THE EDITOR'S GODZILLA

-by Lenard R. Roach

Once again, the time for the newsletter is at hand and once again, it crept up on me and I had no idea. A lot of things have happened to me since to production of last newsletter that, though not Commodore related, does affect my work on the Commodore in some sort of fashion. Most of these things happened in the space of a week, and, as Robert and Dick have illustrated to me so many times, you can't report on an incident or event unless first the event happens.

First of all, a Commodore report: After much review to the Roach family finances, it seems that I will have to resend my previous comment about attending this year's CommVEx and put that off for 2015. Unless a financial miracle happens between now and July, we don't see any way of going. However, one big bill will be paid off by February 2015 (about a $4,000 debt), and we should be able start putting money back for the 2015 trip after that. Also, I have blown the dust off my Commodore 128 (again!) and started using it for budgeting and money balancing purposes using the "Money Manager with EZ Budget" program I distributed at the 2013 CommVEx. This program works well and

allows you to see your financial progress as it goes and I can tell where I need to focus my financial attentions. I also use "The Envelope Addressor" to make my mailings ready for the postman.

However, the Commodore computer stand is where my laptop sat and Hennessy, our tuxedo dressed black and white cat, decided that the desk is the best place to catch the winter sun through the window and lays his overweight body on the desk and push the laptop off onto the floor. This time he has pushed the laptop down and fractured the hard drive. This hard drive contained all the graphic art and format for The Interface, so I was in a bit of a stress. Fortunately, I was able to rescue most of the picture and transfer a copy of Open Office to a desktop unit given to me by my Pastor, but the work on some of the books I have been pursuing have been lost, for the moment.

Enter my graphics designer and technician, Tim, who came all the way out from Keytesville (a two hour drive across US 24 in Missouri) to 40ᵗʰ and Noland Road in Independence, Missouri to collect the laptop and take it to his shop. As of the latest report, Tim has rescued the contents of the hard drive (which includes my books), but he thinks that the hard drive is fractured to a point of no recovery. He is in the process of looking for a new hard drive that will fit into the small cavity in the laptop. Sometimes it is better, I think, to work on the Commodore and abandon these modern marvels of technology; they are too sensitive, while a Commodore seems to have more durability.

Now I did mention that Pastor gave me a desktop, which was a hand me down from his office at the church. It is a 1.8 single core with 250 gigs of hard drive space, which is only using one gig to operate all

the programs that I need. It runs the XP OS and it has been a great substitute for my laptop. Because of lack of space, we had to set the unit up on the kitchen table, which is great for me since I do most of the cooking at the Roach Center, and I can watch videos or follow Commodore on the computer while cooking. So the problem of having a computer to do my writing work and getting articles off the Internet for the newsletter has been solved with no cost to the Roach Center For BASIC Commodore Studies.

Moving on to another great feat of miracle. As you may have followed on the news in your location, Kansas City and surrounding areas got the "big snow" of 2014 around February 5th where Mother Nature dumped 7" of the white stuff all over the area. I was out that Tuesday making deliveries in that stuff and tried to make a run from Kansas City to Warrensburg, Missouri (a one hour trip east on US 50). I made to to Warrensburg without incident but I curbed the Neon when I was only ¼ of a mile from my destination. Fortunately, I got to drive it home and Gabriel looked at it extensively after the storm. It seems that I popped a couple of press welds from the frame and damaged everything on the driver's side, so from a Friday straight on to a Tuesday, Gabriel pulled and replaced everything from the strut to the sub frame on the Neon and it is now ready to roll. Most people would have considered the car totaled but Gabe has other ideas when it comes to cars.

Speaking again of cars, let me set up the scenario: You're standing at work, impatiently waiting for quitting time when a phone call comes in. It is your friend Jon, who has in his possession a car that starts, runs, and drives, but he has no use for it and wants to give it to you. What do you say? "No, thanks. I got a car?" Hogwash! You

thank him profusely and arrange a pick up time.

We got to Jon's Friday morning and picked up a 1993 Ford Mustang Fox Body Coupe which was in perfect running condition, with a few "minor" flaws, like, it had no headlights, no front turn signals, no grill, and no hood. Talk about ghetto, but the car did what Jon said it would and we drove it from Overland Park, Kansas, through police infested Merriam, Kansas, and back to the Roach Center in Kansas City.

Instantly Gabriel went to work (working on cars is relaxing to him, but you can't tell with all the "d—ms and "mother f---ers" that I hear from his workshop) looking for parts on eBay for it. Gabe quickly found a front end assembly which will house the headlights and turn signals for $119, complete with free shipping. We will be ordering this attachment when I get my tax return.

Speaking of tax returns, guess what I'm getting back from Uncle Barack? That's right, my biggest tax return since the Clinton administration. Things such as this just might make me switch political allegiances, but there are too many factors involved that will keep me voting for whom ever I think will do the job best for each respective office I'm voting to fill. Now, you may ask, "If you're going to get such a big refund why don't you use that to fund your 2014 trip to CommVEx?" Good question, and I got a good answer: BILLS! I still need a clutch assembly bought and installed on my Neon, and I need struts for the other Neon I possess, plus tires for it. I have some plumbing issues here at the Center that need to be addressed and the list goes on and on. If this courier job proves to be as tax lucrative next year as it did this year, I will be definitely looking at going in

2015. Besides, to be honest, I don't have anything in the way of programming to present at the 2014 CommVEx, so it's best that I sit this one out.

