



THE EDITOR'S GODZILLA

-by Lenard R. Roach

COMMVEX 2018: A PERSONAL SUCCESS

This issue, I would like to take a few lines and express how CommVEx 2018 was a personal success even though I never set foot out the four state region around Kansas City.

First of all, I must admit that I personally stink when it comes to making any major travel plans. I do tend to vacillate between this deal and that bargain, so I end up changing plans frequently. When I was married, the wife made all the accommodations and planned the route. When the boys and I were coming home from CommVEx 2015, we ran out of money by Pittsburg, Kansas. If it wasn't for Gabe getting a line of credit increase while we were at the show we would have been stopped there.

Let's get back on subject. The minute I canceled all plans for CommVEx 2018, some money flowed back into my accounts. I put the new found change to use by paying up on bills that would go overdue since I was going to use all funds for CommVEx. Now I wouldn't be charged late fees.

Gabriel was an exceptional blessing to me since I was going to stay home. For some reason he

figured he owed me for two months back rent. I was letting him and his friends stay rent free at the house until the end of July since, in May, he paid for the repairs to the power mast that fell off my house during a thunderstorm over Memorial Day weekend. I assured him that his math is off, but he still insisted that I was wrong and paid me some serious green. I was flabbergasted to say the least.

Later on that weekend, Saturday to be precise, I got a notice in the mail from the bankruptcy trustee. Fearing that something happened to my auto withdrawal set up at the bank for them, I opened the notice. Inside was a check made out to me for a little over a grand and a note explaining that my attorney's request for my abatement was accepted by the judge and this was my money back for the July payment. I was amazed and put that money quickly to work on more debt.

Focusing on Gabe again: After I opted out of the train ride to CommVEx and the subsequent shafting I got from Amtrak, Gabe was going to let us use his small truck for the trip. Since I was home, I didn't need it anymore, but his real purpose was to just give me the truck while he bought for himself a Chevrolet Spark. Therefore, I now possess (but do not own) the 2003 Nissan Frontier XE. I take care of all maintenance, insurance, and taxes, and Gabe will finish paying off the \$1,000 or so left on the loan on the truck. Due to legalities with the courts I will not take full possession of the truck for quite a while. This was a total shock to me, but I was happy to have transportation with a working air conditioner in such dastardly heat.

Still staying on the subject of the truck, my second co-traveler and I decided to have a "meeting of the minds" conference at the Texas Roadhouse restaurant in Columbia, Missouri (home of the University of Missouri Tigers) in lieu of not making it to CommVEx. The Saturday

that CommVEx was in full swing, I left Kansas City to drive the 122 miles to Columbia.

I got 33 miles out east when the Frontier had a quick drop in power and speed, and the truck wouldn't recover. Lucky for me I was coming up on the Woods Chapel Road exit off of M-291, so I glided off the highway. At the top of the exit I waited, then turned left to go back to Kansas City. The truck fought and sputtered like an old steam engine as I tried to maneuver over to exit into the closest parking lot. It took me about three minutes to make it to a Burger King lot, where I just put the truck in neutral and coasted into a parking place. I got on the cellphone immediately and called Gabriel, who knew the ins and outs of the vehicle. I told him what happened in great detail, to which he responded with a few "in field" tests I can do like rev the engine and see how high the tachometer would go at the moment. That test proved that the truck had sufficient power to continue the journey to Columbia. I opted to try and nurse it back home down back roads. Gabe insisted that it would be too dangerous and wished for me to stay put until after he got off work in an hour, then he would hot rod out to where I was and look first hand at the engine. We bantered rather heatedly over which ego would win in a vocal alpha male smackdown. Gabe conceded, but only with the stipulation that when he got off work in an hour I would call and give him my location, immediately park in a safe place, and wait for him. I agreed.

Back on the road, the truck behaved without so much as a hiccup as long as I kept speeds around 40 mph. Being a courier for a couple of companies in the last fifteen years gave me some topographical knowledge of the back roads of Kansas City. During my journey back home a thought struck me: What if this happened on my way to Vegas? I'd be on a lonely piece of highway at night with no help until the police made a pass by. I may have been saved a real suffering situation.

In short, when I got home (I beat Gabe home as a matter of fact. He was pulling up in his Spark as I was backing the Frontier into the drive), Gabe checked the error code and found the culprit to be the mass air flow. The mass air flow is the most expensive electrical component on this make and style of engine. The OEM piece would cost \$500 from the auto parts store; the knockoff version was only \$139.99. We got blessed again, for auto repair shops in our area are notorious for going with the most expensive part, tripling the value, and adding labor costs to all that. Gabe had the old MAF off and the new one on in less than five minutes. I was blessed beyond measure to have all this happen while I was local and not en route to CommVEx.

But wait! There's more ...

During this time between May and July 2018, I applied for benevolence assistance for one of my \$400 electrical bills from the church I attend. The church is pretty good about helping out those in need, but they don't just take the word of every Harry Hardluck and Sally Sobstory that walks through the rectory doors. They also don't flippantly hand out money at a whim. You have to prove you need help. In my case, I had a copy of the electric bill and my payment agreement with same. I also have the emails to all the church elders so I could plead my case over the Internet complete with documentation. It took them about three weeks to deliberate, but by early August, they agreed to assist with one month's electricity. I will be paying them back for all their help, but this was a great boost to my personal budget recovery.

