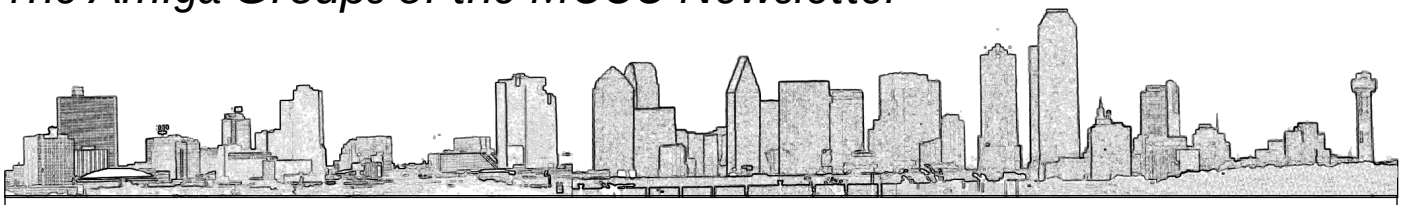
The AGM Journal

The Amiga Groups of the MCCC Newsletter



Fort Worth *Volume 15 Issue 2 — April 1997* *Dallas*

The Amiga 5050T

A Look At The New Amiga And The Siamese System That Will Drive It

by Bill Raecke

Amid all the talk of new Amigas and new operating systems that will be released that will be compatible with the Amiga operating system, there is another product soon to be released by QuikPak. It's the Amiga 5050T. Rather than being a whole new product, the Amiga 5050T represents a logical extension of existing products. The 5050T will consist of an Amiga 4000T and a Pentium based Windows machine coexisting in a single box and using a single keyboard, mouse, monitor and peripherals. What it means is that you no longer need to consider going over to the dark side just to keep your boss happy at work. It will be possible to run those PC (and Mac, via Shapeshifter) applications that you need to run and, at the same time, keep on using the more cost-effective Amiga applications you're already familiar with on the more advanced Amiga OS. What's the system going to consist of?

Amiga Features	*PC Features*
68060 50 Mhz	*Pentium processor*
1.2 Gb HDD	*ISA and PCI slots*
18MB RAM	*SCSI Bus networking*
High density FDD	
Zorro and Video slots	
SCSI Bus networking	

This isn't just smoke and mirrors — and it isn't just wishful thinking. Tying these distinctly different operating systems together is the job of another software/hardware system already available. The name of the product is The Siamese System.

Have I gotten your attention yet? I thought I might. The rest of this article will be devoted to the Siamese system itself. It's certainly a product worth considering on its own merits, although the idea of a single box holding all that power is certainly appealing. For more information, check out www.antigravity.com or the site of the product's author: www.users.dircon.co.uk/~pnolan. All this information was gathered from those sites and was written by the product author, Paul Nolan.

Main Features:

- *Integrated Amiga, PC and Mac system possible.*
- *Single Monitor automatically switches to display PC as if Amiga Screen.*
- *Single Keyboard and Mouse operation across all platforms.*
- *Built in Serial networking with all PC drives mounted on Amiga.*
- *Siamese uses high speed SCSI network with suitable SCSI interfaces.*
- *Read / Write on any PC Drive at high speed, including Networked Drive.*
- *Text Clipboard, Cut and Paste between Amiga and PC applications*
- *Full Arexx support built in.*
- *Share Printers, all Amiga output sent to PC printer.*
- *Amiga MCI controller from AmigaDos or ARexx, (Media Control Interface)*

Access to Low cost PC products:

- *16 bit Sound Card with Wave Synth chip. MJpeg Video Recording cards.*
- *PC Ethernet Cards.*
- *Use Cheap PC SVGA monitor with AGA Amigas*

Plus Optional extras:

- *Sharing of PC Modems.*
- *MJpeg based, SVHS Animation software.*
- *TCP/IP networking support.*
- *Stand alone High Speed Siamese Win95 Pentium Box -*

What the Press have to say!

- *CU Amiga's Matt Bettison, Aug'96. "I never expected the Siamese to pull off PC and Amiga integration to this*

degree." "I consider this to be the most revolutionary product of the year for the Amiga." CU Rating 93%

• Larry Hickmott from EM Issue 11. "the Siamese system has not only helped to make things much more efficient around here, it is also bringing different types of computers together" EM Rating 90%

• David Taylor (prototype preview) March '96. "Now you can have the best of both worlds, using each machine for the areas they excel in. This is the beauty of two independant machines working together."

Introduction

The idea behind the Siamese System is to transparently integrate a PC with an Amiga, and in so doing, give the Amiga access to some of the cool things modern day PCs can do (that the Amiga would do if it weren't for horrific mismanagement). For example, modern, cheap, "multimedia" PCs have many features found only in highly expanded big box Amiga's (if at all), such as 24bit high resolution graphics cards (often with 3d acceleration), software/hardware mpeg players, 16bit sound playback and recording, and of course "Industry Standard" software. So why not take advantage of the PC? The Siamese System does more than take advantage, it practically rapes the PC.

