March, 1994 - Volume 11, No 3

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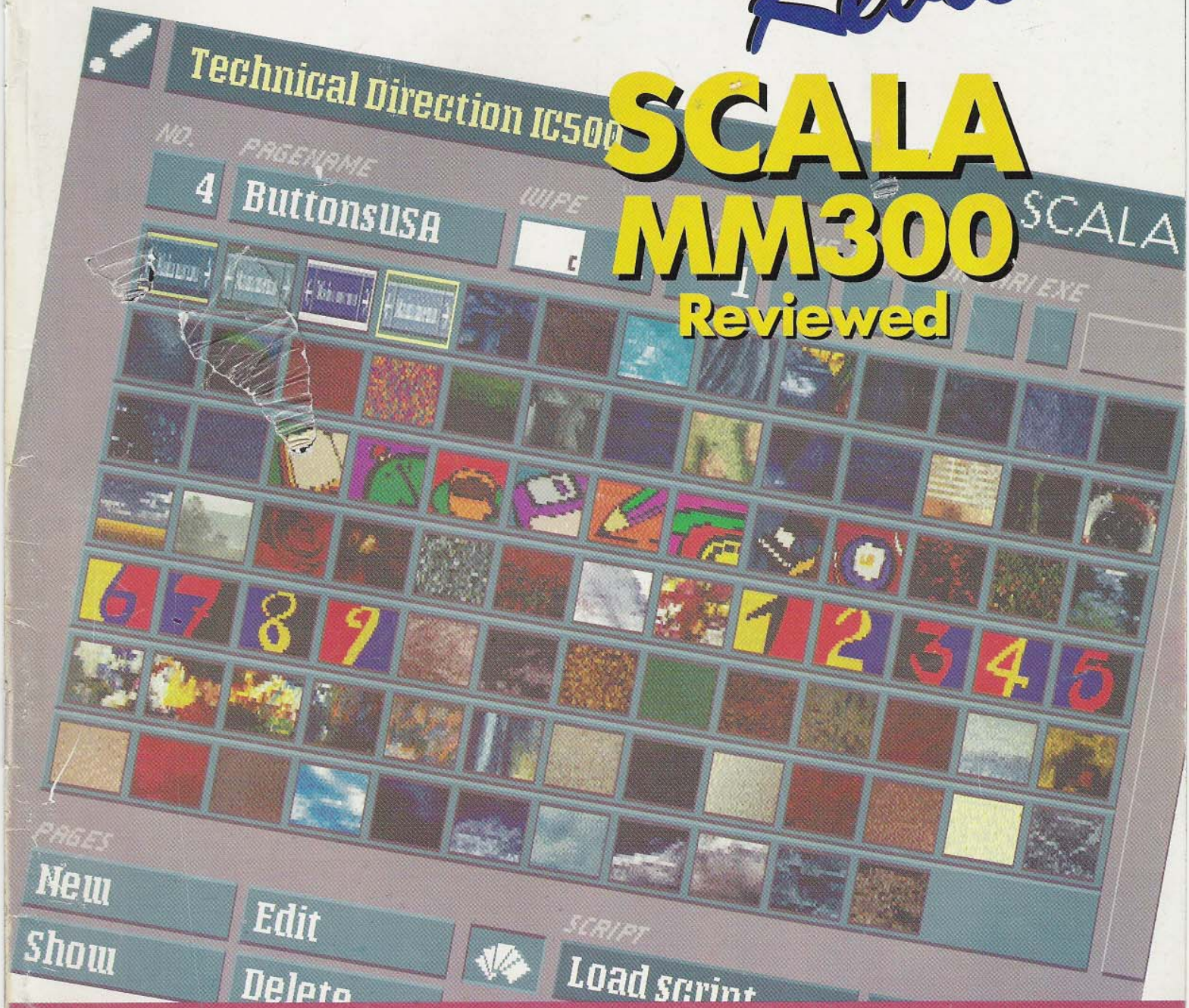
Commodore NEWS Inside

Australian Commodore & AMIGA Review

For Professional and Home Users



SCALA MM300 Reviewed

Reviews: GVP TBC, A1230 Accelerator VIDI 12/24 - PLUS New DTP Column

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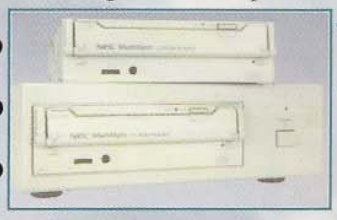

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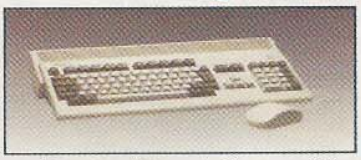

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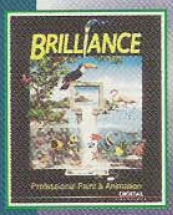

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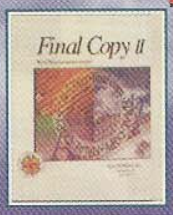

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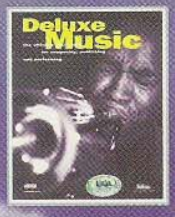

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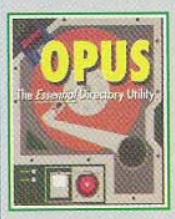

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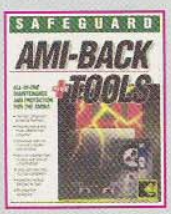

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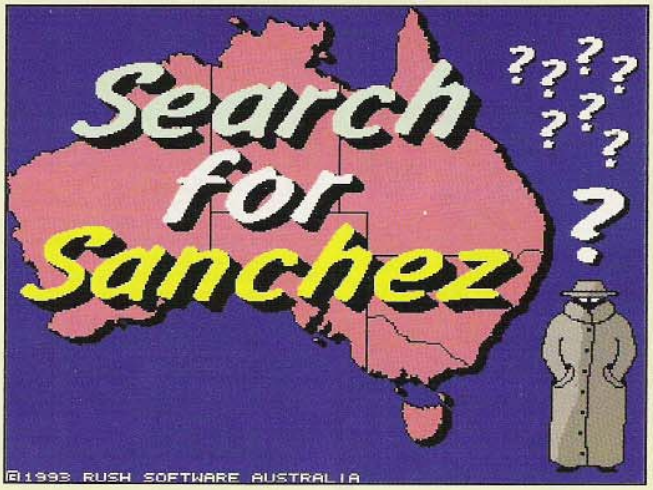

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PERFORMANCE COUNTS
(...NOT PROMISES)

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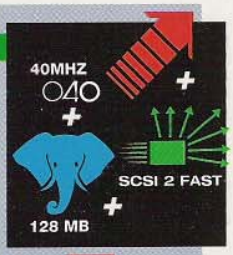
Great Valley Products delivers on our commitment to manufacture the most innovative and technologically superior products for the Amiga.



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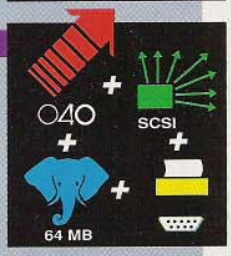

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The classic Combo taken to the Ultimate Extreme! Your applications will blaze with the awesome power of a 33Mhz 68040 processor. Give that muscle some room to flex with room for up to 64MB of fast 32-bit RAM. Of course our award-winning SCSI II interface is integrated for maximum performance and we include the bonus of ioExtender capability with an extra parallel port and a buffered high-speed serial port. Hot "toast" served here!
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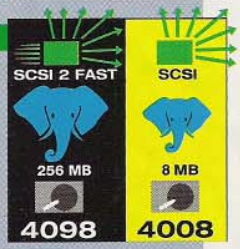

4098 SCSI2*FAST*/4008 SCSI II™
Bring the world of SCSI within your reach with either of these versatile boards. Instantly gain access to thousands of peripherals such as hard drives, SyQuest removable media and CD-ROMs. Add up to 7 devices to your Amiga 4000 and smile. The 4098 is equipped with a full 32-bit SCSI2*FAST* interface providing up to an incredible 10Mb per second transfer speed. Eight 32-bit, standard 72-pin SIMM slots provide for up to an amazing 256Mb of very fast RAM...NOW! A2000 users or those looking for the most economical SCSI solution will find room for up to 8Mb of 16-bit memory on our 4008 card.
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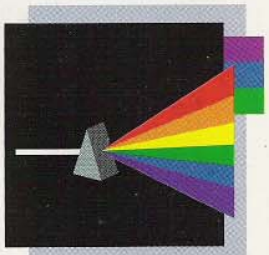
IV-24™ A4000, The Ultimate Genlock
This is what you have been searching for in a professional quality genlock for your Amiga 4000. This integrated hardware design provides the crispest, cleanest genlocked video on the Amiga desktop. With options for RGB, composite, SVHS, Betacam and M-II compatible inputs & outputs as well as a 24-bit, 16.7 million color frame-buffer and real-time framegrabber/digitizer, this is ***the*** Amiga genlock every professional needs. GVP's acclaimed ImageFX software as well as the powerful EGS SpectraPaint, now included, complete this picture as the Ultimate Genlock. An enhancement package including the professional Component Transcoder (CT) is available separately!
CIRCLE **28** ON READER SERVICE CARD

TBCPlus™ This professional quality (CCIR-601), all digital time-base-corrector (TBC) uses state-of-the-art 8-bit 4:2:2 video signal processing...***Plus*** it provides a real-time video frame-grabber and 16.7 million color frame-buffer ...***Plus*** there is a full SMPTE/EBU time-code receiver/generator and a separate comb filter available...***Plus*** this incredible product will transcode composite and Y/C inputs...***Plus*** a 3 channel video input switcher (in composite and Y/C) ...***Plus*** programmable video special effects!
CIRCLE **5** ON READER SERVICE CARD

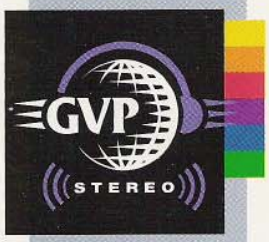
G-Lock™ Bring live video, audio and Amiga graphics together and do it on ***any*** Amiga! Get connected with the world of video with our built-in transcoder to convert input video to composite, Y/C, RGB or YUV outputs! Full support for AGA systems as well as the 'classic' Amiga 500, 2000 and 3000. Acclaimed interface controls make this easy to use and simple to control. **Scala™** users can purchase an EX module from Scala distributors. With G-Lock's *included* dual-input audio panel it's simply the best choice for every personal Amiga owner.
CIRCLE **25** ON READER SERVICE CARD

EGS 28/24 SPECTRUM™
Go Beyond AGA Graphics with this real-time, 24-bit, true-color graphics enhancement card. Programmable resolutions up to 1600x1280! 800x600 in 24-bit! We include a custom display pass-through cable for single-monitor use. *Included with Spectrum is a GVP exclusive, the acclaimed EGS SpectraPaint* (formerly EGS-PAINT). Get the standard that others are developing for, EGS Spectrum. Bring workstation graphic power to your Amiga today and see what you've been missing!
CIRCLE **3** ON READER SERVICE CARD



Performance Series II™ At 50Mhz, you can own the fastest A1200 in the world! Add up to 32MB of high-speed 32-bit RAM, today! With the added power of a 50Mhz FPU, your floating point operations have never been speedier. A 40MHz version is also available for those who want the best, but don't need as much speed. A simple connection in the A1200's 'trap-door' never voids a warranty, and with either SeriesII you have the added versatility of our DMA Peripheral Port (DPP). Add the fastest SCSI interface on any A1200 with the A1291 SCSI Kit. It just plugs in from the back. Other expansion products including a 16-bit CD quality audio digitizerand playback unit as well as a real-time video digitizer coming soon! Keep your options open!
CIRCLE **15** ON READER SERVICE CARD

DSS8+™ Clearly Superior! This is the quietest, most professional and attractive digital sound sampler yet made. Assembled of high-impact clear polycarbonate, this is the sound sampler to own for the Amiga. The versatile **Digital Sound Studio** software includes a multifaceted program for sampling, editing, song composition, stereo sound playback as well as creation of .MOD format songs. New DSS 3.0 software now supports direct-to-disk (hard disk!) recording and playback. New real-time effects and powerful playback and editing features as well as an even more versatile and powerful interface.
CIRCLE **53** ON READER SERVICE CARD



PhonePak VFX™ 2.0
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CIRCLE **41** ON READER SERVICE CARD

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Feeling trapped? Let GVP extend your horizons with our easy-to-use **ioExtender**. Contained on a single card, you will find an additional parallel port, allowing you to connect a printer and a digitizer (such as DSS8+) at the same time. No more messy, unreliable switch boxes! To speed you on your way, we include a high-speed, FIFO buffered serial port. No more dropped data or bogged-down computers when transferring data via modem (at speeds in excess of 57,600!). Optional RS-422 Kit or second RS232 Kit are available for even greater versatility. Free your ports and regain performance on your Amiga with **ioExtender**!
CIRCLE **36** ON READER SERVICE CARD

ImageFX™ This revolutionary must-have-program combines the traditional elements of image processing with amazing high-end special effects and morphing tools. Image FX is east-to-use in every respect. It supports image file formats in use on nearly any platform from Macs to SGI machines.It has built in virtual memory for all Amigas, no more 'out-of-memory' problems! ImageFX even incorporates an on-line help system! ImageFX includes EVERYTHING you need in one low cost package: 24-bit painting, scanner modules, image format conversion, and much more! Recommended by Video Toaster User and in use at Warner Bros. Animation ...ImageFX is the one to have! Get the tool the professionals use and recommend!
CIRCLE **18** ON READER SERVICE CARD

A500
A600
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A3000
A4000

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Conundrums at Commodore Australia

By now the situation may well be different, so take all of this with a grain of salt. However, as we prepared this issue to go to press, things were looking a little out of sorts over at Commodore Business Machine's head office, at Lane Cove in Sydney.

There has been little official word about what is taking place, however we can be sure of one thing. In the long term, it is very likely the Amiga will continue to be distributed and supported in Australia - and probably by a company with the word Commodore in its name somewhere. However, in the meantime you will no doubt hear or read about the current situation. It is true that an administrator has been called in by the directors. His job is to sort out the Australian company's current financial difficulties - and they are serious.

He will be working closely with the major creditors to decide what is to be done to sort things out. Here is where the situation gets kind of vague, so the less said the better. But, right now there are possible problems with warranty repairs, and the supply of Amigas is likely to be interrupted for a short time. We are however assured this will all be rectified quick smart and that there is no cause for alarm.

Reading this month's Commodore Update on our new Future Watch page, it is plain that Commodore is doing very well - world-wide. The future of the Amiga is not in doubt. The European operation is having great success with a very aggressive campaign spear-headed by the CD32 player. They have gone head to head against Sega, and appear to be winning. Recent figures showed CD32 as the biggest selling CD based device in the U.K. - with Sega a close second and PC CD-ROM drives trailing in third place. Titles are starting to push through, and the FMV module is said to be available at Dick Smith stores in Australia right now - although video titles are a little more difficult to come by.

So, whilst our local situation may suffer a few ups and downs over the next month, all should be well again very soon.

You may notice a few changes taking place to *Amiga Review*. Your feedback is important - so please feel free to pass on your comments in the knowledge that all will be read and considered. You can fax the editor directly on (02) 816 4714 or write to us at *Amiga Review*, 21 Darley Road, Randwick 2031.

The Opal Technology saga continues, however despite rumours to the contrary, the Video Processor is very close. It includes the Roaster, Framegrabber and Genlock allowing video transitions, wipes and page flips. The device will be on show at NAB in March, and should be shipping downunder soon after.

Opal Technology may well lead a revolution in desktop video in Australia, as they bring the price of high performance equipment into the reach of you and me. Stay tuned.

ANDREW FARRELL

DP-Tute from Toad Software

A couple of issues back we mentioned a Dpaint tutorial from the folk at Toad Software. It seems we screwed up on the phone number. The correct number is (08) 251 3655.

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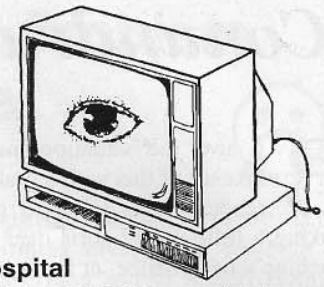
Media Watch



Film Graphics

Monte Boyd of Cremorne NSW, who previously sent us the spotting of Amigas in *Jurassic Park*, has found another one. While doing work experience at the production house Film Graphics, he drew his own 10 second animation and had to do a line test - doing an animation of the pencil drawings to ensure everything lines up.

Film Graphics use for this purpose an Amiga hooked up to Digi-View - a simple, fast, cheap digitising platform. And yes, Monte, this time you WOULD have got a free subscription - if you hadn't been outclassed by one of our other correspondents - sorry mate!

The Rachel Papers

Mick Gooch of Lowood, Queensland, spotted two Amigas - well, Commodore references, anyway. During the movie *The Rachel Papers* on Channel 9 on the 6th of February, an unmistakable A500, 1084S monitor and lumpen A1010 external drive showed up. And during the SBS *World Soccer* show on Saturday the 29th of January, the French First Division team Paris Saint Guienne has a Commodore logo emblazoned on the back of their strip and the curved Amiga logo on the front. Commodore are obviously their major sponsors!

Robert Pogainis of Beecroft NSW also spotted the "Rachel Papers" Amiga (or was it the Rachel Files? Near enough...), but has been keeping an eye out for quite a few others, too. He spotted the A1200 on Real Life on the 27th of January - which, if we recall, was another one of those beat-up stories about computer porn. Ah well, it was an Amiga anyway. He noticed the A3000 that shows up in a lot of AV Jennings ads, as part of their home design system.

Hospital

Robert didn't know what it was used for, but there's definitely an old Amiga somewhere in the Sydney Adventist Hospital's in-house TV system, since once he noticed an unmistakable Kickstart 1.2 hand on the TV. A BBC Hardware store at Thornleigh uses an A500 with A590 hard drive to run a program to show what a digitised house looks like in different colour schemes. A while ago, during an advertisement for the Happy Hockers or some such tarted up pawnbroker there was a WB2/3 mouse pointer - there's a Amiga doing the tiling there, and an absent minded recording engineer!

Robert also clarified the spotting we had a few months back about an Amiga controlling a surgical laser for birthmark removal and similar things. The Amiga's definitely an A2000, and it's used in a clinic opposite Hornsby Hospital.

For that little lot, Robert, you most certainly get a free subscription!

C64 in Woman's Day

A few people, including Heath Kirby Miller of Stuart Mill, Vic and Paul Morablto of Cabramatta NSW, spotted a prominent old model C64 and appropriately elderly monitor under a story in the January 24th Woman's Day on computer addiction in children. Paul even ripped out the page! The opinion around the office is that they didn't show an Amiga to prevent thousands more children spending their days glued to the screen - and we're not quite sure what's wrong with that, anyway - it's certainly how the editorial team got their jobs!

Commodore Update

● Over 320,000 CD32s have already been sold world wide (And Atari is hoping to sell a mere 50,000 Jaguars this year!).

● There are now far more CD32s than 3DOs (and it's going to stay that way), and will soon (if not already) pass the Sega CD in sales.

● Commodore International is shipping 40,000 Amiga 4000s a month worldwide.

● These days Commodore ONLY makes AGA machines: namely CD32, Amiga 1200, Amiga 4000, and soon the Amiga 4000 Tower.

● At the current rate Commodore is selling Amigas, they will ship two million machines world wide this fiscal year! This number is more than they've ever sold in one year - and all AGA machines. In the heyday of the Commodore 54, Commodore in Australia shipped one million dollars' worth of orders in one day!

● AGA games are starting to come. Lots of big name developers who dropped the Amiga are now back. The list of expected CD32 titles is starting to grow very long, although availability in Australia is still lagging behind.

● According to the *Financial Review,* Commodore Business Machines (the Australian company), recorded around $40 million of revenue for its Australia/New Zealand operation. ❑

AAA Moves Ahead - New Amigas Expected

The first AAA computer to roll out will sport a brand new architecture. Several CPU versions are likely - including '040 and '060 versions (simply change CPU modules). A RISC model in early 1995 is expected which will use HP's PA-RISC chip. DSP (for 16-bit sound and communication) will be on the motherboard. Expansion should allow for up to 16Mb chip ram, and up to 128Mb fast ram - with say 2Mb Chip and 8Mb Fast as standard. ALL memory will be 64 bits wide. Fast ram may even be 128 bits wide, if it improves performance significantly.

The expansion bus will offer 64 bit PCI slots, four Zorro III slots. A 3.6Mb floppy drive and high speed SCSI-II interface is likely too. The V4.0 operating system offer RTG (ReTargetable Graphics), and networking support.

The entry level model may cost as low as US$1500. Various configurations of ram and hard drive will be available. Various version of the AAA chips, offering a range of video resolutions and speed, will be offered.

At the low end, we can expect similar video modes to SVGA on the PCs. Although using 32 bit DRAM memory, the low end unit will be missing the Linda chip, but offer better than 57Mb/sec bandwidth - shared between video and processors (so it will slow down in hires/hicolour modes). Expandeding to 64 bit ram will give you mid range performance.

Resolutions: 640 x 480 x 16 bit (72Hz non-interlaced), 640 x 400 x 24 bit (60Hz non-interlaced),, 1280 x 400 x 24 bit (60Hz interlaced), 800 x 600 x 8 bit (72Hz non-interlaced), 1024 x 768 x 8 bit (60Hz non-interlaced), 1280 x 800 x 6 bit (60Hz non-interlaced).

The mid range model with 64 bit DRAM memory, also lacks the Linda chip, and will shovel data round at better than 114Mb/sec. Instead of 60Hz, the mid range will go up to 72Hz for steadier video displays. offer more colours (16-bit in all modes) and 1280 x 1024 x 8 bit.

At the high end, you'll have full 64 bit VRAM memory and the Linda chip. Data will move at 114Mb/sec bandwidth for blitter, CPU, copper, and other DMA; or a whopping 228Mb/sec bandwidth for video. There will be no slow down at all in hires/hicolour modes. Additional resolutions include 1280 x 800 x 24 bit (65Hz non-interlaced);1280 x 1024 x 16 bit (72Hz non-interlaced) with room for 8 to 16MB of chip RAM, which can be added in 1 or 2Mb increments (for 8 or 16Mb).

Chip RAM can be a mix of DRAM and VRAM. With VRAM, there is no DMA contention (remember how hires gets REAL slow in 16 colours on ECS or 256 colours on AGA? Well no more!). The blitter will be just as fast at 1280 x 1024 as it is at 320 x 200. DRAM of course is cheaper. But you could have, say, 4MB of VRAM and 4MB of DRAM and use the VRAM for the screen and DRAM for images for optimum cost and performance.

AAA will boast a much faster, 32 bit blitter. It can blit 24 bit images faster than AGA, and it can blit 8 bit images! This machine will be considerably faster than any Mac or IBM. There will be support for quad-density floppy drives (3.6MB formatted with FFS) and CD-ROM. The two 32 bit chips are Andrea (AKA Agnus/Alice) and Mary (AKA Paula). Andrea is a 32 bit blitter and copper, with burst mode memory access, 110Mhz display rate (4 x AGA).

Mary offers 8 channels of 16 bit CD quality audio, floppy and CD-ROM support. The two 64 bit chips are Linda and Monica (AKA Denise/Lisa). Linda is a video line buffer, controlled by Andrea. Monica gives Chunky and planar video modes (like the PC), HAM/HAM8, true colour, and a new compressed video mode. There will be two high speed buffered serial ports - and if you're still doubting all this news, you'll be pleased to know a prototype AAA based Amiga is up and running even NOW! ❑

Pagestream 3.0 Nearer

PageStream has won numerous awards in Amiga desktop publishing award. However, here at Amiga review we've always felt it kind of lacked key features needed for professional use.

When it comes to PageStream 3.0, we have a different opinion. On specification alone, this product looks set to be one of the most significant productivity titles to hit the streets this year. Version 3.0 gives you many times more power than any previous version. In fact, it's a whole new program.

There are over 1000 new features in 3.0. PageStream 3.0 is claimed to be the easiest desktop publisher for beginners to learn because of its Amiga-standard interface and extensive online help.

Professionals will love PageStream for its power and flexibility. Precise typographic controls, advanced drawing features, stunning color output and recordable macros make PageStream 3.0 the best choice for your desktop publishing needs.

Most of all, you will love the fact you can import Professional Page files directly. PageStream 3.0 can import and export text in Amiga and PC word processing formats, including Final Copy and WordPerfect. It has so many word processing features that you may never use a word processor again. PageStream comes with a fast spell checker and can automatically hyphenate your text. No word processor can match PageStream's selection of precise typographic controls. Kerning, tracking, leading, bulleted paragraphs, widow and orphan control - PageStream 3.0 has it all!

When?

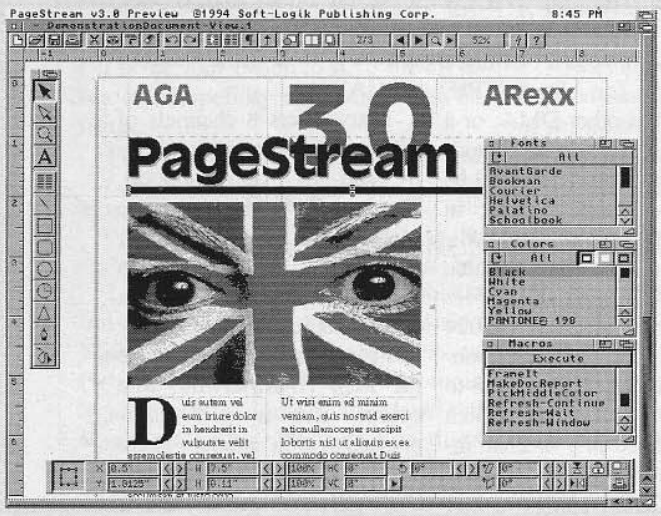
As soon as possible. Softlogic say they want 3.0 to be the best it can be, and if it takes a little longer to get it done, so be it. They say PageStream 3.0 will be available in March 1994. We don't think it could be any later than April.

It's been a long time since a new version of PageStream was released, but this is the 'big one'. They started from scratch this time, and threw away the old source code. This will make PageStream easier to upgrade and maintain in the future.

They pored over all the letters we have received over the years, and added as many of the features requested as possible.

It sounds like SoftLogic really do care what you think, and have designed this program for us. If you want a particular feature, write to them. If you're upgrading from ProPage and find something confusing about PageStream2 or 3, let them know and they'll try to make it easier in the future.

PageStream 3.0 will include PageLiner 2.0 (text editor), BME 2.0 (picture editor and autotracer), HotLinks 2.0 (data exchange), Over 50 fonts plus clip art, New manual and an Online Help System. For more information call Tupsoft on (02) 477 5353. ❑



Notice the floating toolbar strips - very much like Pagemaker on the Apple Mac.

Affordable Colour Primera

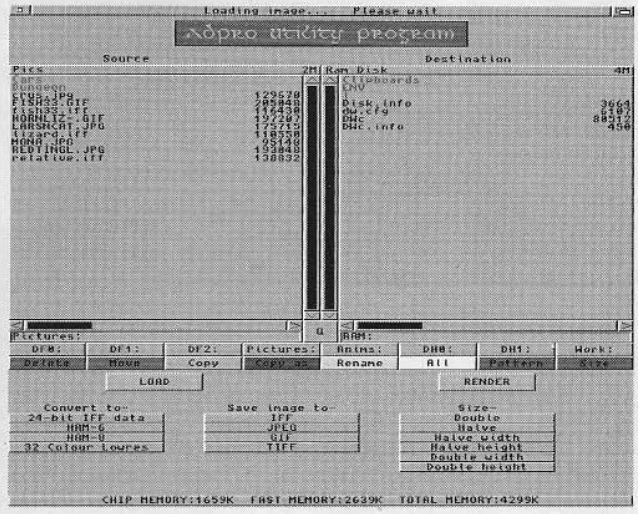
Sydney - Tupsoft, a leading importer in Amiga productivity titles have announced they will be distributing the Primera thermal and die sublimation printer.

The Primera has won many accolades for the brilliant photographic quality prints it can achieve for around $3000 - considerably less than alternatives costing close to $20,000!

A special driver for the Amiga is now available, with the main driver a mere 10K, and a separate file offering additional support for the die-sub option - which costs around $7 per page to output. Lower quality thermal output is available for under $2.

The price for thermal only is a tad under $2500 inc tax, with die sub around $3000 inc tax. The printer needs film ribbon refills and special paper.

For information call Tupsoft on (02) 477 5353. ❑



Dirwork 2.0 Announced

Disk and file management is tricky business, especially when it comes to choosing the right program. Until now the only commercial offerings have been either hard to get, or made hefty demands on memory requirements.

However, *Dirwork* - a popular shareware file manager - is now a commercial product, with all sorts of hip new stuff added. The program is now downright ridiculously configurable.

Flexible

You can have *DirWork* open as an inch square window on Workbench with four buttons and no file display, or you can have a 1280x512 screen open with a couple of hundred buttons and room for two file lists besides.

Keyboard shortcuts, different fonts and colours for buttons, three button mouse support, unlimited menus, disk copy and install functions including high density drive support, system information functions, a virus checker, full ARexx support, displaying of any picture you've got a datatype for on WB3 and, of course, lots more.

DirWork can now be used for just about anything - examples included with the advance press release include front ends for *Art Department Professional* that talk to it via ARexx, docks, simple file manipulators and plenty of other things.

