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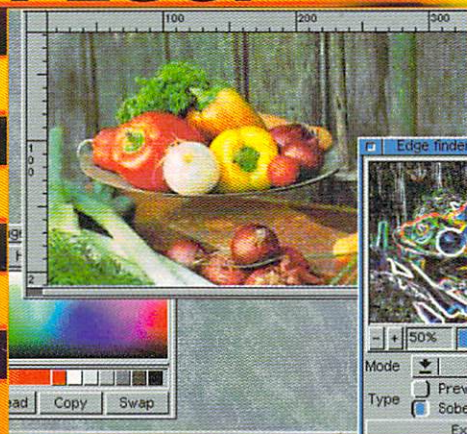
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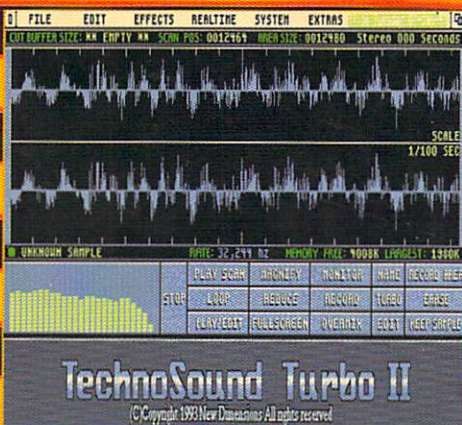
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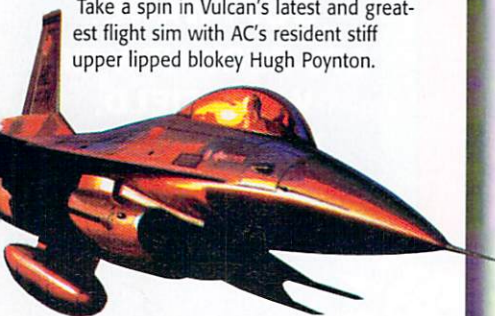
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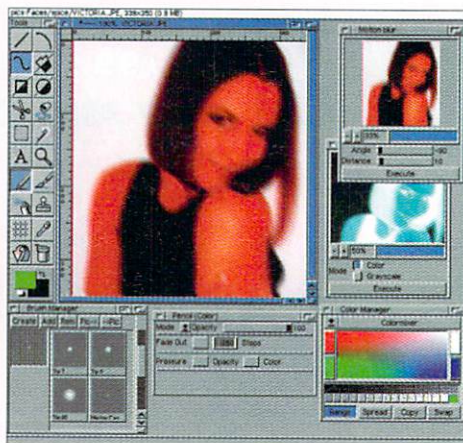
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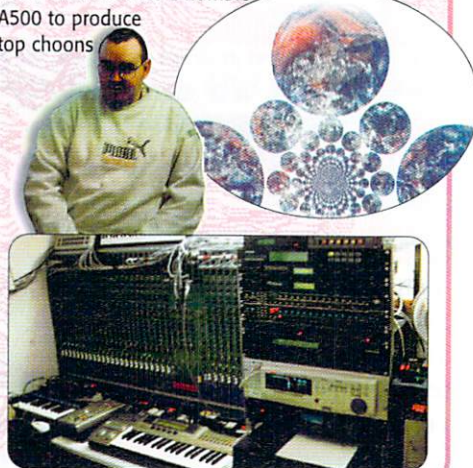
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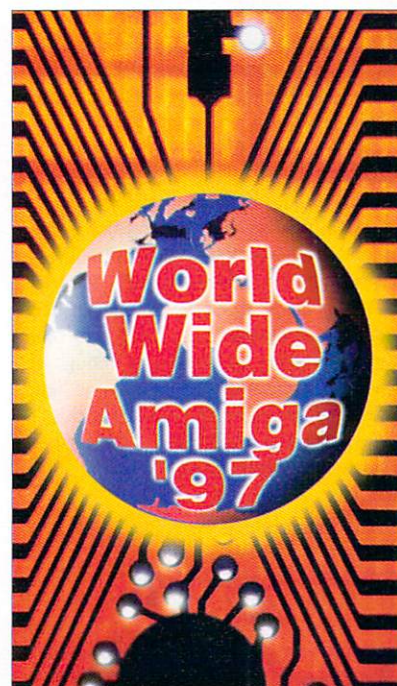


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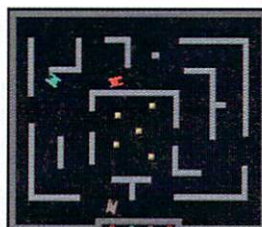
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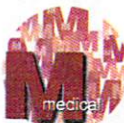


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A lone female figure strides forwards. She has an impossibly curvaceous figure. Large, pert breasts, firm well rounded thighs and a waist that any woman would kill for. Is this the classic adolescent female figure of desire. Bridget Bardot, Marilyn Monroe, Pamela Anderson, women who, whilst undoubtedly alluring were ultimately sex objects?

Perhaps. After all, Lara Croft's sexuality is her trademark and there is little doubt that her appearance will arouse more feminist criticism than male appreciation.

However, there is another side to this new feminine heroine. Her teeth are clenched, her eyes hard and glaring. Her whole stance represents cold, hard and highly aggressive female sexuality. It is only with a second glance that we see in the pictures the gun in her left hand and certainly it takes a background position in comparison to her purely physical presence.

Does this kind of image do anything to forward the, so to speak, female struggle for equality or does it merely signify yet another attack on women by a stereotypically male misunderstanding of femininity? The obvious answer seems to clearly lie with the latter idea. After all, yet again the woman has been reduced to a merely sexual being, only capable of expressing her personality through her physical characteristics. At the same time, however, there seems to be a side to this figure which has a much more positive aspect, a side which I feel can not and should not be ignored.

For a start, Lara Croft is totally dominant. Her figure, her stance and perhaps most importantly, her expression puts her firmly in control. This woman is far from a fool and any man who dares to mess will be sorely burnt for his troubles. Whilst her sexuality is overt to say the least, it has clearly been depicted as a tool to be used as part of her control technique.

For women as a whole, such a figure appears far from demeaning. It seems that over the last century advances for women have largely been to the detriment of her femininity and indeed, sexuality. In our fight for equality we seem to be attempting to increasingly enter the traditional male

amiga
comment

Pixelated Pleasures

When Tomb Raider for the PC was released a few months ago, the games heroine Lara Croft caused much controversy. Men liked her, women hated her. Ultra slinky sex vixen bimbo or feminist crusader against the phallus wielding oppressors? Caroline 'Don't call me babe' Lofthouse decides

domain of career development and financial independence. This is all well and good, but there certainly seems to be a point where women's sexuality is somehow stamped under the carpet in an attempt to prove our similarities and thus equality to men.

Lara Croft represents an advance in computer game vision in that it gives the female heroine power and dominance, not merely through the addition of a male muscular

physique but through an almost aggressively powerful appreciation and control of her sexuality. She is depicted as a figure totally aware of her physical qualities and in that context, appears able to use it to her own advantage.

Rather than merely criticise yet another apparent debasement of women, we should perhaps hail the creators of Lara Croft for creating an exciting and incredibly powerful vision of female sexual aggression.

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Oregon Research

Ibrowse+Termite TCP	89.00
Ibrowse	39.95
Squirrel Zip/Jaz Tools	24.95
Surf Squirrel	139.00
Termite TCP	59.95

Phase 5

CyberVision 3D 2mb/4mb	Call
Mpeg Decoder	Call
Monitor Switch	Call
CyberStorm Mark II	899.00
CyberStorm SCSI Option	199.00
CyberVision64 Memory	79.00
CyberGraphics Software	49.00
Blizzard 2060 Turbo	899.00
Blizzard 1230 IV Turbo	269.95
Blizzard 1260 Turbo	799.95
Blizzard 1230/1260 SCSI	169.95

Modems & Telecom

Supra Fax 14.4 Ext.	79.95
Supra Fax 33.6 Ext.	199.00
Supra Express Fax 33.6 Ext.	149.00
Supra Sonic 33.6 Ext.	269.00
AWeb-II V.2.1 (New)	44.95
Serial/Null Modem Cable	7.95

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BBS (408) 625-6580



Visa, Master and Discover Card orders are accepted with no surcharge. We also ship COD only in payment of Cash, Cashier's Check or Money Order. All returns must be returned and accompanied with a RMA# within 15 days. Defective products will be replaced with the same item only. Software is non-returnable. Other returns subject to 25% restocking fee. Shipping & Handling charges are non-refundable. Price & availability are subject to change without notice. We do not guarantee hardware and software compatibility. We are not responsible for any typographical errors.

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Hardware

Amiga A1200 MagicPack

Includes: Wordworth V4SE, Datastore, Organiser, Turbocalc 3.5, Personal Paint V6.4, Photogenics 1.2SE, Pinball Mania & Whizz.

Very Limited Stocks Available, Early Purchase Recommended

£379.99

Amiga A1200 Magic Pack Inc. 170Mb HD & Scala MM300

Includes same software packages as Magic Pack, But also includes Scala MM300 (Req. 4Mb).

£479.99

AMIGA M1438S Monitor Only!! *£259.99 When bought with a computer

First Starter Pack

- A1200 dust cover
- 10 x D5DD disks + labels
- Top quality joystick
- Deluxe mouse mat
- 3 x A1200 games

All for only £19.99

PRIMA The PrimaATOM PSU Heavy Duty PSU £69.99

- High Quality 200 Watt PSU.
- Colour Co-Ordinated Casing.
- 4 x The Power of Std. Amiga PSU
- 12 Month Warranty.

The Amiga's Standard PSU cannot support extra heavy power consuming peripherals, eg. RAM Accelerator boards & Disk Drives. Over loading the PSU often leads to the Amiga crashing.

CD ROM Drives

Ultra CD ROM Drives

- 6 X £189.99
- 8 X £199.99
- 16 X £229.99

Kit No Drive £119.99

Quick & Easy to install, fits via the Internal IDE Connector, does not interfere with existing H.D.

Amiga Technologies Q-Drive CD/ROM

4X Speed Only... **£149.99**

PRIMA External SCSI CD ROM Drives

- Quad SCSI CD ROM
- Quality Sanyo Drive
- Own Internal PSU 17W
- Fast SCSI Transfer Rates
- 12 Month Warranty

£139.99 4 X Speed

Internal SCSI CD ROM Drives

- Sanyo CD254V x4 Speed £89.99
- Teac CD56S x6 Speed £121.99
- Toshiba 5701 x12 Speed £149.99

SCSI Controllers

- GVP 4008+/ Oktagon SCSI £99.99
- Big box Amiga, A2000/A4000 SCSI Controllers
- Squirrel/Surf Squirrel £45.00/£75.00

When purchased with a CD ROM Drive or Modern.

Hard Drives

3.5" Hard Disk Drives IDE SCSI

- 540Mb...£117.99
- 270Mb...£99.99
- 850Mb...£133.99
- 540Mb...£149.99
- 1.08Gig...£160.99
- 1.08Gig...£249.99
- 2.1Gig...£229.99
- 2.1Gig...£345.99
- 3.2Gig...£299.99
- 4.3Gig...£797.99

Build Your Own SCSI Hard Drive

- SCSI case with built in PSU £69.99
- SCSI Hard Drive, Select from above
- SCSI Squirrel Interface £45.00
- 12 Month Warranty.

2.5" Hard Drives for A600/A1200 with installation kit inc. software, screws, cables and instructions

Seagate CONNER

- 80Mb...£64.99
- 120Mb...£80.99
- 170Mb...£85.99
- 250Mb...£119.99
- 420Mb...£129.99
- 540Mb...£139.99
- 810Mb...£149.99
- 1.0Gig...£219.99

3.5" H.Drive install kit £19.99

Includes set up software, cables and full instructions, no Hard Drive.

Monitors

AMIGA New Amiga Monitors

Multi-Sync Monitors

- 14" 1438s...£269.99
- Includes Built In Stereo Speakers.
- 17" 1764...£579.99
- 17" 1701...£529.99

Disk Drives

Zip Tools Driver Software Suits Zip & Jazz Drives...£16.99

Amiga Ext. drive £44.99

Amitek 1.76Mb drive £69.99

A1200/600 int. drive £39.99

A500/500+ int. drive £39.99

Squirrel I/face

Surf Squirrel

- Hi speed serial port
- SCSI-II interface
- Autobooting HD

from *£79.99

Squirrel

- SCSI-II interface

From only *£45.00 if purchased with SCSI device

£54.99 if purchased separately

SupraFAX Modem Modems

Sportster Vi

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- Personal Voice Mail
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- Call Discrimination
- BABT Approved

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- 33,600 Data/14,400 Fax...£161.99

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Only...£119.99

Complete with cables & Amiga N-comm Software

Bargains

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- V22Bis 2400/9600 Modem £24.99

Amiga SurfWare bundle when purchased with any Modem only...£19.99

Modem Accessories

- Phone Line Extension Cables... 5M...£6.99 10M...£8.99 15M...£10.99
- Dual Socket Adaptor...£6.99

RAM Expansion/Accelerators

PRIMA A1200 RAM Expansion

- A1200 1 MB RAM £59.99
- A1200 2 MB RAM £64.99
- A1200 4 MB RAM £76.99
- A1200 8 MB RAM £93.99
- A1200 1MB/33Mhz Co Pro £95.99
- A1200 2MB/33Mhz Co Pro £100.99
- A1200 4MB/33Mhz Co Pro £102.99
- A1200 8MB/33Mhz Co Pro £120.99

MASSIVE PRICE REDUCTIONS

- 2 Mb 72 Pin SIMM £9.99
- 4 Mb 72 Pin SIMM £15.99
- 8 Mb 72 Pin SIMM £30.99
- 16 Mb 72 Pin SIMM £75.99
- 1 Mb 30 pin SIMM £10.99
- 256x4 DRAM (each) £4.99

Accelerator Cards

- Viper II-33 £129.99
- Up to 128Mb RAM, FPU socket & R/T Clock
- Blizzard 1230-50Mhz £159.99
- Up to 128Mb RAM, FPU Socket & R/T clock
- Blizzard 1260-50 £179.99
- Up to 64Mb RAM, MMU & FPU & R/T Clock
- Blizzard SCSI Module £89.99
- 68882-33Mhz PLCC £34.99
- 68882-50Mhz PGA £99.99

A500/600 RAM Expansion

- A500 512k RAM no clock £19.99
- A500+ 1 Mb RAM £29.99
- A600 1 Mb RAM no clock £29.99

Part exchange available on your old memory.

Printers

Canon

- Canon BJ30 £159.99
- Portable mono printer, 30 page ASF built in
- Canon BJ70 Colour £185.99
- Portable colour printer, 30 page ASF
- Canon BJ240 £190.99
- Colour printer, 720x720dpi
- Canon BJ4100Col. £209.99
- High quality col./fast mono printing 360 dpi
- Canon BJ4200Col. £254.99
- New ver. with Photo Realism cart. option
- Canon BJ4350Col. £369.99
- A3 printer with Photo Realism cart. option
- Canon BJ620 Colour £348.99
- 720 x 720 dpi, near photographic quality

EPSON

- Stylus 200 £139.99
- 720 dpi, 2.5ppm Black, Colour Upgradeable
- Stylus 200 Colour £179.99
- 720 dpi, 2.5ppm Black, 1ppm Colour
- Stylus 500 Colour £249.99
- 720 dpi, 4ppm Black, 2ppm Colour
- Stylus Pro £389.99
- 720x720 dpi, Photo-Realistic output
- EPSON GT-8500 Scanner £329.99
- Entry level A4 Colour Flatbed Scanner
- EPSON GT-8500 Scanner £450.99
- 400 dpi, Fully featured A4 Flatbed Scanner

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All Citizen printers have a 2 year warranty

- ABC Colour printer £119.99
- Simple (as easy as ABC) to use 24 pin printer. Comes as standard with 50 sheet Auto sheet feeder. Tractor feed optional at £34.99
- Citizen Project IIc £164.99
- 300x300 dpi, Colour Inkjet Printer, 70 sheet Auto Sheet Feeder, HP Deskjet emulation.
- Citizen Printiva 600c £376.99
- Micro Dry Technology, 1200x600dpi Mono 600x600 dpi Colour, Supports Metallic colours, 2 Year Warranty.

HEWLETT PACKARD

- HP340 Colour Portable £179.99
- Full colour 600x300 dpi mono 300x300 dpi col.
- HP400 Colour £154.99
- Full colour, 600x300dpi Mono, 300x300 dpi Col.
- HP690 Colour £249.99
- 600 x 300 dpi colour printer, now even faster.
- HP870 Colour £395.99
- 600x600 dpi up to 4 ppi/mm mono, 3 ppi/mm colour
- HP SL Laser printer £339.99
- 4 ppi/mm 600 dpi
- HP 6P Laser printer £569.99
- 8 ppi/mm 600 dpi

ACCESSORIES

- Printer Switch Box 2 way £12.99
- Printer Switch Box 3 way £17.99
- 1.8 Metre printer cable £4.99
- 3 Metre printer cable £6.99
- 5 Metre printer cable £8.99
- 10 Metre printer cable £12.99
- Epson 200 8 Hr. Warranty £46.99
- Epson 500 8 Hr. Warranty £75.99
- Epson Iron-On Transfer Paper £12.99
- Epson 720 dpi Paper Pack £12.99
- Canon T-Shirt Transfer Pack £20.99
- Canon BC-06 Photo Cart. £24.99
- Canon BC-09 Fluorescent £24.99
- Canon BC-22 Photo Kit £37.99
- Canon BC-29 Fluorescent £32.99
- Canon Bubble Jet Paper £14.99
- HP DJ690 Photo Cartridge £29.99
- HP Photography Paper £9.99
- HP Banner Paper £24.99
- HP Deskjet Paper Pack (500) £10.99
- HP Premium Glossy Paper (10) £9.99

Studio 2 New version 2.13

"If you want to get the best possible results from your printer, get a copy of Studio".

£49.99 or £44.99 when purchased with a Printer.

Consumables

Ribbons

- Citizen Swift/ABC colour £12.99
- Citizen Swift/ABC colour £12.99
- Star LC90 mono ribbon £4.99
- Star LC100/100 mono £3.69
- Star LC100/100 colour £3.69
- Star LC240c colour £13.99
- Star LC240c mono £8.99
- Star LC240 mono £5.99
- Star LC240/100/200/300 £13.99
- Re-Ink Spray for mono ribbons £11.99

PREMIER-INK Cartridge Refills

Save a fortune in running costs with your ink/bubble jet. Compatible with the HP Deskjet series, Canon BJ10/20/30/40/50/60/70/80/90/100/110/120/130/140/150/160/170/180/190/200/210/220/230/240/250/260/270/280/290/300/310/320/330/340/350/360/370/380/390/400/410/420/430/440/450/460/470/480/490/500/510/520/530/540/550/560/570/580/590/600/610/620/630/640/650/660/670/680/690/700/710/720/730/740/750/760/770/780/790/800/810/820/830/840/850/860/870/880/890/900/910/920/930/940/950/960/970/980/990/1000/1010/1020/1030/1040/1050/1060/1070/1080/1090/1100/1110/1120/1130/1140/1150/1160/1170/1180/1190/1200/1210/1220/1230/1240/1250/1260/1270/1280/1290/1300/1310/1320/1330/1340/1350/1360/1370/1380/1390/1400/1410/1420/1430/1440/1450/1460/1470/1480/1490/1500/1510/1520/1530/1540/1550/1560/1570/1580/1590/1600/1610/1620/1630/1640/1650/1660/1670/1680/1690/1700/1710/1720/1730/1740/1750/1760/1770/1780/1790/1800/1810/1820/1830/1840/1850/1860/1870/1880/1890/1900/1910/1920/1930/1940/1950/1960/1970/1980/1990/2000/2010/2020/2030/2040/2050/2060/2070/2080/2090/2100/2110/2120/2130/2140/2150/2160/2170/2180/2190/2200/2210/2220/2230/2240/2250/2260/2270/2280/2290/2300/2310/2320/2330/2340/2350/2360/2370/2380/2390/2400/2410/2420/2430/2440/2450/2460/2470/2480/2490/2500/2510/2520/2530/2540/2550/2560/2570/2580/2590/2600/2610/2620/2630/2640/2650/2660/2670/2680/2690/2700/2710/2720/2730/2740/2750/2760/2770/2780/2790/2800/2810/2820/2830/2840/2850/2860/2870/2880/2890/2900/2910/2920/2930/2940/2950/2960/2970/2980/2990/3000/3010/3020/3030/3040/3050/3060/3070/3080/3090/3100/3110/3120/3130/3140/3150/3160/3170/3180/3190/3200/3210/3220/3230/3240/3250/3260/3270/3280/3290/3300/3310/3320/3330/3340/3350/3360/3370/3380/3390/3400/3410/3420/3430/3440/3450/3460/3470/3480/3490/3500/3510/3520/3530/3540/3550/3560/3570/3580/3590/3600/3610/3620/3630/3640/3650/3660/3670/3680/3690/3700/3710/3720/3730/3740/3750/3760/3770/3780/3790/3800/3810/3820/3830/3840/3850/3860/3870/3880/3890/3900/3910/3920/3930/3940/3950/3960/3970/3980/3990/4000/4010/4020/4030/4040/4050/4060/4070/4080/4090/4100/4110/4120/4130/4140/4150/4160/4170/4180/4190/4200/4210/4220/4230/4240/4250/4260/4270/4280/4290/4300/4310/4320/4330/4340/4350/4360/4370/4380/4390/4400/4410/4420/4430/4440/4450/4460/4470/4480/4490/4500/4510/4520/4530/4540/4550/4560/4570/4580/4590/4600/4610/4620/4630/4640/4650/4660/4670/4680/4690/4700/4710/4720/4730/4740/4750/4760/4770/4780/4790/4800/4810/4820/4830/4840/4850/4860/4870/4880/4890/4900/4910/4920/4930/4940/4950/4960/4970/4980/4990/5000/5010/5020/5030/5040/5050/5060/5070/5080/5090/5100/5110/5120/5130/5140/5150/5160/5170/5180/5190/5200/5210/5220/5230/5240/5250/5260/5270/5280/5290/5300/5310/5320/5330/5340/5350/5360/5370/5380/5390/5400/5410/5420/5430/5440/5450/5460/5470/5480/5490/5500/5510/5520/5530/5540/5550/5560/5570/5580/5590/5600/5610/5620/5630/5640/5650/5660/5670/5680/5690/5700/5710/5720/5730/5740/5750/5760/5770/5780/5790/5800/5810/5820/5830/5840/5850/5860/5870/5880/5890/5900/5910/5920/5930/5940/5950/5960/5970/5980/5990/6000/6010/6020/6030/6040/6050/6060/6070/6080/6090/6100/6110/6120/6130/6140/6150/6160/6170/6180/6190/6200/6210/6220/6230/6240/6250/6260/6270/6280/6290/6300/6310/6320/6330/6340/6350/6360/6370/6380/6390/6400/6410/6420/6430/6440/6450/6460/6470/6480/6490/6500/6510/6520/6530/6540/6550/6560/6570/6580/6590/6600/6610/6620/6630/6640/6650/6660/6670/6680/6690/6700/6710/6720/6730/6740/6750/6760/6770/6780/6790/6800/6810/6820/6830/6840/6850/6860/6870/6880/6890/6900/6910/6920/6930/6940/6950/6960/6970/6980/6990/7000/7010/7020/7030/7040/7050/7060/7070/7080/7090/7100/7110/7120/7130/7140/7150/7160/7170/7180/7190/7200/7210/7220/7230/7240/7250/7260/7270/7280/7290/7300/7310/7320/7330/7340/7350/7360/7370/7380/7390/7400/7410/7420/7430/7440/7450/7460/7470/7480/7490/7500/7510/7520/7530/7540/7550/7560/7570/7580/7590/7600/7610/7620/7630/7640/7650/7660/7670/7680/7690/7700/7710/7720/7730/7740/7750/7760/7770/7780/7790/7800/7810/7820/7830/7840/7850/7860/7870/7880/7890/7900/7910/7920/7930/7940/7950/7960/7970/7980/7990/8000/8010/8020/8030/8040/8050/8060/8070/8080/8090/8100/8110/8120/8130/8140/8150/8160/8170/8180/8190/8200/8210/8220/8230/8240/8250/8260/8270/8280/8290/8300/8310/8320/8330/8340/8350/8360/8370/8380/8390/8400/8410/8420/8430/8440/8450/8460/8470/8480/8490/8500/8510/8520/8530/8540/8550/8560/8570/8580/8590/8600/8610/8620/8630/8640/8650/8660/8670/8680/8690/8700/8710/8720/8730/8740/8750/8760/8770/8780/8790/8800/8810/8820/8830/8840/8850/8860/8870/8880/8890/8900/8910/8920/8930/8940/8950/8960/8970/8980/8990/9000/9010/9020/9030/9040/9050/9060/9070/9080/9090/9100/9110/9120/9130/9140/9150/9160/9170/9180/9190/9200/9210/9220/9230/9240/9250/9260/9270/9280/9290/9300/9310/9320/9330/9340/9350/9360/9370/9380/9390/9400/9410/9420/9430/9440/9450/9460/9470/9480/9490/9500/9510/9520/9530/9540/9550/9560/9570/9580/9590/9600/9610/9620/9630/9640/9650/9660/9670/9680/9690/9700/9710/9720/9730/9740/9750/9760/9770/9780/9790/9800/9810/9820/9830/9840/9850/9860/9870/9880/9890/9900/9910/9920/9930/9940/9950/9960/9970/9980/9990/10000/10010/10020/10030/10040/10050/10060/10070/10080/10090/10100/10110/10120/10130/10140/10150/10160/10170/101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- Composite & SVHS inputs.
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- BMP, TIFF & PCX File Support.
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- 16.7 million colour grabbing.
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Pro-GRAB
SVHS 24RT Plus

- Compatible with YHS & SVHS.
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- Support for virtual memory
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- Large preview window

for only.... **£129.99**

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hama

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Genlock 292

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- Fade to black of output signal
- Demonstration software inc.
- Independent power supply

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- Video edit controller
- Works on Kickstart 2.0 and above
- Scenes defined, sequenced/exchanged
- Independent power supply

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- Lora-1000 Genlock
- Comes with Scala HT100
- 92% Amiga Shopper June 95
- Composite only Genlock

Only!! £99.99

Entry level Genlock

Graphics

New!! Epson GT-5000

- A4 Flatbed scanner
- 300 dpi optical scan resolution
- 2400 dpi output resolution

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Epson GT-8500

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- A4 Flatbed scanner
- 400 dpi optical scan resolution
- 3200 dpi output resolution

£450.99

Epson GT-9500

- Bi-directional Parallel Interface
- A4 Flatbed scanner
- 600 dpi optical scan resolution
- 4800 dpi output resolution

£629.99

Epson Flatbed Scanner
Software & Cable... **£49.99**

Hand Scanners

Power Scan v4. £89.99

256 g/scale on AGA Amiga, 64 g/scale non AGA

PowerScan Col. £174.99

24 bit colour scanner, 16.7 million colours

Graphics Software

New Photogenics 2 CD

24-Bit
Graphics Manipulation
Requires 2chip/4 fast
RAM minimum,
Hard Disk &
CD Rom Drive,
K.start 3.0 or higher.
only!! £89.99

Cinema4D Ver 3

£169.99

Amiga Ray-Tracing software
Req. 3Mb of RAM, and
Kickstart 2 or higher.



Scala MM400

£279.99

Recommended, 6Mb of
RAM, Kickstart 3.0 or
higher & Hard Disk.

Special Offers

X-CAD 2000.....£19.99

Vista Pro Lite.....£4.99

Full version, with Manuals.

Blitz Basic 2.1.....£29.99

Music

Technosound

Turbo 2 Pro

8/12 bit Stereo Sampler plus
many more advanced features
A bargain at only **£29.99**

Mega-Lo-Sound

8 bit direct-to-disk sampler

Great value only.. **£27.99**

ProMIDI

Interface

- MIDI in, MIDI thru & 2 x MIDI out
- Compatible with all MIDI software

only!! £19.99

- 2 x 3metre MIDI cables £9.99

AURA 16/8

£74.99/£29.99

Otamed compatible

16 or 8 bit stereo direct-to-disk

PCMCIA samplers

OtamedSound Studio

Latest version of the best
music making program for the Amiga. **£22.99**

Home Office



Final Writer 5

Word Processor/Publisher

Latest version of this award
winning software
only!! £72.99

Final Writer Lite

Requires Kickstart 2.04 or above,
2Mb of Ram and 1 Floppy Drive,
Hard Drive installable if desired.

£39.99

Wordworth 6 CD

- Any Amiga 2.04 or higher
- 3Mb of Memory
- CD Rom drive & HDrive.
- On Line documentation

£39.99

Wordworth 6 Office CD

- Wordworth 6 • Datasort 2 • Organizer 2
- Money Matters 4.

£49.99

Mini Office

Integrated
Package

- Wordprocessor • Spreadsheet
- Database • Graphics • Disc Utilities

£46.99



Final Data £39.99

• Requires Workbench 1.3 or more

1Mb of memory & 1 floppy drive.



Twist 2 £74.99

Relational Database

- Requires Workbench 2.1 or above & 2Mb of memory

Final Calc £94.99

- Requires Workbench 2.0 or above, 2Mb of memory min., H.Disk with 5Mb of free space

TurboCalc 4 £49.99

Directory

Opus 5.5 £45.99

- Requires Workbench 2.0 or above, and a Hard Drive.

Other Titles Available

Disk Magic 2 £34.99 IBrowse £23.99

Maxon Magic £26.99 Net&Web £29.99

Devpac 3 £63.99 Net & Web 2 £66.99

Gamesmith £79.99 Termite £31.99

Hisoft BASIC 2 £63.99 Termite TCP £47.99

Hisoft C++ £149.99 Lightwave3D £429.99

High Speed Pascal £69.99

Quarterback Disk Suite £34.99

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Cables

Amiga-CD32 Serial Network cab. **£24.99**

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Null Modem Cable **£9.99**

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Centronics-Centronics **£9.99**

SCSI D25-50 way Cent. **£11.99**

SCSI D25-50 way Micro-D **£15.99**

SCSI Adaptors from... **£15.99**

SCSI Terminators from... **£19.99**

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Amiga-3.5" Hard Drive **£19.99**

Custom Cable Suppliers

For all your custom cable requirements
just give us a call, we can usually supply
most cables next working day.

Peripherals

Wizard 560-dpi

Amiga Mouse

£12.49

Alfa Data 400-dpi

Mega Mouse +

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2 Button Mega Mouse-E **£9.99**

Mousemat 4mm £2.49

Zip Stick joystick £9.99

Gravis Amiga joystick £19.99

Roboshift mouse/joystick switch £9.99

Amiga Contol Pad £9.99

Kickstart 2.04/2.05 £24.99

CIA 8520A I/O chip £18.99

FPU 25mhz PLCC £34.99

FPU 33mhz PLCC £39.99



AlfaData

Crystal Trackball

Only...£34.99



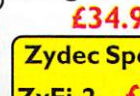
Amiga PSU

£34.99



Amiga Modulator

£34.99



Zydec Speakers

ZyFi-2....£26.99

ZyFi Pro..£57.99



PRIMA Heavy Duty

PSU £69.99

4x Standard PSU Power

200watts of Power

Clock Cart.

TurboTech

Real-Time

Clock Cartridge

£14.99

Vista Lite-3



Vista Pro Lite

Requires 2Mb of Ram

& Hard Disk With

Kickstart 2.04 or above.

£9.99

Limited Offer

Amiga CD ROM's

Delivery £1.50 per title or £3.99 for 4+

Amiga Developers CD Ver 1.1 £12.99

This CD contains all the materials needed to develop software
for the Amiga. From Amiga Technologies comes the complete
Amiga Developers Tools and Documentation.

New!! Geek Gadgets CD £17.99

Geek Gadgets contains all the tools you need
to get started programming on the Amiga

**Buy Weird Science Network 2 CD &
CD-32, Serial Network Cable.**

For only, £35.99

New!! EPIC M/M Encyclopedia £25.99

New!! Women of the Web £21.99

Over 450Mega of information on over 250 of
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Contains No Nudity

New!! Magic Publisher 4 CD set £39.99

Inc. Wordworth 4 TD, Final Writer 4 SE,
10,000 Fonts and 5,000 Clips and more.

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Two terrific titles bundled together to
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Both titles for only...£18.99

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Totally revamped new version of this top selling
CD, includes endless new and improved features.

New!! AmiNet 17-Now Available £12.99

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Ideal Xmas Gift!!

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CD Version of the ever-popular fact filled
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Graphics Sensations 1 **£17.99**

Guinness Disc of Records **£17.99**

Horror Sensations (18) **£17.99**

Hottest 6 **£17.99**

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Into-the-Net **£17.99**

Insight Dinosaurs **£4.99**

Learning Curve **£17.99**

Light ROM 4 **£24.99**

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Multimedia Toolkit 1+2 **£17.99**

Multimedia Backdrops **£17.99**

Network CD 2 **£12.99**

Nothing but GIFs AGA **£17.99**

news

By Tina Hackett

QuikPak replies...

This month Amiga Computing undertook a huge survey of the Amiga community (see cover story page 21). The aim was to determine what support is left for the machine and the direction the platform should go in 1997. We took our results to QuikPak - front-runner to buy Amiga - to see what they thought...

Dan Robinson, the Amiga Development Manager, agreed with the majority of survey respondents who said the Amiga urgently needs an improved OS with better Internet/network support, plus improved graphical and audio facilities. QuikPak also realises the importance of a move to faster processing speeds (probably using DEC Alpha chips), but its specific development plans will only be announced when the company's bid is accepted. Hopefully, this will be concluded in the very near future.

The Canadian-based company is also starting to work more closely with the Amiga business community than Escom or Commodore managed - an issue our respondents thought was important. It has also set aside a substantial advertising budget, according to Robinson.

QuikPak does not, however, seem to agree with the numerous companies that said it should concentrate on cheap, entry level

machines instead of the Video Professional market.

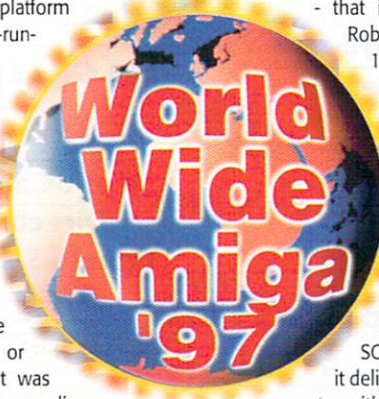
"The Video market is currently providing the only purchasers of A4000Ts - that is why we devote so much development to them," said Robinson. "The A1200 Escom brought back was a huge mistake. 1992 systems re-introduced at ridiculous prices...hey, I'm a fanatic and even I wouldn't pay a thousand Canadian dollars for a computer I purchased for 599 dollars in the spring of 1994. We do have an entry level system ready to go, but the big question is, will anyone buy one?"

The demands for all-powerful Amigas at ever cheaper prices do not impress Robinson either.

"Cheap, cheap, cheap...to these people who whine about cheap PC IBM clones, I say so buy one and shut the f**k up," Robinson said. "The Amiga in my opinion has value. An A4000t at \$1997.00 US with 16 Mb of Ram, a CD-ROM drive, SCSI II HD, a software bundle and all the wonderful capabilities it delivers, is good value. This is a true pre-emptive multitasking computer with unmatched video potential with a recognised name brand!"

QuikPak hopes to have good news for the Amiga by the time this issue hits the shelves. Rest assured, we'll keep you up to date with the latest developments.

See our main feature to see what the world-wide Amiga community really thinks...



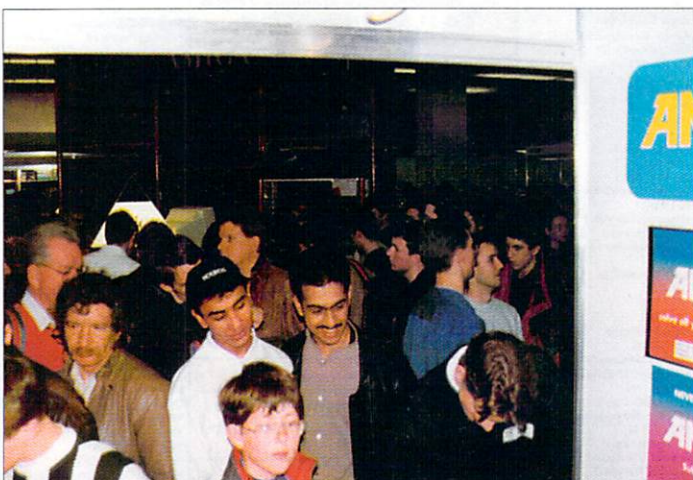
AMIGA SHOW RETURNS

The World of Amiga UK Show returns this year and promises to be even more successful than last year's exhibition. The two day show will be held at the Novotel Exhibition Centre in Hammersmith, London, on Saturday 17 and Sunday 18 May.

The exhibition will be a showcase for all the latest developments in Amiga technology, with products from a wide range of German and British manufacturers on display.

Judging by the fact there have been even more Amiga related hardware and software developments this year than last, the show should be a runaway success. Admission prices are £8 for adults and £6 for children.

A show of this calibre is exactly what the Amiga community needs, even more so now than last year. With all the uncertainty over the platform, it will show that, as always, Amiga users and developers are still fighting on to keep the machine alive.



Last year's World Of Amiga show was a great success

INTERNET ON THE UP

Online Information 96 took place at Olympia recently and attracted 22 per cent more people than last year's event. As the world's largest exhibition and conference for the on-line information industry, it showed the industry was growing and it has already sold 70 per cent of space for next year's show.

Showing that '96 was a positive year for on-line developments, Demon Internet announced 1996 was its most successful year to date. Cliff Stanford, Demon Internet founder and managing director said, "Our aim in 1996 was to ensure that Demon Internet customers had the best possible service and to make their access to the Internet as simple as possible." Demon gave users extras such as homepages and a free 5mb virtual Web server. It predicts, though, that 1997 will be even bigger.

On the other hand however, results published by Key Note say that although the Internet is transforming the workplace, the Internet revolution is still being snubbed by home users in the UK. In 1996 only 3 per cent of homes were connected to the Internet compared to 14 per cent of American homes - showing the UK is way behind in terms of accepting the net.

It predicts that this will change and rise to 4 per cent by the end of next year and 12 per cent by the year 2000. In terms of actual homes connected, this means that the 900,000 users in 1997 will rise to 2,600,000 by the end of the century.

