



THE EDITOR'S GODZILLA

Once And Future Commodore

-by Lenard R. Roach

CommVEx, CommVEx, CommVEx, what can one say about CommVEx that has not already been said? Dick's report both on his website and here in this issue of "The Interface" is well accepted. My co-conspirator who works with me at Glad Tidings Assembly of God on Sunday mornings has written his view on the show, which was NOT cleared by me or any of the officers of FCUG, so he's on my "naughty" list for Christmas this year for not checking in, but, then again, we are suppose to be a country of "free speech" so he shouldn't have to report to me to express his canine opinions to the press.

So what can *I* say about CommVEx that has not already been said? Only that this year's CommVEx was the best collection of Commodore minds and fun seekers that I have ever attended. It was great to meet and actually speak with the son of the late Jack Tramiel, Leonard, and Commodore 128 creator and designer, Bil Herd. That crazy dog I brought with me from Kansas City actually got to interview Mr. Herd, and he posted his interview on YouTube for all to see. I know I shouldn't plug Theo's video in my article after what he has done

but when you catch someone as big in Commodore as Bil Herd being playful with such an animal like Theo, you gotta broadcast it. So, type in the YouTube search engine THEO IN VEGAS (all caps) and look for the puppet sheepdog, it would be worth your watching.

Like I said, the 2015 CommVEx was probably the creme del la creme of all the CommVEx shows I've attended and read about. We had big celebrities and fun, fun, fun all around. But, alas, not all was perfect at the show and that was mainly due to me.

Ladies and gentlemen, my apologies to you for such a poor showing of what we in the Midwest are doing with Commodore at the show. I had twelve months to get ready and make a large presentation, and that was my plan from August 2014 to July 2015, but, do you know that familiar voice that lurks in your mind called Procrastination that always tells you to do what needs to be done later, or next week, or next month? Then, when the newly allotted time arrives, there are more pressing issues that arrises so I, again, push the time back. What little was shown at CommVEx by me was assembled and finalized in a three week period between July 4th and show time. And then, at presentation time, I only show one of many programs present on my "5 Program Bonus Disk" and cut off any question and answer time since I knew I would not be able to answer efficiently inquiries from such a studious group. I also did not plug well my Commodore book so people had no idea how to respond when I asked for a show of support for a sequel to the same. An uninformed group does not know how to vote on a proposal. Even my back woods jokes I lamely tried to tell backfired as I poorly delivered the material. All in all, a pretty lousy presentation on the part of The Fat Man.

Now the question that is to be asked here is: What am I going to do to fix the problem? Well, I need to join my local chapter of "Procrastinator's

Thirty Three Years And Still Coming At Ya Commodore Strong !!

Anonymous," but they keep postponing their meetings till the next month. What about getting off my lazy, fat, flatulent fanny and get things done? Hmm. Sounds like a good plan but it may lack execution. This whole thing measures around a simple deal of time management. It is true, o reader, that ye olde Fat Guy here does put in a lots of hours doing three jobs and working overtime so, thinking on those lines, maybe it's not a matter of procrastination, but of a lack of free time to work on all things Commodore. Not everyone can be a Robert Bernardo and focus all our energies on this fantastic single board wonder (just kidding, Robert!), but, at the same instance, I think I must review the past twenty four hours and discover where my "free" time, if truly any, has gone.

----- snip -----

After a thorough investigation of a random twenty four period I have come to the conclusion that a lot of my free time (where I'm doing little to nothing) is actually embedded within my work times, like breaks, lunches, and layovers. I've ran into this problem before when I was editor of the Commodore Users Group of Kansas City's newsletter, "Ryte Bytes" and, writing wise, the answer came in the form of a little program embedded within the iPhone 4 simply called Notes. Notes is just what it claims to be, a note taking program for the quick jotting down of information. I have used Notes in the past to make writing deadlines by typing in the words I want to say and forwarding those notes to my personal email, then copying the document out of email and pasting it into my computer's word processor, where final blocking and editing are done. The iPhone 4 has long since been disconnected from the network so I have to wait until I get to a wifi hot spot to send the document through the email.

