THE EDITOR'S GODZILLA
By Lenard R. Roach

COMMODORE PROBLEMS

Unaccustomed as I am to public writing, I do want to share with our local Commodore community about problems I had recently with one of my programs and how I went through the task of thoroughly investigating the problems instead of giving up on the Commodore 64.

I was working away at my Commodore early one afternoon, being pressed for time because I naturally had overbooked my day and I was busier than a one-legged man chasing a rolling doughnut downhill; therefore, any problem with any computer, be it Commodore or PC, was not welcome.

As I was going along, I got to the point in my bill process where I was going to print my envelope faces and load the return address LENARD into the machine when the disk drive light started to flash, and I got a message which said READ ERROR. This naturally raised an antenna on me. I had been using this file for a while; I shouldn't have had a READ ERROR. Thankfully, I never had updated this disk. All my data on these files and similar files went back to May, 2020. Since I was starting to run short on time, I exitedthe program, loaded a file nibbler, put a blank disk into the second disk drive, put the supposed

bad disk into the first drive, activated the nibbler, left the computer to overwrite each file one by one, and left the house to work on my next task.

When I got home, I checked on the Commodore, and it had found a second file that refused to read. So, I ignored that file and moved on, but on a second sheet of paper I noted the file name so Icould correct it later, if possible. By now, it was late. I got ready for bed, but instead of going to bed, I stayed up and continued to work. Addressing the envelopes was my last task before finishing the project; I wrestled my way through fatigue to make sure it was done. I don't do my best work when I'm tired, but thankfully the Commodore file nibbler I inherited did most of the work for me, and all I had to do was sit back and relax and possibly take a short siesta in my chair while waiting for the nibbler to finish the job. No sleep came, but some deep breathing did comein handy to make this problem a little easier to handle.

Once that chore was done, the next step – Why did the error occur? In my world a problem usually falls on four categories: the computer, the drive, the program, or the disk. Since the computer anddrive were cooperating during the nibbler phase of Operation Recovery, that eliminated them as being the cause. That left only two possibilities. I started looking at the disk. Most Commodore disks are 40 years old or better, so I suspected that they would naturally wear out quickly. I would hate to pitch one of my most frequently used disks in the trash without backing it up and without going through the task of rebuilding the files from the ground up, but that would be my stupid since I didn't back up my files to other disks on a regular basis. Any problems and I could go to the back-up disk and continue my work without much interruption. But before I threw the master disk into the bin, I wanted to see if the back-up files in question could be read off the back-up disk. Exitingthe file nibbler, I went back into my original

program and started filling in all the necessary info to make the program work, and sure enough, the back-up file worked fine. The problem was clear. It was a corrupted file, but could I recover the disk that it was written on?

I completely erased the master disk by using the format feature offered in Commodore computers and loaded a mirror copier from my collection. This program will transpose all the data from one disk onto another in about ninety seconds to two minutes but will only work with two drives. In fact, both the file nibbler and the mirror copier I use will only work if a person has two drives. Thankfully, I always try to have two drives on my computer setup for just such an emergency. Needless to say, I got the master disk fixed, and I was back into business. However, my business was going to have to wait until the next morning when I wasn't so tired. I needed sleep.

The lesson I took away from all this was don't always hit the panic button and quickly pitch your disk. Sometimes it just takes a little patience and investigation to really find the culprit behind a problem with your Commodore. I wish I could have learned this lesson sooner, because I have thrown away several good copies of "The 3 Stooges" video game; I had thought the disks were bad, but it came down to the fact that there was something else wrong with the computer.

I wish I could say that the C64 came out of the box problem free, but even after all these decades of using the machine, the machine still surprises me with all the ways it can come up with a way to fail. Don't give up on the computer just because it is giving you problems. With today's technology, tools, and this thing called the Internet, a home user can become a Mr. or Miss Fix-It with just a little study and a lot of understanding. The cool thing is you can repeat the YouTube video or reread the Net article that solves the Commodore problem, and get right into fixing it. My son, who works on computers as a hobby, claims that the

Commodore computers are the easiest machines he has ever come across and is always happy to sit down for a few minutes and work on my machines when they display an error message.

Also remember the disk, especially the one that is 5.25" in size, is most likely as old as your computer itself, and the data written onto it is only as good as the magnetic media that it is written on. After so many uses, that data will lose integrity and needs to be "refreshed" from time to time. Even back in the early days of Commodore, the technicians behind the machine suggested strongly that a back-up disk be made of all fresh data stored in the computer's memory. This was the reason for the invention of copy programs – to preserve the data, even after the end of the reign of Commodore as the boss computer of the 80's.