MASTER VISION

Iiyama has announced a new 15" monitor which supersedes the current model, the Vision Master 15. The new model, the Vision Master 350 will cost £260 and comes with a three year warranty. New features include 0.28mm dot pitch flat square tube, a 350mm diagonal viewable screen with non-glare and anti-static coating, 29-69KHz horizontal and 50-160Hz vertical scanning frequencies, and push button digital user controls.



The new
Vision
Master 15

AMIGA FOUNDATION NETWORK

A new enterprise has been set up in Norway to collate as much data as possible on all things Amiga. Jon Lennart Berg wants to set up an Internet based service for Amiga users all over the world. He told Amiga Computing why he wants to set up such a service.

"Ever since the death of Commodore, the voice of the Amiga community across the world has been a silent one. It is understandable developers are keeping their distance because the backbone we called Commodore, is no longer there to keep them updated with vital information - information about the common hardware setup, general interest and total market demand. And by all means, companies should not be expected to obtain such information themselves."

His scheme sounds ambitious, "The list of services such a network could do is endless. My first goal is an on-line information service, providing world-wide overview of all things Amiga related, including market demand for specific software."

Also, user-groups and retailers that are giving their support should be represented, and the list updated. But most importantly, a full scale hardware/software report, this will be the most important service the network will supply."

His intentions are then to target companies to get them to port software onto the Amiga - he even hopes to get Warcraft-II onto the Amiga. He also hopes to address

the issue of piracy.

For more information write to:

The Amiga Foundation NetWork
Jon Lennart Berg
BlvingeVn. 19
N-3173 Vear
Norway

Membership Fee is : 25-Nkr, 2 English pounds, or 5 US dollars.

GET DISTRIBUTED

F1 Software/Licenceware has said that it is interested in hearing from programmers of high quality Amiga software who would like to have their programs distributed via the F1 Licenceware scheme. F1 had to put a hold on taking on any new titles over the past three months due to technical difficulties, but it claims this is all sorted out and F1 is ready to push ahead and add to the existing 150 exclusive titles currently in its catalogue.

For more details contact Steve Bye at F1 Software, 31, Wellington Rd, Exeter, Devon. EX2-9DU. Or, for a faster response, e-mail Steve at steve@f1lw.demon.co.uk.



CHART TIME

GTI have released its December Charts which reveal that Turbo Print Prof 5.0 is still at number one for Amiga Productivity, Aminet 16 is also still at number one in the CD charts and Hugo tops the bill for Amiga games, followed closely by SWOS and Capital Punishment.

NEWBIES STEP FOREWORD

If you live in the Huddersfield area and want to know how to get more from your Amiga, you may like to pop along to the Huddersfield Amiga User Group. Meetings are held fortnightly and topics include DTP, graphics, Comms and Wordprocessing, as well as how to get your Amiga connected to the Internet. Phone Geoff (01484 543534), Tony (01484 460888) or Robert (01484 654291) for more details.

AMIGA PHILE PRESSIES

For the Amiga Fanatic in your life, you may be interested in the Amiga Atlanta 10th anniversary video. The two hour + video includes the evenings events and speakers and is available in either NTSC or PAL standards, with discounts available for other Amiga usergroups that would like to arrange a group purchase for their members.

SHOPPERS FRUSTRATION

Isn't it the most annoying feeling when you've just bought something only to find it available five pounds cheaper down the road? A new UK only Web site has been set up to remove this annoyance for those looking for a computer-related bargain. It has over 1000 computer products listed and where they can be bought from at the best price. Simply type in www.streetprice.com

STOP PRESS!

With events moving so fast in the Amiga world at the moment, it's hard to give you up-to-the-minute news in a monthly magazine. However, we aim to keep you informed on a weekly basis through our Internet site. This ensures you hear the news as soon as we do - the minute a story breaks we will post it on the site. At the time of writing this issue, no deal to buy Amiga Technologies had been completed. Please follow the News link from our main home page (<http://www.acomp.demon.co.uk/>)

NO NEW OWNER... YET

At the time of writing, the Amiga still doesn't have a new owner. Negotiations are ongoing and it appears QuikPak continues to be a front-runner. However, as Dan Robinson told us, QuikPak's patience is also running out. "The deal will close sometime this month...preferably this week...it better or we plan to withdraw our offer and get on with other core business." He continued, "The Amiga market is dying a slow death and six more months of negotiations will benefit no one. Hopefully Mr. Heimbach will realise this at some point."

The value of Amiga Technologies has also been thrown into question. Mr Robinson said, "In our opinion the assets, technology etc. are not worth the 20 Million he seems to be holding out for. They may have been (and I mean maybe) last year when Viscorp made its initial offer...but that was last year."

QuikPak are looking to its future plans whatever happens and revealed, "We have some exciting plans for the Amiga computer should we be successful in our attempt to either acquire AT, or the parts we are interested in - namely an exclusive right to the

Amiga Computer. We are not interested in the set-top market and tried to co-operate with Viscorp (Bill Buck) for months."

Robinson continued, "The Liquidator knows our top offer, if there is someone lurking around with more cash than us then I guess they will emerge with the technology. That said, they will still have to deal with us. We do have all the chips and the capacity to make more, not to mention a very large claim as a secured creditor."

NEW FROM HAAGE

Haage and Partner has announced that it is currently developing a new Word Processor called Easy Writer. Details are brief at the moment but Haage says that it will especially fit the needs of students and business people.

Plug-Ins for Art Effect 1.5 are also now available. Some can be downloaded from the Web site - such as ScanQuix 3 and Toolbox Icons. You can also buy two packages both priced at \$45 US. One is called PowerEffects and lets you add effects such as Page Curl to curl up a corner of the page, or Wave to create wave effects. Also included are the colour effects like Lightchange, Alien and Prism.

The other, called SuperView, lets Art Effect read 32 and write 20 additional file formats. One in particular, is the ability to read the PhotoCD format.



New Plug-Ins are now available for Art Effect 1.5

ON IT'S WAY

We would like to apologies to anyone who is waiting for their 10 Out of 10 Essential IT product. The orders are currently being processed and will be with you very soon.

SPEEDY SOLUTIONS

US Robotics has announced the release of a new modem which is upgradeable to the high speed X2 56Kbps technology. X2 technology allows Internet connection at twice the speed available over standard telephone lines.

Priced at £229, the Sportster Flash has flash memory and owners can register for the X2 upgrade which they can get free of charge from the company's bulletin board. Flash memory also allows for any future upgrades to new technology.



The new Sportster Flash Modem from US Robotics

MONITOR ADVICE

Want to know what to look for in a new monitor? Well, if you don't know your dot pitch from your pincushion, fear not because ViewSonic has produced a free guide explaining all you need to know about monitors. It is available by calling ViewSonic's freephone number on 0800 833 468.



Free advice from ViewSonic

Amiga Mice

Replacement Mice	£6.95
MegaMouse 400	£9.95
MegaMouse Plus (3 Button)	£10.95
Optical Mouse	£29.95
New Golden Image TrackBall.....	£19.95
Pen Mouse	£12.95
(ideal for CAD)	



Ram Boards

A500 512K Ram Board w/o clock	£15.00
A500+ 1Mb Ram Board w/o clock.....	£20.00
A600 1Mb Ram Board w/o clock	£20.00
A600 1Mb Ram Board with clock	£30.00
A1200 4Mb Ram Board with clock.....	£49.00
A1200 8Mb Ram Board with clock.....	£65.00
FPU 33MHz	£20.00

Controllers

AlfaPower Hard Drive controller A500	£99
AT-Bus Hard Drive controller A2000	£69
Oktagon 2008 SCSI controller	£99
Multiface III	£79
PCMCIA Controller for CDROM for A1200	£69

Spider

NEW MULTI I/O CARD

FOR AMIGA 1500/2000/4000

Active 8 port high speed serial card.
Multiboard Support 57600 Baud rate on all channels simultaneously.£299

New AlfaQuatro

Specially made hardware and software. Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller, through Alfapower on Amiga 500/500+ and possibly Amiga 1200 comes, with full IDE Fix software£59

Joysticks & Joypads

Amiga Joysticks	£9.95
Amiga Joypads.....	£9.95

Speakers

Multi Media Speakers	
100 watt (pmpo)	£30.00
Multi Media Speakers	
240 watt (pmpo)	£45.00
Multi Media Speakers	
300 watt (pmpo)*	£59.95
* 3D surround sound	



Floppy Drives

External Floppy Drive	
for all Amigas	£39.95
Internal Floppy Drive	
A500/500+	£35.00
Internal Floppy Drive A600/1200+	£35.00
A-Grade Double Density box of 50 disks	£13.00
including colourful labels	



IDE Hard Drives

HARD DRIVES + AT-BUS CONTROLLER FOR

AMIGA 500(+)/A1500/A2000/A3000/A4000

AT-Bus hard drive controller	£69.00
Alfapower hard drive controller	£99.00
Alfapower-640 640Mb	
hard drive	£199.00
Alfapower-1.2G 1.2Gig	
hard drive	£259.00
Other sizes please ring	



Memory for Alfapower-Plus (new)

marked Alfapower-Plus

4Mb SIMMS	£20.00
8Mb SIMMS	£30.00
16Mb SIMMS	£79.00

Memory for Alfapower (old)

Every 2Mb Zip-Rams	£89.95
--------------------------	--------

IDE 2.5" Hard Drives

FOR AMIGA 600/1200

IDE-170 170Mb hard drive	£79
IDE-250 250Mb hard drive.....	£99
IDE-420 420Mb hard drive	£120
IDE-540 540Mb hard drive	£130

IDE 3.5" Hard Drives

FOR AMIGA 1200/4000

IDE-640 640Mb hard drive	£99
IDE-840 840Mb hard drive	£125
IDE-1.0G 1.0Gig hard drive	£175
IDE-1.2G 1.2Gig hard drive	£165
IDE-1.7G 1.7Gig hard drive	£179
IDE-2.5G 2.5Gig hard drive	£239

Miscellaneous Products

DD floppy disks (50)	
including multicoloured disk labels	£13.00
DD floppy disks (100)	
including multicoloured disk labels	£25.00
3.5" Hard Drive Kit for A600/1200	
+ Install software	£15.00
Colourful Mouse Mat	
Animal Jungle design and Dinosaur design	£5.00
Optical Mouse Mat	£5.00
2 in 1 Scanner/Mouse Pad	
Can be used as a memo pad	£5.00
Contoured Wrist Pad	£3.00
Plain Wristrest	£2.00

CD Cleaners - 1/2 price

CD Rom Cleaner	£3.00
Automatic CD Rom Cleaner (battery powered)	£10.00
Laser Lens Cleaner	£4.50

Complete CD Rom for all Amigas

Quad Speed CD Rom for A500	£129
(needs Alfapower V6.8 or higher)	
Quad Speed CD Rom for A600/A1200	£149
(inc CD32 emulation)	
Quad Speed CD Rom	
for A1500/A2000/	
A4000	£109



Special Offer for this Month

640Mb 3.5"	
Hard Drive	£99
1.2Gig 3.5"	
Hard Drive	£165
1.7Gig 3.5"	
Hard Drive	£179
2.5Gig 3.5"	
Hard Drive	£239
170Mb 2.5"	
Hard Drive	£79
420Mb 2.5"	
Hard Drive	£120
A1200 4Mb	
Ram Board with clock	£49
A1200 8Mb	
Ram Board with clock	£65
Greyscale Scanner	from £79
Greyscale Scanner with OCR	
limited stocks	£99

STAR BUY

8 Speed CD Rom	£169
16Mb Viper	
1230 33MHz	£199
4Mb Apollo	
1220 25MHz with FPU	£79

Accelerator Boards

A1220 APOLLO	
Accelerator Board	£99.95
A1220 APOLLO	
Accelerator Board + 4Mb	
New Low Price	£79.00
A1230 VIPER	
Accelerator Board 33MHz.....	£119.95
A1230 VIPER	
Accelerator Board + 4Mb 33MHz	£169.95
A1230 VIPER	
Accelerator Board + 8Mb 33MHz	£180.00

All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00, £8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome.

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Sales Hotline No: 0181 900 9291 Fax: 0181 900 9281

http://www.reserve.co.uk/gold Talking Pages: 0800 600900



US bargain bin

Due to the success of its holiday sale, Intangible Assets Manufacturing has announced it will continue to sell at the lowered prices permanently. One exception to this plan is the DiskSalv4/MRBackup bundle, which has been reduced in price further to \$49US. Also, IAM regrets that the Deathbed Vigil video and t-shirts have been sold out.

However, Dale Larson, el Presidente of IAM (yes, that is his title), has searched for and found more of the Boing Ball logos that he had been including with orders over the holidays. They will continue to be shipped with any order made directly with IAM, until the new stock is exhausted. There is estimated to be a two-month supply. The exact logos that will be sent are: Square Boing Ball logo, a rectangular Boing Ball logo with the word "Amiga" and a rectangular rainbow checkmark logo with the word "Amiga". All logos are made of metal.

In another promotion, IAM is offering a second Annual Amiga Developers Conference poster to customers ordering more than \$100US in merchandise directly. There are over a dozen of these posters to give away.



AMIGA ZONE EXTENDED

The Amiga Zone, an on-line resource for Amiga users since 1985, has announced an additional method to access its system. There is now a World Wide Web interface for the AmigaZone SIG. Membership in AmigaZone is still required to access these files and messages, however. The site is located at <http://amigazone.com/>.

In order to use the "chat" function from the Web site, you must use the WildCat Navigator, which can be found at <http://www.mustang.com/>. The AmigaZone is still telnettable at the normal address of amigazone.com and will still be based on the WildCat BBS software.

Two types of accounts are currently available. The first is a free two-week trial account with several limitations. The second is the full account, costing \$19.95US per month, with unlimited access to the Amiga Zone, including the file library. Call 916-641-9320 for details of both and tell them the Amiga Zone sent you. For more information about the new interface or the Amiga Zone, visit the other Web site at <http://www.amigazone.com/>.

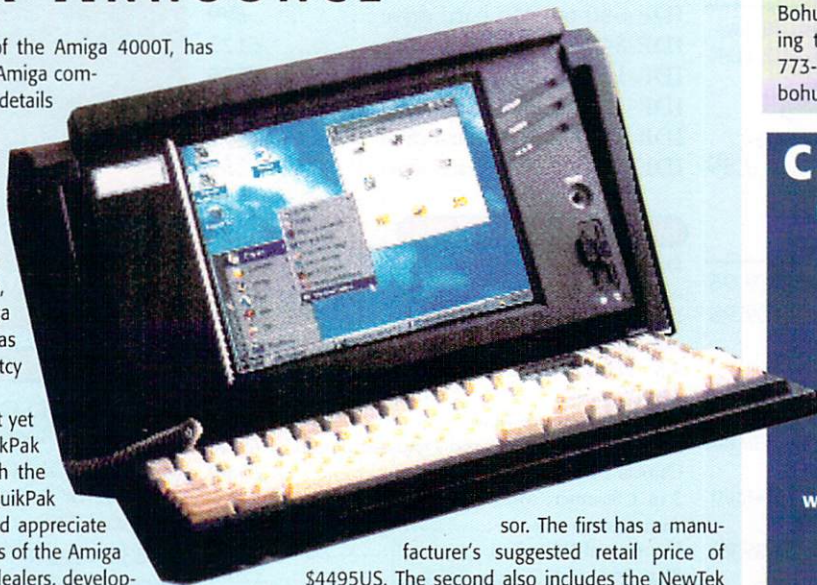
QUIKPAK ANNOUNCE

QuikPak, the manufacturer of the Amiga 4000T, has posted an open letter to the Amiga community. In the letter, QuikPak details instances of its loyalty to the Amiga platform and Amiga users. The company then states that since there seems to be no progress in a deal between Amiga Technologies and VLScorp, that it, as an Amiga Technologies creditor, has made an offer to the bankruptcy trustee of AT.

Despite the fact it have not yet received a response, QuikPak expects the negotiations with the trustee to proceed quickly. QuikPak goes on to state that it would appreciate input from the various aspects of the Amiga community, including users, dealers, developers, distributors and other manufacturers. The letter is signed by Dave Ziembicki, CEO. Any inquiries/comments should be sent to Dan Robinson, Director of Business Development of Amiga Computers. He can be reached via e-mail at quikpak@ix.netcom.com and other contact information can be found at <http://www.amigasupport.com/quikpak/>.

In other news, QuikPak has announced pricing and configurations for the "luggable" Amiga 4000. All models will include 2 megs of chip RAM, 16 megs of fast RAM, 2 gig hard drive, 6x CD-ROM with pre-installed AsimCDFs and a high resolution LCD display.

Two of the models have the 68040 25mhz proces-



sor. The first has a manufacturer's suggested retail price of \$4495US. The second also includes the NewTek Video Toaster and Video Toaster Flyer and has an MSRP of \$9495US. The remaining two models have the 68060 50mhz processor. The first of these has an MSRP of \$4995US. The second also includes the Video Toaster and Video Toaster Flyer, and has an MSRP of \$9995US.

There is no pricing information available for the other new QuikPak machine, the A5050T, which features a Pentium and an Amiga built into one computer. Also, there is an entry on the Web site for a computer model called the A1630LD, listed as coming soon. No other information was available and Dave Ziembicki would not comment.

VIDEO PROMOTION

Nova Design has acquired a new video which will demonstrate some of the capabilities of its ImageFX and Aladdin4D software.



The tape is about nine minutes long and features music from Thomas Krehbiel of Nova Design. All editing and effects were done on Amiga or Draco systems. Contact Nova Design for information on obtaining this new video at 804-282-1157.

The video was created/produced by a Chicago-based company known as The Vantage Point, with the talents of lead artist Bohus Blahut. For other video work utilizing the Amiga, call The Vantage Point at 773-465-5158, or send e-mail to bohush@xnet.com.

CONTACT POINT

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828 Ormond Avenue
Drexel Hill, PA 19026-2604 USA
voice: 610-853-4406
fax: 610-853-3733
e-mail: info@iam.com
sales@iam.com
www: <http://www.iam.com/>

The Amiga Zone
ftp: [amigazone.com](ftp://amigazone.com)
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www: <http://www.amigazone.com/>

QuikPak Corporation
phone: 888-784-5725
fax: 610-666-8086
e-mail: quikpak@ix.netcom.com
www: <http://www.amigasupport.com/quikpak/>

Nova Design, Inc.
1910 Byrd Ave., Suite 214
Richmond, VA 23230 USA
Orders: 804-282-1157
Fax: 804-282-3768 BBS: 804-965-0234

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EXTRACTING COVER DISK FILES

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

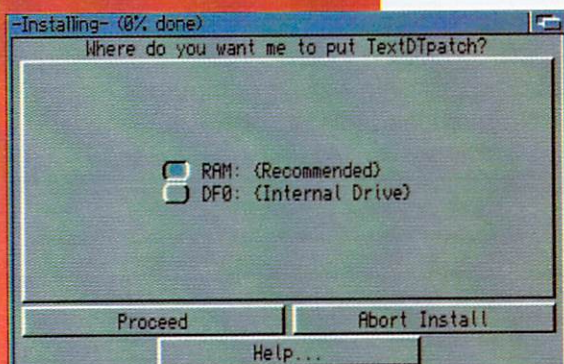
To extract any single archive, simply double click its icon, and follow the on screen instructions. If you want to extract the program to Ram, select the NOVICE level on the welcome screen, and press proceed once on the current screen, and then again on the next. The program can then be found in your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

HARD DRIVE USERS

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

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

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



This is MultiExtract for all you sensible people with hard drives



Ain't war brilliant? Well it is with **Tiny Troops**. Kick ass with these micro sized marauding meanies

DISK 1



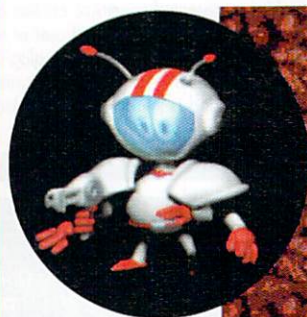
TINY TROOPS

Author: Vulcan SoftwareAny 1Mb Amiga

RUNNING TT

To run Tiny Troops just boot your machine with the Tiny Troops disk in the floppy drive. Hard drive users can drag the Tiny Troops drawer off the disk onto your hard drive and run it from there.

There is a plot, honest there is, but really all you need to know is that two inhabitants of a planet have decided to come to Earth. Not for a sightseeing trip, not to spot a few trains or collect stamps but to kick each others butts, and you're going to help. The thing is they are only about a centimetre high – a bit



less than half an inch for none metric people.

From the main menu screen you can choose to have a single or two player game and also the type of controls you want to use - mouse is highly recommended.

Troop selection lets you pick how many and what type of troops you want. Just scroll through the lined up troops at the bottom and click the ones you want to fight with. When finished, press the subtle war button to kick off. At the top left and right you can get

helpful hints from your general and check out the battlefield you are about to enter.

Once in battle your aim is simple - kill all your opponents. Your troops appear from out of the transporter fresh from Agaris IV and ready for action. Troops can be moved around individually or, by using the bounding box, you can select a group to order around. Depending whether you pick a single or group of troops, you have different options in the control panel.



FAULTY DISKS

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

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

Please allow 28 days for delivery

If you liked the cover disk demo then why not get the full thing? Check out the reader offer on page 76



CONTROL PANEL

Scan Map - Shows a mini version of the current level, click on it to be able to scroll around the current level

Crossed Swords - This moves the play area directly over a troop who is currently fighting

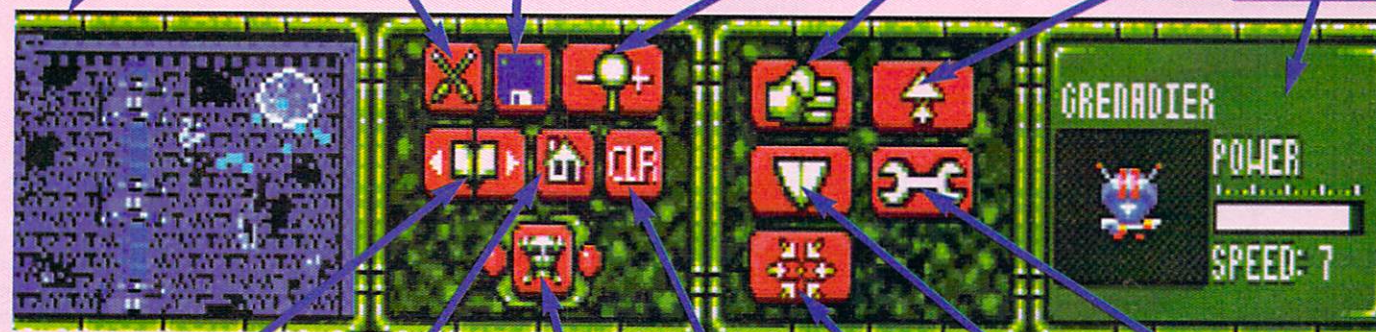
Disk - Opens further options allowing you to load and save the current game as well as quit and surrender

Eyeglass - Alters the current size of the scan map in the left corner of the screen

Fist - Allows you to get any currently selected troops to attack a target

Arrow - Move selected troops around with the left button, or set up to four way points with the right button

Status display - Shows you either the current status of the selected troop, or the four movement modes



Book - The left half of the page gives you advice, while the right side shows you the current game stats

House - Run away, run away. Makes all your troops leg it back to the home teleporter, like girlie cowards

Skull and Bones - Gets all your troops to attack the enemy base

Clear - Any order given out can be cleared using this icon and the troop will use their original orders

Star - Calls other troops to the rescue of the selected troop

Shield - Allows you to get troops to guard a set area

Spanner - Get the selected troops to go back to the teleport for repair

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The DraCo Non-Linear Video & Audio Workstation

By MacroSystem GmbH - Distributed in the UK by our sister company, DraCo Systems UK Limited

A purpose built, professional, non-linear video and audio editing system which can operate at up to full broadcast quality. The DraCo is a 50MHz 68060 based computer, running the Amiga OS 3.1, and housed in a "Cube" style case. It has a built in 4Mb high speed 24-bit graphics card, Fast SCSI-2 controller and Quad Speed SCSI-2 CDROM drive. 5 Zorro II (Amiga compatible) slots and 3 DraCo Direct 32-bit expansion slots are provided (1 free). The DraCo is supplied with 24Mb of RAM (exp. to 128Mb on-board), a Jog / Shuttle unit, and the DraCo Direct Vlab Motion (DraCo Motion), successor to the award winning Amiga Vlab Motion card. The DraCo Motion has built-in 16-bit Stereo, DAT Quality Audio, and is supplied with NEW MovieShop V4.1 video, and SampleRate MSV3.0 audio, editing software. One 2Gb SCSI-2 drive is used to hold audio samples, application programs and user data. A single 9Gb Micropolis AV, Fast SCSI-2 drive, holds the video data. An optional Amiga compatible Parallel port kit is available, which allows the use of Amiga LIGHTWAVE 3D V4 and so on. Future upgrade options include a DEC Alpha Co-Processor (allowing near real-time rendering of video transitions and effects), machine control, CMX EDL's and Timecode. Options available now, or imminently, are as follows:-

Component YUV/RGB (Beta SP) in and out, D1, plus a P1394 DV (FireWire) interface. The system can already handle totally uncompressed video, but current drive speeds limit the minimum compression to 4:1. Output is up to Broadcast Quality with suitable input/output options. Although DraCo is designed as a Non-Linear Editing workstation, it runs many Amiga programs, FREE with the DraCo: Art Department Professional, Morph Plus, Professional Conversion Pack, Scanner Drivers & Xi Paint.

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Note: The Blizzard 1240 is only suitable for fitting within certain A1200 tower cases. Please call the case manufacturer before placing an order.

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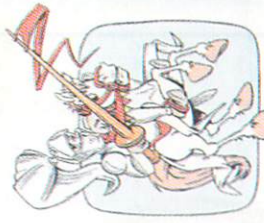
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RGV01

An international community of developers, dealers and user groups looks to the future of your computer

EXCLUSIVE SURVEY

By Gareth Lofthouse
and Tina Hackett

World Wide Amiga '97

The story of the Amiga is a strange one. Since Commodore went bust in 1994, impressive corporations have arisen as apparent saviours of this unique platform, only to disappear leaving a string of unfulfilled promises. If it was any other computer, the Amiga would have been forgotten by now.

But this is not any computer, and its supporters are not your average computer users.

The Amiga has certainly been wounded by delays in its development, and many of the best companies have either gone bust or

moved to more stable markets. But there is still a whole host of others developing and supplying products to keep us happy, plus the real hope of new, powerful Amigas on the horizon from QuikPak.

1997 should be the year the Amiga's destiny is finally resolved. In this exclusive survey, you'll find out what an entire community of businesses and users think should happen next.

USA

The birthplace of the Amiga it may be, but the American market has suffered since Commodore's demise. According to most of the companies in the survey, the US market has been struggling of late, though the Video Toaster market remains fairly buoyant.

Randhir Jesrani from retail firm **Compuquick** painted possibly the bleakest picture, saying that customer interest had declined over the past five to six months. **Software Hut** has experienced a similar downturn in US-based trade, which they ascribe to the fact that people are becoming discouraged by waiting for a resolution to the ownership situation.

By contrast, **IAM's** Dale Larson said business was buoyant during the holiday season, thanks partially to reduced pricing and small incentives like the historical 'Boing logo' offer. However, he added that "Too many customers have had a wait-and-see attitude since Commodore went bankrupt".

As to what needs to happen to revitalise the market, all the US companies were in agreement on one thing: A new owner is needed, and soon. "Thereafter we would like the OS to be expanded for Internet access, memory management,



networking, and better printer/scanner access," said Compuquick's Jesrani. "We would then like the Amiga platform to offer more power in terms of processing speed and CD quality sound, though it should retain its custom chip-set."

"The new owners should advertise and market the Amiga so that the confidence of Amiga owners is maintained and the marketplace becomes familiar with the Amiga brand name and the technology," he added.

Dale Larson's masterplan was rather more wistful. "Ideally, Bill Gates would put me in his will and then die," he said. "I'd have hundred of millions of dollars to invest in creating a new generation OS to compete with WinTel as a better general-purpose system with better apps. Short of that resource, I don't see how the Amiga platform will continue to develop in terms of new generations of hardware/OS. It will still develop through third-party extensions and enhancements, though, and it remains excellent in some niches and as a low-cost home machine."

GREAT BRITAIN

Good Old Blighty, always dependable for the best Amiga support...or is it?

"The Amiga market still accounts for 30-40 per cent of our total revenue, and customer interest is still extremely strong - an estimated 50 per cent of all our calls are Amiga related," says **First Computer Centre**. **Blittersoft**, **Digita** and **HiQ** all agree that customer enthusiasm remained surprisingly high.

Commitment to the Amiga was very strong among the UK survey respondents and the developers contacted all had products in development, at least in the form of updates to existing software. **HiQ's** Steve Jones was particularly optimistic in this respect, promising an RTG version of the award-winning Siamese system with a few surprises thrown in for the near future. As for the Amiga itself, **HiQ** thinks it might just show the way for the new owners.

"We want cross platform support (as in stage 3 of

the Siamese System), because customers just want to run software and not worry about platforms," says Jones, adding: "The Amiga should go Alpha and drop the Power PC, we are working on ways to do this smoothly while maintaining compatibility. I hope to not only be supporting the Amiga in two years time but be in a position of guiding its future!"

Blittersoft's Paul Lesurf emphasised that any new owner would have to encourage third party support to ensure a vibrant future for the Amiga.

"More affordable third party peripherals are important to any future success, making use of existing technology on other platforms," he told Amiga Computing. "The new owners should open up the Amiga technology to third party developers."

For a slightly different perspective, we also contacted **Technocom**, a company offering specialised Internet access for Amiga owners. The company



believes there are only a few thousand UK users with Net access at present, but the community is growing with the potential to reach numbers in the tens of thousands.

"The Amiga, with its multitasking abilities, is an ideal computer for Internet access even in its present form," comments **Technocom's** Tim Evans. "But the Amiga needs top-flight Internet software - browsers like **IBrowse**, **Voyager** and **AWeb** need to be developed at greater speeds, to take advantage of new developments like frames. Most importantly, it needs Java."

GERMANY

This is the biggest Amiga market in the world, according to the majority of the survey respondents. As for product developers, **Phase 5** has probably done more than anyone

to keep the Amiga up-to-date of late, thanks to its superb range of accelerators and graphics cards. General Manager **Wolf Dietrich** told Amiga Computing that the company is looking forward to releasing its **PowerPC** accelerators and Amiga. "We are working closely with major software vendors to realise massive support for this architecture," he commented.

Another company, **Haage and Partner**, are developing products like the image manipulation package **Art Effect** and **Storm C**, the powerful development system. They say that the strongest customer support in Germany comes from students that find the individual strengths of the machine appealing.



ITALY

"In general, the interest in Amiga products has remained unchanged," commented **Michael Battilana** of **Cloanto**, Italy's top software developer. "We are continuing to invest in the Amiga, and for 1997 you can expect both new versions of current products (eg **The Personal Suite**) as well as some surprises."

Battilana said that survival for the committed Amiga developer with the right sort of product has not been too tough so far. In fact, in some ways, the lack of new models has meant customers have had more money to spend on software instead.

"The Amiga is a low cost, low maintenance machine," he said when asked how it should be improved. "But we now have an old Operating System, which is not very open to the new standards which are increasingly interconnecting the world."

He continued: "I would push the Amiga into the very low price segment, with a new model having fewer and more standard components - as it is, it's too expensive to manufacture. Today, there are no computers in the price range which made the **C-64** or **Spectrum** the most popular computers ever sold, but I think the demand is still there. I would also increase attention on specific emerging countries."



USER GROUP PERSPECTIVE

CUCUG's Amiga Web Directory has become the top Internet resource for any Amiga user with access, making it a truly huge and international community. We decided to get its perspective on the international Amiga scene, and **CUCUG's** Kevin Hisel provided the answers:

Q. Is the number of Amiga-owning members for your user group in decline?

A. No, in fact the Amiga membership is on a sharp upswing. However, our case is different from most other group's as many members have joined **CUCUG** to support our efforts with the Amiga Web Directory and are located all over the world. It appears, though, that many of the other local clubs we communicate with are losing Amiga members.

Most ex-users seem to have 'jumped ship' moving to more up-to-date and less expensive hardware offered by **Wintel** and **Macintosh** platforms. Many of our own members who have exited say that they could easily be called back to the Amiga if the OS was ported to a more robust processor and costs were reduced.

Q. In which countries is Amiga support still strong?

A. It appears the Europeans still enjoy a very active base of Amiga support. However, as time goes by, this question will become less meaningful since the Internet is decidedly shortening the distance between users and vendors.

Q. Do you think **QuikPak** would make a good new owner for the Amiga?

A. We're not sure what the best choice of new owner would be, but we will say it needs to be someone besides **Escom's** trustees and it needs to happen very soon.

Q. How would you like to see the Amiga platform develop?

A. Many of our members would like to see the Amiga OS ported to a more sophisticated processor environment. **Power PC** was our first choice, however questions have been raised as to the **PowerPC's** long-term commercial viability, so perhaps another **RISC** solution would be more appropriate. It would also be helpful if the new Amiga supported modern hardware standards like **PCI**, **USB**, **IEEE-1394**.

Q. What should the new owners do to revitalise the Amiga?

A. It's probably most important to build and

ship something right away. **QuikPak** seems to be on this high road having recently announced the first new Amigas in years - much to the delight of Amiga fans. But ultimately the Amiga needs a major hardware upgrade and some fundamental, niche talent to set it apart from the millions of cookie-cutter Intel machines. The new owners need to find modern-day Amiga pioneers and build a truly different computer and counter-market it much like **Apple** did early in the **Macintosh** saga.

Q. How optimistic are you about the Amiga's future?

A. We feel that fundamentally the Amiga remains one of the most capable computing platforms. While it has fallen behind in hardware and OS capability - especially networking and the Internet - the machine and its software are still remarkable. Of course, this does not guarantee a bright future...The right company and the right people still need to work hard to make success happen for the Amiga.

REST OF THE WORLD

The general consensus has been that the strongest interest in the Amiga has been in Europe. Even companies like the Australian **GP Software** who are generating reasonable sales of **Opus 5.5** say the main market lies in Europe.

Companies such as **Click Grafix** and **Systcom Limited** told of the state of the market in the Far East, where there is a small amount of fanatical support. As is the case with many of the Amiga companies, their dedication was such that while the Amiga exists, they're committed to supporting it. Each of these developers were working on new projects (such as **Click Grafix's** '**GeneRext**' software) for the Amiga.

SHOW OF SUPPORT

One thing that has kept the Amiga platform so strong is the loyalty of the users and, I'm sure many would agree, the various shows that are held help keep the market alive. It gives the companies the chance to meet the customers face to face - and find out what they really want. It also shows a unanimous front against the onslaught of the PC.

Shows are held all over the world. From the huge Computer '96 at Cologne to the smaller scale Expos, Amiga users flock in droves to find out about the latest for their platform of choice. The Amiga still dominated at last year's Cologne show with only 30 per cent of exhibitors from the PC side. In 1996 we also saw a successful Video Toaster Expo held in Hollywood, with high profile exhibitors such as AntiGravity and Nova Design.

The Amiga Central Ohio Network recently organ-

ised an Amiga show and, pleased at the response, are organising one for this year.

Dave Pearce from AmiCon

told us, "Last year's show was successful in a number of ways:

Nova Design, Silent Paws and several other vendors simply sold out of product in a short space of time, which showed Amiga consumers are not afraid to buy."

"Most people were amazed that there were so many Amiga users close by. Companies who participated were great, too. Many of them went out of their way to do something special for the event and were very careful and patient with questions and inquires about their products and commitment



Cologne's Computer '96 showed that there was still huge support for the Amiga

to the Amiga market." He continued, "I feel that events such as ours show people that there are Amiga users out there, keeping up with today's standards and still doing fabulous things with their machines. I think all of us realise the

Amiga situation is grim and there's been little to be thankful for, but when a large number of Amiga users get together to talk, browse and interact with each other, everyone leaves with a better outlook."

This year looks set to have just as many Amiga shows. It has been confirmed that the World Of Amiga UK is going ahead, plus plans are being made for a show in Melbourne, Australia to name but a few.

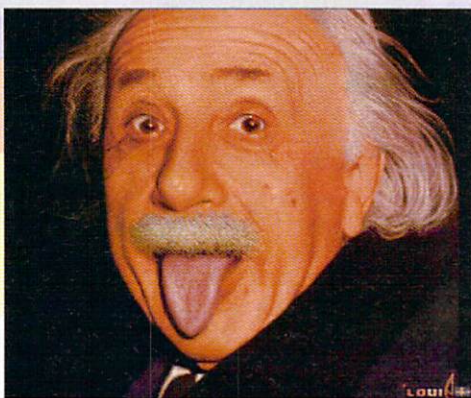
SCENE AMIGA

The demo scene has always been particularly strong on the Amiga. Even now, regular parties are held and although support for the demo scene has dwindled in some parts of the world, it is still popular in many of the Scandinavian countries and places like Germany.

Manfred Linzner (Pink/Abyss) told Amiga Computing, "Most demos are coming today from France, Finland, Sweden. The UK as a demo country is DEAD! One of the most famous groups of all time (ANARCHY (UK division) died some years ago and so also the UK demo scene." He believes the Amiga demo arena is the best demo-related scene, "The best musicians are found on Amiga, the best drawing artists and probably the most innovative coders are also showing their skills on Amiga at its best."

Thies Edeling from RAW Online the demo E-zine, (<http://www.xs4all.nl/~blahh>), told us about the scene in The Netherlands, "Compared to the real scene-countries like Sweden, Finland, Germany and smaller ones like Norway, the UK, France, it's quite small. In these countries there are several active groups who produce demos on a regular basis. In The Netherlands I can't think of a group - consisting of only Dutch members - who produces a demo for every big party."

He tells us that demo parties worldwide are



Albert by Louie - vote for your favourite pic at Raw



Raw Ezine keeps you informed of the demo scene

still very popular, "There is The Gathering in Norway, each Easter. I think this is the third big party. From what I've heard though, the people attending there mostly consist of PC-gamers (isn't it fun, playing network Quake for three days at some party? No, it isn't). Of course there is Assembly in Finland, every year at the beginning of August. And last, but definitely not least, the most popular one: The Party in Denmark, every year between Christmas and New Year. This one is the most popular in the Amiga scene."