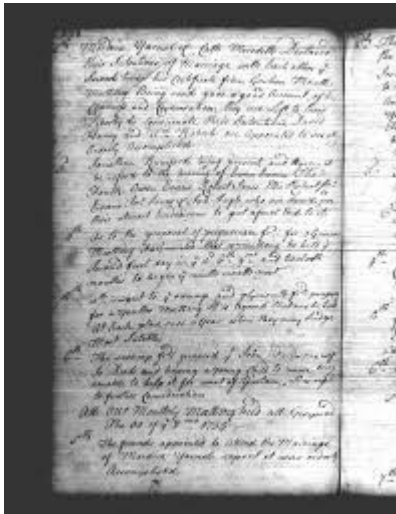
With that problem solved for the most part, what about programming in Commodore BASIC? How will that be accomplished? I've been thinking

about that and -- I'm drawing a blank. Unless some of our Commodore geniuses out in cyberspace can come up with an application for either Apple or Android, we may be at an impasse, albeit a temporary one. My oldest son, RJ, has been looking off and on for an app to allow him to play his favorite Commodore games that he grew up with, like "Hardball!" The app I would be looking at would be more of a "swap" program between Commodore computers and the device. Most likely a third party computer running either a Windows or Mac OS would be necessary to make such a product work properly. But, as always, the final denominator comes down to money, money, money! How much can be made on such an application? If you're asking this Redneck then my answer is simple: I don't know. Like pretty much everything else it would all come down to how well the product is marketed. I'm having my own personal battles with marketing on all the books I have in circulation. I'm not the one to ask on this.

Well, with all that ironed out it looks like this old man has a plan as to what needs to be done in order to make his Commodore time more productive both on as well as away from the keyboard. I'm confident that a better showing on Commodore from the Midwest will be able to grace next year's CommVEx. It looks like a good time all around the Roach Center For BASIC Commodore Studies as we prepare for same...



Thirty Three Years And Still Coming At Ya Commodore Strong !!



MONTHLY MEETING REPORTS

– July 2015 –

-by Robert Bernardo & Dick Estel

Dick arrived on time, just before 11 a.m., and was soon joined by... no one.

So he waited. He checked email on his iPad. He ate chips and salsa and waited.

Finally about 11:25 he called Roger, who is always very responsible about getting the equipment to the meeting on time. Because of the change from third Sunday to second, Roger had forgotten about the meeting. His brother had the only car, so he would have to be picked up.

But without Robert, would there be a meeting? Dick called Robert, knowing he would get no answer if Robert was not at home. Robert's cell phone is registered in Europe, and Dick didn't have the number anyway.

No answer. Dick decided that if Robert had not arrived by noon, he would order lunch and then leave. First he decided to send an email to Robert. He might get it on the road, but most likely not.

Just before Dick pressed “send,” he walked Robert, with a sad tale of locking his keys inside the house. Getting this resolved put him about 45 minutes behind time.

Dick then left to get Roger and the equipment, and soon all was well, with only a 90-minute delay in getting things started.

The focus of conversation was CommVEx, coming up the following weekend. For the first time all the club officers will be present - Robert, Roger, the Mazzeis, Dick, and newsletter editor Lenard Roach. Roger will travel with Robert who leaves Wednesday, and Dick will report on Friday evening.

Being a first-timer to CommVEx, Roger had several questions about the show, and Dick and Robert answered all of them.

Having returned from a quick trip to Europe, Robert showed some goodies he purchased there, including several brand new C-64 games, an adapter to control the C-64 with a Play Station controller, a USB mouse to Amiga mouse adapter, and a virtual USB drive that installs in the Amiga 500 to replace the mechanical drive. It also works with the A1200, but requires substantial modifications to the case.