Look out for a full comparison between *DirWork, Opus* and the IBM directory utilities coming soon!

❑

24-Bit Video Titles

InnoVision Technology, the people who brought us *Broadcast Titler*, have launched a full 24-bit video titling and graphics package for the Amiga. The software supports AGA machines, as well as various 24-bit cards including OpalVision and ImpactVision 24.

It is said *Montage* can create razor sharp anti-aliased titles with real time click and drag font scaling. An array of effects can be applied such as embossing, gradient fills, transparency and soft cast shadows.

You can also create 24-bit backgrounds with gradient spreads, translucency blending, beveled boxes, wallpaper and tile effects.

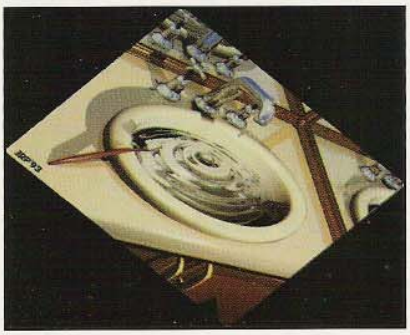
Montage supports import and export of 24-bit IFF and Super Hires HAM-8 images. For final output, *Montage* supports various transitions and wipes between screens - particularly when used on an AGA machine.

Eight typefaces are included, with an additional 10 available. An optional postscript module, available in one month, allows Adobe Type 1 and 3 fonts to be used as well as the popular Compugraphic fonts (standard with Workbench 2.x or higher).

All fonts have ultra-high-level anti-aliasing for an effective resolution of 1 nanosecond regardless of size.

For more information contact Tupsoft on (02) 477 5353. RRP is $499 and the extra fonts are $245. A price on the Postscript option will be announced soon.

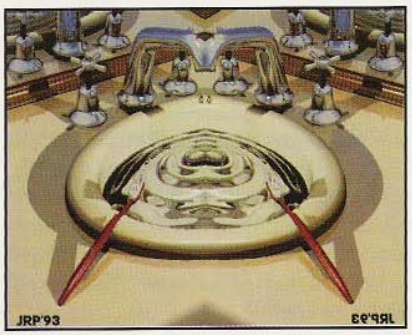
❑



45 Degree Rotation

Antique

Black and white



Mirror

Image processing with Image F/X

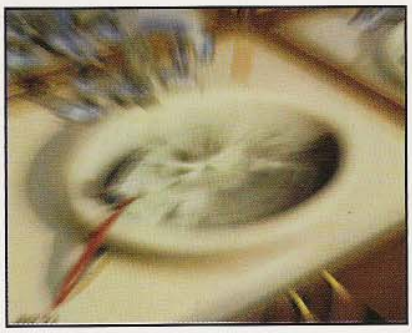
According to Jarrod Pudsey, Image F/X 1.5 is set to become the defacto standard for image processing on the Amiga

Halftone

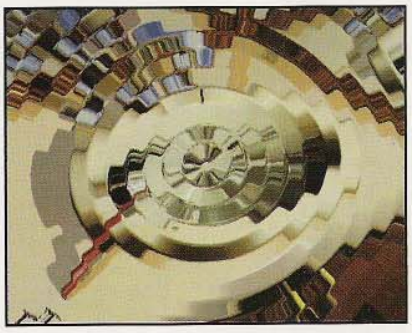
Version 1.50 of GVP's *ImageFX* is now available. It is packed with many new features and improvements. Being a complete image processing solution, it is quickly becoming a popular choice for graphics users.

In the US *ImageFX* is now accepted as the standard image processing package and has been used by companies

Flip



Explode



More Distortion

Black Hole

Blur

Chisel

such as Warner Bros. to create their animated series, *Animaniacs*.

Whether your interest in the Amiga is animation, painting, DTP, video or photography, *ImageFX* is designed to supplement your needs.

What is image processing?

Anything involving the manipulation of an image on the Amiga can be classed as image processing, from changing the file format to performing gamma correction and much more. An image processing software package is essentially the hub for all graphics work.

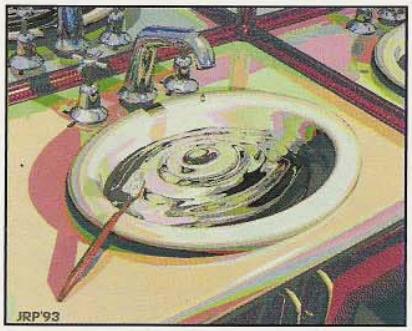
Using *ImageFX* allows you to load in an image from a wide variety of file formats, perform colour alterations, adjustments and effects, paint, cut & paste, scale, composite images, capture images from framegrabber devices or scanners, save in as many file and image formats or send the image to print. Using the included *Cinemorph* software it is even possible to morph single or multiple images together.

Up and running

ImageFX comes on four disks and requires at least 2-3 megs of RAM, depending on the size of images being displayed. It will work on a 1.3 system and can even be booted from disk, however a hard drive is recommended as this tends to be a little slow.

Once up and running, the layout consists of a menu panel across the base of the screen. There are five action gadgets controlling the different areas of the program, each using its own menu. A status indicator simulates the progress of a function in a graph-like scale and functions can be cancelled while still in progress. Throughout the program the right mouse button is used to remove and replace the menu panel for full screen views.

Clear Bumps



Clear Rough

Distortion

Dispersion

Mirror Again

Fact Box

Image F/X 1.5
from Peripheral World (03) 725 3233
RRP $449
Requires 3Mb RAM
Accelerator/WB2.x/Hard Drive Recommended

The remainder of *ImageFX*'s layout contains the image buffers where pictures are loaded and displayed. There is a main buffer consisting of three layers (two image buffers and one alpha buffer) and images loaded into this buffer are converted to 24-bit (8-bit for greyscale images) to provide high quality processing. The two image buffers are the same, acting as one main and one spare, and can be swapped with each other.

The alpha buffer is a 256 level grey channel for creating effects to one or both images in the buffers. For example, when compositing the two image buffers, black areas of the alpha buffer will maintain the main image while white areas will display the spare or swap image. Portions containing a medium value of black to white will result in a 50% composition of both images.

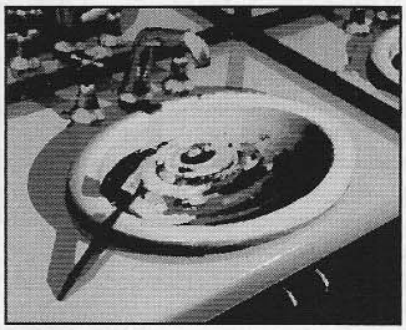
True colour (24-bit) image data is stored in RAM so the image is displayed through a preview buffer. This can be an Amiga display or 3rd party device. The Preview is designed as a fast feedback working environment of the true colour image. When an image is processed it can then be saved as 24-bit. To convert to less than 24-bit or to view in a different format without changing the preview mode, the image can be rendered to the Render buffer and saved as rendered image data.

Features and functions

With the number of functions available in *ImageFX*, most too numerous to mention let alone explain, a summary list has been added to the review as well as images depicting various image effects. Below are some of the features available.

ImageFX is completely user configurable allowing customizable menus and hotkeys. Macros enable a process or series of processes to be recorded and repeated as many times as neccessary. A command shell interface is available at the press of a key to allow manual entry to all of *ImageFX*'s functions. ARexx is also able to access all of the functions available in the program. ARexx is popular for animation as frames created by the computer can be loaded into *ImageFX*, processed and saved automatically using an ARexx script.

A preference screen enables configuration of the program. Options for the Preview select this buffer to display from Amiga hardware (AGA on the A1200/A4000) with controls for dithering, or from the third party devices DCTV, Firecracker24, HAME, IV24 and Opalvision. There is even a SuperAmiga mode which uses any screen mode in the Amiga monitors directory.



Oil Painting

ImageFX supports the Sharp JX100 and Epson scanners, along with Framegrabber, Vlab, IV24, and the PP&S framegrabber.

Rendering is possible to all the devices supporting the preview display. Included is the ability to use such devices as Retina, EGS Spectrum, Foreign (for use on platforms other than Amiga) and SAGE compatible boards like Resolver. In addition, DCTV and HAME do not require the hardware to operate and the images can be saved for display on these devices.

Printing can be done to any printer supported by the Amiga preferences. Postscript printing is also possible as well as the ability to to export postscript (PS or EPS) files to use in desktop publishing programs.

An important feature of *ImageFX* is the ability to create a space on the hard drive for use as Virtual Memory.

The Main Toolbox

The Toolbox is the main menu panel and where all the action takes place. All of the main image modification and analyzation is done through this menu. Along the top of the panel are all the utilities of a paint program such as line, fill and geometric tools, spraypaint and cut & paste.

Region limits areas of an image to be processed. Balance uses sliders to alter the colour levels. Composite gives control to the varying ways the swap buffer and main buffer images are combined to form one image. Size allows an image to be scaled in overall dimensions, cropped to remove edges or set the aspect of horizontal or vertical pixels.

Measurements can be in pixels or numerical values and halving or doubling buttons enable quick and easy operation. Color provides a selection of colour effects or a custom menu where a curved graph can be altered to remap the image's colour to the curve. Predefined remap curves can also be loaded. Convolve creates image distortions by replacing pixels with averages of their surrounding colours. Likewise, custom convolutions can be performed or loaded and saved.

Filter is useful for video applications as it can reduce the amount of colour bleeding and illegal colours by using dynamic ranges or RGB colour limits. Finally Hook brings up a requester to load programs and modules

Comparison

Look for our head-to-head comparison with the new Art Department Professional 2.5, coming soon.

accompanying *ImageFX*. Additional processing hooks are blackout (removes black component of images for printers using separate colour and black ribbons) and spiral (warp image in a circular motion).

Programs included are *ImageFX Multiple Image Processor* (IMP), capable of processing entire ranges of frames, and *Cinemorph*, which produces image morphing using a mesh technique to alter entire grids of pixels instead of the usual point morphing. The result is faster morphing with less distortion to untouched areas of the image.

New features

Most of the new features in the upgrade are improvements over older versions and provide improved ease of use. Several new features do appear however, such as a definable multi level undo, seven drawing palettes and a render palette instead of one of each, pressure sensitive tablet support, new display driver options, prefsII printing for improved colour 24-bit printing (claimed by GVP to be the best quality printing available for the Amiga), new loaders and savers, a new 256 level Quantize for reducing 24-bit palettes, and all new drawing tools and modes to improve overall speed and operation. A summary of the features appears at the end of this review.

Verdict

If it's image processing you're looking for on the cheap with standard results then there are programs like *Personal Paint*, but be prepared to wait for your image because these programs can be slow. *ImageFX* on the other hand is fast, easy and efficient.

This quality does come at a price but compared to similar packages you're paying no extra once you purchase the add on extras like the hardware drivers, multiple image handlers and image painting software. *ImageFX* provides features galore in a complete processing solution. ❑

Image FX features

Scanners/framegrabbers
Epson, Sharp JX100, Vlab, Framegrabber, IVFG

Printers
Preferences, Postscript, Prefs II

Preview devices
Amiga, Amiga AGA, DCTV, FC24, Hame, IV24, Opalvision, SuperAmiga

Render devices
Amiga1.3, Amiga/AGA, DCTV, EGS, FC24, Foreign, Hame, IV24, Retina, SAGE, Opalvision

Loaders
Alias Pix, Amiga icon, Anim, BMP, DCTV/Clip, DPIIE, FLI/FLC, GIF, Hame/Clip, ILBM, IMG8, Impulse 12/24-bit, JPEG, Macpaint, Multi-FAXX, PCX, PGMBinary/Text, PPM Binary/Text, QRT/DKB/POV, Rendition1/2, Sculpt Grey/RGB, Single-FAXX, Targa, Tiff Intel/Motorola, VMEM, Windows 3.0 icon, YUVN

Savers
Alias, BMP, Clipboard, ILBM, JPEG, PBM, PCX, QRT/DKB/POV, Rendition, Sculpt,Targa, Tiff, VMEM

Palette
RGB, HSV, CMY, YIQ, YUV

TOOLBOX

Region
Full, Box, poly, free, Flood, Brush

Balance
RGBV, HSV, CMYK, Color, Gamma

Composite
Transparency Include/Exclude/Closeness, Merge, Matte, Add, Subtract, Imagemap, Alpha Frisket/Texture

Rotate
Any angle, + - 90, 180

Size
Scale Smooth/Fast/Border, crop, Set aspect

Color
Custom, Negative, Solarize, Posterize, False Color, Grey to Color, Color to Grey, B&W to Grey, Halftone

Convolve
Custom, Sharpen, Unsharp mask, Blur, Motion blur, Relief map, Edge detect

Transform
Flip Horizontal/Vertical, Mirror Horizontal/Vertical, Roll

Filter
Dynamic range, RGB Colour limit, Antialias, R.I.P.

Effect
Remove feature, Oil Transfer, Disperse, Roughen, Distort, Wave Distort

Draw Modes
Matte, Lighten, Darken, Color, Gradient, Colorize, Hue, Saturation, Value, Blur, Rub through, Trace through, Add, Pantograph, Felt tip, Sharpen, Trail

Edge
Normal, Antialias, Feather in, Feather out

Hook
Antique, Balance, Blackhole, Blackout, Cinemorph, Deinterlace, Explode, GrabFC, Hist, ImageFX Multiple image Processing, Interlace, Measure, PI, Pixelise, Rampedge, Spiral, Variance

Quantize
MedianCut64, Enhanced64, Tibbet256

Other program functions;
Aspect lock, Disable verify, Disable undo, Coordinates and Metric.

Rocket Power

for your A1200

by Daniel Rutter

There's a certain hoonish appeal to putting huge power into small machines. How else can you explain VW Beetles with the back seat removed in order to fit a nine litre V12 engine?

The less expensive and offensive variant in the Amiga world is taking a small Amiga - originally the A500 but now the A1200 - and giving it far more processing power than anybody could reasonably expect to find in such a small package.

I'm typing this article on a worked 68030 powered A500, and I'm proud to report that the tradition of souping up baby Amigas continues, with GVP's release of the A1230+ A1200 expansion, which gives the little 1200 literally twice the power of the old flagship, the A3000.

Turbocharging A500s is hard to justify for any purpose beyond the abovementioned Cooper S Mini philosophy, but a fast 1200 is a rather neater machine for portable use. It's got an RF modulator and colour composite video out built in, so you can use it as an easily moved demo machine that can plug into just about any video output device.

The problem has been finding powerful but reasonably priced expansions. GVP have now got a serious contender.

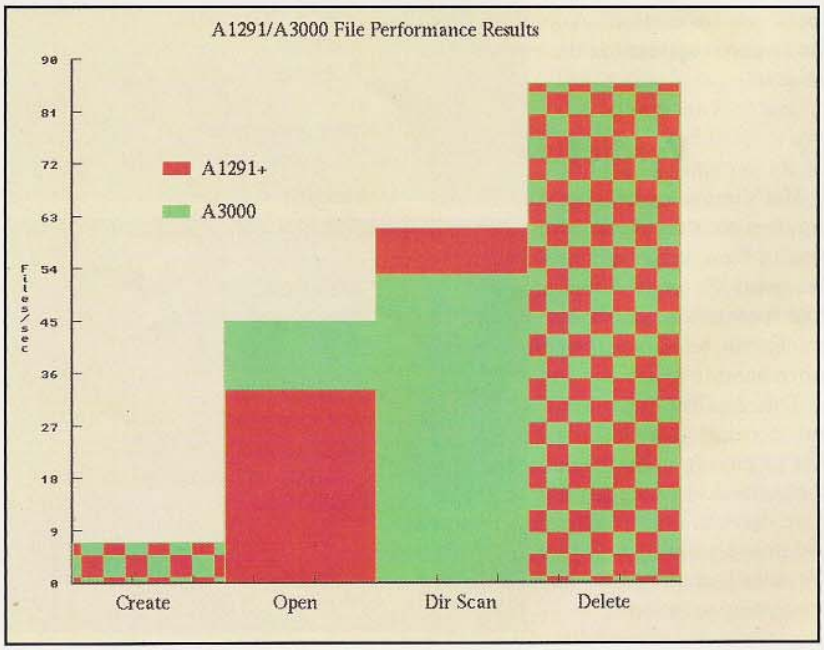
The next wave

GVP have produced A1200 expansions before, the original A1230 Turbo and their SCSI-RAM board. The old 1230 featured a 40MHz 68EC030 processor and optional maths coprocessor, the same as the earlier A530 side box for the A500. Fast this board certainly was, but it was the only GVP accelerator board for ages to lack a SCSI hard drive controller and hence didn't sell terribly well.

The A1200 has a hard drive controller built in; it can actually take up to two 2.5" IDE hard drives inside with a little tweaking. If you want to connect any of the groovier expansion stuff - Syquest or Bernoulli removable cartridge drives, tape backups, monster scanners - you need SCSI, and the A1230 didn't have it.

Fact Box
GVP A1230+ and SCSI Adaptor
Distributed by Peripheral World
(03) 725 3233
Australian street price: from $849

So GVP released their SCSI-RAM board, which had the hard drive controller, room for RAM and a coprocessor socket but no accelerator. Once again, close but no cigar; the A1200's 14MHz 68EC020 processor is quite fast, particularly with the double speed boost that fast RAM gives it, but still not swift enough for heavy duty applications like rendering and desktop publishing.

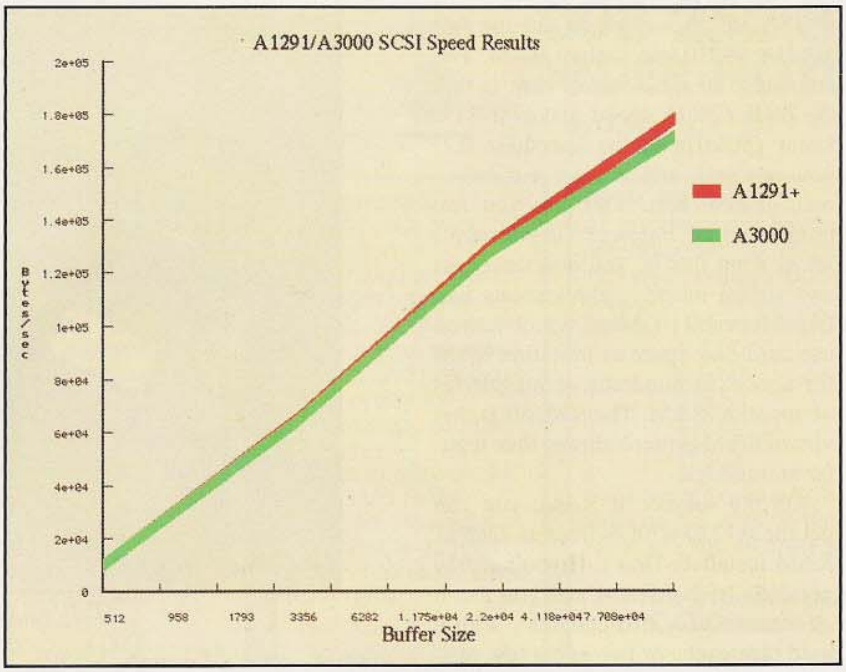


Now you can get RAM, 030, SCSI, battery backed clock and coprocessor all at once, in a rather more elegant package - the new A1230 Turbo Plus.

What do you need?

The problem with making an all-in-one package like this is that many users genuinely don't need SCSI. GVP have got around this by using the A1291, a $200 daughterboard that plugs into the main trapdoor expansion. If you don't need SCSI, don't buy it.

Likewise, the 68882 maths coprocessor is optional. Just as well, since the 40MHz version will set you back $350 and the 50MHz $400, and they're only useful if your applications actually support them. For rendering a coprocessor's great, for spreadsheets it can be useful, for word processing it's as functional as a bullbar on a tank.



Okay, Okay, So It's A Digital Time Base Corrector, But can it...?

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Plus – NTSC/PAL/SECAM Signal Standards Conversion to NTSC/PAL for integration into worldwide video environments automatically.

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Plus – Full Processing Amplifier (ProcAmp) Control for correcting or adjusting incoming video "on-the-fly" quickly and professionally.

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Plus – Convert the 2–composite inputs into a single Y/C input, providing two switchable Y/C inputs.

Plus – Full SMPTE/EBU encoding/decoding/striping available as an option.

Plus – much, much more!

"This is simply the most powerful and flexible video stabilization device for the Amiga computer. The TBCPlus makes an excellent complement to any GVP IV24™, NewTek Video Toaster™, or Centaur OpalVision™ Graphics System. The Plus means it also offers more!"

Gary Gehman, President Magic Bullet Communications, Inc.

GVP

Distributed in Australia by
Peripheral World
506 Dorset Road, Croydon, Victoria 3136, Australia.
Phone: 03 725 3233 Fax 03 725 6766

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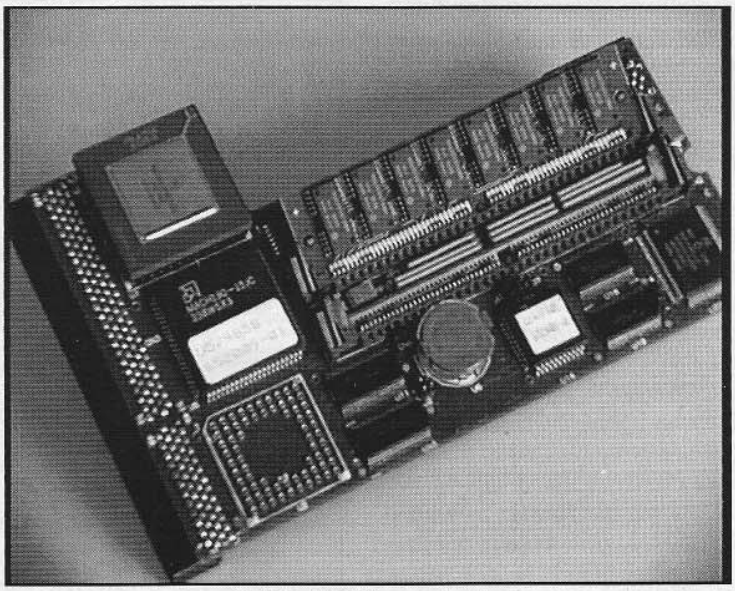
The A1230 we tested had the full 50MHz 68030 and 4Mb of RAM. The advantage of the non-EC chip is that the higher clock speed makes it 25% faster (50MHz is the speediest 030 you can get), and it's got a memory management unit. This lets you run programs like *Enforcer* (if you don't know what this is, you don't need it) and virtual memory applications like GigaMem and HDMem, which let you use hard disk space as imitation RAM for access to hundreds of megabytes of apparent RAM. The tradeoff is that virtual RAM is much slower than regular storage.

On the subject of RAM, you can get the A1230 with as little as 2Mb of RAM installed. Don't. If you've only got 2Mb of fast RAM and you use it all - not a very difficult feat, with a hard disk cache or two and a few resident programs on top of a normal multitasking load - your system will suddenly take a leisurely holiday in the Land of the Cabbage, running considerably slower than your original 020. This is because fast processors in the Amiga architecture must have access to fast RAM, or the bigger the processor, the slower it runs. Sounds weird, but that's the way it works.



GVP's A1230 accelerator

So 4Mb is essential, or more if you run lots of programs at once or handle monster files. The 1230 can actually fit up to 32Mb of RAM, but this will cost you very large dollars and is far more storage than most people need. The board has two SIMM memory sockets, and can take 1Mb, 4Mb and 16Mb SIMMs in any combination. This means you can configure the board with one, two, four, five, eight, 16, 17, 20 or 32Mb of RAM, although as I said above the first two options are largely useless.

The need for speed

Now to the juicy bit - the speed tests. The standard high powered Amiga for the last few years has been the A3000, powered by a 25MHz 68030 with coprocessor clocked at the same rate and using the old ECS chip set. The A1230 with coprocessor is, in every processing department, twice as fast as the once-mighty 3000. Remember that the machine we're talking about here is smaller than an Amiga 500 and can have a couple of hundred megabytes of hard disk storage inside it.

The A1291 SCSI controller card is nothing special. It's the standard GVP Series II SCSI interface, as used on every other recent GVP controller and with precisely the same performance. When I tested it against the SCSI speed of a stock A3000's internal SCSI interface, the GVP board won by a very narrow margin, as you can see in the accompanying graphs.

Regular readers will remember that the chequerboard patterns on the bar graph for file manipulation speeds mean both machines scored the same; there's really nothing much between them. The test drive was a late model 88/44Mb external Syquest, using a 44Mb cartridge, and it had 100 regular buffers and no intelligent caching. The 1230/1291 combo would have pulled ahead further with a cache running, thanks to its extra processor power.

The 1291 is only a SCSI-1 controller, which means you can't plug in more than seven external devices (not too constricting) and you can't use SCSI-2 devices at their full speeds. SCSI-2 devices work just fine with it, though, and are still generally quicker than SCSI-1 equivalents because

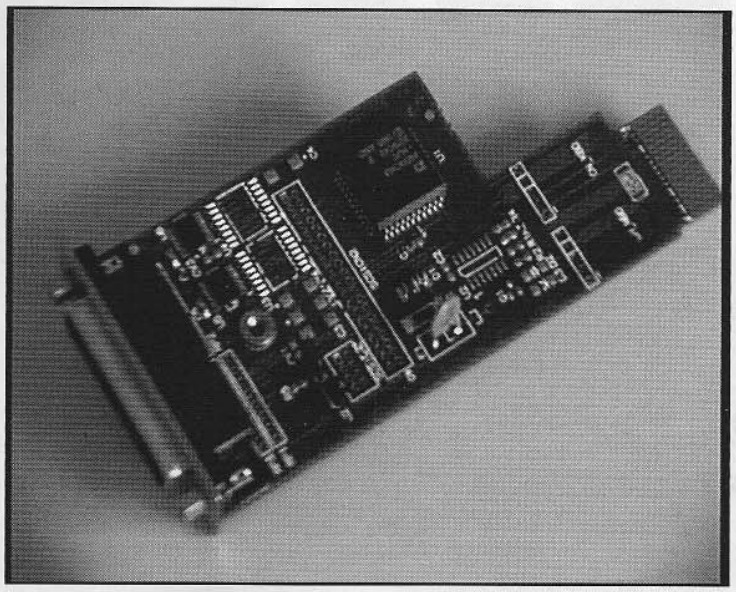
FOR BEGINNERS

What's an accelerator?

It's a plug-in for your computer that completely replaces your existing processor (the CPU - your Amiga's engine if you like), making the machine faster. It doesn't matter what processor you had to start with - identical accelerators will give identical results.

If you start with an Amiga 2000, for instance, and put a 68030 accelerator in it to replace its existing 68000, you'll get exactly the same processor speed as an Amiga 1200 with an identical 68030. it doesn't matter that the 1200 started out with a 68020; the accelerator bypasses the existing processor.

Of course, this does mean that the 1200 owner paid for a 68020 processor instead of the much cheaper 68000 and then didn't use it, but this is compensated by the fact that the 1200 is a newer and better built machine which does graphic operations - which are not closely related to processor speed - twice as fast as the 2000.



The SCSI extender

they're generally later models.

The SCSI controller IS respectably quicker than the internal A1200 hard drive, but I couldn't do a meaningful test because it was of course impossible to test both controllers with the same drive.

If you get a 1231 with no SCSI controller, using a disk cache like HyperCache on the internal A1200 drive would be an economical alternative. Caches work most dramatically on machines with slow drives and fast processors, which is certainly what you've got.

GVP mention that the socket that the A1291 plugs into can take other, exciting expansion devices too. Yeah, sure. They said the same thing about the expansion slot in the A530, which can take an 80286 PC emulator card and that's it. I'll be surprised if anything very new comes out for the 1230, although a SCSI-2 interface isn't out of the question.

Value for money?

The biggest consideration about these large A1200 expansions is whether they're really a good deal. After all, an A4000/030 gives a lot more room for extra internal expansion, so you save on external boxes. How do the prices stack up?

Well, the A1230 in 40MHz EC030 trim with 2Mb costs $849. With 4Mb - the cheapest useful config - it's $1049. The 50MHz version costs $350 extra. If you want 8Mb of RAM it's $399 more. The A1291 costs $199, and the coprocessors $349 for 40MHz and $399 for 50MHz.

Ignoring the price of a monitor, a 4000/030 costs about $2700. It has a 25MHz 68EC030, a 120Mb IDE hard drive and 4Mb of RAM. So to get a 1200 with the same power (a bit more, actually), you're looking at maximum prices of $1000 for the basic machine, $450 to swap the drive for a 120Mb, and $849 for the basic A1230. This is about $2300, and gives you a machine that's 60% faster for 15% less.

Let's say you go for broke. A 1200 with the 50MHz full 030, 8Mb of fast Ram for a 10Mb total and a 68882 coprocessor, along with the SCSI board, costs about $3,200. As shown above, this gives you a machine with twice the speed of a 3000 and twice the speed of a 4000/030 on everything except graphics. You've got AGA graphics, just like the 4000/030, and a 40Mb internal drive for you to boot from. Stick your application software on an external SCSI drive for speed and you're in business, with the most computing power per cubic centimetre outside the Batcave.

Wrap-up

The big advantage of a worked A1200 over the more expandable 4000 is its compact size. If you don't want another box in the house, or you need a portable machine that you can take anywhere and plug into a TV for spectacular SCALA presentations, showing off your rendering talents to potential clients or simply giving you high powered Amiga computing in whatever hotel you happen to inhabit tonight, this is the machine for you.