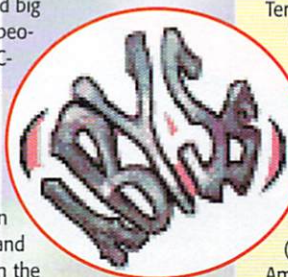
Jon Lennart Berg from the Norwegian based Amiga Foundation Network said, "Our demo scene is probably more alive now than ever - every coder wants to beat the PC at what the

PC does best - namely texture-mapped 3-D. Last year we saw the highlights of Amiga demo-coders demolishing any PC resistance with 4-8Mb AGA demos - hopefully some of this technology will make its way into the games we all hope for."

In Australia, however, the demo scene is not as good. Warrick Burgess told us, "The scene itself is pretty bad currently, with only two active groups, Cydonia (makers of Defy, the disk zine) and a new group called Broken formed by The Heavyweight

an ex-member of Devious Designs and Terminator (ex-member of Dusk).

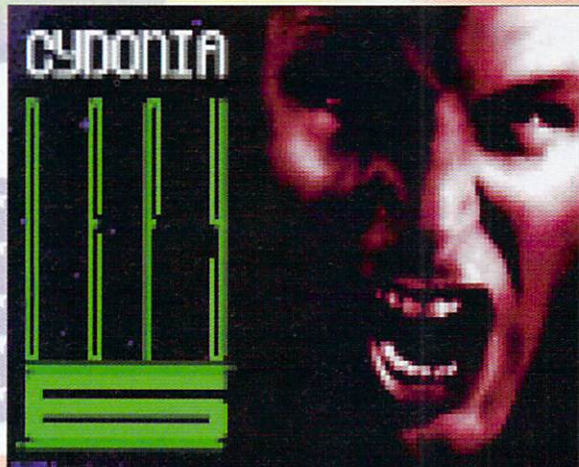
Both are still producing things (Broken has taken over releasing the Devious Tools utility pack series) but generally the scene is slowly falling away as more people purchase PCs. I don't think it will ever completely disappear, but like the C64 scene just continue at a smaller size." He goes on, "Having said that, the commercial (retail) side is more interesting. While the Amiga isn't selling in chain stores here, the interest and support of smaller computer speciality stores hasn't dropped off. One store recently even advertised wanting to purchase A1200s!"



The Amiga demo scene is still going strong in some countries



Some work by demoers, Abyss



In Australia there are only two active groups

CANADA

Famous For: QuikPak, Capital Punishment (the game!) Aurora Works, Asimware Innovations Inc, Wonder Computers

Sound Bytes: "QuikPak are certainly putting the country well on the Amiga map and if the purchase goes ahead, Canada will be bigger than ever on the Amiga scene."



BRITAIN

Famous For: Blittersoft, HiQ (Siamese System), Almathera, Digita, (Wordsworth), Hi-Soft.

Sound Bytes: "The number of Amiga computers in the UK means that there is still a significant market for Amiga related services. Also ISP's should try to support all types of computers for access, as the WWW is a cosmopolitan place!" Technocom "Although Commodore died, the userbase didn't and many companies have continued to support the machine. People continue to buy new software and hardware and the few Amiga shows that continue are still packed. The Amiga has a loyal bunch of dedicated followers and so the machine can still be profitable to develop for." Epic



AMERICA

Famous For:

Anti-Gravity, Intangible Assets Manufacturing, Software Hut, AmiTriX, NewTek (Lightwave)

Sound Bytes: "Overall I believe customer interest in Amiga products is down slightly as people become discouraged with waiting. We are still very busy because we sell to dealers and end-users as well as around the world." Software Hut "Despite what others may tell you, the Amiga is a good profit centre with a loyal base of users. These users are what keep the Amiga alive and they are happy and overjoyed to support dealers that carry Amiga products." Anti-Gravity



SPAIN

Famous For: AmigaTek Espana, Graffiti Board

Sound Bytes: "Without Spain we wouldn't have the name Amiga which is of course, Spanish for Girlfriend."

SURVEY RESULTS

We contacted over forty Amiga companies from all around the world. Here's what they said:

- Most dealers have seen a gradual decline in custom over the past year, but the market remains very viable.
- The Amiga Video market remains very strong in many countries.
- The majority of developers contacted still had Amiga products in development, though most projects were upgrades rather than totally new products.
- Over half the respondents said the Amiga desperately needs a faster processor ASAP. Most of these say it's got to be Power PC or DEC Alpha.
- Almost half said it badly needs its OS updated; a few specified a need for better networking and Internet support.
- About a quarter said it needed improved graphic and/or audio capabilities.
- The majority thought a new owner should focus on the cheap, entry-level computer market. A few expressed concern that QuikPak were focusing too much on the Video Professional market.
- The majority also thought a strong advertising campaign in the general computing press would be required to show potential customers that the Amiga is available.
- Many said that the new owner needs to network better with third Party Developers than has ever happened in the Amiga market before.
- A minority of the respondents said a new owner should concentrate on the Video niche market and/or develop cheap big box Amiga that are fully expandable.

QUIKPAK REPLIES

See our news pages to see what they say!



BELGIUM

Famous For: Amiga City, Generation Amiga

Sound Bytes: "We have been open since October 1996. First of all, we are Amiga enthusiasts. We think that there is a market for the Amiga. The Amiga is an answer for a lot of people who want more than a PC..."
Generation Amiga



NORWAY

Famous For: Scala, Applause Data

Sound Bytes: "The owner [of Amiga] must be capable of taking control of the Amiga in a serious and professional manner. They must maintain a proper dialogue with the distributors and co-operate with them to get the Amiga back into the shops. This will not be an easy job, at least not here in Norway." Applause Data
"The Amiga has some old roots in Norway and those roots will not be replaced by any new machine in the near future." Amiga Foundation Network



GERMANY

Famous For: Haage and Partner (Art Effect, Storm C)
Phase 5 (CyberVision, CyberStorm), Eagle Computer Products, ProDAD, CeBit, Cologne Show
Sound Bytes: "Arguably the most Amiga supported country in the world - tons of companies, users and shows all dedicated to the Amiga."



FRANCE

Famous For: Solectron, Requester Tools

Sound Bytes: "France has its fair share of Amiga activity. For one thing - the Solectron factory in France was chosen by Escom to produce the Escom Amigas."



JAPAN

Famous For: Systcom Limited
Sound Bytes: "[Interest in Amiga products] is very weak. Amiga doesn't support the Japanese language and the Japanese branch office (or any official marketing company) didn't develop it. The language barrier is serious here." Systcom Limited



CYPRUS

Famous For: Vavel Computers

Sound Bytes: "We sell complete Amiga-based systems for TV stations - six out of eight depend on the Amiga for their graphics. Cyprus Airways is using a number of Amigas for flight information. Also we provide TV graphics services for a number of companies and studios in Cyprus, Greece, Bahrain and Dubai." Vavel Computers



ITALY

Famous For: Cloanto

Sound Bytes: "In our sales statistics, Italy is at fifth place, following Germany, Great Britain, France and Poland. In general, in all countries, the interest of loyal customers has remained unchanged, but I estimate that in Western Europe there is 20-40 per cent fewer active users than one year ago." Cloanto



AUSTRALIA

Famous For: Austex (Uropa2) GP Software (Directory Opus).

Sound Bytes: "Most of our sales are in the UK and European markets. The Canadian/US markets are quite tough these days with it becoming increasingly difficult to reach the end user. The Australian market is fairly small, but there are still some active user groups and some other developers producing products and services for the Amiga." GP Software
"Many Amiga products are available in Australia, but not games, as there is a \$350 censorship fee for any title that is imported." Amiga News Australia (phone 042 672685 for Australians or 61 42 672685 for overseas)



MALAYSIA

Famous For: Click Grafix - GeneRexxT (ARexx Generator for Adpro)

Sound Bytes: "Although the user base is very small nevertheless they are very much in love with the Amiga. Some have given up, and some swore it's the last computer they will use and will never migrate to any other platform. Sometimes my showroom becomes a heated battle between Amiga users only." Click Grafix

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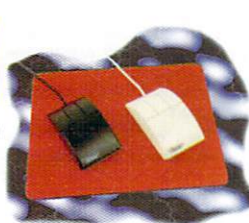
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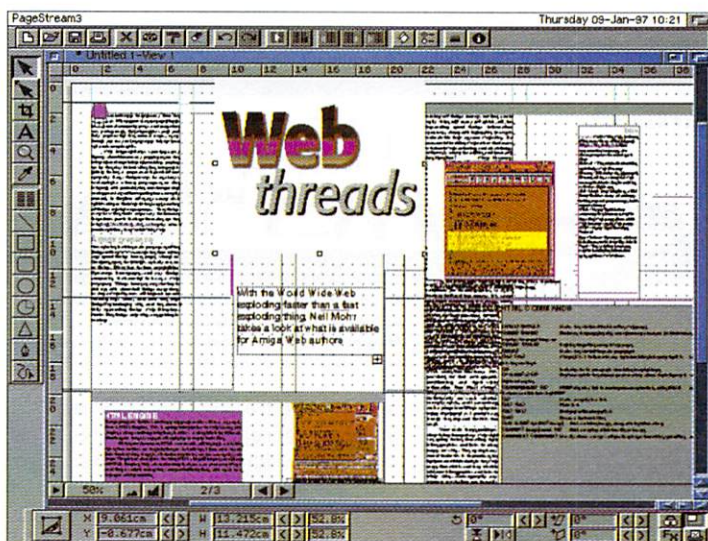
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PageStream imported this complicated document from Wordworth 5 - only partially successfully



PageStream 3.2 is unrivalled on the Amiga when it comes to sophisticated page design

Think of desk top publishing on the Amiga, and most of you will admit that, for a long time now, there has been only one choice for the serious designer. Soft-Logik has been proving for years that what the Macintosh can do with Quark XPress, the Amiga can accomplish with the venerable PageStream package.

Not surprising then, that Amiga designers have been getting impatient waiting for a new release of the PageStream software. In fact, PageStream appeared as version 3 - to great acclaim, of course - way back in December 1994. Some would be forgiven for imagining that Soft-Logik had abandoned the Amiga to develop for less uncertain markets.

Fortunately this is not the case. PageStream 3.2 has finally arrived to reassure Amiga users that their favourite DTP package is keeping up with the times. The fact that this is only being marketed as an update rather than a full new version shouldn't disappoint anyone too much either. So many refinements and new features have been implemented since version 3.0 that Soft-Logik can justifiably claim to have made widespread improvements to the program.

Before anyone with a sudden desire to make a start in DTP places their order, remember this is a powerful package aimed at the professional user and consequently requires a reasonably powerful Amiga to run satisfactorily. Version 3.2 now needs 4Mbs of RAM, but recommends 8Mbs. Furthermore, if you plan to

Power Publishing

PageStream has received a major update with the release of version 3.2. **Gareth Lofthouse**

puts the Amiga's leading DTP program to the test

work on a day-to-day basis with PageStream, a RTG board would be highly recommended to allow you to move text and picture boxes around at speed. PageStream 3.2 includes direct support for CyberGraphx graphic cards, allowing users to work in up to 24 bit mode on

a CyberGraphx compatible system.

A good DTP package should put a huge array of flexible tools and options in the hands of the user, yet it has to be suitable for use by non-technical, creative people. In this respect, PageStream competes admirably with the best packages on other platforms, yet alone the Amiga.

WORKING WITH OTHER PLATFORMS

Softlogik has made a big deal of how PageStream can work with source material from the PC or Macintosh platforms. This is understandable, since the Macintosh has established itself as the industry standard for Desk Top Publishing.

However, there have been problems previously with importing text from other platforms. Now Soft-Logik have added a new RTF (Rich Text Format) import filter to replace the Word and WordPerfect 5 filters which never worked as well as they should have. Fortunately, all major word processors, including Word and WordPerfect, can save in RTF format.

Graphically, PageStream still will import and export the commonly used PC and MAC formats. It also uses PostScript, Compugraphic Intellifont and PageStream fonts, and includes 42 fonts as part of the package.

OTHER PLATFORMS

The interface is composed of a title bar, depth gadget, toolbox and edit palette and, of course, the working window itself. Text and pictures can be imported into PageStream, from other programs (and even other platforms), then drag'n'dropped into position on screen. Text chunks and pictures are contained within frames with grabable handles that can be used to resize them. This means viewing documents, laying them out and formatting them is as simple and flexible as you could hope for considering the huge array of options that lie

below PageStream's tidy surface.

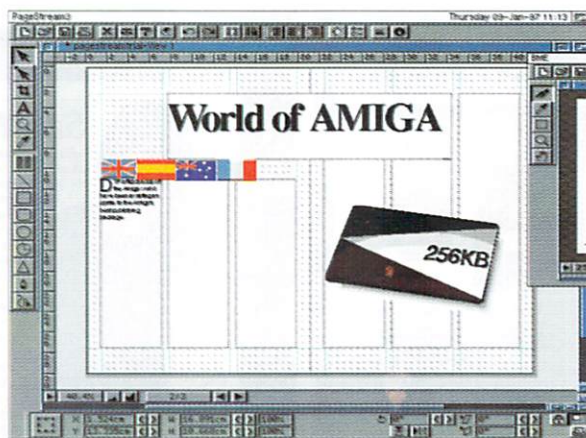
Pretty much everything you needed to create documents ranging from flyers to whole novels was included in the previous release of PageStream. BME, for example, allowed users to retouch pictures with the included cropping, rotational and autotracing tools. Similarly, PageLiner acts as a text editor allowing users to import and alter text much more quickly than can be achieved in PageStream itself.

This package really does allow users to generate professional-quality layouts with all the tools a designer should expect to have at their disposal. There is, for example, a range of powerful drawing tools included that allow you to create boxes, lines, spots and flashes, as well as freehand paths. Text can then be made to automatically flow round irregular pictures and objects. Automatic drop caps and bulleted paragraphs can be inserted from simple requesters, and there's a selection of gradient, radial and shape fills at your disposal.

One of the biggest improvements over the initial release of version 3.0, however, is that the program is now infinitely more stable. When the program appeared two years ago it used to lock up on quite a regular basis, but this problem was sorted out with a patch a long time ago. In this release, there have been dozens of small refinements to make the program run more smoothly than ever before.

So how about the new features? First off, the interface - while remaining essentially familiar, it has received a few valuable alterations. The Toolbox, for example, has been given a new crop tool, neatly separating it from the Reshape tool under which it previously could be accessed. The Magnifier tool has also been improved - you can now just drag over an area to zoom in on the desired portion of the screen - while a new 'Eyedropper' tool allows users to copy and paste text and object attributes, allowing for faster formatting.

The Toolbar, beneath the working window, has also received new tools, including buttons for Play Script and Preferences. The Toolbar is also now configurable in the Preferences requester, giving you the option to decide which menu commands and scripts should be placed within it. If that wasn't enough, there's a 'Show/Hide' command for the Toolbar in the Window menu, and its position can be remem-



The interface has been enhanced, though the program remains familiar

bered by PageStream. Finally, there are also increase and decrease indent buttons.

Graphical flexibility has been enhanced with new masking features. For example, it's now possible to mask drawings, EPS pictures and illustrations with whatever shapes you can think up and draw. Users simply have to select a graphic and a shape or path and then choose the Mask Graphic option. Another big difference in this department is that these and other effects can be added to pictures in PageStream without editing the picture in BME - instead, you simply click on the FX button in the Edit palette. Furthermore, PageStream now has built-in virtual memory, just like BME itself, which it uses to load and print graphics.

The program has for some time supported bitmap graphic formats including BMP, GIF, IFF, MacPaint, PCX and TIFF, as well as outline formats including EPS, Art Expression, Freehand, Illustrator and ProDraw. JPEG loading support still doesn't feature in this program itself, but a separately sold filter is thankfully available. This filter can now load and save progressive JPEG images. The export requester has a Progressive checkbox to turn this feature on, though it's switched off by default because many programs do not currently support Progressive JPEG images.

When laying out anything like a magazine, even idiots of the design world, like myself, know that you lay illustrations or titles across double page spreads to give them increased visual impact. With the importance of this in mind, Soft-Logik have made double-sided pages into automatic page spreads; whereas before you had to manually make facing pages into spreads, now you can just start designing. In line with this



PageStream 3.2 still comes with BME 2.0, allowing users to retouch pictures. However, it's now possible to work directly with graphics within PageStream itself

improvement, the New Document requester includes a facing page checkbox that allows users to set which pages will be viewed as facing pages. Incidentally, while on the subject of spreads, it is possible to drag a page to the bottom of another to start a vertical page spread, yet another example of PageStream's combined creative flexibility and ease of use.

EASIER EDITING

The process of editing a document has been improved due to the addition of an Apply button in the Edit palette. Changes made via this palette are no longer effected at once; instead, a batch of alterations can be made to the co-ordinates, pictures and text frames, and all can be effected at the same time with the apply button - a method which actually speeds up multiple alterations.

One drawback that is becoming more common with Amiga productivity programs is the lack of a proper printed manual in the 3.2 box. Extensive on-line, context-sensitive help is available, but while this is by far the best way of looking for small chunks of information, it does not compare with a proper manual when it comes to getting an overview of a program.

The lack of a tutorial will be sorely missed by anyone who want starting off either with DTP or with Softlogik's product, although the 16 page overview makes some concessions in this direction. I did, however, like the idea of the Navigator tip box which appears every time you load the product, a feature that help users assimilate new features bit by bit. Incidentally, while on the subject of the Navigator, this has been improved with the introduction of a preferences button.



This package really does allow users to generate professional-quality layouts with all the tools a designer should expect to have at their disposal.

LOGIKAL PROGRESSION

A whole host of minor refinements and bug fixes aside, that pretty much brings us up to date with the improvements made to PageStream since version 3 appeared on the tail end of '94. So what do we think of the Soft-Logik's progress?

Certainly there are no revolutionary surprises in this latest version. While there are dozens of new 'features', they all basically optimise the interface and develop tools already in existence. There's nothing radically new, but then this is more of an update than a completely new version.

It's been a long wait just to get this far, but it would

be nevertheless unfair to accuse Soft-Logik of sitting on its thumbs. Though essentially the same program as it was two years ago, PageStream has at last evolved into the powerful, intuitive program it promised to be back then. It's much more stable, and the interface has benefited from constantly being re-evaluated and refined to make it work better for the end-user.

Of course, those who stand to make the most of the latest version PageStream are the ones who've invested in a RTG board. If you're serious enough about DTP to invest in a Cybergraphx card and PageStream 3.2, you're in for a real treat.

Bottom line

PRODUCT DETAILS

Product	PageStream 3.2
Supplier	Soft Logik
Price	\$199
Tel	1-800-829-8608 US

SCORES

Ease of use	86%
Implementation	92%
Value For Money	78%
Overall	88%


Why so glum chum? Amiga about to sprout wings and a harp? See if ACAS can't help

COMPUTER NEWBIE

? I'm writing to you from Malta. I am hoping you will be able to give me some information about how a computer works – I only need a few hints. I do not know very much about computers but this year I am going to take some lessons.

I would like a few points so by the time I take the lessons I will know something, rather than nothing, about computers. I have heard people talk about windows, what are they and how would you use them? Does this involve the mouse? I hope to hear from you soon, thanks for your collaboration!

Elaine, B'Bugia Malta

 The trouble with trying to describe computers to beginners is that by their very nature computers are complicated and will remain so for a very long time to come. In some ways, even with all the big advances, they are more complicated today than ever before.

Even to give a brief description of the basics of computers would really take up more space than we have here. It does sound like you know a little already as you know what a mouse is, and that really you are getting confused when it comes to the software that you run with a computer.

When people refer to windows there are two possibilities, one would be the general term for windows. With modern operating systems programs run on a computer appear in 'windows', these are rectangular areas on the screen that you can move around and change the size of using the mouse. In these window programs are displayed allowing you to use them, on the Amiga this window system is called Workbench.

The other reason people may be talking about windows is that they are referring to a software product made by Microsoft – the latest version is called Windows95. One description is that Windows is a program to run programs, it is the thing that actually draws all the windows that appear. The one thing you should know is that Windows95 does not run on an Amiga, to use it you need a PC. It is more than likely that when you start your course you will be using Windows95, so do not be too shocked.


As with everything in life, the best way of learning is to try using your Amiga, you will come across problems learn how to overcome them and so grow through the processes, all very Xen.

LIGHTENING THE WAY

? I have owned a basic A1200 with just a 4Mb RAM upgrade and 80Mb hard drive for the last few years and have been wanting to upgrade it for a good while now, with thoughts about having a serious go at raytracing. So far I have played around creating models and scenes with various packages but the amount of time renders take has always put me off.

I have now got access to some extra cash and I'm looking forward to being able to upgrade my machine, but need some advice on what you suggest I should go for to get best out of my cash, and hopefully not have to splash out too much more in the future.

Ted Krilley, Atherton

 Raytracing is a real power computer application and the general advice to give to people is go for the highest specification equipment you can afford. In your case you will have to upgrade your processor, memory and hard drive.

Having said that, you should also consider the current market situation. Due to the grotesque requirements of Windows 95 and Windows NT, the price of Simms and IDE hard drives have really crashed. With regards to memory I would strongly advise you to go for 16Mb, and due to the fact most A1200 accelerators only allow you to use one Simm, if you plan to get really serious you may want to go for a 32Mb Simm to keep your machine future proof.

On the hard drive side of things, again, do not go for anything smaller than 1Gb. Firstly if you start creating large animations even this size of drive will quickly fill up and secondly, again, 1.2Gb+ sized drives are now the defacto PC standard and anything under this can be snatched up very cheaply.


Now for the crunch decision – what accelerator board to go for. The general advice is go for the fastest you can afford. If you take it that you should go for a 16Mb Simm and a 1Gb hard drive you should know how much money you have left. To be honest you would be wasting your time with anything less



PC CONNECTION

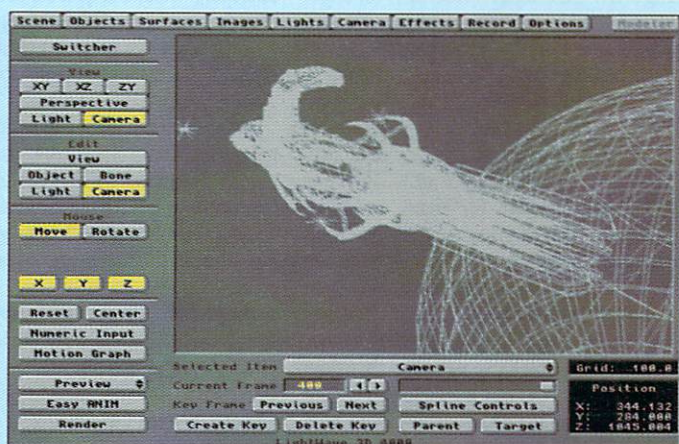
? I need to know if it's possible to hook a PC compatible CD-ROM drive up to an A1200 – it's a Sony model CDU31A-GW. As an added complication it's an internal drive. I know there are kits to convert internal drives to external for Amigas, but don't know if it would be compatible. My IDE connection is already taken up by my hard drive but I understand there is an interface that plugs into the PCMCIA port.

m.kirby2@genie.com

 If it is a normal IDE drive with a 39 pin connector then there's no reason why you can't use it with your Amiga. Obviously it being an external drive complicates things but it is still possible.

There are two routes you could use the first is to use Golden Images PCMCIA connector and external fitting kit. This gives you a PC slot interface into which you can plug an IDE CD-ROM drive. Their external drive kit is a slot together metal box that powers the drive via a connector that goes to the external floppy connector.

The other option is the one from EyeTech. From them you would get the either the two or four device connector that allows you to extend the internal IDE port and an external box with a proper separate power supply. Both come with the very good IDEFix software which makes setting up your CD software a straight forward process.



The all powerful LightWave at work, needs as much memory and processor power as you can afford

than a 50Mhz 030 board.

As an example of rendering times the standard LightWave texture rendered at full Pal resolution with antialiasing and adaptive sampling takes 4 minutes on an 060, almost 18 minutes on an 25Mhz 040 and will a little over half an hour on the 030 board.

One word of warning is that if you are considering a 40Mhz 040 board, such as the Apollo, you will have to get a new power supply as the standard Amiga one cannot handle powering both the accelerator and 3.5" hard drive.

A final point to bear in mind is that Phase5's PowerUp board may actually appear some time soon, and hopefully will give you a power boost far superior to anything current accelerators can. At least two raytracing packages are going to support it, most importantly Cinema4D. So you may consider hanging on for that, if you can bear the wait.

STUCK SCSI

? Hello, I hope you can give me some hints where to look for a solution to my problem. I've got a B2000 with GVP Scsi-030/33 4mb fast ram and OS 3.1. To this I've connected, internally, 2 hard drives and a 88 MB Syquest, the disk configuration are:

```
Scsi ID 0 DH1 Programs 101 Mb and DH2 Work 101 Mb
Scsi ID 1 DH0 Sys 260 Mb and DH3 Games 260 Mb
Scsi ID 2 Syquest - Terminated
```

Now to the problem, sometimes the machine after booting up, or after a while, will give me a message like:

```
gvpscsi.device unit 000
unexpected status $4e/$36
```

After clicking OK another window saying:

```
gvpscsi.device: board 000
invalid reselection
source ID = $88
```

After this it says that my work volume, that is SCSI id 0 has a read/write error on some block. I've only

encountered this problem with my work and program partitions, both located on SCSI ID0. So maybe the hard drive on SCSI ID0 is breaking down?

After this I am not able to access any disks, open any drawers and so on. But all processes already started seem to run. I have to turn the power off and on to be able to start, if I just reboot, it just won't startup. So if someone out there in cyberspace has a clue to what is wrong please send me an e-mail. tomas.andesson@hygiene.sca.se

Usually SCSI problems are caused by either incorrect SCSI IDs or some older SCSI devices not being terminated correctly. It results in either your machine locking up as soon as that device is accessed or it just being ignored.

In your case however, it seems that you have everything set up correctly and that the problem you have is software based, that being the GVP Scsi device driver. This is stored on a ROM fitted to the GVP board. I do know that the German company Schatztruhe +49(0)201 788778, do sell more up to date replacement ROMs, called Guru-



ROM, the latest version being six and gives you a big boost in CPU performance. As you are on the Internet check their home page for more information <http://www.schatztruhe.de/>

SCAN PLANS

? I am planning to buy a flatbed scanner - an HP ScanJet - but am unsure about the necessary software. What software do you recommend, and can my trusty old A2000 handle the scans I make? Would you advise me to upgrade my A2000 to Kickstart 3.0/3.1? If so, what do I need besides the ROM? I am using a GVP SCSI series II HD8 SCSI controller with only 2Mb. I would like to add more memory and have heard about different types of 4Mb SIMM modules. Which one can I use?

T. Broekmans, Netherlands

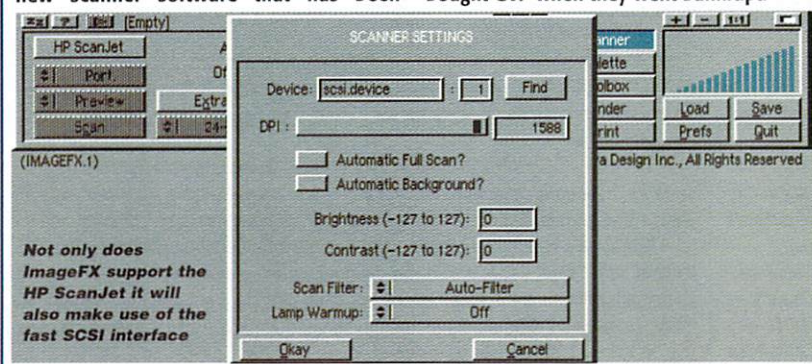
Well as long as you are using Workbench 2.04 I would suggest ImageFX v2.6. This has support for many scanners including the ScanJet, and with its built in virtual memory, even with a small amount of memory you will be able to handle the largest of scans. To get the best out of ImageFX you will need 8 Mb of RAM. Thanks to ImageFX's versatile preview buffer even with an ECS machine you will be able to get a decent idea of what the final image will be like, though the screen update will be slow. I understand that there is some new scanner software that has been

released in Germany, but as I have never seen it I cannot say if this is a good choice.

Upgrading your operating system does give you a number of advantages. Firstly you will be able to guarantee you can run all the latest software (though you only having a 68000 processor could be a problem) and you get the all the advantages of the new operating system. If you already have 2.04 then you can get away with not upgrading but if you are still using 1.3 then virtually all recent software will not run and you really should upgrade.

Along with the ROM you need the six system disks that hold all the new programs, libraries and device drivers used by the new operating system. In the six you will also get an install disk that will help you partition and install the software onto your hard drive.

Usually all GVP products need to use the specific GVP Simms that look like normal 72 pin Simms but are not and so cost a good deal more. You will have to get them from either Power Computing +44 (0)1234 273000 here in the UK or mTec +49 (0)2041 4656 in Germany - the two companies who bought GVP when they went bankrupt.



Jargon box

SCSI - Small Computer Systems Interface, a more complex interface than IDE allowing all manner of peripherals to be connected to it, and as many as seven devices

PCMCIA - That thin slot on the side of an A1200 and A600, know to be known as a PC slot, as everyone got really ticked off having to say PCMCIA slot all the time. Allows memory, hard drives and almost any other type of device to be connected to the computer

IDE - Integrated Drive Electronics, the hard drive interface found on A600, A1200 and A4000. The cheapest way to get a hard drive connected to a computer

Kickstart - The software used to actually start the Amiga, this has to be either loaded from disk or also refers to the part of the Amiga's operating system held on ROM

Raytracing - A technique used in computer graphics to create realistic images by calculating the paths taken by rays of light entering the observer's eye at different angles. The paths are traced backwards from the viewpoint, through a point in the image plane, that point being a pixel, until they hit some object in the scene or go off to infinity



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

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

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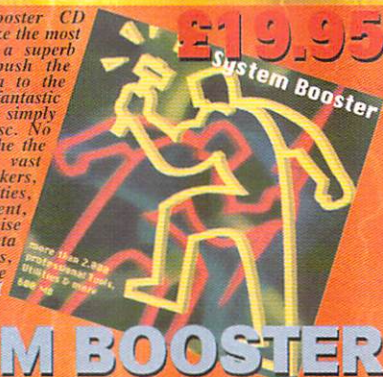
Aminet Set 3, dated July 1996, consists of 4 gigabytes of software in 9,000 archives. Including the full versions of Imagine 4.0, XiPaint 3.2, Octamed 5.0. With 95 megas Utilities, 79 megas Documents, 408 megas Text Software, 12 megas Disk/HD Tools, 7 megas Hardware related, 756 megas Pictures & Animations, 208 megas Graphics software, 394 megas Graphics & Sound Demos, 563 megas Games, 685 megas Music modules, 28 megas Music software, 131 megas Communications and more.

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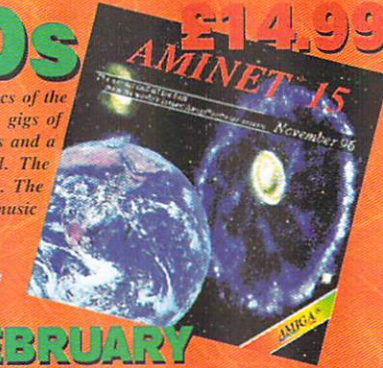
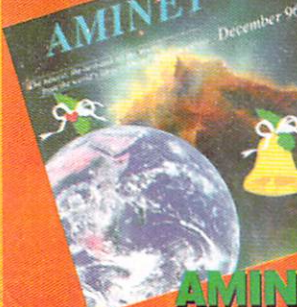
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AMINET 16

Aminet, the worlds largest Amiga archive, provides compact discs of the sites latest software uploads. Each volume contains about 1.1 gigs of archives with a superb menu system for un-archiving the files and a simple search facility to help you find exactly the file required. The search facility will even list the compact disc that the file is on. The latest Aminet CD's contain a theme. The Aminet 16 theme is music modules. Aminet 15 is available now and so is Aminet 16. Aminet CD's 12 to 14 are also still available. Each Aminet CD costs just £ 14.99 and provides the very latest Amiga shareware software on CD.

AMINET 17 AVAILABLE IN FEBRUARY



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Magic Publisher comprises of four compact discs on this unique CD-ROM set you will find all you need to create professional looking documents. There are more than 10,000 Fonts (Colour Fonts, Bitmap, IFF, Adobe, TrueType & DMF), more than 5,000 clip art. Many of these are exclusive to this compact disc. Commercial versions of Final Writer 4 SE & Wordworth 4 TD are included. Both rated as great word processors on the Amiga. Tools for creating WYSIWYG pages along with backgrounds and special clip art this purpose is also included. A 100 page book contains pictures of all the fonts and clip art.

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The Euro CD contains a vast variety of programs and data for the Amiga in the Aminet mould. However this CD differentiates itself by have the contents ready to run without de-archiving. The contents include Animations 36 megas, Commercial 21 megas, Demo's 65 megas, Disk tools 12 megas, Fonts 12 megas, Games 57 megas, Misc. 6 megas, Modules 110 megas, Music 21 megas, Objects 12 megas, Pictures 118 megas, Presentations 23 megas, Printer 1 meg, Programs 23 megas, Samples 4 megas, System 10 megas, Text files 26 megas, Utilities 16 megas and Vidules 3 megas. Full English docs. and menus.

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Includes all the packages previously published by Kara Computer Graphics for the Amiga, plus many more in an exclusive and professional edition reorganised and enhanced by Clonius. This CD-ROM contains 30 ColorPaint, 5 ColorFont, hundreds of screen colour palettes, Starfields, Planegrounds, and software for special effects in pictures, animations, tiling and presentations. All items for sale or combined use. The Kara Collection also includes two software packages developed by Clonius to manage blemished fonts: ColorType for colour fonts and the Personal Fonts Maker for black and white fonts. Both have been acclaimed as the best in their respective fields. To make Amiga fonts really easy and accessible to use. A fabulous collection of Amiga fonts.

The Card Games CD contains a plethora of card and board games for the Amiga and PC. With 250 new Klondike card sets ready to run from the CD. Games include blackjack, Cribbage, Gin Rummy, Casino, Chess, board games, puzzles, Slot machines, Solitaire, Video Poker, Word Games, Lottery and Mahjongg. A superb and involving CD.

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The Epic Interactive Encyclopedia is an exciting new Multi-Media Amiga CD-ROM. It features a superb 256 colour interface, 100's of film clips, sound samples, images and subject information. Additional features are.....Produced in the UK, very latest information from around the world, 1,000's of subjects covered, hot list editor, import new subjects and print facilities.

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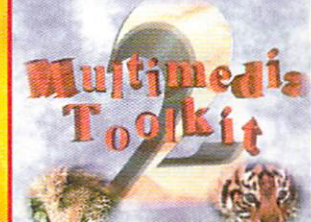
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AMINET 15

Since the last Laser Guidance, two Aminet CDs have plopped onto the Amiga Computing doormat: Aminet 15, the November Aminet release, and Aminet 16 the Christmas release.

Each release has a certain theme, and the focus of Aminet 15 is music and animation. One helluva lot of music and animation in fact. In its uncompressed form there is over 1Gb of software on the CD, including 124 Mb of gloriously over the top trippy animations with accompanying dance music. There are 143 MPEG animations and a number of excellent five minute animated films which look exactly like those 4-mations shorts they show on Channel 4. The pick of the crop is the lovably stupid 'Alien Space Vampire' animation.

As usual the Aminet CD contains a number of games, and along with the usual shoot'em-up clones, space invaders copies and primitive PD platformers, Aminet 15 contains a demo of a game called Genetic Species. It really does have to be seen to be believed - I would stick my neck out and say that it is almost worth buying the CD for this game alone.

Genetic Species is a very sophisticated Doom clone that looks utterly professional but was in fact created by a small group of Danish coders calling themselves Ambrosia. I can safely say that Genetic Species, even in its early form, is the best Doom/Quake clone I have seen on the Amiga.

The inclusion of a Genetic Species demo on the CD could be something of a coup because Ambrosia have agreed to collaborate with the Amiga games giant Vulcan to develop the game. If all goes according to plan, Genetic Species could be one of the most successful games in the Amiga's recent history. Aminet offers you the chance to own an early demo months before the finished product comes out.

There are a ton of pictures on the CD, ranging from interesting little presentations, films and pictures (such as the ace bird changing into a plane morph) to the obligatory dull renderings of the starship Enterprise drawn no doubt by people who spend every hour of the day watching Deep Space Nine reruns and swotting up on their Klingon warrior curses in ill lit bedrooms.



Hugh Poynton sifts through the latest Amiga CD releases

I found the CD fascinating and, although perhaps a little less useful than the average Aminet CD in terms of business software and the like, it is certainly a great deal more fun. For anyone with an interest in animation or computer generated music, this CD is a must, as it includes music modules and software and some pretty good quality dance tracks.

If you're after business software, buy Aminet 14, but if you want a genuinely interesting and fun CD that'll keep you browsing for hours, go for Aminet 15.

Bottom line

PRODUCT DETAILS

Product:	Aminet 15
Supplier:	Epic CD Roms
Price:	£12.99
Phone:	0181 873 0310



Genetic Species - worth buying Aminet 15 for



AMINET 16

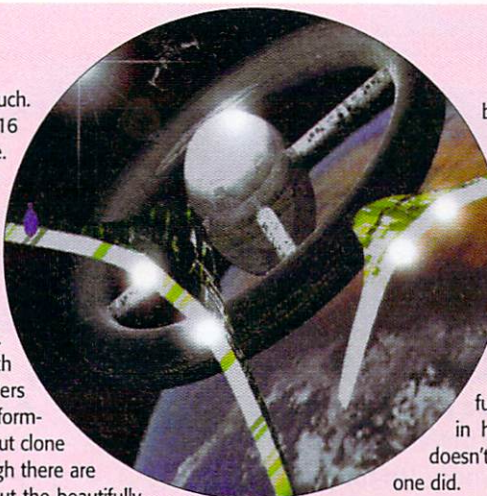
This is Aminet's Christmas release – you can tell because those loveable Aminet fellas have stuck a big bell and some holly on the front. Somebody must be slipping something into the Aminet office water supply because, like the previous Aminet CD, this one also focuses on arty stuff as opposed to dusty old database packages.

As with all the CDs there is the usual collection of useful, interesting and fun software. The onus here is on music modules – there are a total of 367 Mb of music mods on Aminet 16. A word of warning however, many of the modules on Aminet 16 have been taken from the Modules Anthology Vol 1 CD, so this CD won't

extend your catalogue much.

