rise of the Robots* will know that beauty is only skin deep, however. What really counts is whether *Brutal* can provide anything in terms of a challenge that hasn't already been offered by previous beat-'em-ups.

Thankfully, the cosmetic novelty of fighting with furry creatures is not the only difference about the game. One original touch, for example, is the fact that players must learn special moves as their character gains in experience through winning fights.

Whereas it's possible in *Mortal Kombat* to use all the special moves immediately, this game



Panther shows off one of his lower level special moves



After two successful fights, the Kendo Coyote acquires a new move in the training section



The instigator of the whole competition is the Dali Llama, a creature armed with some devastating special powers

GRAPHICS

83%

SOUND

75%

GAMEPLAY

87%

OVERALL

82%

PUBLISHER

Gametek

DEVELOPER

Software Sorcery

PRICE

TBA

DISKS

2

HD INSTALL

NA

SUPPORTS

All Amigas

Furry but flawed

Unfortunately, *Brutal* is let down by some irritating flaws, one of which occurs in the mountain scene where characters die if they fall off the edge of the combat platform. The problem is that the Lion opponent that inhabits this location has the habit of careering off the edge before the player has had a chance to touch him - or at least that's so in earlier levels.

The inclusion of a password system for each character is vital, especially when you've gained access to a good range of special moves. The fact that this currently doesn't seem to work gives further cause for concern.



Leon the Lion is one of the better caricatures thanks to the addition of some humorous mannerisms

Brutal Paws of Fury

Reviewed by Gareth Lofthouse

makes acquiring them more challenging and satisfying. After defeating two opponents, players rise in rank and enter a training session in which they have three chances to learn a joystick sequence. If they successfully imitate it they have access to that move from then on.

There are a vast number of these moves to be learnt, and greater experience yields more powerful and spectacular combinations. This approach could do much to give the beat-'em-up the durability it traditionally lacks, thanks to the long-term rewards it provides. Putting the fighting

moves into practice is also satisfying. On earlier levels a few simple kicks will get you far - possibly too far - but more variety and imagination becomes necessary on higher levels. Thankfully, no move is so complex that it's impossible to string a series of them together in a fluid attack sequence.

Of course it's possible to play against a friend with different characters and alter difficulty levels, of which there are plenty to choose from, and there are the usual karate sound effects accompanying the action.

Final word

The game's modest appearance does little to inspire excitement on the first viewing of *Brutal Paws*. The cartoon characters make an appealing change in the genre, but the quality of the graphics doesn't match up to top-selling rivals on the Amiga. Surprisingly, the game overcomes this handicap by combining a few innovations with enjoyable gameplay. Training to acquire a broader repertoire of moves did much to solve the problem of giving a combat game a long-term challenge, and it's highly in keeping with the martial arts' theme.

A word of warning for those who eat this type of game for breakfast: I'm no ace gameplayer, but by starting on an easy level I managed to acquire all the special moves to progress

through the game until I almost finished on its highest difficulty - and that was on my first game.

This problem can be avoided by starting the game on a higher level to start with, because it then becomes hard to get each of those powerful advanced moves. Nevertheless, considering how experienced most players are in this genre, the developers should have made *Brutal* a bit tougher from the outset. This is not a damning criticism, however.

What's more worrying is the fact that the password system didn't work, which seriously detracts from the long-term playability. Providing Gametek sort this and a few other minor flaws out, however, this beat-'em-up could be a worthy addition to your game shelf.

‘*Brutal Paws of Fury* steers away from the realistic visual approach of *Mortal Kombat* in favour of more humorous, cartoon-like caricatures,’

preview

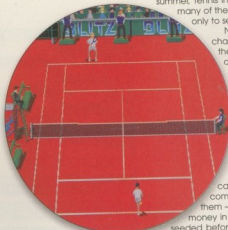
Now Wimbledon has finally packed up and gone home – the event not the place – I can finally come out of hiding as I absolutely hate it, more than anything in the world. Now the football season is underway I'm so much happier.

What really annoys me is the fact the spectators can lounge in the sun with strawberries and cream and us football fans have to stand up in the pouring rain with a bovril every week! Why don't we switch them around – football in the summer, tennis in the winter. Ha, let's see how many of them turn up in the freezing cold, only to see the match rained off.

Newcomers Blitzware set out to change my mind completely with their new product *Center Court*, a rival for *Pro Tennis Tour* which has to be the greatest tennis game on the Amiga. I'm sure you're all familiar with the game of tennis, and even if you don't understand the rules, I'm sure you've all seen it once sometime. *Center Court* isn't merely just a quick game, there's a huge career feature involved.

Basically, the idea behind a career in tennis is to enter as many competitions as possible and win them – picking up quite a hefty sum of money in the process. All the players are seeded before you begin and their seeding will change after each tournament – depending where they finished and how many points they acquired.

At the moment Pete Sampras is the number one seed, but if other players win matches and trophies they will eventually take over the top spot. The most money is won by coming first in all the tournaments and staying number one in the world rankings. That way you can be sure you'll



Sampras and Courier locked deeply into battle – the number one and two seeds



The title screen in all its glory. It actually looks quite cartoony, doesn't it?

Graphic enhancement

The graphics shown in the screenshots are going to be enhanced, as the shots here are early pictures of the action and don't really reflect on the gameplay yet. Overall, it's all coming together quite well, and if the graphics can match the gameplay then it could become another winner.

be top of the prize money league.

You can enter your own name and edit your own personal characteristics. If you wish to be a speedy player, you may have to sacrifice your accuracy or power. All the characters are reasonably matched, only appearing distinctive in one or two areas. The other competitors start off far better than you, although after a few tournaments your rating will gradually improve.

LIFE-LIKE

From the screenshots you will notice that a number of them are digitised and feature action shots from real-life situations. These only appear when you win a particular trophy, but it is quite nice to see some pleasant graphics which reflect on your success.

At the moment you can have a single match against the computer or anything up to four human players at once. This is an excellent idea because you can all take part in a double match. There are over 90 real players included.



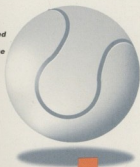
The match options. You can select anything up to a four-player game here



Center looks like it's going to be a bit of a graphical feast



Another digitised shot of a real match. This time your choice of court is clay



Center Court

Reviewed by Andy Maddock

From the tournament screen you can view all the different player's statistics, to help you find their weaknesses

“Center Court isn't merely just a quick game, there's a huge career feature involved ,

with their own individual statistics and attributes. They have also been made-up to look like their counterparts.

For instance, John McEnroe sports a rather nifty headband, but sadly, he doesn't involve himself in all the fracas he usually gets into. André



The Wimbledon-like tennis court – nice and green, but wearing in the centre

Agassi is recognised easily by his rather fetching cap and Boris Becker by his ginger locks. Throughout your career you are given the option whether to take part in a particular tournament or not; if you do you may win it or even acquire some money for the runners-up spot, but if you don't take part at all, your ranking won't increase and you'll be left sniffling at the bottom of the league with a lower rating than a cabbage.

If you select the career option you will be able to access all the other players' statistics and their rankings and also see the points table. These are all very useful when it comes to playing an opponent you are unsure about.