My friends, thank you for allowing me to let you know what is happening here in Kansas City. I'm not bragging, boasting, or blowing my own trumpet, but just letting you know about all the events that affect us here in Kansas City Commodore country. Be safe, be live, and be free, and I will write to you in the next issue.
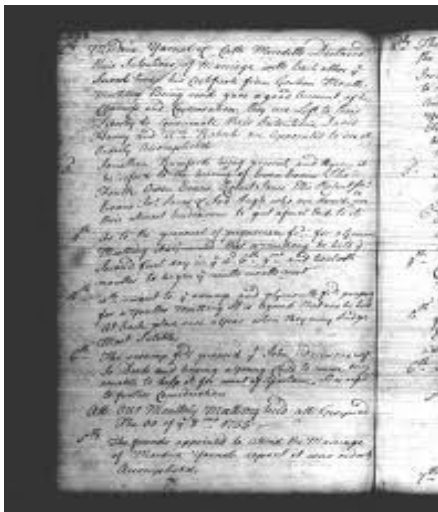
MONTHLY MEETING REPORT

-by Dick Estel and Robert Bernardo

JANUARY 2014

We were back to "full" attendance this month with Brad Strait, Roger Van Pelt, Robert Bernardo, Louis and Vincent Mazzei, Greg and Gregory Dodd, and Dick Estel. We also had another visit from Raymond Ciula, who brought in a large box of 3.5" disks containing all kinds of Amiga software. Robert reached in blindly and plucked out a Star Trek game which he tried at the end of the meeting (but it did not work on Greg's expanded Amiga 2000 -- see below).

The meeting started with one of our occasional discussions of old technology, in this case, reel-to-reel recorders. Roger recently acquired a reel-to-reel machine at a yard sale, a big, high-quality unit with dual tube amplifiers. Dick mentioned that he has a Tandberg which still works, although the motor is noisy.

The day before this month's meeting Robert had visited the Computer Station in Long Beach, returning with some items that the owner donated, some other items for sale on consignment, and a few that he purchased.

The planned demo of GEOS/Wheels did not take place, because the program was not on Robert's CMD hard drive, one of two, and sadly, the one that he did not bring. Instead we looked at a bunch of the programs from Computer Station.

These included several with a musical theme: Party Songs, which played a selection of 20 or so songs and displayed the lyrics (Dick and Robert tried singing along with that program); On Stage, which did the same with the added bonus of graphics, some of them animated; and Guitar Pak, which includes two different guitar tuners and some other programs.

Greg brought his Amiga 2000, and eventually convinced Gregory, who was engrossed in a hand-held game machine, to give it a try. Gregory found and played with the three different Star Wars games that were on the A2000's hard drive. Describing it as the worst-looking from Robert's storage unit, Louis displayed a VIC-20 which he had painted a bright red, making it one of the best looking VICs around. Louis also received from Robert the two VIC-20 boards that C= repair technician Ray

Carlsen had repaired.

Looking ahead, Robert will be attending the Vintage East Computer Festival in Wall, New Jersey the first weekend in April, and Notacon 11 in Cleveland, Ohio on the second weekend. Due to Easter falling on the third Sunday, the meeting that month will be April 27.

FEBRUARY 2014

-by Robert Bernardo

For the Feb. 16 FCUG meeting, I came in from Stockton, about 2 hours away. I was still 15-20 minutes early, and I immediately started unpacking the Commodore and Amiga items. About half an hour later, Roger arrived and started bringing in his gear. Finally, Greg, Louis, and Vincent arrived to round out the attendees.

We took an extra long time to set up the gear, because not only was I putting up a VIC-20 (and later on, an A600 and C128) set-up, but also Greg had brought his A2000 and Louis had brought his A500. When all hardware was arranged, we finally sat down for lunch.

In old business, Louis admitted that he did not have the time nor the facilities to check out the fifty 6581 SID chips he bought from China. He called for somebody else to take up the chip testing. After a pause, I volunteered, and Louis will bring the chips to the next meeting.

In new business, I reminded everybody that because Easter was set for the third weekend in April, our usual FCUG meeting for that Sunday would have to be moved. For the first weekend in April, I would be at the Vintage Computer Festival East in New

Jersey, for the second weekend I'd be at Notacon in Ohio, and for the fourth weekend I'd be at the William Shatner Weekend in southern California. If we were to move the meeting to the fourth weekend, someone would have to take over in my absence (my last absence being in 2005 or 2006). Hence, I looked to Roger and said, "You're the vice-president. You'll have to take over." After telling him that I'd advise him how to run a meeting, he agreed.

On the laptop tied into the room's Wi-fi, we looked at Reset #02, the freely-downloadable Commodore magazine which had just been released. I showed them my article that was published in the magazine and enhanced with photos that the editor had chosen. The members commented that it was a very colorful magazine with all the photos and screenshots of C64 games.

Somehow, conversation moved to the game, Airwolf. Yes, it was a C64 game, and it was also an arcade game. Greg had never seen the show; Louis explained its premise, and I showed the show's opening credits captured on YouTube. I also showed eBay listing for the arcade version that was for sale in Westminster, followed by a YouTube video of the arcade game in action.

We got going into the software and hardware part of the meeting late, but we left extra late by meeting's end. My presentation was to show the VIC-20 cassette game, Dodge Cars, and the VIC-20 word processor, Speedscript, printing through a Blue Chip 020/10 daisywheel printer. From Randy Abel, president of The Other Group of Amigoids in San Jose, I also had a couple of 3 1/2 inch floppies with one of the best Amiga disk copiers, X-Copy.

Dodge Cars had an overhead view of your car running vertically down a playfield of opposing cars running up at you. In other words, you were going against one-way traffic, and you had to dodge the other cars by moving into different lanes. It would start slow, but then the action would speed up. We broke out of the program and were surprised that it was written in BASIC.