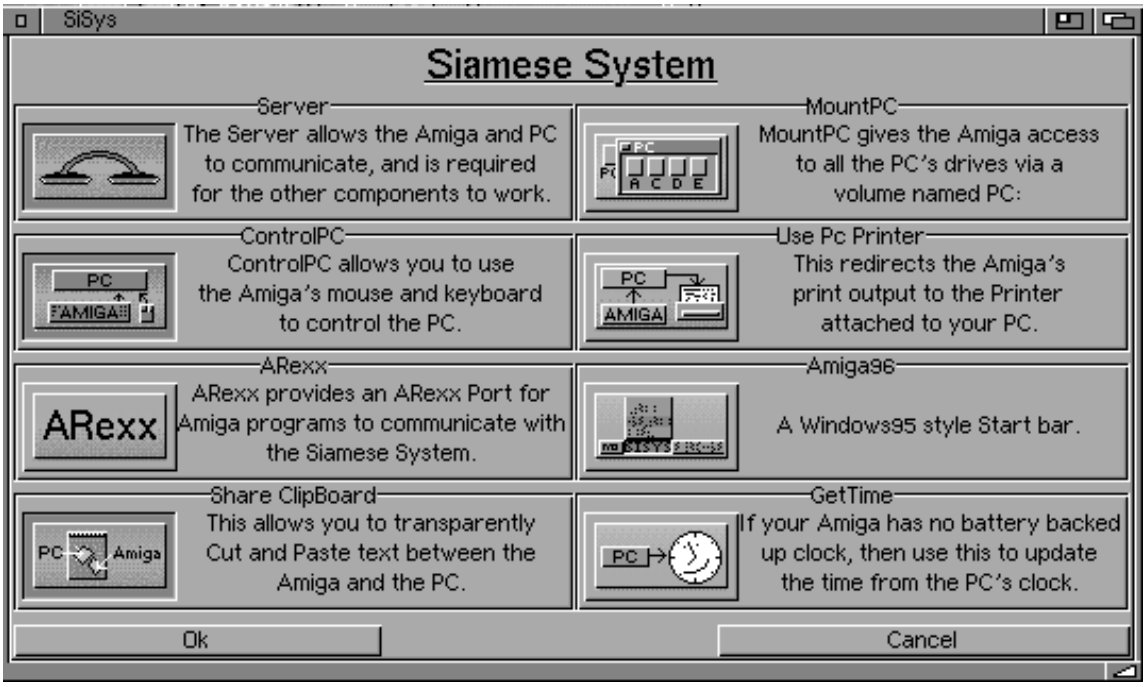
So what exactly is the Siamese System? It consists of a Server running on each machine, with software modules you can choose to activate. The Amiga and PC communucate via a serial lead, which is looped through the Electronic Software Controlled Display Switcher. The switcher is an ISA card that slots into your PC, and allows you to flick between the Amiga and the PC's video output at the press of a hotkey, or the press of a button, or via an ARexx command... (you get the idea).

So what does it do?

The most obvious thing it does is allow you to use one keyboard, one mouse, and one monitor, to control both computers (you choose whether you want to use the Amiga or PC mouse/keyboard, or you can continue to use both if you want). You flick between computers as easily as flicking between Amiga screens, using a hotkey "left-amiga-c", or "f12" on the PCs keyboard. An Amiga depth gadget also appears on your Windows StartBar Tray. Pressing that goes to the Amiga, and you can also use the included Amiga96 StartBar program to put a button on your WorkBench to flick back to the PC.

But that's just scratching the surface. One of the software modules you can run is called MountPC. This mounts a pseudo disk on the Amiga, called PC:. Inside this disk are directories for each drive you have on the PC. For example, you could type "ed pc:c/autoexec.bat"to edit your PC's autoexec file using an Amiga text editor. Or you could render your LightWave scene using your fast PentiumPro 200 (or soon your 533mhz DEC Alpha), and edit the output images on the Amiga (say with Photogenics for example), or use them with the Toaster. Maybe you don't own a CD-ROM drive for your Amiga. Using MountPC you have access to ALL PC drives, including CD-ROMS and networked drives! We successfully installed LightWave Amiga from the PC internal 10x CD-ROM drive.

By default MountPC uses whatever cable you have between your Amiga/PC (usually a Serial lead, soon Parallel though) to transfer files. You can get 10 to 12kb per second this way. However, using SCSI-Networking, you



can acheive transfer rates of several megabytes per second. You have a SCSI controller in your PC, linked to a (shared) drive, which is linked to the SCSI controller in the Amiga. Now both computers can see the drive in the middle of the SCSI chain. So if you wanted to copy a 10meg file from the PC's C: drive to Work: on the Amiga, you would copy the file from pc:c/ to Work: as normal, but this time the file wouldn't be sent via the Serial lead, but would be copied to the shared drive. Once on the shared drive, the Amiga can then see the file (this is thanks to CrossDOS6 Pro, included with the Siamese pack), and so copies it to its final destination, Work:. It may sound long winded, but you achieve speeds up to 30 to 50% the speed of the shared drive, which will be many many times faster than going via serial. Using a very old, 1meg per second shared drive, I achieve rates that are faster than ethernet. Using a more modern drive, you can get up to 10 times that speed.

But there's more to the Siamese System than that. What if you want to move some text between the two computers? Normally you`d save the text clip to a floppy disk, put the floppy in the other computer, and load it into whatever program you are using. Yuk. With the Siamese Systems ShareClipBoard module, you just cut the text from one computer and paste it into the other. Do you have a printer? Well, let both computers use it with UsePCPrinter, which redirects print output on the Amiga to the PC. Does your Amiga1200 have no real time clock? Use GetTime to set your Amiga's date and time from the PC's battery backed up clock.

For the slightly more advanced user, the Siamese System comes with 2 Amiga CLI commands. WinExe <filename> launches the given filename as if you had double clicked it on the Windows desktop (even if the file is on the Amiga). You can use this to launch Quake from the WorkBench, or start your PC paint program with a file on the Amiga's hard drive (or anywhere else for that matter). For ease of use, you can use the supplied Amiga96 StartBar to call winexe from a popup menu item.

The MCI command works in a similar way. MCI is the Windows Multimedia Control Interface. You can use it to display pictures, view movies, play 16bit wave files etc. You can even set up a "View on PC" button in DOpus. Want to see what your rendered images look like in 24bit? No problem. Obviously the Siamese System also has an ARexx Port so these commands can be used in ARexx scripts, and integrated with other software.

Siamese RTG

Currently in Beta Testing is version 2 of the Siamese System — Siamese RTG. It's a sad fact that even cheap PC Graphics cards outperform even the best Amiga cards. So in true Siamese System fashion, why not take advantage of that? RTG lets you open up your Amiga screens on your Windows desktop, at high resolution, high colour, and no flicker (assuming your PC's graphic card and monitor can handle it).