The actual match sequences are very addictive and contain all the various shots contained in tennis, such as forehands, backhands, smashes, diving shots and volleys. All of these can be performed very easily with the slightest movements with the joystick.

Acid Software, the makers behind Skidmarks are distributing Center Court Tennis. As it is programmed in Blitz Basic there's no reason why it can't be of the same quality as Skidmarks. We'll have to wait and see.

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preview

‘The pre-production demo we played had plenty of **blood and gore**, it also looks like it will be quite successful in creating a mysterious atmosphere,’



Like other games of this nature, there will be a liberal splattering of blood and guts

The Citadel

Previewed by Tina Hackett

The name is fairly new over here but Arrakis Software are a company who usually develop utility products for the Polish market. Their latest projects include a new editor like Final Writer, a database, and a spreadsheet with versions in Polish, English, Czech and German planned. But the reason for their inclusion in this section is because of their latest title which means a real change in direction for the Polish team. Called 'Citadel' it joins the latest in a long line of Doom clones for the Amiga. It's not the only game in the pipeline either. 'Diamonds Mine' is the next on the schedule with three more to follow - although details are sketchy at the moment.

Citadel, as previously mentioned, is a Doom-esque shoot-'em-up. Viewed from the usual first-person perspective, set in a 3D environment, you

are armed with a gun and the mission is to shoot anything that moves.

A brief plot summary casts the player as the only surviving crew member on a mysterious planet and their mission is to destroy the Citadel. The Citadel is the army complex placed under the surface of the planet D104-GS12. When communications broke down, your crew - the X16, combative operation unit - was sent to see what had gone wrong. The rest of the crew have now been destroyed.

When finished the game will contain 20 levels, varying in difficulty and using different graphical scenarios. The final version will also have a 2Mb rendered intro and will have in-game and Game Over animations.

The pre-production demo we played had plenty of blood and gore to keep the more blood thirsty happy. It also looks like it will be quite successful in creating a mysterious atmosphere - something the other clones seem to lack so far. One thing we weren't too happy with at this stage was the way you got hurt when you bumped into walls - a fact which is inevitable when you play from this view.

The main character of the cyborg is armed with six types of weapons, all of which are necessary to see off the different types of enemies. The hero can also get tired, become injured and even get drunk. As well as being able to blast the enemy, the player will encounter puzzles and traps such as moving walls and levers and buttons which need to be operated.

The recent problem that the developers of the Amiga Doom clones face is how to get the game running smoothly at quite a fast rate, but without reducing a lot of the detail. Most have overcome this by making their game configurable to suit the capabilities of different machines.

Similarly, Arrakis Software have also made this possible by making the game window a variety of different sizes and incorporating user-definable detail levels. So those with an A500 can still expect a fairly slick game as long as they play on a small window and without floors. Those with A1200s and above, on the other hand, can freely choose screen size and level of detail.

Expect a full review of Citadel soon. We'll also be bringing you a round-up of the best and rest of the Amiga Doom clones when we've seen all the contenders in what seems to be genre of the moment.



There are many different screen modes available and each alters the speed operation on machine



This is the smallest view available - a bit too small perhaps

C^{Virgin}mpo



Celebrity Golf competition form

Name: _____
 Address: _____



Please send your entries to:

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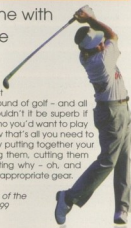
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Score a hole in one with our Virgin/Sensible Golf competition

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20 lucky winners will get a copy of the brilliant **Sensible Golf** worth \$29.99 and a Virgin T-shirt.



SYSTEM

Cheats

Sensible World of Soccer

There have been so many cheats and tips flying around for the greatest football simulation ever, we thought we'd join the party! When you begin the game, be one of the top clubs with the most expensive players – Man United, Juventus or Barcelona being the favourites – and whizz through the entire season, collecting a worthwhile honour. When you receive an offer from a club you wish to transfer to, exchange two of your best players for the worst each week and hopefully when you accept the job at the end of the season, a huge bank balance and an awesome team will be waiting for you.

Pinball Fantasies

Type in these before you begin for some strange effects:

Earthquake
 Vacuum Cleaner
 Extra Balls
 Andreas
 ULF
 Markus
 Fairplay
 Digital Illusions
 The Silents
 Fredrik
 OLOF
 Barry
 Crew

Shadow Fighter

Type these codes on the character selection screen for the following effect:

TEREKAKKU – Unlimited credits
 PARAPONZIPOPO – Fight as Puppaz
 MBARVIDSOCCAFARIMBAR – Fight as Shadow Fighter
 EBBRAVOSCECCU – Opponent loses energy if you type this in at the beginning of a round

Roadkill AGA

Here are some track codes for Acid's excellent racing sim:

Track zero: LQPONTGNJO
 Track one: LQPONRHCNM
 Track two: LQPONTMBCH
 Track three: LQPONTMBCH

SYSTEM

budget

Reviewed by Andy Maddock

Ishar
Trilogy

PUBLISHER

Daze

DEVELOPER

Simarils

PRICE

\$29.99

DISKS

10

HD INSTALL

Yes

SUPPORTS

A1200

PUBLISHER

Hit Squad

DEVELOPER

Sensible Software

PRICE

\$14.99

DISKS

2

HD INSTALL

No

SUPPORTS

All Amigas

The Sensible Software trademark comes in very effective once again - small but so pleasurable.

Ishar 1, 2 and 3 weren't really my most favourite games ever - especially being a reviewer that detests any sort of RPG. All this business of wizards and warriors is just too much for me to handle.

These games always seem to inflict the most serious effect of boredom ever. If you are one of these people, you'd better skip this bit as Daze bring out their incredibly adventurous Ishar games in one package. Anoraks out everybody!

I suppose as time has passed, each Ishar game has been superseded either in overall quality or in a graphical way, and Ishar 3 is supposedly the best of the bunch.

The way Ishar actually plays is the most annoying factor, with slow, tedious scrolling drudging

Cannon Fodder hardly needs an introduction as it turned out to be one of the best games of the year. It's very unlikely that anyone out there hasn't actually played it, so I suppose this budget release could be, in fact, quite pointless. However, after such a high profile release with its success, how could it possibly avoid the inevitable budget label?

Cannon Fodder is, pure and simple, a war game. The objective of war is to win - sparing as many casualties as possible. The idea is to complete the mission objectives along with the sub-phases in each scenario. The first is in the jungle where you are given five recruits. Each one has a rank and to begin with you are given the highest ranks to play with. As you lose a soldier he will be



along only to reveal mammoth beasts that must be disposed of rather quickly. This is achieved by aimlessly wandering around, going into shops and buying magic potions, and recruiting the ordinary public to join your gang. You can then begin the mission to hold on to your island, Kendoria.

As mentioned before, the graphics are nothing very special and the whole game may be very in-depth but just doesn't play well, which is the most important part.

If you are a roleplaying game buff then three games for the price of one would sound quite a bargain. Although, for \$29.99 you could also buy yourself three balaclavas, a pair of horn rimmed spectacles, an anorak and a tartan flask. The choice is yours.