While Dodge Cars was running, I went over to Greg's A2000 and tried to boot up X-Copy. It didn't want to boot up; in fact, when we tried to eject it, it got stuck in his drive mechanism. What was wrong? We found out that a sticky metal flap over the disk opening was catching in the drive mechanism. When we tried to reboot the A2000 with CONTROL – Amiga – Amiga, the computer would not get to the desktop. We tried to power cycle the computer… still nothing. After a few tries with both methods, it would boot… but only sometimes. And when it did boot up, the color on the screen was green with a horizontal stripe of normal color at the top of the screen. We opened up the casing and looked at the cables. I pushed down on the SCSI card, I tapped and pushed on the SCSI hard drive casing, I wiggled the cables and looked for any loose fittings – all to no avail. Diagnosis – for the booting problem, the surplus drive mech was shot; for the color problem, we didn't know.

I handed the X-Copy disks to Louis, and he got them going on his A500. Meanwhile, I had other problems. With the VIC-20 set-up I had, I needed 2 serial ports – one for the uIEC card drive and one for the Blue Chip printer. However, the uIEC had no serial pass-through for the printer. After wrestling through various scenarios on how to get everything to work, Roger hit about the idea about disconnecting and connecting the peripherals while "hot", i.e.,

load the program through the uIEC, disconnect the uIEC from the serial bus while the computer was on, and connect to the printer to the serial bus while the computer was on… and hope that the magic blue smoke would not appear from any of the devices. His idea worked. Another problem was that the carriage for the Blue Chip was locked in "transport" mode. It wouldn't budge, no matter how hard I tried to slide the printhead to the right or to the left. Roger freed it by playing around with the on-line buttons on the front of the machine.

With Speedscript 3.2 loaded into the VIC, we tried to run it but were treated with gibberish on the screen. A few more tries... the same results. We found out from the Speedscript instructions (which weren't clear in the first place) that the VIC-20 needed at least 8K RAM expansion. Without it, the machine would just lock-up with that gibberish on the screen. I hadn't brought a RAM expander with me.

Nevertheless, I got the C64 version of Speedscript 3.2 to work with the club's C128, and we were able to print with the Blue Chip printer, notwithstanding the wrong replacement ribbon I got from Office Depot (we used the original, old ribbon). After I printed a few test lines, Vincent did some printing with a few choice words. Louis smiled, remarking that he hadn't heard the sound of daisywheel printing in years. I discovered that the printer was more sophisticated than I originally thought; it did bi-directional printing.

Also the Compute! magazine's VIC Emulator for the C64 seemed to work. It gave various options for memory, e.g., push a button for standard memory, push a different button for 24K memory, push other buttons for different memory amounts

in-between. It displayed everything in 40 columns, but according to the instructions, it would switch to a 22-column screen after the software was loaded into it. Due to my oversight, Dodge Cars could have been loaded into it to see if it could run, but we didn't do that.

With Greg observing, Louis carried on with X-Copy. Louis had bought brand-new, blank disks, and the game disks he was going to archive were the ones donated to the club by Raymond C. at the January meeting. The Doscopy+ option in X-Copy provided mediocre results in the copy process, so we switched to the Nibbler option. That worked better and faster on the disks that Louis was trying to copy. By the meeting's end, Louis had archived 14 disks.

Something had to be done with Greg's A2000. During the meeting, after his A2000 wouldn't work, Greg had played around with my A600. I offered Greg the use of my A600 while I brought his A2000 in for repair. Greg wouldn't hear of it, saying that the A600 would sit anyways until he finished building up his game room. Greg didn't leave the meeting empty-handed; he bought a C128 and 1571 that I had gotten out of storage earlier.

It was nearly 5 p.m. when we got out of the meeting. I finished packing the car, including the unexpected load of Greg's A2000. I said good-bye to everyone as Greg, Louis, Vincent, and Roger continued their conversation in the parking lot.

HISTORY OF THE AMIGA
PART SIX:
STOPPING THE BLEEDING

-by Jeremy Reimer

Chopping heads

When a corporation is bleeding money, often the only way to save it is to drastically lower fixed expenses by firing staff. Commodore had lost over $300 million between September 1985 and March 1986, and over $21 million in March alone. Commodore's new CEO, Thomas Rattigan, was determined to stop the bleeding.

Rattigan began three separate rounds of layoffs. The first to go were the layabouts, people who hadn't proven their worth to the company and were never likely to. The second round coincided with the cancellation of many internal projects. The last round was necessary for the company to regain profitability, but affected many good people and ultimately may have hurt the company in the long run. Engineer Dave Haynie recalled that the first round was actually a good thing, the second was of debatable value, and the last was "hitting bone."

Under Jack Tramiel, Commodore had embarked on a whole host of projects: some practical, some far-sighted and visionary, and others just plain crazy. To try

and figure out which was which, Rattigan looked for an experienced opinion. He found one in Charles Winterble, a former Commodore engineer turned consultant who at the time was still under the lawsuit Commodore had going against Atari!

First to the chopping block were Commodore's aging line of PET computers, which had been the first fully-assembled computers to hit the market (they predated both the Apple II and TRS-80). The VIC-20, once promoted by William Shatner, was also axed. Next up were the innovative but ultimately pointless collection of small 8-bit computers that were incompatible with the blockbuster C-64: the Plus/4 and Commodore 16, and various other machines that had never left the prototype stage. The Commodore 900, an innovative Unix workstation with a 1024 by 800 bit-mapped display, was also canceled.