Now let's not forget that the entire single board system that is the Commodore 64 could be the criminal in the case of a failed READ/WRITE. command given to it, and the computer decides to enter into some sort of tailspin. The next thing you know you have a SYNTAX ERROR that has to be dealt with. If I understand most present-day users of the Commodore, they have a desk drawer full of used but good chips that a simple swap would fix if necessary. I personally do not have the skill or possess the necessary tools or pieces to make the computer good again, so I usually am at the mercy of electronic repair personnel that have never seen such a device before as the Commodore computer. This is the curse of living in an area where the Commodore is forgotten, and I have to search out of my area, sometimes thousands of miles from my home, to get repairs done. In the meantime, I usually have a back-up C64 or two in my own Commodore office when, in the case of a computer emergency, I have to get a different computer onto the desk.

Did you think the disk drive was going to get out of this scrutiny? No way. Sometimes, the evil minion of computing disaster is that big box in

which the user slides the disk into the box, closes the door, tells the keyboard to load the program into memory, and finds that the load fails. I was personally told that when this happens, check the drive head rails because they could probably use a good dry lubricant, like graphite, to get them going again. Sometimes the silly disk drive has gone down and needs to be repaired or replaced. The disk drive is not immortal, dear
reader, it just looks that way. One story I'd like to share was of a constantly failing 1541-II disk drive that was so bad my repair person at the time nicknamed it, "Frankendrive", because it was no longer a 1541-II but a hybrid version of several crossover drives; it finally had to hit the trash after numerous repairs and after my repair person telling me that it was done for good. If I look hard enough, I think I still have the original power supply to that drive somewhere in storage in my Commodore room. Anyway, please remember that sometimes these disk drives wear out, and they might be the cause as to why data refuses to load into the Commodore in question.

So, let's review. Four possible causes for error: the computer, the drive, the program, or the disk. The solution: to do what Sherlock Holmes said and eliminate the obvious and whatever is left, no matter how impossible, must be the
truth. In my case, when it came to the computer's error, it turned out to by the disk; it needed to be refreshed – wiped clean and data rewritten onto the media. I also made two extra copies of the same disk; just in case this error ever happened again, I would have back-ups. All disks will be refreshed about once a month and all the data

made current at the beginning of the month. This should slow down the possibility of error during the READ and WRITE operations on the disks.
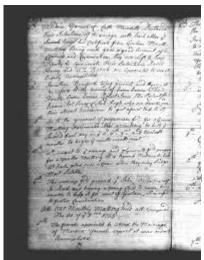
Now, let's get back to using those Commodore machines ....

MONTHLY MEETING NOTES
by Robert Bernardo & Dick Estel

Due to the COVID-19 crisis, all meetings for the Fresno Commodore User Group has been postponed until further notice. Watch this space for more details.

Due to the ongoing pandemic, it's hard to say when each issue of "The Interface" will be available, but rest assured we will be doing our best to make sure this fine Commodore publication is available on time.

Strong After All These Decades

MEMOIR AND INTERVIEW OF ERIC LEE, Creator of The Write Stuff for C64/128

Eric Lee, the creator of Busy Bee Software and author of The Write Stuff software suite for Commodore 64 and 128, was interviewed by Eric "AmigaLove" Hill.

However, in collecting his thoughts for the interview, Mr. Lee was inspired to write his own brief memoir. It has been published here in its entirety, completely unchanged. AmigaLove asked some follow-up questions which have been added to the end of this article.

AN AUTOBIOGRAPHICAL MEMOIR
by Eric Lee.

A Life in Question

I was an exceptionally dull and stupid child; hence, no efforts were made to educate me. I learned early on that asking adults questions annoyed them, so I stopped. And the other kids didn't 'know s**t from apple butter', so I didn't ask them either. This condition favored my becoming an autodidact having a fool for a teacher.

Evidence is that I developed at an exceptionally

slow rate. In any large population of ten-year olds, some may be functionally more like seven-year olds, and some could pass for a teenager. In childhood the gap between my developmental 'age', and the development of my cohorts widened until puberty, after which their rate of growth slowed, but my rate of maturation didn't slow, which allowed me to catch up with my chronological peers. Or exceed them. I was 25 when people stopped asking me which high school I went to...