But isn't sending all the graphics data via the serial port really slow? Well, depends. If you are blitting huge images on screen with something like LightWave's animation preview, it's going to be slow. But for general use, i.e. things like the WorkBench, it feels as fast, if not faster, than using an Amiga graphics card. In 256 colours, it's certainly many times faster than the AGA chip set! Windows move instantly (in real time using readily available PD utilities), and gadgets are drawn at lightning speed. In fact, running at 115200 baud, Siamese RTG can draw lines 500 times faster than the Amiga's chipset! That even outperforms a graphics card. And there's more...

Video Playback Acceleration

As I explained earlier, transferring animations over the serial port is slow. So why not transfer the animation using MountPC, then get the PC to use its CPU to decode the animation, and get the PC's graphics card to do the hard work of displaying each frame at high speed? The result is an animation player that plays animations faster than the Amiga, but in an Amiga window!

Real Time 3D Graphics with OpenGL™

Real time 3D is a big thing these days. It seems like a new 3d card comes out every week for the PC, each better than the other. But Amiga users shouldn't feel left out. The CyberVision643D is now shipping isnt it? (er, without 3d support it is). Siamese RTG today (15th Jan 97) proved the feasability of controlling OpenGL™ from the Amiga. Heck, my PC doesnt even have a 3D card in it, my Pentium100 was doing all the hard work.

Future Versions

So what's next? Siamese RTG will be released soon. Its launch will hopefully coincide with the release of a version of the Siamese System that can make use of the greater bandwidth of the parallel port. This will be an awesome combination.

But what about after that? Well a very special Siamese System was present at the Toronto AmigaFest. That wasn't Windows95 the PC was running, it was WindowsNT4.0. And that wasn't Intel inside, that was a 433mhz DEC Alpha. And please stop bugging me for modem sharing, it's on my todo list, and will be done between the other things.

Everyone knows that only open systems can truly succeed. Siamese System 1.5 was open ended on the Amiga side, now this is being extended to the PC side as well. The new system will allow developers to write modules that execute on the PC, but are controlled by the Amiga, and vice versa. For instance, you could have a speed critical routine running native on whatever CPU your PC has (eg 200mhz Pentium or 500mhz DEC Alpha AXP for example), in parallel with code running on the Amiga. UPDATE: This is now in the Alpha stage, I`m just finalising the API. AGM

phase 5 News

The A\Box Operating System Strategy by phase 5 Digital Products

In the current situation of the Amiga, one of the biggest questions asked by many users is "What is the future of the Amiga OS?"

As within our A\BOX project we follow the goal to build an innovative computer system which, in our opinion, can be a dignant successor of the Amiga, we are very much affected by this question, as the AmigaOS is an important part of the Amiga Computer, and we will be asked to offer the next generation Amiga OS if we want to offer the next generation Amiga by many users.

Before we discuss the OS question, we need to reinforce that while we do believe that the AmigaOS is an important part of the Amiga, we don't believe that the OS is it all that makes the Amiga. Many opinions commenting to this issue in the public discussions — mostly from SW people — argued that way. As a matter of fact, there is a significantly larger number of persons who understand (more or less) the software issues than persons who understand the hardware, just as there are many more software designers — professionals, semiprofessionals and hobbyists — than hardware designers out there. It's understandable that SW designers often don't want to deal with the hardware itself and prefer to develop hardware independent (how does that work?). However, as a matter of fact it is still (and will continue to be) the hardware on which every software is running on. Any software — OS or application — can always only reveal as much performance as the hardware can offer, it actually can't make hardware faster. It is a myth created by software people — who sometimes obviously don't understand the hardware — that hardware would make no difference or is unrelevant. Just as an example: If a grahics controller can display any image in the main memory at any position of the screen just by changing a pointer, this is always significantly faster than if the image data must be copied into the right place of the display memory, and will save much more resources than the leanest OS may do. Software developer who don't understand this — especially in respect of the A\BOX hardware concepts — obviously don't see how significant innovation in hardware can be.

With this being said, we want to take a look on the operation system issue. It is obvious that an operation system has a major influence on the appearance of a system in general. Today, an operating system must offer a multitude of advanced features combined with high-speed execution, while it should be safe and proven to provide a stable system. Of course, beside a fast response the user also expects a friendly and modern interface, with all the comfort that she/he needs to work effciently. Especially the Amiga user has expectations on the fast and flexible multitasking. However, most of these expectations do not depend so much on HOW things are done within the OS — as long as they are done in a way that provides powerful and efficient functionality.

Looking on these issue more deeply, we can — very roughly — define 3 levels of interest inside an OS: the OS core, which is like Amiga Exec providing the basic OS functionality, the system service/device level and the high-level/GUI-level functions. The OS core must provide the functionality which is expected today from a modern OS; the system service/device level includes all the functionalities like drivers for e.g. SCSI, networking, ISDN, I/O in general, the file system, audio and graphic device drivers, and similar stuff. On the high-level/GUI-level most of the appearance (or look-and-feel) of the system is defined. As a matter of fact, for most users and also many developers it is not of interest how the OS core and the device level work, as long as it works fast and reliable; the look-and-feel is nearly completely defined by the high-level functionality, which mostly consist of replacable applications — such as e.g. the Workbench on the Amiga.

Under consideration of these aspects, and after a long time of evaluation and discussion about the possibilities and options we have finally decided to use a modern UNIX kernel as the operating system core for the A\BOX. We believe that this is the best choice available, as this solution provides a most flexible, reliable and proven way to supply a powerful OS with an Amiga like, but updated and enhanced look-and-feel. As a matter of fact, the Amiga Exec has always been quite similar to UNIX in some of it's basic functionalities, although it was missing some of it's major features like Memory Protection or Virtual Memory. On the other hand, in earlier UNIX kernels the support for e.g. shared libraries and reloadable devices was missing... what made these UNIX versions large, resource-hungry and sluggish — the reason why UNIX was considered to be the dinosaur of the operating systems quite often.