However, there is still a sad note mixed in with a little poetic justice: The co-traveler that was being a whiner that I mentioned before in Part One of this expository (see the September/October 2018 issue of "The Interface") went ahead and moved unilaterally and went to Las Vegas on his own with another family

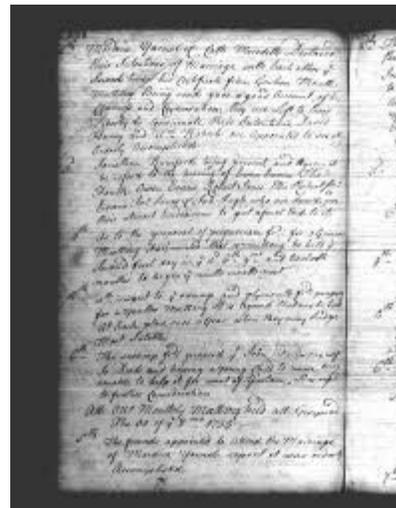
member. He specifically went to a little town 60 miles west of Vegas to see a close relative. That meant that he had the money the whole time to go out there on his own and instead chose to drain my wallet by having me believe he did not have the budget to go on his own. We rednecks, as well as a few urban dwellers I know, have a few names we call a person like that, but this is a family newsletter so I won't repeat them here, but I think "pusalatomous polecat" is about as close to an expression as I dare get.

"But justice is vindicated by her children," the Good Book says...

While on his way out to Nevada, and while traveling through the heat of the day, the air conditioning pump in the vehicle they were in failed, and they were nine hours from their destination. Even though they made it to the town, they spent half of the vacation time and \$1,390 at a mom and pop repair shop to get the air conditioning pump replaced. Again, reader, this could have been me with this person, but I was bullied by The Heavens, now revealed to be for my benefit, to stay home in Kansas City and not go to CommVEx.

Conclusion: A cake was being made from all the good and bad ingredients of these incidents. Usually, each ingredient of making a cake from scratch tastes yucky by themselves, but when all these different, yucky tasting ingredients are mixed together in a big bowl, they taste absolutely delicious.

Happy CommVEx to me ...



MONTHLY MEETING REPORT
-by Robert Bernardo & Dick Estel
November 2018

Robert arrived to the meeting first, followed by Dave, Roger, and Mike, in that order. Roger set up the club C128 system, and Robert set up his Amiga CD32 system. Mike was very interested in Robert's Sony GVM-1311Q monitor, having never seen such a NTSC/PAL CRT monitor like that one (it appeared at CommVEx, but Mike didn't go to the show). Dave showed off his new 64 Mini which he had ordered from Amazon.com, but Dave was not prepared to demonstrate the 64 Mini, saying that he would save that for a future meeting.

The waitress was fairly quick this time with the orders being taken efficiently; while the members waited for the food, the big topic of discussion was the Camp Fire in Paradise, California; the Woolsey Fire in the Malibu area, and the unhealthy/hazardous smoke covering the valley all the way through Fresno down to Bakersfield. Robert knew of a Commodore vendor who was in Paradise; he hoped that vendor had survived the fire which wiped out the town. Robert had also talked to Mario Luppi of the Southern California

Commodores & Amiga Network, the club based in Northridge. (Mario and his wife visited FCUG in 2017.) The Luppis lived in Westlake Village, a city evacuated during the Woolsey Fire, and he and his wife saw fire on the mountaintops as they were evacuated. Did their house survive? They discovered that the houses on their side of the street remained standing; the houses on the other side of street were destroyed!

As the FCUG members chowed down on their food, Robert talked about how SCCAN was going to have an exhibit table or two at the December 1 Downtown Los Angeles Maker Faire and two to three tables at the January 5-6 Retro City Festival in Pomona. Robert spoke about how FCUG has voted on donating money to a charity during the December meeting. For the last several years, it had been to the St. Jude Children's Hospital, but Robert thought that this year with the disastrous fires in California, the club should donate to aide the victims. The other members agreed with the idea.

After the meal, Robert started up the CD32, and the others concentrated on the various game discs for that machine while Robert tried to run the newly-revised 3D Kit Game on the C128. He tried but failed, because his SD2IEC card drive would not fit in the computer with the SuperCPU attached. He'd have to wait until a C64 or a differently-designed SD2IEC was brought to the meeting. However, he was able to carry on with the rest of the demonstrations without hardware difficulties.

Among the various CD32 discs, the members especially liked the cartoony and smooth-running Zool. Over on the C64 mode of the C128, they tried out the new games – Shadow Switcher (a platformer), Great Giana Sisters 30th Anniversary Preview (another platformer), Knightlore (isometric graphic adventure), Tower of Rubble 64 (a type of Bomberman), Hibernated 1-This Place Is Death (text adventure), and their favorite,

the atmospheric and gory Limbo Preview (run-and-jump). Then they went into C128 mode with the 80-column text adventure, Innuh's Pyramid. Finally, they closed out the meeting by setting up the VIC-20 and running Chinese Patience (a card game) and Morse, a program which lets the user practice Morse code by pushing the firebutton on a controller and listening to the dot and dash sounds while seeing the results on-screen. The 8K RAM-expanded version of the program ran better than the unexpanded version, but there was still some lag due to the firebutton insensitivity of the particular controller used.

December 2018

Robert had a Christmas present for the members and hopefully for many Commodore fans – there WILL be another CommVEx show! Commodore Vegas Expo v15 will take place August 10 and 11 (tentative on signing the contract) at the Plaza Hotel in downtown Vegas. Although this will be the final CommVEx, all agreed that the show has had an amazing run.

Receiving this news from Robert were Brad, Dick, and Dave. We said that this news was like having dessert before our lunch!

Robert also noted that the third annual Pacific Commodore Expo (PaCommEx) will be held in June in Seattle. And Robert is trying to coordinate a new show in May – the Commodore L.A. Super Show (CLASS) at the Santa Monica Public Library. We'll have more information about all these shows in the future.

Dave once again passed around his C64 Mini, a game machine designed to look like a quarter-size C64, which Brad and Dick had not seen before. A demo will be scheduled some time in 2019.

Dick passed around a thank-you card from St. Jude hospital, which has received our annual charitable donation for the last few years. Because

of recent devastating fires in northern and southern California, the club voted to make a donation to the Red Cross disaster relief fund this year.