Games-wise Aminet 16 is quite unremarkable. Because of the incredible Genetic Species demo on the Aminet 15 CD, this doesn't have a chance of living up to its predecessor as far as games are concerned. However, mixed in with the retro Space Invaders clone and primitive platformers is a demo of a Wipeout clone called Slipstream. Although there are no other ships flying about the beautifully rendered course with you, the demo is still a good laugh. The graphics are very impressive, although admittedly rather jerky.

Other than music modules there are lots of pictures (279 Mb) and the usual amount of other stuff, totalling about 900Mb of files. The pictures range from the interesting and impressive to the unbelievably dull. One stands out in particular – some guy has taken about 10 photographs of his remarkably unremarkable dodgy Japanese motor (the sort that they produced by the million in the 70s and 80s, rusty little tin cans with the aerodynamics of a breeze



Aminet 16 is packed with quality artwork like this

block and cheesy names like Colt or Sunrise). These photographs show his pride and joy (oo er) from every conceivable angle. Strange.

There is also the usual selection of demos, graphics software and communications stuff. This is basically your average useful, good quality Aminet CD. It's stuffed with a load of useful software that will no doubt come in handy at some time. However, it doesn't blow your socks off like the last one did.

Bottom line

PRODUCT DETAILS

Product:	Aminet 16
Supplier:	Epic CD Roms
Price:	£12.99
Phone:	0181 873 0310



Is this your car? If so, you are very sad

ADE

It has always been said that one of the key strengths of the Amiga is that it is essentially a hobbyists machine, and that programming software can be relatively inexpensive and simple in comparison to PCs or the like. Geek Gadgets from Cronus Software intends to capitalise on this fact.

With a name like Geek Gadgets you just know this CD is going to be intimidating and techie. Despite this, Geek Gadgets is an impressive and useful piece of software; it contains the Amiga Developers Environment or (ADE). ADE is a project undertaken by Cronus to adapt a number of the most important and useful development tools and utilities for the Amiga.

If you want to start programming on the Amiga then this is definitely the CD for you. All the necessary tools are here; C, C++, assembler, linker, ADA Compilers and GNU debugger are present as well as dozens more. There are also beta test versions of upcoming ports such as the X Window System.

To simplify things Cronus have compiled the CD so that there is no need to install any of the files to your hard drive – they can be accessed directly from the CD.

Bottom line

PRODUCT DETAILS

Product:	Geek Gadgets - ADE
Supplier:	Weird Science
Price:	£19.95
Phone:	0116 234 0682

MEETING PEARLS IV

Bottom line

PRODUCT DETAILS

Product:	Meeting Pearls IV
Supplier:	Epic CD Roms
Price:	£9.99
Phone:	0181 873 0310

Amiga Technologies certainly knew why it chose the Meeting-Pearls III as a freebie to be included with their Q-Drive. Everyone who knows the Meeting-Pearls series will confirm it offers highest quality at the lowest possible price – and this hasn't changed with volume IV. This time also, only high-quality and well-tested software pearls have found their way onto this crammed CD. A clever system has been devised to protect the lovers of Amiga games from many undesired crashes. Several different search tools (based on MUI and AmigaGuide) make finding and executing of software packages straight from the CD a snap. With the Meeting-Pearls CDs, no archives need to be unpacked – all programs can conveniently be started from the Workbench. For the first time, protection bits, which used to get discarded during CD-ROM production, are preserved.

As was the case with earlier volumes, access tools have been improved noticeably. There is probably no other Amiga CD that can be configured according to personal preference in so many aspects – but fortunately doesn't require the user to do so.

AMIGA DEKTOP VIDEO 2

Almathera is back, with a follow up to the acclaimed Amiga Desktop Video. The Amiga Desktop Video sold out shortly after its release in 1995 and there is no reason to suspect that the follow up won't repeat the success of the original.

Whereas the original Amiga Desktop Video focused more on 3-D images, the second CD concentrates on 2-D presentation and titling, with more commercial uses.

Included on CD2 is about everything you will need to produce your own video presentation with background sound and music. It offers over 200 antialiased colourfonts, up to 250 point and above, with PostScript versions.

The complete Scala 1.13 is also present on the CD, complete with an upgrade path to the more mod-

ern version, Scala MM400. Version 1.13 is ready-to-run from CD and can utilise all fonts, animation and 16-colour textures supplied on ADTV2.

Amiga Desktop Video CD2 also includes licensed musical tracks from various Amiga demo scene musicians and the required applications to play them. Other features on the CD include clip-animation streams ideal for use on presentations and current releases of video utilities and graphics processing tools including NetPBM and MainActor. At £14.95, this is an excellent value package to start you off if you're new to Amiga video work – every aspect of Video presentation seems to be covered. Even if you are an expert, DTV2 still contains some useful material.

Bottom line

PRODUCT DETAILS

Product:	Amiga Desktop Video 2
Supplier:	Almathera
Price:	£14.95
Phone:	0181 687 0040

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Mad as a March hare, **ESP** takes a look at the many letters sent in by you, the readers.



UPGRADE NOW



I have been an Amiga user for nearly 4 years and have been on a low income for most of that time. When I read in magazines about other people saying it's too expensive to upgrade their Amigas, I have to laugh. In the past two years I have bought for my A1200 (nearly 4 years old and not a mishap) a Blizzard A1230MkIV (179 including a free game), 8mb ram under 100, Power CD-ROM 179, 850mb Seagate hd 110 and a 33600 modem 119 and Internet connection.

As you can see I now have a much more powerful Amiga for about half the price of a PC. I have had more fun out of upgrading it myself than if I'd gone to a PC box shifter, got it home and then found out I had to pay a lot more for graphics cards etc to do the same things the Amiga can do for half the price. So, it can be done. Nobody ever said computing was a cheep hobby - but it can be if you shop around.

*Ian McDonald macca@enterprise.net
P.S Get Netted Or Get Left Behind :-)*



Good for you. Let's hope others will decide to follow suit. If people have high-spec Amigas it may encourage more development - especially on the games front as it gives the developers more to work with. Take for instance the Doom clones that required more powerful machines - I'm sure they impressed those other than Amiga users. And I'm sure upgrading isn't nearly as expensive as many people think.

STOP YOUR MOANING



I've never written to ESP before as my ponderings have always been answered by some other like-minded soul before I could put pen to paper. This time though I've had enough. Why do people write in moaning all the time? This is the one thing that will put half-hearted users off!

If I was flicking through a PC magazine and the readers pages were constantly harping that 'the end was nigh', I wouldn't touch a PC with a barge pole. Potential users are (easily) influenced by information from all sources so if the people who use the machine are flaming it what hope is there?

The market is shrinking but it's not half as bad as some of these turncoats would have you believe. I co-run an Amiga User Group and PD library in the North West and in our first year of operation we have attracted a new member virtually every week.

Visitors to the club are predominately from within a 5 mile radius and if this is extrapolated, it's safe to assume there are still thousands of active Amiga followers up and down the country. Most are what you would call typical Amiga users - innovative and enthusiastic - but it is becoming increasingly obvious that a lot are new to computers in general and they have bought Amigas second hand.

In short, the Amiga audience has changed but not gone away completely. I mean, let's face it, nobody throws away their old Amigas - there are still hundreds of thousands of them out there. We just have to wait until

they filter through to the people who want to use them.

Consider the recent events to be streamlining - we are simply getting rid of the 'band-waggoners' - the people who used their 1/2mb A500's when it was trendy to do so. We will be left with a core of hi-specced dedicated fans that are happy with what they've got and as a result the user base will not shrink further.

*Simon Brown Email -
simon@ssamiga.warp.co.uk*

For details of the user group, please write to:

*S&S Amiga User Group, 79 Woodnook Road
Appley Bridge,, Wigan, Lancs. WN6 9JR*



I can understand people wanting to whinge about the current situation - we just want to see the Amiga bought and in the hands of someone who wants to do something positive with the platform. However, it's a very good point you are making about the new users who have bought an Amiga second hand.

I think a lot of people new to computing are picking up A1200's for around £100 and wanting to get as much information as possible on their new machine. It doesn't help when they find out that many users are constantly moaning about the Amiga market and current situation. The more new users we can attract at the moment, the better.

WRITE IN!

If you have something you need to get off your chest then put pen to paper and write to ESP, Amiga Computing, Media House, Adlington Park, Macclesfield, SK10 4NP. You can also Email us at ESP@acomp.demon.co.uk

We have various software bundles to give away for the best letters (please indicate whether you'd prefer serious software or games). We do try to reply to all Emails and letters, but at busy periods this is sometimes not possible so please bear with us



ACTION REPLAY



When I first read in your magazine that Amiga Action would be incorporated into Amiga Computing, I was quite worried. I can't say that I am

an avid fan (although I do enjoy the occasional new release) and I was concerned that the whole magazine would be over-run with infantile games coverage - sorry, but I've seen past issues of Amiga Action, and I don't want to see my £4.50 a month wasted on Horse posters.

However, I was pleasantly surprised when I saw the new games section because:

- 1: It is roughly the same size as System
- 2: The pages are bright and colourful and breaks up the magazine nicely
- 3: You have managed to bring in more features which will help keep the market alive (I've noticed that many mags just fill in space with reviews of inferior games).

I just have a few grumbles though (you knew they were coming, didn't you?). I would like to see some kind of Action chart included which rounds up the best releases of the last few months - I don't buy many games but it would be nice to be able to see at a glance which I should go for when I do make a purchase. Also, I think it would help in a review to compare a game to a classic game in the same genre - whether it is better or not and so on. Just a suggestion...

George Preston, Derby



Thanks for your comments. I've passed them on to our resident games guru who'll see what he can do - keep an eye on future issues.

OOPS



Delighted as I was to find our company, Almathera, listed as one of the members of the "Amiga Elite Support Squad" in the article on Heroes and Villains in your January 97 issue, I'd like to take issue with a couple of points.

Firstly, you said "Photogenics was an image manipulation package". That is indeed the case, but why the past tense? Photogenics is an image manipulation package, which we will continue to support for as long as we possibly can. I'm sure this was a simple slip of grammar, but I'd like to reassure your readers that we haven't stopped supplying or supporting Photogenics.

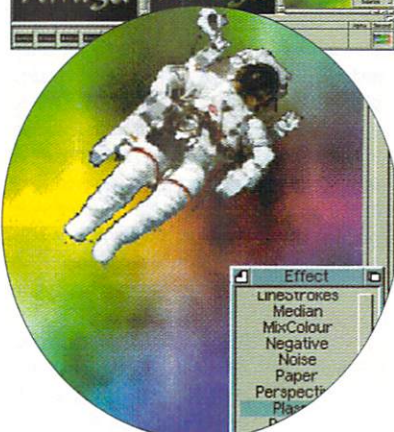
Secondly, you said Photogenics was programmed by Paul Nolan. While it is true that Paul Nolan wrote the original program on which Photogenics was initially based, it would be unfair not to mention those who spent 18 months of their lives (including myself!) making Photogenics the package you know and love today.

So, for the record, Photogenics was designed and programmed by Kriss Daniels, Jason G. Doig, Paul Nolan, Jolyon Ralph and Keith Smith, with help from many others inside and outside of Almathera. Writing and supporting Photogenics was, and is, truly a team-effort and I thank you for this opportunity to put the record straight.

Jolyon Ralph - Almathera



Sorry for any confusion on this matter, I'm sure your letter has set the record straight.



Photogenics, still strongly supported by Almathera

STILL SUPPORTING...



In December 1996, while I was awaiting the next load of Amiga magazines at my local magazine shop, I noticed the demise of Amiga Shopper and Amiga Gamer CD32. A sudden cold shiver caught my body. When I took a look at the size of your magazine (still excellent, by the way), I realised that this could be the start of the end! So this loyal Dutch reader wants to tell you something.

It's not that I am negative, but I am living in a country with the highest software piracy rate and the lowest means of buying Amiga stuff. After the announcement of Commodore, many of my local shops suddenly stopped supplying Amiga hardware and software and (most of all) service. It started to make me worry about the future of one of the finest machines ever.

Lots of friends turned towards the PC - "Because the games and hardware should be better and cheaper". Though I do not agree (and I will NEVER sell my trusty A2000 and CD32), it is happening more and more. This also made me worry.

So why is this take over taking so long? Why are the liquidators such a pain - don't they see that they are slowly destroying a fine piece of technology? And again, these questions worry me.

I think the best way is to keep going and hoping that the Viscorp deal will be done soon, so new developments can start right away. And to all those Amiga freaks out there who feel the same but want to step to the PC platform, I would like to ask them: Why should you?

All necessary and serious software is available on the Amiga as well. So that may not be the reason. Better games, faster programs? Only when you buy a state of the art Pentium 200 MHz with lots of memory, hard disk space, expensive and fast graphics cards, SVGA multi-sync monitors and all for a 'bargain price' of £1,200? Don't make me laugh!

So my advice: Think twice and ask yourself if you really need it. Do the things you want with the things you have and support your favourite machine as long as possible.

Tom "a bit worried" Broekmans (NL)



Start of the end - I certainly hope not! It is inevitable however, that as people desert to the PC, there are going to be fewer people to read the magazines which is why some have had to close. It's unfortunate that Amiga Computing has, along with many other Amiga mags, had to drop in size. However, we will continue to support the many loyal Amiga users out there with best quality magazine we can - as well as considering other projects such as bringing Amiga Computing on-line (as well as producing the print magazine).

Yes, it is frustrating that no deal has yet been finalised for the purchase of the Amiga - I don't think the liquidators are slowing things down on purpose and I'm sure they want to see the deal finalised. However, we may have to wait a while longer as the deal is no longer as clear cut as it once appeared (see news story last issue). There are other contenders who are hoping to buy the Amiga - which at least shows how much the machine is still wanted!

I think other readers should take note of what you say though - why go and buy a PC when you can do everything you need to with your Amiga? Hang in there for just a while longer and wait and see what happens - we could be richly rewarded.

CALLING ALL READERS

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So at the moment all we need to know is "Would you be interested?". It won't happen if you're not. You're not committing to anything - all we need to get is a feel for the number of people who'd like such a service. Expected cost for such a subscription could be

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If there is one area computers have managed to revolutionise more than any other it has to be the music industry. The advent of digital recordings technology changed forever how recording were made and has gone on to produce whole new areas of music styles, without which the world would have missed out on Keith on the Prodigy.

Thankfully, armed with your Amiga and even a measly amount of hardware and software, you too can jump in head first into the music world without having to re-mortgage your house, wife and children. A basic set up to get you started composing music on your Amiga would be: A sampler and some sort of stereo amplifier – that really is it. The amplifier does not need to be anything fancy to begin with, either a hi-fi or radio cassette player that has the correct inputs and outputs to make full use of your hardware.

The type of sampler you choose depends on your budget and how keen you are. Luckily, there are good low, medium and high end choices for all Amiga owners, no matter what your budget or machine.

If you just fancy having a quick dabble for fun, then whatever machine you have you will be better off going for one of the parallel port type of samplers that are on the market. The main three currently available are the Technosound Turbo, MegaloSound and GVP DSS8. All three plug into the parallel port of your machine and allow you capture stereo 8 bit samples.

DECENT SOFTWARE

All these samplers come with decent software that allow you capture samples from 5Khz all the way up to 56Khz. They also provide for direct to disk capture giving hard drive owners the option of playing with even longer samples. At around £30 all produce excellent quality samples, come with decent software and are cheap enough for you to buy just to try them out.

Moving up the price scale a wee bit there is the Aura16 from HiSoft. This PCMCIA device, even though called the Aura16, allows you to

QUALITY IS THE KEY

When it comes to actually sampling, you will initially want to get the best quality you can and then reduce the sample down to a level usable on your system. At the initial sampling stage, depending on your machine, you will have to set the sampling rate to what your machine can handle. The best minimum set up is an A1200 with 4Mb of FastRAM – with this you will be able to get quite long samples at high frequencies(41Khz plus) and if you have a hard drive, all the mentioned samplers come with direct to disk sampling providing even more flexibility. People with lesser systems will still be able to get good quality sample around the 32Khz level, you will just have to be a little more conservative on sample length.

capture and play stereo 8 bit or stereo 12 bit samples. Normally the best quality samples the Amiga can play are 8 bit, but the Aura adds another 12 bit stereo channel that is mixed with the standard Amiga sound output. The actual Aura software that comes with the sampler works in full 16 bit quality, but you will still only be able to replay them in 12 bit.

The Aura software is very nice, giving you all the cutting, pasting and other editing tools you would want. Along with these are a stag-

gering amount of filters many of which you may have to just ignore, but thanks to the built in FFT display you can get a good understanding of what each filter does. There is even a MIDI sequencer built in so Aura can play back samples under external control. One final point is that OctaMED Sound Studio supports the Aura by giving you additional 12 bit audio output via the Aura.

Radio



The Aura software in action showing you a spectrum analyser monitoring the current sampler input

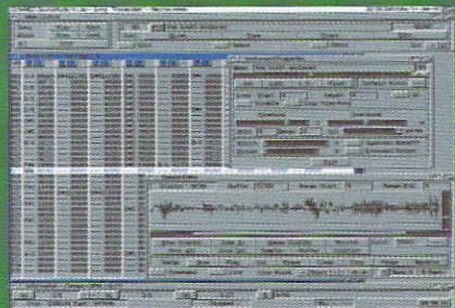
KEEP ON TRACK

You may have noticed I have talked a lot about how you can get the best samples possible, but not mentioned too much about what you can do, apart from fiddling with them in the sample editor. Well, many moons ago when programmers wanted to add music to games they concocted a strange symbolic music system and wrote a program called Sound Tracker. This gave them a simple way of adding music tracks to games and demos, as tracker modules are written in a way that was simple for the computer to understand. Unfortunately for the poor old musician, they had the task of learning this system and writing music with it.

I may have made trackers sound a little worse

than they actually are. What they do is allow you to play samples at set times and at specific notes. By giving you a number of channels, to let you play multiple notes at once, you can produce fairly complex compositions. It is even possible to add effects to samples played using extra codes.

These codes are the crux of the whole problem with trackers. Before you can really get into producing good songs you have to become familiar with all these codes, and for a beginner they can be a real turn off. Luckily all the modern trackers do a good job of simplifying things as much as possible and good documentation should help newbies along.



Possibly the most advanced trackers on the face of the world, OctaMED Sound Studio supports loads of module types, can play up to 64 channels at 14 bit quality and is dirt cheap too

At the top of the range for big box Amigas the best choice around is SunRize's board and a good second choice would be MacroSystem's Toccata board. Both offer the

best sound quality around and can sample and replay better than CD quality 16 bit sound. The SunRize board has the best software support with the Toccata really being

Neil Mohr takes a look at some of the software and hardware that could help you break into the music biz

developed to back up the V/Lab motion capture board, but it still offers exceptionally good sound quality and if you go for the Pro version, additional support is added for Midi devices.

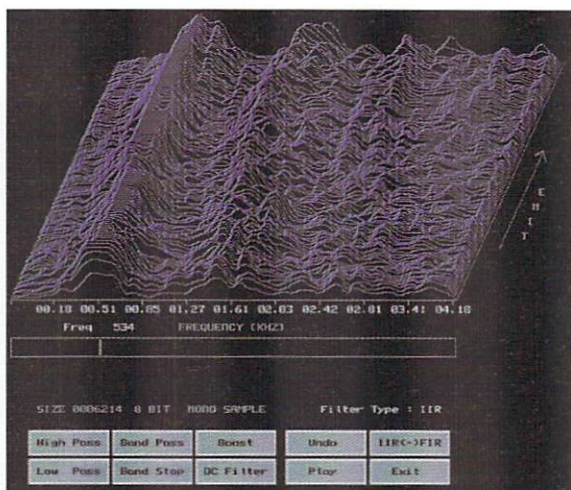
So you have the sampler and are ready to try getting some sounds into your computer. The first thing you need are good quality leads to hook all your bits and pieces together. Your main enemy when trying to get samples is background noise or interference so we want to get off to a good start by having decent leads and general connections. Next you want to choose what the input is going to be, either from a microphone, tape or CD. If using a microphone, some sort of amplification is going to be necessary.

SETTING LEVELS

Once everything is hooked up you will need to set the levels to try and get the best sample possible. Most sampling software has a monitor mode that gives you a real-time display of what the sampler is currently receiving. You need to adjust the volume level as high as possible without distorting or saturating the sampler's inputs. On the monitor display you will see the current wave form as being received by the sampler, you need to set the volume as high as possible without the wave



A little on the old side now, but TechnoSound Turbo 2 still provides all the editing tools you will need



Aura's FFT display may seem just a meaningless jumble of lines, but it shows graphically what effect filters have on samples

JARGON BOX

Module - Once a piece of music has been written in a tracker program it is saved out as a complete module. Both the sound samples and music score are contained in a single file called a module. There are various different forms of modules, the most common being Protracker and OctaMED modules, also common on the PC are Scream Tracker modules.

Channel - Allows a single sample to be played from your Amiga, which has four channels so can normally only play four sounds at the same time, but with some clever mixing routines can appear to have a lot more

Hertz - Used to describe how many times something happens a second. When used in reference with samples it tells you how many times a second

the sampler takes a snapshot of a sound. So at 10,000Hz or 10Khz a sample is comprised of 10,000 separate samples

8 bit - Describes the quality of a sample, an 8 bit sample has 256 separate levels and produces decent quality sounds

16 bit - A 16 bit sample has 65,000 separate levels and produces perfect quality samples

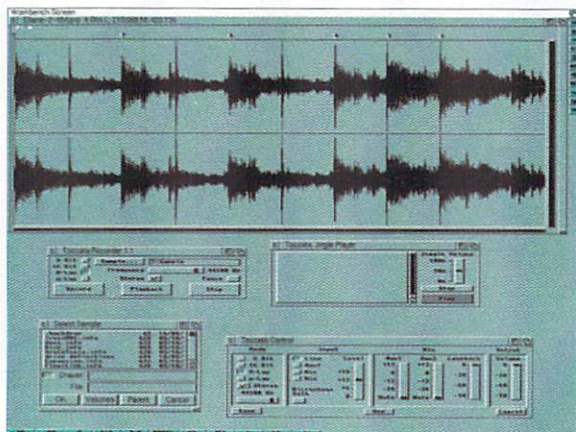
12 bit - Used by the Aura 12 bit quality gives samples 4096 different levels

MIDI - Musical Instrument Digital Interface. A standard way of allowing many different types of musical instruments and computer software to talk to each other

touching or flattening out at the extremes of the monitor display.

Now you have everything hooked up, the input levels are not too high and you have the sampler set at a rate right for your machine. All you need now is something to sample, usually a good quality belch will do for starters. When making samples remember to add a little extra time before and after doing the samples, this space can be cut out later and makes sure you get the whole thing first time.

Tocatta's Samplitude software allows you sample and work with CD quality samples

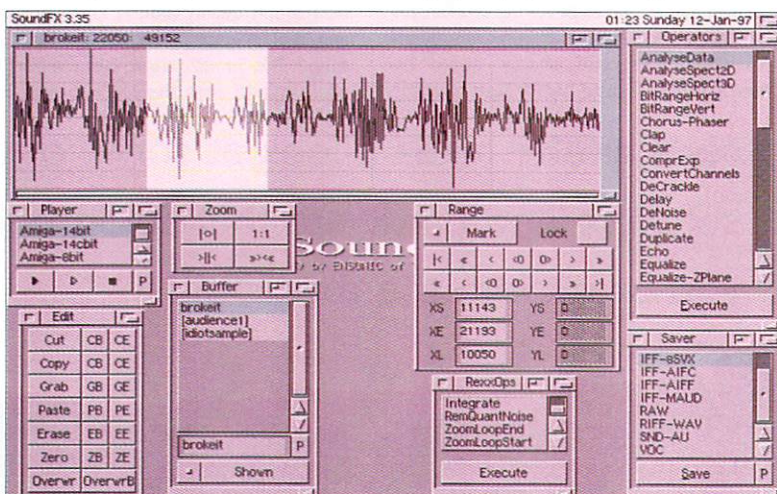


SAMPLE IT AGAIN SAM

The current Aura and Technosound Turbo sampling software might be fine for getting samples onto your computer and although they do come with the basic editing tools and have a fair few filters, neither have been updated for a long while and there's a good chance you will want more power from your sample program.

One that is right up to date is SoundFX. It gives you a font sensitive, multi-windowed, on-line help, style guide compliant interface. As I well know, looks aren't everything, but SoundFX does not disappoint in the features department. Along with a shed load of filters, operators, ARexx scripts and some advanced editing controls SoundFX can replay samples in both 8 and 14 bit quality and takes advantage of the AHL system allowing replay on normal Amiga hardware, Delfina, Wavetool and Toccata board.

AHL is a fairly new development of more use to big box user, even though it does support the Aura for sampling on A600 and A1200 machines. It is an attempt to bring retargetable audio to the Amiga and does for sound cards what CyberGraphX did for graphics cards. It has been used by Shapeshifter to add sound to the Mac emulation, so big box Amiga owners can have CD quality sound from all their Mac programs. Even for the standard Amiga audio it provides enhanced 14 bit replay for programs that support it.



Scott Hallam's love affair with dance music began back in 1988 when Acid House was sweeping the nation. Manchester was the epicentre of the Summer of love and a new club was opened on Manchester's Whitworth Street called the Hacienda.

Like many other people at the time, Scott was completely enamoured with this new musical form: "The music had energy, it was aggressive with a sound of it's own - new, fresh and full of power". After a few years clubbing and buying almost every House track he could get his hands on, Scott gradually got to know people who were compiling their own tracks.

After visiting a House musician, Scott was inspired to start creating his own tracks. Collaborating with Mark, Scott got to know the equipment needed and the processes of creating a decent tune. In addition to learning how to use mixers, drum machines and keyboards, Scott was introduced to the Amiga.

STARTING OFF

Bitten by the bug, Scott started to build his own recording studio in earnest. Starting off with an Amiga 500 and turntable, he used the Amiga for the turntable and for internal samples. After acquiring a Roland D10 Keyboard, Boss SE50 Effects Drum Machine and other gizmos, Scott came to realise the true strength of the Amiga. Although very adept at sampling, the Amiga was also extremely useful at managing external sound sources. In the fledgling studio the Amiga was at the heart of the system, connecting and controlling everything.

Remarkably, seven years on, Scott is still using an Amiga despite having bought a 486 PC a year ago. Although some of the music software available for the PC looks good, the PC didn't cut it when it came to handling the large amount of data required.

Whilst the Amiga could control and sequence everything almost flawlessly, the PC had the irritating habit of crashing almost every time it was used. The Amiga, in Scott's words, "Has only crashed about twice in its existence" Because of the architecture of the system and the fact almost every component is

Hugh Poynton talks to musician **Scott Hallam** about the place of the **Amiga** in the modern recording studio

made by the same company, there are no incompatibility problems between sound cards, graphics cards, memory boards and the like.

Scott continues: "What I like about the Amiga is that it is all in one, you don't have to worry about getting compatible components, it's all done for you. You just get a hard drive for it and you're away. It's also quite versatile, I would have loved to have got into the video editing side of it. There are a lot of Genlocks available for Amiga. Pretty good machine as long as you've got the memory for it."

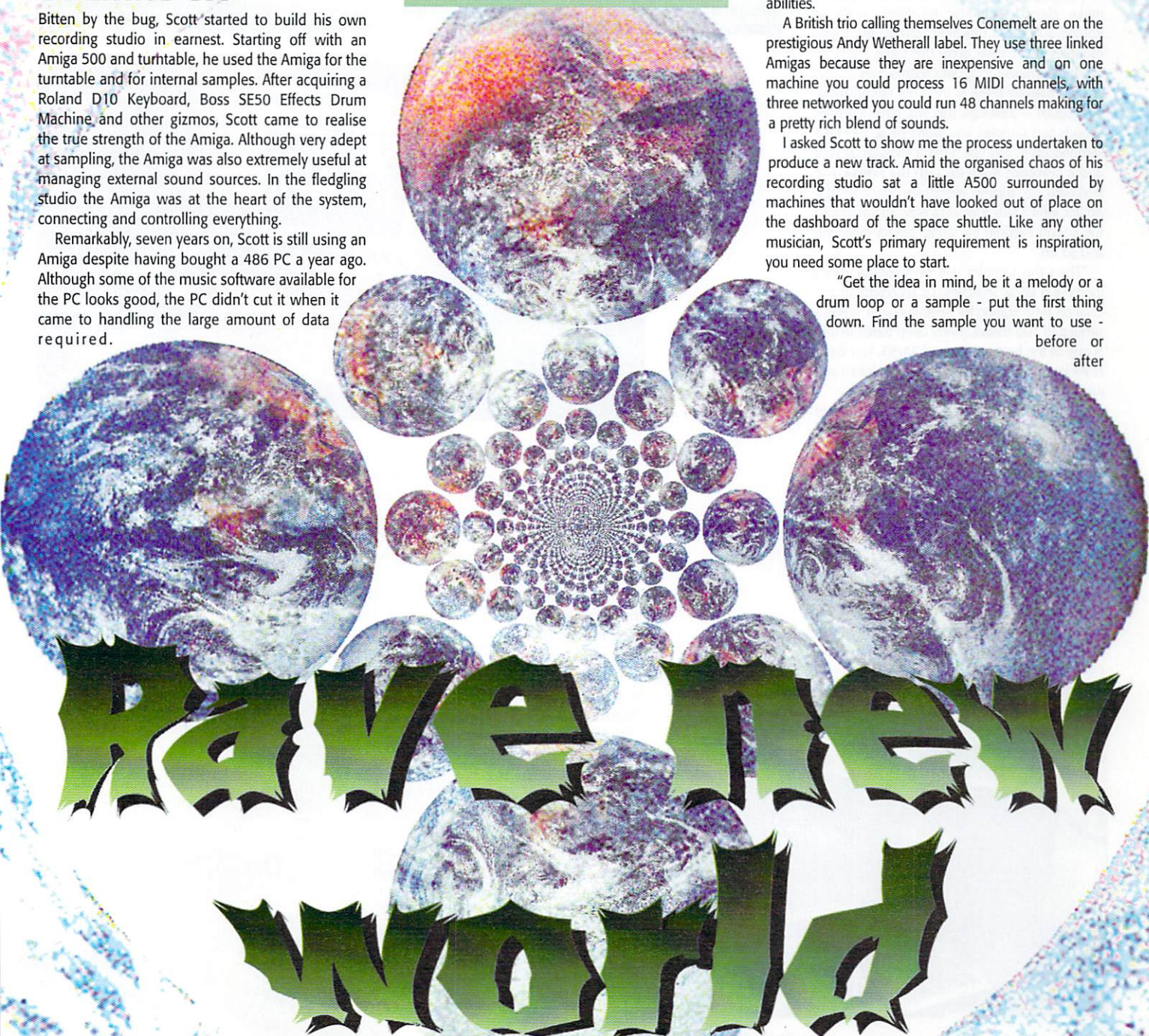
A remarkable number of people still use Amigas to create dance music. Not as many professional studios use Amigas because in a full recording studio there are probably specialised machines - such as the industry standard Atari or the new Atari Falcon that are too expensive to be owned privately.

Future magazine publish CDs full of home produced tracks that are often listened to by industry A&R people. If deals are signed and contracts drawn up, chances are they will stick with the Amiga because they know how to use it and are comfortable with the machine and its abilities.

A British trio calling themselves Conemelt are on the prestigious Andy Wetherall label. They use three linked Amigas because they are inexpensive and on one machine you could process 16 MIDI channels, with three networked you could run 48 channels making for a pretty rich blend of sounds.

I asked Scott to show me the process undertaken to produce a new track. Amid the organised chaos of his recording studio sat a little A500 surrounded by machines that wouldn't have looked out of place on the dashboard of the space shuttle. Like any other musician, Scott's primary requirement is inspiration, you need some place to start.

"Get the idea in mind, be it a melody or a drum loop or a sample - put the first thing down. Find the sample you want to use - before or after



writing the track - trim the start and the end point so it'll loop OK. This is basically just a matter of assigning the sample a key and then placing it in the track. You could play the whole track with samples but it takes away the originality, better to disguise samples."

He continues: "For example, with a breakbeat, instead of just having it loop over and over again you have your own version of that breakbeat. You might have the end at the start, the start at the end or just chop it up a bit. That's how a lot of the jungle tracks are made - rolling snares, things like that."

With the sheer amount of high tech electricals, producing dance tracks can't come cheap. I asked Scott just how much money was required to equip a basic studio:

"You would really need an Amiga 500 with 2 Meg memory and 80 Meg hard drive. This wouldn't be particularly costly. As for software, you'd need something like Music X v2 for sequencing external sounds. Lots of companies make classic sounding modules, such as Roland 303 drum machine sounds, but these modules don't have quite the same effect as using the original machines themselves."

"Alternatively there is the Korg sound module (£600) - although this will have loads of sounds and samples, you won't be able to take samples on it. You will need a sampler as well and a keyboard route through the Amiga. The keyboard to trigger everything through the Amiga, which tells it what to play, and then into the sound module for string, piano, bass line and so on."

"Then the sampler will be used for drum loops and vocal snatches. I'd recommend the Ovation Bass Station for analogue stuff, it has a simulated 303 sound, a very deep baseline and is one of the best products of 94/95. You don't really need a big set up, but if you get into it you just collect more and more equipment."

"You will need a mixer as well, a 16 channel one. FX - you want reverb and echo. You can get FX machines for about £300. You would also probably require a DAT - its what everyone uses. Maybe even a multi track recording system. This will mean that instead of recording a tune onto the DAT as one track which you can't over dub, using a multi track, it can be run in time with the Amiga. This allows you to add more sounds, beef up bass lines and so on. The basic set up including an Amiga, keyboard, FX, DAT, mixer, sound module and sampler and drum machine would cost between £3000 and £4000."

Producing professional quality dance tracks



And that's just one wall!

OTHER AMIGA MUSICIANS

CONEMELT (EMISSIONS AUDIO OUTPUT)

Conehead are Ashley Marlowe, Nat Mellors, Grant Newman - a British trio that debuted over a year ago with the album "You F**kers F**ck" on their own New Ground label. For their second album "Confuse and Destroy" they are signed to Andy Wetherall's Audio Emissions Output label.

Their own particular brand of 'radical techno'

has been likened to a 'robo-Rottweiler that is intimidating, charming, aggressive and playful at the same time' or as 'sublime, warped, jazz-tinged and flipped-out techno that could cut you in half with a feather'. The Tunbridge lads use three linked Amigas to produce their own unique sound.

SIDEWINDER

Eric Gieseke (aka Sidewinder) is one of the best known Amiga-using musicians. Eric has been writing music on the Amiga for about seven years and even designs the inlay cards for his CDs using an Amiga 3000. The Texan musician draws influences from his travels around the world (having lived on about every continent bar Antarctica). Essential discography tracks his development in the computer music scene since the late 80s. Starting in 1990, Sidewinder started cre-

ating music in MOD format and became one of the best computer musicians in America and beyond.

There are four tapes released by Sidewinder since 1992. Technology Bytes Volume 1 & 2, Best of Hardcore! and Insatiable Fantasy. Future Shock 2 features songs from Technology bytes including the remixed Liverman and Sidewinder's extremely energised anthem Spanish Armada is featured on his upcoming Analyzer CD.



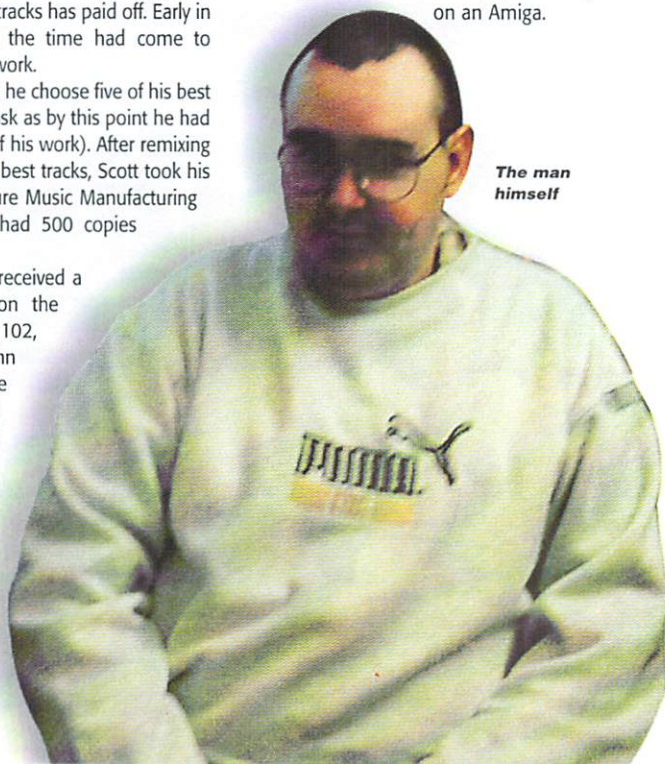
Perhaps the most souped up A500 you will ever see

could hardly be considered cheap but if the equipment is picked up and accrued over a few years, the costs don't appear so intimidating. For Scott, at least, it looks as though his passion for producing dance tracks has paid off. Early in 1996 Scott decided the time had come to release some of his work.

Deciding on an EP, he chose five of his best tracks (not an easy task as by this point he had more than 40 DATs of his work). After remixing and touching up the best tracks, Scott took his EP compilation to Pure Music Manufacturing in Manchester and had 500 copies produced.

The records have received a fair bit of airplay on the radio, mainly Kiss 102, with DJs such as John Berry and 808 State playing tracks on their shows. Chris Evans has played tracks on the Breakfast Show and major record companies are showing a keen inter-

est. Scott plans to release more tracks in spring '97. There's every chance that, if in 1999, clubbers are going mental to a Scott Hallam tune it was probably pieced together on an Amiga.



The man himself

If you use a photocopier to make a copy you go to the machine, place the document to be copied inside, press a button and wait for the device to do its job. It's likely you do all this without really knowing what goes on inside - you just know what input is required (the document to be copied) and what must be done to start the copying process. You also know that some results will come back i.e. a copy of the input document.

This information hiding 'black box' concept is an effective way of protecting a user from unnecessary complexity. For the C programmer, there is an equally effective facility - the C function. This provides similar capabilities and because of this, functions are the essential building blocks of all C programs.

Many functions, like `printf()` we used last month, have been found to be so useful they are provided with all C compilers. The Amiga also has its own function libraries and we'll see later how these are used for handling Intuition, graphics and so on. Often however, you'll need to create your own functions.

FUNCTION DEFINITIONS

Listing 1 provides a general description of a C function whilst listing 2 shows a simple example which calculates the area of a rectangle by multiplying its width and length values together. This latter definition uses C's `*` operator to indicate multiplication and give us our first encounter with some variables.