Merging the best of both worlds and using the latest software development techniques like object-oriented system add-ons will lead to a powerful operating system fullfilling all the requirements of future computing.

What will this mean for the A\BOX and for its relation to the AMIGA? First of all, we will have a OS core with the following features:

- *Fast preemptive Multitasking*
- *Full multiprocessing support*
- *Multiuser support with all necessary services*
- *Memory Protection, a feature that is demanded by most developers*

• Virtual Memory support
• Loadable Devices, a extension of the original UNIX functionality
• Shared Libraries which make the OS use much less resources and make it significantly faster

With these functionalities, tested and prooven by large numbers of installations worldwide, and some optimizing on the fast PowerPC CPU, the OS core will be a very efficient and extremely fast OS core that provides similar functionality to an Amiga Exec and important features beyond it.

Around this OS core, a large quantity of system service software will provided, which comes from the Unix world and is long time prooven, such as:
• SCSI drivers and Ethernet hardware drivers
• TCP/IP service and networking protocols
• ISDN drivers and services
• Graphics Device drivers
• Audio Device drivers
• All kind of I/O drivers for various purposes

On this level, once again it does not make a major difference how the things work. The implementation of software on this level may or may not be similar to the implementation on the Amiga. For the user as well as for the SW developer it's simply important that a similar and reliable functionality is provided, and that's what this level will do. As far as drivers have to support new functionality of the A\BOX that hasn't been available on any hardware before, the functionality of these drivers will have to be new and different also.

On the higher-level OS functionality, we work on a system design that is similar to the Amiga in respect of the ease of use, as well as the look-and-feel. Many of the high-level functionality of the AmigaOS, which basically consists of application programs running on top of the OS core and the device level, can be implemeted in a modern and updated way. A device-oriented file system representation will be available, as well as software components similar to commodities, datatypes or Rexx. An Amiga-similar CLI will also be provided. With a comprehensive set of utilities and functionalities, software development for this OS will be easy and comfortable. Software that will run on PowerUp cards and support CyberGraphX V3 will be running on this OS with high performance, and a Virtual Amiga Machine will be able to execute even original Amiga 68k binaries fast and safely embedded into the system.

The A\BOX will come with a preinstalled system and a lot of tools that will make it as easy to use as the Amiga today. There won't be the need, for example, to recompile or link the OS kernel and it's drivers/devices in order to install updates or changes; also it won't be necessary to spend major efforts configuring the system. Of course, the user is free to reconfigure the system to his likes, or go into the depths of the OS.

During late summer 1997, we plan to start alpha and beta releases of the A\BOX OS for developers running on our PowerUp accelerators. With this solution, developers can start to prepare their existing software for the A\BOX. The A\BOX alpha and beta OS release will be available for a small fee for the CD and possible documentation cost to all developers; free update support will be available via our FTP site.

We also will release hardware functionalities of the A\BOX custom chip CAIPIRINHA as a spin-off on a graphic card add-on for the CYBERSTORM PPC later this year (unfortunately not for free); this graphic card will have a stand-alone version of our DLRP Display List Risc Processor which can read random image data from the main memory via DMA and write it to a WRAM-based frame buffer. With this board and the supporting driver, developers can start to experiment with the superior functionality of this design, although performance is limited compared to the original A\BOX design (but will be, however, VERY competitive to existing graphics cards from the PC market).

Why didn't we commit to pOS from ProDAD? After the massive marketing campaign by ProDAD for their upcoming pOS, many users have asked us to use their pOS as the A\BOX operating system, and some have critizized in harsh words that we are not planning to do it. As a matter of fact, we have yet not seen pOS running on 68k machines except at a presentation at Amiga 96, and we haven't seen it running at all on a PowerPC machine. An operating system, however cannot be evaluated from looking on a nicely designed GUI; it must be evaluated running completely independent from any proprietary features or OS code of the Amiga itself, showing multitasking and multiprocessor support, as well as all the necessary support for graphics, sound, drivers for SCSI, ethernet, ISDN, other devices and anything else that counts.

We have spent a lot of money and efforts (and will spend even more) into our current developments, and we need to make sure that we have a working OS solution that fullfills all the demands of future computing. As we had announced earlier, we do have a fully AmigaOS 3.1 Exec running, and had other OS-compatible functionalities under development. However, a next generation OS needs significant enhancements, so we can't see that an OS which is extremely close to the AmigaOS 3.x can fullfill the demands. That's also valid for pOS; therefore we won't use or support pOS unless we can be convinced that it is a true, working and complete alternative. It must also be taken into consideration that other companies — like, for example, Be — needed many years of work and lots of manpower and money to build a complete OS — and some even say that BeOS is not so complete yet, at least in respect of system services and applications, tools and driver support — which leads us to doubt whether pOS can be

Continued on page 7

Zip Drive Usage

Mountlists and Rigid Disk Blocks Compared

by Dean Adams, GEnie (dean.a@genie.com)

Hard drives such as the ZIP drive can be accessed from the Amiga in two ways: 1) Format it and treat it as a regular hard drive, including using the RDB (Rigid Disk Block) parameters, or 2) create a mountlist file and mount it that way. This article by Dean Adams discusses the benefits of taking the mountlist approach. ...Editor.

RE: Using a Mountlist or DEVS:DOSDrivers file for Zip disks. It's pretty straightforward, but the problem is it's a lot easier to begin with this method than it is to change after you have already written RDBs to some of your Zip disks. Changing means starting over with all of your Zip disks. The only way to remove any trace of the RDB is to do a low-level format. If the RDB is still present, you run the risk of corrupting some disks, unless the RDB parameters are the same as the Mountlist or DOSDrivers file.

