



MCCC NEWS



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Amiga: Ahead of Its Time

As most of us know by now, the Amiga just had its official thirtieth anniversary last month. Along with the animation project I'm working on (and might actually finish before the year is over), I've had some fun going through some of my earliest Amiga graphics, and posted them around a few places for the anniversary, along with this write-up for the uninitiated:

Roughly thirty years ago, the first Amiga computer system was released to the world by Commodore. It was rough around the edges in a lot of ways initially, but a stunning achievement regardless. Many people nowadays short-sell the Amiga's importance in the grand scheme of computer things, perhaps out of ignorance. It's easy when pretty much everything that made Amiga special back in the day is easily surpassed by the most modest of today's hardware now. In the mid-1980s however, it was a different story. Where Apple's Macintosh popularized graphic interfaces and ease-of-use, and IBM's PC brought the modular design philosophy that helped it rule the world through its clones, the Amiga was the first consumer-level multitasking multimedia machine. While text-only, monochrome, or basic color displays were the norm for home systems thirty years ago, the Amiga offered full color graphics in several different screen resolutions,

some approaching photographic (or at least VHS video) quality. It also had four-channel stereo sound capable of playing digital samples to go with those graphics. This power was thanks to a trio of custom co-processors, which could operate independently of the main CPU, doing the audiovisual grunt work while the system is doing other things, enabling zippy performance for full-screen animation or heavy-duty gaming (by 1980s-1990s standards at least). This was a vast expansion of the kind of multimedia power offered by earlier 8-bit systems by Commodore and Atari, and like them, the Amiga hardware was conceived to potentially double as a high-spec game console as well as a computer system. Perhaps for this reason (or just to allow users to use their own TVs instead of buying a monitor), the Amiga was good at syncing up with analog video signals, and mixing its own graphics or animation with it. Where the Apple Mac is said to have pioneered "desktop publishing," the Amiga almost single-handedly created the field of desktop video, and soon amateurs and public-access stations across the globe were using Amigas for video graphics, titles, and more. The field reached its apex with the "Video Toaster" by Newtek, a hardware and software bundle which, when combined with an Amiga 2000 and some video equipment, could do the job of video mixing gear that cost tens of thousands of dollars worth of pro video editing gear.

An even longer-enduring legacy would be the Amiga's operating system, which almost from the start offered full preemptive multitasking formerly the exclusive domain of UNIX and institutional systems, and would take close to a decade before Windows and Mac could do the same. Even with its pedigree and power, the Amiga couldn't hold back the Windows PC steamroller in the long run, and pretty much every desktop, laptop, and mobile system today has strong, fast multimedia power using video co-processors that operate independently, and preemptive multitasking operating systems. It would be foolish to say those things wouldn't have come about in consumer computer systems without the Amiga, but I like to believe it was the kick in the pants to spur the market along quicker.

Occasionally I think about what makes Amiga systems (and ones like them) special and desirable, even in this day and age when nearly everything from a high-powered desktop machine to a phone is capable of multimedia presentations and multitasking. There are still a few things out there that the Amiga did that other systems still apparently struggle with, whether by design philosophy or something else. The Amiga OS was known for having a small "footprint" in terms of memory and drive space, though that was partly because it is not as heavily featured as other operating systems that continued developing and growing for decades after Commodore went bust. Still, there is

something to be said for a system that doesn't constantly access an on-disk swap file or virtual memory, even when gigabytes are supposed to be available. I also appreciate that using most Amigas and Amiga-likes is a consistent user experience. If you hit a key or click a button on the screen, you can be reasonably sure it's going to behave the same and take the same amount of time to happen as it did the last several times you did it, and if not, you know it's something out of the ordinary. Go to another OS, and there are all these strange little pauses and delays for no obvious reason. If the system is a few years old, it's even worse as all the little files build up like dust. While a ten-year-old Amiga may not be as zippy as a new one, the difference is nowhere near as great as the performance gap between old and new (but otherwise identical) Mac or Windows or Linux machines. I suppose it's little wonder they recommend system cleanings or de-fragging or total re-installations as often as they do.

Finally—and this is more a biased than an actual shortcoming—I like that Amiga is not afraid to devote a full screen to an application, where other operating systems prefer to put windows up on the main desktop. I prefer the option of flipping through screens myself for speed and convenience. The mobile devices are the one thing that handles its apps similarly, largely because the smaller touch screens made the paradigms of Windows desktops inconvenient. (And now Microsoft needs to figure out the opposite is also true.)

While the world has mostly moved on from thirty years ago when the Amiga taught the consumer computer market how to **really** do things, I believe there is still a thing or two left for the Amiga to teach, if anyone out there is able to listen anymore.

...by Eric Schwartz
from the AmiTech Gazette
August 2015

A Look At Computing Power

As some of you may know, I worked in Information Technology for some time. When I entered the field, the most powerful computer in the world was the Cray-1 Supercomputer. Things have progressed quite a bit since then. I thought it would be interesting to compare computing power back then to what we carry in our pockets these days, so I did a little research. You'll find the results in the table below. Check it out.

...Bill Raecke



	Cray-1 Supercomputer (1975-1982)	Samsung Galaxy S6 Phone (released 2015)
Cost	\$8,860,000	\$899 (list price)
Clock-speed	80 MHz	1.5 GHz
Performance	160 MFLOPS	34.8 GFLOPS
Memory	8 MB	3 GB
Storage	2.5 GB	32 GB
Weight	5.5 Tons	4.87 Ounces

September Calendar

September 14 — Amiga-By-The-Loop Chapter
7:00 PM — Main Grand Prairie Library
901 Conover Drive, Grand Prairie

September 14 — Board of Director's Meeting
Approximately 9:00 PM — Location TBD

September 28 — Newsletter Deadline — 8:00 AM

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