He also showed the BenQ monitor (pronounced Ben-Q), acquired in England and the first monitor he'd ever purchased brand new. It was thin, lightweight, and featured a nearly square screen, designed especially for computers such as the Commodore Amiga. The BenQ monitor was put through its paces, and it performed well with every screen mode of Robert's Amiga 3000, quite a feat for a modern monitor in that most of them cannot sync down to the Amiga's 15 KHz signal.

Robert then showed some video of bands he saw at the June 20 Back In Time Live 2015 in Brighton, England, playing Commodore and

Thirty Three Years And Still Coming At Ya Commodore Strong !!

Amiga game music on real instruments.

Finally he reported on his trip to Amsterdam, Netherlands, for the Amiga 30th anniversary show. Speakers included Amiga developers Dave Haynie, RJ Mical, and Carl Sassenrath. We watched brief video excerpts from their talks.

For our software demos, we tested the games Robert brought from England, with the usual results that some were very good, and some were a bit hard to figure out. They were the new Psytronik/Binary Zone C64 games -- Rocket Smash EX, Kung Fu Maniacs Trilogy, Gravitrix, and X-Force.

We also tried out classic C128 applications -- The Hunter (a hunting test which showed we did not have good hunting knowledge), Morse Code Tutor (which played back sounds that vice-president Roger could decode), and Typing Tutor III (a simple keyboard typing program).

– August 2015 --

-by Robert Bernardo & Dick Estel

The Mazzeis, Louis and Vincent, as well as Greg Dodd, made an appearance after being absent the last month or two. Also present were Robert Bernardo, Roger Van Pelt, and Dick Estel.

While we waited for our food, we looked at two photos of Robert at the recent Star Trek Convention in Las Vegas, posing in original series' uniform on the Enterprise bridge and in the transporter. Getting these photos lightened Robert's account by a number of credits, but everyone agreed it was worth the cost.

Next we had a lengthy discussion of funding for future CommVEx shows in Las Vegas. At the 2015 CommVEx, those present were invited to participate in a discussion of the future of the event. The main focus was getting a larger room

and how to finance it. Various ideas were discussed, including combinations of table sales, increased admission, voluntary donations instead of admission, and free admission.

Dick presented an analysis of sources and amounts of income for the past five years, and estimates for what we would receive under various methods discussed. It was decided to continue with the business model that has sustained CommVEx for the past ten years -- a flat admission for both days, no charge for table space, and no change in raffle ticket prices. Since the cost of the larger room is nearly double, the admission price will be set at \$20, covering both Saturday and Sunday.

Greg advised us that he would like to host a meeting at his house. We will try to schedule this for November or December.

Louis stated that he is always on the lookout for supplies of Commodore computer chips, so there will be some available for members as needed. He also plans to give some to Ray Carlsen, who recently gave him a power supply.

Greg brought in a rare Atari Falcon computer, which had been highly modified, and which had been given to him recently. Despite various attempts, it would not work, and it will eventually go to Duncan MacDougall of The Other Group of Amigoids for repairs.

Robert set up a VIC-20 and plugged in a new product, the Mini 32K RAM expander with DIP switches and a reset button. We looked at Pluto, a new demo showing the famous Disney dog walking along to the beat of a jaunty tune. Then he ran Boray Gammon, a new backgammon game for the VIC. In the game, you can let the computer play itself, have yourself play the computer, or have yourself play against another person. Unfortunately, none of us knew how to play backgammon, though Roger had an inkling

Thirty Three Years And Still Coming At Ya Commodore Strong !!

of what to do, based on how his brother played the game. Roger said that he will try the program at home and see how his brother gets along with it.

Robert also made a Commodore disk from a D64 image using D64it for the C64. That took several minutes, but after the process was over, he had a disk of the latest graphics slideshow, Botticelli Bilderdisk 40, for the Plus/4. Using a NTSC Plus/4, Robert ran the disk's first program, which was the introductory screen, and then the first graphic, which was of an evil locomotive. But when the space bar was pressed on the computer so that the next image could be displayed, there would be many PAL video artifacts, and the next image would never be displayed. Though Bilderdisk was advertised to be both NTSC and PAL video-compatible, we found it to be only partially NTSC-compatible.