It was also time for elections, with the existing slate of officers being re-elected by acclamation. They are: Robert Bernardo, president; Roger Van Pelt, vice president; Dick Estel, secretary-treasurer; and Brad Strait and Dave Smith, members of the board of trustees.

Robert reported on his participation in Mini Maker Faire in Los Angeles the previous day. Over 8,000 people came through the downtown L.A. library, with many of them checking out the Commodore and Amiga units at the table Robert manned with members of Southern California Commodore & Amiga Network.

On January 5-6 Robert will attend the 2nd annual Retro City Festival in Pomona, which focuses on arcade and pinball games. SCCAN will have three exhibit tables there.

Turning to hardware and software demonstrations, Robert set up his Amiga CD32 and we tried several programs. Some would not load, and some did not work past the menu, but Bump & Burn and Bubba 'n Stix both functioned and were well-received by the members present. More CD32 game discs were tried, and the quick-loading ones were favored. Robert remarked that there is a new board that can be installed in a CD32 console which gives a SD card solution, i.e., the programs would load more efficiently off a SD card instead of the 2X speed of the CD32 disc drive. He was not ready to buy that board yet.

Related links:

Downtown Los Angeles Mini Maker Faire -- <https://dtla.makerfaire.com>

CommVEx Discussion Group --

<https://www.commodore.ca/forum/viewforum.php?f=6>

St. Jude Hospital -- <https://www.stjude.org>

C64 Mini -- <https://www.youtube.com/watch?v=BxtDmEZt3QM>

Amiga CD32 --

https://en.wikipedia.org/wiki/Amiga_CD32

Retro City Festival -- <http://retrocityfestival.com>

Southern California Commodore and Amiga Network (SCCAN) --

<https://portcommodore.com/sccan>



Rod Gasson Passes Away

November 26 in Australia, Rod Gasson, husband of Gaelyne Gasson, passed away. The Gassons were the owners of VCSWEB.com and strong supporters of the Commodore community. Gaelyne was the owner of the Homestead Commodore mailing list and the Commodor mailing list when the University of Buffalo could no longer host it. A few years later Gaelyne turned over ownership of both mailing lists to me.

Rod made several posts on the old Homestead@vcsweb list. It was my pleasure to meet both Rod and Gaelyne when I went to Adelaide, South Australia in 2016. He was a gentleman and was kind to show me around the city. All three of us attended the Adelaide Amiga and Retro-Computing Event, too.

I was hoping to see both of them when I was to return to Australia in 2019.

Rest in peace, Rod,

Robert Bernardo



CommVEx Organizer Speaks

(The following is an interview between Paleotronic Magazine - <https://paleotronic.com> - and Robert Bernardo, organizer of the annual Commodore Vegas Expo.)

> What we're really looking for is perspective not so much on the how but the why, and the experiences of you and other organisers. And so, I have the following questions:

> Firstly, why did [you] start...

I had been attending Commodore and Amiga shows, first in the mid-1980's and then from 1997. Thus, I was familiar with what they offered in the way of exhibits and speaker presentations.

I was first contacted separately by hardware engineer Jeri Ellsworth and GEOS aficionado Bruce Thomas; they both relayed messages from the Louisville Commodore Kentucky (LUCKY) Expo organizers that there should be a Commodore show on the West Coast of the United States. Jeri was located in Oregon and Bruce in Alberta, Canada, so it was up to me to start searching for a suitable city in which to hold a show. The requirements of a city: reasonably easy transportation to the show site, nearby eating establishments and tourist activities, relatively inexpensive hotel accommodations, and a strong, local Commodore/Amiga club for support. The requirements of the venue: a venue that was free or inexpensive, a large enough room to hold 50 or more attendees, good and controllable lighting, comfortable ventilation, plenty of chairs and tables, and plenty of electrical outlets.

This was 2005, and I weighed the advantages and disadvantages of potential show cities. Fresno – the home of the Fresno Commodore User Group? Not a transportation hub. Club too small for much support. San Francisco area? No local club for support. Los Angeles? Terrible traffic. No local Commodore club. Las Vegas? A transportation hub, plenty of restaurants and touristy activities, inexpensive hotels, and a strong Commodore club and remnants of an Amiga club.

I traveled to Las Vegas and spent a few days there, visiting the Clark County Commodore Computer Club (the 5C's) of Las Vegas. Then-club president Al Jackson and his members were very receptive to the idea of a show and even offered help in the search for venues. I eventually settled for the spacious, free, public meeting room of the Nevada Power Company, and Bruce Thomas, as co-producer of CommVEx, booked a hotel near the Las Vegas Boulevard as the official accommodations.

In 2006, when I couldn't book the NPC room again because of their new rule of only having one-day events, I spent a few days in Las Vegas exploring hotels to find out what they had to offer in the form of conference rooms and accommodations. I was the sole producer of CommVEx now, and I had to decide on which hotel was the best. It turned out to be the Plaza Hotel & Casino in downtown Las Vegas, a hotel with which I was familiar because the Classic Gaming Expo was held there, and I had been a Commodore exhibitor for that show. The conference room was relatively inexpensive so that CommVEx would only charge a small attendance fee to cover the cost of that room. I was also able to reserve a block of rooms as accommodations for the attendees. Since that year, CommVEx has always been held at that hotel, except for the two years when the hotel was being rebuilt.

> ... **[why] you still do it?**

It has become a tradition. It is still great to get together, to socialize, to learn, to discuss, to experience Commodore/Amiga.

However, as the years have progressed, I see the need to get the general public involved and not just keep our computers to ourselves. I see the need to expand past CommVEx and get the word out that Commodore and Amiga are still around. Perhaps showing off Commodore and Amiga computers at the Bay Area Maker Faire gave me that idea. Hundreds and hundreds of fairegoers and their little children would pass by the Classic Computers exhibit and play with the Commodores and Amigas, remarking that they used to have one or more, that they used to program on them, that they used to develop on them, that they began their career on them. I would tell them that they could still pull the computers out of their closets, that they could still program on them, that they could still develop on them, that they could teach their children that

these computers could be a stepping stone to a career.