Variables represent areas of memory that you can use for storing information and, just as with languages like Basic, it helps to use names that mean something. Needless to say I have defined a variable called `result` - because in this instance that's exactly what it is being used to store.

The expression 'int', incidentally, is just C's way of describing a variable that can store an integer (a whole number) value. The width and length parameters used in the function definition are also variables (again defined as integers) but, because they represent the function arguments, take on whatever values are supplied when the function is used. Inside the function however, these items are used just like any other variables.

The `return()` statement indicates the value to be returned to the caller and any valid C expression may be used inside the parenthesis. Functions do not have to provide a return value and a `return()` statement without an expression, or in fact no `return()` statement at all, both result in no actual value being returned. It's also perfectly legal to ignore a return value, although

More help for
aspiring C coders
as **Paul Overaa**
puts function use
under the spotlight

Functions

```
return-type function-name ( parameter list )
{
    variable declarations
    appropriate C statements
}
```

Listing 1: In general C functions have this sort of layout

in the case of our example function, it would make little sense to carry out the calculation if you weren't going to use the results!

So, the listing 2 function definition tells us `Area()` is a function that expects two integers representing the width and length of a rectangle - and returns an integer representing the area of that rectangle. Using the function is easy - if, for example we have a variable called `rectangle_area` that we want to set to the area of a 6 unit by 8 unit rectangle we just write:

```
rectangle_area = Area(6,8);
```

C evaluates the right hand side of the expression by making a call to the `Area()` function (using the parameters supplied). Then it assigns the function's return value to the variable on the left hand side of the expression. The result - `rectangle_area` gets set to 48!

To be honest, the operation of multiplying two numbers together, which is all `Area()` does, would not normally be written as a function - you'd just work out the result using the statement `width*length`. It must be said however, that if you were going to define a function for

C

Part 3

programming

```
int Area(int width, int length)
{
    int result;
    result=width*length;
    return(result);
}
```

Listing 2: An example function definition

doing this you could do it more concisely by using the function's arguments directly:

```
int Area(int width, int length)
{
    return(width*length);
}
```

or even:

```
int Area(int width, int
length){return(width*length);}
```


Notice that C, unlike other languages, isn't particularly fussy about the physical layout of the source code.

SOME EXAMPLE CODE

On the coverdisk you will find a short program that makes use of this `Area()` function along with a few extra notes about the variable and function naming conventions I use. One thing you will notice in this month's source is an ANSI C function declaration statement called a prototype

```
int Area(int width, int length);
```

This looks pretty much like the first line of the function description itself, with a semicolon tagged on the end. It's job is to provide an initial definition of the variable types being used which then allows the compiler to check all subsequent function use is correct (pre-ANSI compilers were not able to do this).

Needless to say there is plenty more to be said about functions but it's best to deal with individual issues as they crop up within example code. So, although next month it's C variable types and operators that come under the limelight, you will in fact be also be learning a little more about function use as well. 



This month's example can be compiled in exactly the same way as last month's code

Avid Web surfers eager to investigate the programs reviewed in these pages, but not so keen on sifting through Aminet to find them, might want to visit the Public Sector Web site at <http://www.dcus.demon.co.uk/~sector/sector.html> (or follow the "Software" link from the Amiga Computing homepage). From here you can download the archives from Aminet at the click of a button, as well as search through various indices to find and download software reviewed in previous issues.

If you don't have the luxury of an Internet connection, do not be alarmed if you spot an item in these pages that is listed as available from Aminet. The chances are your favourite PD Library will stock the program anyway, but if they don't you might want to contact one of several libraries who will download stuff from the archive for a reasonable charge - for instance, Your Choice PD offer such a service.



Make the Public Sector Web page your first port of call on the Internet

INTO THE DEEP

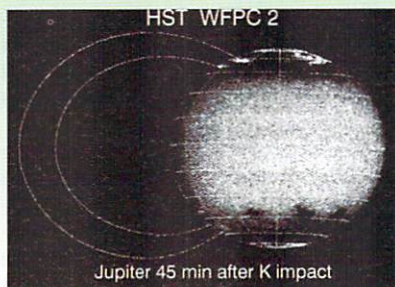
Classic Amiga Software
11 Deansgate, Radcliffe
Manchester M26 9YJ
(Tel: 0161 723 1638)

Online PD
1 The Cloisters
Halsall Lane, Formby
Liverpool L37 3PX
(Tel: 01704 834335)
(BBS: 01704 834583)

Your Choice PD
39 Lambton Road, Chorlton
Manchester M21 0ZJ
(Tel: 0161 881 8994)

HUBBLE PICTURES

Produced by: Hubble Space Telescope comet team
Available from: Online PD
Disk No: OX351



HST WFPC 2

Jupiter 45 min after K impact

In July 1992, the Shoemaker-Levy 9 comet began to break up as it passed too close to Jupiter. Fragments of the comet began to collide with the planet and two years later fragments were still impacting on the surface. Scientists estimated at the time that the combined energy of the impacts would be roughly comparable to a million hydrogen bombs.

Fortunately for fans of spacey images, by July 1994 the Hubble Space Telescope (of the famously dented mirrors, if I'm not mistaken) was on hand to take some snaps. And very exciting they are too.

Actually, whilst some of the pictures probably will not mean a great deal to anyone other than astronomers (despite the interesting comments from the comet team which

Dave Cusick

gives it some gas in the PeeDee porsche...



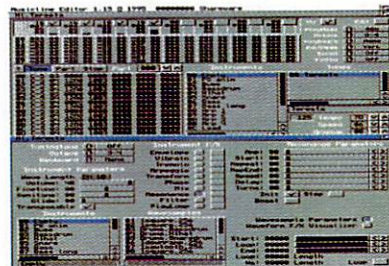
UTILITY OF THE MONTH

MUSICLINE EDITOR v1.14

Programmed by: Musicline
Available from: Aminet
(as mus/edit/mline115.lha)

The Musicline Editor has apparently been four years in the making and when you load it up you won't fail to be impressed by the sheer wealth of options available. In fact, because the programmers have deliberately set out to make the editor totally different from the numerous ProTracker clones already in existence, using the Musicline Editor can at first appear somewhat daunting.

The features list is frighteningly long. Music can be created using four or eight channels, using notes covering five octaves; sound samples can be up to 127k in length (significantly bigger than with ProTracker, which if memory serves me correctly only allows 64k samples); each tune can include up to 255 instruments with which a huge variety of effects

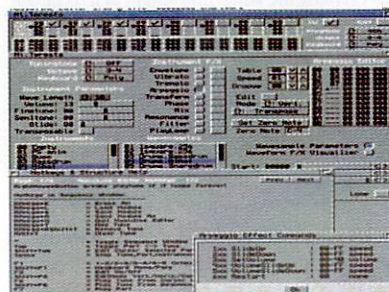


The Musicline Editor is absolutely bristling with powerful features

may be used and ProTracker modules can be loaded and modified. In short, Musicline Editor can do more than pretty much every other non-MIDI music composition program in existence - which explains why the authors have made it Shareware, with a £16 registration fee.

The effects that can be applied to instruments can all be adjusted to suit - for instance, if you chose to use an envelope you could alter the attack, delay, sustain and release characteristics and if you chose to apply tremelo you could opt for one of four wave types before playing around with the speed, depth, attack and delay. In other words, once you get to know your way around the interface, it's possible to hone your compositions so they sound exactly as you would like.

The example modules supplied with Musicline demonstrate just some of the power of this excellent editor. No serious Amiga musician should be without it.



Forget about ProTracker clones - just get hold of the Musicline Editor as soon as possible



18 July 1994

accompany many of them), they are nevertheless quite fascinating in a strange, cosmic sense. Indeed, after reading some of the truly stupendous figures involved (for instance, Jupiter was approximately 477 million miles from Earth when some of the images were taken) and working my way through the 19 Jpegs included on the disk, I suddenly began to feel extremely small and insignificant.

TEMPLE OF EVERLASTING LIGHT

You may remember that last month Public Sector featured a sort of "Perfect PD Past and Pathetic PD Present" thing. Well, focusing on pathetic stuff struck me as just a tad too negative, so I thought instead I would expand on the Perfect PD Past idea to include a selection of themed gems from the last few years. This month, The Simpsons...

Homer 1.6

Programmed by: David Swasbrook
Available from: Aminet
 (as util/wb/Homer15.lha and
 util/misc/Homer16.lha)

Itch & Scratchy #2, #3 and #4

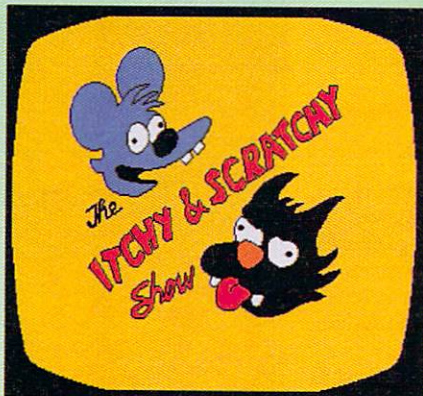
Programmed by: Chrome Australia
Available from: OnLine PD

When I first reviewed Homer last year, I was a relative newcomer to the world of The Simpsons. Back then, Sky viewers were treated to an hour a week of what I described at the time as "An often hysterical, constantly sparkling satire on modern life American style." Nowadays, lucky satellite subscribers get daily doses of The Simpsons and (after a long wait) now there are even 22 minutes of Springfieldian fun on terrestrial TV every weekend.

Unfortunately the BBC have seen fit to slip The Simpsons into a particularly inappropriate slot between "classic" Tom And Jerry cartoons and the painfully populist Noel's House Party. This ensures that practically everyone to whom the program would appeal, if only they

caught a glimpse, is in actual fact eating their Saturday evening meal when the program goes out. Some bright spark at the Beeb has also decided that rather than showing the episodes in any sort of order, it would be better to transmit the very cheesiest and possibly least funny episodes ever made before even thinking about running some of the all-time classics. Still, I suppose we can't have everything...

Despite the Beeb's best efforts to suggest they were right all along and that The Simpsons is completely unsuited to terrestrial TV, I know of at least a dozen recent converts and it's with them in mind that I thought Homer was worthy of another mention in these hallowed pages. Let's make no bones about this: Homer is a totally useless program. However, that does not stop it from being a must-have. The simple fact is that 22 minutes of Homer Simpson per week is not enough to sustain ardent D'oh-votees of the Great God Blubber himself and the prospect of having everyone's favourite fat American numbskull sitting on



It's the Itchy & Scratchy show

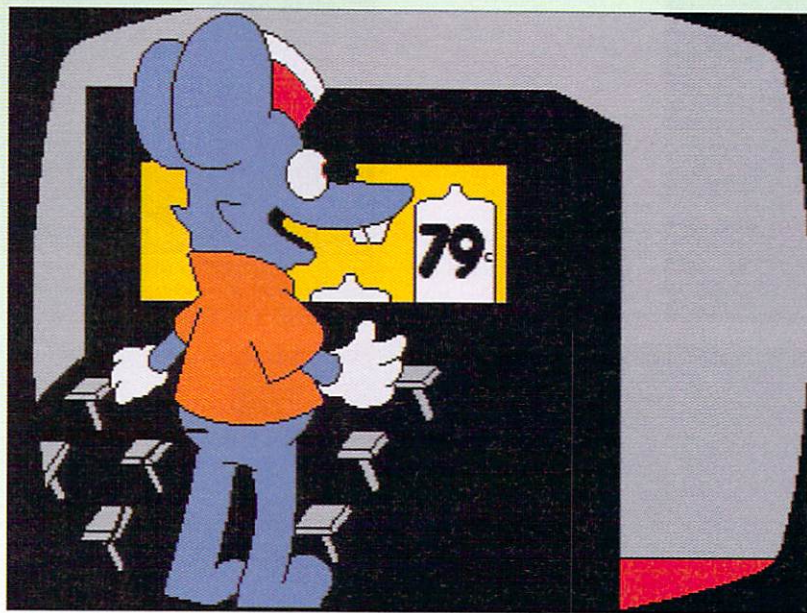
the Workbench and sharing pearls of wisdom (in between belches) is just too attractive to pass up.

The Workbench version of Homer relies on sampled sounds, plenty of which are actually included in the v1.5 archive. If - woe betide - you should tire of the supplied speech snippets, adding new samples is a straightforward process. You could of course sample Homer yourself with the aid of a VCR, a Scart

cable and a sound sampler, but Internet users might like to visit <http://www.snpp.com/> which, along with more Simpsons-related information than you are ever likely to wade through, contains hundreds of links to Simpsons sample archives.

Of course, Homer isn't the only star of The Simpsons. The cat and mouse duo Itchy and Scratchy have supplied their fair share of memorable moments in the past, with their horrifically violent adventures figuring prominently in some great Simpsons episodes.

When I first reviewed Itchy & Scratchy animation disks #2 and #3 a couple of years ago, I had no idea they were Matt Groening creations. Twenty-two issues later, the animations are just as colourful and comical. Admittedly they only last around 30 seconds each, but are all extremely entertaining and certainly liable to be loaded up more than once.



They may have been so violent that Marge Simpson didn't want her kids to watch them...



...but the Itchy & Scratchy cartoons are amongst the greatest ever created

MAGIC THEATRE

Human beings are, on the whole, critical beasts. Although for the most part only the very best in Freeware and Shareware makes it into these pages, doubtless there has been the odd occasion when you have flicked through Public Sector muttering to yourself "I could do better than these poor PeeDee efforts", or something. So here's your chance to prove it.

Here's the Bobby Moore: Cram your best efforts onto a 3.5", slap it in a padded envelope with a covering letter and wang it with all haste in our general direction, pausing only to mark the envelope with "Reader Submission" in addition to the usual Public Sector address. Some days later when said envelope tumbles gently through my letterbox, I'll tear it open, shove it in my drive and don my evaluating cap, with the creme de la submissions earning reviews in these pages as well as highly desirable prizes for their creators.

Dear reader, is this not music to your ears (or, erm, candy to your eyes)? Don't dawdle for another moment - get those submissions in the post before Tina changes her mind about the prizes...

SMART DOGS

Games Blaster

Programmed by: Stuart Beatty
Available from: OnLine PD

PlayStation Cheats

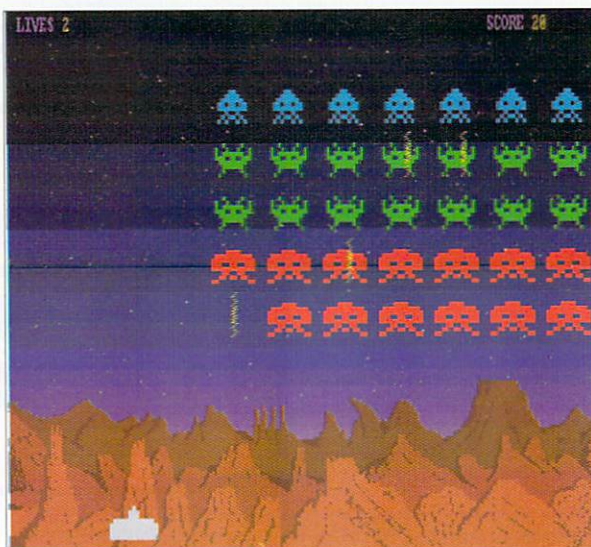
Programmed by: an anonymous
Web author

Available from: Classic Amiga Software

Games Blaster is a disk full of game cheats, which are unsurprisingly presented in Amigaguide format, making the guide clear and simple to navigate. Scores of games are covered, from the Addams Family to Zool 2, with passwords, type-in cheats and suchlike all included.

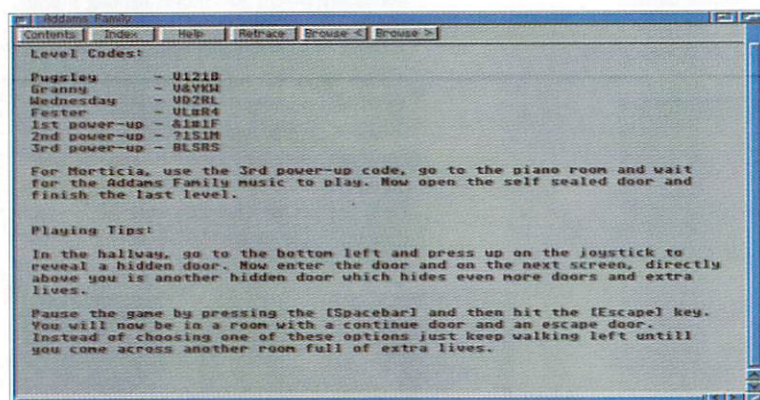
PlayStation Cheats, on the other hand, is simply a text file which has been slapped onto a disk. Again, plenty of games are covered so if you have decided to invest in one of these extremely popular consoles for gaming purposes, but you're struggling with the latest expensive smash hit, you'd do well to consult this disk.

As an added bonus, the PlayStation Cheats disk includes an excellent little Space Invaders clone which, in a fit of originality, the author saw fit to call Space Invasion. It does-



Do not underestimate the power of, erm, Space Invasion

n't compare too well with Wipeout, but it is a playable version of a golden oldie which will remind you of the days when men were men and arcade games never cost more than ten pence. The kids of today don't know they're born, I'm telling you...



With Games Blaster you'll be able to complete that classic even if you're completely useless

TANKKK v0.77

Programmed by: K-P Koljonen
Available from: Aminet
(as game/2play/tankkk.lha)

Tankkk is an extremely playable shoot-em'up which allows 2-4 players to take control of tanks and trundle around a maze shooting each other. The objective is straightforward: Destroy your opponents.

The tank battle can take place in one of six mazes and in preference to ordinary bullets you can opt to fight with bullets that keep bouncing off walls until they hit something. Once a certain number of bullets have struck a tank or it collides with a wall once too often, it will begin spinning around in circles and eventually explode. When only one tank remains, a statistics screen appears telling each player just how accurate their shots were.

The graphics are clear (though functional rather than spectacular) and the sound effects are suitably noisy, but without a doubt Tankkk's biggest asset is its sheer playability. As with other PD multiplayer gems such as Dogfight and Bratwurst, you'll find yourself having "just one more game" worryingly often as you try to exact revenge for an unlucky loss.



Knack: compress files with ease, and perform some other everyday operations whilst you're about it

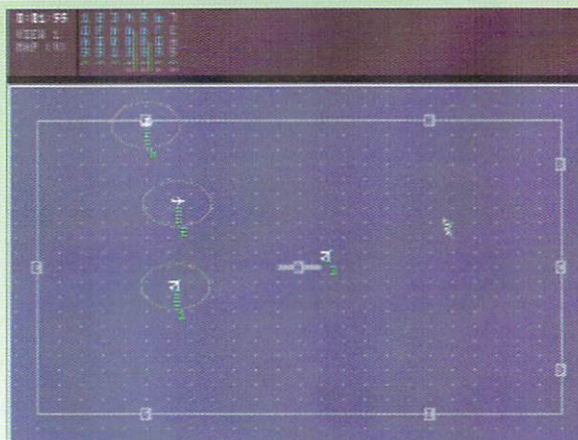
FLIGHT CONTROL

Programmed by: Paul van der Valk
Available from: Aminet
(as game/misc/flightcontrol.lha)

This is a curious game in an embryonic but fully functional version 1.0. As with Fireflies last month, in its current incarnation the program is interesting and strangely absorbing though lacking in long term appeal. With development it could become an accomplished offbeat attention-keeper.

Flight Control is based on an old Microprose game of the same name. The objective is basically to guide aircraft to their destinations safely, but in practice this is not as easy as it sounds because with several planes airborne at any one time, there can be a lot to think about at once.

It's not a good idea to keep an aeroplane waiting on the ground for too long before allowing it to take off. Once airborne, different types of plane move at different



Flightcontrol: Do that Air Traffic Controller thang

speeds towards their destinations. At any time a flight can be selected and new orders issued regarding the direction and height the plane should take. If two aeroplanes travelling at a similar height enter the same map area, they will come into conflict.

Some of the improvements the author is

planning include adding sound effects and fancier graphics, building in a career mode so the game has some sort of eventual objective and incorporating disasters. As it stands, Flight Control is curiously compelling but ultimately unfulfilling. When the proposed additions are implemented it should definitely be one to look out for.

HEY DUDE

I want to hear from you if you have any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable Public Domain, Shareware or Licenceware, if you feel it is of sufficient quality to merit coverage, stick it in a padded envelope and send it in with all haste.

Although Public Sector cannot possibly hope to cover all submissions, I promise I'll at least look at your work - even if it is yet another Lottery program or Klondike cardset. It does make my job a lot easier though if disks are clearly labelled. Please also include a covering letter detailing the disk contents and price and giving some basic instructions. The magic address is:

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

ATOMS

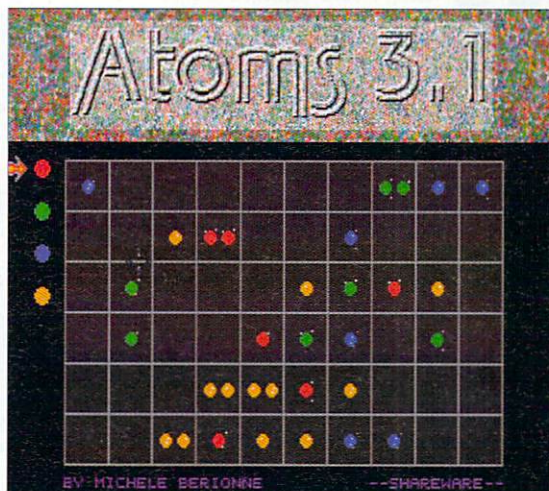
Programmed by: Michele Berionne
Available from: Aminet
(as game/think/Atoms31.lha)

Based on an old Atari ST game, Atoms offers brain-bending fun for up to four players. If you don't have any friends (either in the room or in the world), the computer can play for up to three people or you can simply choose to play with less than four participants.

Each player takes it in turns to place an atom in a square on the gameboard. Players can only place atoms in empty squares or in squares containing their own coloured atoms. If too many atoms are placed in a square, the atoms become unstable and explode.

The number of atoms which will cause an explosion varies depending on the position of a square on the board - corner squares can hold only two atoms, edge squares hold three and other squares hold four. When the atoms in a square explode, neighbouring squares are showered in atoms of the same colour.

It all sounds horribly confusing, but in practice makes for an engaging game combining luck and skill. With passable graphics and nice sound effects too, the only thing Atoms can really be criticised for is the dreadful music which will have you reaching for the volume control within moments of first load-



Atoms: Mind-boggling fun, or something

ing the program.

Atoms is Shareware and the registration fee is 15,000 Italian Lira. In these days of constantly changing currency exchange rates (and Italian governments, the cynical might say), I'm not exactly sure how this translates, although I believe it is probably about £6 (don't you just love the Lira?) For your trouble you will not only receive peace of mind and the knowledge that you're helping sustain the Amiga in these troubled times, but you'll also get a disk full of games by Michele.

MATRIX GENERATOR

Programmed by: Mathieu Dhondt
Available from: Aminet
(as game/role/SRunMatrix3_1.lha)

In the past I have hypothesised in these pages that Rawk music appreciation is, for many people, a fundamental part of the adolescence experience (although I'd like

to re-emphasise that I, like most of the AC staff with the unfortunate but notable exception of our beloved editor, managed to avoid succumbing to it). There is a second, perhaps equally common, phenomenon which is particularly prevalent in males. Allow me to elucidate.

Many hours of my early teenhood were spent hunched around a dinner table rolling dice, calculating experience points and consulting colourful maps of fictitious worlds. Yes, I was a roleplayer. Perhaps it was to escape from the obligatory teenage angst or perhaps it was just because Manchester United were hovering dangerously close to relegation - who can tell? Suffice to say that for some time I wasn't at a loss for something to do in the evenings and weekends.

My obsession began with the seminal fantasy RPG that was Dungeons & Dragons and I confess that over a couple of years I accumulated an obscene amount of rule

books, adventure packs and copies of TSR's ever-so-slightly biased Dragon magazine.

I later left the confines of the fantasy environment to guide teams of intrepid spacefarers around the universe in MegaTraveller. At the same time, one of my roleplaying friends made the leap from Runequest to Shadowrun. Shadowrun is based around a Gibson-esque cyberpunk theme, but as an added twist, fantasy creatures such as elves feature too.

However, the main thrust of games I participated in was always the technological aspect of cyberpunk life and as such my character became an accomplished hacker and broke into several large corporate computer networks. These networks were called matrices and invariably the gamesmaster would not let me hack into one unless he happened to have prepared it in advance, because otherwise the game would grind to a halt for ten minutes whilst he rolled some dice and consulted his tables to generate a matrix.

Shadowrun GMs will therefore consider the Matrix Generator something of a god-send - in a matter of seconds it can generate an entire computer system, which can then be printed out for reference. Whilst it clearly caters only for an extremely small number of people, this is the sort of simple but useful program that the Public Domain was made to house.

The Matrix Generator doesn't look too impressive but will be a great help to Shadowrun GMs

It seems to have taken an eternity to get hold of a copy, but finally I have managed to get my grubby mitts on this latest Amiga art package. At a time when the Amiga's future is no more clear than it has been at any time in the last couple of years, it is quite a shock to find a company showing as much faith in the Amiga as Haage and Partner. Following the release of its C/C++ compiler just a few months ago, it now has what is supposedly Photoshop for the Amiga, a bold claim for any package to make on any platform.

It has to be said though that any new Amiga art package is going to have to be something special to make its mark. Looking at the current range of programs out there, Amiga users have a great deal to choose from already.

For bitmap work there is DPaint, Brilliance and the latest version PPaint. For image processing you have ImageFX and AdPro not forgetting public domain entries ImageStudio and ImageEngineer. And then for 24 bit work you could again choose Brilliance, XiPaint, Photogenics or, for the rich, TV Paint. So for ArtEffect to succeed it may very well have to be as good as Photoshop.

TWO DISKS

The whole ArtEffect package only takes up two disks so installation using the Amiga installer takes no time at all. When you first run it you must choose what screen mode to use. ArtEffect can use any Amiga screen mode from 16 to 256 colours and if you have a CyberGraphX card you will be able to make full use of it and take advantage of the 15 and 24 bit screen modes. One point to note is that ArtEffect needs a screen at least 400 pixels high, other wise the GUI will not fit.

NEW FOR V1.5

Support for Ham8 mode (A1200, A4000)

This is a bit of a mixed blessing depending on how you look at it. With the Ham8 mode you generally get a much better colour representation of the picture, indeed it is much better than Photogenics' own Ham8 mode. On the down side, screen update is dog slow and Haage & Partner themselves only recommend it for when you are image processing

Plug-In MotionBlur

A free new plug in allows you to add motion blur to your pictures, hence the name MotionBlur plug in, it's all clever stuff

Plug-In Tile

This module fills the complete picture with the current brush

Plug-In MakeTile

This module creates a tile that can be used with the module tile to create an 'endless' texture. This actually has a useful application for Web pages as you will be able to make seamless backdrop images in no time at all

Plug-In ScanQuix

This module calls the external scanner software ScanQuix if it is installed on your computer

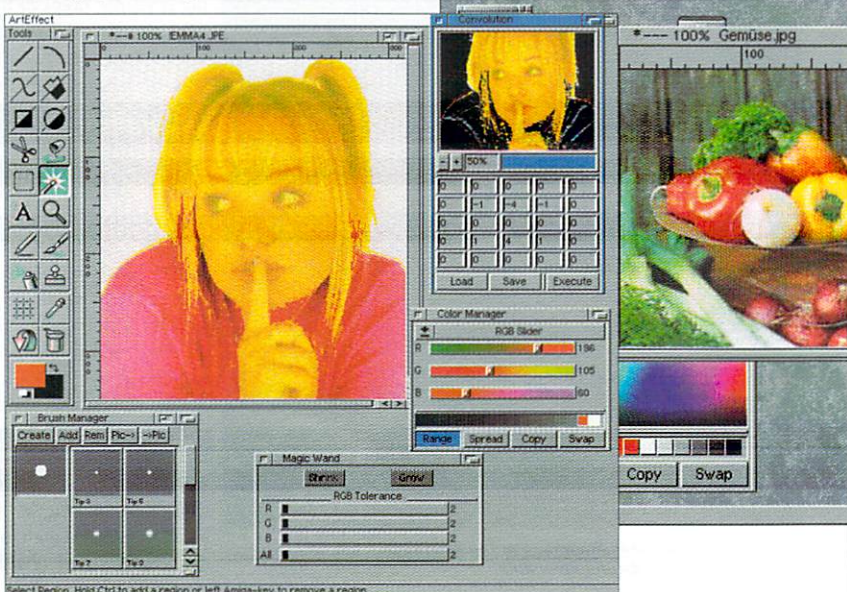
Drawing Inspiration

Could an **Amiga** art package even come close to challenging Photoshop? **Neil Mohr** sees if the rumours are true

ArtEffect has one of those all singing multi-window front ends and thanks to BGUI, everything is font sensitive and aspect correct. A nice touch is that when you shut it down all the current windows,

positions and status are recorded for the next time you run it. One puzzling thing though is why the tool box is so big – are Germans not very dextrous? It could easily be half the size and still be big enough, but

Using the magic wand and the main settings you can easily mark out areas in pictures and so protect them from the image processing effects



As with most programs today, to get the best out of ArtEffect, you need a relatively high specification Amiga – preferably an 040 Amiga with a CyberGraphX card

that's me being picky.

Other than the tool box, normally you will have a brush window, which again I think it a little on the large side, a universal option window that works very well. For each drawing tool you select this changes so you can leave it open and have access to all the options at any time. For colour selection you have quite a choice – RGB, HSB and CMYK slider along with a HSB colour range and a configurable colour mixer.

COLOUR CHANGE

The sliders are very well implemented, as you adjust them the actual slider container changes colour, showing which position corresponds to which colour, taking out some of the guess work. The one thing not available is the normal circular Amiga colour selector, which I do find quite easy to use and would like to see added.

Different paint packages expect you to work in different ways, the older or more traditional style Amiga paint package generally only allowed you paint on direct colour or play around with gradients working on the pixel level. With the arrival of Photogenics you had an awful lot more power as it allowed you to both paint directly onto an image with its effects and also mask out areas with its alpha channel.

With Photoshop, as with ArtEffect,



You will be able to run ArtEffect on any public screen that has more than 16 free pens

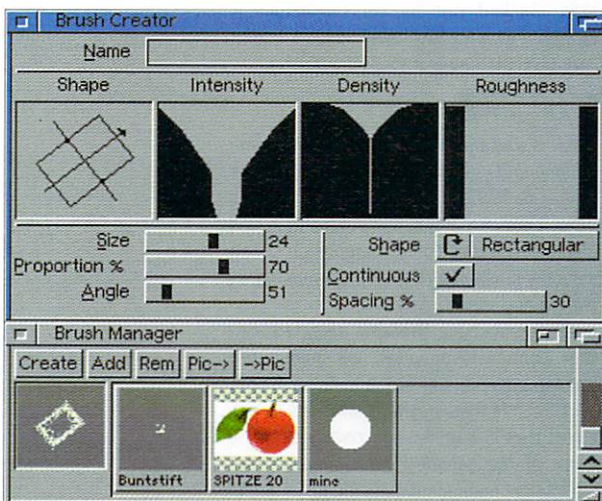
BRUSH WITH DEPTH

Fancy effects and composition tools are all well and good and have their place in any self-respecting art package, but if they are not backed up with decent drawing and brush tools, the program will always seem to be lacking something. For example, ImageFX's painting is far from perfect and Photogenics does not allow you to grab brushes from other images.

Well ArtEffect certainly does not disappoint with its brush support. To start you have three different drawing modes – pen, brush and airbrush. All giving you a slightly different control over how colour is spread onto pictures.

The real power of ArtEffect's brushes lies in its brush manager and the universal settings window. The brush manager is the part you will use the most and is where all your brushes are stored.

If you are familiar with Brilliance, you will know this had a brush store where all the loaded brushes were graphically stored. ArtEffect is a little different, not only can brushes cut from images be stored here, but you can create your own brush styles. Using the brush creator it is possible to alter the size, shape, density, dithering and brush spacing. As a result you can create a brush for whatever type of situation you wish.

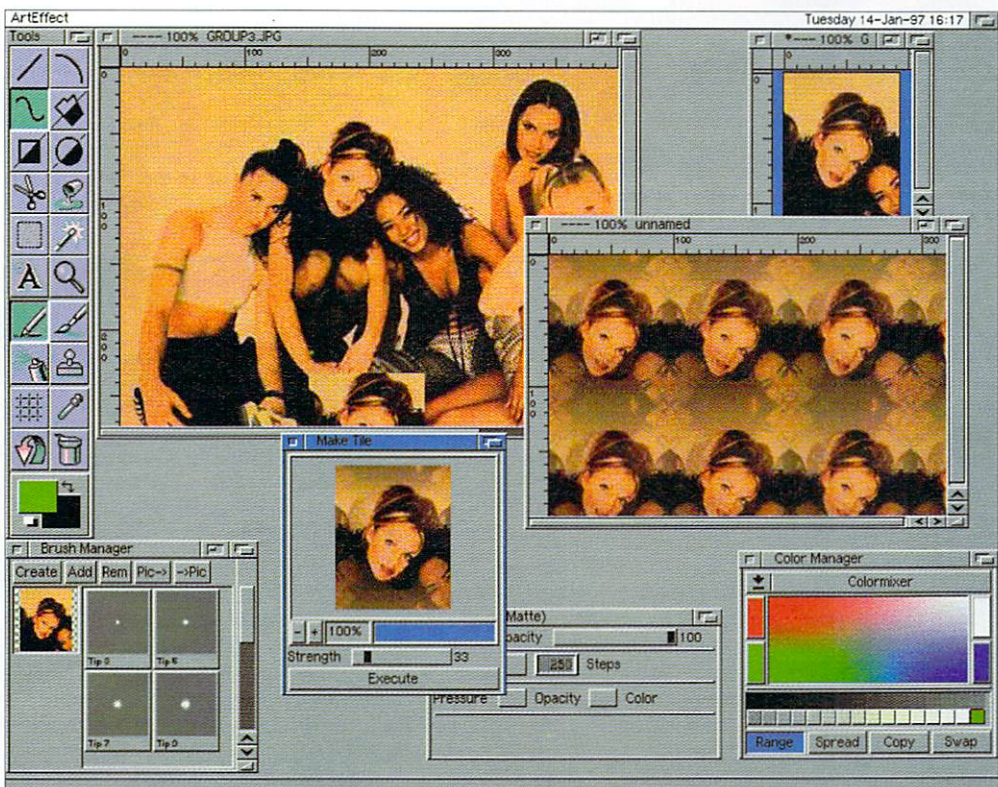


Using the brush creator you can knock up almost any type of brush you like

effects are applied to the entire image, unlike Photogenics in which you can 'paint on' these effects. Obviously there are times where this is not what you want, you may only be interested in a specific area or portion of an image.

To help you here ArtEffect has a stencil

tool. If you have ever used DPaint or Brilliance you would have more than likely come across their stencil functions. With these programs you can select certain colours in a picture and protect them from being drawn over. The main point being



A new MakeTile plug in copies Photoshop's seamless welder and allows you to create continuous Web backdrops with ease

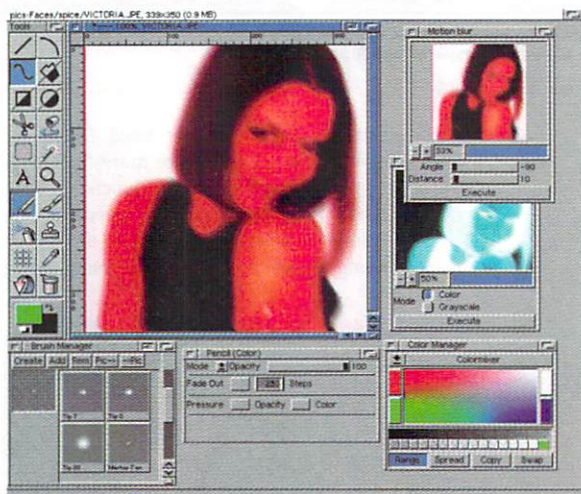
that in a picture, relative areas usually consist of similar colours, so you can protect these areas by selecting the relevant colours.

This same sort of thinking is also used with ArtEffect, but the execution is very different. With Dpaint you got a list of colours in the picture and which ones are in the stencil. With a 24 bit image this is obviously not practical, so instead the area masked out by your selection is shown graphically on screen with ArtEffect shading out the selected areas.

TOLERANCES

Area is determined on the colour you choose and you also have control over the tolerance levels, or how closely matching other colours have to be before they will also be selected for the stencil. You can select and de-select multiple areas using the alt and control keys.

Once you have the area selected, further control is provided via invert, add border, grow and shrink functions. Finally there is a feather option that fades in any effect that is applied and covers over the edge of the selected area. Anyone that



The new motion blur filter in action, all the while a second filter is still working in the background

GUI AND YOU-ME

It seems to be common place now for Amiga programs to shun the standard interface in favour of the increasing number of replacement systems out there. Since version two of the Amiga's operating system arrived a new interface library has been available called GadTools.

This was meant to supply the programmer with access to all the different gadget types they would ever need in one small library, which it did. Unfortunately, to implement even a simple set of buttons required you to go through the arduous process of creating a GadTool data structure for each one, and then there was the matter of then having to collect the gadgets messages afterwards.

Because of the unfriendliness of GadTools many programmers took it upon themselves to produce replacement interface libraries – entirely new ones or ones that built upon the existing GadTools

library. The best known, or some would say infamous, is Magic User Interface, this provides a wealth of special gadgets and features for the programmer while being simple to implement. To be honest, the word overkill could describe MUI, every single part of it is adjustable and at the end of the day most people use the same type of fonts and gadgets.

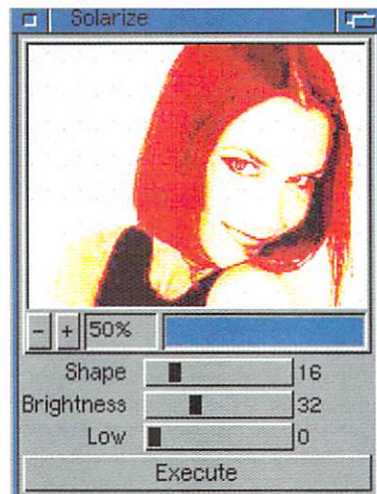
I would say the runner up in the GUI war is BGUI, another long running replacement system that takes a much more cut-down approach than MUI. It only requiring a single 100k library but still gives the programmer a simple way to create rescale, font sensitive windows and interfaces. With programs such as ArtEffect, DrawStudio, World Construction Set and Digital Universe all opting for these replacement interface systems, I can only see the trend continuing in the future.