Computers weren't the only thing that Tramiel had a hand in. At the time, the company still owned an office supply manufacturing firm in Canada. I personally ran into Commodore-branded filing cabinets far more often than I ever ran into Amigas. Rattigan got rid of these and other distractions. Rattigan also cleaned up the sloppy accounting processes that had been allowed to fester under his predecessor, Marshall Smith. Three redundant manufacturing plants were closed, and new financial controls were put into place to keep a tight check on spending.

In all, the cuts did their job. Commodore paid off their debts and even posted a modest $22 million profit in the last quarter of 1986. In the meantime, the Amiga still needed applications if it was to become anything more than a curiosity. One of the first companies to publicly pledge support

for the platform was none other than Electronic Arts.

Electronic Arts and Deluxe Paint

Those who have firsthand experience with the modern Electronic Arts typically know it as a faceless corporate behemoth, infamous for absorbing, then strangling independent development teams, eliminating competition by paying for exclusive rights to major sports leagues, and working its employees beyond the breaking point. They may be surprised to find out that EA originally had quite a different mission and philosophy.

EA's founder, Trip Hawkins, was actually fighting against the poor treatment of programmers that he witnessed elsewhere in the industry. When he launched Electronic Arts in 1982, he envisioned an environment where developers and game designers would be treated like rock stars: promoted in major media, given generous royalties, and allowed to explore wherever their imagination and talent led them.

Hawkins saw the Amiga as a groundbreaking platform, a brand new canvas that would let his developers create great new works of art. In November1985, he took out a two-page ad in Compute! magazine that extolled the Amiga's virtues and promised that Electronic Arts would be supporting the platform for a whole new generation of games. "I believe this machine, marketed and supported properly, should have a very significant impact on the personal computer industry," Hawkins said prophetically in an earlier interview in the same magazine.

EA's first Amiga product, however, wasn't a game at all but a game development tool. Programmer Dan Silva had been working

on an internal graphics editor that was code-named Prism. When the Amiga was released, he quickly reworked the program to take advantage of the new computer's stunning graphics capabilities. Even before it shipped, Silva was already working on the next version, which would contain many more advanced features.

This program was Deluxe Paint, and it launched the careers of thousands of computer graphic artists. With a simple interface featuring a toolbar on the right-hand side of the screen, Deluxe Paint was a powerful tool that could create not only static graphics, but also animation. This made it perfect for creating images for computer and video games, and for a long time Deluxe Paint was the industry standard for creating art for this medium, much like tools such as 3D Studio Max are today.

Even years later, as the PC gaming market began to eclipse the Amiga in terms of sheer size and number of titles, many game development studios still made their art using Deluxe Paint. Its native format, IFF, and animation format, IFF ANIM, are still supported by many graphics packages today. IFF ANIM files were compressed using delta encoding, resulting in smaller files. This was nearly 10 years before animation compression standards such as MPEG were released.

But back in 1986, the combination of an Amiga and Deluxe Paint was unbeatable. While Adobe's Photoshop on the Macintosh platform would eventually become the standard tool for creating two-dimensional graphic images, the Mac was still a monochrome-only computer at this point, and the PC could barely manage four colors even with a CGA graphics card. Again, the Amiga was ahead of its time.

The cover art for the Deluxe Paint II box featured an image of Tutankhamen that had been created inside the program itself. This image quickly became an iconic picture in the computer graphics industry. Even Commodore recognized the power of Deluxe Paint, using the Tutankhamen image on a new full-page ad that — finally! — stated the Amiga's advantages outright.

Magazines

Around this time, the first print magazines covering the Amiga platform were starting to appear. The first such magazine was called Amiga World, started by publisher IDG. The premiere issue of the bimonthly magazine reached store shelves in late 1985, and featured the new Amiga 1000 on the cover.

For the second issue, Amiga World tracked down Andy Warhol, who had been one of the stars of the Amiga unveiling. Warhol was an enigmatic personality who ran a magazine called Interview, yet refused to give interviews himself. After brusquely turning down the Amiga World reporter's request for an interview, Warhol retreated to his office upstairs. The undaunted reporter followed Warhol into his office, and while the iconic artist began painting pictures on his Amiga 1000, the journalist started asking him questions anyway.

"Do you like the Amiga? What do you like about it?" the reporter asked.

"I love it. I like it because it looks like my work."

"Do you think it will push the artists?

"That's the best part about it. I guess you can... An artist can really do the whole thing. Actually, he can make a film with

everything on it, music and sound and art... everything."

"Why haven't you used computers before?"

"Oh, I don't know, MIT called me for about ten years or so, but I just never went up... maybe it was Yale."

"You just never thought it was interesting enough?"

"Oh no, I did, uh, it's just that, well, this one was so much more advanced than the others."

Warhol was a genius at self-promotion, but his "interview" showed genuine enthusiasm for the Amiga computer. He expressed frustration at not having a color printer yet and talked about how cool it would be to have a graphics tablet and stylus to replace the mouse. These products were all in development, but Warhol wanted them now.

Celebrity endorsements were hardly new in the computer field, but here was something different: a celebrity artist who was a genuine user and enthusiast for the platform. Here was a market — albeit a small one — that could potentially be nurtured.

Repositioning the Amiga

Commodore marketing had positioned the Amiga 1000 as a business machine to compete directly with the IBM PC and its countless clones. This was probably not the best idea.

The average businessman is — let's face it — slow, stodgy, and a bit boring. They are often the last to adopt any new technology unless it can make a clear case for increasing the bottom line. A computer that could print dynamic 3D charts and graphs in color was not going to be useful to a businessman unless there was a whole supporting infrastructure around it: color printers, color overhead display panels, business presentation software, and so forth. This was not the case in 1986.