To get the word out that Commodore and Amiga are still around... that is why I organized the Pacific Commodore Expo NW in Seattle, Washington in 2017. PaCommEx is held at the Living Computers: Museum + Labs, and the museum and thus our show is open to the general public. In fact, attendance to this year's PaCommEx rivaled CommVEx in its best year. And as in Maker Faire, the general public had no idea that Commodore and Amiga were still viable computers.

> **What's in it for you? Not just as an organiser but also as an attendee?**

There is the satisfaction of seeing old Commodore/Amiga friends and discovering new friends. There is the satisfaction of teaching and learning old and new Commodore and Amiga hardware and software.

CommVEx has always been run as a non-profit event. Whatever money is made over and above the cost of the conference room is rolled over into the show for next year. Our Fresno Commodore User Group treasurer, Dick Estel, makes sure that the money is accounted properly. I don't even include the cost of my accommodations, my gasoline for the car, my food, or providing snacks and beverages for the attendees.

> **What challenges have you encountered organising the event?**

I've had to battle against the cost of the conference room, which has been rising lately. It has been a delicate balance; too low of an attendance fee would not cover the cost of the room; too high of a fee would drive attendees away. If there were not enough attendees, then there wouldn't be enough bidding on the CommVEx raffle prizes of hardware and

software, which another way we use to cover the room cost.

For several CommVEx years, we've had enough money to roll over into the next show. However, with the rising price of the conference room, keeping CommVEx in the black has been a challenge. At the time of CommVEx v3 or v4, at Sunday dinner, I was depressed that we were \$5 in the red. Sitting next to me, Dave Moorman, editor of Loadstar disk magazine, noticed this, asked me about it, and when I told him, he gave \$5 to cover the red ink. I felt much better... we were in the black.

In 2017 the Las Vegas C= club ended their support of CommVEx, dumping their long-time president Al Jackson and replacing him with a person who didn't like how CommVEx was run. With the loss of the those club members and their attendance, CommVEx took a big hit... in the pocketbook. Nevertheless, CommVEx continued for 2017 and 2018, and we're planning for 2019 which would be the fifteenth CommVEx.

Those financial worries are not a part of the Pacific Commodore Expo NW. We don't have to worry about an attendance fee or about raffles to cover the cost of a room. The attendance is taken by the museum, and we don't touch their monies. All we do is show up, set up our computers, and attend to the crowd. And that might be the way to go. The CommVEx financial model may no longer be viable. It might be time to partner up with other institutions and reach the public through them... something that I'm investigating for a Commodore/Amiga show in the Los Angeles area.

For example, there is a mini-Maker Faire in LA on December 1; we'll be showing off Commodore and Amiga computers there. And by we, I mean the Southern California Commodore & Amiga Network, a club that was not in existence at the time of the first CommVEx but now has grown to

support Commodore and Amiga in LA. A mini-Maker Faire would be just a taste of what a dedicated Commodore/Amiga show would be like in the area.

> What is it like trying to cater to a diverse group of attendees?

I've tried to steer CommVEx between the traditionalists and the modernists, between those who want the classic programs and hardware and those who want the latest and greatest, between those who want lots of free time on the computers and those who want presentation after presentation, between those who just want Commodore and those who just want Amiga. I think I've done that successfully, in comparison to other shows that just devote their time to the traditionalists or to the modernists, to Commodore or to Amiga. I want CommVEx to be inclusive, not exclusive.

> Do you have any notable or amusing anecdotes about your experiences running CommVEx? What memories do you particularly cherish?

Ever since the first CommVEx, we've had the support of software and hardware engineers. Hardware engineer Jeri Ellsworth was our guest at CommVEx v1 and v2; at v2 she brought us to the Rollercon skating event being held the same weekend, and there she was, wearing her roller skates. Commodore Business Machines engineers Bil Herd and Dave Haynie would send interview videos they produced that we would show at the show. Bil telephoned into the room one year, and he held an audio presentation for us; I had to hold the microphone of the a/v system next to the phone so we could hear him. Another year we had a Jeri Ellsworth, Bil Herd, and 6502 father Chuck Peddle skyping into the show. The best was when Dave Haynie attended the show in 2009, talked to us at length on both days, went out to Saturday dinner with us, and even jammed on

his guitar for us, in front of Los Angeles filmmakers who were doing a documentary. In 2012 the elusive Amiga engineer, R.J. Mical, filmed a show introduction for us. In 2013 Kent Sullivan of Dr. Evil Labs talked to us about the days his company built SID Symphony cartridges.

Another best was when Bil Herd and Leonard Tramiel came to the show in 2015. Leonard told great stories about his father, CBM head Jack Tramiel, and Bil's presentations were a wonder. 2016 brought CBM engineer Bill Seiler who talked about working on the PET and the VIC-20 and even diagnosed and repaired a PET 8032 for us, saying that it was fun. LOGO software engineer Leigh Klotz videotaped his presentation for us in 2017, and Video Toaster engineers Daniel Kaye and Kenneth Turecott did the same in 2018.

> What would you put in a highlight reel?

Hey, that would make for a good 1-minute CommVEx commercial! A significant photo from each CommVEx year zooming past the camera! Every major guest, every major piece of hardware or software, and even a quiet moment or two.

○ NEXT
ISSUE

The First Issue Of The 2019 Edition Of "The Interface" Should Be Done And At The Meeting No Later Than –

MARCH 15th, 2019



A History of the Amiga Part 12 Red vs. Blue

**Amiga was now an independent company again,
but trouble was brewing.**

(The final chapter in the Amiga saga)

by guest contributor Jeremy Reimer

The year 2000, which once seemed so impossibly futuristic, had finally arrived. Bill McEwen, president of the new Amiga Inc., celebrated with a press release telling the world why he had bought the subsidiary from Gateway Computers.