THOSE EFFECTS

Just as every other art package out there, ArtEffect has a bulging pouch of image effects ready for you to unleash on your unsuspecting pictures. Just as with Photoshop and Photogenics, ArtEffect uses a plugin system to allow filters to be updated or added to at a later date.

ArtEffect uses quite a good window system in which a preview thumbnail of the finished effect is shown and any options are available. Even though a progress bar shows how long the preview will take to display, it would be even better if the preview was a progressive display. One interesting point about the effect windows is that they run asynchronously to the main program. So you can open an effect, leave it open and go back to editing the main picture, and the preview will continue to be updated.

All the effects are pretty much what you would expect. I was half hoping for a decent gaussian blur filter but



Everything you would expect is provided by ArtEffect's filters, I just want a progressive display

unfortunately it is still limited to only two blur levels and was almost as slow as Photogenics'.

has used Photoshop will now realise that the stencil is another name for Photoshop's magic wand, and the tool in ArtEffect used to select the stencil area is called exactly that, but you get the added bonus of being able to draw on the stencil as well.

As with most programs today, to get the best out of ArtEffect, you need a relatively high specification Amiga – preferably an 040 Amiga with a CyberGraphX card. With a plane old AGA or ECS machine drawing on screen with some of the fancy pens can be a laborious task, even though most of the effects and other drawing tools do work fast enough.

For a first release, ArtEffect shows enormous promise. I think it has a way to go before it can live up to the claim that it is equal to Photoshop. It has some good

advantages over Photogenics – excellent brush manipulation tools and functions are something that Photogenics sorely misses – and the ability to create new brushes with-in ArtEffect is excellent. Personally I cannot wait for version two which we should be seeing something of by the start of February.

Bottom line

REQUIREMENTS

RED essential BLACK recommended



PRODUCT DETAILS

Product	ArtEffect v1.5
Supplier	Blittersoft
Price	£79.95
Tel	01908 261466
E-mail	bsoft@wildnet.co.uk
WWW	http://blittersoft.wildnet.co.uk

SCORES

Ease of use	92%
Implementation	85%
Value For Money	90%
Overall	89%

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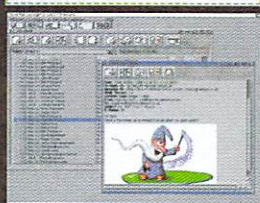
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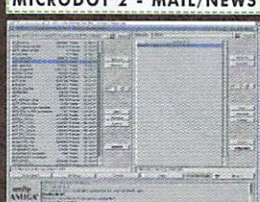
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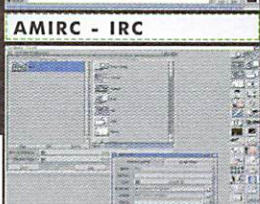
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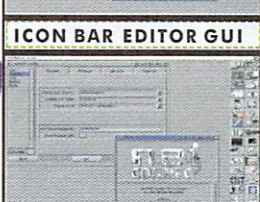
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ery few people like having to enter a reason for chat, as in MaxsChat mentioned last month. Try setting up a different kind of Sysop pager, one without code, using the ANSI in this month's Max.lzx archive.

You will still use MaxsChat to drop straight into chat after a caller has paged (if you want to) as it's a decent front end with the split screen chat method. The actual paging process will be different and completely redefinable graphics-wise, unlike some coded opposition.

Before this, login and press C from the main menu to see how the built-in pager works at the moment. Put Pager1.ans and Pager2.ans in your Text directory.

In Max's Configure/Text, line 37:

```
"^M^M^[C34mPaging %a..."
```

should be changed to:

```
<BBS:Text/Pager1.ans
```

and line 38:

```
"^M^M^[C34m%a has been paged, he may chat  
interrupt later..."[O0m^M^Z"
```

should be:

```
<BBS:Text/Pager2.ans
```

Set up Max's Configure/Menus with a key to page the Sysop:

```
Key: Func: Extra: Lo acc: Hi acc:  
P310 10000
```

The 3 begins Max's built-in Sysop page routine. The 1 (this could be any number) refers to how many times you'll be paged with a screen flash and chat sample.

After you've been paged you can drop into chat using MaxsChat or another favourite door or press any key whilst the sample is buzzing to use Max's internal kit. If you come into the room when someone is on-line, you'll know if they have paged as their name in the info bar at the bottom of the screen will be red with an asterisk on each side. Should

MAX power

Jason Jordache presents the
Sysop pager with a difference

they have already logged off, you can check to see if they paged via BBS/Caller Log.

In Configure/System, the Max Pages field can be set to 1. So, should they page a second time on the same visit, they'll get a different message. Put the NotHere.ans in Text.

From Max's Configure/Text, change line 41

```
"^M^M^[C1;31mThere's no point calling any-  
more!"[O0m^M^Z"
```

to:

```
<BBS:Text/NotHere.ans
```

OVERLAID SCREENS

Max's auto insert option allows say, %, to be part of an ANSI screen. Instead of displaying this like you see in HyperANSI, Max notices

the % as an indication that the following letter of the alphabet is a special control code for inserting information such as a users name (%R) or the date (%c), or for forcing a pause (%Z) normally at the bottom of a screen. Have a look at AutoInsert.text in BBS. As standard, two %% side by side cancels this function and displays just one % when viewed through Max.

Sysops find when they use %R in the middle of an ANSI screen, it messes with the surrounding text by pushing it to the right. To get round this and to learn how our Sysop pager works, auto inserts and ANSI graphics are overlaid upon existing ANSI instead of having it all on the one screen. You can do this with HyperANSI.

In Hyper use Page/Next Page and Page/Prev Page to move among screens. At the middle bottom, in cyan, is the word Page followed by the page you are on. Say you're on the first screen of several, by clicking on Page it turns to a red Trns, letting you see the graphics appearing on successive screens. Useful when positioning graphics to align with other pages. You edit what is on the current screen, but not what you see coming through from following screens. You can only alter those by first moving to them.

Load in Pager1.ans on the first page. Move to the second page and load PagerOrig2.ans. Move to the third, load PagerOrig3.ans. On the first page click on Page at the bottom, turning it Transparent.

Now you see how all three pages fit together. At this stage you may want to edit the text and ANSI to suit your BBS, toggling Trns on/off to save confusion. The %Y in the top left of pages 2 and 3 give a one second pause before displaying the graphics beneath. You'll probably understand it all better now when you test the pager you've installed in Max's.

1: M A X's BBS Version 1.54 Copyright © Monday 24-Jun-96 8:08:28 pm

Menu editor:

Menu #: 19 Goto: Text filename: bbs:menus/Sysop.text

Key:	Function:	Extra:	Lo acc:	Hi acc:	Filename/Name/Dir/Path:
!	28	0	10000	10000	
C	13	0	90	10000	bbs:ansi/CLI.ans
V	34	0	90	10000	bbs:questionare/OnlineVie
P	19	0	90	10000	
5	13	0	90	10000	BBS:LogFiles/SysEventsLog
A	13	0	10000	10000	bbs:ansi/accesslev.ans
L	18	0	90	10000	
4	13	0	90	10000	files:comms/mail/trapdoor
X	17	5	90	10000	
1	2	0	0	10000	

Top/Btm Show Add/Insert Delete

Where all the options available to you and your callers are edited for each menu

You'll probably want to re-edit screens over time so save out each screen separately. Saving multiple screens as one block or file means they can't be loaded back in without causing problems. Remember when saving to keep an eye on the Page Range in the save requester as you have to adjust it, e.g. "From 001 To 003" to "From 001 To 001".

Due to the Sysop pager system there are two finished ANSI files required. One will have page one saved under Pager1.ans, the second will have pages two and three saved as Pager2.ans. The trick to clean screens lies under the Edit menu with ANSI Parameters. The Screen Preparation gadget should be set to Clear. Cycle through the Inter-Page Preparation to Home. Number of Rows at Auto. End of Line Character can be anything you like, as long as ANSI Code Cursor Advance is toggled On.

You have a backup of the ANSI so with those settings move to page 1 and save it in Text as an ANSI under the name Pager1.ans, adjusting the Page Range so not to save the rest of the pages at the same time. Move to page 2. Alter the ANSI Parameters so Screen Preparation reads Home. Home just sends the cursor to the top left of the screen before drawing the graphics instead of clearing it first like Clear does.

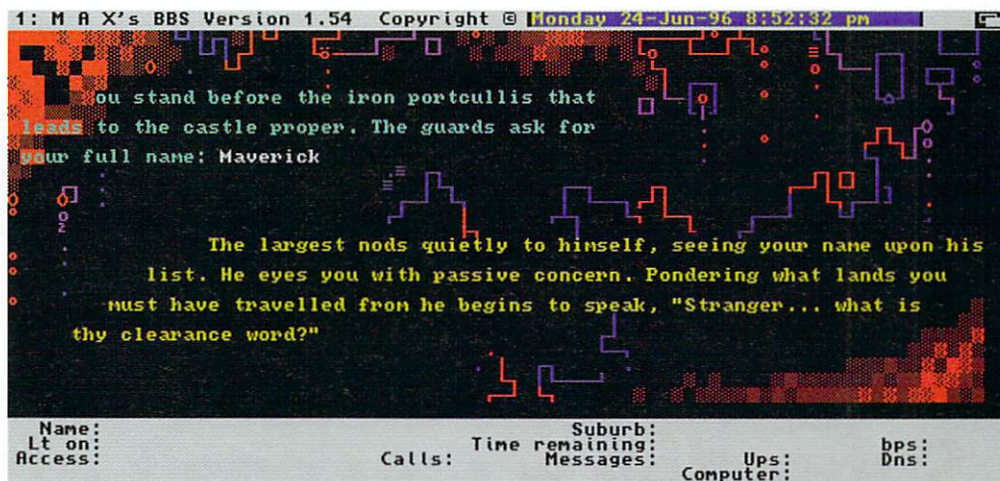
Go to save, you should see the Page Range already set "From 002 To 003". Save page 2 and 3 in this way as one file under Pager2.ans in Text.NotHere1.ans, NotHere2.ans and NotHere3.ans are the screens building up NotHere.ans, for if a user pages twice, to be edited as above.

A main menu might incorporate the talking clock (%e). Page 2 would have %e typed and positioned so as to fit in a gap on page 1 where everything else in the main menu is drawn. These two would be saved as one with Screen Prep at Clear, Inter-Page Prep at Home and ANSI Code turned On.

CURSOR REPOSITIONING

By having HyperANSI's Number of Rows set to AUTO in the ANSI Parameters the cursor always appears straight after the last character towards the bottom right of a given ANSI screen. Fine for some purposes but what if you want the cursor to appear elsewhere? Like in a box you've drawn, common throughout the menus, for that aesthetic touch.

The Workbench Ed won't do it, nor will Final Writer. You need a text editor such as Transwrite or CED - you've probably got something that can handle it. Load the ANSI



A taster of the ANSI you can find from the coverdisk

into CED, say your MainMenu.text. It might be an idea to copy it to Ram while playing about like this and temporarily change the Text Filename field in Menu 0 from Max's Configure/Menus, to read "Ram:MainMenu.text".

Continuing straight from the last character at the bottom of the ANSI text file, but don't press return afterwards, we need this in:

```
CED:<esc>[10;5H
```

Instead of typing <esc> you need the reversed character you see by pressing the escape key. Along the corridor and down the stairs. We move along 10 characters and down 5, and that's where the cursor lands when viewed in Max's. It will take a few tries before you get it spot on.

Row 253 in Configure/Text:

```
"Hit <Esc> twice or wait 30 seconds to enter the BBS..."^M^M
```

is a prompt requiring change with the help of our < command. Design yourself an ANSI called PressEsc.ans (then place it in Text) with the logo or name of your BBS covering the entire screen, with a bit of info at the bottom detailing opening times, connect speeds, Sysop name and the like, plus the essential notice paraphrasing the message:

```
"Hit < twice or wait 30 seconds to enter the BBS".
```

This screen won't be displayed via local login but the caller will see it and so will you when he calls. This is your chance to make an impression. Replace line 253 with:

```
<BBS:Text/PressEsc.ans
```

Take a look at LogIn.text in your Text drawer using Hyper. This is the default first screen a caller sees after reading the hit escape one liner. Since we've changed this by having our first screen appear even sooner by making amends to line 253, we no longer need the BBS name and connect speed information that appears in LogIn.text.

To finish off, here's a couple of ideas for when callers enter their name and password. Replace the LogIn.text in your Text directory with the one from the coverdisk (have a backup of the Menus and Text directories on standby, you may need them over the weeks). This file will be shown straight after PressEsc.ans and now holds the what's your name question.

If you logged on now it won't look right, so in Configure/Text change line 1

```
"^M^MEnter your full name:"
```

to:

```
^[[36mname: ^[[37m
```

That should do the trick. Login and enter your name. Looking good. But that's one dull password prompt. Place Password.ans in Text. In Configure/Text, replace line 3:

```
"^M^M^[[32mEnter your password: ^[[30m" with: [9;12H and Password.ans [21;27H) as cursor repositioning is implemented. Save LogIn.text with standard clear screen. Password.ans requires Screen Preparation set to Home and ANSI Code Cursor Advance toggled On so it overlays properly.
```

AC



Creating overlapping ANSI graphics with auto insert codes without messing up surrounding graphics



One of the better chat doors on the market for Max's

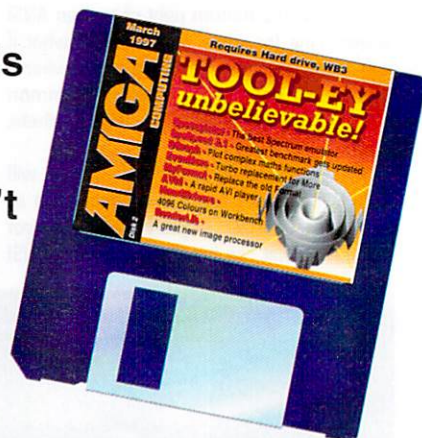
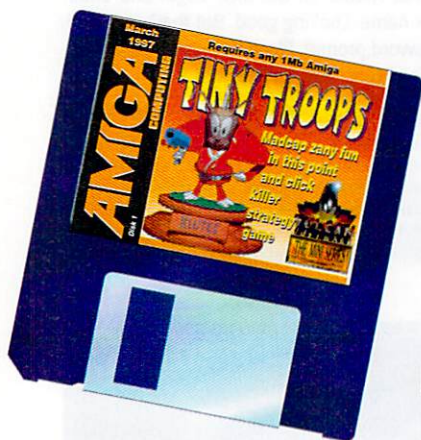
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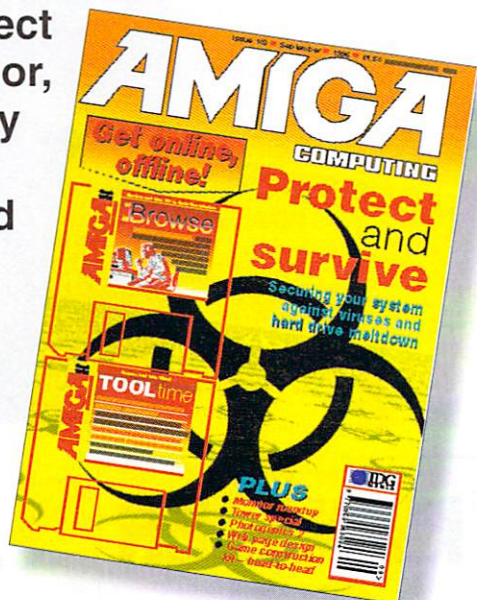


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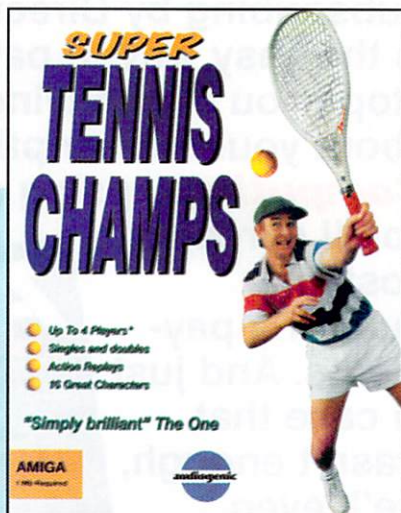
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SPORTS, ADVENTURE -WHAT MORE COULD YOU POSSIBLY WANT?

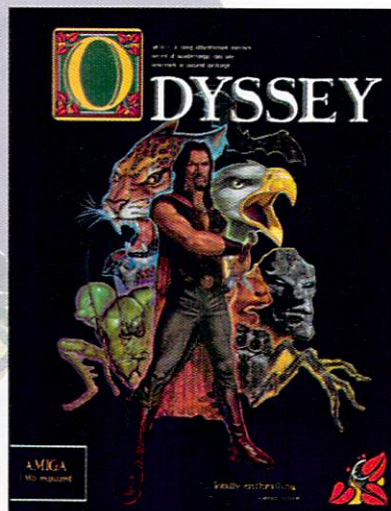
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SUPER TENNIS CHAMPS

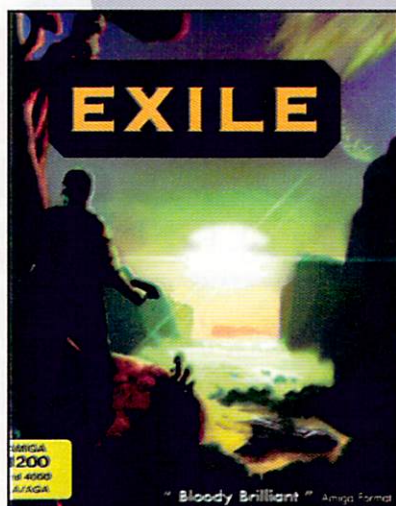
has been described as the 'Sensible Soccer' of the tennis world. It scores highest when it comes to the most important factor of all - gameplay. Tennis games are usually difficult to pick up, but the intuitive controls makes this a doddle. Play singles or doubles with friends or just against the computer. Before you know it, you'll be playing at Wimbledon! For all 1Mb Amigas.



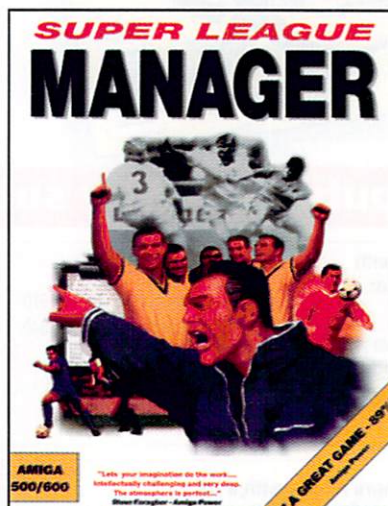
ODYSSEY continues the arcade adventure tradition but with a feel more reminiscent of Prince of Persia and Flashback. You, the hero, explore seven mystical islands gaining magical powers that enable you to morph between different creatures, each with key features essential to the completion of your quest! For all 1Mb Amigas.



EXILE was a classic when first released and the AGA version exploded the myth that you can't have great gameplay and superb graphics in the same game. Acclaimed Game of the Year by one magazine, it is one of the few truly ground-breaking titles of all time.



The world of Exile feels so real as you are weighed down by gravity, blown around by gusts of wind and pummelled by squawking birds. In fact there are so many fascinating puzzles in this true arcade adventure that you'll probably still be enjoying it in the next millennium! Versions for A500/600, A1200 and CD32.



SUPER LEAGUE MANAGER is a football management sim with a difference - it's more true to life! Instead of providing sheaves of statistics that just aren't available in the real world, you must use skill and judgement to turn a team of no-hopers into a League-winning side. Versions for A500/600 (not 1200 compatible) A1200 and CD32.

Audiogenic Software is the **oldest** games publishers in the UK, with a history dating back to 1979 - long before the Amiga was invented. Now there's a chance for Amiga Computing readers to obtain a copy of Audiogenic's first Amiga game, Impact (published way back in 1987), totally free when you buy two or more games from this page.

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AMIGA ACTION

news

Hugh Poynton investigates the latest news stories in the Amiga gaming scene

Good news for the Amiga this month. Guildhall and Vulcan appear to be largely responsible for keeping the Amiga format well supplied with quality games, both old and new. Guildhall is releasing a selection

of veteran titles that many PC owners will be secretly wishing they could get their hands on and Vulcan is continuing to expand its impressive range of new games.

GUN FURY

One of the Guildhall '97 releases is Binary Emotion's new thinking man's shoot 'em up - Gun Fury. Despite the slightly disturbing sounding working title, Binary Emotion's latest release looks like it will be a challenging puzzler/shoot 'em up.

The aim of the game is to repel waves of alien invaders with your - as the camp bloke in *Allo Allo* used to say - 'liddle tank'. The aliens are various colours and as you shoot one, your tank turns that colour - you can then only shoot another alien of the same colour. A fairly simple premise, but often the simplest games are the best. Gun Fury should be ready in a few weeks, so we'll bring you a preview as soon as we can.

SIXTH SENSE INVESTIGATIONS

Epic Marketing is to publish a new game from called Sixth Sense Investigations. The game, being developed by Swiss developers CineTech, is a comedy graphic adventure about a buddy buddy detective team who solve the problems and mysteries of their rich clients. The twist is that in their investigations they are aided by the spirit of a sarcastic old bloke.

Written in a style reminiscent of Sam and Max, Sixth Sense Investigations makes use of the VEGA graphics adventure system which allows it to run at 50 frames a second and enables the player to zoom in on the various characters. The A1200 based game should be ready for release by April.



Jus' one more ting sir - Columbo style detective puzzles in Epic's Sixth Sense Investigations

GENETIC SPECIES

If you have Aminet 15 or have been downloading files from the Aminet, you might have come across a remarkable game called Genetic Species. Although it looks like a very professional product, Genetic Species was in fact developed by a young Danish coder, Per Bloksgaard. Part of an informal scene group called Ambrosia, Per has been developing the game for the last two years on his Amiga 4000.

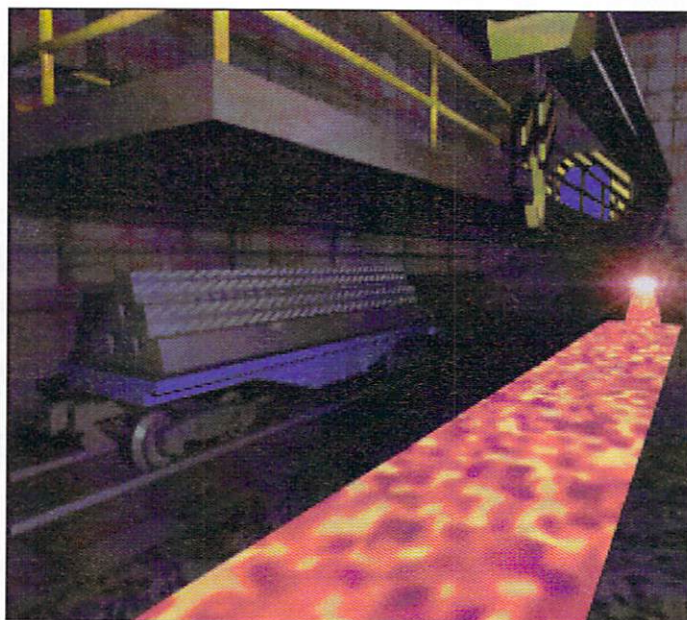
The latest news is that Genetic Species and Ambrosia have been signed to Vulcan software, virtually assuring the success of this potentially huge Amiga game. Developer Per intends to make the final version of the game networkable, so maybe the Amiga will have its own Marathon within the year.

The storyline isn't hugely different from any other Doom clone, in this case you are a soldier with orders to destroy genetically altered aliens that have overrun a moon base. As in Doom, various weapons lie around the playing area waiting for you to pick them up and waste some Extra Terrestrials.

Vulcan believes that Genetic Species should be nearing completion within the next three months so keep your eyes peeled.



Graphically impressive alien bashing action from Vulcan



Good enough location
for a fight, I'd say

MYOPIC MYST MYSTERY

The farcical story of the Myst port to the Amiga has taken an even more confusing turn with the announcement that Sunsoft of Japan will be responsible for developing Cyan's game if it decides it is a commercially viable project.

Myst first appeared in demo form on the Amiga courtesy of Polish developers Broderbund. This demo was found to be a fake, but so many people had been impressed by the demo that there was quite a demand for its full port over to the Amiga. For months speculation amongst the Amiga community has been rife as to who will develop the product and when it will be released.

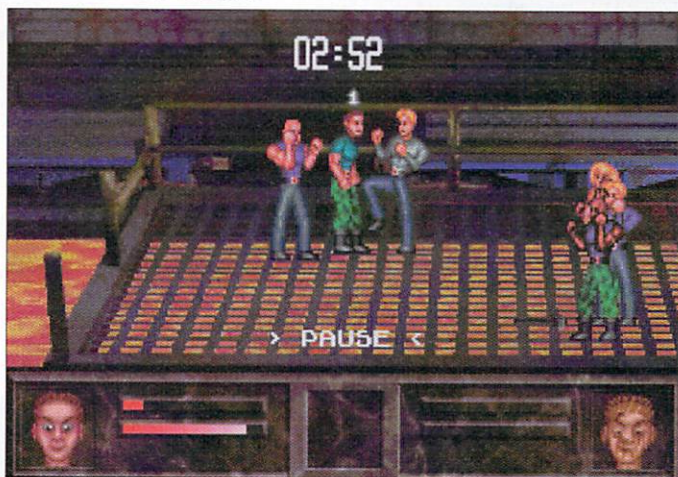
THE STRANGERS

Slovakian software development team, Ablaze Entertainment has completed its first project, The Strangers. Although the project is finished, Ablaze are at present looking for a distributor.

I have only played a demo version of the game but it looks like it could be fun. The story is pretty simple – you are in a factory with a bunch of homicidal nutters, all intent on beating you up. Your mission is to beat the stuffing out of them first.

Unlike traditional beat-em ups such as Street Fighter, The Strangers offers you the opportunity to knee somebody in the groin (at which your unfortunate adversary will double up with a rather concerned expression on his face). The dress sense of the protagonists is another endearing feature of this game – the bloke you control looks like Jean Claude Van Damme after experimenting with mind expanding drugs. Puke green trousers and a luminescent blue T-shirt – no wonder there are people out to beat him up.

From what I've seen, The Strangers looks like a fun beat-em up that could do well if it finds a distributor, so watch this space. For further information mail Ablaze at: kraviar@vadium.sk



Ooof, hoofing in the nuts is definitely
not Queen's rules, you bouncer

GUILDHALL RELEASES

Guildhall is to release four titles in the New Year, as well as increase its back catalogue with classic games from Microprose and Electronic Arts. In addition to the Microprose releases mentioned in last month's Amiga Computing, Guildhall will be re-releasing 3D Golf, Covert Action, F15 II, Grand Prix, Rail Road Tycoon, and Silent Service. Electronic Arts games include PGA Golf, FIFA Soccer, Theme Park, Desert Strike, Wing Commander and the (in my opinion) absolutely classic Road Rash.

Guildhall will be also be responsible for the distribution of Many's Euro League Manager and Basket Island, and Binary Emotion's Minskies Furball's and Gun Fury.



Many's new
footy sim – Euro
League Manager



Road Rash, one of Guildhall's classic re-releases

ACTION PREVIEW

SPACE SIM

**Hugh Poynton
tries his hand
at Applause's
latest
intergalactic
tinker
simulator**



Cygnus 8

I was tired and hungry, I'd just been released from jail for the fourth time and only had enough money to buy a snack in a dodgy pub. The letters page in the Big Issue? An exert from Trainspotting? No, actually that was the state my character was in after playing Cygnus 8.

It's a strange game. Although the basic idea behind it has been done many times before (trade goods, both dodgy and straight across the galaxy and attempt to get rich) the idea has never been approached like this. Graphically the game has a very cartoony feel to it; there are none of the polygon models and texture mapped planets of, say, Elite Frontier. Instead the space travel sections play like Astro Blaster and the planet based trading parts include destinations such as The Pub and Jail and give you the option of breaking and entering various premises.

Although quite cute looking, Cygnus 8 is like a psychotic hamster - deceptively vicious. You may think there's nothing to the game, that it's purely about trading the same boring old commodities. Well you'd be wrong. If you don't drop into the pub every day and feed your face and get some sleep (which costs a lot of money), your health will decline inexorably. You need to be earning quite a lot to do this comfortably, so



Fight your way through the thronging crowds in Denab's best pub

if you're not exactly excelling at interplanetary trading, you'll probably take the slippery path to theft and drug abuse that I did.

It was all so easy to begin with - wander round the deserted planet and break into factories and stores. This pays off when you're lucky, but the money required to buy your way out of jail is so extortionate you'd probably prefer to spend a week in the slammer. However, if you haven't got enough money to buy food or shelter, your health will decline to such an extent that Spaceport officials won't allow you fly your



Craft waits on the spaceport launch ice. (Reshield 042, Reshield 038)

Your intergalactic runabout - more Xr2i than XL5.

spaceship. To be totally honest, at this stage, the graphics aren't really very good and the preview version we received didn't have any sound. Despite this, Cygnus stands out on account of its originality and the funny little touches which set it apart from other trading games. I mean, getting tired? You never flaked out from exhaustion if you hadn't found digs for the night in Elite. If you want a detailed space trading simulation game pick up Frontier, but if you just want a Del Trotter in hyperspace, space cockney muck about, you could do worse than investigate Cygnus 8.

**"I'm a control freak",
Hugh Poynton is
often heard muttering.**

**Who better then to test Logic 3's
new range of peripherals?**

Peripheral vision

SpeedMouse

The AM SpeedMouse is a budget mouse and looks like one. This may sound like a criticism, but I'd prefer to think of it more as an observation. The plastic is bright shiny white and unfortunately renders the thing quite ugly and tacky looking. Also the two function buttons, although they do their job, look and feel almost flimsy.

Having said this, the SpeedMouse does its job without problems. I used the AM Mouse both for workbenching on the Amiga and game control on Vulcan's JetPilot, in both cases it proved to be quite smooth and fast.

So there you go. If you want inexpensive but decent computer peripherals you could do worse than look at Logic 3's range.



AMActionPad

I love it when a handful of peripherals come through the post and land on my desk. There's a good reason for this. In order to test each peripheral enough to do it justice you really should play test it considerably – not just on one game, oh no, but three or even four. Its not just a method of skiving, it is a sacrifice I make to ensure my journalistic integrity.

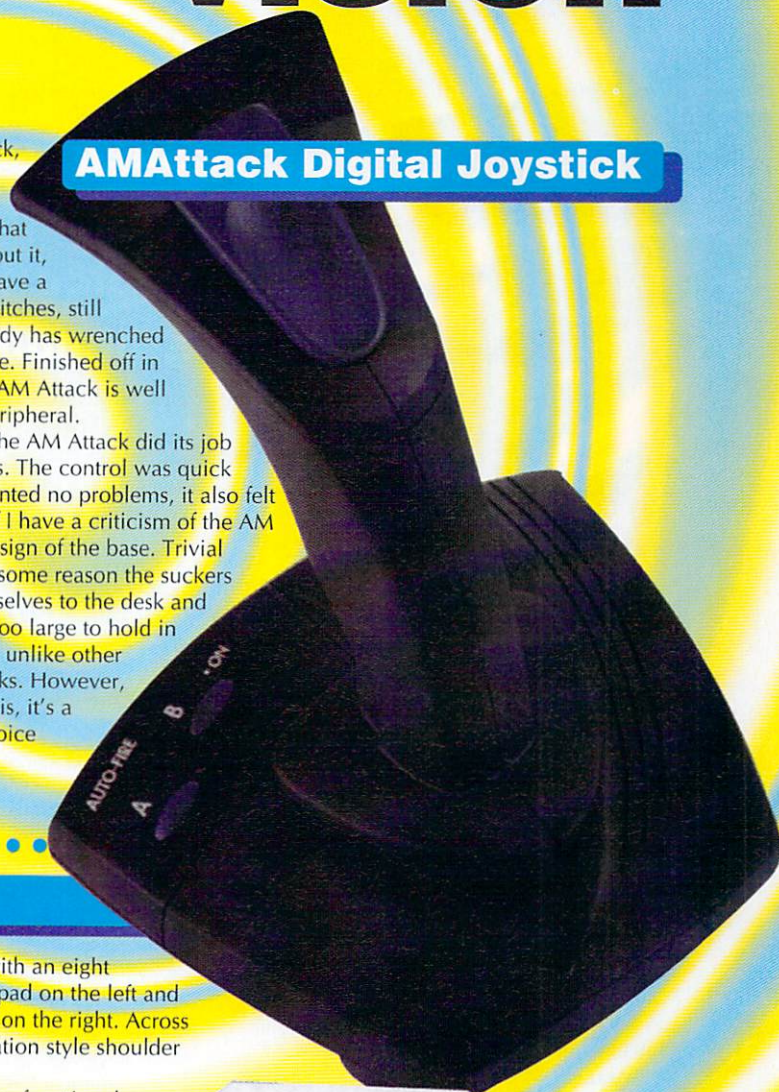
Needless to say when Logic 3 sent us three of its latest budget Amiga peripherals I took it upon myself to ensure they got well and truly tested.

First up is Logic 3's new control pad for the Amiga. The AMActionPad is a pretty functional but aesthetically pleasing gaming peripheral for all Amigas. The layout of the pad is pretty much identical to the Sony

For a budget joystick, the AM Attack joystick looks quite cool. It has that flared and mean look about it, and although it doesn't have a myriad of buttons and switches, still looks a little as if somebody has wrenched it out of a nearby jet plane. Finished off in matt black and blue, the AM Attack is well produced for a budget peripheral.

Like the control pad, the AM Attack did its job well whilst playing games. The control was quick and responsive and presented no problems, it also felt quite strong and sturdy. If I have a criticism of the AM Attack, it concerns the design of the base. Trivial though it may sound, for some reason the suckers don't always attach themselves to the desk and the joystick base itself is too large to hold in one hand comfortably, unlike other Amiga joysticks. However, despite this, it's a good choice

AMAttack Digital Joystick



PlayStation control pad with an eight directional digital output pad on the left and a pair of function buttons on the right. Across the top is a pair of PlayStation style shoulder buttons.

The pad is no-nonsense, functional, ergonomically well designed and fits snugly into the hand. Build quality is good, although inescapably plasticky, it nevertheless feels sturdy and strong. Control wise the pad behaves exactly as it should, and is pretty easy to learn to use. A good buy.



ACTION REVIEW

FLIGHT SIM

JetPilot

THE LOW-DOWN

PUBLISHER Vulcan Software
DEVELOPER In house
CONTACT 01705 670269
DISKS 4
PRICE £16.99
MACHINE All Amigas (1Meg min)

GRAPHICS	90%
SOUND	85%
PLAYABILITY	85%

REVIEWED BY HUGH
OVERALL SCORE
88%

Hugh Poynton has always wanted to be in Top Gun, so he was the obvious choice to review Vulcan's groundbreaking new flight sim.

Have you ever seen the simulator rounds on The Krypton Factor? The bit where Kenneth the systems analyst from Chelmsford has to sit in a Boeing simulator and attempt to land it at Hong Kong International. He sweats, gnashes his teeth and grimaces until he's crashed into the Hilton Hotel just to the left, shrugs and hopes for better luck on the manual dexterity round. The whole process looks fiendishly complicated but somehow you wouldn't mind a go yourself.

JetPilot gives the opportunity to do just this. It would be safe to say that what Vulcan is offering here is pretty much the most realistic flight simulator written for the Amiga. Needless to say this means it requires patience, skill, intelligence and about five hands.

Almost every aspect of flying a modern jet has been reproduced here including flight parameters that come within 10 per cent of real aircraft, changing weather conditions and 27 air bases from the Eastern Mediterranean to Scotland. Jetpilot is absolutely packed full of options – there are three planes you can fly: The Lightning, Starfighter or Mig 21, on a huge variety of missions from formation flying to combat intercept missions.

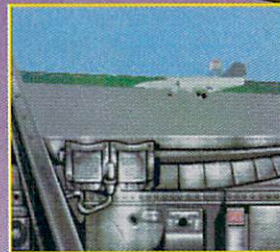
To be honest, Jetpilot is something you will either love or hate, it really depends on what you look for in a computer game. It isn't something you can just play for 15 minutes while waiting for Neighbours to start. Because



At the risk of sounding inane, this plane is the coolest cos it looks so smart



This is the chopped and lowered version



Ha! Beat him from the lights, c'mon you big girl, catch up!

of the complexity of the simulation you really need to get to know the game and practice flying the jets and using features such as the radio communications and ground tracking.

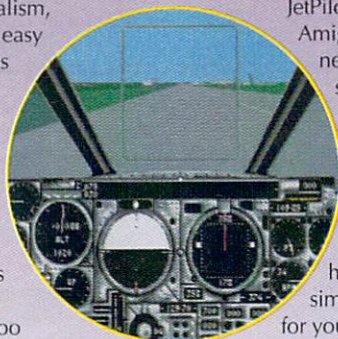
Because of the inherent realism, the planes despite being quite easy to handle, aren't as forgiving as in other less realistic sims – take off too steeply and the tail will drag on the ground and destroy the plane. Land too fast and the tyres will burst. Jetpilot is a very impressive product and flight sim buffs will be happy as pigs in mud, however I do get the feeling the game will appear too complicated and perhaps intimidating for those who aren't as well acquainted with sims.

This said, Jetpilot is a step forward for the Amiga. Spec wise the game is pretty hungry but it shows the strength of the computer – there isn't, to my knowledge, a game that comes near it on the PC in terms of realism and detail. The graphics are excellent, the planes are realistic right down to the smallest detail with even individual markings visible.

The geography is completely detailed and realistic – take off from a North Wales air base and you'll be able to see Anglesey in one direction and the Wirral in the other.

JetPilot will run on pretty much any Amiga but, like many of Vulcan's new products, favours higher spec machines. On a 1MB or 2MB system some features will have to be disabled. However, on a souped up A1200 or A4000 the simulation will run like a dream. If you have a fairly high spec Amiga and are a flight sim buff this game is tailor made for you.

Some mention also has to be made of the price – at £16.99 JetPilot is very competitively priced for such a high quality game, you will certainly get your moneys worth out of this one. The simplest missions, such as just taking off and circling are complicated enough to master, so with 20 qualification missions and loads of combat missions there is more than enough to keep you occupied for donkeys years.