I was actually in high school when for some reason, having been a non-reader, I tried to read Walden, and Thoreau noted that he only needed to work six weeks a year to support himself the rest. So why should I need to work more? In my last year of public schooling I managed two 'A's, a miracle of rare device, one in zoology and one in earth science. I was becoming more functional.

After high school I spent summers 'on the road' as a migrant farmworker putting in my six weeks. I went to a community college for three years – first year mostly 'C's, second 'B's, and third mostly 'A's. It was low-cost schooling, and I lived in the back of a 1954 Ford pickup I bought for $200 and had fashioned a five-sided box from plywood on [it]. Summers began by hitchhiking to Bakersfield to chop cotton, then following the crops north by hitchhiking and riding freight trains. It was a wonderful life.

Cheap as schooling was, I decided to 'drop out' and feed directly from the trough of knowledge, libraries, so I moved to Isla Vista, a student ghetto next to the University of California Santa Barbara whose nine-story library was open until 11 pm. For nine months or so I wandered the stacks in wonder and read books, whatever seemed of interest. I often walked on the beach and occasionally took in presentations offered. Especially memorable was an informal talk with students (or whomever showed up) given by Garrett Hardin. I wasn't a real student so I didn't

presume to speak to or socialize with any. I once lost my voice from disuse (I don't even move my lips when I read). Some seven years passed.

I was on my way back to California, end of season that had ended with picking apples near the Canadian border. I was watching the Oregon countryside pass from an open boxcar when I thought that if I became an agricultural expert I could live elsewhere about the world and serve humanity by furthering the green revolution.

I tended to work more than six weeks a year, so I had saved up on the money stuff each year. It paid my way to Cal Poly State University SLO for three years and I took BS degrees in soil and crop science (late 1970s and schooling was still cheap).

I did well... would have been paid to go to graduate school, but my education, if not my schooling, had informed me that as an expert in agronomy all I could do was show others how to turn fossil fuel inputs, direct and indirect, into food. But doing so was not sustainable, so transitioning traditional people from what works to industrial agriculture that could produce ten times more food (for a time while supporting ten times more people) was not in their best long-term interest. So I never used my degrees to serve the global economy or make money or otherwise save the world as pretending to save the world or be a benefactor of humankind was of no interest.

After graduating with highest honors, I worked another summer as an over-educated farmworker. It was a last hurrah and I decided to move on as, not unlike Thoreau, I had other lives to live. My older brother knew an engineer who had one of the new Commodore 64 computers. I soon had one too. Not much use without software, so I started typing in BASIC programs published in magazines. I learned BASIC and got into coding to implement visions of software daring do like a version of 'Guess the Animal—Are you thinking of an animal?' with questions based on taxonomy

such that most common animals could be guessed and players could add new ones. I became active in CSUN (a local user group, the Commodore Systems User Network). I served as 'disk of the month' compiler, and, yes, I shared my latest offerings. For a year I was newsletter editor. I got a 300 BAUD modem and went online before there was a WWW.

I even got a 'real' job as an instructional assistant to a special ed teacher in the public school system. I set up a C64 system in the class. California had just decided to levy a tax on the innumerate (the State Lottery) and so I wrote an accurate simulation, and each student who played got a few hundred in pretend money to 'win' more pretend money. None did, and when their bank account was empty, I refilled it, but only after they stood on one leg with a book on their head while they recited a poem from memory. Now that's education.

One year of real work was enough, and while gainfully employed I had gone to a teacher's conference where vendors were plying their wares. I saw a talking word processor for the Apple II for maybe $300 or some ridiculous amount and I thought I could write one for the C64 and sell it for $5. And I did. But first I had to think about what a word processor should do. I knew plenty of software collectors (pirates) and was one, so I looked at the offerings and envisioned one I would want to use (then make it talk).

I went to live on the streets of Santa Barbara, California, parking next to a city park across from an apartment complex where I wasn't taking anyone's accustomed parking space. My home on wheels looked like a utility shell (a new one on a '65 Chevy pickup) and appeared to be locked with a small padlock from the outside such that surely no one could be inside. Flying under everyone's radar worked. I had a small bicycle that fit in the front passenger side. I rode to the beach most

mornings, ran a few miles, then took a swim in the ocean before doing the lay-on-the-beach thing. Back at the truck, I lugged my portable C64 to the city library and did a day's work.