“Gateway purchased Amiga because of Patents; we purchased Amiga because of the People.” It was a bold statement, the first of many that would come from the fledgling company. Amiga Inc. now owned the name, trademark, logos, all existing inventory (there were still a few Escomera A1200s and A4000s left), the Amiga OS, and a permanent license to all Amiga-related patents. They had also inherited Jim Collas’ dream of a revolutionary new Amiga device, but none of the talent and resources that Gateway had been able to bring to bear.

“Gateway purchased Amiga because of Patents; we purchased Amiga because of the People.”

To chase this dream, Amiga Inc. would have to look elsewhere. McEwen thought he had found the answer in an obscure British technology startup. This was the Tao Group, started by Francis Charig, a UK businessman, and Chris Hinsley, a talented Atari and Amiga games programmer who wrote in assembler.

The Tao Group and Amiga Anywhere

Tao had created a product that was so innovative that few people understood what it actually was. Taos was an operating system that was coded in VP1, an advanced assembly language that used instructions for an imaginary, idealized RISC CPU. When Taos programs were loaded into memory, the system translated the VP1 opcodes into the equivalent ones for whatever CPU it happened to be running on. Taos could run on an x86, a MIPS, a PowerPC, or a transputer, and many more—or even different combinations running at the same time. Because VP1 instructions were more compact than most CPU's native opcodes, Taos programs would often load and run faster than native ones, even when you included the time it took to do the translation. Taos was a little bit like magic.

As cool as it was, Taos had a hard time finding buyers in the marketplace. So the group doubled down and added new features to make it more attractive. The people at Taos wrote a graphical user interface and support for multimedia. They wrote a Java virtual machine (JVM) so that users wouldn't have to write applications in VP1 assembler. There was little money in JVMs, but there was a market for full-fledged operating systems that ran on a tiny amount of resources, could run on different CPUs, and supported Java applications. This was the burgeoning world of personal digital assistants (PDAs). PDAs were all the rage in the late '90s and early 2000s. Not quite yet smartphones, they were pocketable devices that could keep track of your appointments, record notes, and sometimes take

pictures. Palm was the biggest player in this space, but plenty of other companies wanted in on the action.

Bill McEwen saw the opportunity to get in on the ground floor of a new market, and he licensed the full stack of Tao Group's technology. He called it the "Amiga Digital Environment" or AmigaDE, although it would be later branded as "Amiga Anywhere." McEwen even made an appearance on TechTV with Leo Laporte to demonstrate how you could take a single SD card with an Amiga Anywhere-branded 2D shooter game and run it on Windows and a whole host of incompatible PDAs with different CPU architectures. It was an impressive demo, but what it had to do with the Amiga wasn't clear exactly.

Amiga Inc. also announced a deal with Hyperion Entertainment—a company that ported older games to Linux, Macintosh, and Amiga systems—to convert its games to the AmigaDE.

The split begins

The remaining Amiga community reacted to these announcements with confusion. Amiga Inc. made a vague promise that old software would run on the AmigaDE through emulation, but this didn't provide a bridge for people with existing hardware.

To mollify the community, Amiga Inc. announced a partnership with Haage & Partner to make a new version of WarpOS that would run the AmigaDE environment. WarpOS wasn't really an OS at all, but a PowerPC library that sped up certain Amiga programs on PPC accelerator cards. It was a replacement for PowerUP, the library that shipped with Phase5's PPC accelerators. The divide between WarpOS and PowerUP had been contentious in the past, before both sides had agreed to an uneasy truce. Now, the stage was set for this old rivalry to split the Amiga community in two.

Merlancia

It was a heady time, and the dotcom mania attracted both legitimate and dubious investors. One example of the latter was Ryan Czerwinski, who claimed to be 40 years old, a Ph.D., and the president of Merlancia Industries. He arranged meetings with Amiga Inc. and even hired legendary Commodore engineer Dave Haynie to work on new Amiga PowerPC hardware. It turned out in the end that Czerwinski was a teenager living with his mother, and Merlancia was just a bunch of ideas in his head. Haynie, who was now owed \$55,000 for his consulting work, was left scarred by the experience. After the failed PIOS startup and now the Merlancia debacle, his heart was broken. He would never work on Amiga-related technologies again.

MorphOS

In October of 2000, Haage & Partner released the final version of the classic Amiga operating system, AmigaOS 3.9. In the same month, Petro Tyschtschenko announced his retirement and the closing of his office in Germany. All the old Escom A1200s and A4000s were finally gone. It was the end of an era.

Also vanishing by this point was the PowerPC accelerator company Phase 5, which had gone into bankruptcy. But some of the former employees of Phase 5 formed a new company named bPlan and partnered with a software company called Thendic. Thendic was run by Bill Buck, formerly of VIScorp, who had helped pay the salaries of Amiga Technologies employees during the Escom bankruptcy. bPlan and Thendic got to work on a dream they had been imagining since 1995—a fully PowerPC-based Amiga with a native Amiga operating system.

Some of the pieces were already there. The PowerUP library, for one, but there was also the Picasso graphics library that supported non-

Amiga display chipsets, a new file system called SFS, and other components from the open-source Amiga Replacement OS (AROS) project. All it really needed was a new microkernel, and when Ralph Schmidt wrote one called Quark, the old PowerUP system had finally morphed into a full operating system in its own right. Thus it became dubbed “MorphOS.”

Amithlon and AmigaOS XL

It could have been called AmigaOS 4.0, but those naming rights were held by Amiga Inc. Bill Buck called up Bill McEwen at Amiga Inc. to try and work out a deal. At the time, Amiga Inc. had just announced new PowerPC Amiga hardware with a company in the UK called Eyetechnology. Buck wanted to get a license for the old Amiga OS 3.1 source code to fill in the remaining bits of MorphOS and to license the AmigaOS 4.0 name. But Amiga Inc. had now announced its own version of AmigaOS 4.0, which was to be written by Haage & Partner. As of mid-2001, Buck and McEwen had still not come to an agreement.