In a more successful presentation, Robert loaded Robert "Hydrophilic" Willie's BASIC 7.80, which makes certain C128 graphic commands work in both 40 and 80-column mode.

As the meeting wound down, Robert powered up the Amiga CDTV, which now boasts a matching keyboard and mouse.

LINKS:

Greg and the Atari Falcon:

<http://www.dickestel.com/images/fcug411.jpg>

Pluto out for a stroll:

<http://www.dickestel.com/images/fcug416.jpg>

Amiga CDTV:

<http://www.dickestel.com/images/fcug417.jpg>



DICK GOES TO COMMVEX

-by Dick Estel

After skipping the event the last two years, I once again took the long, boring, hot drive to Las Vegas for the 11th annual CommVEx, the Commodore computer show sponsored by clubs in Fresno and Vegas, and held this year at the Plaza Hotel. I've already driven through Las Vegas once this year, on my Colorado Springs trip in June, and will do so again in October when my daughter and I visit Grand Canyon and some of the national parks of Utah.

So when I had to drive not THROUGH Vegas, but TO it, I was less than thrilled. Still, I had a good time, met some new people, renewed old acquaintances, and heard some interesting new stuff about these old computers.

Without going into detail here, the Commodore 64 was ahead of its time and sold more units than any other single model (regardless of Steve Jobs' claims to the contrary). The Commodore 128 took things a step further, with more capacity and increased speed, and also sold in the millions. For a number of reasons, the company did not keep up with developments in the world of computers, and went bankrupt in the early 1990s. However, the name lives on.

Thirty Three Years And Still Coming At Ya Commodore Strong !!

There were numerous other models before and after the C64 and C128, but those were the biggies. The next most successful product was the Amiga line, which had three or four models. It started as a separate company, but was bought by Commodore before being brought to market. For many C64 and C128 users it was the next logical step, offering more memory, faster speed, and a better color palette. I never used an Amiga, but I would guess that 90% of its users were former 8 bit owners

Most of the officers of the Fresno Commodore Users Group (FCUG) were at the event, one of them for the first time. They included President Robert Bernardo, Vice President Roger Van Pelt (our first-timer), treasurer Dick Estel, board member Louis Mazzei, his son Vincent, Grand Exalted Poobah of the VIC20, and our newsletter editor, Lenard Roach. Lenard lives in Kansas City KS, performs his duties long distance, and made the 25 hour drive with his oldest son and several friends. Robert and Roger drove down Wednesday in my F150 pickup, to provide more carrying capacity than Robert's Crown Vic; I drove down Friday, and the Mazzei's left Thursday after work, arriving very early Friday morning. Most of us stayed at the Plaza, although Robert and Roger were at another motel a few miles away.

Since most of my audience are not Commodore fans, I will focus on non-technical matters. Robert and Lenard will surely provide reports on that aspect of the event, and publish them where the proper audience will see them.

I arrived about 5 p.m. Friday, stopped by the meeting room to see what was going on, then got checked in. Although the show does not officially start until Saturday, there are lots of people there Friday evening, setting up their equipment and greeting other Commodore fans from around the country and the world. I have to confess I was

happy to see that Robert and Roger had already finished setting up most of the equipment we were responsible for.

The hard core fanatics stay in the room as long as Robert lets them, which Friday was about 1:30 a.m. I however, was long gone, reading, relaxing, and getting to bed at my usual time, a little after ten.

The show started Saturday at 11, but Robert was there at 7 a.m., driving from his motel several miles away. Roger, unused to the wild Commodore life of virtually no sleep, slept in, so at 9:30 I was dispatched to pick him up, along with more equipment. We then went to a local supermarket to pick up a cake Robert had ordered in honor of the 30th anniversary of the Amiga and C128.

We had good attendance this year, with 47 paid admissions. In addition there were a couple of special guests who did not pay. With a few wives and kids not on the registration roster, we had about 55 people, not all there at once.