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ACTION REVIEW

SHOOT-'EM-UP

I've heard of loads of weird games concepts in my years – big blue blobs down-hill skiing, plumbers, dinosaurs and mushrooms go-karting round pink race tracks, spiky multicoloured hedgehogs running about eating stars. However, Tommy Gun, Mutation's second release, is basically nuttier than a Snickers bar.

That's not a criticism, Tommy Gun is brilliant. The concept is weird and original, the graphics excellent and the whole game is a breath of fresh air. It arrived in our office on one of those dull wintry Wednesday mornings when you wished you could've had just another half hour in bed and there's still quite a way to go until the weekend. I booted up the machine and within a minute I was playing with a big smirky smile on my face.

The aim of the game is simple: The bad guys (who range from vegetables to lobsters depending on the level) have taken over five zones and captured Tommy's buddies. Your job as Tommy the SWAT team Tomato (or side kick Big Cheese) is to blast your way through, shooting the bad guys and blowing the padlocks of the little cages in which your mates are imprisoned. The game reminds



Don't ask...

me in concept of Terminator, with the basis basically being a sideways scrolling shooting gallery.

The graphics are very good. The screens scroll past while the killer tomato side steps his way through the level. By directing the cross hairs with your joystick, the offending evil grocery items can be blown apart, and the zone liberated.

Tommy Gun's just saturated with really stupid but funny little touches. For instance the drive-by supermarket gerkins – mean gangsta-style gerkins who fly past you in a trolley with guns blazing, or the paratrooper carrots who shoot away while drifting down from the supermarket rafters. And this is just in one level. Another priceless addition is the fact that when you do shoot the lock off one of your buddies' cages they jump out, throw you a power up or



This is the best level. It's like a cross between Muppet's Treasure Island and The A Team.

a bonus and shout 'Thank You' in a voice that sounds like an inebriated smurf on helium. However, despite being a genuinely enjoyable, fun game, Tommy Gun does have a few detracting points, although they are admittedly minor criticisms. It might be a fact that I haven't played it long enough but it is pretty difficult – even on the easy levels there are so many baddies that surviving to even half way is a mean feat.

Having said this the game is very addictive. You find yourself thinking, just one more game and I'll crack it – this balance between being annoyingly frustrating and challenging is the secret of making an addictive game.

Although graphically it doesn't match up to Xtreme Racing or Worms the presentation is of a good standard, the concept is original and amusing and there is easily enough addictiveness and playability to keep you blasting away for a fair while.

Tommy Gun

THE LOW-DOWN

PUBLISHER Mutation Software
DEVELOPER Inhouse
CONTACT 01705 672616
PRICE £14.99
DISKS 1
SUPPORTS All Amigas

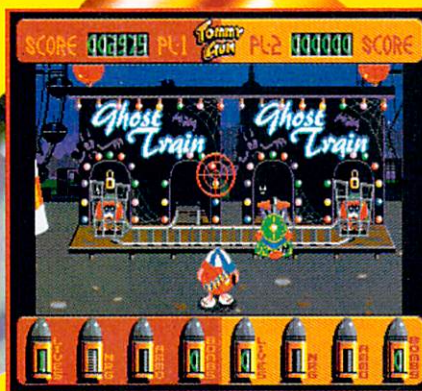
GRAPHICS	80%
SOUND	80%
PLAYABILITY	86%

REVIEWED BY HUGH

OVERALL SCORE

84%

When grocery products start shooting up the local supermarket, who ya gunna call?...Hugh Poynton.



Die Hard with a Tomato



Attack of the root vegetables

ACTION FEATURE INVESTIGATION

Begorrah Aurora!

HUGH POYNTON investigates the work of
new Canadian Amiga developer, **Aurora**



Perversely, as the future looks more and more gloomy for the Amiga, small software and games publishers have sprung up. As larger developers and publishers have almost raced each other to abandon the format, smaller, more dedicated niche software companies emerge to fill the vacuum. For those who have exploited the situation, the rewards have been great.

Developers such as Binary Emotions and publisher/developers such as Vulcan have laid claim to a still lucrative market.

Aurora is one of these brave new Amiga dedicated developers. This Canadian based games company has declared it is dedicated to supporting the Amiga and at present has three games under development. Although Aurora intend to produce games that can be run on a bog standard A1200, it is also interested in developing for higher spec machines and even the eagerly awaited next generation Amigas such as the Phase 5 A/Box Amiga Compatible.

Aurora currently has three games in development for

release in 1997. The first is a two player action game called Zone 99. Due for release in March 1997, Zone 99 promises to be a blend of action, strategy and puzzle that requires brains as well as fast reactions.

The aim of the game is to pilot your hover tank around 99 levels attempting to find your way to the final zone. This is done by collecting clues as to the zone's whereabouts on every level. To do this you will have to solve various puzzles and, depending on the level, battle against, or work with, the other player.

Each level will be different from the last with underwater, space and jungle zones. As zones are completed and clues found, modifications will be made available for the hover tanks. Although at the moment planned as a serial linked game, Aurora has plans to add TCP/IP so the game can be played over the Internet.

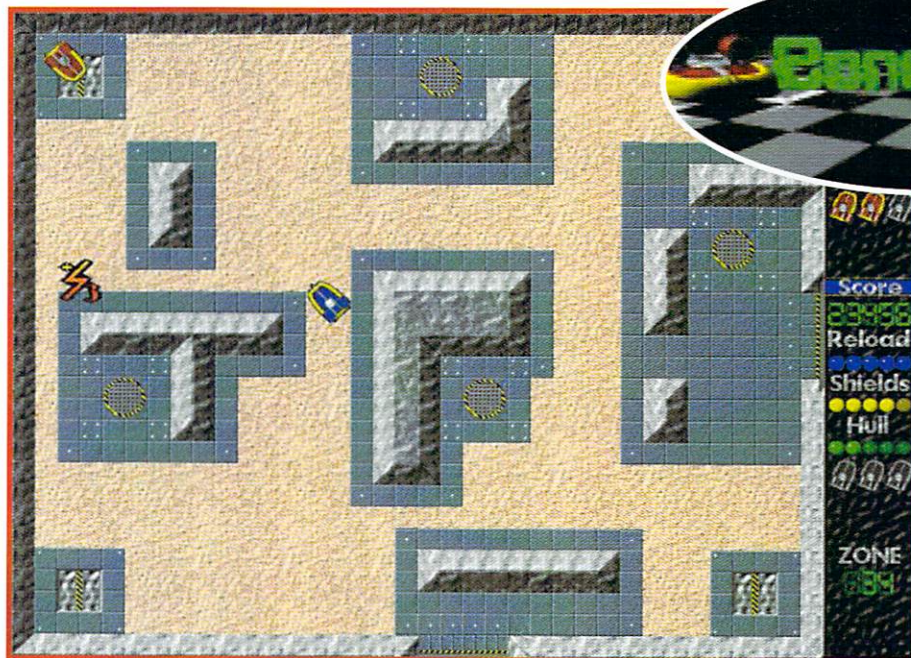
Aurora is also working on an RPG/puzzler mix – Betrayed – we are told it will comprise of seven chapters each

containing four levels. Despite the project being in its early stages, there are a few things that we do know about the game. It is set in a research station on a distant moon from which a scientist, betrayed by his

superiors, must escape. It will be a scrolling game on an impressive scale with the largest level 19 screens across and 19 down. Because of the size and complexity of the game Betrayed will only be available on CD-Rom.

Betrayed isn't scheduled for release until November 1997 and Aurora has a number of other projects in development including a galactic conquest war game and a texture mapped spaceship simulator. On top of this it is already starting work on the second part of the Betrayed adventure.

Keep your eyes on Aurora, its projects look impressive and in defiance of the Amiga's doom sayers, it has a list of projects planned for well into 1998.



Guildhall Go



Can't quite seem to get the hang of this thing...



The plane with loads of smoke coming out of it is mine



Do you smoke camels? Only if they've got Arabs on them

Dogfight

As far as I'm concerned this is the best of Guildhall's budget releases and as flight sims go, is notable for being interesting. The trouble I have always found with flight sims is that they have the tendency to be more boring than Thora Hird. I mean who decided to make an Airbus sim where (whoopie) you could land at the top 20 international airports of the world.

In all honesty, until they bring out a 'terrorists on board' data disk, the flight sim has to be about as interesting as an M25 traffic jam simulator. However if a sim is done well it can be ace, like the dog fighting scenes in Top Gun when its all blaring alarms and swirling fighter planes.

Dogfight is a cool game. Like the very successful Chuck Yeager's Air Combat of the same year, this offers pure action. The graphics are massively realistic, even down to the pilots head inside the cockpit and the markings on the wings.

You can fight one on one which is fun or attempt the more challenging missions. There are five different conflicts to choose from: World War One, World War Two, Korea, Vietnam, Falklands and Syria not to mention loads of different objectives to achieve, from shooting down Zeppelins in 1918 to hunting Syrian Migs in the Bekka valley.

The planes are easy to control and responsive and the action is non-stop. One

criticism I do have is that the sound effects are a bit trashy but, when the rest of the game is so well, turned out this is a minor niggle.

THE LOW-DOWN

PUBLISHER Guildhall Leisure

DEVELOPER Microprose

HD INSTALLABLE Yes

PRICE £14.99

SUPPORTS Any 1Mb Amiga

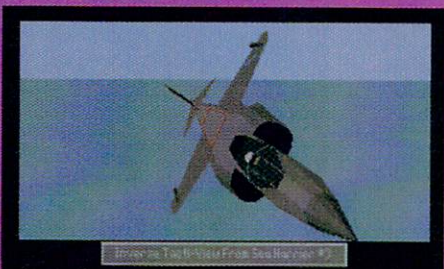
GRAPHICS	90%
SOUND	75%
PLAYABILITY	88%
DIFFICULTY	EASY

OVERALL SCORE

84%



I've always been told smoking is bad for you



A smart Harrier

F117A

Following on from the success of F19, Microprose released F117A in 1993. I remember buying the game and what with PCs being so bobbins back then, it was like playing using a flick book. Of course Amiga users never had that problem and the game proved a winner.

The graphics were excellent at the time and though lacking the gouraud shading and withering of present day games, they still look good three years on. In the cockpit you are offered a mind boggling array of display screens and flashy lights and you can look back forwards and to the sides within the cockpit.

Unfortunately you don't get involved in many dogfights in this game, the enemy planes have all the aggressiveness and fighting ability of a happy slug. However, this doesn't matter because it's challenging enough flying to your objectives at under 500 foot while avoiding

enemy SAMs.

The missions are against the same poor old countries that get it in the neck in every other sim such as Vietnam, Korea, Russia, East Germany, Cuba and Libya.

The game is pretty involving with a large variety of missions and objectives to complete. Matters are made more complex by the fact that the loevel of the various conflicts vary meaning that, in a cold war for instance, once you are detected, the mission is a write-off

One criticism I might have of the game is that there are too many parts of the game that take too long. Flying to the mission objectives can take ages, and on automatic pilot it is perfectly possible to walk slowly to the kitchen, make a caffetier of coffee.

Despite this F117A was, and still is a quality product. There are enough options and features to the game to keep you occupied for quite a while.

THE LOW-DOWN

PUBLISHER Guildhall Leisure

DEVELOPER Microprose

HD INSTALLABLE Yes

PRICE £14.99

SUPPORTS Any 1Mb Amiga

GRAPHICS	75%
SOUND	75%
PLAYABILITY	88%
DIFFICULTY	TRICKY

OVERALL SCORE

82%

odies...

THE LOW-DOWN

PUBLISHER Guildhall Leisure
DEVELOPER Acid Software
HD INSTALLABLE Yes
PRICE £14.99
SUPPORTS Any 1Mb Amiga

GRAPHICS	69%
SOUND	73%
PLAYABILITY	80%
DIFFICULTY	TRICKY

OVERALL SCORE

78%

Starlord

Ever fancied ruling the entire galaxy by playing off interplanetary nobles against one another in a never ending flurry of internecine squabbling and pitched battles?

On the off-chance that you might, Guildhall are re-releasing *Starlord*, a space adventure shoot 'em-up strategy game. Your mission is to spread your influence



Together Luke, we could rule the universe

and power as far as possible throughout the galaxy.

Basically the *Starlord* storyline is a sort of *Star Wars*/*Dune* mix of power politics, war and diplomacy set thousands of years



The secret bastion of Star Lady Huff's dynastic legions

We take a look at the next batch of Guildhall/Microprose releases.

in the future. The aim of the game is to assert your power and authority by fair means or foul until you are the most powerful dynasty in the galaxy. About three quarters of the game is played as a conventional strategy game, with the remaining quarter being a space combat sim where you direct your forces and fly your own ship in combat.

The depth of the game, and the sheer number of choices involved make the game an interesting and challenging exercise in strategy. Directing the space battles can also be good fun.

However there is one criticism I would make of this game - the space battle scenes are graphically very poor and unfortunately just do not stand up to their PC equivalent. If you can live with this flaw however, *Starlord* is a pretty decent, fun and entertaining game.



In space nobody can hear you getting a pasting

B17 Flying Fortress

Another flight sim, but this one's a bit different. Unlike any other sim I can think of off hand, B17 offers you the opportunity to control not just the plane, but the other 10 crew positions, such as gunners and bombardiers.

Although much more playable than other 'authentic' demos, *Flying Fortress* is still undeniably a very realistic and detailed game. All the switches and levers are in the right place in the cockpit and the flight model

is extremely realistic taking into accounts factors such as damage, wind speeds and bomb load. One particularly novel little touch is the ability to customise the nose art on your plane, although unfortunately you can't paint the whole plane. I wanted mine in bright yellow with zebra skin trim but, no joy.

Although B17 is possibly too much a sim for many, the game will still appeal to a good deal of people who want a challenging flight simulation with a difference.



Hughster the Rooster!



Watch out men a huge plane is about to run us over as we pose for this lovely photo

THE LOW-DOWN

PUBLISHER Guildhall Leisure
DEVELOPER Microprose
HD INSTALLABLE Yes
PRICE £14.99
SUPPORTS Any 1Mb Amiga

GRAPHICS	80%
SOUND	80%
PLAYABILITY	82%
DIFFICULTY	TRICKY

OVERALL SCORE

81%

University

What processes do you have to undertake to develop a game? Do you start off with a definite idea of what you want to create, or does it just grow and develop as the project progresses? If possible could you explain to us the step by step process involved in developing a game?

What I am aiming for. In order to change the bare idea into code I normally follow the steps below. This is not exactly the way I have gone about designing Explorer 2260 because of the type of game it is. Some other programmers almost certainly will not agree with the way I work, but the development process is a personal thing, built up from experience – what suits me may not suit anyone else! This is not a quick-start guide to programming; writing good programs requires years of experience and practice, as well as an in-depth knowledge of the Amiga and the language you are using.

I. OK, you have a rough idea of what you're after. Firstly you must sit down and work out an outline, on paper, of what you want, filling in details as you go along. Expect this list to change! Explorer 2260 has changed beyond recognition from the early designs.

II. Looking at this huge list of things you want to do, the first thing that will come into your head is "How the hell do I do this and where do I start?" I have found that there isn't any easy way to decide where to start. I tend to code the most complex parts first as they are usually the pieces which other areas of the game rely on.

III. To decide what to do, firstly take the list and develop what I call a data flow/ dependency diagram. Look through your list for the sections which will be most used and most important. Put these down on paper and connect them up with arrows showing the flow of data and interactions between them. Now add in the smaller, less important, sections and link them in. This way you can get some idea of which parts of the code will be depended upon by the rest of the program. These are the pieces you should code first. Be warned though, the process of drawing these diagrams and deciding upon which pieces are important take a lot of practice, choosing the wrong sections can make the program very difficult to write.

IV. Now you start designing and writing sections of code. Don't try and get them to work together yet and don't try for optimal solutions. As you get your teeth into the program

Ever fancied writing your own games? Hugh Poynton talks to young hopeful Chris Page in part two of his exploration of the pleasures and pitfalls of developing a game

you will start to find easier ways to do things and better ways to go about certain tasks. You may also find pieces you have forgotten or didn't realise you needed, earlier in the design process. If you do find any, stop and re-evaluate your designs – you may have made a mistake in the design or you may have found a way around many of your problems. Do not be too concerned with graphics and sound at this stage, it does cut down design time if you get them sorted out here, but it may cause problems if you have to redesign parts of the program in the next stage.

V. Start bringing the pieces of code together and begin simple optimisations (a discussion of optimisation techniques is beyond the scope of this answer). Redesign and remake any pieces of code which cause problems – interfering with data structures etc.

VI. You need to ensure everything works together correctly, then you can begin polishing and debugging. This takes a long time because it is often necessary to remake sections of code or, in extreme cases, start all over again!

VII. Get someone else to test it! Never trust a test you do yourself. I have been satisfied my code is bug free only to find my brothers can pick holes in it! A good programmer is not necessarily a good debugger, especially when it comes to his own code. Expect to go back to stage V or even IV many times.

VIII. Once confident your program is working you can remove bits and pieces, add time limits etc., for public release demos. Take notice of any feedback you get (I've already had a lot and I haven't even released anything). If people express dissatisfaction with parts then change them, if people want you to add things, try to.

IX. Now the nasty part begins. You have a choice: Release the game as PD/ Licenseware or start hounding software

houses to try and get your game released commercially.

NOTE: Expect your designs to change at any time during the development process and do not expect to get a well polished game designed, written and released in a few weeks or even a few months.

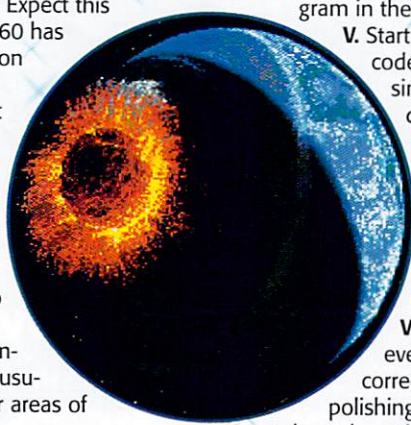
How long has the game been in development? When do you think it might be finished and do you see the copyright issue being a major problem?

Explorer 2260 has been in development, on and off and in many forms, for nearly six months. It is just coming out of the design phase into unoptimised code (stage IV) and I really can't say when it will be released. I am a student and university work takes precedence, but I am putting every spare minute into the game. I think I may have worked around many of the areas which could have caused copyright problems but would still like to contact someone in Warner Bros to make sure.

How do you plan to publicise the game when finished? Via the Amnet? By posting downloadable demo's on the Internet?

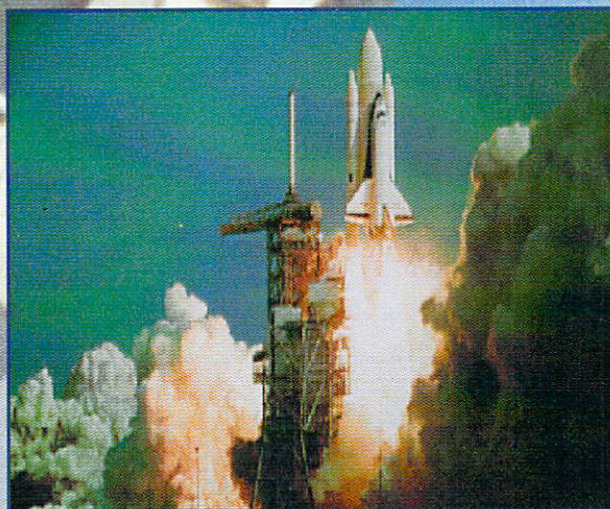
I intend placing demos on Amnet and on any other sites which may help (I already have had some offers). I may also contact a software house – I have already thought of two which may be willing to help, with a view to commercial release, although this is remote, maybe.

Chris Page has recently been approached by a major Amiga software company and is in negotiations to have Explorer 2260 published and distributed. Good luck Chris.



challenge

Part 2



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♦ Amiga A1200. Boxed with manuals, mouse etc. £160. 01767 640088.
♦ Amiga 500, 1Mb. Good condition. Colour Commodore monitor, two joysticks, dust cover, mouse, plenty of games. Quick sale needed. All for £150 ono. Call Matt on 01206 213040.
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N.Yorks, YO14 9QW.
♦ A1200 perfect condition, boxed. Two boxed joysticks, mouse and pad, 8 boxed games, 17 utilities, 20 unboxed games. Worth £700 will sell for £250. Phone Owain 01497 847489 for full list.
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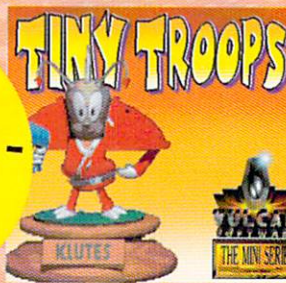
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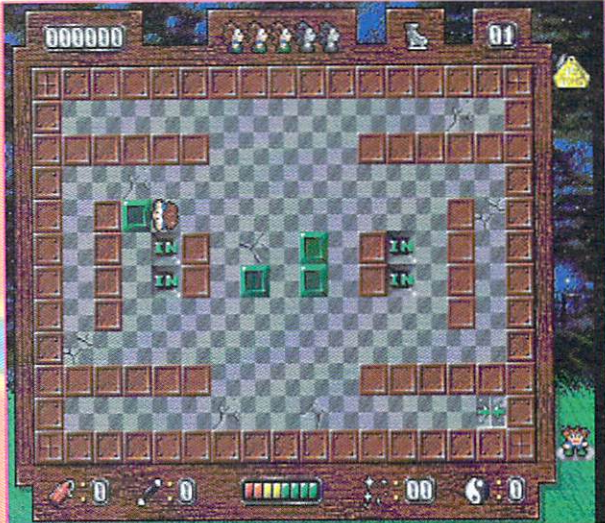
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If all these screen shots look as if they're from the same three levels, there's a good reason - I wasn't very good at the game

ACTION PREVIEW PUZZLER

Hugh Poynton teases zee liddle grey cells with the new puzzler from Applause

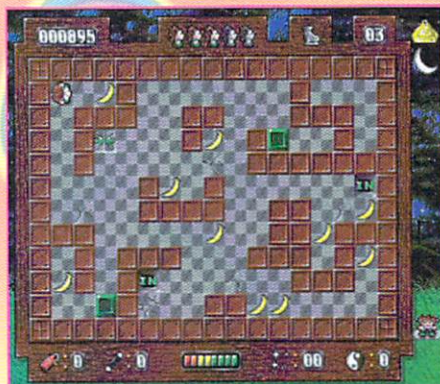
BLOCKHEAD

You can't beat a good puzzle game - the graphics don't have to be that good and the sound effects are of little importance. If however it blows away cobwebs from an under used brain, it can be a brilliant way to pass half an hour. The best puzzlers are the simplest - Tetris had you slotting coloured blocks together and Pong required you to bounce a ball around the screen, destroying blocks. Applause's latest project is a fine puzzler in a similar vein.

Blockhead, Applause's most recent addition to the Amiga games market, is a departure from the last few releases. After adventure strategy games such as DNA and Cygnus, Applause has opted for a pure puzzler and in doing so produced its best, and most professional, game to date.

The aim of the game is simple. You control a cute looking little character called Bertie who, in the small amount of time allowed, must venture around a room slotting blocks into holes. In true 'buy it or the puppy gets it fashion' Bertie's mate petrified Pete faces destruction if the level isn't completed.

As a sort of time limit for each level, a sack is slowly dropped onto Petrified Pete. As the sack drops, it changes from gold to



Simple though it may look, this screen is actually pretty tricky

silver, to bronze. If the level is completed when the sack is golden, maximum points will be scored. Once every hole is filled, your little character may exit and Pete escapes destruction.

Although this may sound easy, the reality is that unless you are very gifted and have a natural affinity for lateral thinking and strategic planning, you will find even the early stages of the game pretty difficult.

The real strength of the game is that it requires a certain degree of mental agility. If, for example, you have four blocks to drop into holes, the layout of the room will more or less dictate how, and in what order, the blocks need to be moved. You will have to think ahead and work out in



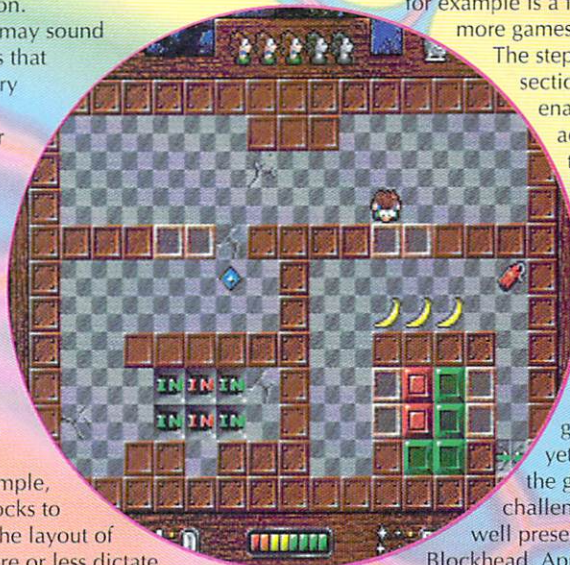
And this one is even harder

whether the action you take will help or hinder future moves.

The game includes a couple of novel and very welcome features. The tutorial section for example is a feature I wish more games incorporated.

The step by step tutorial section for Blockhead enables you to get acquainted with the controls, features and powerups included in the game.

This looks like being a very promising release. The concept of the game is simple yet engaging, the gameplay challenging and well presented. With Blockhead, Applause has come up with a challenger to the Binary Emotions slick and polished puzzlers.



Use your dynamite to blow up walls on this level



Many bananas

AMIGA Snippets

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This month try doing a drop shadow or two – Neil Mohr shows you how



Cliff and his drop shadows

If you have been following what is admittedly, a fairly basic tutorial, you should at least now be familiar with all Photogenics' most regularly used parts: Drawing tools, alpha channel and composite function. This month we are going to pull all these elements together and actually do something useful – add a drop shadow.

This is a fairly simple technique, but drop shadows are used absolutely everywhere. In magazines – there are more than likely a few in this very magazine. On Web sites – drop shadows are almost compulsory, the Amiga Computing site is no exception and they also turn up on television. The reason being they help emphasise an element by making it literally jump off the page or screen, adding a sense of depth.

For this example we will be using the spaceman tutorial image, which luckily already has an alpha clip outline ready for us to use, which is handy. This alpha image will act as the basis for the shadow and will also allow us to prepare the spaceman image as well as tidying up the final product.

After you have loaded the spaceman image and its alpha clip, the first thing to do is touch up the alpha image so it is ready for use. The main changes are whitening out the rest of the planet and adding the detail for the spaceman's foot. The best way is to use the rectangle tool to white out most of the earth, then switch to either

the polygon or freehand tool and clean up the left over bits.

For the fine detail on the foot, paint on the original image covering the spaceman's feet and then select the alpha as the actual alpha channel, you can slowly add or remove the black area until you have a good match to the original. To tidy up the final shadow use the blur draw tool to anti-alias the new foot section you have added.

Once all that is out of the way you can get on with creating the parts of the final image. The first step is to get the spaceman separated from the rest of the picture. As we have the alpha channel ready to go, just fill the spaceman image with black and fix these changes, leaving a spaceman suspended in blackness.

Before making the shadow for the spaceman, create a clone of the existing alpha channel which will be used later. To create a proper shadow effect perform a gaussian blur on the entire alpha image – it's best to use the gaussian blur option from the image menu. Set it to about six and sit back and twiddle your thumbs or better still go make a cup of tea – for some reason Photogenics' gaussian blur is about as fast as a snail on Mogadon.

Now we have our shadow image and main spaceman image ready to be composed together. Select the spaceman picture as the secondary image and make the shadow image that is currently the alpha, the primary image.

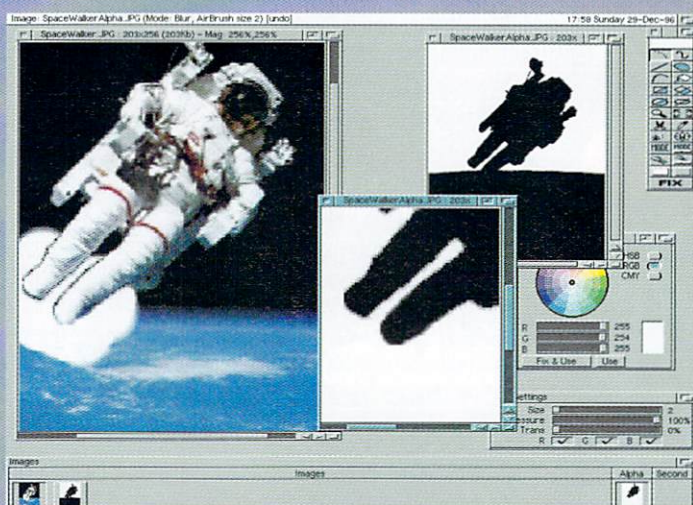
Remember you can use the one, two and three keys as shortcuts. Select the shadow image and press the right Amiga and k keys to start the composition.

Make sure the transparent black tick box is set and you should see your spaceman appear over your shadow. To increase the effect you need to offset the spaceman image slightly. Entering minus five into both the x and y offset text boxes should position the spaceman correctly.

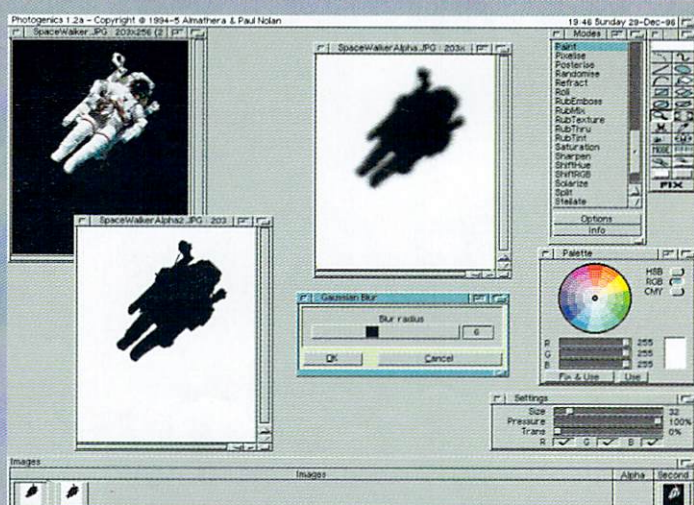
Before you press the OK button take a careful look at the top left parts of the spaceman, a bit jaggy is it not? We are not going to stand for any botch jobs, no sir're definitely not. Click on cancel and we shall turn our attention to the copy of the original alpha channel we made. Select it as the alpha channel, go back to the shadow image and go to the composite requester making sure both the transparent black and compose alpha tick boxes are selected.

All that should be visible now is an odd outline of the spaceman over the shadow (this is because the alpha is negative of what we need). From the alpha menu use the invert alpha option to invert the alpha channel and Bob's your uncle – a much cleaner looking version of what we had before. As the compose alpha option is ticked it is moved and scaled right along with the secondary image, so allowing a gentle blending into the background colour to be applied.

PIFF, PAFF, PUFF INSTANT SHADOW



First step is to get hold of all the images you need to put the drop shadow together. Next, touch up the alpha image by cutting out the rest of the earth



Once you have what will be shadow image, make a copy of it, as the spare alpha. You can then cut out the spaceman image and run a gaussian blur over the shadow

YOU'RE CHEATING YOU ARE

As you may have noticed, I used the spaceman's alpha clip image as the basis for the drop shadow. You may well be thinking that normally this is not the case and you would have to create the outline for your drop shadow yourself – you're right. Thankfully, using Photogenics handy array of tools, this is not quite as hard a job as it may first appear.

As you may have noticed, we are laying the original image on top of the shadow we have created – actually this is very similar to how it is done in Photoshop. Depending on what original image you are using you can go about creating the drop shadow in a number of ways.

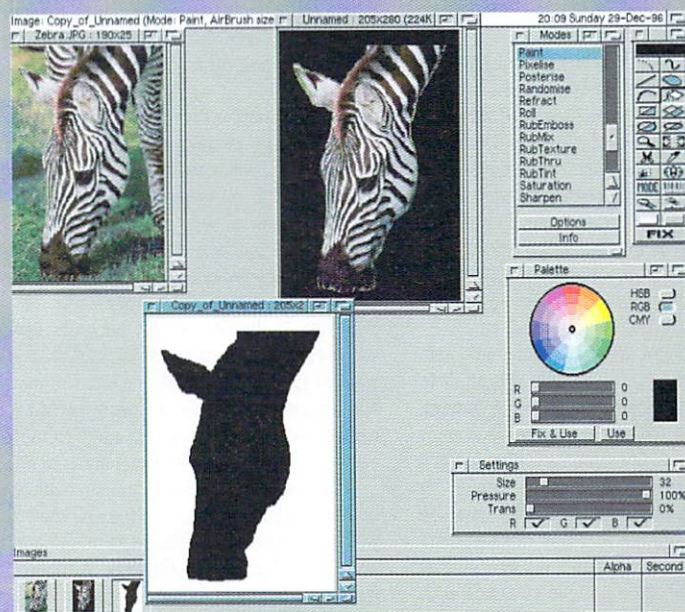
The most straight forward is if you are adding shadow to text. You may get a little confused by the way Photogenics handles text as it seems little construed, but using the text loader (found in the loaders window) using the prefs button you can alter the type of font and size you wish to use, then select load and type the text you wish to appear.

Unfortunately Photogenics does not seem to give you any control over the colour the text appears in, but worry not, we will manage just fine. Once you have the text loaded, clone the image and make one of the clones negative – this one will obviously be your shadow. Select the other as the secondary image and composite the images and voila, instant text with shadow. If you want to colour the original text, use the tint paint mode to alter the original white text while you are still composing the two images.

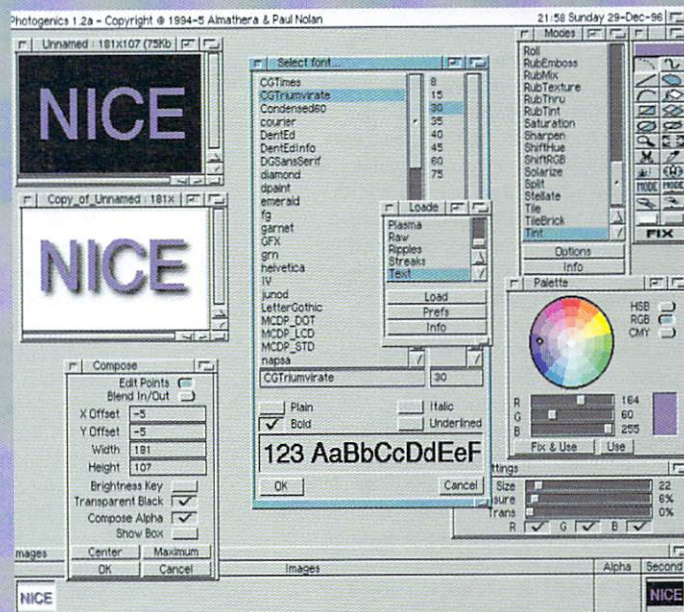
If however, you are working with just part of a photograph, a little more work is required. Take the zebra tutorial image as the basis for creating a shadow for an image. Select the free hand cut tool, by selecting the cut option twice, and cut around the part of the zebra's head you want to cast a shadow for. You may also want to expand the window size to get a more accurate cut.

Once you have marked out the zebra's head, it will appear in a separate window with just the head you want to add a drop shadow to. You can now discard the original image. Create a clone of the zebra head and use the add space image menu to add 10 pixels around each side of the head. Using the fill tool add white to all this and fix these changes.

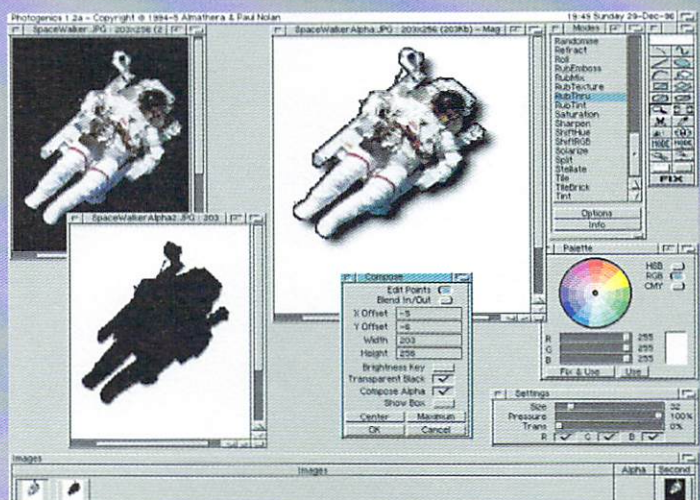
Fill this white area with black and (here is the clever bit) select invert paint layer from the paint layer menu and you will have an instant zebra's head shadow. To create the drop shadow all you need do is blur the shadow, select the original zebra image as the secondary one and composite away.



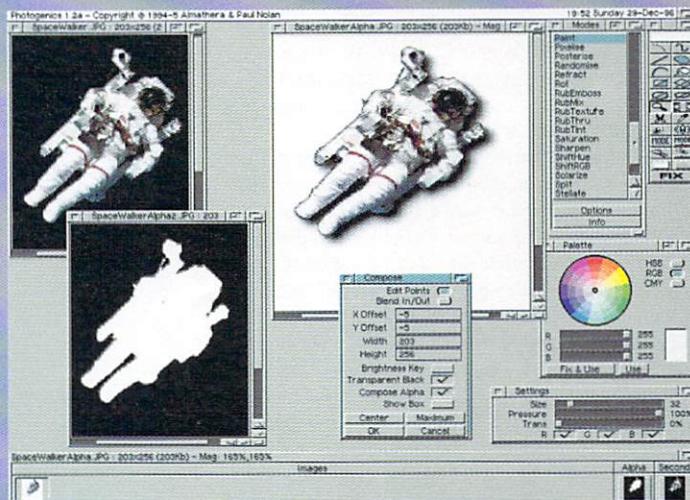
Making use of Photogenics free hand cut tool and then the inverse paint layer, you can have both the main image, shadow and alpha clip in four simple stages



Once you know how, adding shadows to text in Photogenics is dead simple

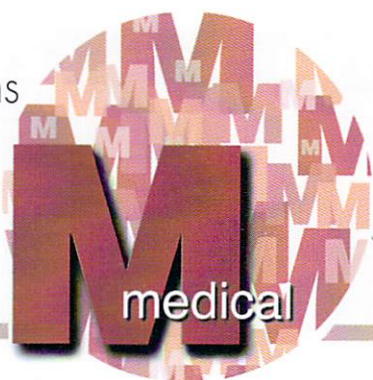


Make the spaceman image the secondary one and using the composite function, lay the spaceman over the shadow – set the x/y off-sets to around minus five



With the first attempt the spaceman had a jagged edge to it, using the alpha compose mode allows you to blend the edges into the background making the final image look much better

Neil Mohr explains
how to use
wildcards with
the Amiga's Shell



Real wild child

Continuing my little delve into the Amiga Shell, I think it's about time we had a talk about wildcards. Even in their simplest form wildcards give a way of dealing with a large number of files, in either manipulating selections of files or using wildcards to ignore other selections.