Haage & Partner, meanwhile, had different ideas about where the future of AmigaOS should go. This turned a two-way disagreement into a three-way split and rocked the tiny Amiga community to its core.

It all started with a new emulator for classic Amiga software, written by Bernd “Bernie” Meyer and Harald Frank. This emulator used “Just-In-Time” (JIT) translation technology to speed up execution. Benchmarks showed that a 1GHz Athlon CPU could run Amiga programs (at least ones that didn’t use the old custom chips) at a speed equivalent to a 450Mhz 68040, which turned a typical PC into an Amiga 4000 that was 10 times faster than the original.

Meyer had integrated the emulator into a custom version of Linux, which would boot directly into the Amiga’s Workbench environment and even

translate Amiga OS API calls directly into their Linux equivalents. Haage & Partner was more interested in a solution that used the x86 version of QNX Neutrino as the base operating system. In typical Amiga fashion, the company chose both and shipped two CDs in the same package. The former was called Amithlon, and the latter dubbed AmigaOS XL.

The sudden existence of these two solutions stunned the Amiga community. On one hand, it was great that the community could run its old software much faster on commodity PC hardware. But these emulation solutions had no support for the PowerPC accelerator boards that many people already owned and had no potential for new features in the future. Like all emulators, they were frozen in time, preserving the past but never moving forward.

But the transitional nature of Amithlon and AmigaOS XL wasn't the biggest problem. Bernd Meyer found out that Haage & Partner had never received a license for the ROMs and operating system from Amiga Inc. Not wanting to expose himself to a lawsuit, Meyer officially withdrew his support from H&P and signed a new contract with Amiga Inc. H&P's response was to demand that Amiga Inc. transfer ownership of Amithlon or H&P would leave the Amiga market entirely. Amiga Inc. did not agree to this, and H&P made good on its threat.

In a statement, Fleecy Moss said that H&P had done "a good job" with AmigaOS during the Gateway years, but that "there can be only one captain and course to steer."

With H&P gone, the captain had no crew left to work on the operating system. The company signed a new contract with Hyperion to write AmigaOS 4.0. By this time, several things had happened, both in the world at large and with Amiga Inc. The attacks on September 11 propelled what had been a shaky dotcom market

into full-blown collapse. Investors abandoned the fledgling Amiga Inc. Bill McEwen tried to put on a good front, insisting that the company was merely "moving offices," but what was really happening was that Amiga Inc. existed now in name only. Court documents would later reveal that the company had shrunk to just Bill McEwen and Fleecy Moss, whose only income was the rapidly dwindling sales of Amiga Anywhere-compatible PDA game packs from the amiga.com website.

"There can be only one captain and course to steer."

Hyperion, knowing of Amiga's financial condition, stipulated in its contract for developing OS 4 that, if Amiga Inc. were ever to go bankrupt, all rights to the software would revert to Hyperion itself.

Red versus Blue: The AmigaOne and Pegasos

By late 2002, the first AmigaOne motherboards had arrived from Eyetech, but there was no OS 4 ready to run on them. bPlan and Thendic, now merged into a single company called Genesi, had released its own PowerPC motherboards which it called the Pegasos. The Pegasos boards came with a beta version of MorphOS. Both boards were based on a reference design called the Teron, developed by the China-based Mai Logic. Mai had developed the boards for industrial and embedded applications where Linux was the standard. The boards were new and had some rough edges. Bill Buck claimed that Genesi had developed a hardware fix (which the company dubbed "April") for some of the bugs and used this as a way to plead for a reconciliation of the OS 4/MorphOS divide.

This was the infamous "There is no Mai without April" post. "This market and community is in complete confusion," Buck wrote. "There is no leadership or vision, and we need both fast or we

can forget it. This is a public statement in good faith to Eyetech and Hyperion. Allan and Ben are formidable marketing opponents. We can forget the past if you can. We need to get into the same boat.” His words fell on deaf ears. Both the red (OS 4) and blue (MorphOS) camps continued with neither willing to compromise with the other. On community forums, people were forced to choose sides. It was not a large market to begin with, and splitting it only made things worse. Only 400 Pegasos boards were shipped in the first batch alongside a slightly higher number of AmigaOne systems.

OS 4 appears, hardware disappears

In 2004, the first release of Hyperion’s OS 4 was made available as a “Developer Preview.” It ran on the AmigaOne motherboards, but not the Pegasos. Eyetech also announced a small, mini-ITX form-factor board called the Micro AmigaOne, which I bought and reviewed for Ars. While the AmigaOne had some rough edges, it was the first completely new Amiga system released since 1992’s Amiga 4000, and the old Amiga magic was still there for anyone who wanted to see it. I fitted mine with a Flash card connected to a SATA interface, which offered me a brief glimpse into a future of fast SSD-based computers that would boot in under seven seconds.

Unfortunately, this joy was short-lived. Mai Logic went bankrupt, and Eyetech, with nothing left to sell, closed down its business. Now that OS 4 was officially out, there was no hardware left to buy to run it on. Many people begged Hyperion to make an x86 version of OS 4 to run on commodity PC hardware, but chairman Ben Hermans held fast against the idea, calling it “disastrous”.

Hermans had seen how Microsoft had destroyed the market for non-Windows operating systems on the PC. He pointed out that both Be Inc. and the Linux game company Loki had gone out of

business. He offered as evidence the fact that Hyperion sold more game ports on the Amiga platform than it did on Linux, despite the latter having a larger installed base by several orders of magnitude. Hyperion’s income mostly came from sales of its Macintosh game ports. However, it kept developing OS 4 as a labor of love and in hope that the market would grow again.