However, the special guest who caused the most excitement was Bil Herd who describes himself as "a recovering Commodore engineer." Bill worked for the company in the early 1980s, and was one of the designers of the Commodore 128. He described the development process as designing a computer to do what the engineers thought it should do, rather than to meet the goals set by sales and management. I only made use of the two major Commodore products, of which there were at least two dozen brought to market, but the C128 seemed to me to be the perfect computer for its time, capable of many things that designers of IBM and clone PCs had not yet been able to do.

Bil is a fascinating speaker, with an endless supply of stories. Some of them are of interest mainly to those with considerable technical

knowledge, but many are of the "human interest" type that would entertain any audience. Bil spoke for close to an hour, recounting various experiences and events during his years at Commodore.

He then called up our other special guest, Leonard Tramiel, son of the founder of Commodore, the late Jack Tramiel. The business started as a typewriter company, later made office furniture, watches, calculators and a number of other products, before venturing into computers in the late 1970s. Bil asked Leonard a series of questions about matters that took place during the time Bil was with the company, as well as some about the Tramiels' work at Atari after Jack resigned from Commodore.

One of the most fascinating revelations was that Jack was not at all interested in technology. He was interested in creating a product that could be sold at a low price to millions of people, and succeeded wildly in that quest. The first computer he was really comfortable using was an Apple iPad.

Bil continues to write and speak about his experiences, and there are articles and videos on line.

Once they finished their presentations, Bill and Leonard cut the C128/Amiga 30th anniversary cake and all who desired some had a piece. Since I am no longer a Commodore user, just sort of a hanger-on-er, most of the talks and demonstrations were not of great interest to me. Still, it's always fascinating to see what people are doing with these machines that were declared "obsolete" over a decade ago. There is pretty much no modern computer equipment that has not been made to work with a Commodore or Amiga computer, particularly various configurations of flash drives and CD-ROM drives.

I enjoy seeing the various pieces of equipment

that are put on display, and of course, I have great respect and admiration for the enthusiasm of these vintage computer fans. However, I had duties that kept me occupied throughout the day.

As usual, I operated the registration desk, collecting admission and selling tickets for the prize drawings that are held throughout the event. The procedure is to have a container for each prize, so that people can put their tickets into the box for the specific prize(s) they are interested in. In the past I had used the lightweight cardboard boxes that CDs and DVDs used to come in, but this year I hit on the idea of washing out Hershey's cocoa boxes, melting a slot into the top with a hot screwdriver, and labeling each box. It worked out well, and gave us a much more durable container, reusable for many years. Years ago I created an Excel spreadsheet file in which I enter the name of each person and the amount of their admission and raffle ticket purchases if any. The dollar totals are automatically updated on a second sheet that shows income and expenses, so at all times we can see how close we are to covering costs. At the start of the day on Saturday this was a busy task, but I enjoy it, and get to meet everyone who comes in, at least briefly.

The final "presentation" of the day was actually a round table discussion of the future of CommVEx. The room we were in was slightly smaller than the one provided last year, and I believe a little smaller than what we had three years ago at the Las Vegas Club Hotel. There were more people wanting table space, and of course, near-record attendance. Therefore the room was crowded, it was hard to get around, and the various exhibitors were jammed together with no elbow room whatsoever.

Robert had talked with the hotel about a bigger room. One is available, but the cost would be nearly double. Since we have been doing just a little better than breaking even, funding the extra

cost was a concern, so Robert asked everyone present for their thoughts.

Without exception, everyone felt we needed the bigger room. Several of those present said they would donate anywhere from \$100 to \$500 to help pay for it. We also talked about increasing the admission price, currently \$10 for both days. Many said they would not object to a higher price. We've never charged for the use of tables, and a number of those who had set up tables for various purposes said they would be willing to pay for the privilege. There was also discussion of making admission free but charging for tables, advance registration (so we would know before the event how much money was coming in), making admission good for the entire family (although few family members attend), and asking for voluntary donations instead of a set price. It was clear that with money raised this year plus pledges, we could fund the larger room for next year, and that decision was easy. Whether we can sustain this is another matter, so the precise method of admission/table fees etc. will be discussed further by the organizers of the event, and a decision will be announced later, after we calculate how various methods would work. In a good sign for the future, several people made immediate donations, so one way or another, we can look forward to a bigger, better, less crowded CommVex next year.