58%



The most exciting, in-depth, animated adventure game ever. Packed with remarkable gameplay and an amazing challenge. Ooh, that's right!

Cannon
Fodder

replaced by another nervous youngster willing to risk his life and limbs for his country. Obviously these young chappies aren't going to be as sharp as the rest of the bunch, so the more you can keep them in the clear and at distance, the more likely they are to survive.

There are two main strategies to follow on your road to victory. These are either hold back and wait for the enemy to make the first move, or the less favoured run towards them at a ridiculous speed with all guns blazing - destroying yourself and a number of the enemy all at once.

The characters themselves are controlled by the mouse using a point and click method. All the weaponry such as cannons, grenades and rockets can be activated using simple clicks on the mouse.

With the typical Sensible Software characters, tremendous gameplay and a big challenge, Cannon Fodder will always rank alongside the true greats the Amiga has produced. Their rather cheeky yet uncompromising quote 'War has never been so much fun' is clearly an understatement. It's more fun than ever!

92%

Rome AD92 was released around two or three years ago now and adopted the Populous-like 3D isometric view which actually became quite popular. The idea is to control Hecator, a Roman slave who wants to higher his position in society by deception. At the beginning you start as a slave with lower status than the cleaners. Stealing a toga off one of the people of authority will deceive many of the town's residents, enabling you to order people around.

As the volcano that lies on one side of the town is about to explode, getting off the island is a must. With so many people and so few boats, fighting for an escape route is essential, and this entails mugging people for their money and purchasing a very sharp dagger.

When Rome AD92 first arrived, the humour element was instantly recognised. It wasn't a strict copy of life in Rome but more of a serious light hearted look at life back in Roman times. For a start, all the characters are humorously named - you are ordered to send a message to Seganus Megadivus, of all people.

If you can remember Robin Hood from a while back, it plays just the same. You have freedom of the entire city so you don't have to do things in any particular order - you can just roam, talking to everyone you meet.

Although the graphics don't boast quality, they are reasonable nonetheless and do their job more than adequately. There are six levels to battle through, all with fresh challenges, making this not

Rome AD92



Once you've managed to steal the toga from the fat bloke who's always in the swimming pool, you can mug everyone!

so much an essential purchase but a fun game for anyone - especially with the humour element. At a nice cheap price of £14.99, Rome AD92 certainly boasts value for money.

84%

PUBLISHER

KIXX XL

DEVELOPER

Millennium

PRICE

£14.99

DISKS

3

HD INSTALL

No

SUPPORTS

All Amigas

Being a loud American in a quiet village in China means merging in with the common public isn't going to be an easy task. Making as many friends as possible in this very graphical icon driven adventure is an absolute necessity. You are given your own identity, character and personality, and unfortunately you have been graced with Jake Masters, or Lucky to your friends - an annoyingly loud American with less sensitivity than a badger.

There isn't an actual plot as such - all is revealed as you become more involved in the game. This involves plot branches where you can reach different parts of the game you may never reach again if you restart the game, and picking different objects up and speaking to other

Heart of China

people about other things. This makes Heart of China probably the most interactive game around - this system is called the Dynamix Game Development System (DGDS).

All the usual adventure icons are present such as talking, picking things up, dropping things and looking around. However, as you progress and make friends with people, they will join you on your mission objective and you can temporarily take over their actions and objects.

There is an enormous amount of depth to Heart of China and the animated effects and atmospheric tunes are excellent. However, there is a down side. Most of the progression throughout the game is made by guesswork and trial and error. There isn't so much as a sniff of clues or hints and purely by luck will you end up right in the heart of the game.

Having said that, though, if you have got the time to explore the game in great detail, it'll certainly be a worthwhile and rewarding experience. Heart of China is certainly one of the better graphic adventures around.

83%

PUBLISHER

KIXX XL

DEVELOPER

Dynamix

PRICE

£16.99

DISKS

9

HD INSTALL

Yes

SUPPORTS

All Amigas



Before going heading off to battle, a trip to the herb shop is in order to purchase those magical remedies



You can fly absolutely anywhere you like in Heart of China, with the exception of Barbados to bask in the hot sun. Pity

Snippets

AMIGA

GUIDE

Leading
the way in Amiga
advice, the definitive
guide is back to
keep enthusiasts
fully informed

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Frank Nord takes a different line this month and reviews the MegaMouse Plus

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Paul Overaa suggests a way to improve percussion sounds in your sequencing setup

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Can there ever be video harmony again for the new Amigas? As! Gary Whiteley

Warthogs love big jobs



You will be stunned by the speed of the new Warthog 275 from Premier Vision - and positively gobsmacked by the incredibly low price. The Warthog275 is based on the world's fastest chip -the DEC Alpha, making it the most complete cost effective rendering solution on the market.

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Three buttons are better than two

This month I've decided to take a break from configuration, organisation and cogitation and take a look at a handy product that, although it doesn't really need a whole page's worth of review, deserves some recognition. The item in question is Gasteiner's three button 400dpi mouse.

Looking just like the original Mega mouse, this one fits nicely into the palm of your hand and comes equipped with one more than the usual number of buttons. But what is the point of having a third mouse button?

For a start there are actually several programs that use a third mouse button including Directory Opus, Histo's DiskMagic, and many other directory managers. But in addition to these programs there are a host of PD and shareware utilities that are either specifically geared towards using the middle mouse button, or have middle mouse button functions built into them.

Some examples that spring to mind include our CoverDisk item MultiCX which lets you use the middle mouse button to cycle screens, which is much easier than the left-Amiga combination or going up to the top-right corner of a big screen. Most of the other big commodities will also have some provision for MMB screen cycling or multi-file selection, where instead of having to hold down the shift key you use a mouse button.

Commodities like YAK have so many items to configure you could probably do with a 23 button mouse! Finally, the Gasteiner three button mouse also comes with a nice long lead and you can't beat it for value at only £12.95.

Also groovy this month is the latest version of the aforementioned MultiCX.

In a slight change to our normal programming, Frank Nord reviews something

AmigaOS 3.0 AGA 1,609,296 (76%) Chip 13,710,856 (81%) Fast T:51 L:37 S:2

MultiCX's new improved Workbench title bar includes what chipset you are running, totals for Chip and Fast RAM, with percentages used and the numbers of tasks, libraries and screen currently in use

Now I can throw away even more of the commodities I have in my WBS startup drawer (hooray! down to only 16). MultiCX now replaces AssignWedge, offering the by now familiar Tietzy, assign, mount, dery, cancel options to the 'Please insert volume BinkBonic' in any drive requester. MultiCX also replaces my much-loved NewEdit commodity by letting you paste copied text into text files. Other improvements include the

rather nifty WBTITLE tooltip which gives you full information in your Workbench titlebar. The last three rather cryptic items refer to the number of tasks, libraries and screens you have running. The 'About' Project menu item in Workbench has also had a facelift with new reboot and flush buttons and more complete system information including processor type, etc. Hopefully there will be enough room on this month's CoverDisk to put on both this



See how your system requesters look with ASL PreFs. Unfortunately, there is still no way of making the font preview window in the font requester any bigger.