It's not cheap, but neither is it ridiculously expensive. The new GVP expansions aren't for everyone, but they've definitely got a place in some people's 1200s. ❑

What are all these processor numbers?

The 68000 is the basic low power processor, now only available in the baby Amiga 600. It dates back about 15 years. The 68020 is the processor used by the old A2500 and new A1200, and gives around five times the performance. The 68030 is used by the A4000/030 and older A3000, and goes at about ten times 68000 speed. And the 68040, only used by the A4000/040, burns along at something in the vicinity of 40 times the 68000.

The reason these figures are rough is that processor speed is determined first by its type - 020, 030 or whatever - and second by its clock speed, expressed in megahertz (MHz), or millions of cycles per second. The standard 68000 Amigas run at 7MHz. The A1200 runs at 14MHz. The 4000/030 and A3000 run at 25MHz. The 4000/040 runs at 25MHz. And accelerators go right up to 50MHz; for some tasks, a 50MHz 030 beats a 33MHz 040, but don't think that makes it better.

020, 030 and 040 accelerators are available for the Amiga 2000. You can get 020 and 030 accelerators for the A500, and can shoehorn in an 040 if you happen to be stark raving mad. The A3000 can take 040 accelerators, and faster boards for the A4000 models are in the works. The new 68060 chip promises more than twice the speed of the 040.

VIDI AMIGA 12 & 24 RT

It's now affordable to capture high quality video images on any Amiga. Daniel Rutter checks out the latest solution from Rombo.

The Vidi Amiga 12, reviewed in *Amiga Review* back in August 1993, brought colour video digitising to the masses for less than $300. Amigas have been able to digitise and manipulate video from cameras and VCRs for ages. However until now you could have any two of either cheap, fast or good quality - but not all three!

The new Real Time (RT) VIDI digitisers cost more, but for a reason. Real Time is a confusing term - after all, when was the last time you saw something happen in fake time? In this case, Real Time simply means with no delay - as soon as you click on the Grab button, your image is stored in the Vidi box.

To do this, the framegrabber must be able to capture a single video frame. Video runs at 25 frames per second, so this is quite a tricky thing.

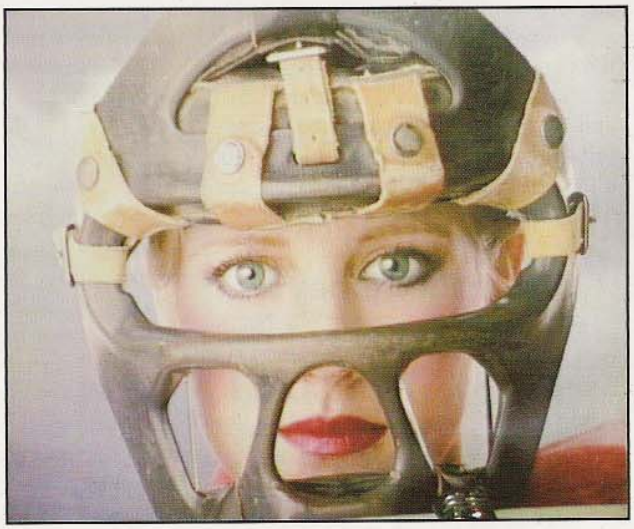
On the older VIDIs, your picture would get badly messed up if there was any movement in the input video during the first stage of the grab, which could take a second or so. There was no way you could digitise from moving pictures, unless you worked in very low resolution. Getting a good quality shot of anything that wasn't sitting very still was impossible.

You could get around that by recording whatever you wanted to digitise and grabbing it from your VCR's freeze frame, but if your VCR or camera didn't have a rock solid pause, like you get from four head VCRs and cameras with digital still, then your images were still screwed up.

Fact Box

Vidi Amiga 12 RT $449
Vidi Amiga 24 RT $749
Available from
Amadeus Computers
(02) 652 2712
Comprepair (03) 326 0133

Output from the Vidi Amiga 12 RT ... and 24 RT



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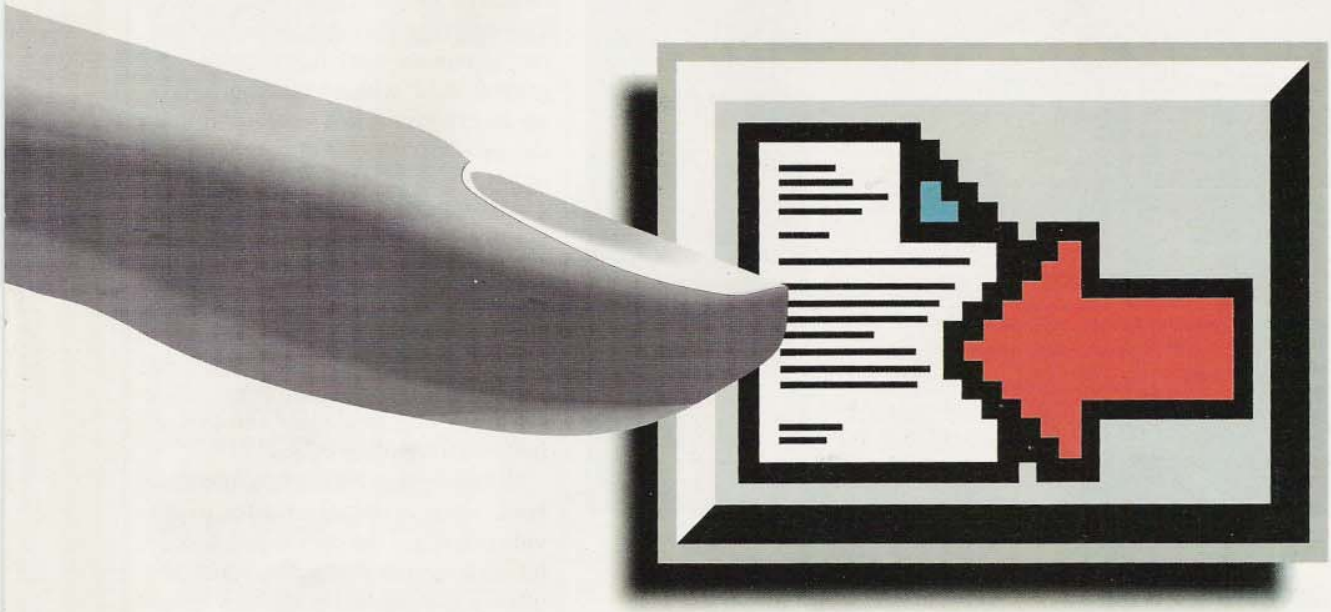

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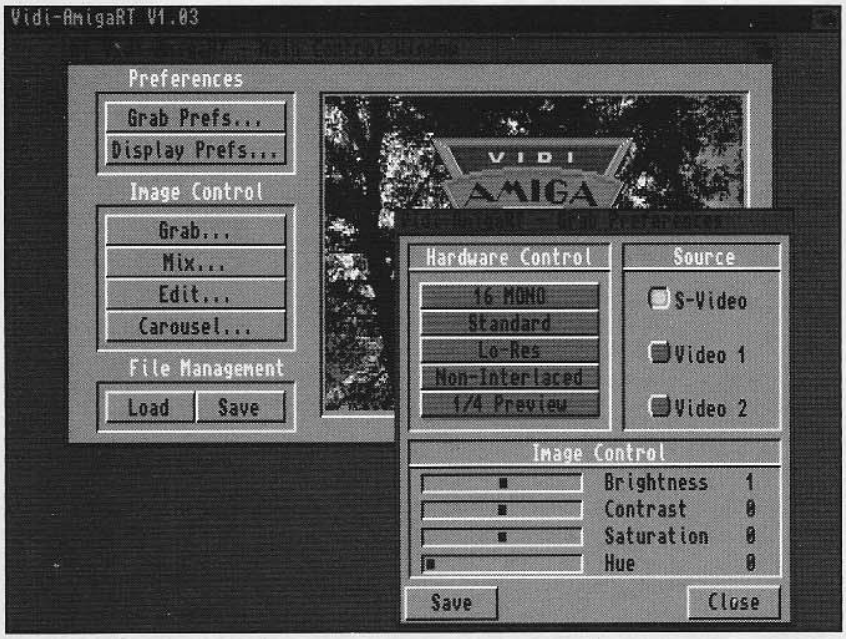

The software is the same for both the 12 RT and 24 RT

What's new?

All This Has Changed with the introduction of the Vidi Amiga 12RT and more powerful Vidi Amiga 24RT. The real time option now means that they genuinely work like a slow frame grabber card, without needing to take up an expansion slot - they plug into the parallel port - or put a giant hole in your bank balance.

What's a frame grabber? It's a hardware device for people heavily into video digitising which takes a frame or frames out of incoming video and, typically, stores it as 24 bit data in its own memory. The 24 bit data gives 16,777,216 colours, the most you'll see in any digitised image and enough for photorealistic pictures.

To view this data, you can either hook up an external monitor to the video card, get the card to talk to a 24 bit card in your computer, which it's often a part of, or render the image

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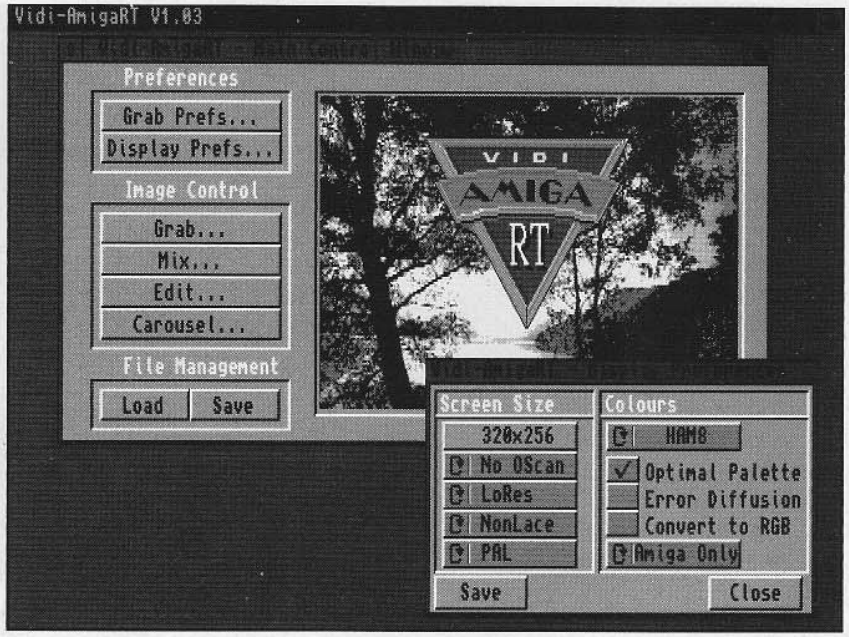
with fewer colours so that your system can display it without extra hardware.

A lot of the heavy duty image manipulation is done by the hardware on the frame grabber, which is why they're so expensive, but fast.

What's missing?

The VIDI Amiga units have a lot less processing power than a professional frame grabber. All they do is grab red, green and blue components of the incoming video and leave rendering images up to the computer itself. The result is digitised images that look as good as those you get from far more expensive hardware, but which take longer to grab.

The two versions of the Vidi RT cost $749 for the 24 and $449 for the 12, including mains adaptor (beware dealers who sell you the box with nothing to power it!).



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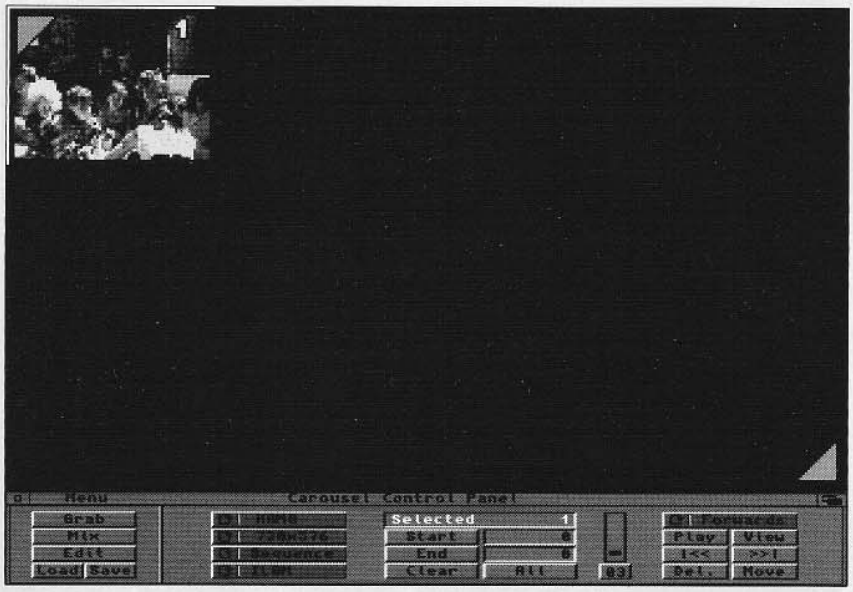


The Carousel screen

The difference is that the 24RT can grab high resolution images - the 12RT is limited to low res. Both can do interlaced pictures, though, and on an ECS machine that can't do high-colour high resolution modes like HAM-8 and 256 colour, low res interlace HAM is as good as you'll get.

Making animations

The other major application for the Vidi digitisers is making animations. You can do automatic multiple grabs until your memory's full, and if you've got a machine with a few megabytes of RAM (the 24RT requires at least 2Mb, the 12RT can get along with one) you can grab quite long sequences, provided you resist the urge to put them all in high res HAM-8.

If you use, say, 16 colour grey scale, you can grab images quite quickly. You'll never make a live action movie - the grab process is too slow - but for time lapse photography or stop motion animation the Vidi package is quite good.

You can set the time lapse feature to work from external triggering - pressing the button of a joystick in port 2 will grab a frame. If you wire your own cable for this, you can hook the trigger to almost anything and grab pictures of unsuspecting wildlife, burglars, Royal lovers or whatever without any human intervention at all.

You put the animation frames together on the Carousel screen, which lets you arrange, modify and delete frames, select the range you want to play and save any given frame or range of frames as regular pictures or as an IFF animation file that can be loaded by any other animation package. You can load previously grabbed or other pictures as part of your animation.

The software's the same for both digitisers, and anyone who's used the old Vidi software will be immediately at home. The interface is functionally identical, and just as clumsy - the interconnection of the grabber panel, the mixer to change image formats and the carousel to set up animations could be a lot better.

Once you get used to it, though, using the software's quite fluid; the major problem remains the interminable length of time it takes to mix and display images on even quite quick Amigas.

If you're using a 68000 based machine and decide to render a laced hold and modify picture, you'll have to line up the completion indicator with a pole to see if it moves. Ditto for A1200 owners going for high resolution laced HAM-8 images; the results are stunning, but the wait's quite a while.

You can save your images as 24 bit IFFs for the best possible reproduction, but only people with big graphics boards will then be able to view them. They're good, though, if you want to do more powerful manipulation of the image with a program like Art Department or ImageFX.

Special effects

On the subject of image manipulation, quite a few special effects are built in. Averaging, blurring, brightness, contrast and colour balance adjustment, convolve (a powerful multipurpose effect), edge detection, embossing, dynamic range extension, flipping, gamma correction, negative, pixelisation, sharpening, cutting, pasting and more are available, and all are undoable.

For professional use the Vidi effects aren't much cop - if you're serious, use *ADPro* or *ImageFX* - but for home applications they're brilliant fun. The ability to use them on any picture you choose to load gives whole new possibilities for the package.

The Vidi RT's manual is not great. It's got a few cross-references that don't match the pages, it's cheaply printed and not very efficiently arranged. It tells you what you need to know, but not without a bit of effort.

So, overall, the new Vidi Amiga RT is the rather niftier upmarket cousin of the old version, with superior grabbing speed but much the same software and the same unavoidable problems with slow image generation.

If you're not in a tearing hurry - a minute seems an age when you're staring at a screen - and you want a high quality video digitiser that's well under a thousand bucks instead of well over, then the Vidi Amiga RT models are for you. The 12RT costs enough less than the 24RT to make it a better option for ECS machine owners, while the 24RT is the perfect companion for a 1200 or 4000. ❑

Clean up your Video

GVP's TBC Plus

Peter J. Ward reviews a new plug-in time base corrector board

Many novice videographers who have tried their hand at a wedding video, school sports carnival or even a training video for work may have noticed their video footage mutating from quite viewable on the original camera tape to a fuzzy, colour bleeding mess on the VHS distribution copy. By the time it has been edited, had some background mood music added, and even perhaps a few titles added by your trusty Amiga and a genlock, the video masterpiece you had hoped for is no more.

There are many things you can do to improve this situation. For example, use a Hi-8mm or S-VHS tape and shoot in plenty of light. Similarly, all editing should be done on Hi-Band equipment.

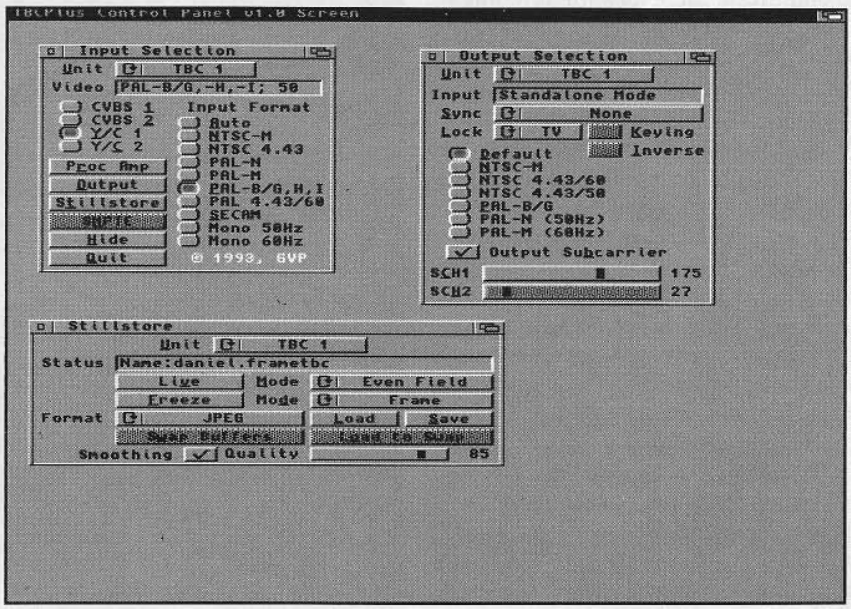
However, the sad reality still remains. As a videotape is played, recorded, played and recorded again tiny timing errors in the video signal are generated by slight slippage and stretching of the tape. As each generation is recorded, the errors are amplified, and by about the third generation all is not well with your hard won images.

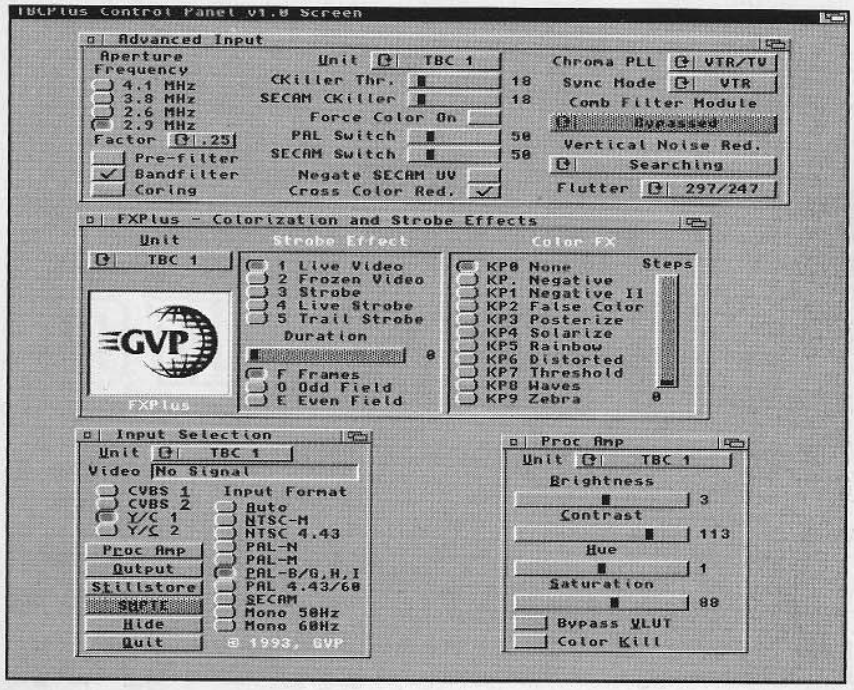
Enter the Time Base Corrector. These marvellous devices effectively remove all the unwanted jitter and slippage from a video tape signal by reading an incoming video field, and playing it back at a properly metered rate with all timing errors removed. Video professionals have used these devices for decades, and not surprisingly, associated prices for these black boxes have been in the tens of thousands of dollars.

The TBC Plus

GVP have recently introduced the TBC Plus, a fully featured time base corrector that costs about the same as a PC. Though not unique among TBC's now available for the Amiga, the TBC Plus does represent the latest generation of plug in TBC boards.

The TBC Plus is supplied with two 3.5 inch floppies with self installing software. Just a few mouse clicks is all you need to have the software functional on your hard disk. The TBC Plus board requires Kickstart 2 or later and resides in either a Zorro II or III expansion slot. The manual consists of approximately 160 spiral bound





pages, and includes a tutorial and reference section.

The manual explains all of the functional aspects of the TBC-Plus, and includes many Arexx script examples for each element. It also has an index, which though not extensive is functional enough.

The name "TBC-Plus" is no marketing gimmick. This board represents a significant step forward in Amiga TBC hardware. Apart from a time base correcting function, you can also transcode Y/C and composite video signals, perform standards conversion between PAL, NTSC and SECAM video standards, grab 24 bit still frames from live video, perform real time special effects and process incoming video hue, saturation, brightness and contrast (known as a Processing Amplifier in video jargon) in real time. Owners of *Image F/X* also have access to direct manipulation of images stored in the TBC frame buffer.

Having tried rival TBC cards out in my Amiga-based editing suite on previous occasions, I must admit to being somewhat blasé on receiving the TBC Plus for review. My attitude quickly changed on seeing the quality of the TBC Plus output. This card visibly improved the signal even prior to going to tape!

The control software is fairly intuitive, though it does pay to spend a little time with the manual to find out exactly what each control does.

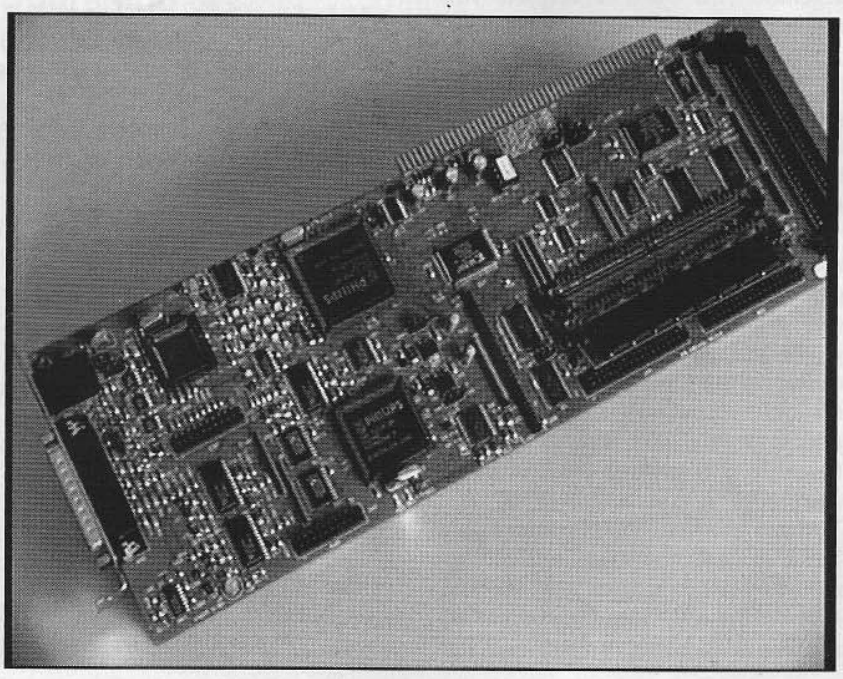
Fine tuning

Particularly impressive is the composite video filtering and enhancement. The TBC-Plus will let you vary the frequency at which the colourburst subcarrier is separated from the video waveform - in short it helps remove "colour noise" from the picture. Elements such as luma delay, automatic chroma control, Y/C gain and chroma delay can also be adjusted.

Almost every aspect of an incoming video signal can be tweaked to give an output which is truly broadcast quality. I was a little disappointed with the chroma delay control, which is -37, 0 or +37 nanoseconds only. I have used other TBC units with chroma delay adjustable in single nanosecond increments over the same range.

Yet another commendable feature of the TBC Plus is the ability to have several video inputs directed to the card at any one time. This is achieved through a multi-cable connector which accepts Y/C input and output, two composite video channels and a blackburst or studio sync input.

Reading this list may lead you to believe you can time base correct two channels at the same time. Not true. Only one channel can be processed at



any one time, but you can A/B switch between sources, be they synchronous or asynchronous. The TBC Plus will also send out an advance sync pulse for servo locking video tape decks and read and generate linear time code, provided the optional time code module is installed.

Image F/X Support

The TBC Plus software has an F/X Plus menu which allows numerous real time video manipulations. The effects are pretty weird, with negative, false Colour, posterised, solarised, rainbow distorted and other effects available. There are also time based effects such as strobing and trailing and freeze frames. If you are about to make a rock video clip, this could the stuff dreams are made of.

The negative feature has some interesting possibilities, as photographic negatives could be converted using this feature and a standard video camera. These could be subsequently saved as a 24 bit IFF images, or simply placed directly onto video tape.

There is an additional digital comb filter option available for the TBC Plus. Comb filters extract the chroma and luma signals from a composite video waveform for separate and hence better signal processing and output. It would not be of much benefit to users of component sources, which is why it's an option.

Owners of Image F/X can use the TBC Plus as a frame rendering device. The frame buffer is easily called up from within the Image F/X "render" menu. Still image special effects, processing or enhancement can be performed on a standard Amiga screen with the final 24 bit output (well, almost 24 bit) being sent to the frame store in the TBC Plus.

The results are then viewed on either a composite or Y/C colour monitor. It is here that you can begin to appreciate the quality of the TBC Plus encoder circuitry. Its encoded output has minimal cross colour and excellent saturation and rivals many dedicated 24 bit RGB display cards.

Wrap-up

The TBC Plus for less than two thousand dollars can give owners of professional, semi-professional and even home video equipment access to multiple generation video editing with minimal signal degradation. Indeed its signal enhancement circuitry can actually improve lousy video footage. With its built in processing amplifier functions, multiple inputs, foreign video standards conversion and real time video effects, the TBC Plus is unique in the video marketplace. If you are in the market for a time base corrector, GVP's TBC Plus in an excellent choice. ❑

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Scala MM300

Synchronises Multimedia

I have created numerous multimedia presentations for companies such as Fujitsu, Techway and Tech Pacific - all using *Scala*. I have yet to see a multimedia presentation on any computer platform which compares with one created using *Scala* on the Amiga.

The latest version continues the tradition of powerful features through an increasingly easy to use interface. However, it is not simply a minor upgrade. MM300 contains many impressive new features.

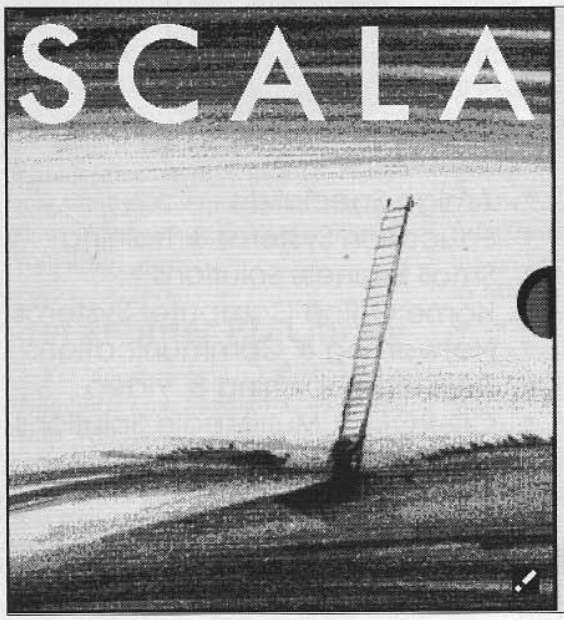
What's new?

As usual, a few subtle changes in colour schemes and the location of familiar buttons give the appearance of a new program. However, in operation MM300 is almost identical to MM200.

The new File Requester has a gadget which reveals a thumb nail version of all images in the current directory - including brushes, animations and pictures. Like the Shuffler, this function is a tad slow the first time you use it. Once Scala has scanned the directory, a permanent image is stored in the icon .info file for next time. Selecting images to be included in a presentation is now considerably faster.

You can now composite multiple images onto one backdrop. *Scala* achieves this using a combination of super fast dithering, and image scaling along with clever palette optimisation. The speed must be experienced to be believed. It is considerably faster than *Art Department.*

Drawing tools let you create lines, rectangles and circles which can be resized and moved - plus enjoy the usual transitions and styles. Previously *Scala* was largely restricted to presenting rather than creating graphics.