In a long-standing tradition, those of us who wanted to walk to the nearby Main Street Station to eat at the buffet a little after 5 p.m. This year our group was 17 strong. Due to consuming cake, a very tempting doughnut, and a peanut butter sandwich, I was not hungry enough to take full advantage, but I managed to enjoy it anyway. A lucky few, including myself, were seated near Bill Herd and were treated to another series of his always enjoyable stories.

One of the best features of the meeting is that many people bring their own equipment some to

display it, some to sell items, and many to just play/work. Several of them spent both days sitting at their computer, working on projects, and talking to people who were interested in what they were doing. Of course, they also kept an eye and ear on those presentations that were of interest to them.

Sunday's presentations covered a wide array of topics, but again the best one was Bil Herd's second talk. In this case he just called for questions, but with rare exceptions, each question triggered his memory of still another fascinating story of the heyday of Commodore. It was obvious that Bil enjoyed the occasion as much as his audience.

Eventually closing time arrived and the part of the weekend I enjoy least began - disconnecting all the computers, packing everything up, and loading it into the truck. Since Robert does not have room to transport the extra computers we like to set up, we get some from Al Jackson, a member of the Las Vegas club. These then have to be returned Monday, and fitting everything into the truck is a challenge.

This time I was able to put quite a few things in my car so that Robert could get all the rest of his and Al's items in the truck, but it would not have been possible without the packing expertise of one of our guests, Agent Friday (Steve Davison). He must be an expert at Tetris, because he fitted things together in the truck bed in ways the rest of us would never have thought of.

It took about two hours to disassemble and load the equipment, with some more waiting time as some of the guests finished getting their own items loaded.

Our Sunday dinner tradition is a visit to a sit-down restaurant in the nearby Hotel California, where about 17 of us enjoyed a very good but very late dinner.

Returning to the Plaza, we detoured through Fremont Street but I felt my eardrums ms being destroyed as soon as we walked in. I turned back and returned to the hotel, leaving the others to suffer as best they could. I thought I was going to escape without being tempted by the casino, but walking back in I put some money in a slot machine, which paid off less than any other machine I've ever used. At least the torture was over quickly, and I headed upstairs to bed. Robert could not leave before noon on Monday, so it was decided that Roger would ride home with me. I checked out of the hotel, got gas, and headed for their motel. I had a hand cart that Robert would need, so I asked Roger to get the keys and open the truck so I could put it in. Roger put his luggage in the Honda, and we left Las Vegas about 9:30. Our trip home was mostly smooth. We stopped for lunch at Peggy Sue's Diner near Barstow, then continued on our way. We made a rest and gas stop in Earlimart, just north of the Kern County line, about 70 miles from home, and I asked Roger to drive. I then checked the email on my cell phone, only to discover a very unhappy message from Robert asking where in heck were the keys to the truck. We pulled over, and Roger sheepishly pulled them from his pocket.

By this time it was after 5:30, so we made arrangements to send them priority mail the next day, meaning Robert would have to spend another two nights in Las Vegas. We also agreed that someday we would look back and laugh, but that it would probably be quite a long time. After dropping Roger off at his apartment I arrived home between 6:30 and 7, a trip of 830 miles. I packaged up the keys, got up early the next day, and was at the counter at a nearby FedEx before 8 a.m. The following day, Wednesday July 22, the keys arrived at 9:30 a.m. and Robert could finally finish up his duties - returning Al Jackson's equipment, and signing a contract for next year's CommVEx.

Every time I am in Las Vegas the crowds, the noise, the traffic, and the temptation combine to make me swear I will never return. This time was no different. However, I now think I will have to come back in 2016, if only to see how the new, bigger room works out.