Thomas Rattigan didn't believe that the business market was the best place to try and sell the Amiga. "I think the price confused a lot of people," he said in a 1987 interview. "People seem to think that home systems are under $1,000 and business systems are over $1,000. I don't think the higher-end Amiga is going to go into accounting departments, but I do think it is going to go into areas where there is a degree of creativity, if you will." In this prediction Rattigan was bang-on.

Rattigan believed that the best strategy was to split the Amiga 1000 into two products: a low-end model to take on the huge home market that had been dominated by the Commodore 64, and a high-end computer that would appeal to graphic artists — like Andy Warhol — who were interested in expanding their system.

The low-end: The Amiga 500

The Commodore CEO wasn't the first one to make the case for a cheaper Amiga. Hardware engineer George Robbins felt that a lower-end Amiga was a better idea right from the start, and Bob Russell said he had been fighting for such a product before the Amiga 1000 was even released. Still, it took someone higher up in the management chain to make the new machine — dubbed the Amiga 500 — a reality. Rattigan had to choose between the remnants of the original Los Gatos crew who had designed the Amiga 1000 and Commodore's core group of engineers in

West Chester, Pennsylvania. He chose the latter group because he felt they would be "more bloodthirsty" and thus likely to deliver the machine faster.

He assigned Jeff Porter, the engineer who had developed the innovative (but canceled by Rattigan's predecessor) LCD computer, to be the director of new product development. The lead engineers for the 500 were George Robbins and Bob Welland, who had previously worked on the also-canceled Commodore 900 Unix workstation. They were an odd bunch to be tasked with coming up with the computer that had to save the company, but in many respects they echoed the rogue team of misfits that had come up with the Amiga in the first place. George Robbins, a gentle and kind man with long hair and a walrus mustache, practically lived at work and often forgot to do his laundry. His coworkers, who loved Robbins, but worried about his personal hygiene, would constantly buy him new shirts to wear and quietly dispose of the old ones.

Robbins needed to avoid the distraction of laundry duties, as he was intensely focused on cutting costs on the Amiga. Welland was the ideas man, while Robbins was the practical engineer who could take great ideas and turn them into working electronics. One of the ideas Welland had was to increase the RAM on the "Agnes" custom chip to 1MB so that the Amiga could support higher graphics resolutions. The original Los Gatos team was a bit miffed at the proposed changes to their design, which they felt were not revolutionary enough, and made it known that they didn't think the changes would work. This motivated the Amiga 500 team even harder.

"Fat Agnes" did end up working, and the

original Amiga engineers admitted that the design was probably a good idea. The modest change increased the Amiga's capabilities while also keeping a high level of backwards compatibility with existing software. "It was a step in the right direction, but it violated the [original] idea of the bus architecture and actually slowed the machine down," RJ Mical said later.

Meanwhile, the pragmatic Robbins was finding ways to redesign the Amiga's motherboard to reduce costs. He took out the ability to connect directly to a television set and replaced it with a separate adapter, the A520. This turned out to be a good idea because most users weren't using a TV set anyway — the fuzzy image quality of TV sets caused text to "bleed" and made it hard to read. He took the power supply out of the main machine and integrated the keyboard into the case, which was inspired by the design of the Commodore 128. The 3.5 inch floppy drive was fitted in on the right-hand side of the machine. An thin expansion slot was placed on the other side. Devices could be plugged into this slot directly without removing the Amiga's case.

The high-end: The Amiga 2000

While the 500 project continued, Commodore needed people to work on the high-end Amiga 2000 design. Unfortunately, Rattigan's massive personnel cuts had left few engineers available for the project. The task was farmed off to Commodore's German subsidiary, but the engineers there simply took the original Amiga 1000 design, added a hardware interface for adding expansion cards, and put the whole thing in a standard PC desktop case. This wasn't quite what Rattigan was looking for.

The task of redesigning the Amiga 2000 fell

on one Dave Haynie, whose broad shoulders and ever-broadening ego were large enough to carry this burden. "I was the design team for the A2000," Haynie said. "That's kind of the way things were there because we had a lot of layoffs. I was working day and night, and there still wasn't enough time to do everything." Haynie would work through the week, then let off steam on Friday by retiring to Margaritas, a local dive where the beer was cheap and plentiful.

Haynie was inspired by the designs made by the Los Gatos team and determined to improve on their elegant architecture. He designed a new custom chip, called Buster, to handle the expansion bus. The bus design, which was called "Zorro" in reference to one of the original Amiga prototypes, was also ahead of its time. Unlike the ISA slots in the IBM PC, the Zorro slots had "autoconfig" built-in and would allow expansion cards to be work instantly without any manual configuration of jumpers or resolving device conflicts.

Haynie wanted to design a machine that would be easy — for both end users and Commodore itself — to upgrade to more powerful processors that were coming out of Motorola's design labs. He put the CPU on a separate board that could be swapped out later. From the German designers he got the idea of a genlock — a way to directly output computer images on top of video with no loss of image stability. He turned this idea into a separate dedicated video slot, which could be fitted with a genlock card or other types of video processing cards. This idea would later turn the Amiga — already a multimedia powerhouse — into the standard computer for the video industry.

The Amiga 2000 would have unprecedented expandability, with five open Amiga Zorro expansion slots, four IBM PC ISA slots, and the aforementioned CPU and video slots. This was to be a serious machine, for serious users. The case was recycled from the canceled Commodore 900 workstation project.

Not everybody liked the idea of the 2000. Amiga creator Jay Miner, when asked about the machine at an Amiga user group meeting, recommended that Amiga 1000 owners hang on to their existing computer instead of upgrading. Jay's feelings weren't all about sour grapes. He felt that the computer had not been improved enough, given the advances in technology that had occurred since he first started designing the original Amiga back in 1982.