To realize my vision I had had to seriously learn assembly. It ended up taking an hour and a half to assemble a new version, but there were books to read and I often just left the computer running in the library and went for a walk about the city. So some hours of coding and bug hunting, then a break. This went on for a full year. I had to document the software and managed to get a 24-pin printer running in the back of my truck off an inverter to produce a proof of a manual to be copied.

The C64 version of The Write Stuff.

I can't say I had no idea what to do with the heir of my invention, because I did. There were hundreds of Commodore user groups worldwide, and I had a list I could type in. So I did. I made a demo disk that did everything but save. I used all but a hundred and some dollars of my life's savings to send out the demo disks. That could have been the end of the story, but it turned out not to be. Go figure.

I offered to supply user groups with a master copy, numbered disk labels, and manuals (even keyboard overlays) for not much for 10, and less per each on up to 50. I got orders. The Bartlesville Commodore User Group ordered 50 as a first order. The group, of course, would add a copy fee, so, win-win. My 'userware' innovation worked.

To provide user support, I'd need one of those telephone things, so I moved into one of those house things my parent's owned as a rental, a small place behind the main rental. Apart from the kitchen, which became the shipping department, I kept on coding in the bedroom until I couldn't. Then I'd slide out of my seat to sleep on the floor in my sleeping bag. Sometimes I'd awake to a

ringing phone, and someone seeking user support would get all annoyed, because I obviously wasn't actually awake yet. My parents lived next door, and my dad was my only accomplice who filled most of the orders. I had never made enough money to pay taxes, so he handled that for me. I was in business for maybe seven years total. At the peak (and there always is one), sales were over $70K/year, and I flew in an airplane thing to Philadelphia for a Commodore Convention. I did another in L.A. Things happen. Go figure.

I ended up president of CSUN, as some people are easily impressed. I offered free Commodore systems user support and was starting to look like a normal person. One user married me for lifetime user support. We are still tying the knot. Things happen, and I can't figure it out, so I just dance with the system.

I've had a few other real jobs (one lasted seven years), but nothing to speak of. Properly unemployed again, I'm working now to save the world (aka humanity from itself), but no one is paying me to. I've never worked for money in my life. Sometimes it came my way, but it was only incidental to doing important things, like chopping cotton or picking apples.

M. King Hubbert noted while giving a seminar at MIT's Energy Lab in 1981 that there are two incompatible cultures – the 'monetary culture' and the 'matter-energy systems' worldview. I live in Hubbert's world. All the rest of you Anthropocene enthusiasts don't. But have a good Anthropocene while you can. It's a wonderful life a while it lasts. It is down right mysterious. I wonder why?

–QUESTIONS FOR ERIC LEE conducted by AmigaLove...

- Do you still live in the Santa Barbara area today?
EL: In 1994 wife wanted out of California, so it

was Arizona or Oregon. Until late 2018 it was SE Arizona with 11 inches of rain per year, but since then Coos Bay, Oregon, with 66 inches and no AC needed.

- Did you sell more C64 disks, or C128 disks?

EL: C64 was much more common, so mostly C64.

- Did you ever create C64/128 software professionally other than The Write Stuff and its supporting applications?

EL: No.

- How did you create BB Speller and the 17,000 (and 61,000) word dictionary?
EL: I acquired a data file of words from somewhere. I came up with a way to compress the list and search it. I recall comparing mine with one for a 25x faster IBM processor desktop (I eventually got one), and my algorithm was faster. With slow processor speed and memory limits, programmers have
to try harder.

The C128 version of The Write Stuff is utterly packed with features. In fact, the 128 version seems to be more full-featured than most PC/DOS/Apple options, and even 16-bit computers, available at the time.

How did you decide what features to build and pack into the software?

EL: Easy, if I could envision it and code it, I added it. I liked my idea of 'macrotyping' and used it a lot. You created a small text file with one or two characters set equal to any text string less than 256. Whenever anyone typed one or two characters (other than SPACE), then typed a SPACE, the string would appear if defined. So 'B' + SPACE and my mailing address would appear on three lines. Many common words had short-

forms, so my typing was greatly sped up.

- The C128 version of The Write Stuff is bursting with features and special commands. Was there ever a version beyond V2?

EL: No.

- When did you to pack up shop with Busy Bee Software? Was it the demise of Commodore or something earlier that convinced you it was time to move on?