Andrew Farrell checks out the latest upgrade to the worlds favourite multimedia package - Scala.

Timing

Scala previously had some limits in the timing area. However, MM300 has been partially rewritten to allow for far more sophisticated synchronisation of events. MIDI and SMPTE driven scripts are now possible, allowing for improved use in video based applications. The use of absolute time points allow you to easily sync up a presentation with a prerecorded video segment or other absolute events.

> ***"super fast dithering, and image scaling..."***

Optimise palette will calculate the best colour palette for a page when several pictures, brushes and text colours are used on the same page.

Brushes and pictures can be resized on the page or when you import them. They may also be cropped and moved as often as you like, or converted to different sizes, resolutions, numbers of colours and so on.

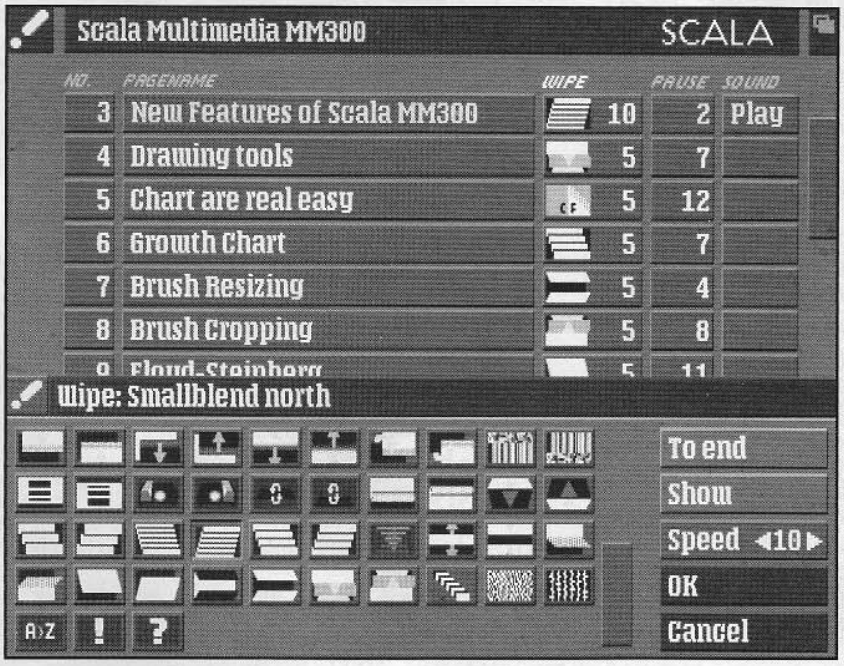
Thumbnails from the file requester

At last the sound on button option has been restored (it showed up in a beta of MM200 then disappeared!). Anti-aliasing also functions better to help create smooth, flicker free text.

Other new features include Automagic button creation, new wipes (FadeToWhite, Nuclear, Random, Dissolve, Ants, Rollodex, Flipover, and Ccccut), better horizontal scrolling, separate underline colour, new backgrounds, transparent boxes, hard disk sound playback and 24-bit picture preview.

New EX modules included are MIDI 2.0, CDTV 2.0 (with the ability

Additional wipes and transitions



Scala vs Mediapoint

A new player arrived on the scene just as Scala MM300 was released. Mediapoint is less expensive, does not require a dongle and offers superior scheduling capabilities. However, the interface is not as pleasant to use and many of the real smart features are lacking. Whilst Mediapoint would be a strong competitor with MM200, the new version is considerably more advanced. Mediapoint is no competition for Scala MM300.

to play from within any track) and various genlock and 24-bit EXes. Overall, a very impressive number of improvements. It will be interesting to see how the new competition stacks up.

Wrap-up

Upgrades are available for $200 complete with new manuals, disks and a new key. Fast turnaround is promised, so you won't be without your Scala dongle for more than a few days. The new version MM300 has a street price of $549. For more information call Power Peripherals (03) 532 8553.

Overall, a very worthwhile improvement to a great program. ❑

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Search for Sanchez

by Greg Abernethy

I'll kick off the new education column by reviewing a great new title from Rush Software. Situated at Gerroa, on the New South Wales south coast, Rush has produced a large range of quality educational titles, some of which I'll review in future issues.

As a top investigator with G.I.A.N.T. it is your job to capture the agents of R.U.N.T. (Really Untidy Nasty Types), who have parts of a code that will enable you to find the location of Sanchez' hideout. You must then negotiate a maze to be able to enter his hideout and capture him. Your job is made harder by the fact that the agents have logic bombs which, if not defused, scramble thought patterns, causing confusion and loss of memory. To defuse a logic bomb you have to solve a logic puzzle, and these include word scrambles, codes and pattern matching. I found the puzzles were challenging and fun, while not detracting from the smooth flow of the game.

You are assisted in the field by Agent 13 who gives you information on the location of the enemy agents. All the information is in the form of clues, such as "The RUNT agent was headed for a famous landmark opened in 1932". It is up to you to decide which city in Australia matches the clue.

There are a large number of clues for the various cities around Australia, some easy to solve, others requiring some research. Also, several of the clues involve latitude and longitude, causing me to dust off the trusty school atlas.

My daughter spent many long hours chasing the agents of R.U.N.T. around Australia and very quickly learnt how to use her atlas correctly as well as knowing the location of all the major cities in Australia.

Although rather simplistic, the graphics throughout the program are colourful and give the game a comic book feel. There are several animations that add a distinct "Maxwell Smart" touch. Sound is used to good effect in several scenes.

I found the game interesting to play, as well as providing a challenging means of teaching the geography of Australia. There were several clues that required the use of an encyclopaedia, and as mentioned above, I became quite proficient at using the atlas to find longitude and latitude readings. The logic puzzles are a great feature of the game, and the word lists used can be edited to suit the user's need.

Games can be saved to disk while you are visiting Head Office. This solves the problem, in a classroom situation, of being unable to finish the game in a specified period of time. There are three levels of difficulty, that are used to determine the length of time available to solve the logic puzzles. Also available is *Search For Sanchez in New Zealand.*

As an educational tool, I feel *Search For Sanchez* is excellent and would recommend it for school and home use. *Search For Sanchez* is available only from Rush Software. For details on pricing and ordering contact them on (042) 342107 or (042) 617442. ❑

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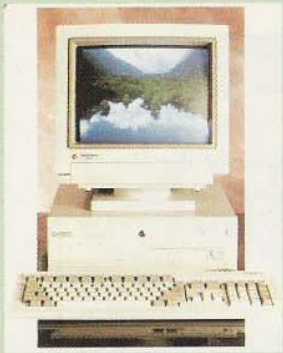

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Icons, RAM Disk and the Shell

In a jam? Need help? Can't figure it out? Write to our new Help Line column where our team of experts will solve your problems and provide plain English answers to get you back on track.

Lost icons

Dear Help Line, I have *Final Copy II* on the hard drive of my Amiga 2000. When I go into my *Final Copy* drawer I can see all the drawers - FC Files, FC Libs, FC Spell and so on, but the *Final Copy II* icon to start the program is missing.

I know I haven't deleted it, so what has happened to it?

Confused,
Albany WA

ACAR: *If the icon hasn't been deleted, it's probably accidentally been moved or dropped into another drawer. Try opening up all the drawers around where your icon used to be.*

It's very easy to drop an icon over the top of a drawer by accident. This tells your Amiga you want to put the file inside the drawer. Once you find it, all you need to do is drag it outside the open window and put it back where it belongs.

What is the Shell?

Dear Help Line, I have recently bought a second hand Amiga 500 from a friend and it is running Workbench 1.3. I am fairly computer illiterate. There is an icon in there called shell. I read somewhere that if you double clicked on this and typed in DIR you could get a listing of all the files on my Workbench disk. I have also been able to list files on my external disk drive by using the CD DF1: command. The problem that I am having is that when I have finished looking around I have to reboot the computer to get rid of this window. Is there an easier way?

Sally Stroud,
Meering Vic

ACAR: *Fortunately there is a faster and easier way to close this window. Try typing in ENDCLI or ENDSHELL into your shell window. Note there are no spaces in either of these commands.*

In the later versions of Workbench - Workbench 2 onwards - there is also a close gadget on all shell windows, a very worthy addition to the software.

Also if you type in CD C: <return> then DIR <return> you will get a listing of all the commands available to you from the C directory.

RAM Disk?

Dear Help Line, Whenever I load Workbench it comes up with an icon called Ram Disk. If I double click on it it opens up a window but there is nothing in it. What does the Ram Disk do and why is it there?

Paul McEwane,
Tourello Vic

ACAR: *The RAM Disk is a temporary storage area. It works like a disk drive, only whatever you put in there is lost when you turn your Amiga off. So, what's it good for?*

Imagine you had to copy something from one disk to another - particularly on an Amiga without a second drive. Enter the Ram Disk. You can copy your file to the RAM Disk, eject the source disk and insert the destination disk.

Now copy the icon or file from RAM onto your destination disk. Hey presto. Small programs can even be put into the Ram Disk with the advantage being that they load much faster from RAM than from disk.

Don't forget though that the RAM Disk is using the computer's memory. The more you put in RAM the more memory it uses. It grows to accommodate the storage space it needs.

You must remember that if you turn off or reboot your Amiga, everything in its memory is lost. This also applies to information in the Ram Disk, so don't forget to save it first before

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rebooting or turning off your Amiga.

A1200 game problems

Dear Help Line, I have just upgraded my A500 to an A1200HD. It's a great machine but some of my old games won't work. Is there anything I can do to make them work?

Ken Ryan
Telegraph Pt, NSW

ACAR: *Yes, there are several things that you can do to make your A1200 more compatible with older software.*

The first of these is what is known as the Amiga Early Startup Menu. As you turn on or reboot your computer, hold down both mouse buttons and a new menu will appear on your screen.

There are several options, but the one you need to select is Display Options. The following menu allows you to choose between three chip emulations. Select Original and then click on use. You may also wish to click on Boot Options and click on the check box next to Disable CPU Caches and select use.

The last step is to put your game disk in DF0: and click on Boot.

Hopefully your game or program will now work.

Another option available out there is a disk called Make It Work by Nico Francois which is in the public domain - which means it can be freely copied and is available very cheap from various freely distributable software libraries. You insert this disk in DF0: and turn on the computer; once it's loaded, select Boot Kickstart 1.3. This program is very good and allows many other older games to work on the A1200. There are also a few other versions of similar programs out there.

Make It Work is available from Wall Street Video as well as places like Amadeus Computers, and PD libraries such as Prime Artifax and Megadisc.

Challenge Corner

Dear Help Line, I have a weird problem that has been irking me for some time. Whenever I run LHARC, my machine guru's. I have tried reinstalling the program. I have reinstalled Workbench. I even asked a friend who is supposedly an Amiga expert to come by and fix it. However, so far nobody has been able to solve my problem. What am I doing wrong?

Kluong Shore
Gladesville

ACAR: *Obviously you have some seriously weird things going down at your house. Has anyone else experienced this problem? Have you tried rebooting? How are you holding your tongue when you run LHARC? But seriously folks, that's an odd one.*

It sounds like you may have some strange hardware problem. Do any other programs act up? Are you sure you're copying the new LHARC over the old one? Make sure you're not getting a protection bit set error - which means the old LHARC can't be deleted.

DirOPUS can fix the problem by highlighting the file and selecting protect. Make sure deletable is ticked.

Anyone with any more ideas should send them in to our Challenge Corner, 21 Darley Road, Randwick 2031.

If you've got a really tough one, send it in to us and we'll try to help you out. Include information about your machine - like which Workbench you're running, which CPU, what programs were running when the machine did something odd and so on. The more information you give us the better.

Lost time

Dear Help Line, I have an Amiga 600 which I recently purchased. I understand that I can set the correct time on it but every time I set it and reboot the time and date are lost.

What am I doing wrong?

Craig Hartigan
Manly, NSW

ACAR: *Probably nothing. The Amiga 600 in its standard trim does not have a battery backed up clock. Normally when you purchase a memory expansion card for your 600 they come with this part on the board. There is a Ni-Cad battery on the card which gets charged while you are using the computer.*

You set up the time and date on the computer and save it. Then when you turn off the computer it keeps the correct time because of the rechargeable battery on the card.

You also have the option of purchasing a card for your A600 which doesn't include extra memory, but has the clock on it. This is cheaper, but in the long run you're probably better off with the memory as well.

Even if you don't see the need for it now, you probably will in the near future. ❑

Attention all new A1200 owners in Australia and New Zealand

If you are having problems getting to grips with your new machine then "An Introduction to the Amiga 1200" is for you. It is a One Hour Training Video designed to get you up and running with the minimum amount of fuss. Order your copy now by Bankcard, Mastercard or Visa on:

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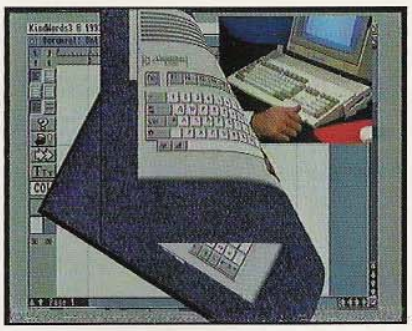

An introduction to the A1200, a one hour video from Wall St Video.

Thank you to everyone who re turned our reader survey form from the January issue of *Amiga Review*. The information we were able to glean from the survey has proved invaluable in helping to fine tune the magazine to your needs.

Hoopy Paint from Tupsoft.

Starting this month, you'll see we've made some noticeable improvements inside the magazine. There's our new desktop publishing column, New Products and Future Watch sections and revamped entertainment section. Look for more additions over coming months ... but now to our prize winners.

Commodore have very kindly donated a new Amiga CD32 player, currently the biggest selling CD based games console in the world. Additional prizes were provided by Tupsoft (02) 482 7040, one of Australia's leading importers of productivity software, and Wall Street Video (02) 411 2108, the Australian Amiga training company who now have videos selling around the world.

1st Prize

The winner of the CD32 player from Commodore is:

Hugh Griffith of Eumungerie, NSW

2nd Prize Winners

The winners of *Hoopy Paint*, the most fun you can have in a paint program, are:

Colin Bolton of Bondi Beach, NSW
MG Jefferies of Farrer, ACT
B Benyon of Woodridge, Qld

3rd Prize Winners

The winners of the A1200 Introductory Video, getting you up and running on your A1200, are:

P F Kitto of Mt Lawley, WA
Xenos Tang of Kowloon, Hong Kong

Winners will also be notified by mail. Prizes will be despatched to the winners directly by relevant sponsor.

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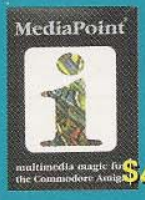

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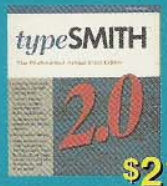

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Postscript is Postscript

You would be amazed how many calls I get from people searching near and far for a bureau capable of outputting Amiga files. Now, most of these are people who are using a program capable of Postscript output. A Postscript file describes a document using a language understood by many types of output devices.

Think of it as a standard way of driving many types of high quality printing devices - ranging from colour thermal printers, toner based desktop Postscript printers, to image setters costing several hundred thousand dollars.

Programs such as *Professional Page, Pagestream, Art Expression, Professional Draw* and *Final Copy* can all create a Postscript file instead of printing to your regular printer. This file is just a big text file - you can view it in any text editor or word processor. Some of the commands are English like, and you'll also see text from your page appearing amidst all the gobbly-gook.

Desktop Publishing

by Andrew Farrell

Once you convert your page to postscript, it can be sent to almost any output bureau. You see, Postscript is Postscript. The only small hurdle you need to face is how to get it there. Here is where there are a few quirks you should know about - and make sure your bureau knows about.

Which format?

The simplest method is to save the file onto an MS-DOS 720K disk. If you have a machine with Workbench 2.1 or higher, you'll find an icon called PC0: on your Workbench drive. It's in a drawer called DOSDrivers, in the Storage drawer. Move this icon to your devs DOSDriver drawer in the devs drawer.

Now when you reboot your machine, the device PC0: will be mounted for use automatically. This device works much like DF0: - it lets you access a floppy disk in your internal floppy drive - however when you ask to see PC0: from any file requester, the Amiga will see DF0: as a 720K MS-DOS disk.

You can ask format PC0:, select it in a disk utility like DirOPUS, access it from the SHELL - or from directly within the print to postscript requester of your particular desktop publishing program. So, it's simple to just write a postscript file directly to a MS-DOS disk - once you've formatted it, of course.

You'll see an icon for PC0: on your Workbench and you can select it and use the pull-down format option on the Workbench menu to format it. This disk should be able to be read by almost all image output bureaus - including Mac-based operations.

Like the Amiga, the Apple Macintosh has the ability to read MS-DOS disks. Of course, you're limited to moving files around which are small enough to fit on one disk. Is there a way around this?

Compression

Once your files start getting too big to fit on one floppy, you have several options. One is to compress the file to make it smaller. Now this may sound like some mystical process, however compression is actually very logical and simple to explain.

Imagine you're looking at a large football stadium - which is your postscript file. You notice that certain groups of seats are empty. Now let's say you're describing which seats are empty and which are full. You could list every seat, and then notate whether it was full or empty. Inefficient and clumsy - but this is like an uncompressed file.

Compression would say something like A1 - full, A2 - full, A3-A9 - empty, A10 full... and so on. As you can see we've saved some space by dealing with groups of vacant seats rather than listing each individually. This is the basic priniciple behind compression, however in practice it is considerably more complex than this.

Fortunately, programs like ZIP, LHARC and others do all the hard work for you. Unfortunately, these programs can only be used from the command line (SHELL) - although there are some neat public domain utilities that make it a mouse-driven affair. Programs like *DirOPUS* can also be configured to handle the compression process most effectively.

Postscript is especially good at being compressed, because it is inherently wasteful in the way it describes things. This is particularly true when you start dealing with images. If you view a Postscript file in your favour-

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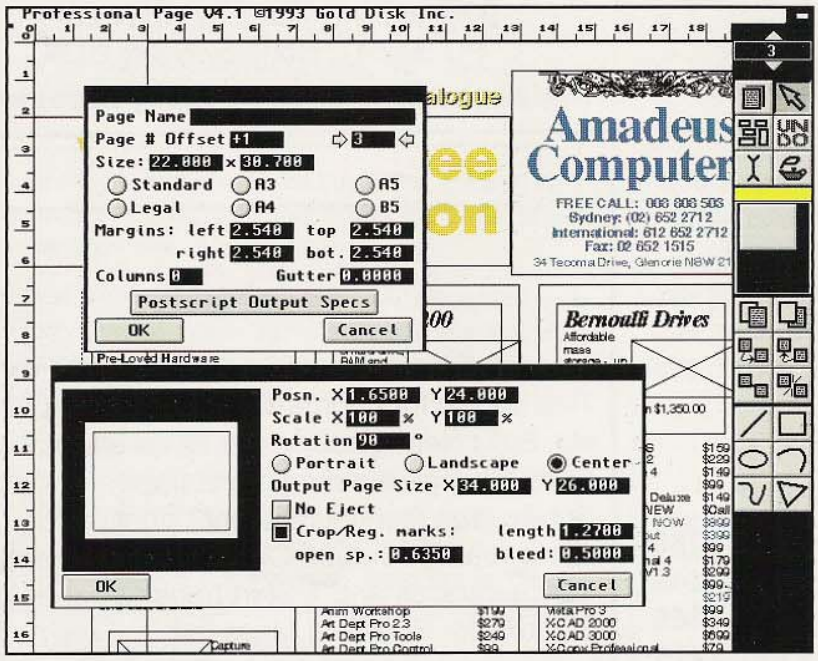

By rotating your page as per the specification on this above output requester, you will save film and time. This may help land you a better cost from your bureau. Check with your bureau on the correct output page size

ite text editor you'll see bitmap images appear as great strings of numbers - and often there will be a long series of the one number. Here, as you saw earlier, is where compression works very well.

It is not uncommon for a compressed Postscript file to be around one-fifth the size of the original.

A small snag

In the Amiga world we are blessed with almost every compression method known to man. However, LHARC is by far the most commonplace. In PC land, ZIP seems to rule supreme, although most PC based bureaus can handle LHARC files happily. LHARC has had less problems with compatibility over different version than ZIP, so it is often preferred.

In the Mac world, LHARC is not so commonplace. In fact, I had a hard time tracking down a Mac owner who

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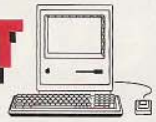

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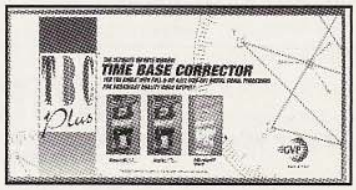

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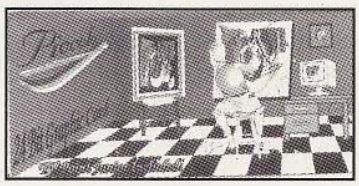

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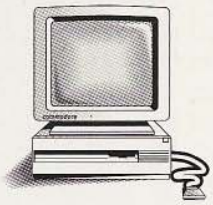

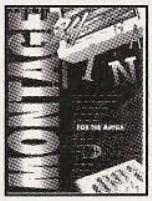

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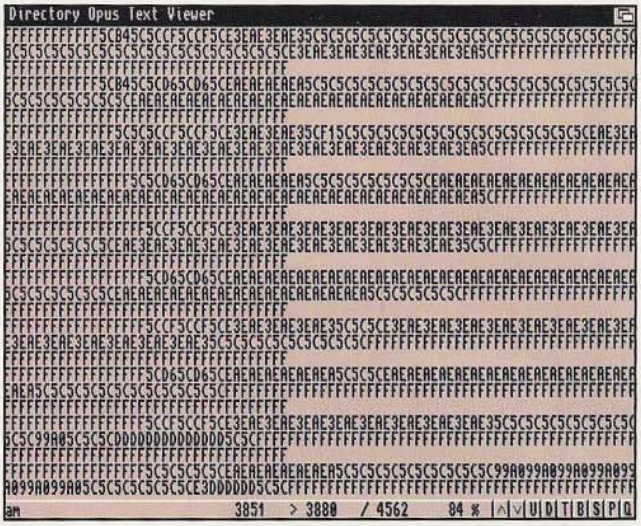

Yes, it's a bunch of numbers - actually, they're in the middle of a long postscript file and are actually an illustration on the page. You'll notice the repetitive nature of the sequence which makes it ideal for compression.

had a program to decompress LHARC files. More recent LHARC compressed files end with .LHA. Older versions end with LHZ. The latest LHARC can create LHZ files - a necessary thing for my Mac friend.

Mac people prefer a program called *Stuffit*. There is no such compression program on the Amiga. I have given Mac owners uncompressed Postscript files on a disk and found they were at a loss as to how to print them. It seems in Mac land some people are not used to simply copying files to the parallel port. They seem to think they must be imported into some application and then printed.

Once you're dealing with the king-size files generated when you start colour separating stuff, the best way to move files around is by modem. Compress them with LHARC, turn off your modem compression and then dial away. Almost every bureau these days has a modem line for receiving files ready to be output.

The business end

Make sure you fax an order after sending your file. Describe clearly how the file should appear when output - most bureaus can preview your postscript file on screen before outputting it. They'll do this to check the output looks right, is not cropped or wrongly configured and so on. This normally happens on what they call a RIP - Raster Image Processor. These days a RIP is nothing more than a fast IBM PC running software which turns your postscript file back into a giant bitmap image - and we're talking huge - at resolutions of around 1250-2500 dot per inch. This image is then sent by a special high speed connection to the image setter.

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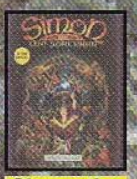
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Retail sales and exclusive wholesale distribution of **REAL 3D** in Australasia is now being handled by **Digipix Pty Ltd** of Sydney, not by Colour Computer Systems of Perth..

The current release version is **2.47**, while further upgrades are in constant development. Version **2.47** sells for **$900**, and the upgrade from 2.xx costs **$90**. Freight is **free** to anywhere in Australia and New Zealand. The upgrades are only available from **Digipix.**

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1) A **Bulletin Board System** with sections for latest news, objects, all problems ever encountered, hints & tips, minor updates, etc. This will provide a forum for all users with modems.
2) A **Technical Support Line** manned by **Bruce Brown**, the guru of **REAL 3D** in Australia. Bruce is an approved beta tester, and one of the world's most knowledgable users.
3) A regular **Newsletter.**
4) Assisting with the formation of local **User Groups.**
These services will be provided **free** of charge to registered users. Details will be posted to all users.

Prospective purchasers of **REAL 3D**, if buying from a dealer, should make sure that the product was sourced from CCS or **Digipix**, as some unscrupulous dealers obtain the program from shonky contacts in the USA or elsewhere. Illegally sourced versions and unregistered users will **NOT** be eligible for the above support or upgrades from **Digipix**, who are the exclusive agents. By the time this ad is printed, all registered users should have received a letter from **Digipix**.

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Expect to pay around $15 per sheet of film for an A4 page with crop marks. You won't get a discount until the number of sheets increases considerably.

For Sydney Amiga owners, there is a new bureau coming on line any day now which is Amiga, PC and Mac based. Actually, they're running an Amiga 4000 with an Emplant card to run Mac software. They can accept Amiga format Syquest cartridges and look set to become a popular service for Amiga owners. For more information call Access Graphics on (02) 550 4499.

Layout Rules

There are numerous basic rules on how to create good layout. Now you may think that good page design is simply that which looks good. However, the purpose of all design is primarily to assist in the business of communicating information. Departing from these hard and fast rules runs the risk of seriously diminishing the effectiveness of a document. Only an experienced designer will know how to fiddle the guidelines in a way that enhances the end product without decreasing readership comprehension.

Each month I will share a few of these rules with you. If you wish to move ahead at a rapid rate, there are some excellent books available on the subject.

Upper case is out

Many people place headings, and even body copy in all upper case. Whilst this can be effective when used sparingly, it seriously hinders readership. The simple reason is that people recognise words by their shape, not by the letters which make them up. By placing copy in all upper case, words become less distinguishable and text takes longer to read - which may frustrate the reader to the point of giving up.

So, avoid all upper case headings - and totally abstain from using all upper case in body copy.

On the subject of word shapes, programs which stretch letters and words into weird and wonderful shape are very clever - but once again you run the risk of destroying the basic shape and exacting a heavy toll on comprehension levels. *Pagestream* is especially guilty in this area, as the program allows text boxes to be rescaled with ease. I have many user group newsletters filled with distorted text. Avoid this practice and you will have more readers.

Fish on ROM

by Daniel Rutter

Regular readers will be waiting for another Fish disk update. They're not gonna get it. Why? Because Fred Fish hasn't released any disks above number 930 at the time of writing. This isn't totally astonishing, seeing as he's converted over to CD-ROM as well as floppy disk distribution and is aiming to have the CDs come out monthly, which is way quicker than most big compilations.

Getting one disk out and producing another, which will be out by the time you read this, has changed Fred's approach a bit. I'll let the man himself tell you all about it, in lightly paraphrased text from his Fishing Report of January the fifth:

"The initial concept for pricing the CD-ROMs was to provide two standard prices, one for orders that were received prior to production of the CD-ROM, and one for orders that were received after. This was to encourage people to preorder CD-ROMs so that I could closely match supply with demand.

"Now that I've gone through the production cycle for two Freshfish CD-ROMs, I have a much better grasp of the costs involved. So I have decided to eliminate this price differential, and use the preorder price (currently $US19.95 plus shipping and handling) for all CD-ROMs.

"I still encourage preordering however, if for no other reason than to ensure that a disk is available for you. If you wait until after production, and I have guessed wrong on matching supply with demand, you may find that a disk you are interested in is sold out and no more production runs are planned.

"I still think the concept of a CD-ROM series that is updated on approximately a monthly basis is good, and I will work towards reducing the production cycle to hit the goal of releases every four to six weeks. For the next couple of CD-ROMs I will be satisfied with a six to eight week release cycle. Naturally, people that have preordered a certain number of months of the "monthly CD-ROM" will still get exactly that many Freshfish CD-ROMs, it will just take a little bit longer to get all of them."

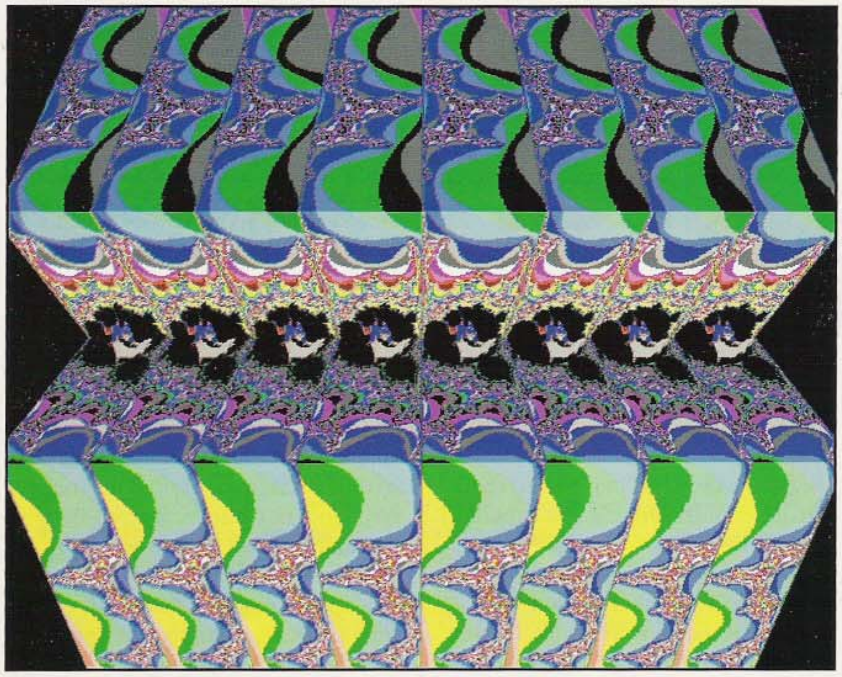
Fred goes on to discuss his projected quarterly CD-ROMs which will contain all the new stuff from the last three months for people who don't want to pay for a new disk twelve times a year, and the 1000 floppy archive disks, which will come out around April, when the library hits disk 1000 and stops coming out on floppy disks. Don't get alarmed; your favourite PD library will still stock all the Fish CD contents for people who don't have CD-ROM drives.