Rattigan's fall

Jay Miner had a point. Time had been passing swiftly since the Amiga launch in 1985, and he wasn't the only one getting frustrated. Irving Gould, the enigmatic financier who controlled Commodore at a distance, started voicing concerns that the Amiga 500 and 2000 were taking too long to arrive.

Gould, like many bosses before and after, was asking for the impossible. Making Commodore profitable was the first priority, and Rattigan had done that by slashing the payroll. Creating a more popular successor to the Amiga 1000 was the next priority, and the few remaining engineers were doing what they could with very limited resources.

The Amiga 500 and 2000 delays weren't the only fault that Gould could find with Rattigan. He accused his CEO of behaving "in a high-profile manner" in an interview with the Philadelphia Inquirer, a spurious

charge if there ever was one. Rattigan's "high profile" consisted of doing a couple of magazine interviews. In one of these, the reporter asked him how he felt about being so little-known compared to other computer industry CEOs like John Sculley at Apple. He replied that he didn't think it was important to be well-known when your company was losing money.

Rattigan knew that he could not win in a battle with Gould, who owned six million of Commodore's 30 million shares. For his part, Gould was a slippery opponent. He rarely came into the Commodore offices, preferring to spend his time phoning various employees, trying to dig up dirt on his own CEO.

In April 1987, Gould hired the management consulting firm Dillon-Read to prepare a report on Commodore. Consulting firms have a long and inglorious history of charging outrageous fees just to have their junior-level employees issue urgent recommendations for more consulting, all billed by the hour. This particular firm was no different, but the Dillon-Read consultant who prepared the report had an even less altruistic purpose in mind.

His name was Mehdi Ali, and legions of Commodore employees and Amiga owners would one day learn to rue his name.

The report suggested that Rattigan be immediately replaced, something Gould was more than happy to carry out. He called a board meeting, specifically excluding his CEO from attending. Rattigan knew that the game was up, but decided to stick it out to the end, and showed up for work the next morning.

The guards had been ordered not to let him

on the premises, but pretended that they hadn't heard these instructions. "What the hell am I going to do?" one of them said. "The guy is running the company and turned it around, and I'm going to stop him from entering? Are you crazy?"

The locks on his office door had been changed. Rattigan was met in the hallway by an army of lawyers, who informed him that he was no longer employed at Commodore. He asked what the basis was for his termination, but the lawyers could give him nothing but meaningless gibberish. Resigned to his fate, Rattigan allowed himself to be escorted out of the office. Standing in the parking lot, he took a look back at the company that he had saved and wondered where it had all gone wrong.

Gould had won, but it was a pyrrhic victory at best. He had lost the best CEO he ever had, and worse still, had broken a legally binding contract to do so. Rattigan sued for breach of contract and $9 million of unpaid wages. Commodore immediately countersued for $24 million. The case wasn't settled until 1991, which was ironically the expiry date of Rattigan's original five-year contract. Rattigan won, and Commodore's countersuit was dismissed.

The Amiga strikes back

So what had Rattigan accomplished? He had stopped the bleeding, made Commodore profitable, and made possible the projects that would bring the Amiga into its golden age: the A500 and A2000. Both models were released within a couple of months of Rattigan's termination.

What the Amiga could have done had Rattigan been allowed to stay is another of the many "what if" stories that pepper the

Amiga tale, but it is what he did while he was there that mattered. By saving Commodore, he allowed the Amiga to survive, and in its new high-end and low-end forms it would find sales successes that the Amiga 1000 could only dream of.

And because of these new models, the story of the Amiga split also. No longer was it just about the original creators, or the struggles of a company trying to introduce a revolutionary new technology. From now on, the Amiga tale would be about its users: a diverse group of people who found the platform in different ways and took it in different directions.

Amiga was now about the gamers, about the bulletin board users, about the demo coders, about the hackers, and about the graphic artists, the animators, and the movie and television creators. It was now about the Amigans.

(Tune in for the next installment, where we'll take a look at the glory days of the Amiga 500 and the games that made it famous.)

THE ROUGH ROAD TO
COMMODORE MEETINGS

-by Robert Bernardo

Not again! I was stuck at the top of a mountain, miles and hours away from the Commodore meeting I was to attend... with no help in sight.

The things I do for Commodore! For years I've traveled to club meetings, whether it is 50 miles for the monthly Fresno Commodore User Group meeting or 3 hours for the monthly The Other Group of Amigoids meeting or 3 hours for the bi-monthly Southern California Commodore & Amiga Network. It is inevitable that I'd run into auto troubles after all that mileage on the road.

In the early 2000's one of my cars was a 1991 Honda Accord station wagon – supposedly a reliable car. It was a hand-me-down from my brother-in-law, and it had over 100,000 miles on the odometer. This supposedly reliable car was a money pit. I'd throw money at it, and then something else would break down.

One time a friend and I drove to the Saturday TOGA meeting in San Jose. The 3-hour drive to San Jose was no problem; it was the drive back that eventful. We had to cross over the coastal mountains back into the valley. The climb over those mountains was fairly steep. As the Honda climbed, I felt the car shudder. An unnatural shudder. A mechanical shudder. The car continued the climb at 65 miles per hour. A few minutes later I started losing speed. I shifted down the manual transmission, thinking that I was losing speed due to the steep climb. I still lost speed. No matter how much I pushed on the accelerator, the car lost speed. Then another lurch and the engine raced. I smelled a burning that emanated from under the car. No forward gear would work. I pulled the car over to the side of the highway. It was night, and the highway was very dark. We were far from any city, and there was no cell phone coverage in the place where we had broken down. After a

couple of hours, a California Highway Patrol car came up behind us. The officer got out of his car and walked over to us. After ascertaining our situation, he called for a tow truck. The tow truck rescued us after we had waited another hour. The driver brought us to the town of Los Banos 45 minutes away. He dropped off our broken car at the Best Western Hotel, and we got a room. The car would not be repaired until Monday. I was supposed to bring my friend to the Sunday FCUG meeting, but we were stuck miles away from Fresno. Early Sunday morning I called a FCUG member and told her that the meeting was canceled, that she should tell that news to any members who showed up at the meeting site, and that she should post a note on the door saying that the meeting was canceled.