Later that year, Amiga Inc. used some sleight of hand to escape a pending bankruptcy. Amiga sold its assets to a shell company called KMOS—a Delaware firm headquartered in New York—then renamed KMOS back to Amiga Inc. It tried to use these shenanigans to get out of the clause in its contract with Hyperion that would revert ownership of OS 4 if Amiga Inc. ever went under. Then, to top it off, Amiga sued Hyperion for not delivering OS 4 on time and demanded the return of all source code.

As the lawsuit dragged on, Bill McEwen decided the best use of his time was to get Amiga Inc. back in the news by sponsoring the new “Amiga Center at Kent” stadium, home of the Seattle Thunderbirds hockey team. The company did get in the local news, but three months later made even bigger news when it was dropped for failure to make the downpayment. It was an embarrassing moment for all involved.

New hardware and the end of the line for Amiga Inc.

Astoundingly, this wasn’t the end of the Amiga story. While the “parent” firm was clearly no longer a company, work on new hardware and software continued. Hyperion released AmigaOS 4.1, and a company called ACube released a pair of PowerPC motherboards called the Sam440ep and Sam440ex that came bundled with the new OS.

In September 2008, the lawsuit between Hyperion and Amiga Inc. was settled. Hyperion won and

was granted complete rights to the Amiga OS 4 operating system. By this time, the Tao Group had also gone bankrupt, leaving Amiga Inc. with nothing at all to sell.

Meanwhile, MorphOS was soldiering on despite troubles of its own. A group of coders claimed that it had not been paid for its work and launched a website to protest against Genesi. When Genesi did not respond, the author of the Ambient desktop (a clone of the Amiga Workbench that MorphOS used) open-sourced the project. Genesi also was forced to stop selling the Pegasos line due to new EU restrictions on lead-based solder. The company did, however, release a new low-end micro-ITX board called the Efika. MorphOS continued to be developed and, for a brief moment, ran on Pegasos boards, the Efika board, some models of PowerPC Macintoshes, and even the Sam440ex. Owners of the latter were the first people to ever successfully dual-boot OS 4 and MorphOS on the same hardware.

In 2010, a new hardware company entered the scene. Partnering with Hyperion, A-Eon technologies announced the Amiga X1000, a high-end Amiga system with a dual-core PowerPC CPU and a mysterious “accelerator” chip called the Xena. A-Eon was founded by Trevor Dickinson, an English entrepreneur who made his fortune bringing technology to the oil and gas industry. In the 1990s, he had used Amigas in his business for graphics work, video, and desktop publishing.

In the fall of 2010, I met Trevor at the 25th anniversary of the Amiga, held at the annual AmiWest convention in Sacramento, California. He was an enthusiastic and well-spoken supporter of the Amiga. He admitted that the X1000 and its successor the X5000 were pure passion projects, driven out of the love of the platform rather than any expectation of making money.

“I am first and foremost an Amiga enthusiast and wish to continue the legacy and tradition of the groundbreaking Amiga computer,” he told Ars in an interview. “As long as there are people who, like me, want to keep the dream alive, I will continue to fund Amiga hardware and software development to make it happen.”

Between A-Eon and Hyperion, the Amiga platform finally had new hardware and software for the foreseeable future. Work continues today on software support and drivers for new Radeon graphics cards and a less expensive, small form-factor A1222 motherboard.

“As long as there are people who, like me, want to keep the dream alive, I will continue to fund Amiga hardware and software development to make it happen.”

Where they are now

MorphOS continued to be developed and sold, with the last version, 3.9, coming out in 2015. Genesi, however, pivoted its business to selling ARM-based hardware running Linux to the embedded market. Today, Bill Buck is busy fulfilling contracts with the US military for its technology modernization project.

Haage & Partner still exist today as a distributor for Windows-based utility programs. The company sell a Windows version of Directory Opus, which was a popular file manager for the Amiga. Hyperion shipped OS 4.1 Final Edition Update 1 to coincide with the release of the X5000. Ben Hermans resigned from the board of directors of Hyperion in 2016, although he still owns shares in the company. On its website, Hyperion speculates about the possibility of an OS 4.2 but warns that development depends on the sales of 4.1 Final Edition.

Bill McEwen continued the pretense of owning Amiga until 2016 when he failed to renew the

copyrights on the Amiga name. The amiga.com website shut down later that year, becoming a parked domain with only a single email address listed. On his LinkedIn profile, McEwen lists himself as the CEO of Amiga Inc. from 2000 to 2016. He is currently working as the Director of Operations for DC Logistics, a freight forwarding company.

Fleecy Moss has vanished from the Internet.

The Amiga dream

It is tempting to dismiss the efforts of Amiga, Inc. in the 21st century as the deranged thrashings of delusional and incompetent people. Yet it is worth examining exactly what it was about the Amiga that drove so many people to try and revive a dwindling market. No other platform has experienced this. Nobody fought bitterly over the control of a successor to the Atari ST. There weren't multiple efforts to revive and modernize the TRS-80. Why did the Amiga make people behave in this way?

Part of it was the uniqueness of a platform that was literally ten years ahead of its time. You can take an Amiga 1000 from 1985 and use it today as if you were using a modern (albeit slow) computer. It has a graphical user interface, color, stereo sampled sound, long file names, and preemptive multitasking. You can even, with the appropriate peripherals, connect it to the Internet. The equivalent Macintosh at the time had only a 9-inch monochrome screen and everything halted as soon as you held down the mouse button. A typical PC from 1985 was even more ancient, usually sporting a text-based display and a command-line only, single-tasking DOS.

To be so far ahead was both a blessing and a curse for the Amiga. The mainstream technology press didn't quite understand it. The press either pretended like it didn't even exist or published dismissive screeds claiming that nobody needed

color, sound, or multitasking in a business environment. Ten years later when Windows 95 appeared, these same features were touted as innovative and exciting.