Downloading

MultiCX	http://src.doc.ic.ac.uk/aminet/util/cdity/mcx20b.lha	34944 bytes
ASLPatch	http://src.doc.ic.ac.uk/aminet/util/vbs/asl_v42.0.lha	114061 bytes
VirusChecker v.6.57	http://src.doc.ic.ac.uk/aminet/util/Virus/VChck657.lha	129629 bytes
PicBoot	http://src.doc.ic.ac.uk/aminet/util/boot/PicBoot.lha	39203 bytes

Amiga Medical Part 9



and the next program I want to tell you about. The next program is actually a patch to the ASL library that comes with Workbench 3.0 or 3.1. It won't work if you have an older version of Workbench, and the authors haven't tested it with a processor more humble than a 68020, so there's no guarantee it will run on a 68000-based machine. This patch gives added functionality to the three requesters ASL provides, namely the standard file requester, the fonts requester and screemode requester.

Changes are made using the provided MUI-based preferences program and you can set such things as having the requesters centred on your mouse, the active window or screen, or at the top-left corner of the active window or screen. You can also make sure the file requester puts the directories at the top of the file list, rather than at the bottom which always seemed strange to me.

Lastly, but not least, a boot utility was brought to my attention when trawling the net for stuff for a CyberVision card. The utility in question is designed to show a picture instead of that boring black screen as Workbench loads. The utility is called PicBoot and it handled pretty much every IFF image I threw at it loading 1024 x 768 images in the blink of an eye, thanks to the accompanying UnPackILBM tool which decompresses IFF picture files, making them load a lot faster.

PicBoot is equally at home on an ECS or AGA machine or on a machine that has an RTG graphics card like the CyberVision or Picasso. It will fade in the picture and fade it back out once Workbench is loaded.



The bottom line

Product: MegaMouse Plus
Supplier: Gasteiner
Tel: 0181-345 6000
Price: £12.95

Virus alert!

It doesn't seem like John Veldhuis ever sleeps. No sooner have you got round to downloading v6.56 of his superb VirusChecker program, there's another version out. This time it's 6.57 and it's angry. Well, possibly not, but if you want to ensure that your hard drive is safe from even the newest viruses then get this. More than anything, this release fixes bugs from earlier versions but it does cover 49 different viruses and their relatives.

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Amiga 3D Part 7



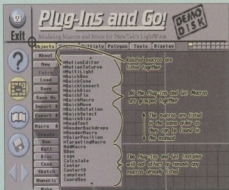
Paul Austin explores the latest plug and play add-ons for LightWave

In addition to the excellence of the LightWave interface, one of the most important elements in the LightWave repertoire is its ability to employ *Allex* in the form of dedicated macros. In the early days, macros were almost entirely Modeler oriented, however the latest generation also provide add-on power to Layout in addition to the traditional automated modelling tools.

At the forefront of the new breed is a new collection from Hester and associates. Following in the footsteps of Power Macros, the new Plug-Ins and Go! collection offers a similar, if more basic collection of tools. To make up for the slight lack of technical merit in relation to Power Macros, Plug-Ins and Go! hit back with 53 macros as opposed to the 16 on offer from Power Macros.

Perhaps the best way to clarify the difference between the two is that Power Macros offer a design special effects collection – explode and shatter being classic examples – while the Plug-In range offers a more utilitarian approach.

Aside from the disk containing the macros, you also receive an excellent 100-page manual plus a second demo disk which highlights the finer points of the collection. The quality of presentation is generally excellent throughout the package, a classic example being the manual placing icons alongside each macro description to denote its area of expertise – namely, creative, modifier, calculation information or special feature, layout related, motion related, object related or text related.



On-line examples of the finer points via the impressive demo disk

The manual further enhances ease of use by following up the basic macro type with a list of icons which denotes what they do and will need in order to implement the chosen macro. For example, the macro may affect the entire layer or just selected items, or perhaps it requires a background layer or an empty spare layer.

USER-FRIENDLY

Installation is also a breeze, courtesy of a direct import of the entire collection via modeler direct command option. Better still, once installed the macros are shown in the same order as they appear in the manual – a very welcome user-friendly addition.

As mentioned earlier, the macros on offer break down into a number of specific categories. Given the available space mentioning each in turn is impossible, so I'll highlight my personal favourites in each category.

In the auto modelling department the top three include Modify to sphere or cube, quick convert, and quick move. The first option is, in fact, two separate macros, but

as you'd expect they essentially do the same job. However, for anyone looking for means of morphing between basic objects and complex structures it's an invaluable addition.

The next modelling must be the invaluable quick convert option. Although not as immediate as the morphing macro, it does offer a means of converting or automatically scaling objects from millimetres to metres or even kilometres – particularly useful for blending elements from existing scenes.

Quick move is another classic example of a utility macro, which moves all the selected points in the layer to a new user-specified position. Again not spectacular, but nevertheless extremely useful on occasion.

Next comes the calculation macros. Here you could probably obtain the same information with the aid of a little thought and a calculator, but why bother if Plug-Ins will do the hard work on your behalf. In this particular genre my favourites include calculate time and calculate render time. The former generates the total number of frames needed to cover a specific period, for example 1 minute 23 seconds translates to 2075 frames.

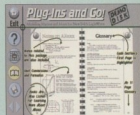
Creation tools are the next element in the equation, and it must be said the weakest link in the Plug-Ins chain. The only noteworthy macros are the create lightning and create star options, with the former generating random lightning objects for import into layout while the latter provides a simple means of designing multi-point stars.

The big disappointment in this section is the fact that they repeat many of the basic options available via LightWave's numeric input options.

Special feature macros offer a fairly

unique range of tools including automated LightWave configuration, and quick macro generation. The first provides a means of adjusting the LightWave/Modeler config files on-line, while the second offers a real-time macro option which tracks your actions and then generates a completely new custom macro from them. In addition, there's a more involved macro generator which allows you to select from blocks of pre-set code and build a macro step-by-step.

Next comes motion control, with highlights such as curve to motion and motion to curve, which as you've probably guessed converts and saves either sketched paths or motion files ready for loading directly into either Layout or Modeler – again, relatively simple tasks now with added automation.



Excellent user-friendly design plus an equally impressive manual



Allex has never looked so interesting. Point and click all the way...

A plug for Plug-Ins

As mentioned, Layout macros are an important part of any modeler collection. And true to form, Plug-Ins does its bit with macros which import entire scenes into modeler, add multiple lights to selected points, automate multiple batch rendering of scenes, and of course the all important targeting of one object to another over an entire anim or a user-defined number of frames.

Overall, the Plug-In collection is excellent, although it does suffer from the odd filler to make up the numbers. However, the really useful additions are exactly that. Assuming you've got to make a choice between Power Macros and Plug-Ins, I'd definitely opt for the latter.

SYSTEM ESSENTIALS
RED = Essential BLACK = Recommended



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The bottom line

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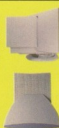
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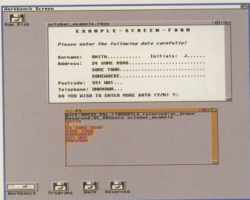
Going loop4

AREXX

In recent instalments I've been discussing a number of coding approaches involving console device control character sequences and by last month, these had found their way into a program that set up a screen form. This allowed data to be entered and collected from a set of pre-defined 'fields' on the screen. I drew your attention to the fact that this preliminary script used independent statements for setting up and collecting data from each field (see listing 1) and hinted that there is a far better approach available.