A simple example would be to type into a Shell: **dir #?**, in return you will get a straight forward directory listing. Nothing stunning in that, but you have just unwittingly used a wildcard, and probably one of the most commonly used ones. What you have actually told the Shell to do is give you a directory listing of everything in the current directory. It just so happens that typing **dir** will do the same thing, but that's beside the point.

Wildcards allow you to tell the Shell to match all the filenames in a directory against a file pattern you have given it. This file pattern is made up partly of wildcards and partly of a normal filename. The simplest example expanding on the first one would be **dir l#?**. Here you have told the Shell to list every file that starts with **l**.

The wildcard **#?** literally means anything and where the Shell encounters it, it will match anything to it. So if I were to ask you to find all the words beginning with **C** and ending in **G** you could ask the computer the same with the

following **C#?G**.

If I also wanted words that had an **i** in the middle you could do this with **C#i#?G**. To put this in more computer oriented context; if you want to specify just the icon files in a directory then you would use **#?.info** to do so, or for Jpegs you could use **#?.jpg**.

Things start to get a little more complex when other wildcards are introduced. Two that are of most use are the NOT and OR wildcards represented by the **~** and **|** symbols. This helps you lump together wildcard definitions. So if you wanted to perform some operation on all the GIF and Jpeg files this would do the trick: **(#?.gif|#?.jpg)**. The brackets tell the Shell what the pattern is and the bar tells it that files matching either wildcard will do. So any file ending with **.GIF** or **.JPG** will be used.

The little squiggle symbol, called a tilde, represents a Boolean not, or tells the Shell to ignore files that match following file pattern. This is useful in ASL file requesters that allow patterns entered to filter the file listing. To get it to ignore all the icon files you can enter **~(#?.info)** and all the icon files will be removed from the file list. This can be useful when using a specific program – if you save all your files off with the same file extension such as **.wv** for Wordworth by using **#?.wv** in the file pattern gadget only Wordworth files will

be shown.

You should be aware that the hash and question mark wildcards are actually two separate wildcards that when used together just happen to match any characters. The question mark will match any single character in a name. So **A?C** will match any occurrence of **A** and **C** with any other character in-between them.

The hash mark is slightly more complex as it will match zero or more occurrences of a pattern. So **A#BC** will match **A** and along with any number of **B**'s in-between them. So **AC**, **ABC** and **ABBBBC** are all valid matches. As you have already seen brackets or parenthesis can be used to enclose wildcard definitions and allow you to show AmigaDOS exactly which set of characters it should use, this becomes handy when you need to show AmigaDOS that you want to specify a group of characters to match and not just a single one. So using **A#(BC)** you can tell AmigaDOS that you want to match every **A** that is followed by any number of **BC**'s.

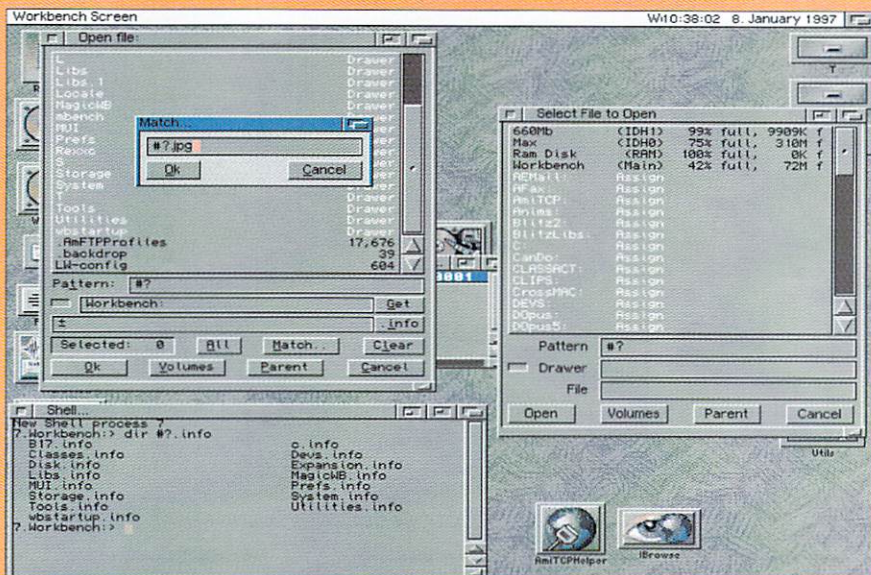
A final wildcard and one you probably will not have to use very much in the null character which is represented with a percent sign and is just a way of giving the computer a chance to ignore a match. So **A(B|%)C** will match both **ABC** and just **AC** as you have given the null option.

PATH FINDER

You have more than likely come across the situation where you have typed a command or program name into the Shell and it has returned with unknown command, but you know full well that it is on your hard drive. This happens because the Amiga's operating system maintains a list of directories which it will search for commands when using either the Workbench or Shell.

The standard search path is set up in the startup sequence and you can check what this is by typing **PATH** into a Shell and it will display a list of all the directories that will be searched. If you want to add further directories you can either add them to the list in the startup sequence or you could add another path line in the user-startup, and at the end of list of extra directories put the command **ADD**. This tells the path command that you want to add these extra directories to the current list and to replace it.

When using the shell you can add extra directories at any time and the current Shell will use the new path list. You should be aware only that Shell will use it and the Workbench search path will also stay unaffected. If you want to update the Workbench path list you need to type **LoadWB NEWPATH** and the Workbench will inherit the new path.



The latest ASL requester gives you everything ReqTools does including the handy pattern requester, wildcards crop up quite a lot when dealing with files

Phil South looks at plotting and drawing functions in AMOS



Plots Thicken

The fun part about being your friendly local AMOS columnist is that I have absolutely no idea of your level of understanding on AMOS. This is both a blessing and a curse. Do you want machine code widgets or do you want basic code generation? Do you want graphics or procedures? My answer is to put a wide range of things into the column and let them find their own level. From the mail I receive via post and the Internet, this approach seems to be working, as almost everyone gets what they want eventually, and as long as it's entertaining you don't seem to mind what goes on.

AMOS is one of those things which is all things to all men. Some view it as a means of putting ideas into action, others see it as personal development, a way to stretch themselves. Either approach is worthwhile and I'm sure you'll enjoy the bits and bobs I've got lined up for the next few months. In the meantime, thanks for all your mail – let's get going with this months AMOS curiosity.

TOP OF THE PLOTS

Something a lot of beginners ask me about is how to make marks on the screen such as lines, dots, squares etc. The reason I get asked this has something to do with the old Amiga Basic, as this was the only kind of graphics you could produce. I like to call it Etch a Sketch graphics, as it is based on lines and dots and boxes, just like the old two knob drawing toy.

It's easy. The first instruction you should look at is PLOT. This is the easiest command of all and simply places a dot, in the currently selected ink colour, on the screen, like so:

```
Ink 9 : Plot 30,56
```

This places a dot of colour 9, 30 pixels along the screen and 56 pixels down. There is a easy way to specify the colour, if you want it different from the Ink colour:

```
Plot 30,56,9
```

This is a useful command if you want to create a starfield in your game, like in the old classic Galaxians (which may or may not be a bit before your time...) like so:

```
Cls : Curs Off
```

```
Do
```

```
Plot Rnd(319),Rnd(255), Rnd(15)
```

```
Loop
```



Going dotty...

This fills the screen with multicoloured dots. If you don't want those of colour 3 to flash, add the command:

```
Flash Off
```

Okay, that's dots, what about lines? We do this in pretty much the same way:

```
Draw 30,56 To 150,200
```

This draws a line from the first point mentioned to the last. Simple enough. You can change the look of the line by adjusting the line style:

```
Cls : Ink 2
Set Line SFDFD
Box 50,100 To 150,140
Set Line X1100110011001100
Box 60,110 To 160,160
```

The line style is set using the SET LINE command and this allows you to set the variation of the pixels in the line. This is a nice and very underused feature, so write something that uses it, eh?

The final bunch of features are the box and circle commands. To make a box, like the one we just saw in the SET LINE program, we have to set the top left and bottom right corners of the box. So:

```
Box 10,10 To 30,30
```

makes a box 20 by 20 starting at 10,10 and

ending at 30,30. The circle command is similar again, but this time you set the centre of the circle and the radius (the distance from the middle to the outside of the circle, for those of you who fell asleep in maths). So you can do this:

```
Circle 100,100,50
```

Allied to this is the POLYLINE command, which draws multiple lines. This is like drawing a line with the DRAW command, only you keep going, so:

```
Polyline 10,10 To 20,30 To 60,30 To 58,10 To 200,100
```

and so on. You can build up quite complicated pictures like this, but it would take a bit of graph paper and a lot of sweat to make a human face.

There was a program once, I can't even remember if I printed it, but it took a drawing you made with the mouse and turned it into the code you would need to draw it from polylines! If anyone can find this program I'd be grateful if they would e-mail it to me.

That's enough for now, I'll move on into more complicated graphics next time, until then Happy Amos!

WRITE STUFF

If you have any other AMOS programs or queries about AMOS, please write to the usual address, which is: Phil South, Amos Column, Amiga Computing, Media House, Adlington Park, Macclesfield, SK10 4NP. Or you can send e-mail to me on phil@webscape.co.uk, or via my home page on <http://www.webscape.co.uk/phil/>.

Please send routines on an Amiga disk with notes on how the program works on paper, not as text files on the disk. Make the routines short enough to appear in print, i.e. no more than about 30-40 lines of code. If possible make them use no external graphics, if they can't be used without them, be sure to provide them on the disk in native IFF format, the same goes for sound files.

Larry Hickmott discusses the merits of turning your ideas into reality



DTP Dilemmas

Every month in Amiga Computing, we show you just how versatile this great machine we use is. One of the most popular past-times is desktop publishing and in this issue I will cover using graphics in desktop publishing. The reason for this discussion is simple – most of you will use graphics on a page to get across a message, either on its own or in conjunction with text.

The important point to remember about using graphics to convey a message is that in creating the image (the message carrier), your aim must be to use the best tools to allow you to turn your idea into reality. Forget any preconceived notions about what is the best graphics format and what is the best application.

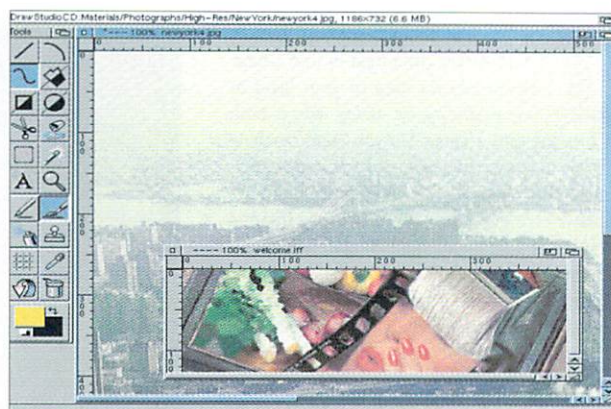
Go into the graphics creation part of the exercise and think hard about what tool will let you turn an idea for an image into something on the screen. If a graphics format is going to prevent you creating certain imagery, look at other graphic formats that will let you create the picture you require. Don't accept second best.

This thought process is paramount in image creation. When creating an image (or page), you need to work backwards. You should know or have a vague idea of what you want the final image to look like. This vision may be something you have created in your head or an image (or part thereof) you have seen already. Try dissecting the image and look at how you think different bits can be created. Make a note of what tool is required and create a schedule for the creation of the different bits.

While working on a recent project, I took an idea from someone else's advert and applied it to an image of my own. This required certain images from a bitmap application such as Art Effect and then the creation of the final image in DrawStudio.

One of the effects was to have a relief looking background with the shadow of other objects raised above it. The shadow had to be transpar-

Tools on the Amiga for creating eye catching graphics are becoming more advanced and the only graphics format that can handle such imagery is bitmap. Making changes to bitmap pictures however, can be a chore



ent. I could have done that in DPaint, which supports transparency, but I wanted to have the luxury of being able to edit the image at any stage, make changes and so on which I did in DrawStudio.

I chose to do this for a particular reason. As I said, the shadows belonging to objects had to be transparent to let the background show through and to give the image depth. Without the transparent shadow the image appears false because we know in reality that shadows hold details of what lies under them.



This type of image is now old hat and if you want your pages to have an air of imagination about them, you'll need to use more advanced programs that let you be more creative

Lets now apply this logic to graphics formats. I could be pig headed and work by the rule that structured graphic formats give the best printed result, print more quickly or whatever. But that would be silly because for one, bitmaps can print just as well and secondly, with current structured formats like ProClips and Illustrator 88, it would stop me having my transparent shadows and prevent me having bitmap filled objects and structured elements in the one file.

Consequently, the image would lose all its impact because I failed to make sure that the message the image is to convey is carried through, while also making sure the graphic format chosen is suitable.

Experience from 18 years in the business has taught me I don't need to rely on structured formats for smooth output. The only graphics formats that will let you express your imagination fully are bitmapped ones, because invariably structured ones have a drawback or three. Normally, I'd like to back that statement up with facts, but that will have to wait because I don't have the space.

Just remember, there are no best formats or tools, just tools and formats appropriate to your ideas and ideas are what makes you special.

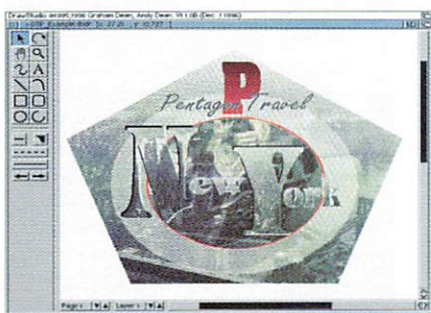
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There is an old wives tale that says structured graphics print better than bitmapped ones. Not so. Bitmapped pictures will print as smooth as a structured one as long as you remember this:

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paper and your printer is 300 dpi, create the image four inches wide and scale it down to one inch in your publishing program.

If the image is full colour and is to be one inch on paper, create it about an inch and half on screen and make sure you use anti aliasing so text and so on print smoothly. There are of course exceptions and what I would recommend you experiment and get a feeling for what works and what doesn't. In this game, there is no substitute for experience.



When creating an image, think hard about which application you should use to create it with and which format should be used for saving the finished work to disk

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Epson LQ100	4.10	3.95	3.75	3.55	Star LC24-10/200	2.86	2.71	2.51	2.31
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NEC Pinwriter P2200	3.03	2.88	2.68	2.48	Star LC200	9.78	9.63	9.43	9.03
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Siamese SYSTEMS

Siamese System V1.5

The Siamese System was designed to enable the computer user to have multiple platforms (Amiga WB3+, Windows 95, MacOS) appear as if they are a single machine, so as to make the user more productive. It does this by taking the two machines and a possible MacOS emulator on the Amiga and using one keyboard / mouse / monitor. Once this is setup you operate one keyboard and mouse on all of your software, look at one suitable monitor that can handle all the screen modes you wish to use and then as far as you are concerned you just run software, you need not worry if that software is Win95, MacOS or Amiga software because it just runs in front of you. Obviously this is backed up by the fact that the Siamese System has all of the drives from the different operating systems mounted within the Amiga Operating System so that you can share files instantly between applications.

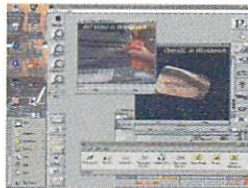
With the standard pack, file transfer is via serial, but if you have a suitable SCSI card on the Amiga and PC and a shared SCSI drive for buffering, you can send the files via a very high speed SCSI network developed for and included in the standard Siamese System software. Rates of severa; Mb/sec. have been recorded with a high speed SCSI network setup between the machines. Please note that if you have the SCSI network installed you still need the Serial connection for the Siamese control software link.

You can cut and paste text between applications and other functions are available to make the system integrated, sharing of printers, programs like Winex or MCI which allow the Amiga to launch PC applications from the Amiga or control PC Multimedia devices, even from Dopus. There is also a full Arexx port for calling Siamese functions from other programs.

One more feature to be added in March as a low cost upgrade is RTG. This system opens Amiga screens on the PC graphics card enabling from 256 up to 16M colours, higher resolutions and a flicker free display for all Amigas with WB3+.

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Siamese System V1.5 voted Hardware Product of 1996 by Amiga User International



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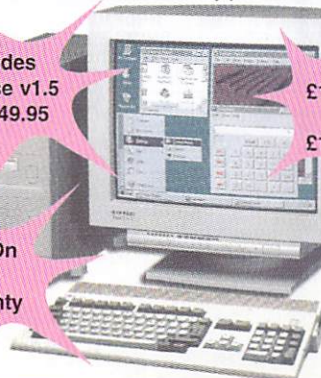
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Dave Cusick
searches for
an impressive
Web browser



Surfing with the enemy

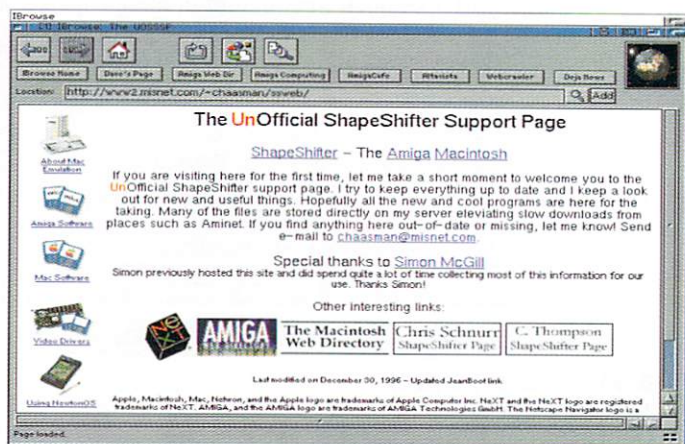
Although both IBrowse and AWeb have come along massively in recent months, the Amiga is still trailing in the world of Web browsers. Many Web sites, particularly larger American ones, are simply not viewable on our beloved machine - and if they are, don't look anything like they would on a PC or Macintosh. The Web has been completely transformed by the extended HTML command sets used by Netscape's Navigator (or Communicator, as v4.0 seems set to be called) and lately, Microsoft's Internet Explorer.

Faced with this situation, the Amiga enthusiast has several alternatives. At one time, simply forgetting about fancy Web sites would not have been a great loss. As recently as a year ago, most commercial sites were simply colourful adverts with no meaningful content. However this situation has changed dramatically, with the Web finally beginning to fulfill its enormous potential and missing out is no longer a remotely attractive option.

The second option, to either sell up or pawn all your belongings so you can afford to buy a PC, is the most drastic and probably least attractive (although nevertheless a large number of Amiga users unfortunately seem to have followed this path). The third option is one that an increasing number of Web surfers are opting for - emulation.

Because Apple Macintosh machines are based on the same 680x0 technology as Amigas, they are the natural choice for emulation. The Mac also boasts some of the best productivity software in existence, such as Microsoft Word, Adobe Photoshop and Quark Express (all of which are used in the creation of this magazine) as well as a

**You can find out
about ShapeShifter
at one of the excel-
lent Web sites dedi-
cated to it...**



powerful version of Netscape Navigator.

Once upon a time, Macintosh emulation involved expensive hardware solutions such as the original Emplant board. These days, although a powerful Amiga is a must before you even start considering emulation seriously, there's no need for an additional investment in an expensive hardware emulator. Most people simply use ShapeShifter.

The program can be downloaded from various FTP sites and Web pages, but before it can be run there is a fairly major hurdle to overcome - you will need to obtain an image of a Macintosh ROM. The ROM image cannot be distributed because it is the copyright of Apple Computers, so technically it is illegal to make an image of a ROM unless you yourself own the ROM in question.

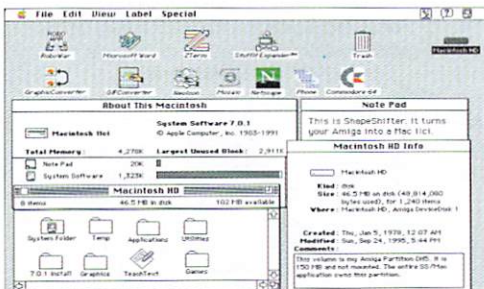
Once you have obtained a ROM image, the next step is to get hold of the Macintosh system 7 software. Unfortunately this comes on Mac high density floppies, but you'll find information about how to get around this on the second Web site listed below. Then, provided you have Workbench 2.1, plenty of memory (10mb to run Netscape) and at least an 020 inside your Amiga, ShapeShifter can be fired up. The Macintosh emulation happily multitasks, so you can run Netscape on a Macintosh screen whilst running AmFTP or other native Amiga programs at the same time.

On faster Amiga systems, ShapeShifter manages to emulate a Mac at a pretty respectable

speed. It can actually emulate Macintosh screens in 256 colours on AGA machines and 16 colours on ECS machines, but you'll be better off with a graphics card. Not only will this enable you to run software in up to 16.7 million colours, but because the Mac uses chunky pixel graphics (whereas the Amiga uses bitplane graphics), using a graphics card will make a world of difference when emulating in colour.

Again, there are patches around to try to improve speed when emulating in colour on AGA machines - check out the sites below for details and keep an eye on the misc/emu/ directory of Aminet. Of course, even if you decide to take the plunge and buy an accelerator or graphics card for emulation purposes, you'll still be spending a lot less than you would if you were to splash out on a new computer.

With ShapeShifter up and running you'll finally be able to experience Netscape Navigator. It's not perfect, but is light years ahead of any of the native Amiga browsers currently available in terms of features. You'll finally be able to view frames sites (although frames are, in my humble opinion, a pain anyway), enjoy secure on-line ordering and view extended HTML3.2 layouts including fancy tables and exact text control. Owners of super-fast Amigas might even want to experiment with RealAudio software. Having your own Mac might not change your life, but will certainly change the way you view the Web forever.



**...and you'll soon be running Mac
software on your beloved Amiga**

SHAPESHIFTER WEB PAGES

The Official ShapeShifter Page

<http://www.uni-mainz.de/~bauec002/SSMain.html>

Information about ShapeShifter

<http://www.execpc.com/~innuendo/amiga/emulators/ss.html>

Unofficial ShapeShifter Page

<http://www2.misnet.com/~chaasman/ssweb/>

Mac Emulation on the Amiga

<http://www.znet.com/~colin/text/amigatosh.html>

CONTACT

If you wish to contact me, my e-mail address is dave@dcs.demon.co.uk. Questions, suggestions and feedback are all more than welcome. I also have a homepage, which can be found at <http://www.dcs.demon.co.uk/>.

Some advice from Paul Overaa on eliminating sequencer timing problems



Sequencer Syncing!

Most musicians at some time or other will need to transfer sequences to their Amiga from an external Midi unit. This could be a drum machine, a standalone sequencer that uses 'mini' disks rather than the 3 1/2" variety or some other unit where it's not possible to use the standard approach of saving the sequence as a Midi file and loading it directly into the Amiga. In all such cases it then becomes necessary to link the external unit to your Amiga (via a Midi cable) and physically transfer the song sequences by playing them on the source machine whilst recording the output.

The one thing you shouldn't do is try and adjust the playing and recording speeds manually. No matter how careful you are in adjusting the tempo settings you are unlikely to get it right and a 120 bar source sequence might end up becoming anything between 119 and 121 bars in length. Whilst this will not affect the playback of the new sequence it will make sequence editing a nightmare because the original bar divisions present in the sequence are destroyed.

Fortunately the solution is easy. Set up the external device so it generates Midi clocks and then arrange for the sequencer doing the recording to use those clock messages rather than following its own internal timing clock. Almost all Amiga sequencers have menu options for using an external clock in this way. Some, such as Dr T's KCS, even provide controls which allow you to choose whether an explicit Midi Start message is needed to make the sequencer begin recording or whether it should start as soon as the first clock is received.

These features are not always needed but can be handy when you're dealing with an external Midi device that generates timing clocks continuously (some old drum machines had an annoying habit of doing this even when a drum pattern was not playing).

So to record from any external unit you firstly set it up so it will generate timing clocks whilst playing and then load up your sequencer program and select the external clock option. Set



Recording rhythm patterns from this Yamaha RY8 drum machine is a prime candidate for using your sequencer's external clock option

the sequencer to record, hit the start button on the external unit - you'll find the sequencer will record the sequence exactly as it was written without any bar length timing glitches in sight.

In case you're wondering how all this technical magic works here's a brief run-down on what happens beneath the surface: Midi clocks are single byte Midi messages that have the value decimal 248 (that's F8 hex). When you set a sequencer to its external clock option the internal timing mechanism is disabled and attention is focused purely on the incoming Midi data.

The external device will be transmitting clock bytes at the rate of 24 per quarter note and these will be received along with all the other Midi data. Whenever the sequencer reads one of these clocks it adjusts its bar position counter by 1/24th of a quarter note. By the time 24 have been collected the sequencer will know that one bar of data has been received.

When you record data in this way the absolute tempo of the external device doesn't really matter. To double the playing speed you double the number of Midi clocks sent. Halve it and you halve the number of Midi clocks. Either way the sequencer will be able to recognise each bar of music as it arrives and if, for example, you play exactly 120 bars of a sequence - you will end up recording exactly 120 bars regardless of tempo.

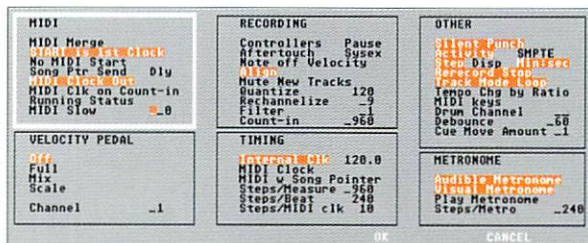
These type of external clock based Midi links

LINKING TWO AMIGAS

also come in useful on other occasions. You might come across a collection of songs recorded with an old sequencer which didn't provide options for exporting sequences as Midi files. To move those songs across to a more modern sequencer you just need to borrow another Amiga and link the two machines together using a Midi connecting lead (and two Midi interfaces).

Once you've linked the source and destination machines together and loaded the respective sequencer programs, do pretty much the same thing as before: Set the sequencer that is going to play the song sequences to its internal clock option, making sure that it is also set to generate timing clock messages at the same time. Then set the sequencer being used for recording to its external clock option and start it recording.

Nothing will actually happen until the source sequencer is started. This is because the recording sequencer will be waiting for those all important Midi clocks and these will not appear until the sequencer being used to play the song is actually started. When you do hit the source sequencer's start button however, everything should fall into place. The destination (recording end) sequencer will then record and store a copy of the original song material bar for bar.



Dr T's KCS sequencer can either wait for real Midi 'start' messages or starting recording on the first received Midi clock

Looking for an easy way to organise backup operations? Paul Overaa shows you how



ARexx's AmigaDOS Connection

On many platforms, including the PC, REXX (the language upon which ARexx is based) is used primarily as a macro language for system house-keeping operations. Moving and renaming sets of files, batch editing of text files, performing standardised backup operations and so on.

This system-oriented use is perfectly understandable on these other platforms since the operating system is, to a large extent, the only other 'process' that can be communicated with. ARexx of course, has no such restrictions and in this sense Amiga users are extremely fortunate.

ARexx's ability to communicate easily with other programs does tend to result however, in the potentially useful batch processing links with AmigaDOS, often taking a back seat. Now this is clearly a shame because for these types of applications, ARexx is far more powerful than AmigaDOS's own scripting language and you need look no further than the rather neglected area of data backup to realise the possibilities.

Whilst data safety is obviously the primary concern, the objective of any type of backup arrangements ought really to be to get some sort of system going which makes routine data backup as easy as possible. It is, after all, a well known fact that procedures which are awkward tend not to get followed.

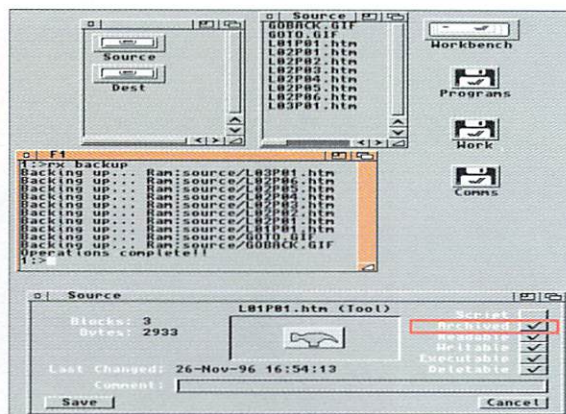
Fortunately for most users, backing up a complete high-capacity hard disk on a regular basis is almost never necessary. For example, programs themselves, once backup copies of the master disks have been made, do not need further regular backing up. The unwritten rule with data files of course is that you back up files only as frequently as they change.

The key to success is organisation. Make sure you have appropriate directory structures and/or hard disk partitioning (ie the creation of a number of different logical drives). One big help is to make sure you keep data files separate from the applications programs which create and use them.

Within this highest level division of programs versus data, the next most useful hierarchy criteria is the required file backup frequency. If, for example, an order file is backed up once a day, it is worth keeping that data in a directory (or hard disk partition) that contains only those files that need to be backed up with this frequency.

AN AREXX EXAMPLE

Once you have a workable backup plan available ARexx can, in most cases, completely eliminate the need for using dedicated backup utilities. Let's say, for instance, you're interested in automating the backup of a directory called 'daily' that exists on a partition called Work. In short you want to copy, to floppy disk, any files present in that directory whose contents have changed since the



With a little organisation, plus some help from ARexx, almost all backup operations can become a piece of cake!

drawer was last backed up.

The trick here is to adopt the same method as used by most archiving utilities. Whenever a file is backed up the archive bit of the source file gets set. If, when the next backup is performed, that bit is still set the file hasn't changed and does not need recopying to your backup disk.

As far as doing this type of thing via ARexx is concerned the important first step is identifying the names of the files present in the chosen source directory. ARexx's address command can be used in conjunction with AmigaDOS's LIST command to generate just such a list.

One approach is to set up a couple of constant definitions to point to the source directory and to a temporary file for storing the list command output. The files, nodates and nohead switches inci-

dentally can be used on the LIST command line to ensure that only the file names, size and protection flags values are sent to the output file. ARexx code such as...

```
BACKUP_SOURCE='work:daily/'
TEMP='Ram:t/temp'
address command 'list' BACKUP_SOURCE 'to' TEMP
'files
'nodates nohead'
```

therefore ends up generating a temporary file consisting of text lines whose general format is...

By reading these lines and splitting them into individual name, size and protection flag values using the ARexx PARSE instruction it's then easy enough to check each flag set to see whether the archive bit is clear or not. Any file whose archive bit is not set represents a file that has been altered since the last backup, so all we need to do is copy all such files to the destination backup directory - resetting the archive bits of each source file as we do so.

Now your individual requirements for backup are doubtless going to be different from mine but the example shown in listing 1 should give a reasonable starting point for creating your own backup scripts. In this case it's the general ideas that are the important thing - so the thing to do is to set up some dummy source/destination directories on your own system (modifying the script's directory references to suit) and then experiment. Once you see how these archive bit arrangements work you should then be easily able to incorporate similar ideas into your own backup arrangements!

```
/* backup.rexx */
TEMP='Ram:t/temp'
BACKUP_SOURCE='Work:daily/'
BACKUP_DEST='df0:daily'
ARCHIVE_BIT='a'

address command 'list' BACKUP_SOURCE 'to' TEMP 'files nodates nohead'
if Open(fh,TEMP,'r') then
do
do while ~EOF(fh)
Line=Readln(fh)
if Length(Line)>0 then
do
parse var Line file date flags
if Pos(ARCHIVE_BIT,flags)=0 then
do
file=BACKUP_SOURCE||file
say 'Backing up...' file
address command 'copy >NIL:' file 'to' BACKUP_DEST
address command 'protect >NIL:' file '+a add'
end
end
end
call Close(fh)
address command 'delete >NIL:' TEMP
say 'Operations complete!'
end
```

Listing 1: A typical archive bit based ARexx backing up script. Notice how the >NIL: statement is used to discard output from the copy, protect and delete commands!

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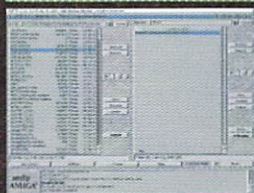
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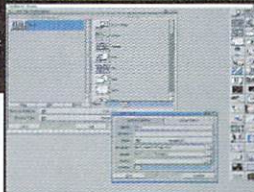
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Paul Overaa
starts work on
a date
stamping utility



StampOnIt!

Over the next two months I'm going to turn the skeleton code provided on the February coverdisk (or on our Web site) into a utility that will run in Workbench that can extract date stamps (in ASCII form) from all files in a given directory. There are plenty of uses for such a program but the one I have in mind is one which will allow easy date stamping of Web pages.

If, for example, you check out my corner of Amiga Computing's Web site you will see all pages have a last updated date stamp in them. These dates are in fact generated automatically by a utility currently written in C, but I thought a directly coded 680x0 version might be useful for the purposes of this column because, once you've seen the ideas involved, you'll realise that the same framework can be used to create many other utilities.

The starting point for the discussions is the DirHandler() routine whose main job at the moment (if we disregard the temporary print/clear name operations) is to copy the selected directory name from the asl requester. Copying is usually done so a selected filename can be added to a directory to produce a complete path for the file.

For our current application however, being only interested in drawer names, we can eliminate the copying and use the asl requester's own directory buffer. This approach involves some minor changes in that the text pointers of the IntuiText structures cannot now be defined using the original static dirname reference.

Instead we install the pointers at run time (after the internal asl buffers have been allocated). The new method, which you'll find in my AllocFileReq() routine, is to load a0 with the asl requester base and load a1 with each IntuiText base in turn to copy the pointers using indirect addressing instructions like this:

```
move.l fr_Drawer(a0),it_iText(a1)
```

These and a few other minor alterations – such as adding an image to the display using the Intuition DrawImage() function and changing the window and menu text – will be easy enough to recognise by comparing this month's source with that from the previous issue. The real work however, involves extending the DirHandler() routine so it can search the named directory and locate any files present.

DOS OPERATIONS

Once a directory name is available the directory must be locked using the Dos library Lock() function. An FIB (File Info Block) must also be allocated using AllocDosObject() and its initial directory values set by calling Examine(). An ExNext() loop can then be used to examine all the files in the selected directory.

The easiest way to explain the relationship

```

; -----
DirHandler    move.l    d0-d5/a0-a2/a5,-(a7)    preserve registers
              lea       function_stack2,a5      for alloc/dealloc operations
              ;get/print dir name (see coverdisk source for details)
              jsr       LockDir
              beq.s     .deallocate
              jsr       AllocFib
              beq.s     .deallocate
              jsr       ExamineDir
              beq.s     .deallocate
              jsr       ExamineNext
              move.l    (a5)+,d0                retrieve function pointer
              beq.s     .exit
              move.l    d0,a0
              jsr       (a0)                    and execute routine if it exists!
              bra.s     .deallocate
              .exit     movem.l    (a7)+,d0-d5/a0-a2/a5    restore registers
              rts

; -----
LockDirUnlockDir  see coverdisk source for these routines;
; -----
AllocFib/FreeFib  see coverdisk source for these routines;
; -----
ExamineDir        see coverdisk source for this routine;
; -----
ExamineNext    move.l    fib_p,d2
              move.l    d2,a2                    copy in address reg
              .loop     move.l    dirlock_p,d1
              CALLSYS    ExNext,_DOSBase        get details of this entry
              tst.l     d0
              beq.s     .exit                    no more entries ?
              tst.l     fib_DirEntryType(a0)
              bpl       .loop                    directory - so ignore
              ;PROCESS THIS FILE
              bra.s     .loop                    check for next
              .exit     rts
; -----

```

Listing 1: Framework used for the new DirHandler() Dos operations

between the various steps involved is to refer you to the flowchart shown in figure 1. One difficulty with this set of operations is that several of the Dos function calls can fail so we need to plan for this in advance.

No excuses here - I'm adopting the same function pointer trick as is used for the main program resource allocation and deallocation. A separate function pointer stack area has been set up with each of the above mentioned steps coded as separate subroutines. Those functions that require a corresponding deallocation operation, providing they are successful, then push the address of their deallocation routine onto that stack. If you trace through the example code you will see the zero flag always gets set when an error occurs so the main control section of the routine consists of just a set of jsr and beq instructions.

Listing 1 shows the overall framework and a few words need to be said about the loop in my ExamineNext() routine. Each time the Dos library's ExNext() routine is called, details of the next file or directory entry in the locked directory will be retrieved and placed in the file info block. The convention used is that if the fib_DirEntryType field of the FIB is greater than zero, that entry is a directory. If it is less than zero, it indicates a file. In short, it is necessary to check the field and process only those ExNext() discovered entries that relate to files.

ExNext() fails, incidentally, as soon as no more entries present in the locked directory (returns a zero value in d0) and so I've used this characteristic to terminate the search loop. Of course the task now is to extend the loop so date stamps are extracted from all recognised files and this of course is exactly what we'll be doing next month. In the mean time you'll find the updated code and details of the various functions used on the coverdisk.

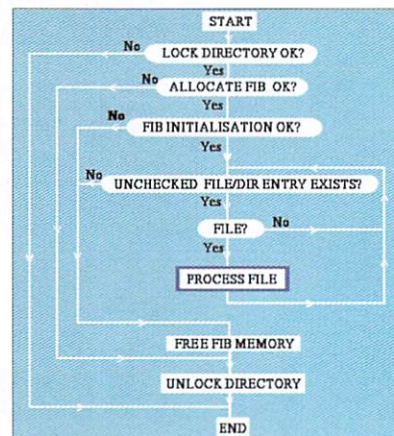


Figure 1: Flowchart description of the operations performed by the new DirHandler() routine

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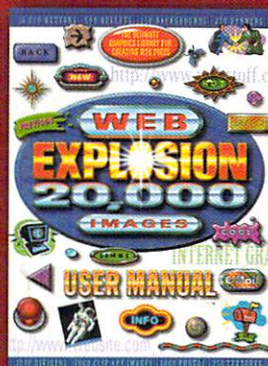
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