So when Commodore's inept and malicious management imploded the Amiga's parent company in 1994, fans of the platform were naturally distressed. Things got even worse when successor companies inherited the "Commodore curse" and either died themselves or downsized and sold off the Amiga division.

The dotcom boom of the late '90s and early 2000s seemed to give the Amiga one last chance at a rebirth. Investors had tons of money to spend, and the Internet revolution promised the opportunity for a computing world that wasn't dominated by Microsoft and Windows.

Unfortunately, the two people involved in running the new Amiga Incorporated, Bill McEwen and Fleecy Moss, were not equipped to lead this revolution. They knew that the future belonged to mobile computing, and this led to the partnership with the Tao Group and the Amiga Anywhere platform. However, they didn't have the skills to manage the transition to a new platform while simultaneously unifying and migrating the old Amiga hardware and software.

Ironically, the new platform nearly survived on its own. One of the most tantalizing licensees of the Tao Group was a Motorola phone, the P1100, running on an 11 MHz ARM processor with a monochrome bitmapped screen. It ran the full Tao Intent stack, including a GUI and downloadable Java applications, featured a large (for the time) touch screen. It was scheduled for release in late 2000. Unfortunately, Motorola cancelled the project. The world might have been very different if the project had stayed alive.

Ultimately, the Amiga wasn't just the set of custom chips with names like Agnes, Paula, and

Daphne. It wasn't just the Kickstart ROM chips or the Workbench interface that made up the AmigaOS operating system. The Amiga was an idea. It was the idea of a personal computer that was easy to use and fun, powerful enough to run cutting-edge games and applications, but still understandable by a single person. It was possible to know and recognize every file in the operating system and even comprehend how the custom chips worked on a fundamental level. Today, we have computers that are tens of thousands of times more powerful, but nobody would ever pretend to understand how every part of Windows works. Something has been lost.

The Amiga didn't just play great games. It offered a glimpse into a sci-fi future, where affordable personal devices could allow ordinary people to edit video and create new three-dimensional worlds in software. But it was more than that. The Amiga, unlike any other computer that followed it, had both a soul and a heart.

The future is wide open

The present-day situation of the Amiga, incredibly, is better than it has been in decades. The machine's impact has been fondly remembered in series like this or in documentaries like 2017's *Viva Amiga*. And you can even purchase new hardware that runs an updated AmigaOS, allowing a new generation to dig into the hardware and software while running a modern Web browser and interacting with the rest of the computing world at a comparable level.

Further Reading

The A-EON Amiga X5000: An alternate universe where the Amiga platform never died

Coincidentally, we tested that new Amiga—the Amiga X5000—and it brought back plenty of familiar feelings:

The X5000 is a strange beast. It's like a window into an alternate universe where Commodore never went bankrupt and the Amiga platform never died. The fact that both the hardware and operating system were produced at all is a monument to the passion and dedication of the folks at A-EON and Hyperion Entertainment.

It is by no means the fastest PC ever made, but it is certainly the fastest Amiga ever produced. The operating system harkens back to the days when computing was more personal, less corporate, and a lot more fun...

It feels like an exotic car: expensive, beautifully engineered, and unique. If you bought one, you'd be one of a proud few, a collector and enthusiast. It practically begs for you to dig in and tinker with the internals—the system comes with an SDK, a C compiler, Python, and a huge amount of documentation for things like MUI, the innovative GUI library. On top of that, there is the mysterious XMOS chip, crying out for someone to create software that leverages its strengths. It feels like a developer's machine.

Trevor Dickinson reports that over 50 percent of people who purchased an Amiga X5000 have never owned an Amiga before. Perhaps some of them will be inspired to create something entirely new and revolutionary, in the same spirit as the tiny band of heroes who joined together to found Hi-Toro in 1982.

Comments:

hazydave a.k.a. Dave Haynie - wise, aged Ars Technica veteran

I wouldn't exactly say my heart was broken... I was just fed up with all the vultures and crooks trying to get a little taste of the Amiga's moldering body before the bones turned to dust. Or something along those lines.

There were too many wanna-be's fighting over a tiny little bit of possible sales, and more often than not just ripping off Amiga fans. One big strength of the Amiga experience has always been the community, the users who became nearly as passionate about their computers as they did their art, their music, their video, etc. Those are the people who really deserved better, and I didn't want to be any part of another promise to them that some idiot wasn't going to let me keep. But I never gave up on the community.

Things have actually got much better lately. Kind of like the boardwalk in Asbury Park... if something on value to enough people gets bad enough, it doesn't take a whole lot to get it going back in the right direction. Trevor and A-EON didn't create the weird situation with PowerPC and Amiga, but they're the real deal, they're not trying to rip anyone off, just deliver some kind of new Amiga without going to deeply into debt. And it's a good time for it, because the originals are starting to fail. It has been decades. There are a bunch of projects, like the Vampire accelerators, the Amiga chips and other things being built in FPGAs, building classic Amigas from scratch again, in one form or another. I'm expecting an "Amy-ITX" to arrive at my house in the next few weeks.

Sure, Amigas may never be a big business again. Without real on-going OS development, it's kind of frozen in time here and there. Then again, they seem to have got multi-processing on AROS last year... only 24 years after Randell Jesup and I tried to something about that at Commodore with the Gemini project.

Keep the faith,
Dave Haynie

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-The Small Print-

The Fresno Commodore User Group is a club whose members share an interest in Commodore 8-bit and Amiga computers. Our mailing address is 185 W. Pilgrim Lane, Clovis, CA 93612. We meet monthly in the meeting room of Bobby Salazar's Restaurant, 2839 North Blackstone Ave., Fresno, CA. The meetings generally include demonstrations, discussion, and individual help.

Dues are \$12 for 12 months. New members receive a "New Member Disk" containing a number of useful Commodore 8-bit utilities. Members receive a subscription to The Interface newsletter, access to the public domain disk library, technical assistance, and reduced prices on selected software/hardware.

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