This 1000 disk should come in two versions; a standard disk with everything in archives, and set up for bulletin board use and a two disk set with nothing archived. Both will cost $US19.95, or $US24.95 including shipping to Australia. This price is pretty darn good; even after currency conversion, you'll be paying a bit less than you would for a new good quality IBM shareware CD in a store!

Seeing as there's no new Fish this month, I've taken advantage of the shorter break between Companion Disks and put on some of the groovy stuff I never had room for before. For a start, the complete text of the pretty

Program Complexity Guide
*** Can you find the computer?**
**** ... in a darkened room?**
***** ... in someone else's house?**
****** ... and take it away without them waking up?**

One of Janot's pretty pictures



The 3-D picture. It's probably printed too small

abovementioned Fish Report is on the disk, but you'll also find:

Demos

There was a demo on the last companion disks, and I've included a couple more this time. These ones are from The Gathering '93, one of those European accumulations of young up and coming computer talent primarily devoting itself to self-aggrandisement and copyright infringement. These boys do know how to code, though, and these two efforts are from the 40k Demo Competition.

Entries had to be 40 kilobytes or less in size, which makes for some interesting approaches since you can't use huge sampled instruments or massive pictures. The first one, *Chaos Land*, features (after a worryingly long startup) some extremely nifty fractal scaling and plasma effects which are rather difficult to describe. Essentially, fuzzy objects that zoom at you and

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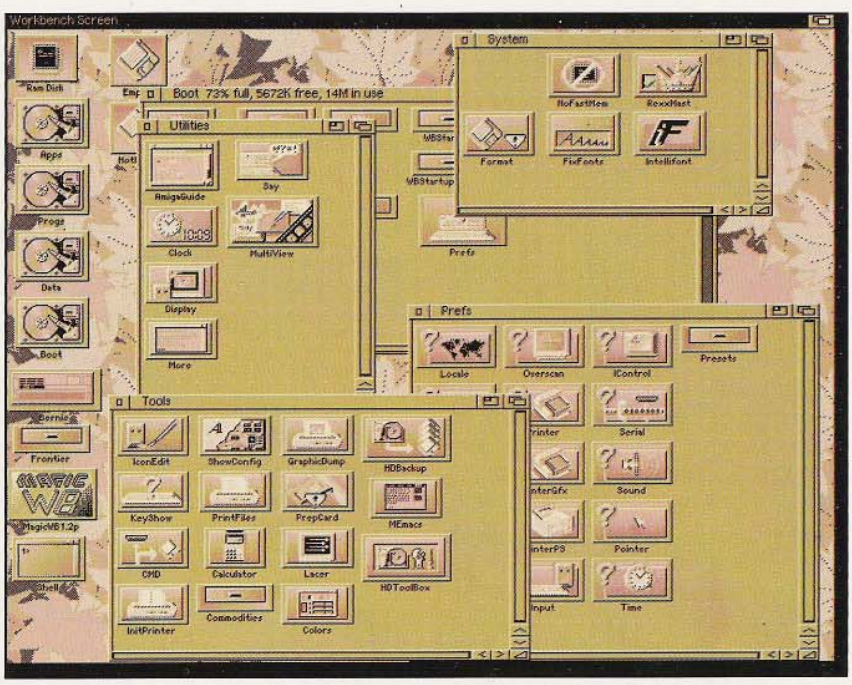
get pricklier as they get closer, plus other stuff.

Chaos Land claims to have 150k of music in it (explaining the very long startup), but if so then they've got the least efficient composer in the land. Methinks it's just a delay to make them look smarter, since it takes an age on 68030 as well as 68000. Visually impressive nonetheless.

The other demo, *Lego*, is frankly silly but I had to put it in. A couple of genuine demo bits and rather a lot of appalling visual puns and similar stuffing about. Both demos work on WB2 machines with fast processors, as well as the ubiquitous 68000 driven WB1.3 A500. This was not true of all the competition demos, by the way, and many showed the old graphic glitches on my fast machine. Ah well, it's not as if they're selling the things.

Janot stands for Just A Neat Old Thing, and I've included it for three reasons. One, it's small. Two, it draws



Yes, it's my Workbench again, featuring the new MagicWB icons

Dir Work

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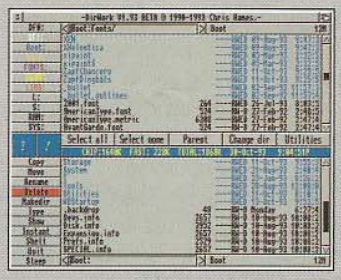

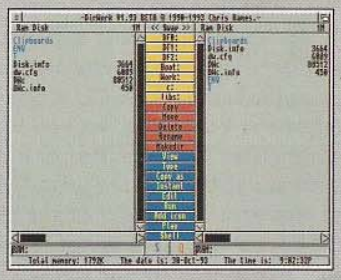

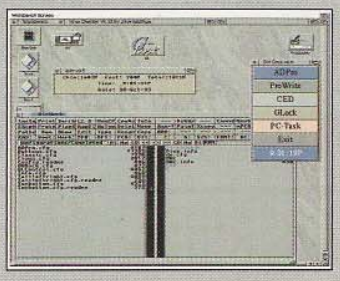

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pretty patterns (and that's ALL it does). Three, its documentation is amusing. Enjoy.

ADProRunner **

Art Department Professional is an excellent commercial image processing package. Unfortunately, by default it gloms vast amounts of your memory when you run it. It basically says to the system "What've you got? OK, that'll do. Now nick off."

You can fiddle with the icon tooltypes to change the memory usage, but what if you want to set a different amount every time? This is where *ADProRunner* comes in. It's a CanDo application that you run instead of *ADPro*. Set the memory you want on a slider, click a button and *ADProRunner* kicks of *ADPro* with the right settings. An Installer script is included to get the program set up, and for once I had enough room to include the Installer utility with it.

CxKiller ***

Commodities are great things. You can use them under Workbench versions from 2 up, and they provide a simple, manageable format for all sorts of utility programs, marshalled by the Commodity Exchange. But what if you're running a script, for example, and want it to kill a commodity?

If the commodity's got an ARexx port you can probably do it that way, but most don't. Enter *CxKiller*. Give it the name of a commodity and it terminates it. Or feed it several names and watch them all die screaming. If you don't give it any, it shuts down every running commodity - a positive bloodbath.

It's not real smart about it, though. Some commodities patch system functions that get very upset if the patcher suddenly vanishes, and so killing them can cause your system to abruptly enter Cabbage Mode - so be careful. And, of course, *CxKiller* requires Workbench 2. Duh.

MagicWB1.2p **

I last mentioned *MagicWB* five months ago; it's a $US20 shareware collection created by Martin Huttenloher, which contains scads of exceedingly nifty dithered eight colour icons and backdrops and a flawless installer that perfectly patches your existing icons without stomping their positions or tooltypes. It's now been updated to v1.2p, with a lot of new icons and some changed backgrounds for an even better look.

MagicWB still has its old problem - it's designed for flicker-free machines. If you use it on a medium-res display, as used by most Amigans, everything looks twice as tall as it should be. *MagicWB* provided the last ten per cent of encouragement to me last year when I set off to buy my flicker fixer. So be warned - seeing this delectable little piece of eye candy can lead to spending hundreds of dollars on a card and a new monitor!

You also still need WB2 to use *MagicWB*. If you haven't got it, upgrade. Now. how many times do I have to tell you? Sheesh.

MagicWB is too big to put on the Companion Disk, but it's available separately from Prime Artifax.

Postcodes *

Have you got one of those little booklets with about a trillion place names and their postcodes? Ever tried to look up which places have a given postcode? Impossible.

Not any more. The Companion Disk contains a text file with 13,720 Australian locations and their postcodes. It's actually small enough to use on even a 512k Amiga.

The interesting thing about this file is that it perfectly demonstrates the principle behind those CD-ROM based telephone books that let you look up names from numbers. People have got very agitated about the privacy issues of this sort of thing - at the ACAR office we had a demo of a product that would let you find out who lived on a given side of a given street, within, say, five kilometres of a given place and with a certain combination of letters in their name and a phone number ending in 4. This is impressive stuff, and it's what the information revolution is really about.

Enough cyberpunk waffling - let's play some tunes.

ElektrikFunk *

This is a rather good *SoundTracker* module - a song file including note data and instruments, and needing only a player to work. I've included an old version of *IntuiTracker* to play the MOD; the interface stuffs up a little on WB2 but it still plays all right.

ElektrikFunk is one of the new wave of REALLY good sounding *SoundTracker* MODs, replacing the old guard of tedious synthesised demo tunes and scratchy, boring monster-sample pieces. It actually sounds remarkably like a rather good jam session, needing only a lead vocal to make it complete. Andrew Farrell's efforts in this field were, of course, magnificent. I know which side my bread's buttered, readers.

SIRDS *

Single Image Random Dot Stereograms, or SIRDS, are pictures cunningly constructed so that if you carefully misfocus your eyes on them you suddenly see a very realistic three dimensional image, with no fancy glasses, mirrors, polarisers or drugs needed. For this reason, they're enjoying considerable popularity and their vendors are making large dollars.

On the companion disk you'll find a picture of this type - it's not really a true SIRDS but it uses the same principle. the Illusion pic isn't really "of" anything much - just some rather alarming corrugations. For the proper result, look at it with your eyes lined up on something distant but focused on the screen (yes, I know it's tricky). For a simpler version, go crosseyed until the images line up and then refocus - this gives you a reversed version. If you can't do it, find a kid to teach you. They're everywhere.

By the time the next column rolls around I should have a load more Fish disks to play with, so I'll be back to the old schedule.

The Companion Disks are available from Prime Artifax (02) 879 7455.

Make Your Own Typing Tutor

by Greg Abernethy

This month we will be designing a Typing Tutor. It is very basic, but is designed mainly to demonstrate how the KEY INPUT OBJECT can be used to create an application.

The Typing Tutor revolves around getting keyboard input and acting on the key pressed. It is necessary to screen what key has been pressed, due to the way that CanDo interprets the key string. I explained the problem in the December 1993 tutorial. In short, some keys return a string, e.g. pressing the SPACE BAR returns a "SPACE" string. Also, all letters are UPPERCASE, so it is necessary to check if CAPSLOCK is down or the SHIFT key is pressed.

The program will consist of one card with a document for displaying a choice of lessons, some fields for displaying the current lesson, time taken and accuracy. A keyboard of the relevant keys is displayed on screen, as well as a box for displaying the letters to type. The current letter to type will be underlined in the box. When a key is pressed, the corresponding key on the keyboard will be highlighted. If the key matches the current letter, the next letter will be underlined. Once the end of the line is reached, a new set of letters will be displayed.

I have created TEN lessons, starting with "ASDFG" and working through to all the main keys on the keyboard.

PLEASE NOTE: This program requires the font "Diamond 20". Please ensure you have it in your fonts directory.

Creating the Typing Tutor

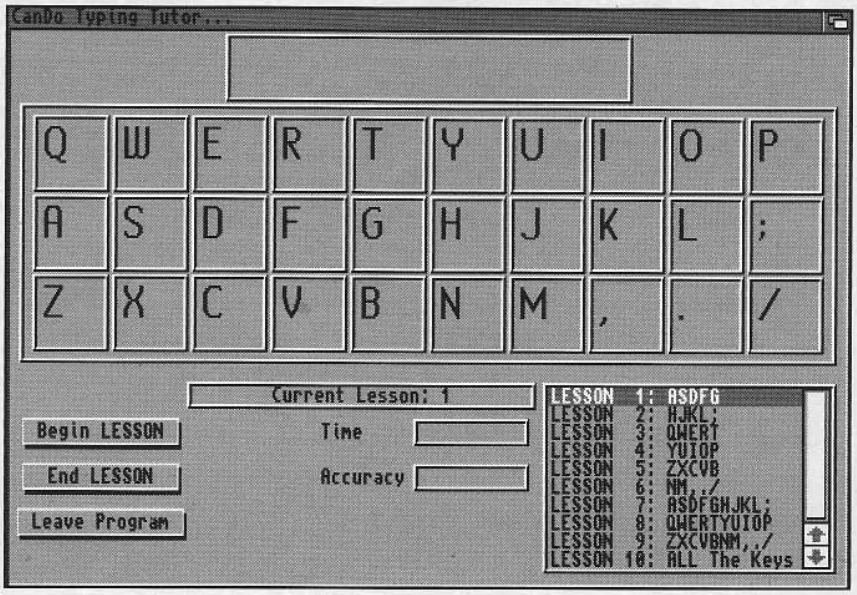
```
WINDOW SPECIFICATIONS
WINDOW TITLE "CanDo Typing Tutor...."
WINDOW SIZE   X = 640: Y = 256 4 COLOURS
VISIBLE BORDERS
ALWAYS OPEN ON OWN SCREEN
WINDOW BACK/FRONT GADGET:WINDOW
DRAG GADGET
```

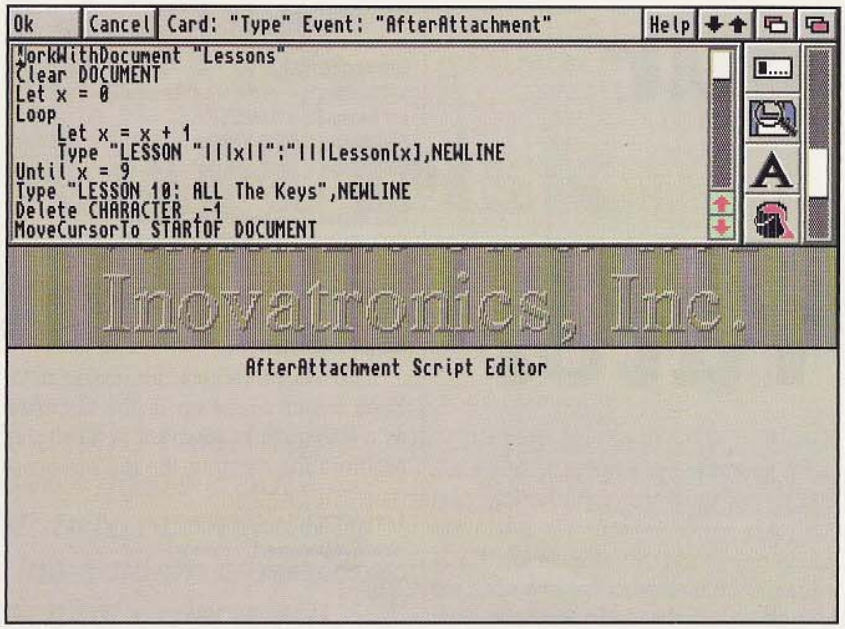
```
BEFOREATTACHMENT SCRIPT

Dispose Lesson
Let Lesson[1] = "ASDFG"Let Lesson[2] = "HJKL;"
Let Lesson[3] = "QWERT"
Let Lesson[4] = "YUIOP"
Let Lesson[5] = "ZXCVB"
Let Lesson[6] = "NM,./"
Let Lesson[7] = Lesson[1]||Lesson[2]
Let Lesson[8] = Lesson[3]||Lesson[4]
Let Lesson[9] = Lesson[5]||Lesson[6]
Let Lesson[10] = Lesson[8]||Lesson[7]||Lesson[9]
```

Explanation:

This script creates the lesson data. Each lesson is set up in the database as a string. This database is all that is required for creating the ten lessons.

```
AFTERATTACHMENT SCRIPT
WorkWithDocument "Lessons"
Clear DOCUMENT
Let x = 0
Loop
   Let x = x + 1
   Type "LESSON "||x||":"||Lesson[x],NEWLINE
Until x = 9
Type "LESSON 10: ALL The Keys",NEWLINE
Delete CHARACTER ,-1
MoveCursorTo STARTOF DOCUMENT
DrawBorder 170,14,300,26,DOUBLEBEVEL ,2,1
DrawBorder 15,45,610,110,DOUBLEBEVEL ,2,1
Dispose Pos
Let x = 0
Let x1 = 25
Let y1 = 50
SetPen 1
SetPrintFont "diamond",20
Loop
```






```
    Let x = x + 1
    DrawBorder x1,y1,50,30,DOUBLEBEVEL ,2,1
    PrintText GetChars(Lesson[10],x,1),x1 + 5,y1 + 3
    Let Pos[x].x = x1
    Let Pos[x].y = y1
    Let x1 = x1 + 60
    If x1 = 625
       Let x1 = 25
       Let y1 = y1 + 35
    EndIf

Until x = 30
Dispose Under
Let x = 0
Let x1 = 180
Loop
   Let x = x + 1
   Let Under[x].x = x1
   Let x1 = x1 + 30
Until x = 10
Let Current = 1
SetText "CL","Current Lesson:"|||Current
Let Begin = 0
DetachObject "WhichKey"
DetachObject "Time"
SetPrintFont "topaz",8
SetPen 1
PrintText "Time",239,183
PrintText "Accuracy",239,203
```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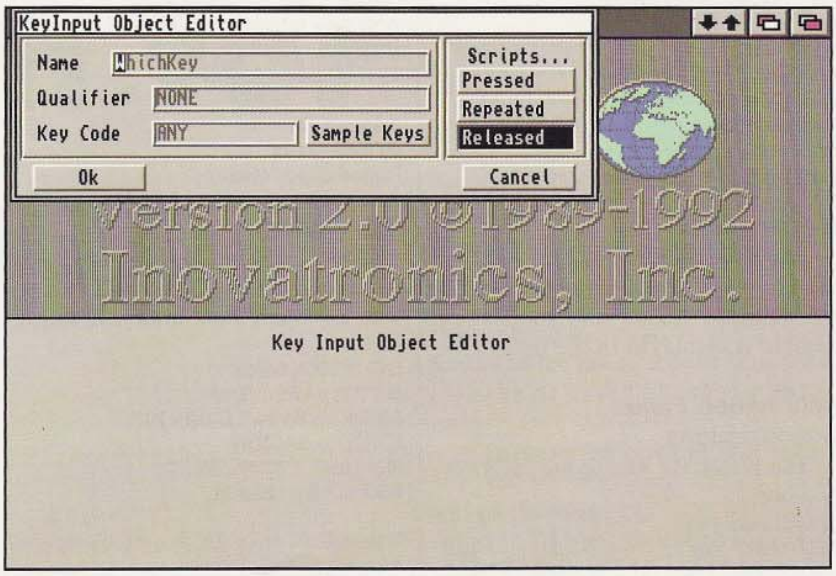
Explanation:

This script dispays the lessons in a LIST document, and draws the keyboard and letter display box on the screen. I use the string from Lesson[10] for displaying the keyboard letters using the DIAMOND 20 font. The Pos variable holds the location for each key, so that the key can be highlighted on screen when it is pressed. The Under variable holds the location for each letter in the display box, so that the underline can be easily moved along underneath each letter. The Key Input Object is detached to avoid any problems with the user pressing a key before starting a lesson. The Time Display Object is detached, ready to be used after the user has pressed the first key in the lesson.

Lesson Display Document Specifications

OBJECT NAME "LessonDoc"



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```
DOCUMENT NAME "Lessons"
ORIGIN X = 411: Y = 167
SIZE X = 214: Y = 80
BORDER = DOUBLEBEVEL
LIST DOCUMENT
Release Script
Let Current = TheLineNumber
SetText "CL","Current Lesson:"||Current
```

Explanation:

When the user selects a lesson from the list, the Current variable is set to the selected lesson and the lesson number is displayed in the field.

Information Fields Specifications

The Fields for displaying information are;

```
Current Lesson Field
FIELD NAME   "CL"
ORIGIN  Horiz = 142 : Vert = 167 : Width = 256
TEXT 32 Characters
BORDER = DOUBLEBEVEL : CENTRE JUSTIFICATION

Time Display Field

FIELD NAME   "Clock"
ORIGIN  Horiz = 313 : Vert = 183 : Width = 80
TEXT 10 Characters
BORDER = DOUBLEBEVEL : CENTRE JUSTIFICATION

Accuracy Field

FIELD NAME   "Accuracy"
ORIGIN  Horiz = 313 : Vert = 203 : Width = 80
TEXT 10 Characters
BORDER = DOUBLEBEVEL : CENTRE JUSTIFICATION
```

Specifications for Typing Tutor Buttons

```
BEGIN LESSON Button
BUTTON NAME   "Begin"
ORIGIN      Horiz = 15: Vert = 182
BORDER = SHADOW : HIGHLIGHT = COMPLEMENT
TEXT = " Begin LESSON "

Release Script
Do "ShowLetters"
ReattachObject "WhichKey"
```

Explanation:

This script sets up the lesson and reattaches the key input object to enable keyboard input to be monitored.

```
END LESSON Button
BUTTON NAME   "End"
ORIGIN      Horiz = 15: Vert = 202
BORDER = SHADOW :
HIGHLIGHT = COMPLEMENT
TEXT = " End LESSON "

Release Script
If Begin = 1
   DetachObject "Time"
   DetachObject "WhichKey"
   Let Begin = 0
EndIf
```

Explanation:

This script is only performed if a lesson is currently in progress. It detaches the key input object and the timer object.

```
LEAVE LESSON Button
BUTTON NAME   "Go"
ORIGIN      Horiz = 11: Vert = 222
BORDER = SHADOW :
HIGHLIGHT = COMPLEMENT
TEXT = " Leave Program "

Release Script
Quit
```

Key Input Object Specifications

```
NAME     : "WhichKey"
QUALIFIERS: NONE
KEY CODE  : ANY

Release Script
If Begin = 0
   Let Begin = 1
   Let Correct = 0
   Let Attempts = 0
   Let Time = 0
   Let Accuracy = 0
   SetText "Clock",Time
   ReattachObject "Time"
EndIf
Let Key = KeyPressed
If NumberOfChars(Key) > 1
   Let f = FindWord("SEMICOLON
   *CO MMA*PERIOD*SLASH",Key,1,"*")
   If f > 0
      If f = 1
         Let Key = ";"
      ElseIf f = 2
         Let Key = ","
      ElseIf f = 3
         Let Key = "."
      ElseIf f = 4
         Let Key = "/"
      EndIf
   EndIf
EndIf
If NumberOfChars(Key) = 1
   Let Attempts = Attempts + 1
   Let f = FindChars(Lesson[10],Key,1)
   If f > 0
      SetDrawMode COMPLEMENT
      AreaRectangle Pos[f].x,Pos[f].y,50,30
      Delay 0,0,10
      AreaRectangle Pos[f].x,Pos[f].y,50,30
      SetDrawMode NORMAL
      If Key = GetChars(Letters,un,1)
         Let Correct = Correct + 1
         Let un = un + 1
         If un > 10
            Do "ShowLetters"
         Else
            SetPen 0
            AreaRectangle Under[un - 1].x,35,20,2
            SetPen 1
            AreaRectangle Under[un].x,35,20,2
         EndIf
      EndIf
   EndIf
   Let Accuracy = (Correct/Attempts) * 100
   SetText "Accuracy",FormatValue (Accuracy,"##0.00")||"%"
EndIf
```

Explanation:

This script handles the monitoring of all keys pressed by the user. Firstly, if this is the first time a key has been pressed in the lesson, the variables for time, correctness, accuracy and number of attempts are reset to zero. If the number of letters in the Key string are greater than one it is necessary to check to see if the COMMA, PERIOD, SLASH or SEMICOLON keys were pressed. If they were, the Key string is changed to the appropriate character. If the letter is in the valid range of letters from all the lessons, I then check to see if it matches the currently underlined letter in the display box. If it does, the underline is moved to the next letter, or another selection of letters is displayed if the end of the line was reached. The attempts and correct variables are incremented, if necessary, and then the Accuracy variable is calculated, formatted and displayed. The

Next month our CanDo column will be moving to a shorter, punchier format. The bulk of the program normally listed will be instead be available on BBSs and directly from Greg Abernethy.

FormatValue command is very good for setting up correct display characteristics for numbers and strings.

See the CanDo manual for a full rundown on how to use this command. It is too involved to discuss in this tutorial.

Timer Object Specifications

```
NAME   : "Time"
INTERVAL : RECURRING : 1 SECOND
Occurred Script
Let Time = Time + 1
Let m = FormatValue(Time%60,"##0"||"m")
Let s = (Time MOD 60)||"s"
SetText "Clock",m||s
```

Explanation:

When the Timer is attached, it updates and displays the time elapsed, from the first key press, in the "Clock" field. Once again, the display is calculated and formatted before being displayed. In this way, minutes and seconds can be displayed.