The proper mountlist parameters are shown below, (but these are not the only ones which will work):

```
ZIP:
    Device = omniscsi.device
    Unit = 5
    Flags = 0x0
    Surfaces = 2
    BlockSize = 512
    BlocksPerTrack = 34
    Reserved = 2
    Interleave = 0
    LowCyl = 0
    HighCyl = 2889
    PreAlloc = 0
    Buffers = 20
    BufMemType = 5
    DOSType = 0x444f5301
    MaxTransfer = 130560
    Mask = 0xffffffff
    Mount = 1
    BootPri = -128
#
```

Edit "Device" in accordance with the SCSI device name used on your system (scsi.device, etc.). Edit "Unit" in accordance with the position of the "SCSI ID" switch on the back of the Zip drive (5 or 6). Edit "Mask" in accordance with the setting presently used with the hard drives already installed on the system.

Add the above to DEVS:Mountlist, or save it as DEVS:Mountlist, if there isn't a Mountlist in DEVS: already. Or, save it as DEVS:DOSDrivers/ZIP (without the "ZIP:" at the beginning and the "#" at the end). If it is saved as DEVS:DOSDrivers/ZIP, adding a project icon for the file is optional. Set the default tool to Mount.

If a Mountlist is used rather than a DEVS:DOSDrivers file, then the command "Mount > NIL: ZIP:" must be added to the S:user-startup. You are, of course, free to use a device name other than "ZIP".

During bootup, most controllers will encounter a delay when they find a SCSI device that does not contain a disk. They sort of sit there, waiting for you to insert one. If you also have a CD-ROM drive, then you are out of luck. An empty CD-ROM drive is going to cause a delay anyway, so the best bet is to place a disk in both the CD-ROM drive and the Zip drive in order to avoid delay. Otherwise, read on.

This problem may be avoided by using RDPrep [by MicroBotics] to set the HiDrive flag in the Rigid Disk Block of the hard drive that has the highest SCSI ID. This will work so long as none of the hard drives have a SCSI ID = 6. In other words, so long as the Zip's SCSI ID is higher than that for any hard drive. Start RDPrep and select the hard drive with the highest SCSI ID. Select the "Read RDB" gadget. You should get a notice "Rigid Disk Block read successfully". Select "Go to Complex Mode." If the "HiDrive" setting is not set to "Yes" then click on the gadget. Then click on the "Write RDB" gadget.

NOTE: Only the hard drive with the highest SCSI ID should have its HiDrive flag set to yes. The HiDrive setting tells the SCSI host to not bother with scanning the buss for more eligible devices during bootup.

While you have RDPrep running, you should take the opportunity to check the Reselect setting for each hard drive. Always select the "Read RDB" gadget after selecting a hard drive. If Reselect is set to "Yes", change it to "No" and save (write) the RDB. If Reselect is ON (Yes) for any drive, it will most likely lead to problems with a Zip drive.

[CUCUG Editor's Note: Here's what one of RDPrep's Help Screen's says about Reselection: A SCSI option of use only when more than one computer is tied into the same SCSI bus. When your computer sends a command to a drive (eg: Read a block), the drive normally ties up the SCSI bus until that command is completed. When Reselection is enabled, the drive may tell the Host Adaptor to wait and then get off the SCSI bus; freeing it up so a second Host Adaptor could talk to another device. When the drive is ready, it re-selects the original Host Adaptor and finishes the command. We recommend you leave Reselection OFF as the extra operations needed to get off the bus and then back on again will slow down your system access time.]

If you already have some Zip disks with a RDB, the RDB should be removed. This can be done only with a low-level format, so be sure that anything important on the

disk is already saved elsewhere. RDPrep can't do a low-level format, so you'll need HDToolBox for this step.

Start HDToolBox and select the proper SCSI ID and unit number (usually 0). If you can't find the Zip disk on the device list, then it probably doesn't have a RDB. Click on the Low-level Format gadget. When the low-level format is complete, do not, under any circumstances, select "Save Changes to Drive." If you do, you will write another RDB to the disk. Now, you can re-boot or open a shell and type "Mount ZIP:" (without the quotes). If you had any Zip disks with RDBs written to them, then, you should definitely reboot. Insert a Zip disk which does not have an RDB on it. Format it with the AmigaDOS Format utility (SYS:System/Format) and you are done. Adding or changing Zip disks is now as simple as buying a new floppy disk. No RDBs or HDToolBox, RDPrep, ExpertPrep, etc. Just pop the new disk in the drive and format it.

Why go this route? There are many advantages. You are guaranteed compatibility when transporting Zip disks from one Amiga to another. All you need is the Mountlist or DEVS:DOSDrivers file normally used with the disk. While there is a limited degree of compatibility between different controllers, the success rate falls short of terrific. This is complicated by the fact that everyone's RDBs are likely to have different parameters, even if they are compatible. And, if the parameters are different, you can say goodbye to any data on the disk if you make any attempt to write to the disk without taking proper precautions.

Here's the problem. John takes his Zip disk over to Jane's Amiga. They both use RDBs on their Zip disks and they both use the device name "ZIP." But they use different parameters (BlocksPerTrack, DOSType, etc.). The OS only reads the RDB ONCE for any given device. This is why some people have noticed that they don't need to write a Rigid Disk Block to every disk. Only the first disk to be inserted requires a Rigid Disk Block.

So, Jane inserts one of her Zip disks and it works fine. Then she removes it and inserts one of John's Zip disks. The system reads the RDB and says "ah, this is just another ZIP: disk and I already have those parameters." But the parameters AREN'T the same. The OS is only fooled into thinking they are. And when an attempt is made to write something to any of John's disks, adios data. ALL the data.