The trick, of course, is to use stem-based compound variables to represent field names, row and column screen position co-ordinates, and lengths of reply fields, and it is this arrangement that I want to deal with this month. A compound variable data table is going to be used to store the values required for the CursorWrite(), ShowInputField() and CursorRead() routines of the existing script.

Listing 2 shows the new data table and the key thing to notice is that the field numbers



This month's script display may look much like that from last month, but underneath the surface an awful lot has changed!



It's looking good but...

Despite the improvements with this month's script there is, however, still one area that provides a potential trouble spot. It concerns some of the static definitions used within the example code. You'll notice that, where procedures (i.e. AREXX functions with their own symbol tables and execution environments) are being used, some items (for example, ESC and CSI) have to be defined in more than one place.

Despite procedural isolation being, in the main, a very good thing, the fact that pseudo-constant definitions, which are deliberately intended to be global, are blocked and have to be redefined within each procedure that uses them is unfortunate. As always there is a way around this difficulty, but I'm afraid you'll have to wait until next month to find out what it is!

now form part of the compound variable table. The immediate benefit here is that do/end type loops can now be used to perform all forms of setting up and data collection operations. For example the field names and cleared reply fields can now be produced using the code shown in listing 3. Because these loop-based routines, along with others that you'll find in this month's example script, can handle any number of field items, this means that no matter how complex a form definition you decide to use, these routines will be able to handle it.

Input data can also now be collected using compound variables, with the contents of each completed form, i.e. a complete 'input record', forming part of a single compound variable set (reply%4). Needless to say, this, compared to the relatively simple approach used last month, is a big improvement.

When you run this month's example (by typing rx october_example at a Shell window) a form pretty much the same as that used in the previous instalment's code is produced. I chose, incidentally, to keep the form description the same in order to allow easy comparison with the field definition approach used last month. Underneath the surface, however, you'll see that quite a lot of code has changed, and as well as implementing the compound variable loop tricks already mentioned, some preliminary code, to allow any number

of form 'records' to be stored, has been added.

At the moment, however, all that happens is that a 'dummy save' routine gets called and, as each record is selected for storage, the form data just gets written back to the Shell window (as a sort of 'visible prompt' to confirm that something is happening). As the entering of each set of information is completed, the script will ask if you want to store the current record or not, and whether you want to enter further data. All these things are achieved with fairly mundane use of a CursorWrite() routine using these types of statements:

```
call
CursorWrite(raw_window,22,4,SCREEN_PROMPT1)
x=Readch(raw_window,1)
if Upper(x)='Y' then call SaveData()
```

Another improvement to be found in this month's offering is that if, at any time while entering information, you want to scrap the currently displayed data, you can now just hit the ESCape key to clear the form and return to the first data input field again. In order to do this I've had to modify the CursorRead() routine so that it detects when the ESCape key is pressed. Because of the way the routine was designed, this was quite easy to do and simply involved defining an ESC variable (as the value '1B') and adding an additional ESC case to the routine's Select/When statements.

```
call CursorWrite(raw_window,10,4,FIELD1)
call CursorWrite(raw_window,10,34,FIELD2)
call CursorWrite(raw_window,12,4,FIELD3)
call CursorWrite(raw_window,15,4,FIELD4)
call CursorWrite(raw_window,16,4,FIELD5)
call CursorWrite(raw_window,18,4,FIELD6)
call CursorWrite(raw_window,20,4,FIELD7)
call ShowInputField(raw_window,10,4,length(FIELD1)+1,6)
call ShowInputField(raw_window,10,34,length(FIELD2)+1,7)
call ShowInputField(raw_window,12,4,length(FIELD3)+1,37)
call ShowInputField(raw_window,15,4,length(FIELD4)+1,37)
call ShowInputField(raw_window,16,4,length(FIELD5)+1,37)
call ShowInputField(raw_window,18,4,length(FIELD6)+1,10)
call ShowInputField(raw_window,20,4,length(FIELD7)+1,10)
```

```
FIELD_COUNT=7
F.1.name=Surname: ; F.1.r=10; F.1.c=4; F.1.l=16
F.2.name=Initials: ; F.2.r=10; F.2.c=34; F.2.l=7
F.3.name=Address: ; F.3.r=12; F.3.c=4; F.3.l=37
F.4.name= ; F.4.r=16; F.4.c=4; F.4.l=37
F.5.name= ; F.5.r=18; F.5.c=4; F.5.l=37
F.6.name=Postcode: ; F.6.r=18; F.6.c=4; F.6.l=10
F.7.name=Telephone: ; F.7.r=20; F.7.c=4; F.7.l=10
```

Listing 1: Last month's program effectively treated each field as an independent item

Listing 2: The new style compound variable field definitions

```
displayform:
do int to FIELD_COUNT
call CursorWrite(raw_window,f.i,r,f.i,c,f.i.name)
end

clearform:
do int to FIELD_COUNT
call
ShowInputField(raw_window,f.i,r,f.i,c,length(f.i.name)+1,
f.i.l)
end
return
```

Listing 3: Compound variables allow short loops like these to handle any number of form setting up and reading operations

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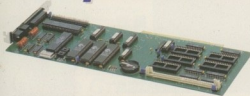


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The Doubler 4000 accelerator is an easy-to-install daughter board that simply replaces the 25 MHz 68040 CPU with a faster 50MHz version already installed. Anyone who can install a SIMM can install the Doubler 4000. Customers are supplied with photo-illustrated installation instructions plus the necessary extraction tool to perform the installation.

Simply putting a faster processor into an Amiga does not help much unless the system can supply enough data to keep it busy. That is why the Motorola 68040 contains a large on-chip cache. This cache frees the Doubler 4000 to work semi-independently of the Amiga memory subsystem. In fact, 85% of the time the cache contains the data and instructions necessary for the Doubler 4000 to operate at full speed.

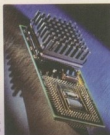
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CIX?

The other day I saw a posting on CIX heralding the 'new A4000T.' It was attributed to Alex Amor's Creative Equipment International, an American company who'd been involved in the bidding for the Amiga before Escom finally snarled it up.

It was headed 7 July 1995 - FOR IMMEDIATE RELEASE - and described how the A4000T will be 'positioned as a high-end video workstation.' It goes on to describe it as 'a tower-based model with the Motorola 68040 processor operating at 25MHz. Initial configurations are expected to be 6Mb of RAM and 540Mb hard disk. Introductory pricing is set for a street price of US\$3499. CEI will be offering different configurations....'

Furthermore 'we realize that the price of the A4000T is slightly higher than we all would have wished. At the same token there is pent up market demand....'

Now, knock me down with a feather but I couldn't help taking this with a very big pinch of salt. After all, CEI didn't win the bid, but had been making big noises that they were confident of winning. They've been out of the limelight for a while, so a message from CEI serves, if nothing else, to keep them on the map during these lean times.