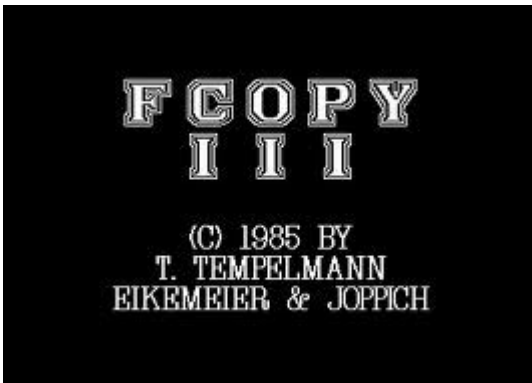


If all goes well with cars and computers, then the next issue of The Interface should be ready no sooner than ...

November 5th, 2015



Thirty Three Years And Still Coming At Ya Commodore Strong !!



THE STORY OF FCOPY FOR THE C64

-by Thomas Tempelmann

Back in the 80s, the Commodore C-64 had an intelligent floppy drive, the 1541, i.e. an external unit that had its own CPU and everything. The C-64 would send commands to the drive which in turn would then execute them on its own, reading files, and such, then send the data to the C-64, all over a proprietary serial cable.

The manual for the 1541 mentioned, besides the commands for reading and writing files, that one would read and write to its internal memory space. Even more exciting was that one could download 6502 code into the drive's memory and have it executed there. This got me hooked and I wanted to play with that – execute code on the drive. Of course, there was no documentation on what code could be executed there and which functions it could use.

A friend of mine had written a disassembler in BASIC, and so I read out all its ROM contents, which was 16KB of 6502 CPU code, and tried to understand what it does. The OS on the drive was quite amazing and advanced, in my opinion; it had a kind of task management, with commands being sent from the communication unit to the disk I/O task handler. I learned enough to understand how to use the disk I/O commands to read/write sectors of the disk. Actually, having read the Apple II's DOS 3.3 book which

explained all of the workings of its disk format and algorithms in much detail, was a big help in understanding it all. (I later learned that I could have also found reverse-engineered info on the more 4032/4016 disk drives for the “business” Commodore models which worked quite much the same as the 1541, but that was not available to me as a rather disconnected hobby programmer at that time.)

Most importantly, I also learned how the serial communications worked. I realized that the serial comms, using 4 lines, two for data, two for handshake, was programmed very inefficiently, all in software (though done properly, using classic serial handshaking). Thus I managed to write a much faster comms routine, where I made fixed timing assumptions, using both the data and the handshake line for data transmission. Now I was able to read and write sectors, and also transmit data faster than ever before.

Of course, it would have been great if one could simply load some code into the drive which speeds up the comms, and then use the normal commands to read a file, which in turn would use the faster comms. This was not possible, though, as the OS on the drive did not provide any hooks for that (mind that all of the OS was in ROM, unmodifiable). Hence, I was wondering how I could turn my exciting findings into a useful application. Having been a programmer for a while already, dealing with data loss all the time (music tapes and floppy disks were not very reliable back then), I thought: Backup!

So I wrote a backup program which could duplicate a floppy disk in never-before seen speed: The first version did copy an entire 170 KB disk in only 8 minutes (yes, minutes), the second version did it even in about 4.5 minutes, whereas the apps before mine took over 25 minutes. (Mind you, the Apple II, which had its disk OS running on the Apple directly, with fast parallel data access, did this all in a minute or so).

Thirty Three Years And Still Coming At Ya Commodore Strong !!

And so, FCopy for the C-64 was born.

It became soon extremely popular. Not as a backup program as I had intended it, but as the primary choice for anyone wanting to copy games and other software for their friends. Turned out that a simplification in my code, which would simply skip unreadable sectors, writing a sector with a bad CRC to the copy, did circumvent most of the then-used copy protection schemes, making it possible to copy most formerly uncopyable disks.