The solution? John brings a copy of his Mountlist or DEVS:DOSDrivers/ZIP file with him on a floppy. When he wants to use one of his disks, he opens a shell and types "Assign ZIP: dismount" followed by "Mount ZIP: FROM (John's DOSDrivers/ZIP file)." Reverse the process to use Jane's disks again. If they both use Mountlists or DOSDrivers files with the same parameters then it's completely transparent and there's nothing to worry about. The following parameters MUST be the same: Flags, Surfaces, BlockSize, BlocksPerTrack, Reserved, Interleave, LowCyl, HighCyl, PreAlloc and DOSType. Obviously, parameters like Device and Unit will vary with the system.

The bottom line is that it makes a lot more sense to store data of this nature in one central location than to place it on every disk. Rigid Disk Blocks were never meant to be used on removable media. Can you imagine what a pain it would be if everyone used the equivalent of a Rigid Disk Block on all their floppies? The variety of RDBs would be a nightmare.

[Editor's Note: I thought this was an interesting article because it raises a lot of questions. But I couldn't disagree more with the solution! Look at the statement above that states that Flags, Surfaces, Blocksize, BlocksPerTrack, etc. MUST be the same. Is that likely? And it is further complicated by the fact that the hard drive controller and device number will almost certainly be different. That means that your mountlist has to be modified when you get it to your friend's house. It's obviously NOT the simple solution that the author indicates.

A MUCH better solution is to keep a Rigid Disk Block on each disk. Then you can overcome ALL the problems with a simple program you can get from the MCCC library called "SCSIMounter." Every time you put another disk in the drive, you simply fire up "SCSIMounter" and re-mount your ZIP drive. The system then reads the information from the RDB of the disk that is in the drive and everything will work correctly. All old information is flushed from memory. It won't matter at all if the drives have been formatted the same and you won't have to worry at all about different controllers, device numbers and the like. Attach "SCSIMounter" to a ToolManager Dock or a Tools Daemon menu and the whole operation becomes totally painless — without resorting to a shell at all...Bill Raecke] AGM

A\Box OS — from page 5

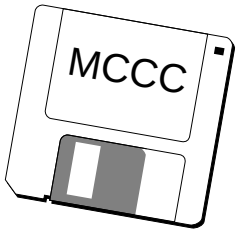
completed, updated, expanded and maintained in a way that would be expected from it.

We are not, as some assumed, going to prevent ProDAD from porting pOS to any of our hardware; we simply won't support it — especially in its alpha state — but offer and support our own solutions. We can't commit to pOS as the OS solution for our PowerUp accelerators — as ProDAD wanted us to do — and later consequently for the A\BOX. What would automatically happen once we commit to pOS on the PowerUp boards and leave software developers only this choice; this would mean that the success of our hardware project A\BOX would fully depend on external software/OS work by a third party — a scenario very benefical to pOS, but very difficult for us in case pOS cannot meet the expectations it has created.

If, in the future, pOS is fully operational, provides all functionality of a modern OS, gets sufficient support from software developers, and can be ported to the A\BOX in a way that it can make use of its advanced hardware, we would probably welcome pOS as an alternative OS. AGM

Library News

The Best of The BBS — On Disk
by Bill Raecke



MCCC-A_1228

CLICon: It's a replacement for the IconX command that comes with the AmigaOS. IconX, for those who aren't familiar with it, is a program that executes a script from an icon. CLICon is better because it allows you to embed the script that needs to be run into the icon itself. This means there's one less file to keep up with on disk. IconJ did the same thing back in 1990, of course – and it still works just fine – but if this is a new concept to you, check this out. It can make your life easier.

CyberUpdate2.22: Just one of three updates this month to the CyberGraphX software package. All three updates are included because the updates don't all modify the same programs. You need to get all the updates and install them in sequence. CyberGraphX, for those who may not know, is THE software package to use with any graphics card. It supports CyberGraphX, Retina, Picasso, and all the other major players. It has become the standard. No matter which graphics card you wind up purchasing, save another few dollars for the CyberGraphX package.

Useless_mwb_4: I guess it may be useless, but I thought enough of it to add it to the month's collection. It's a collection of brushes done in Magic Workbench colors designed to be used as Workbench, Screen or Windows backgrounds on your Workbench. It's a very nice collection.

MCCC-A_1230

ToolManager: ToolManager is one of those utilities that simply everyone ought to be running. It adds items to your Workbench TOOLS menu and gives you the capability to add AppIcons, docks and sounds to your Workbench. All this really ought to be built into the system, of course, but in the meantime you can do it yourself with this package. ToolManager has been around for a number of years. This is release 3.0. There is some debate as to whether this version is better than previous versions... some things have been added – others have been removed. One thing that is a definite improvement is the new MUI-based configuration program. Anyway, if you don't have ToolManager installed on your system, time to get with it. If you do have it, check out the upgrade.

MiamiSpeedMeter: It's pretty much what the name implies. Run this program and it will give to an up-to-the-second account of the transfer rates that Miami is handling, both incoming and outgoing. (Miami, of course is the way you should be hooking your computer up to the internet. Look for the upgrade elsewhere in this month's disks.)

NewZIPMount: Just a collection of mountlists for ZIP drives. Gives you access to cartridges formatted for the PC or the MAC.

MCCC-A_1230

MUI_3.8: Simply the latest version of MUI. Provides new capabilities that IBrowse and other MUI-based programs are already taking advantage of. Time to get upgraded. It's distributed here in archived format due to floppy space limitations.

MCCC-A_1231

IBrowse_1.1: I've tested all the web browsers. To my mind, there is no question – IBrowse is the best. This is the 1.1 update that, among other improvements, provides the first support for frames on the Amiga platform. This is not a demo version. It is an update for registered owners of the product. If you don't already own IBrowse, this disk won't help you. If you do own IBrowse, you definitely need this update. Two versions are provided in archived format – one for 68000-based Amigas, and one for 68020 or greater.