Then came a contradictory message from Giles Bourdin of Amiga Technologies GmbH in Germany, dated 14 July, which says that as yet there have been no firm distribution contracts or agreements signed for Northern America, nor have pricing levels been set for the A4000T. So just what is going on? Did CEI jump the gun? Did they dream this A4000T up themselves?

TURKEY

Let's look more closely at the spec. No monitor or CD-ROM is mentioned; the drive is quite small by high-end standards - 6Mb of memory isn't even enough to run that TV favourite LightWave, and other crucial programs such as Art Department Professional, ImageFX2 and Real 3D are all going to need more memory for serious TV work.

On top of that it doesn't say whether the A4000T will have any form of video output, so an encoder card or good-quality genlock will be required. This A4000T looks like a machine which is tailored to run something like Scala MM400 [not that I'm knocking MM400 - it's a great application] and not a 'real' video machine after all.

And then there's the price - US\$3499! Even loosely translated into UK currency that's around £2190, or £2600 including VAT - and not even a monitor thrown in. Couple that with the relatively slow [by high-end standards] 25MHz '040 processor and the only conclusion I can come up with is that CEI have announced a real turkey.

A friend of mine has just bought a Pentium 90K costing around £2400. The price includes a 1Gb drive, 15" multisync monitor, 16Mb RAM, sound card, 24-bit graphics card, speakers and a quad-speed CD-ROM! And it runs LightWave like a dream. Knocking off a full overscan, antialiased render with refraction and reflection in a matter of minutes. In fact, when I phoned him he was rendering the textures example and it took less than three minutes to do the business. I can't see a 25MHz '040 even getting close.

Okay, his PC will need a few more add-ons to

Upset in videoland



achieve full video compatibility, but, unlike five years ago, these extras are becoming more and more accessible to PC users. There's now a PAR card for the PC, and genlocks, video processors, framegrabbers and edit controllers are all readily available. The A4000T will also need additional hardware, which might include a PAR card and a framegrabber. A 24-bit card would also be very useful, plus all the bells and whistles [memory, CD-ROM, monitor, big hard drive, etc] which are no longer luxuries for serious video producers and animators.

Now, let's hope that all this is theoretical, and that the new A4000T will not only have reasonably priced bundle options, but that the base machine itself will not make a Pentium PC or well-appointed Mac look even more tempting than they already do. It's one thing relying on the Amiga's video reputation to sell it, but Escom/Amiga Technologies are going to have to come up with something really special to keep video folks on their side.

After all, PC and Mac development continues apace while Amiga R&D appears to have ground to a halt, developers are still waiting to

be contacted by Amiga Technologies, and a new high-end Amiga will still only be playing catch-up with current PC and Mac systems by the time it hits the streets - unless some rapid behind the scenes developments are going on.

This is not a good state of affairs to be in, even if you're the most rabid of Amiga supporters. If I was in the market for a video/graphics Amiga I'd want one which could see off the competition, and at a sensible price. I'd want a built-in video output which was at least composite, preferably S-VHS (or even both), even for lesser machines such as the A1200 or rumoured A1300.

Until Amiga Technologies take a good hard look at what Amiga users actually require for high-end video applications and come up with some solutions, I can only conclude that this A4000T price and spec. certainly isn't going to cut it. For all our sakes, let's just hope that CEI's message was low on substance and high on hype. Only time, and Amiga Technologies, will tell.

The source

Thanks to Jeff Walker of JAM for posting the original messages on CIX.

Gary Whiteley can be e-mailed at dgarg@cix.compulink.co.uk.

VIDEO



A press release from CEI in America sets Gary Whiteley off on the road to video harmony

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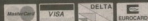
Fonts Type1 EMC 4,5,6,7,16 - CG EMC 6,9,10,24,24 - PDnew EMC 16,19,20 & 52 Clipfonts
Clipart Fully sorted into sub-directories (number of directories listed in brackets)
IFF Animals (114), Fantasy(27), Music(12), People(73), Religion(12)
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Fonts Type1 EMC 17,27,29,37 - CG EMC 25,26,30,31,32 - Colour EMC 48,49 & 71 Imagine
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IFF Alphabets, Balacons, Birds, Buildings, Cartoons(17), Computers(7), Education(5), Electric(16), Food(90), History(5), Natural(59), Space(37), Sports(3)
IFF Col Fruit, World Maps (of every country on Earth), Ships, Vegetables
GEM Animals & Stars, Borders, Buildings, Clipart, Office, OtherStuff, Photo, Transport, Xmas
IMG Animals, Cartoons, Food, OtherStuff, People, Plants, Sports, TheArts, Transport, Xmas
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Given the versatility of almost all synthesizers, you might well imagine that it would be quite easy to produce drum/percussion accompaniment by just selecting suitable drum sound voices. In fact, it isn't quite that straightforward because, set up in the conventional way, a multi-timbral synth would only be able to play one voice group setting per channel. So even if you only wanted a bass drum, a snare, open and closed hi-hats, a couple of tom-toms and a cymbal... you'd still use up seven Midi channels and a large chunk of your multi-timbral capabilities.

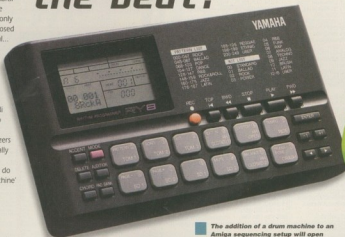
The solution to this difficulty was solved years ago and involves a slightly different arrangement whereby all percussion events are sent on just one Midi channel with the note value being used to indicate which particular drum/percussion voice should sound. Now, newer synthesizers often have facilities like these built in (usually on Midi channel 10) but many older instruments will not, and the best thing to do in these cases is add a separate 'drum machine' to your Midi set up.

SOPHISTICATED SOUNDS

Drum machines nowadays are quite sophisticated and often use sampled (i.e. digitised real percussion sounds) as opposed to synthesized sounds, and even the pitch and volume of individual drum's voices may be altered. Loads of preset rhythm patterns will also be provided, many of which will make good starting points for creating your own percussion tracks.

When you start a drum machine playing you'll not only hear the percussion sounds via its audio connections but the unit will be transmitting Midi data as it plays. The messages transmitted may include start/stop information, timing clocks, and the drum-note data itself. Of course, the reverse procedure also applies and if the drum machine is sent Midi data it will

Are you missing the beat?



The addition of a drum machine to an Amiga sequencing setup will open many creative doors for the musician

play the appropriate percussion voices. As far as the recording of percussion tracks is concerned, it is much the same as recording ordinary synthesizer data. You start the unit playing and just record the Midi data generated at the Midi Out terminal. There is, however, one thing that you do have to bear in mind – you must not transpose drum channel data. Since specific drums and percussion instruments are represented by particular Midi notes, any change in these note values would change the actual percussion voices being played.

The effect of inadvertently transposing a

drum part will, on playback, sound disastrous – recorded bass drums might turn into cymbals, the snare drum might vanish, and the overall effect is invariably to make the drum/percussion track sound almost unrecognisable. Obviously, it is something that is easily fixed by re-transposing the data back into its original key (thus restoring the original note values). Some Amiga sequencers (like Dr T's KCS) allow you to 'protect' a specified Midi channel from transposition and this is very convenient because it allows you to carry out all normal transposition operations knowing that the note values of the drum/percussion data inside your drum tracks will not be altered.