I had tried to sell my app and sold it actually 70 times. When it got advertised in the magazines, claiming it would copy a disk in less than 5 minutes, customers would call and not believe it, “knowing better” that it can’t be done, yet giving it a try. Not much later, others started to reverse engineer my app and optimize it, making the comms even faster, leading to copy apps that did it even in 1.5 minutes. Faster was hardly possible, because due to the limited amount of memory available on the 1541 and the C-64, you had to swap disks several times in the single disk drive to copy all 170 KB of its contents.

In the end, FCopy and its optimized successors were probably the most popular software ever on the C-64 in the 80s. And even though it didn’t pay off financially for me, it still made me proud, and I learned a lot about reverse-engineering, the futility of copy protection, and how stardom feels. (Actually, Jim Butterfield, an editor for a C-64 magazine in Canada, told its readers my story, and soon he had a cheque for about \$1000 CA for me – collected by the magazine from many grateful users sending \$5 cheques, which was a big bunch of money back then for me.)



Paul Armstrong Equipment Sale

A huge treasure trove of Commodore equipment, software and accessories has come on the market. Paul Armstrong, of the Clark County Commodore Computer Club in Las Vegas, has been collecting computer “stuff” for close to 30 years, and is now offering most of it for sale – over 300 cartons of new and used Commodore goodies, including hardware, magazines, manuals, disks, etc.

There are also some Atari, Nintendo and Mattel game consoles, Commodore wrist watches and adding machines and who knows what else. Paul tells us that everything will be clean and tested.

He probably has just about anything you might want, so if you are looking for something specific, email Paul at CommodoreLasVegas@email.com, and he’ll get back to you with availability and pricing.



Thirty Three Years And Still Coming At Ya Commodore Strong !!



MEMORY LANE

-by Dick Estel

INTRODUCTION

This is number 14 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, some 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.

BILL TERRY and MARIE TERRY

There are several former members that I don't know a lot about, or don't have much to say about. This is a reflection on me, not them. For these folks, I will devote a couple of paragraphs to each and combine two or three in one article.

Marie Terry and Bill Terry and were the only mother-son combination who ever attended our meetings. As far as I can recall, Marie was not an official member, but came to most meetings and seemed to enjoy the group. Her big interest was genealogy – she was a member of a local genealogy society, and was heavily involved in

research. I don't know if she made use of a computer for her record-keeping, but it's not likely she did much of her early research on the Internet, which was barely known at the time.

Bill was a teacher, and like many in that profession, used his Commodore to maintain class records and grades. He was also a devotee of slot machine gambling, and had some interesting and useful ideas on how to succeed at this activity. (I'm sorry to say that either I did not follow his advice correctly, or it just didn't work for me.)

After he retired, and probably before, Bill handled the announcing duties at school sporting events, mainly varsity football, in Visalia where he lived.

It's been a while since Bill came to a meeting, but Robert, also a Visalia resident, kept in touch with him for some time. Marie passed away a number of years ago, while Bill was still attending meetings regularly.

Club Officers

>>--> Officers and Keypersons <--<<

- President Robert Bernardo
- Vice-president Roger Van Pelt
- Secretary/Treasurer Dick Estel
- The Interface Editor Lenard Roach
- Librarian Dick Estel
- Club equipment Roger Van Pelt
- Meeting place reservation Dick Estel
- Grand poobah of the VIC-20 Vincent Mazzei

-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

Thirty Three Years And Still Coming At Ya Commodore Strong !!

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.

Permission to reproduce content of The Interface is granted provided credit is given to the source, and when identified, the author. Club members are encouraged to submit articles, tips, or ideas for articles.

Disclaimer – The club, its officers, members, and authors are not responsible for the accuracy of the contents of The Interface or the results of actions based on its contents.

Our disk library contains over 3,000 public domain programs for the C64 and C128. Members are entitled to copies of these disks at no cost if a blank disk is provided. We do not deal with pirated, copyrighted, violent, or obscene programs. Please call our attention to any programs found in our library which may violate these standards.