MCC_HTMLtext: MCC stands for MUI Custom Class. This provides HTML capability for MUI-based programs. A simple HTML reader is provided with the custom class. That means that you no longer have to fire up your browser to read a simple HTML text document that you have on disk.

MCCC-A_1232

MCC_MonthNavigator: It's a MUI Custom Class to handle calendar functions. A simple calendar program is included in the distribution. It's wise to stay current.

New8n1: This is a replacement for the standard Amiga serial.device. It's lots faster. It will allow you to transfer at higher rates using the standard serial port than you could with the standard device driver AND it will put less of a strain on your system, allowing you to do more multitasking while you are downloading or uploading. If you are using the standard serial port, get this one for sure.

MCCC-A_1233

CyberShow: CyberShow is simply the best picture viewing utility for CyberGraphX systems. It also works well on plain AGA Amigas. It will handle the major file formats internally and will use datatypes for anything else. It's fast and it provides lots of options, including slideshow capabilities with fancy wipes. This is version 8.2a. To see your pictures in color, you have to be a registered user. If you're not registered, you just get to see your pics in grey-scale. It's a program well worth the registration cost.

term_4.7c: term is the best terminal program available for the Amiga. This is a patch to take you from version 4.7

to version 4.7c. Just bug-fixes, but it probably pays to keep up to date, even if you have never seen any bugs (I haven't).

MCCC-A_1234

ChaosPro_2.13: ChaosPro is the best fractal exploration program I have found for the Amiga. The interface is clear and easy to use and you can have multiple windows actively drawing concurrently. All the fractal formats are provided for including Mandelbrot, Julia and Lyaponov. It will even save pics in 24-bit format, which gives unbelievable results. Check this one out. It's distributed here in archived format because of floppy space limitations.

ScreenClock: This is the latest version of a little utility I've been using for some time now. It provides a clock and, optionally, free memory information in the title bar of the active screen. (It's also supposed to optionally provide information on CPU utilization, but I've never managed to get this working.) The information travels from screen to screen with you so you're never without the information you need.

MCCC-A_1235

FastIPrefs4035: It's a replacement for the standard Amiga IPrefs program. This is a must for anyone running a CyberGraphX system. It provides some improvement for a standard WB 3.x setup as well. It allows me, for example, to display a 256-color picture as my Workbench background on a 32,768 color screen without messing with the picture's palette as the standard IPrefs does. On a standard (no graphics board) Amiga, FastIPrefs saves memory (and it's faster).

sun.datatype: A 3.x datatype to handle the display of graphics from a Sun Workstation.

mpegvideo_datatype: It allows you to view MPEG animations using Multiview.

targa.datatype: Allows you to view pics in the Targa format using Multiview or any other datatype aware utility.

TM30_PopMCCs: An upgrade to the Pop MUI Custom Class. This update is specifically to provide support for ToolManager 3.0.

MCCC-A_1236

MCC_TimeString: Another one of those MUI Custom Classes that you need to keep current on.

Soliton: It's been a while since a nice Solitaire game came around. This one is particularly nice to use because it's been programmed with MUI providing the interface. It works well and looks good – and it's a good way to kill some time. The only thing I miss is the ability to save game statistics and high scores.

MCCC-A_1237

CyberUpdate2.23: This is another of those CyberGraphX software updates that I mentioned earlier. You need to get all three to keep your software current.

JPEG-Pics: If you like animal pictures, here are a couple of pics worth adding to your collection. There's picture of a doe and fawn, and another picture of a baby harp seal. Check 'em out.

VersionWB: This program provides version information on the software in your system. It can be operated as any standard Intuition based program. If you don't provide the name of a program or library to be checked, a file requester is opened to prompt you. It can also be operated from a shell where the name of the file is provided on the command line. This makes it very nice for building into a directory utility such as Directory Opus. It's output in either case is provided in a nice Intuition window.

MCCC-A_1238

HBMonopoly: I'm not a big fan of the game Monopoly, but this is such a nice implementation that I had to include it here. The game board opens on the Workbench. You can have up to four players, and any of them can be either human or computer players. You can play solo against three computer opponents if you like. If you're looking for a change from Solitaire, this may be right up your alley.

CyberUpdate2.24: This is the last of the CyberGraphX software updates that I've been mentioning. Be sure to get them all.

MCCC-A_1239

akJFIF-Datatype: Time to upgrade the more important datatypes. This one is a JPEG datatype. It supports all screen resolutions, including 24-bit. On my system it's so fast that JPEG pictures come up almost as fast as IFFs. A huge improvement over the standard JPEG datatype that came with the system.

akPNG-Datatype: PNG pictures aren't all that common so far as I am aware, although you never know when you might encounter one while browsing the Internet. This datatype will prepare you for that eventuality. Like the JPEG datatype, this one is fast.

MCCC-A_1240

akSVG-Datype: This datatype handles pictures in the SuperView format. Once more, it doesn't hurt to be prepared.

Miami_1.20j: This is a complete distribution of Miami. Miami is the best way to hook up to the internet. It's fast, inexpensive, and easy to use. If you're registered, install this and you'll be set to go. Without registering, your sessions will be limited to one hour, although you can reconnect immediately after losing your connection.

WizardLibrary: It's just another of those libraries that programs keep wanting you to install. This one is required by the Prefs programs supporting the "ak..." datatypes. Get it. Install it. AGM

Meeting Notes

Amiga By-The-Loop Meeting
Johnny C. Kitchens

February turned out to be a strange month in many ways. It is usually known as a dry month with plenty of grass fires. This year we get record rain, not exactly what we need just before the usual heavy rains hit. Our meeting for the second month of the year had a similar reversal of fortunes. We usually have trouble coming up with something, for the meetings, 'till the last minute. Fortunately, it seems things come together with an interesting meeting that works. Not this time.