Drum machines (and integral synthesizer percussion facilities come to that) vary enormously in the number of different percussion sounds they can provide. Unfortunately, prior to General Midi, there was little standardisation between different manufacturers as far as which note numbers represent which drum sounds. The note, which on one drum unit plays a crash cymbal, could well produce a 'High Bongo' sound when sent to another machine. Needless to say, this is something which many users just have to live with and it really only causes major problems if you are using material that is either intended for, or created by, someone else who is using a different drum machine.

As far as creating suitable drum patterns is concerned, the situation for the beginner is very good indeed. Firstly, you'll be able to use the rhythm patterns and styles available on the percussion unit itself. Secondly, you'll find that local music stores will stock a number of books which provide details of popular and useful drum patterns written in easy-to-understand 'block notation' style.

MUSIC



If your existing Amiga Midi set up is somewhat lacking in the percussion department then Paul Overaa has just the answer

Tricks of the trade

It is sometimes said that drum machines can produce monotonous drum parts. They can – but this is almost always due to how the drum patterns were programmed in the first place. The big question is... what can you do about it and, most of the time, it comes down to attention to detail. A common problem is getting the accents right on hi-hat parts. Some accent pads have limited capabilities – even though the drum machine may be fully velocity sensitive via Midi. In these cases, it's usually best to drive it from a touch sensitive keyboard but you'll find, by experimenting, that a lot can also be done by editing the data using your sequencer.

It's been recognised for some time that if you take a perfectly quantised drum pattern and marginally alter the position of the snare drum, i.e. pull it back or push it forward, then the whole 'feel' of the pattern can change. You can do this sort of thing quite easily via most sequencers simply by recording each drum on a separate track and adjusting the individual start positions.

As well as altering the feel of a drum pattern track, you can 'thicken up' weak sounding drums by taking the drum track (or a part of it), duplicating it onto a second track, shifting it along by a small time interval, and playing the resulting tracks simultaneously. Done selectively it can be very effective, especially when using hard-left/hard-right stereo panned sound outputs.

All these sorts of tricks come with practice and most users find that, within a few weeks of starting to use a drum machine, they are getting excellent results. Yamaha and Roland drum machines are available at quite reasonable cost, and with many shops offering second-hand units at bargain prices nowadays, it's never been easier to add extra percussion facilities to your Midi set up. If you don't believe me, take a walk down to your local music shop and see what's on offer yourself!

I know I've argued about this before, but Net usage is expensive. A lot of stupid companies who don't pay for their phone bills are rushing onto the Net with Web sites and inviting us to send our cash down the phone to pay for goods and services. No way! Think about it. These admittedly brilliant sites I've mentioned here can cost you a couple of quid to visit – even if you visit them at off-peak times. It's a pricey business, even with all the good deals that phone companies are flinging your way these days to get your money.

Obviously, faster modems would be a bonus, and for frequent Net access, or if you are a Net hack like me, then a 28,800 baud or even ISDN is a definite good idea. Okay, so you shell out more initially, but the savings in Net time are enormous. You have to be very careful when you get fast Net access though, because it might mean you spend a bit longer on-line than you should, and you just download bigger files. It's a bit like real life where your expenditure expands to fill and even exceed the available budget.]

So to help you enjoy your Net life more and avoid those scary phone bills, here is my five-point plan for more efficient Netting:

Net profit, net loss

1. Get the fastest modem you can buy, beg or steal. The more rapid transfer rate between you and the host machine will mean faster access to the Internet, especially useful for graphics-intensive Web sites.

2. On-line so much people can't get you on the phone? Get another phone line for your Net access or better yet, get a beeper like the one I have – the Motorola Lifestyle Plus. It costs £80 and after that there is no charge. People pay just 20p a time when they dial up a premium rate line and tap in their phone number. It's cool gadget too, and makes people on trains think you are a doctor.

3. Use a stopwatch. When you log on start the timer and keep looking at it. Try to limit your

browsing to half an hour a day, especially if you're logging on before 6pm.

4. Save frequently. Save the text of pages if there's a lot to read, either as text or HTML. Read off-line as often as possible. It's easy to forget you are connected to the phone when you are reading something interesting.

5. Do what you've got to do and get out of there. It's easy to roam around the Web when you are bored, and it's just as easy to not really have any aim in mind. The Web is a tool, and okay, it's quite good fun too, but it should be used carefully. So don't just wander around the Net burning up cash. Look for something, find it, note any interesting URLs on the way, but get out quick.



Phil South
mulls over the
expense of Net
usage

WorldCam

<http://www.avid.com>

One of the most interesting things about the Net is its NetCams, that is to say video cameras which relay almost live info from their location to you via the Web. The most impressive collection of these cams is WorldCam. WorldCam has also compiled a list of the best Cams from around the world, including The Falcon Cam at Calgary University, The Incredible FishCam (a fish tank), FogCam and the amazing wearable WebCam – a camera attached to someone who has a wearable Net-based computer so you see what they are doing.

Batman Forever

<http://www.batmanforever.com/>



The web site for the new Batman film, out now, and very fab it is too. The site has pictures, sounds (live via Real Audio if you have a PC-based Net program running on your Emplant) and movies for you to watch. It also has some very nice HTML tricks, like animated logos.

Net watch

MGM/UA Lion's Den

<http://www.mgmua.com/MGM/index.html>



The MGM/United Artists home page, with details of all their recent filmage. For example Goldeneye, the new Bond film. At the time of writing there weren't any pictures, but there was a sneak preview. Presumably this is because the film is in production and it needs more doing to it before you can really get a look at any sets or anything. Also, there are details about Species, which is a new spooky film with bags of special effects about a new type of human, which of course goes haywire and kills everyone, in the grand old tradition. There's also lots of stuff on the new Tank Girl movie, starring Lori Petty.

Sony Pictures Entertainment Home Page

<http://www.spe.sony.com/Picture/s/index.html>

Access to Sony's Entertainment network, including their movies through Sony Pictures. All the upcoming features are here like the excellent 'The Net' (no relation to the awful BBC series) starring Sandra Bullock, the most excellent 'Johnny Mnemonic' starring Keanu 'Evil Ted' Reeves, and other bonuses like 'First Knight' with Sean Connery and Richard Gere. Oh, not forgetting Julia Ormond... ooh, how could I forget.

Buena Vista MoviePix

<http://www.disney.com/>

The very graphics-heavy Buena Vista Pictures site has now moved to the Disney site. It used to be out on its own but it's been

absorbed into the controlling company's Web activity. All you need to know about the new BV releases, including the new Judd Dredd picture with Sylvester Stallone.

Paramount Pictures

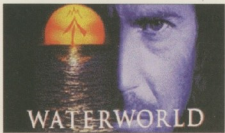
<http://www.paramount.com/>

At the Paramount site you can get a preview of scenes from Michael Crichton's new film, Congo, Mel Gibson as Braveheart, and sneaky previews of the new Star Trek: Voyager TV series (coming soon to a video store near you.)