EL: I kept it going after moving to Arizona. Never packed it up, just stopped getting orders or calls wanting user support, so it just faded away over several years. Commodore's passing away was the cause.
- Did you continue your programming talents beyond the C64/128 days?

EL: No. I transitioned into doing websites and dabbled in JS and PHP, contributed to some open source offerings, Joomla! stuff, but I didn't want to try to master other computer systems.

- The manuals, which I love, all have this very unique, almost Robert Crumb-feel to them. I assume you designed and created them using your own software. They are also quite thick and detailed. How long did it take you to print a single manual? Or did you use a photocopy service?

EL: I printed a master copy (originally on a 24-pin printer) and a local print shop printed them and the keyboard overlays. I folded and stapled them, and took them back to the print shop to be trimmed. Users had to cut out the keyboard overlay.

- If I remember correctly, you even offered a service where folks could send you disks for you to professionally print via laser printer. How did that process work?
EL: I bought a laser printer to make the proofs

and recall offering a laser printer service, but I don't recall anyone using it.

Do you still have any of your Commodore computers or software from back in the day?
EL: We still own the place we first moved to as a rental and there is a shed with stuff in it. I had an SX64 (portable as in luggable) and recently found the magnifier I made to enlarge the screen. The SX64 I used to develop the 64 version should still be in the shed with who knows what else. I plan to go get it and see if any of the hardware still works after over 20 some years.

Did you know that the Fresno Commodore Computer Club still exists, and still offers your software for sale when it is asked?
EL: I recall the group as one of the more exceptional, supportive and active. Didn't know it was still active. We should be in Oregon now, but still in Tucson on lock down. We will pass through Fresno on the way back. Third Sundays at 11AM. Maybe. We won't be selling property in AZ at this time, so we'll be back and forth a few more times in the next few years.

Final Notes by AmigaLove

If you're a fan of the C64 and/or 128, I highly recommending checking out The Write Stuff for either platform. The C128 version has more pizzazz, mainly due to its 80-column mode and full 128 support. But both packages are jaw-dropping displays of highly sophisticated software for our beloved computers. Mr. Lee's work is a testament to his ingenuity, and the untapped potential he saw in the machines and was able to bring out single-handedly.

Vulcan to close its Arts + Entertainment division by Moira Macdonald - Seattle Times arts critic

(The Pacific Commodore Expo NW has been located at the Living Computers: Museum + Labs, but now the parent organization is putting the future of the LCM+L in doubt. The following is edited from the original Seattle Times article)

Vulcan on Wednesday said it is closing its Arts + Entertainment division, as well as its film-making entity, Vulcan Productions, by the end of the year.

Two museums under the Vulcan wing, closed because of the pandemic, will also remain shuttered: the Living Computers: Museum + Labs and the Flying Heritage & Combat Armor Museum. For both, the Vulcan statement said the coming months will be a time to evaluate "if, how and when to reopen."

Many of the projects under Vulcan's Arts + Entertainment division stemmed from Vulcan co-founder Paul Allen's personal interests, and served as showplaces for his collections: his movie costumes and memorabilia at Cinerama; his vintage computer collection at the Living Computers: Museum + Labs; and his military aircraft, vehicles and artifacts at the Flying Heritage & Combat Armor Museum.

After Allen's death in 2018, there was much uncertainty as to what would happen to his vast holdings.

Though it's still listed on Vulcan's website under its Arts + Entertainment umbrella, the Flying Heritage & Combat Armor Museum is an independent public charity. Living Computers: Museum + Labs is overseen by a private operating foundation run by Vulcan staff.

The Living Computers: Museum + Labs, described on Vulcan's website as "the world's largest collection of fully restored supercomputers, mainframes, minicomputers and more," opened in Sodo in 2012 and was expanded in 2016. Its offerings included not only selections from Allen's vast personal collection, but hands-on exhibits on virtual reality, self-driving cars, robotics, and computer-generated art and music.

The Flying Heritage & Combat Armor Museum, housed at Paine Field since 2008, showcases aircraft, vehicles and military artifacts from the United States, Great Britain, Germany, the Soviet Union and Japan.

Club Officers

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

President …............................... Robert Bernardo
Vice-president .... Roger Van Pelt
Secretary/Treasurer …......................... Dick Estel
The Interface Editor …................... Lenard Roach
Librarian …................................. Roger Van Pelt
Club equipment …........................ Roger Van Pelt
Meeting place reservation …................ Dick Estel

-**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 Panera Bread, 3590 West Shaw, 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.