Monday I had the car towed to the local mechanics, and they determined that the clutch had self-destructed. Repair bill -- $600. Two days later I was back on the road, the Honda running with a new clutch.

Fast forward to 2013. I had to go and preside over the May SCCAN meeting in Northridge, California. After work finished on Friday, I drove the 1990 Ford Crown Vic to Bakersfield, about 1/3 of the way to Northridge. The Crown Vic was my daily driver. It had just reached 400,000 miles on the odometer, and I had regularly maintained it. Packed in the Crown Vic was my usual complement of Commodore and Amiga hardware and software for the meeting. I spent the night at the Knights Inn, and all seemed normal. I had made this run many times before… drive to Bakersfield, spend the night there, and cross the mountains the next morning in order to get to Northridge.

Saturday morning I woke up, took a

shower, had the small continental breakfast the hotel offered, packed up the car, and checked under the car's hood. I looked at the drive belts, observed the coolant in the radiator, noted the fluid in the brake master cylinder, glanced at the water pump hoses, and pulled the engine oil dipstick. A quart low on oil. The nearest O'Reillys Auto Parts store was just a mile away. I drove there, bought a quart of synthetic motor oil, and put it into the engine.

The day was hot… around 100 degrees F.. However, I wasn't worried. Though the air-conditioner was on, the Crown Vic had enough power to climb the 4,000 foot high mountains that stood in the way of getting to Northridge. The car cruised along at 73 miles per hour. Traffic on the freeway wasn't bad. The car started its climb. I lowered its speed to just over 65 miles per hour, in accordance to the posted speed limits.

Hmm, the needle on the coolant temperature gauge had risen a bit. Well, it was hot outside, and the car was climbing, so I thought that the gauge measured the added load on the engine. The temperature continued to rise. Hmm, was the strain on the engine showing? The temp still was going up. O.K., this was not normal. I turned off the air-conditioning so that there would be less load on the engine. Temp still rising. I looked at the hood... no escaping steam coming out of the engine compartment. I looked through the rear view mirror... no escaping steam pouring from the rear of the car. But the temperature continued to rise. I looked for an escape off the highway. I pulled to the far right lane, but there was no off-ramp for a few miles. Could the car survive two more miles? After what seemed to be a long couple of minutes, I

saw the exit for the state of California rest stop.

The temperature gauge was all the way to the right… hot, hot, hot. I saw the off-ramp and turned the car onto it. The Ford LTD Crown Victoria decelerated. I didn't touch the accelerator; I let the car coast. My heart was beating hard. I spotted the parking spot under the shade of the trees and aimed the car for it. Don't touch the brake. Let the car slow itself. Could I make it to the parking slot? Finally, I was lined up. I touched the brake gently. The engine started clanking and then it quit. Without the engine running, I had lost power steering and power brakes. I gripped the steering wheel and applied firm pressure to the brakes. The car stopped, and I let out a sigh of relief. I was stuck at the top of the mountain, miles and miles away from any tow truck and still hours from the SCCAN meeting in Northridge.

The SCCAN meeting was to start at 2 p.m.. If I didn't show up, the members would just disperse. My cell phone was working in this area, but there was no one to call; I didn't know the phone numbers of the other members nor did I know who would appear at the meeting. It was now 11:45, and it would take me another 2 hours to get to Northridge.

I opened up the hood of the car and tried to find out what had happened to the engine. I couldn't see any engine fault. I pulled the engine oil dipstick. The oil was sizzling on the dipstick! I had never seen engine oil so hot that it bubbled on metal. There was some oil sitting on the engine block near the water pump. It, too, was sizzling. For engine oil to sizzle, I guessed that its temperature had be more than 300 degrees. Thank goodness that I was using synthetic oil with its greater tolerance for high

temperatures. The dipstick also showed no whitish scum on it; that meant no coolant had entered the crankcase through a cracked engine block or cylinder head. I was lucky. The engine may have survived.

I didn't dare open the radiator cap; the chance of steam blowing out of it was too great. I looked at the coolant recovery tank; no coolant showed through its translucent plastic.

Being at a state rest stop, the facilities were civilized. There were shade trees, picnic tables, men's and women's restrooms, candy and soda machines, and a couple of drinking water fountains. If I had lost all my radiator coolant, I would have to get water from the drinking fountain. I only had a 16-ounce iced tea bottle. I drank the last of the tea and walked off to the nearest water fountain which was near the candy machines. If the Crown Vic cooling system held 12 quarts and I only had the 16-ounce bottle, it would take many trips to and from the fountain in order to fill the system. I filled up the bottle with water and walked back to the Crown Vic.

Then I waited for the engine to cool. It had been half an hour since the car had stalled to a stop. I chanced opening the radiator cap. I twisted the cap to its first detent and pulled my hand back quickly just in case steam and coolant were to spurt out. Nothing... no steam... no coolant erupting out. I twisted the cap fully open and looked inside the radiator. Even when I shone a flashlight into it, I could see no coolant. It seemed totally empty!