We got our thoughts together and came up with a rather exciting meeting, in advance. We decided to demo a good cross section of printers representing the most popular type, inkjets. It was agreed that this would be a great presentation, and to make it better the latest in printer driver technology for the Amiga would be used to make the printers perform! This was going to be a memorable meeting for sure. Then it came time for the meeting. Things started out well enough... the most people I have seen at a meeting outside the Christmas meeting. All the printers showed up well enough, but where was the computer? An unforeseen delay had occurred, keeping its owner away a little longer than desired, but he did arrive. That was a relief — 'till the next step. Installing the software began to look like a problem. Indeed it turned out to be almost impossible. We did get one printer to print with the software. Two of the other printers were coaxed into printing using built in demo modes, which gave us no real comparison. One thing for sure — we will try this again.

March, if you have not noticed, mirrors February, as far as the calendar looks. If February has 28 days, then the 28 days of March will be on the same day of the week as the February day. We hold our meetings on the second Tuesday, and it fell on the 11th for both of these months. To make them even more similar we had come up with a plan ahead of time. It was even a similar idea. We planned to test a group of printers in February, now we planned to test a group of removable media drives for March. Removable media has really taken off in a big way lately. The success of the ZIP drive has really shown that people are in need of a large capacity drive that offers the ability of a disk drive, to move data around or offer unlimited storage for a single drive. The meeting started out even better than last month, with everything showing up on time! Setup went well with everything we needed being available. Our first plan was to hook up all the drives together in a chain and proceed. SCSI is supposed to do this really well as long as you follow the rules. As we were about to discover the rules had abandoned us. After repeated tries to get our setup to work, we had to change our plans. We decided to run the drives one at a time. Even this had problems. One drive wanted to be terminated, as it should be, being at the end of a chain. The next drive refused to work when terminated. The final drive refused to work at the end of the chain at all.

At least we got to test all of the drives! Our three drives included the ZIP, JAZ, and Olympus SYS.230. The ZIP drive, the most popular on the market, represents a natural extension of floppy technology. It has 100MB capacity per disk. The JAZ drive features hard drive technology in a removable format. It has 1GB on each disk, or 1000MB. The SYS.230 uses magneto-optical technology that Olympus hopes can take some of ZIP's market. We had another minor problem — some of the tests I brought needed Magic User Interface, and the machine we used did not have it. So we were limited to two tests. SysInfo's less than perfect test, and a test where we copied the font directory from RAM to the test drive. SysInfo showed the ZIP drive and SYS.230 at about the same speed, 950K per second. The JAZ drive gave over 2MB in that test, as fast as the hard drive attached to the system, which is probably about as fast as that particular controller can go. Copying the directory was very revealing. The ZIP and JAZ drive either tied or came in within a second or so of each other. The SYS.230 is nearly twice as slow, or more. This was a shock to me since I own it. Olympus advertises it as twice as fast, and PC World had shown it to be just that in their test. Our March meeting was fun and informative. Now if we can repeat it! We will be planning our meeting on April 1st. I hope that doesn't mean something...

Picture of a Harp Seal from MCCC disk 1237

The MCCC

Statement of Purpose: The Metroplex Commodore Computer Club is a not-for-profit organization devoted to the collection and dissemination of computer knowledge, to the encouragement of computer education, and to the use of Amiga (formally Commodore) computers in the home, at school, and in business.

Legal Stuff: The MCCC is not connected with ESCOM or Amiga Technologies. Commodore and Amiga product names (Commodore, C64, C128, and Amiga) are registered trademarks of ESCOM.

Meetings and Membership: Our meetings are open to all. Family membership dues are $24 per year or $15 for six months and entitle the member to a mailed copy of the newsletter and free access to the club's extensive public domain and shareware software library. An additional $12 annual fee provides access to the MCCC multi-user Bulletin Board System.

AGM Journal

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Articles: Members are encouraged to submit articles. Articles may be submitted in virtually any Amiga-generated format. They may be uploaded to the MCCC BBS or sent via e-mail to wraecke@arlington.net, or submitted on disk.

Deadline: The deadline for submissions to the MCCC News is 7am of the fourth Saturday of each month. Payment must accompany all ad copy. Make checks payable to MCCC and mail c/o Bill Raecke, 2614 Charolais Way, Arlington, Texas 76017.

Extra Copies: Extra Copies of the MCCC News are available at $1 per copy. Orders should be forwarded with the required fee by the newsletter deadline.

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BBS Numbers

Metro	*28,800 BAUD*	*817-268-4191*
Local	*28,800 BAUD*	*817-280-9900*

Thought For The Month

Indecision is the key to flexibility

Calendar Of Events

April 1 *MCCC Board of Directors Meeting*
7:30 pm — John Malmstrom's place
437 Circleview Drive S., Hurst

April 8 *Amiga By-The-Loop Chapter*
7:30 pm
North Richland Hill Community Center
Loop 820 at Rufe Snow, N. Richland Hills

DIFFERENT LOCATION THIS MONTH

April 15 *Amiga North Dallas Chapter*
7:30 pm
Richardson Square Mall
Beltline at Plano Road, Richardson

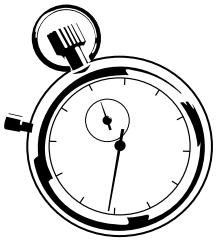
April 26 *May Newsletter Deadline*

May 6 *MCCC Board of Directors Meeting*
7:30 pm — David Owens' place
4640 Greenfern Lane, Fort Worth

Membership Watch

Memberships Expired in March

James Dunnam
Jack & Mary Hagemeyer
Robert Shepherd
Darrell Simmonds
Crystal Eikanger
Tom Ryan
Mark Siedle
Michael Turner



Memberships Expiring in April

John Burt
Thomas Dye
Gary Guy
Jo Lynn Linville
Michael Paschetag
Jack Tarvin
David Campbell
Douglas Guinn
Dennis Kovatch
Vernon Moore
Lowell Sumerlin
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