MCA/Universal Cyberwalk

<http://www.mca.com/>

The MCA/Universal site was one of the first movie companies on the Web, and it shows by its slick presentation. The site has previews of Tom Hanks in Apollo 13, the \$200 million Kevin Costner film Waterworld, and also Spielberg's Casper, the friendly ghost.



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As we said last month this is a screen info program which loads a screen and gives you info about it. The author describes its usage thus:

'Here is a routine that will give you information on the current screen, from the screen number to the amount of memory the screen is using. There are two modes of operation.

```

_SCREENNUMBER=Val(Left$(IS,1))
X=Val(Mid$(IS,3,4))
Y=Val(Mid$(IS,8,4))
WIDTH=Val(Mid$(IS,13,4))
HEIGHT=Val(Mid$(IS,18,4))
NUMBEROFFLOURS=Val(Mid$(IS,23,4))
NUMBEROFBUIPLANES=Val(Mid$(IS,28,1))
AMOUNTTOFSCREENMEMORY=Val(Mid$(IS,30,7))

```

Okay, here's the second part of the code. Don't try to run this on its own as it is not complete! Okay, here we go with part 2.

We grab the palette of the current screen:

Get Palette_SCREEN_NUMBER

```
Fade1,,FFFF,FFFF,FFFF,CCCC,AAAA,777N,FFFF,FF,
888E,,,CC,88F,83,888C
      Cars Off : Flash Off : Paper 5 :
Wide : Wait Wbl
      X=0 : Y=0 : WIDTH=640 : HEIGHT=120
: Gosub LIGHT30
      X=40 : Y=13 : WIDTH=560 : HEIGHT=13
: Gosub LIGHT30
```

```

Debug INFOPRINT
Wait Vbl
Ink 3 : Paint R44,T4,0 : Rem paint an area
of screen, in colour 3
Paper 3 : Pen 5 : Locate ,2 : Centre "Screen
information"
For N=0 To 150 Step 16
  Screen Display ISN,128,N,,
  Wait Vbl
  Next N
For N=150 To 160 Step -4
  Screen Display ISN,128,N,,
  Wait Vbl
  Next N
For N=160 To 150 Step 2
  Screen Display ISN,128,N,,
  Wait Vbl

```

Who goes there? Part 2

119



Frank Nord
gets his mitts
on the new
plug in
modules for
PageStream 3

In with the latest update (3.0h) I received this morning. I got the four new add-ons for PageStream. They are: Gary's Effects, a Jpeg filter, a Wordworth filter, and a font engine for TrueType fonts. These additional filters can be bought now from SoftLogik themselves for between \$20 and \$25, so get your credit card ready.

Gary's Effects come on a single disk for installation into BME 2.0. They are a series of Effects modules that get added to BME's Effects menu and give you some of the more common operations required for desktop publishing. These include, but are not limited to, a user-editable convolution matrix, gamma correction, a histogram graph display (which cannot be edited), control over hue and saturation and other such effects.

It's a bit disappointing that there are none of the really useful DTP-oriented operators such as unsharp masking, or that most of the operators don't seem to work in a predictable fashion when applied to pictures in CMYK format. I can only hope that Gary's Effects evolves into something more like Kai's Power Tools over a period of time. Still, thanks to the new Jpeg filter, at least you can save pictures out from BME as Jpegs.

QUALITY SETTING

There isn't very much to say about the Jpeg filter for PageStream. It does what it is supposed to and offers you a quality setting slider, but really talking about it is going to sound like one of those Ronsseal product ads on the telly: So if you want a filter and you want it to be Jpeg, then get the Jpeg filter. It does exactly what it says in the docs.

Moving on to the third item in our add-on collection - the TrueType font engine. Again, there isn't very much to say about this plug in. It allows you to use TrueType fonts in PageStream transparently, without needing to first convert them into Postscript format. This opens the vast vista of CD-ROMs made for people with PCs and Windows (which

Plug in and print

uses TrueTypes). SoftLogik say in the documentation accompanying the add-on that the speed and quality of TrueTypes in PageStream is roughly equivalent to Postscript fonts. The only thing that would have been nice to see would have been PageStream taking advantage of some of those WinPrinters - printers optimised for Windows' use by having TrueTypes built-in. I'm not sure if this is actually feasible given the printing system in PageStream, so I don't suppose it's all that important.

The last add-on seems to be a little underdeveloped. Although the WordWorth filter will import your WordWorth documents, it will only do so under fairly strict conditions. Because PageStream has no Text Effects or Tables feature, it won't be able to load in any of those nice layouts you have created in

WordWorth using these features. PageStream is also unable to load CGM graphics files like those used by WordWorth, so that option is right out too. PageStream's hyphenation method differs from WordWorth's so you might have problems there too, although not necessarily.

Finally, there are two further problems that would appear to be in the process of being sorted out. The first is a problem with extreme type sizes and the 'Loose' leading method and the other is a problem with picture aspect ratios. All in all, it doesn't sound as though the WordWorth filter is going to be much use for anything but the simplest layouts and as such, perhaps it should have been included with WordStream for nothing, or they should have at least waited until you could do a bit more with it.

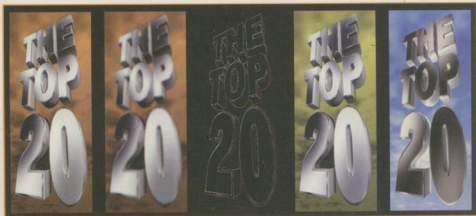
PageStream progress

After having spent some time with PageStream 3.0h, I can definitely say that SoftLogik are pushing forward at a rapid rate towards a finished product. Typing speed in the new version is vastly improved, particularly in long articles, although SoftLogik say it is still not as fast as they would like for v3.1. Also, you can now quit from the editors without them locking up PageStream (at last I can't remember the number of times I hit Amiga 5, Amiga 6 out of sheer habit). In addition, external graphics have finally been implemented and you can now revert to saved.

Owners of non-Postscript printers should be pleased that printing has been sped up and that memory is no longer as important when it comes to printing. Hyphenation, both soft and automatic, has now been incorporated and, at last, your cursor accurately represents where in a text article you are. BME also gains two new effects - Emboss and Sharpen.

However, some of the more annoying niggles like PageStream's inability to copy, duplicate or transform a text box have still not been resolved, neither should you expect PageStream to be able to do colour separations for EPS files or printing (one aspect which must surely limit PageStream's appeal for serious use. Perhaps this ought to be attended to before anything else).

Finally, in the readme file they mention release dates for both a Mac and Windows version of PageStream and promise full cross-platform compatibility, so let's hope that all this doesn't mean that Amiga development slows down and b) Amiga users will finally have a hope of going to a printer with a PageStream file and not get laughed at.



Some of the new operators that Gary's Effects provides BME with. They are: the original picture, blurred, Laplacian Edge (convolution), hue (+25°), solarized, and threshold

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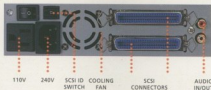
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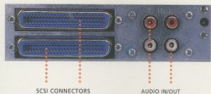
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