I poured in the 16 ounces of water from the tea bottle. Steam immediately came out of the radiator throat, and I could hear hot metal creaking and groaning when hit by the cool water. Not

only did steam come out of the radiator throat but also from the right side of the engine. Hey, steam was not supposed to come from the engine's right side! The engine was still hot. I retrieved more water from the fountain and poured in another 16 ounces into the radiator. Less steam and metal creaking this time. I checked the oil dipstick again. No water contamination on it. The iron block and cylinder head were holding together.

Back and forth I went with the tea bottle of water. I estimated I had put in about 3 to 4 quarts. I would take a long time to fill the radiator at the rate I was going. Thinking that the engine had cooled enough, I finally searched around the right side of the engine to find out where the steam had emanated earlier. I found it. On a heater hose, a plastic T-fitting for cooling system flushing had broken off cleanly. After a few years of being in the hot environment of the engine compartment, the plastic T-fitting had become so brittle that it crumbled when squeezed by hand. The open ¾-inch diameter heater hose had poured out all of coolant under pressure from the water pump. So now I had two halves of heater hose with nothing to connect them. What was I to do? I could pour more water into the radiator, but without the heater hose closed off, it would be a useless effort.

Well, I would cross that hurdle when I came to it. I continued the process of getting more water into the radiator. As I poured more water, I heard a man behind me say, "Do you need help?" I explained the problem to him. He and his wife and son had stopped at the rest stop and had seen me working on the car. He offered a gallon jug of antifreeze. I told him that I couldn't use up his antifreeze, but he said that it was just full of water. Grateful, I poured the

water into the radiator, and then he told his pre-teen son to get more water. He asked what was wrong, and I showed him the sorry state of my heater hose with broken T-fitting. He then asked me what I needed to fix it. I said, "To connect the heater hoses, I need a straight fitting." He responded, "I might be able to help you."

He went to back of his late-model Chevrolet Surburban and brought back a box full of heater hoses and other parts. Wow, was I surprised! "Why do you have all these parts in your car?" I asked. He replied, "We were in Baja California in the middle of the desert. You have to be prepared when you are far away from help." He dug through the box and found a straight metal fitting. He also got a screwdriver and undid the plastic T-fitting for me, though I had tools in the back of my car. I slipped the straight metal fitting between the hoses and screwed down the clamps. With the radiator full of water and the coolant recovery tank filled up to level, I snapped back on their respective caps.

It was now the moment of truth. While he and his son stood by, I got back into the Crown Vic. What if the engine had frozen up? No amount of starter power would be able to turn it then. With trepidation, I turned the ignition switch on. The engine turned over and started! Success! My Samaritan friend and I both breathed a sigh of relief. As the car idled, I got back out and looked under the open hood. No signs of coolant leakage. I checked the oil dipstick again. No signs of coolant contamination. I got back in the car and watched the temperature gauge. The real test would be get to get the car back on the highway and see if the car would maintain normal operating temperatures.

My friend agreed that he would follow me

for a few miles as I drove on the highway, just to make sure that everything was all right. He, too, was heading to the Northridge area, and I invited him to the SCCAN meeting. He had to beg off, because the family had been on a long journey. I offered to pay him some money for his kindness, but he wouldn't think of it.

I shook his hand and got back into my car. I backed up the Crown Vic out of its parking slot and moved forward, slowly at first and then as the on-ramp onto the freeway came into view, I gingerly accelerated the car. The car held together. I brought it up to just under highway speed with the air-conditioner off. I watched the temperature gauge. It rose up to a bit over normal operating temperature as the thermostat opened up and any air pockets in the cooling system were filled. Then it settled down to normal. I listened to the engine, radio off. All was normal. No clanking or banging sounds from pistons or piston rods. It was as if nothing had happened to the engine.

True to his word, my new friend had followed me for a few miles and saw that I was cruising along without problem. Then he accelerated and passed me by, both of us waving to each other. Though it was hot outside, I didn't turn on the air-conditioner until miles later on the down-slope of the mountains, and even then, I was ready to turn it off immediately if something bad were to happen. However, nothing else happened.

I was going to be late for the SCCAN meeting. Fortunately, there was no traffic congestion on the freeways to Northridge. I arrived 20 minutes late to our meeting venue, Panera Bread Restaurant. As I walked to the front

entrance to enter, I saw SCCAN member Richard G. walk up at the same time. None of the other members had shown up yet, and I was relieved. Boy, did I have a travel story to tell them as we sat among the Commodore and Amiga computers!

MEMORY LANE

-by Dick Estel

This is number 7 of a limited series of articles saluting some of our past members, people who have made a significant contribution to the club. Our more recent members did not have the pleasure of knowing these men and women, many of whom have passed on. However, they made a lasting impression on the club and the author.

Questions and comments to our web address, info@dickestel.com, are welcome.

JUANITA EROLES and JOEL BERNAL

Once again we return to the land of the living (as far as I know). The name Juanita Eroles was familiar to me long before she joined our club. We exchanged newsletters with Commodore clubs all over the country, and she was the editor for the Sacramento club. So when she moved to Fresno , she knew there was a club waiting for her.

I believe Juanita had some type of mild disability, and did not drive, or perhaps just

didn't own a car. In any case, members were able to give her a ride to meetings, and since she lived near me, I volunteered a number of times.

Considering her past experience, it was not long before we called on Juanita to become our newsletter editor. She was ably assisted in this by Joel Bernal, a young man who had been with the club only a short time. He helped with assembling the newsletter, and probably with transportation to get it printed and mailed.

It was not long before both these members gradually stopped attending, and we have heard nothing more of them for a number of years. However, we are thankful for the significant contribution they made to the club during their short time with us.