```
Global Routine"ShowLetters"
Script
SetPen 0
AreaRectangle 171,14,299,26
SetPen 1
SetPrintFont "diamond",20
Let n = NumberOfChars(Lesson[Current])
Let Letters = ""
Let x = 0
Loop
   Let x = x + 1
   Let p = GetChars(Lesson[Current],Random
   (1,n),1)
   PrintText p,Under[x].x,16
   Let Letters = Letters||p
Until x = 10
Let un = 1
SetPen 1
AreaRectangle Under[un].x,35,20,2
```

Explanation:

This routine displays a random selection of letters from the current lesson in the Letter Display Box and then the first letter is underlined.

Final words

The Typing Tutor could have many enhancements added, but once again demonstrates how quickly and easily a worthwhile application can be developed using CanDo.

One enhancement would be to be able to do lessons by loading a text file containing sentences or a story using certain combinations of letters. If anybody does this, I would be very interested in seeing the finished product.

Do you ever wish you could insert a disk and then be able to quickly view all directories and files on the disk, without the need to use Directory Opus or the Shell to search through the disk? Next month, I hope to have a Disk Displayer program where you can select the floppy drive with the disk to view, and the program will display all directories and files on the disk in documents. You can then scroll through the lists to find the file you need. You will also be able to print any or all file lists from the current disk.

Until next month, have fun with the Typing Tutor. ❑

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Data Security

Hello and welcome once again to the monthly Blitz 2 column, where we try to give you some useful ideas, and some code to use in your own Blitz creations.

This month we are going to look at data security, and how to protect your graphics, data or text from unauthorised eyes. While there is always a way to defeat almost any security system, our method will provide a high level of protection, for just a few hundred bytes of code.

"Why the need for data security?" I hear you ask! There are many reasons for wanting to protect your precious data, from an amateur not wanting his pictures hacked, to a PD programmer not wanting someone else stealing the glory for his hard-earned code, to a host of personal security reasons.

This month's useful add-on to the Blitz 2 command set is an encryption statement. The statement will jumble up the contents of a block of memory, using a unique key string. The data can be restored to its original condition by calling the statement once again and placing a minus sign in front of the keyword string, similar to the method employed by *Directory Opus*. So there is only one statement, which is used to encrypt or unencrypt your data.

Encryption

The method used is to store your images, text or other data as encrypted data on the disk or in memory, and only unencrypt it at run time, using a carefully concealed keyword string. This will prevent your IFF masterpieces being plundered, your unbelievable samples being misused and your games secrets revealed by that devious and frustrated gamer with an attitude and a hex editor...

Methods to conceal your keyword string are left to your own imagination, but methods devised so far include strings stored backwards, strings made up out of every second or fifth letter and strings made up out of certain filenames within the program's directory! That'll stop 'em renaming your masterpiece as well!

The reason that this has been written as a statement, rather than a function is that there really is no value to be returned. Provided that you check that the memory block and keystring are valid, there is no opportunity for error. After the statement has returned, it's safe to assume the data has been processed. Here's the source code for the encryption routine:

```
; Encrypts or unencrypts the designated memory block
; using the supplied key.        -[key$] unencrypts

Statement CRYPT {start,length,key$}

If Left$(key$,1)="-"      ; determine which function is required
   direction=2
   key$=UnRight$(key$,1)   ; strip off minus sign and set direction
Else
   direction=1
End If
key$=Left$(key$,40)       ; trim key string to 40 characters
Poke.s ?encrypt_key,key$  ; poke it into memory

GetReg d0,start           ; load passed parameters into registers
GetReg d1,length
GetReg d2,?encrypt_key
GetReg d4,direction
GetReg d5,Len(key$)

MOVE.l d0,a0              ; load data pointer into address reg 0
MOVE.l d2,a1              ; load keystring pointer into address reg 1
MOVEQ  #0,d3              ; clear the keystring pointer

CMP.b  #2,d4              ; check to see if it's an encryption or unencryption
BEQ    unencrypt_loop     ; jump to unencrypt

encrypt_loop:
   MOVE.b   (a0),d0       ; load data byte into d0
   ADD.b    0(a1,d3),d0   ; add keystring + its pointer to data byte
   MOVE.b   d0,(a0)+      ; replace rotted data byte
   ADDQ.b   #1,d3         ; increment keystring pointer
   CMP.b    d5,d3         ; check to see if it's at the end
   BNE      encrypt_loop1
```

by Roy Hurley

```
    MOVEQ   #0,d3          ; reset it if it isencrypt_loop1:
    SUBQ.l  #1,d1          ; decrement bytes left to do
    BNE     encrypt_loop   ; do next byte or exit if no bytes left

    Statement Return

unencrypt_loop:
    MOVE.b  (a0),d0        ; load data byte into d0
    SUB.b   0(a1,d3),d0    ; sub keystring + its pointer from data byte
    MOVE.b  d0,(a0)+       ; replace restored data byte
    ADDQ.b  #1,d3          ; increment keystring pointer
    CMP.b   d5,d3          ; check to see if it's at the end
    BNE     unencrypt_loop1
    MOVEQ   #0,d3          ; reset it if it is
unencrypt_loop1:
    SUBQ.l  #1,d1          ; decrement bytes left to do
    BNE     unencrypt_loop ; do next byte or exit if no bytes left

    Statement Return

encrypt_key:  Ds.b  50
End Statement
```

Here's how to produce a CLI utility built around our encryption statement. Blitz will compile this source code into ten kilobytes of turbo-charged 68000 code, which could be hooked up to Directory Opus to encrypt files with a few mouse clicks!

Try creating a system friendly 10K CLI utility like this in AMOS... With a bit of parameter and error checking the code looks like this:

```
DEFTYPE.l
    INCDIR "dh0:Blitz/includes/"
    INCLUDE BLOAD.Fun
    INCLUDE BSAVE.Fun
    INCLUDE EXIST.Fun
    INCLUDE CRYPT.Stat

    version$="$VER: Crypt 1.0  By RatByte Software"

    p.b=NumPars     ; The number of parameters the user entered from the CLI

    If p=1
      If Par$(1)="?" Then p=0
    End If
    If p<>2         ; incorrect parameters, print usage information
      a$=Chr$(27)+"[33m"
      b$=Chr$(27)+"[>0m"+Chr$(27)+"[31;40m"
      NPrint "" : NPrint a$,Right$(version$,30),b$
      NPrint ""   NPrint "USAGE: "
      NPrint "     To Encrypt: Crypt [filename]  [Key] "
      NPrint "     To Decrypt: Crypt [filename] [-Key] ":
      NPrint ""
    Else
      f$=Par$(1)                ; The first parameter is the filename
      key$=Par$(2)              ; the second is the key string
      If EXIST {f$}
        result=BLOAD {f$}       ; load the file,
        If result
          CRYPT {FADDRESS,FLENGTH,key$}  ; encrypt it!
              r=BSAVE {f$,FADDRESS,FLENGTH}  ; Save it out again.
              FreeMem_ FADDRESS,FLENGTH      ; clean up our
memory
          Else
              NPrint "Can't Load ",f$
          End If
        Else    NPrint "Can't Open ",f$
        End If
      End If
End
```

That's all for this month, I hope you are finding this column useful. Thanks to all the people who give me feedback and suggestions and don't forget you can contact me via Powerhouse BBS (042) 616380/622170 or by writing to me at Box 1420 Wollongong 2500. For all those people that have sent me their Blitz PD creations, thanks very much, but we need more!

Happy Coding! ❑

Disk Relabel and MakeDIRA useful routine to enable you to relabel a disk from within the Blitz environment:

```
Function RELABEL {drive$,newname$}
  If Relabel_(drive$,&newname$)
    Function Return True
  Else
    Function Return False
  End If
End Function

; Example usage
If RELABEL {"DF1:","RAT:"}
  NPrint "Relabel done ok!"
Else
  NPrint "Error attempting Relabel!"
End If
MouseWait
```

This function returns a true or false value to enable you to check for success or failure of the operation. Creating adirectory on a disk is almost as easy:

```
Function MAKEDIR {dirname$}
  lock=CreateDir_ (&dirname$)
  If lock>0
    UnLock_ lock
    Function Return True
  Else
    Function Return False
  End If
End Function

; Example usage
If MAKEDIR {"ram:mystuff"}
  NPrint "Directory created ok!"
Else
  NPrint "Couldn't make directory!"
End If
MouseWait
```

New Life in Asia

by Owen James

A new lease of life looks to have been breathed into the C64, thanks largely to its continuing popularity in Asian markets. Unofficial word is that a company by the name of Silicon Holdings is now manufacturing the C64 specifically for this market, and packaging it with several business applications. It's still not likely that we'll see a re-emergence of new C64s in Australia.

Another rising from the dead, this time thanks to CMD. The still popular GEOS range for the C64, which was recently dropped by GeoWorks so they could concentrate on GEOS for the PC, is now being produced and marketed by CMD in the United States. Word is that the resurrection will include all of the GEOS titles ever produced by GeoWorks/Berkley, including the GEOS 128 range. No word yet on when it will be available in Australia again, but it won't be distributed through ComputerMate, the previous Australian GEOS distributors. Watch this space.

Yet another PD Library

Yet another new C64 public domain library has been launched in Australia. Alternative Software carries approximately 200 disks spread amongst nineteen categories, including Education, Games, Geos, Demos, Sound and Music, and Utilities. Price per disk is $4.00, and postage is free.

A disk catalogue is available, which is updated every second month. To obtain the disk, send a cheque or money order for $3.00 to Alternative Software, RMB 221 Sunraysia Highway, Stuart Mill Vic 3478. Alternative Software also carries many second-hand software titles in cassette, disk and cartridge formats. A list of these may be obtained by sending a stamped, self-addressed envelope to the address above.

Daniel Martin has produced a compilation disk of programs he has written in assembly language, as well as some of the more useful public domain utilities available. Included are utilities for 'liberating' music and graphics from other programs, converting between various graphics formats, picture editors, and, Daniel claims, a program which apparently kills a C64 virus. Also included are a variety of PD games.

The cost of the compilation disk is $10.00, and may be purchased by sending a cheque or money order to Daniel Martin, PO Box 1735, Ballarat Mail Centre, VIC 3354. Thanks to Daniel for forwarding the information.

Mail group

A new mail-based user group has been formed with the title of The Right Direction. The Right Direction was formed after the demise of CompuPal, another mail-based group. Members are kept in touch through a bi-monthly disk magazine, and are also entitled to a free disk filled with public domain software.

For membership details, contact The Right Direction's Shane Boswell by telephoning (054) 421 462, or by writing to 102 Forest St, Bendigo Vic 3550.

New PD games

C64/128 Public Domain Software (SA) has several games available that are written by an Australian programmer. The first, Hyperspace, is a fast action horizontal scrolling space shoot 'em up. There are a total of four planets to conquer, and there are two parts to each planet. Winning is not easy, but there is thankfully a trainer mode for novice users.

The object of *Jewel Chest* should be familiar to anyone who has played *Tetris* in the past. The difference is that the falling shapes consist of coloured squares, diamonds and circles, and this version has quite a catchy tune. It was originally an Amiga game, but has been converted to the C64.

Also in this disk collection is a three dimensional demonstration, showing various wire-frame objects on a horizontally scrolling star field. It won't be anything new to anybody familiar with demonstrations, but it's certainly worth a look.

The disk is available for $10, which includes postage as well as the shareware donation to the author. For your copy, send a cheque or money order to C64/128 Public Domain Software (SA), Box 146 GPO, Adelaide SA 5001.

Also available from C64/128 PD are two disks containing GEOS *geoPaint* files of Dinosaurs. These can be used in *geoPaint, geoWrite* and *geoPublish*, and with the recent dinosaur frenzy, should be quite popular. GEOS *Dinosaur World 1 & 2* are priced at $10 each if purchased separately, or $18 for both.

Thanks to Jeffrey Carey of C64/128 Public Domain for providing the information.

MAIL

Where to find peripherals?

Andrew White of Surry Hills NSW writes:

"Dear Owen, I have recently purchased a Commodore 128 computer. I would be grateful if you could help me with the names and addresses of places where I could purchase a parallel printer interface and suitable cable, and any other accessories such as RAM expansion modules, modems, etc.

"At present I have only a mono monitor and any information regarding a suitable colour monitor would be gratefully appreciated. I have just started reading *Commodore and Amiga Review* and I find your column excellent in helping me 'boot' off into this exciting new field."

OJ: Finding products and accessories for the C64/128 is difficult to say the least. There is still a small handful of retailers supporting these machines, but they are few and far between. As a first point, you may like to try finding items second-hand. There are plenty of bargains available, largely because so many users are upgrading to the Amiga and are generally willing to let their old equipment go very reasonably. Try the chain of Cash Converters, or scan your local classified newspaper.

For a parallel printer interface try calling Code One Computer Services on (047) 57 3982, or by writing to PO Box 192, Katoomba NSW 2780. Again, monitors are very difficult to get hold of new, although some retailers do have old stocks. The 128 can be used with many types of monitors, such as Commodore's 1901 or 1081 models. There are plenty of these available second hand, so shop around and find one in good condition.

File handling

Frank Bunton, Secretary of the Commodore Hornsby User Group Inc., writes:

"Dear Owen, May I take the liberty of commenting on two of the items that you included in your column in January?

"The first relates to the use of SYS 65511 to close all open files. The problem is that it closes all files with respect to the computer, but a device such as a disk drive or printer will still think the file is open. Thus, data stored in the device's buffer may be lost for good.

"If the device is the disk drive and the program has been writing to a sequential file then you will end up with a SPLAT file. To prove a point, enter and run this:

```
100 OPEN 3,8,3,"TEST FILE,S,W"
110 FOR X = 1 TO 100
120 PRINT#3, "TEST STRING"
130 SYS 65511
140 PRINT#3,"TEST STRING"
```

"When the program reaches line 140 your screen should give an error message to the effect that the file is not open, thus showing that the computer considers that the file has been closed.

"However, look at your disk drive activity light. It is still ON showing that the disk file is still open. List the disk directory and the file name should show an asterisk next to SEQ, which indicates an unclosed file. There is no substitute for correctly closing all files with the CLOSE command."

OJ: Thanks to Frank for that information. That System call was not intended for general use as a replacement for the CLOSE command, and that warning should have been included. However, it has proven itself to be useful when debugging a program that has opened many files. In other circumstances it can cause problems.

Users wishing to contact Commodore Hornsby User Group (otherwise known as CHUG) can telephone (02) 487 1062, or write to PO Box 1578, Hornsby Northgate NSW 2077.

That completes this edition of The C64 Column. As usual, please send your questions, comments and suggestions to The C64 Column, PO Box 288, Gladesville NSW 2111, or I may be reached via FidoNet Netmail at 3:713/888.999.

See you all again next month. ❑

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Letters TO THE EDITOR

Real Software Please!

After being very impressed with Digital Integration's *Tornado* on the IBM, I bought a copy as soon as it appeared in Amiga format. In particular, this simulation allows you to fight your own campaigns, play your own missions and command a number of Tornado bombers.

Barely able to control my excitement, I opened the packaging and turned to the Amiga Technical Supplement. And then - SHOCK! HORROR! EXPLETIVE DELETED! The Mission Planner and Squadron Command options (easily a third of the game and ALL of the strategy element) had been omitted from the Amiga version! I checked the packaging again - no mention of this monumental limitation and no reduction in price!

I returned the game and got a refund from my local software provider - who was equally annoyed at the misleading packaging and advertising.

My question is: How much longer will Amiga owners be forced to endure this IBM oriented bias from what now appear to be Microsoft/ Microprose controlled software houses? All too frequently now the Amiga versions of games software are either partially disabled, not hard drive installable or simply nonexistent!

This is particularly annoying in the light of the AGA Amigas with both the speed and the hard drive space to accommodate virtually any IBM game.

Isn't it about time Commodore exerted some pressure on software houses to provide better Amiga support? Also isn't it time Amiga owners made their annoyance felt by boycotting products and software houses which persist in these IBM biased practices?

Leigh Tristram
Chifley ACT

Upgrading or OpalVision?

I've been using my trusty A500 without hard drive for about four years now and am thinking of upgrading. The A1200 crossed my mind but it lacks expansion slots and I'd like a machine that can use boards like OpalVision.

But I read in your report on WOC Pasadena that the new AAA machines will be available in mid 1994. I'd rather wait for the new machines if they don't cost a lot more than the 4000/040.

In the meantime, can you tell me if I can get the A4000/A1200 developers hardware/software manuals from some source in Australia? I would like the technical specifications for WB3, the AGA chipset and the Zorro III slots. By the way, I missed your review of the SCRAM 500 - what's the verdict?

Raymond C
Caulfield Vic

Ed: *The current release time for the AAA machines is in the third quarter of this year, but official release dates are regarded throughout the computer industry as being merely a way of encouraging a lively discussion on when, if ever, the product really will hit the streets. The AAA machines are NOT likely to be cheap, but you get what you pay for.*

Hardware manuals for AGA machines are something of a sore point - Commodore don't seem to have released them, to encourage coders to stick to the operating system functions rather than hitting the chips directly and producing still more programs incompatible with later machines. In any case, if you want the heavy duty documentation you'll need to be a registered developer - call Commodore for more information.

The SCRAM 500 review was a couple of years ago now. These neat little A500 expanders aren't in production any more, although you should still be able to get the kits from MegaMicro Technology. The SCRAM's a very compact and inexpensive 8Mb RAM expander and SCSI-1 controller for the A500; it's reasonably quick, uses ZIP RAMs which are a shade cheaper than the SIMMs everyone else uses, takes up very little room and is utterly reliable. If you can find one second hand or want to build one yourself, it's still a great little unit.

Some advice for ACAR

A few cosmetic things you might try:

1) Higher cost/quality glossy stock (thicker cover - more protection).

2) Increase the size - hire more staff so you don't kill yourself doing everything.

3) With the above, increase the cover price accordingly. When was the last time it went up? How can you

afford this $3.95 thing?!

4) Keep up the informative "vs" articles - the Syquest versus Bernoulli comparison was great. More of the same, please, but not just a feature checklist - talk to the engineers involved in design and manufacture if you can; this makes the pros take notice.

5) Keep an up to date calendar of local events - clearly set out so it can be read at a glance. This could be in the news column.

6) Stop trying to appeal to the "Amiga heads" who're already convinced they've got the best computer and don't need their egos stroked. Instead, I'd rather hear about what's on the horizon.

ACAR's a great mag and I think you're doing a great job. Any help I can give I will.

Bill Hodge

Ed: *Deleted from this letter was, among other things, a large amount of begging, pleading and cajoling for the free CD32. Your vote's been noted, Bill - and the case of Scotch was a nice touch!*

In reply to questions one through three, we are giving serious consideration to making the magazine bigger and a bit more expensive. Indeed, ACAR's a cheap magazine and the market could stand it being a little pricier. We'd rather put the extra money into more pages than better stock, though - the existing paper and binding hold together perfectly well.

You certainly will be seeing more comparative articles, and we do talk to manufacturers and designers while writing many of them. In our opinion, though, it's more important to have hard data on how the product actually works than the understandably biased opinions of its creators.

A calendar is an interesting idea; we'll see what we can do about it.

And how dare you suggest we stop telling people in which areas the Amiga beats other platforms? What are you, a traitor? Guards - seize him!

We like Australian

Your magazine is one of the best that I've ever read. Some of this is due to the fact that it is Australian, with Australian prices. Despite this, it can be improved. Don't take this negatively, but as a constructive piece of information.

I think it would be better if you had more of EVERYTHING. Are you actually planning to revise the whole magazine and update everything? If you are, would you consider a cover disk? To keep costs down, you could have the disk available only by subscription. This would be good for people like me wanting loads of PD and game demos, and also for people who only want the paper mag.

I'd like to see a comparison between the top digitisers and frame grabbers. You normally do this as a head to head with only two products compared; I'd specifically like to see, say, the 10 top digitisers. I've included a couple of pages regarding the AAA chipset, which I got off a bulletin board - is it a hoax?

Do you have an E-Mail address - this would be a more convenient way of sending and receiving information regarding the magazine.

Ben Anderson
Shepparton Vic

Ed: *As we said above, we are indeed considering adding more of everything, including cover price. The issue of the cover disk keeps coming back to haunt us - essentially we already have something quite like what you suggest, with the companion disks to the Hot PD column every couple of months.*

We don't have a digitiser overview planned at the moment - but in the meantime, enjoy the review of the new Vidi Amiga RT digitisers in this issue!

The AAA text file you included seems to be genuine, and matches the other specifications for the new chipset that have been floating around and that we've mentioned in previous ACARs. Release dates for the new machines are still dubious, though.

You can contact Andrew Farrell or Daniel Rutter on the Amiga Connection bulletin board, (02) 970 6444 and with the FidoNet address 3:714/909. Feel free to mail us!

Business Users

I use my A500 with GVP hard drive for business purposes - I run a small, part time nursery. I think that there is a lack of business oriented software for the Amiga, especially in the area of financial and accounting packages. It would be great to see a regular feature on business uses for the Amiga. I am sure that there are a lot more readers using their machines for this purpose than anyone thinks - and possibly for some unusual applications. For example, my main uses are for word processing (*Wordworth*), spreadsheets (*ProCalc*), database (*Superbase*) and desktop publishing my annual plant catalogues (*Pro Page*).

Up to date reviews of the latest software are a great aid to decision making. An annual feature for feature comparison of the top word processing/DTP/spreadsheet etc software would be worthwhile.

Regular features on hardware are a good idea - how about a complete, jargon busting article on laser printers?

ACAR's in an unusual position as the only really serious Amiga magazine published in Australia. The Mac and PC platforms are well supported by magazines that can afford large staffs and lots of space to cover all topics, while ACAR must be all things to all readers.

However, I've noticed that other Australian computer magazines have no interest in publishing articles on Amigas, even when prompted to

through their letter columns - there's still the popular perception of Amigas as nothing but games machines.

I think the Amiga is underrated as a general purpose computer - and IBM compatible software is outrageously priced, considering the size of the market. One certainly has to be impressed by the greater efficiency of the Amiga operating system.

Greg Stevens
Borenore NSW

Ed: *The Amiga is a perfectly capable business machine, but no matter how many people use it for serious applications they can't come near the tens of millions of high-powered corporate users that the IBM compatible world sports. With this kind of user base you get vast investments in software development, resulting in business packages for the IBM world which do far more than anything on the Amiga has ever managed.*

Whether people actually need all this power is highly debatable, of course, and it's true that IBM software's overpriced, but simply because of the massive market penetration of the IBM platform there's no way to make the Amiga a success in business. If Amigas start running Microsoft operating systems like Windows NT then this will immediately turn around, but there's considerable skepticism about whether that will ever come to pass.

Annual overviews are the kind of thing we used to include in the Amiga Annual - but Commodore aren't funding it any more, so we're not making one. If the proposed enlargement of the magazine goes ahead, it should give us more room for such ambitious projects.

The laser printer demystification article sounds interesting - we'll see what we can do!

And you're exactly right - ACAR has to cater for all the Amiga users out there, from casual gamers to rendering freaks to desktop publishers to composers. It's a tough job, but letters like yours reassure us that we're managing it (oh, and we're impressed that you didn't crawl for a free CD32, too). Thanks!

On Screen Q & A

Ports Of Call

Holger Schaarschmidt of East Doncaster, Vic, has been having troubles with that golden oldie, *Ports of Call* - not with playing the game, but with installing it to the hard drive on an Amiga 500 with a GVP A500-c. X-Copy's XLENT feature puts the program disk onto the drive all right, but when the PoC icon is clicked it opens a blank screen and locks up.

Our opinion about this is that it might have some badly written reference to DF0: in there somewhere - try using a hex editor (such as DEKSID on Dos Utilities III from Prime Artifax) to hunt through the files and replace every incidence of DF0: with POC:, then assign POC: to the directory the game's installed to. Another possibility is it just needs to be in a logical device with the same name as the original floppy, so try assigning that name to the directory it occupies.

These are just guesses, though - has anyone out there done it?

Reel Fish'n

Di Taylor of Hervey Bay Qld, is looking for a manual for the elderly game *Reel Fish'n*, from Interstel Corporation and released in 1988. The only address given for the company on the disk is PO Box 57825 (big post office!), Webster, and she (and we!) has not a clue where that is. If anyone knows where this is or has a copy of this game that they'd like to sell, give Di a call on (071) 253 775.

Epic

Edwin Blackie of Craigmore SA has a problem. In *Epic*, refuelling and reloading is done by pressing Enter. Edwin has an Amiga 600. The Amiga 600 has no keypad. And *Epic* is not a DOS game, so DOS based keypad patch programs won't work. This may explain why on the end of his letter Edwin asks if anyone would like to swap an A500 with a 1.5Mb or more for his 2Mb A600...

On a lighter note, Edwin has also found a better Road Rash hint - try typing 00001-04310-MSOPC-17PFM, and enjoy $7,815,000.

Hard Drive Installation

Bill Owens of Ballina NSW, is understandably irritated at the still large number of Amiga games which can't be installed to a hard drive. Run from floppy by all means, but games that can ONLY run from floppy make our fine computer look distinctly cheesy next to the hordes of installable IBM games.

The usual reason for the absence of HD installation is the somewhat outdated notion of copy protection - usually done from manuals these days, if at all - and the mania among programmers for fitting as much as possible onto a few disks, foregoing normal DOS formatting in the process. Of course, hard drive owners don't care at all if the game's ten kilobytes too big to fit on three disks - make it four and installable, for crying out loud.

Now that the vein in our collective forehead has stopped throbbing, Bill is stuck in the first stage (forest section) of *Knightmare*. Any ideas, anyone?

Send your questions and answers to On Screen Help Line, 21 Darley Road, Randwick 2031.

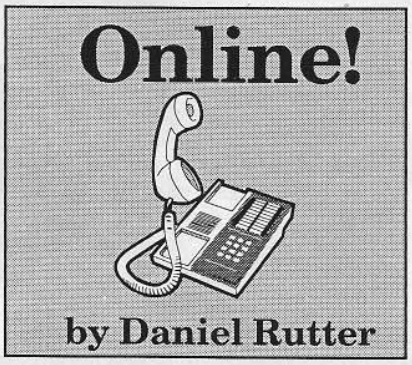
Amiga Connection goes DLG

Welcome to our new communications column, which will be shared by Daniel Rutter and Andrew Leniart. They'll be taking a regular look at the latest BBS systems, new communications software as well as sharing general tips on modem usage.

Amiga Connection

I've been giving the Amiga Connection BBS on (02) 970 6444 rather a lot of publicity recently. Here's some more. It's back. It's working. Tapelink's online, so there's multi-megabytes of stuff coming in (much of it irrelevant but nobody's making you download it).

It looks as if Sydney's finally got an Amiga Monster Board of the same calibre as Distributor in Adelaide, and about time too. If you're used to the interface used by all those faceless IBM based boards out there you might be a tad disoriented by the Amiga DLG system Amiga Connection now sports, but you'll get the hang of it and it's worth it for the high-powered message and file tagging utilities alone. Give it a ring - tell 'em I sent you and you'll get membership for exactly the same price ($55) as every other schmoe.



Amiga Connection is the Australian major site for Tapelink, a system whereby tons and tons of files are put onto a monster tape backup cartridge every week or so and mailed between countries. This gives access to files supporting all computers and piles of other stuff, like the Electronic Publications Network which allows you to download various great works of literature old enough to no longer be covered by copyright. *Mark Twain, Little Women*, the ancient classics, you name it.

There are also plain oddball areas like the Survival Net for people who really want the world to end in a pretty nuclear sort of way so they can use all those machine guns they've stashed in the basement.

You name it, it's there, and a LOT of it's there - over the coming weekend Mario Nicotra, sysop of the Amiga Connection, will be adding another three HUNDRED megabytes of Tapelink files. Wow, huh!

Amiga Connection's also got the entire Fish disk collection online, along with the mighty Aminet CD-ROM and a few other complete PD libraries. You'll need to pay membership if you want access to them, though (hey, it's not a charity!). You get plenty of stuff for nothing, though, so it's fine just to hang out on the board and upload a bit of stuff to pay for your downloads.

Oz Online

I've mentioned this board in Hot PD before; it's a commercial bulletin board (Amiga Connection doesn't make much money) which gives you a week of try-out access and then requires you to pay for membership, paying rather more than Amiga Connection wants although there seems to be a semi-permanent special offer going ("Last Three Days!" for the last three weeks ...).

What does Oz Online give you that Amiga Connection doesn't? It's got the same large selection of Fido and Usenet message areas, and the same large file base. Oz Online doesn't get Tapelink, but it should have an excellent throughflow of Amiga stuff once it picks up some momentum and it's Amiga specific - Amiga Connection, as I said, gets all sorts of stuff of no particular relevance to the Amiga.

Oz Online has a better online games section than Amiga Connection, including a genuine Multi-User Dungeon game, which lets you interact with lots of other users - teaming up or stabbing backs on your trip through the usual impressively complex text-only fantasy world.

Oz Online also does a regular link-up to the smaller Labyrinth bulletin board, which lets users on each system chat with each other and (this is the REALLY cool part) use all the features of the other board as if they were logged onto it - games, downloads, messages, everything.

Call Oz Online on (02) 264 3636. Use your free week and decide for yourself if the money is worth it.

500cc Formula One

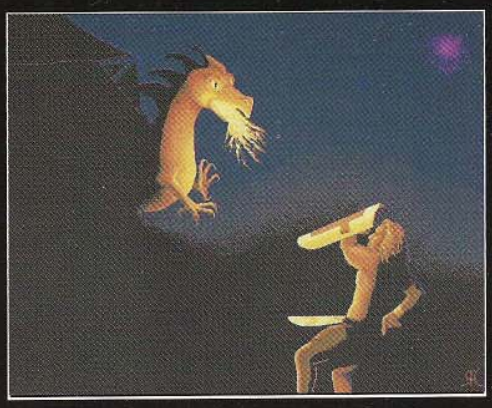
Enough of the fancy-pants new monster boards. One BBS that's been going for ages and shows no signs of slowing down is 500cc Formula One, on (02) 550 4317. It's an Amiga/IBM supporting BBS with plenty of Fido areas, a decent selection of online games and an excellent file section.

500cc not hooked up to any file distribution networks - it's just called by a lot of people who upload hot stuff all the time. Programs, music, pictures, text - if you call once a week you'll always have a big list of new things to grab and plenty of interesting messages to read.

I call 500cc once every two days, or even more often; drop me a line there! ❑

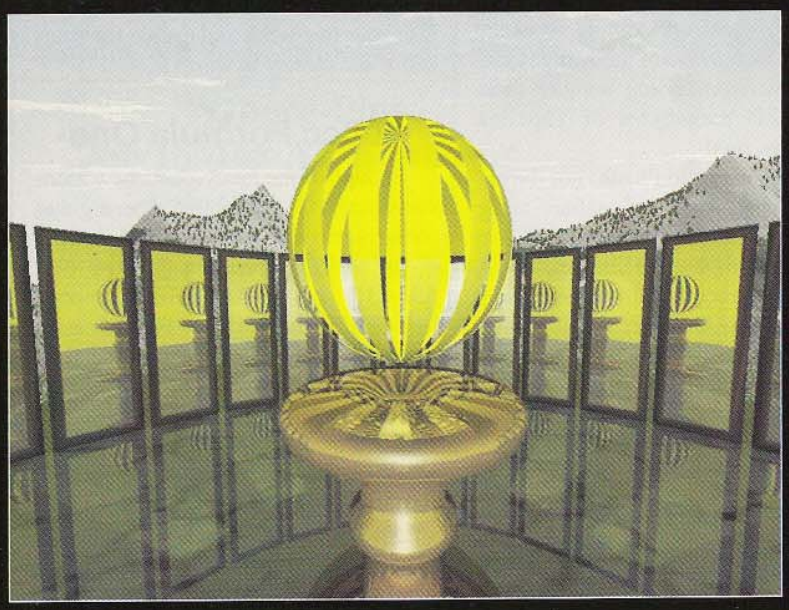
Amiga ART

736 x 576, 24 bit - Raytraced by Tim White using Real 3D V2.



Hand drawn pixel by pixel, 640 x 512 by Rebecca Hurley using Dpaint III.

640 x 512, rendered in Imagine 2.0 by William J.Porter.



640 x 512, 24bit. Background created using Scenery Animator 4, main image raytraced using Imagine by Steve Goodwin.

EHB 352 x 290, hand drawn pixel by pixel.

GALLERY

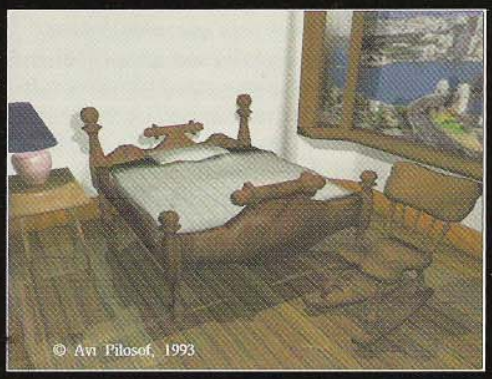
Amiga users are a talented bunch. In this regular spread of graphics created by people like you, we'll be show casing the best images from around the country. So, if you've got something to contribute, why not shoot us a disk - or modem the file to our simple BBS on (02) 816 4714.

(please include your name, tel no and how you created the image)

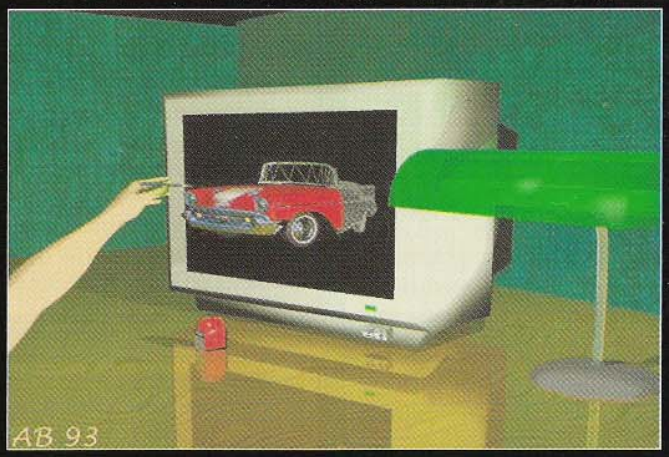
BTW: Like much of Amiga review, this two page spread was desktop published using Professional Page 4.1 on an '030 Amiga.

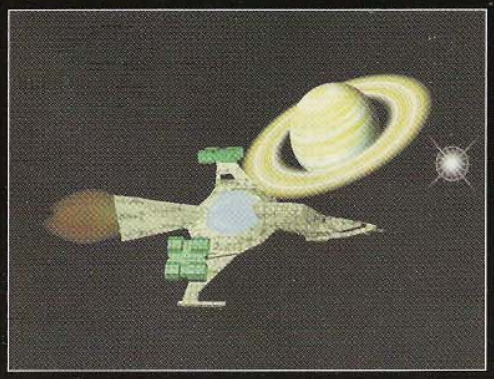
◗ Raytrace: 752 x 480 pixels, 24-bit - by M. Thompson's using LightWave 3.0.

◗ 704 x 566, rendered in Imagine2 by Avi Pilosof.

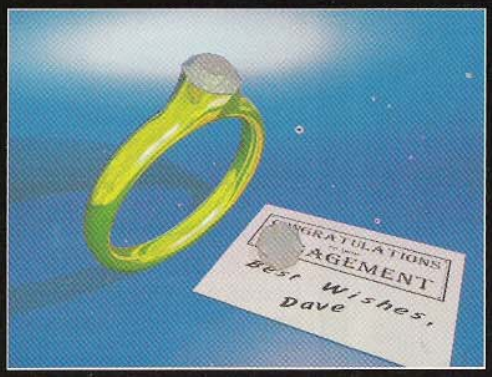


◗ 24 bit - 1024 x 768, raytraced using Imagine by Adam Benjamin.

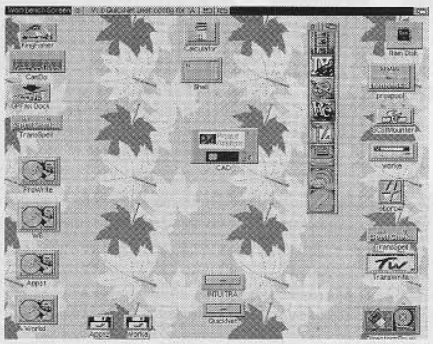




◗ 24-bit, 736 x 576: Raytraced in Real3d v2, textures in Opal Paint, by Ted Whitton.



◗ 768 x 576, 24bit: Raytraced by David Sloan using Imagine 2.0.



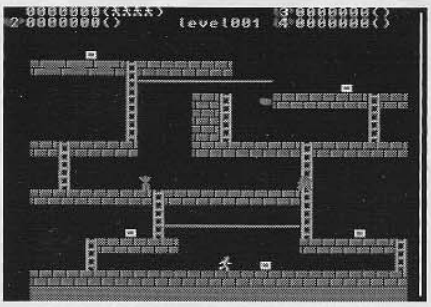
ToolManager & MagicWB

Your Workbench can look this good - Toolmanager provides fast access to any program. If you're not using it, you're wasting time. MagicWB replaces those dull WB icons with new 8-colour versions which are much smarter. 1 Disk each.

Have you wondered what's on our latest disks?

All $5 each...

(even less when you buy more.)



Hot Games # 12 NEW

A disk packed with great new games including the fabulous Loderunner clone - Minerunner. Allows up to four players and has all the original levels from the popular Apple II and Commodore 64 version. Also includes Battle Cars, Dynamite Wars (2-player), Galactoid, Megasquad and Parcheese.

AGA DEMO #2

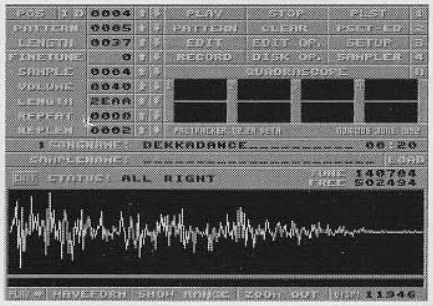
AGA Demo #2 NEW

A fine demo showing of the capabilities of AGA - with a smart new bouncing balls segment, some cool copper effects and impressive polygon animation.
Ideal as an in shop demo too. Mentions all the A1200's good features.
One disk. AGA machine required. Ideal for A1200 owners.

Author	Title	Publisher	1st publ.
Adams, Douglas	Dirk Gently's Holistic Detective Agency	Pan Books Ltd.	1988
Adams, Douglas	Hitchhiker's Guide to The Galaxy, The	Guild Publishing	1986
Baum, L. Frank	Wizard of Oz, The	Mandarin Publishers Limited	1983
Berenford, Dick	Uncensored Boy's Own, The	Macdonald & Co (Publishers) Ltd	1990
Boardman, Tom Jr	Science Fiction Stories	Octopus Books Limited	1983
Burnet, Frances Hodgson	Secret Garden, The	Octopus Books Limited	1983
Carroll, Lewis	Alice's Adventures In Wonderland	Octopus Books Limited	1981
Clarke, Arthur C.	2010: Odessey Two	Granada Publishing Limited	1982
Clarke, Arthur C.	2061: Odessey Three	Grafton Books	1989
Crichton, Michel	Jurassic Park	Random House	1991
Davis, Jim	Garfield: Here's Looking at You	Ravette Books Limited	1985
Davis, Jim	Garfield: Life And Lasagne	Ravette Books Limited	1986
Davis, Jim	Garfield: We Love You Too	Ravette Books Limited	1985
Doyle Sir Arthur Conan	Lost World, The	Hamlyn Publishing	1986

Database II NEW

A collection of simple to use database programs for maintaining all sorts of lists - from catalogues to clients. Flexer - pictured above - is one of the new programs included on release II of the database compilation. Flexer's form-like display makes it ideal for beginners, and powerful enough for advanced users.



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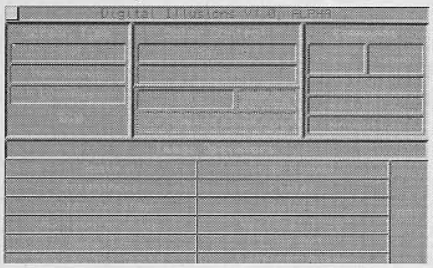
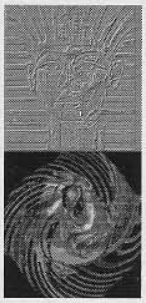


Image Processing



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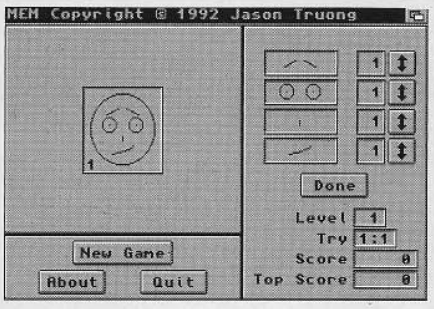

Education #5 NEW

We now have a total of six disks of education software. Mem (a memory game - picture above) is from education #5 - one of five programs on the disk. Others include Maths Adventure, Division, Counting and Lemonade. Education 6 has an excellent puzzle game called OXYD.

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Body BLOWS Galactic

Wham, Bam - sorry Ma'am! The back blocks of the Vega sector is no place for a lady anyhow. Okay - I know you've got Nylocrete Body Armour. But that's not the point. A dame could get badly injur ... OOOFFF! Boy, this baby's in no mood for talking.

We're playing *Body Blows Galactic*, and I have to admit I'm taking a terrible beating. We're competing in the Pan-Galactic Championships, a battle for supremacy that takes place on planets all around the universe.

Body Blows Galactic is the sequel to the original *Body Blows*, one of the most popular beat-em-ups of all time. Naturally, a game like this is open to the criticism that it's just "more of the same." You've moved all the moves, you've kicked all the kicks ... but hold the complaints until you've checked this one out. The fact is, *Body Blows Galactic* has an unusual amount of style, flair and variety.

For a start, the outer space scenario makes for a unique look and feel. It's far from your typical white pyjamas and black belt oriental scenario. And it's not your average city street gang buster *Double Dragon* clone either.

The six planetary backdrops are superb. There's earth, of course, which we know pretty well. But try Titanica, the most technologically advanced planet in the universe. Here's where you'll take on Tekno and Lazer, two high-tech tough guys with an attitude problem.

Then there's Eclipse, a planet that doesn't rotate. One side is permanently freezing, the other is perpetually ablaze - and the life forms have evolved appropriately. You'll be fighting the champion from each race - Inferno, and Warra.

Gellorn-5 and Miasm are next on the agenda, and then Feminion, in the far end of the Vega sector. Ruled by women, the men of the planet are totally under the thumb. And as I've been fighting it out with Azona, I can see why. Ooff! Here she comes again!

As the game begins, you can choose any planet as your home base - and you can play the part of any of the 12 characters. The range of possible movements is awesome - each character has a repertoire of 21 different kicks and blows that will take you quite a while to master. The icy Warra, for example, has all the standard moves - and also his ice-pick. Not only that, if you press the fire button and hold it down, you'll see a power bar incrementing on the status display. When it hits the top, release the button and you'll fire off "The Big Freeze." Do the same thing with Inferno, and he'll let loose a devastating "Heat Seeker."

The sprites in *Body Blows Galactic* are huge, taking up almost half the screen height - you'll almost believe you're playing an arcade machine. Not only that, they're fast, smooth, and well animated. The detail is impressive too - each player is decked out nicely, with high tech outfits and accessories.

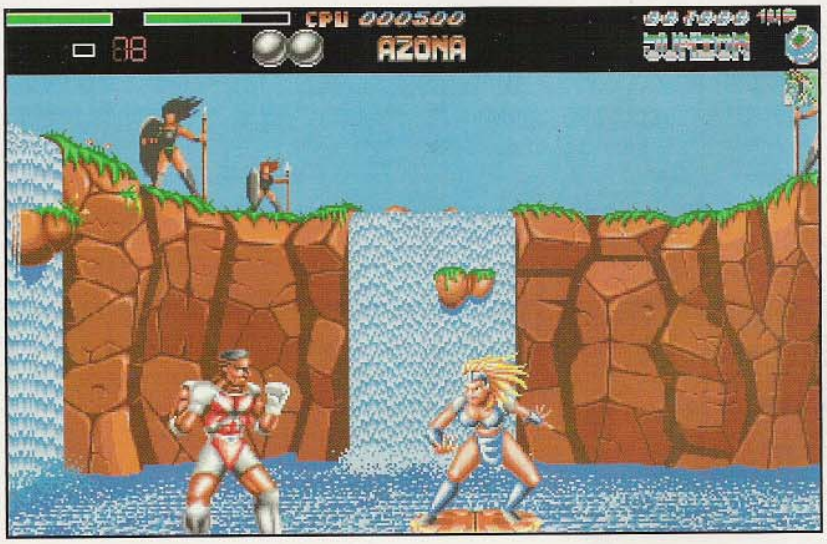
By the way, there's a free bonus disk in the box too, with a playable demo of the soon to be released *Overdrive* - a view-from-the-top car racing game- and a fully working version of *Apache*, an update of the old favourite *Choplifter*.

PHIL CAMPBELL

Ratings

Graphics	**87%**
Sound	**79%**
Gameplay	**89%**
Overall	**86%**

Distributed by Hotpoint (02) 634 6499. RRP $69.95.



Ratings

Graphics:	**75%**
Sound:	**72%**
Gameplay:	**73%**
Overall:	**75%**

Supplied by Logico
(02) 519 6719
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This I simply cannot understand. *Zool* on the CD-32 (see page 80) is an entertaining and mildly addictive game which I can play happily for hours. *Zool 2*, which runs from floppy disks on the Amiga, is not as inviting, as enjoyable, or as playable.

Which is strange, as the game is very similar to *Zool* but with extras. Possibly having seen *Zool* first, I was expecting great things and numerous improvements, and while these have been added they don't seem as funny as the original.

After careful checking I have discovered that the programmer, the graphics designer, the producer and the creative consultant have all been changed between one game and the other. Both were copyrighted in 1993 and both are published by the same company. Something strange appears to be going on here. Perhaps they re-trenched the original team and started from scratch.

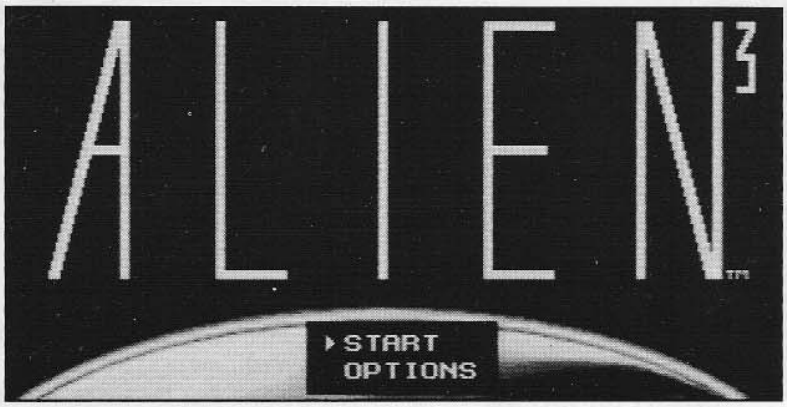
Interesting that the manual for the original *Zool* is only a couple of pages and you do not need to read it. For *Zool 2* it is a much bigger production and a female Zool has been added to avoid accusations of sexism.

The prose style in the new, larger manual is somewhat hard to take, being punny without being funny. "There some fowl play down at Swan Lake, some forked tongue double-dealing at Snaking Pass ..." gives you the flavour.

But I am fascinated why I found this game boring after a while and decided to give it away.

Perhaps it has become over complicated. Certainly it is over-decorated and somewhat over the top. I doubt that you will enjoy *Zool 2* as much as *Zool*. Pity.

GARETH POWELL



Ratings

Graphics:	**75%**
Sound:	**70%**
Gameplay:	**78%**
Overall:	**75%**

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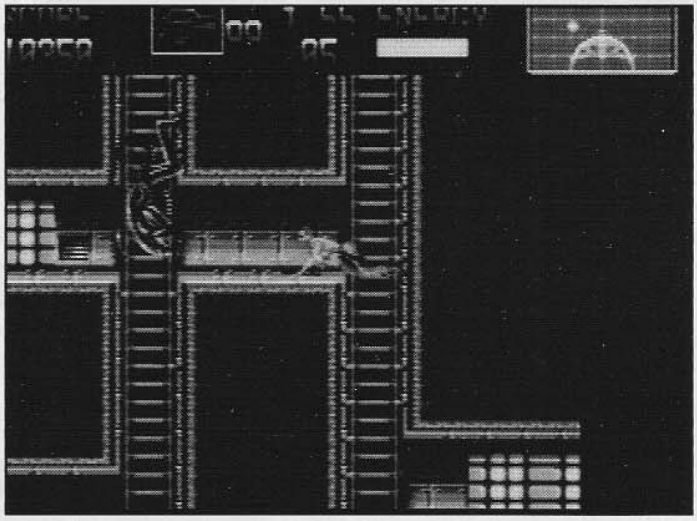
Personally, I prefer Sigourney Weaver with hair and in a dress. In *Alien 3*, the movie tie in game, she has the cropped convict skull, a pair of combat green trousers and a skimpy Chesty Bond vest both of which she fills most convincingly.

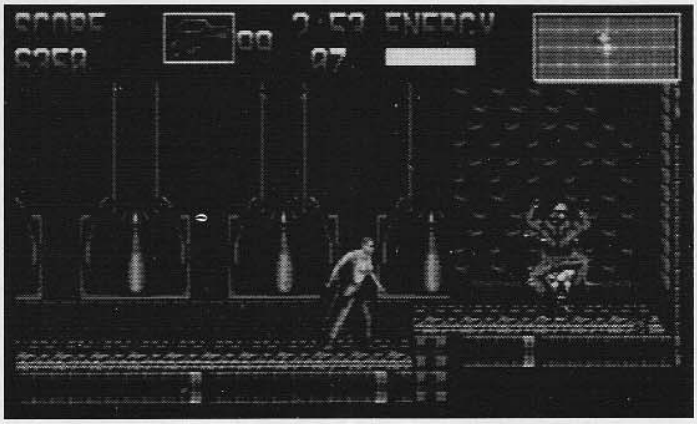
If you have seen the movie you will not be helped in making sense of the game because like almost every movie tie in I have ever seen the movie is only the departure point for the game. The plot gets lost early on. This is a mixture of maze, problem solving and shoot-em-up and, as such is most effective.

The space ship Sulaco is involved in a malfunction in which an unborn Alien manages to invest itself into the body of Ripley who was in a state of hyper sleep along with Newt and Hicks in cryotubes. The names comes from cryogenics which is the art of extending life by deep freezing.. (Are you following all this? There will be questions later.)

Okay, now the cargo carry part of the space ship disengages and crashes on Fiorina 161, killing Newt and Bishop but leaving Ripley unconscious but alive. For which relief much thanks.

This is going to be one of those days because the planet on which you have crashed is inhabited by hard-core convicts. All of which leads to Ripley - or, if you prefer, Sigourney Weaver - to face the task of rescuing the Aliens' captives and then destroying the Aliens themselves.





That is the situation as I understand it but I cannot make that relate to the fact that our heroine keeps coming across bodies in an advanced state of St Vitus dance (the prisoners) which she rescues by walking through them so that they collapse and disappear. Sigourney Weaver, short hair or not, can walk through me any day of the week, but whether I would then collapse and disappear is open for much debate.

The game plays in a series of stages and depending what stage you are at you either rescue prisoners or exterminate aliens. You need to use the radar screen in the top right hand corner of the computer screen to track down the prisoners and you reach them through a complex maze of ladders and tunnels - mainly populated by aliens through which you have to blast a way.

This program comes from Virgin - the company of Richard Branson that brought us an airline and a record store and it is not bad and has plenty of game value. But it is not that great, either. Still and all, playable and enjoyable.

And I love the Alien in the opening credits.

GARETH POWELL

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LOTUS TRILOGY

The late Colin Chapman was one of the world's great fast car designers. He believed that low, light cars driven by small ultra light engines was the way to go. In his original Lotus he used a portable engine built of alloy that had been used by fire brigades and was called the Coventry Climax. The resulting machine went like the clappers, never got unstuck, was close to impossible to beat and about as comfortable to ride in as being dragged over a rough road in a wooden box.

The Lotus Seven was a spartan, totally open two seater machine with vestigial mudguards and no comfort. None whatsoever. If you drove it in England you were mostly wet, cold, bruised and exhilarated. Later cars improved in roadholding, acceleration and speed but the engine stayed small and the ride as hard as a pawnbroker's heart.

Lotus III, the Ultimate Challenge, tries to bring you the thrills and chills of hammering around a course in a Lotus. And, by damn, it almost succeeds.

A few things are missing.

The smell of high octane fuel, the scream of anguish of an engine being revved above the red line, the massive force of sideways G as you swing around a corner in third heeling and toeing like mad and hoping the driver in front will keep to the line. The massive bruises you get on each thigh trying to keep your body upright. But within its limitations this is a most serious attempt to get it right.

Once you have the two disks loaded you are in a racing game with a very wide range of options. You can play with one or two players. Play against time or for the championship. Have manual or automatic. (A tip. Start with automatic and master the power sliding of the car. Then switch to manual and keep the revs up as high as you can.)

You can create your own tracks which is great fun and I ended up with something that made the Nurburgring look like a tame Sunday drive.

You have a choice between three Loti - the M200, the Esprit Turbo SE and the Elan SE. Again, if you will take my advice, you will use the Esprit Turbo which accelerates like a scalded cat and rarely loses the line.

With this game power slides have been built in. This is very difficult to do with a normal production car.

The first one to allow it was the famous gull-winged Mercedes Benz 300SL. This was a brute of a car which could be broadsided under power around corners and would race anything in sight off the road.

The Esprit Turbo is in the same school as the Mercedes. That is you can broadside under power which means that you can steer with the accelerator almost as well as you can with the wheel which means, again, you can keep the engine screaming as it hangs on to its cylinder head blasting around a corner.

Hey, I like this game, I really like it.

They have, as I said, left out the scream of the engine in mortal agony and substituted some pleasant fast paced, fast driving music. But I had sweaty palms after ten circuits which is as real as I want to get this week. Strong approval for a game that is not, repeat not, CD-Rom but on two disks manages to capture a lot of authenticity and thrills.

Lotus Trilogy includes *Lotus Esprit Turbo Challenge, Turbo Challenge 2* and *Lotus III, The Ultimae Challenge*.

Gareth Powell

Ratings	
Graphics	**86%**
Sound	**70%**
Gameplay	**87%**
Overall	**85%**

Distributed by Hotpoint (02) 634 6499. RRP $69.95.

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FlashBack Solut'on Part 2

Level Three:

Go right and kill the terminator, open door, go back right, and re-charge, go left, kill the terminator, and proceed left, open door and take lift up to floor 7.

Jump up and proceed left, open floor trap, go left, and kill the terminator, activate doors and kill the terminator. Go left and kill the terminator, go left, climb up, go left and kill the terminator and the two floating balls. Proceed left and save here, go left and take lift up to floor 6.

Go right and open door, roll left, climb up and go left, watch out for trap door and re-charge. Go left and kill the terminators, proceed left and watch out for floor mines. Take lift up to floor 5. Roll left and kill the terminator, climb up, roll right and save here. Go left, climb down from centre platform, run left and jump up to proceed left. Jump over pits and continue left, take the lift up to floor 4.

Go right, release the terminator and kill him. Open door and go right, recharge and kill the terminator. On the bottom platform, go right and open door on middle platform, go right and open floor trap on bottom platform, go right and take lift up to floor 3. Kill terminator and go right, kill middle floating ball, kill terminator, and save here. Kill remaining three balls and take lift up to floor 2. Kill terminator, open door, and kill the other terminator take lift up to floor 1. Kill terminator. You'll see an animation sequence of a TV studio you'll receive money and launch on a space crusade to the next level.

Level Four:

Talk to the man and give him the I.D. card, go left, kill the cop, and go left here kill the second cop (use the force field, it really works). Go down, kill the cop and floating ball from middle platform, go right and re-charge, go right and kill the cop, proceed right, dispose of all the cops that show their face, go back left and re-charge if necessary. Go right and inside kill the 2 cops and floating ball move right and call a taxi. Save here, climb to the top platform, run and jump all the way right and crack the crystal. Proceed inside and right, here dispose of the terminator. Take the lift up, crack the crystal, and get the key, go all the way right, jump to the middle platform, right again and recharge, step left and incinerate the robot (caution: he explodes). Activate console, go right, open door with the key, and take the lift down.

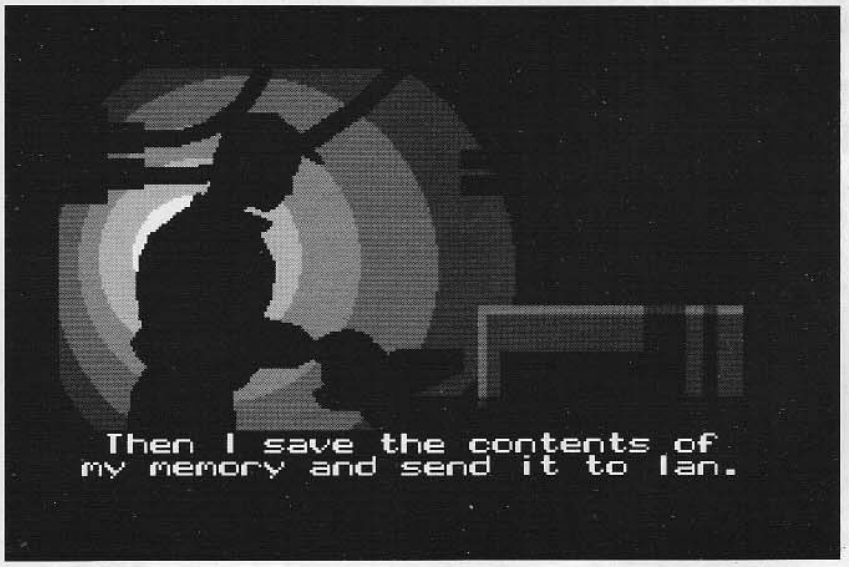
Save here, climb up and the wall will slide away, take the lift down and go up on the right and kill the terminator. Pick up the key, and proceed left, get rid of the two floating balls and climb up, move right and activate the console so that the wall slides out of the way. Then left and climb down, go right and deactivate the force field, proceed down, open door, and recharge, take the lift up and go right. There are two floor traps here, go right and take the lift down on left, run and jump to the top platform so you can open door, go right. Pick up key, lift up, open door and step inside, kill the floating ball, jump mine, and run like hell - a force field will follow you, dispose of the floating ball and proceed right to the next level.

Level Five:

Terminator will open the door, however you can't kill him because you don't have the gun, run right and pick up the gun, kill the terminator and pick up the key. Save here, go right, and open both doors proceed up (caution: force fields all over) and left. Go down to re-charge dispose of the bottom terminator and pick up both teleport parts, kill upper terminator. Run and jump to right screen avoiding force fields open the door and throw the teleport receiver. Teleport here kill the floating ball and pick up the teleport receiver jump down and dispose of the slime creature. Go right and kill the second slime proceed left. Save here, go left and fall into pit kill the floating ball in the next pit and proceed left, climb down and enter the teleport beam for the next level.

Level Six:

Go right and kill the slime, open the door, re-charge, go back left and take the lift down. Go down, kill the slime, pick up the rock, and go left, throw rock at the sensor to open door and go left activate the switch to open the floor on the bottom platform. Shoot the door, operate switch and dispose of the slime, collect atomic charge and proceed left, check out the journal, go down. Open the floor, and proceed down re-charge and kill the slime, throw the teleport receiver into the pit and teleport, down, kill the slime and go down.



Save here, kill mutant dog and proceed left, open door and kill the slime, go right, pick the up key, and step right into the teleporter go right and up take the lift up, go right, and place the key for next level.

Level Seven:

Jump up and take the lift up, be ready to kill the slime and then collect the 2 explosive mice (here kitty, kitty) proceed up run and jump to avoid the falling bombs. Throw the teleport receiver to the left and take the lift up, activate switch so that the lift goes back down, move all the way left and re-charge. Go right and get the teleporter ready, jump into the pit with the slime and activate switch then immediately teleport, be ready to kill the slime at the bottom. Pick up the teleport receiver, move right, pick up key, and open door take lift up.

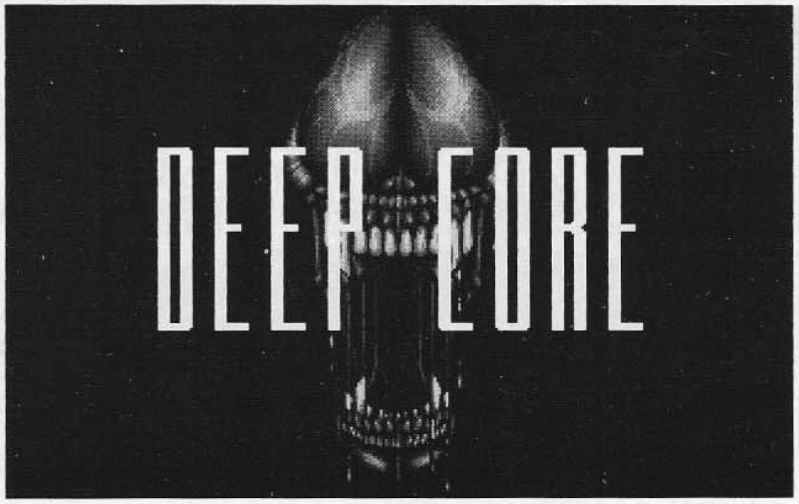
Save here, roll right avoiding the force fields, take lift down and insert key using lift. Blow up the floor mines, throw the teleport receiver into the pit and teleport down. At the bottom kill the slime then using careful timing dispose of the organic entrails inside the half-sphere, pick up the teleport receiver.

Follow these instructions carefully: Step to the right of the floor pit, jump left (keep the button depressed) to hang from the floor, move joystick down and you should fall down and hang from the bottom, once you jump all the way down, proceed.

Move right and leave the teleport receiver, go all the way left and recharge, take the lift down.

Save here. Move right and shoot two slimes, you must dispose of the entrails hanging down from the ceiling to do that, shoot them from the left side. Then from the right repeat until there aren't any more slime-bags coming out, go left, take lift up and re-charge, take lift back down.

Save here, go back to the right, take the lift up and go right, pick up mouse and kill the slime, pick up the key, open the door, and go back to re-charge also save if necessary (recommended!). Return to the door and take the lift down, go right and dispose of the 2 slimes (you might want to use the exploding mice here, now you know why there aren't any cats in this game). Go right and roll through the force field, leave atomic charge and hit the switch teleport back, go right and take lift up, here you will see the final animation.



As the intro sequence plays, I sit back lazily into my armchair and smile. I smile because as I look onto the screen, my eyes are greeted with a spectacle close enough to movie style quality.

A ship hurtles towards the atmosphere, an object is separated from the mothership, this mothership is located on a new course, the droid it deploys enters the atmosphere. A relay of messages are sent between ships floating in the Indian Ocean. The M.S. Hurricane receives a message from the M.S. Arizona and is deployed as the droid tears into the ocean and disappears below the surface.

Capt Dawnrazor is notified of the situation and as the droid docks onto a nuclear research station 20,000 feet deep the Captain is flown to the station. The last words he hears as he sinks into the murky depths of the Indian Ocean are,"Be careful we don't know what's down there, and by the way, we think that the oxygen is running out."

Deep Core is big. I mean big in all standards of the word. Your character Capt. Dawnrazor is a classy guy with his muscle shirt and big guns. The dark tones of the background and your character give an air of mystery, and unforseeable danger. The backgrounds are drawn to perfection, air vents scatter a backdrop of air bubble rising into oblivion and a matrix of squares divided into smaller squares and so on. The animation is smooth and the scrolling is quick and keeps up to the character.

The next article which will come to the attention of your ears is the sound effects and music. *Deep Core* doesn't have any in-game music but the title screen has a great beat. The sounds of your weapon expelling its projectile which evolves into a mass of gases and shrapnel as it comes into contact with the aliens is well done. The only other real noises are the occasional doors and maybe a monster of an alien coming down to greet you with open cannons.

The thing which I found distressing about a game with this much class is the lack of documentation. After playing the game for a few hours I realised that I knew nothing of what I was picking up and using. I couldn't figure out a lot of things until I watched the title screen. This gives you all the information you need the successfully complete the game.

This game is a classic all round platform game which will entice any gamer to have a go and kill the aliens and save the world. Again! It has everything a game needs, but still, as most games do, lacks originality and does get a tiny bit annoying after a few hours of death and carnage. I mean how much can a human take?

Juris Graney

Ratings

Graphics	**86%**
Sound	**65%**
Gameplay	**87%**
Overall	**89.5%**

Distributed by Hotpoint (02) 634 6499. RRP $69.95.

MICHAEL SPITERI'S Adventurer's Realm

Welcome to that part of the magazine where you can unashamedly state that you are stuck neck deep in your once favourite adventure or role playing game, and are basically beyond the point of no return. It is also the part of the magazine where you can air your grievances, trade and barter, have a bit of a chin wag and be the light at the end of someone's tunnel.

If you are stuck you can write to one of our many Clever Contacts or to Kerrie for one of her many free hint sheets (check the list before writing in). If that fails, drop me a line, and if I can't find help for you among my huge database of hints and tips then I'll print your problem here for all to see and hopefully a solution will be forthcoming.

Feel free to send in your hints and tips, your views and news, your rumours and gossip, your complaints and chatter, in fact if it's on the topic of adventure and roleplaying games then we want to hear about it!

The address to write to for adventure hints, tips, problems, natter, chatter, rumours, complaints, etc, is: Adventurers Realm, 12 Bridle Place, Pakenham, Vic 3810

Kamikaze Andy resides deep in his Dungeon and he is our resident roleplaying game expert (he is also pretty cluey when it comes to games in general). Drop Andy a line at: Realms Dungeon, PO Box 1083, Canning Vale, WA 6155.

Always enclose a stamped addressed envelope when writing to any of the addresses published in this article.

Free Hint Sheets

Kerrie, the Lady of the Realm, is slightly preoccupied this month (a little helper is due any time now ... literally!) however she it still trooping along in sorting out your hint sheet requests and the service is just as speedy as it ever was. If you would like up to four of the hint sheets listed below then drop a line to Kerrie's Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810. You must enclose a stamped addressed envelope, and please, don't forget to mention the hint sheets you would like.

Hint sheets available are: Mortville Manor/Maupiti Island, Monkey Island I, Monkey Island II, Space Quest III, Space Quest IV, Wonderland, Leisure Suit Larry 3, Champions of Krynn, Kings Quest V, Pool of Radiance, Zak McKracken, Zork 1, Zork 2, Zork 3, Bards Tale 1, Bards Tale 2, Bards Tale 3, Hitchhikers' Guide to the Galaxy, Guild of Thieves, Jinxter, The Pawn, Corruption, Faery Tale, Indiana Jones and the Fate of Atlantis, Loom, Space Quest II, and the brand new 1994 Clever Contacts Listing.

Realm's Quite Clever Hint Disks

Not only are there two hint books, but there are also two hint disks, skillfully compiled by Graeme Beaven (who is currently working on Volume 3 and public domain disk for the Realm). Combine the two hint disks to cover over 190 different adventure and roleplaying games. Incredible, eh?

Orders are coming in thick and fast, and for good reason of course as they are the best dressed and most easy to use hint disks ever.

Both features a very easy to use interface that allows you to display hints click of a button (volume 2 even contains a swag of maps).

Absolutely packed to the last remaining sector with hints and maps, each disk is priced at an absolute bargain at just $7 (including p&p) or $5 if you supply the disk and stamped addressed envelope. To order either disk send a cheque to Michael Spiteri for the required amount to Realm's Hint Disk, 12 Bridle Place, Pakenham, Vic 3810.

Realm's Jolly Good Hint Books

There are two official hint books available. Volume 1 contains hints and tips to over 40 games, and Volume 2 contains hints and tips to over 25 adventure and RPG games as well as pages upon pages of mapping sheets. Volume 1 is only $9 and Volume 2 is only $10.

To order either book, drop a line to Darrien Perry at 21 Darley Road, Randwick, or give her a bell on (02)3985111.

Realm's Trading Post

Sell, buy, swap, yell out for, search and bargain. That's what happens here. Free ads for used original games will be published free of charge for one month. Pirates get lost. The address to write to is ... Realm's Trading Post, 12 Bridle Place, Pakenham, Vic 3810

Lucinda Kenward of 13 Gagarin Street, Mudbury North SA has *Ork, Mega Twins, Terminator 2, Total Recall, Oxxonian* and *Pinball Fantasies* and will sell or swap for games like *Zak McKracken, Leisure Suit Larry,* and *Bill Tomato Game* (!). Lucina would also like to know where she can get hold of Epyx World Games. She can be contacted on (08)3965073.

Tony Finn of BASC Dental Unit, Simpson Barracks, Macleod, Vic 3085, has a sealed copy of *Wing Commander* ($50), as well as *Space Quest IV* ($30), *Links Golf* ($30), and *Prince of Persia* ($25).

Andrew McCulloch of 33 Carvie Street, Hillman WA has to sell or swap *Wing, Silent Service II, Red Service Rising, Powermonger, Imperum* and *Battlechess.*

Peter Sinbandhit of 33 Waley Avenue, Bellambi, NSW 2518 has *Karate King, Moonwalker, Vortex* and *Datastorm* at $10 each and *Ninja Turtles* for $30. He will consider swapping these games, so give him a bell on (042) 853 848.

Clint Lowe of 7 Pauline Court, Kangaroo Flat Vic 3555, or phone (054) 478 907, has *Nigel Mansell's World Championship* with all it's goodies for just $40 and also *TV Sports Baseball* for $35.

Mandy Huxley would like to purchase original copies of the following Amiga games ... *Shadowgate, Deja Vu, Uninvited* and *Dark Seed.* You can ring her on (002) 204 619 BH and (002) 286 828 AH.

Garry Johnston of 122 Heber Street, Moree, NSW 2400, phone (067) 521 687 has *Civilization* for $60 and *Drakkhen* for $25.

Mark Beijer of PO Box 150, Busselton, WA 6280 has for sale *Ninja Turtles, Street Fighter, Leather Goddesses of Phobos* $10 each, *Garfields Winter Tail*, $15, *Bill and Ted's Excellent Adventure, Hunt for Red October, Shadow Sorcerer, Ocean Action Pack, Colorado, RBI Baseball 2, 3 Stooges*, $25 each, *Pit Fighter* $35, and finally, *Operation Stealth* and *Maniac Mansion* for $40 each. Mark will also swap *Street Fighter 2, Guy Spy*, or *Leander for Dark Seed, Fate of Atlantis, Legend of Kyrandia*, or *A-Train.* Phew!

Doug Smith of 19 Hibiscus Avenue, Brooms Head NSW 2463 writes:

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June 1993 Vol 10 No 6
● 3D Animation with Aladdin ● The Animation Workshop ● Disk Swapping ● Deluxe Paint - Animating in 3D ● Amos Column ● Andy's Attic ● CanDo ● Education - World Construction Set ● Opal - Alpha Channel ● C64 Column ● Hot PD ● **Games** - KGB, Fate - Gates of Dawn, Darkseed, Civilisation, King's Quest Solution Part 1

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October 1993 Vol 10 No 10
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● Palmtop Computing & Your Amiga - low price alternatives to an Amiga portable ● Preview of Final Writer - Super Enhanced Wordprocessing ● What the Manual Doesn't Tell You - for beginners ● Deluxe Music 2 - improved new version ● Quicknet - Delivers Network Speed - a new peer-to-peer network from a local developer ● Understanding Libraries - Why libraries are so important & how to manage them ● CanDo - Getting key input ● Hot PD - Latest PD & Shareware ● Amos - New extensions for AMOS Pro ● Blitz 'em - Zones of control ● Andy's Attic - Ebony and Ivory ● C64 Bumper Tips ● Games - ACAR PD Games 2, Mean Arenas, Yo Joel, CD32 Quickshots (D/Generation, Whale's Voyage, Overkill)

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"I have *KGB, Lure of the Temptress, Police Quest 3, Monkey Island 2, Putty* and lots of others, all boxed and beautiful, and would like to swap for *Legend of Kyrandia, Willy Beamish, Wizkid*, or anything decent. I also want to get rid of 45 magazine coverdisks full of playable demos of good commercial games including the most recent, and I'll sell these at blank disk price in batches of 5. People should get in touch before sending money and enclose a S.A.E. if they want a reply"

Mike: I think we should adopt Doug's suggestion when dealing with any ad in this area.

Clever Contacts

Clever Contacts are adventurers who have freely donated their time and efforts into answering adventure queries put to them. They also make great pen pals!

A complete listing of Clever Contacts can be obtained by dropping a line to Kerrie in the Free Hint Sheet Dept.

New Clever Contact this month if Joseph McElwee of 96 Beatrice Street, Bass Hill, NSW 2197. Joseph can help in approximately 50 different games (too many to list!), but it does include some very well known titles. Joseph is also after hint sheets for Elvira 1, Cadaver, Dungeon Master and Personal Nightmare to add to his collection.

Tony Finn is an existing Clever Contact with a new address! Refer Trading Post for details.

Clever Contact James Wilson is no longer a Clever Contact, so please do not write to him. James is no longer an Amiga person, so thanks James for your much needed efforts. I'm am sure they were much appreciated!

Finally, make sure you enclose a stamped addressed envelope and sufficient funds for printing and photocopying and alcohol when writing to a Clever Contact, and of course, many thanks to all our volunteers around the nation for doing such a fantastic job.

The Adventure Problem Centre

This is the part of the Realm were problems are published and hints revealed. If you were stuck a couple of months back, you could find relief here, today, now.

John San Diego writes ... "Congratulations on the Adventurers Realm Column - it's brilliant! Keep up the good work. Anyway, I'm having a problem with a game called Zak McKraken. How do you get Zak up to Mars? What are you supposed to do with the bird in Lima? I've lured him into the bird feeder with the bread crumbs, and tried using the blue crystal on him, but nothing happens. How do you fly to the Bermuda Triangle? I've bought the ticket, but every time I walk in the gate to the planes Zak just says "The plane's not here now." And what are you supposed to do in the temple in Mexico?"

Mike: Thanks for the compliments, John. You seem to be having lots of fun in Zak McKracken. You seem to be doing the right thing so far with the bird in Lima, however after you use the blue crystal on the bird you have to head to the Left Eye of the hill. In the Mexico temple you have to search around in the dark until you find a light source. Then head to the center of the temple (ie. head towards the blue figures, not the green). This is the beginning of your journey to Mars. Maybe you've missed the plane, or maybe you are too early. You've stumped me there, John. Maybe somebody can help out?

Stephen Downward and Clint Lowe wrote to me separately, both stuck at the same spot in Indiana Jones and the Last Crusade. Both are stuck in the library and neither can seem to find the "X". Well, the only thing I can think of is maybe you guys need to check some of the books in the library, still, any takers for this problem?

Doug Smith writes ... "Many thanks for printing my request for help in Fool's Errand and to Robert Holmes for responding. It's surprising how many people you run across who are still beavering away at this brilliant old game. It came out a few years ago to very mediocre reviews but people didn't give it enough credit for making the power of the computer integral to the puzzles in the story. I've always been a bit disgusted with software that simply presents on computer what could far more easily be put in a book. Exploiting the computer novelty value but not being pretty much the work of a lone enthusiast. I suppose that the days of such people in commercial software development is nearly over.

I've seen a follow up to the game. Does anyone know what the author, Roger Miles, has produced since?"

Mike: Thanks for your letter Doug, and also for the following help you've given to the following troubled adventurer.

Ben Christensen was stuck in Cruise for a Corpse ... "Your clock will read 9.30 AM after you find the receipt. Now talk to Suzanne, Tom, Julio, Fabiana in that order and the clock should stand at 10.00pm. Go to Julio's cabin and find that key on the floor. This is not a door key. Use it to find a bracelet amongst other things. Examine the clasp carefully. This is vital and easily missed."

Ben was also stuck in Kings Quest 2 ... "Ben's clue on the third floor is that he must have a stout heart. As far as I can recall this refers to the final trial, confronting the ghoulish boatman, crossing the poisoned lake, passing the deadly briars and confronting the horror that lurks in the castle. Be sure to bring your mallet, stake and cross and check under any pillows you might find."

The Patrician

Ratings	
Graphics	85%
Sound	70%
Gameplay	80%
Overall	86%

Distributed by Hotpoint (02) 634 6499. RRP $69.95.

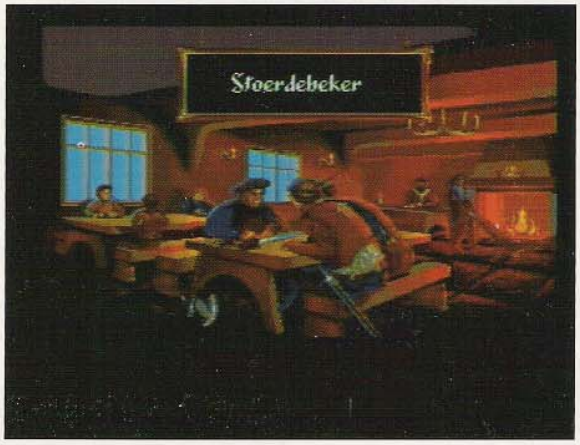
The Patrician is, perhaps, by definition not a game I should be playing. I am not by nature a patrician. Indeed, the reverse.

Patrician is a game which has honourable antecedents. Years ago there appeared on the Apple II a game which won many hearts and minds called *Lemonade Stand*. In it you traded your way to a small fame and fortune by making and selling lemonade.

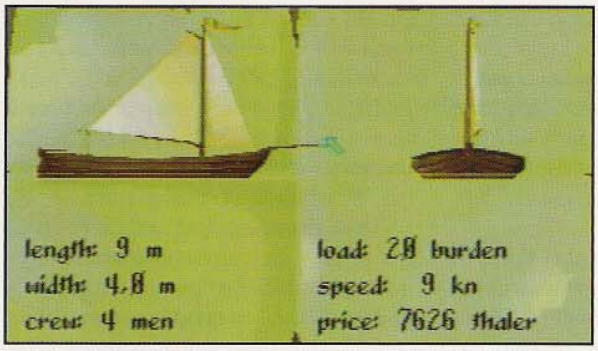
After that came *Shanghai* which was a great success. In that you traded around Asia with some fighting thrown in against the pirate junks. There was a basic flaw in this game in that once you had spotted how to move the trading into a reverse cycle you quickly amassed riches beyond the dreams of avarice.

The Patrician is the same game taken up several levels to its intelligent limits. Again, it is a trading game but this time can be played with between one and four people.

The scene is medieval Germany during the time that the Hanseatic League had a stranglehold on all trade in Germany and most of Europe. You start off from one of the Hanseatic ports and you send your fleet out to other ports trading and bartering as you go, so that you build up a large fortune and retire to enjoy the illicit pleasures of the Reeperbahn in Hamburg.



What is amazing about this game is that the graphics are so good that they lead to a suspension of disbelief and you feel that you are, indeed, trading. I started playing after supper one evening and the light of dawn let me know I had played too long, at which time I was about to be appointed the Patrician, or head of the Hanseatic League.



The game play in this game is fair and balanced and if you make a bum decision you quickly suffer the consequences. You need to balance exactly your trade goods with your defences and make sure that you only sell at a profit. Good training for this game would be a visit to Paddy's Market on a Sunday morning.

A word of warning, I was unable to run the game from an Amiga 500 without a hard disk. This may of course have been bad luck with the disks, but using the same set I loaded it onto an Amiga 3000 with a hard disk, and ran the game with no problems. ❐

GARETH POWELL

War, as we know, is hell. But war on CD-Rom machines is slightly less than hellish because with a bit of intelligent forethought you can always win.

Take *Fire Force*. This is a pretty simplistic shoot-the-baddies game and in no way makes use of the possibilities of CD-Rom machines. On the other hand if you regard it simply as a war game it ain't bad. Indeed, quite playable.

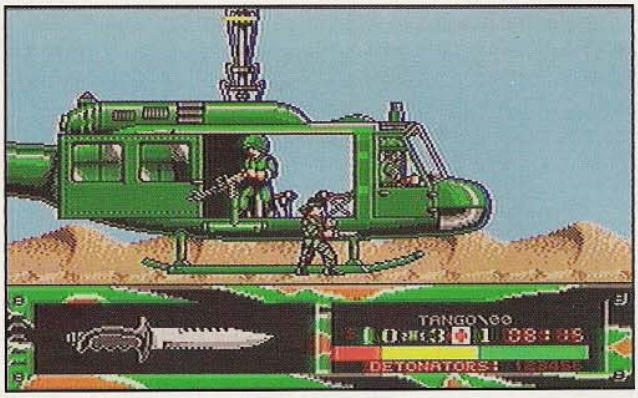
You are part of a strike force which is a lineal descendant of the Long Range Desert Group. This commando force functioned in the Western desert during the second world war and waged a ferocious campaign behind the lines against Rommel's forces.

The idea was that you had highly trained, very motivated soldiers who operated for lengthy periods of time behind the enemy lines. It was found that small numbers worked best and the current British equivalent uses three-man teams.

Originally you roared into action using armoured cars but nowadays it is almost certain you will go in by helicopter.

In the British SAS it is traditional that soldiers can choose, within limits, their own weaponry and this is true in this game.

In real life in the SAS you would probably chose a Hoch and Kepler MP550A2 which comes from West Germany and is a light and extremely accurate machine pistol. You have this held by two clips across the front of your body. You would also probably carry a Browning 9mm automatic and two or three grenades, type depending on the action you were expecting.



In *Fire Force* you choose your weapons before each sortie and although the H and K is on offer the smart move is to chose the Soviet AKM Assault. This is made in various versions out of pressed steel and is not highly accurate but will fire under all conditions. Most importantly, most of the rebel and terrorists forces around the world use it and thus if you knock over a rebel you can get more ammo.

In this game you go in single handed.

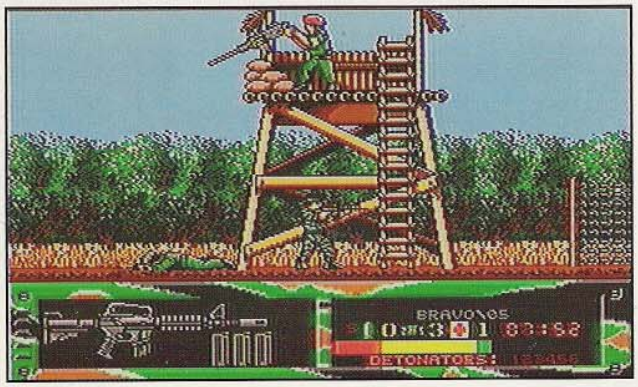
FIREFORCE

In all my time in the service I can only remember this happening once. But, hey, this is a game, right? And we can fight any way we wish.

You are dropped in by helicopter - excellent realism here - into a hot zone with guns free and you run forward leaping over land mines, avoiding grenade bursts and dropping the enemy left, right and centre.

Remember that a three shot burst, in real life as well as in this game, will see off anyone. And that the killing power of a grenade has been much overrated.

When choosing your weaponry avoid the grenades and go for the C4 plastic explosive. If you see a building which is suss a block of C4 will sort out the problem instanter.



The game lacks realism when it lets you run past a machine gun tower without getting zapped. In real life this is not easy to do. A stream of tracer up your backside from a mounted machine gun is most discouraging. But in this game you will probably get away with it.

As you improve so the missions get harder and your chances of getting zapped rise.

The programmers seem to feel that if you get a burst from a Kalishnikov you can fix it with a field medical dressing pack and then fight on. Do not put this to the practical test because it is, believe me, not true.

So though this game tries to be realistic, for anyone who has ever heard shots fired in anger it is plain that the programmers have never seen real combat. Which is a good thing.

That leaves a game which is good fun to play and, at the end of the day, nobody wounded or in serious strife.

Fire Force is a good game available on CD-Rom disk. But it is not a CD-Rom game. It would work just as well from floppies.

GARETH POWELL

Ratings

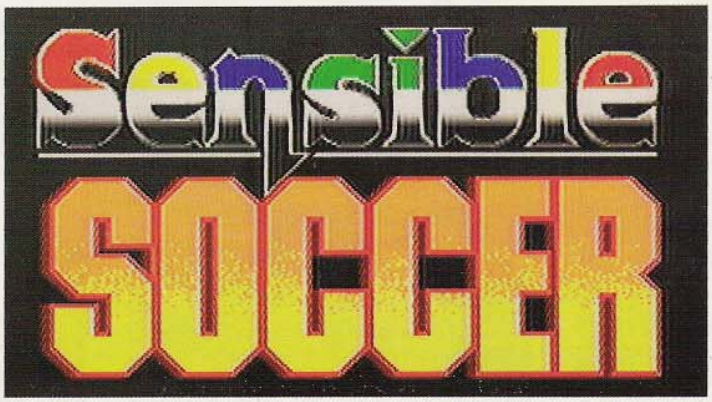
Graphics:	**60%**
Sound:	**85%**
Gameplay:	**86%**
Overall:	**75%**

Distributed by Hotpoint (02) 634 6499.
RRP $69.95.

Twelve years ago sales of the Commodore 64 - the machine that preceded the Amiga - rocketed in Italy. The reason was simple - a software games publisher had put a realistic game of soccer on the screen.

The Italians are soccer-mad in a way which is difficult to understand until you have been to one of their matches. These games are a direct descendant of Christians being thrown to the lions in the Colosseum. Whether the home team wins is of far greater importance than whether the lire collapses, Etna erupts or Spain declares war on Italy. Football is everything. Therefore the ability to replay matches with Italy playing other, lesser, countries on a computer was irresistible. The game sold in its tens of thousands - and Commodore reaped its reward.

Football fever, that desperate interest in soccer as a religion rather than as a game, can be found most places in Europe. The wave of crazed interest reaches its peak during the European Cup when the names of every player and his potential are known by every fan throughout Europe. You need to keep this total fascination with the game of soccer firmly in mind when looking at *Sensible Soccer*. This is very much a European game and the instructions are in English, French, German and, of course, Italian.



But it doesn't make enough use of the CD-Rom technology available to it. For this game is pretty much the same as sold the Commodore in all its numbers 12 years ago. Yes, there have been a few changes.

You can select your national team and make up your mind who will play at what position.

I chose as my opening team Wales which has never got very far but keeps trying. To give them a bit of a run at the cup I started them against Switzerland, not a renowned footballing nation. I chose the weather as being fine - rare in Europe, I know, but who's in charge here, eh?

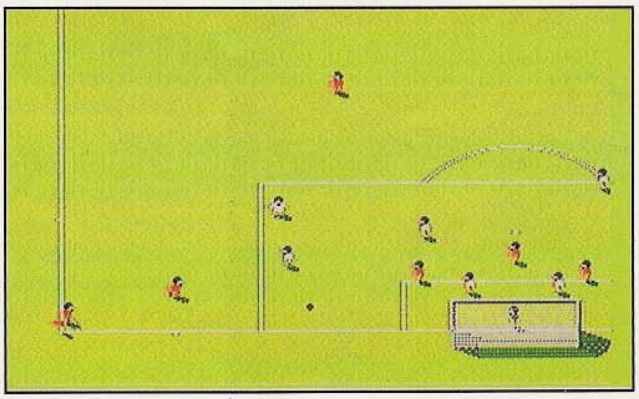
As the game starts you have one view - high above the stadium where you can see the players charging around in not very well simulated motion. You control the players in your team and each player has eight different styles and direction of kick, and controlling each player, although it requires some practice, is not a skill of a high order.

Whoever programmed this game went for the easy options and did not bother with details. For example, all the players have white skin and black hair. Watch any European football match and you quickly realise that a substantial percentage of the top players are coloured.

The angle of view did not change, there were no video clips of realistic charging and goal clearance. No instant replays. No seriously worthwhile changes of point of view.

My guess is that it will be very popular with soccer fanatics who abound in Europe but for Australians it is a low resolution, pretty boring rendition of a game that has been available on computers for some years. Not one to get over-excited about, though with two people playing you can have some hours of fun.

Gareth Powell



Ratings

Graphics	**60%**
Sound	**85%**
Gameplay	**80%**
Overall	**78%**

Distributed by Hotpoint (02) 634 6499. RRP $69.95.

It may be that I am going quietly mad but I totally enjoy playing *Zool* on the 32 bit CD Rom Amiga. I think I should keep quiet about it in case my friends find out.

Zool the character is, I suppose, a bit like a Ninja Turtle and is daft as a brush. He is said to have come from the Nth dimension and I have no problem with that.

Zool finds himself in a candy colour, tangerine flake, acid heaven where he is being attacked by jellies who are, in fact, as you will already have guessed, Krool's Legionnaires in drag. Some of these rotten swine have also turned themselves into far-out bumble bees and come zapping in when your back is turned.

This program actually features a real product - Chupa Chups - which is credited with having sponsored the game. This is the first totally sponsored game of its kind I have seen and no doubt we will see more in the near future.

There is an options screen where you can select easy, normal or difficult and, at least in the early stages, my advice is that you opt for easy. There is also a way of increasing the speed and the rate of braking. In every case go for the lower option until you have cracked the game and then ease your way up to faster speeds.

What weapons does Zool have at his disposal as he walks the Yellow Brick Road towards the Good Ship Lollipop?

The bomb which zaps anything in your way comes in double handy. But that which tickles my imagination is the Twozool. This creates a doppelganger, a shadow Zool, who follows you faithfully and doubles your chances of attacking and killing the lust crazed jellies before they splatter you.

You can play this game for ever as there are many levels and dozens of hidden features to be discovered.

It is passing strange that as soon as I saw the packaging of the game I knew I would hate it to death because twee creatures do nothing for me. As soon as I started playing it, however, I was hooked and I would put this very high on my list of playable games.

Zool was originally written for floppies and has been ported over to the CD-Rom and more could be made of the real estate available on the disk. Nevertheless less this is a bobby-dazzler of a game and could even lead me to trying Chupa Chups.

GARETH POWELL

Ratings

Graphics	**78%**
Sound	**73%**
Gameplay	**95%**
Overall	**95%**

Distributed by Logico (02) 519 6719. Around $69.00.

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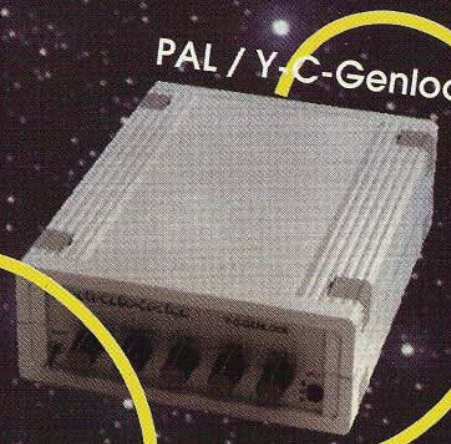

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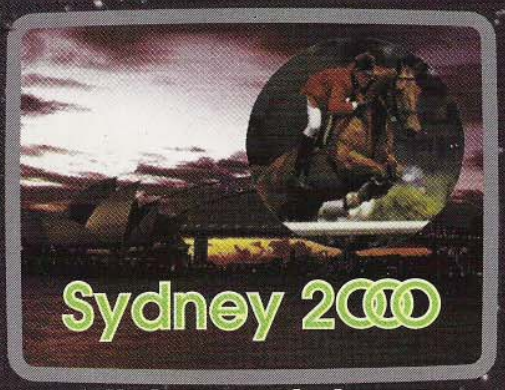

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