Two Degrees of Separation from Einstein
Karan Panetta, Reflector Editor

I'm always telling my students the benefits of being an IEEE member and an IEEE volunteer. I tell them about the networking opportunities to meet the leaders in our field and perhaps to work and learn from the greatest minds in the world. We always think that these opportunities will present themselves at conferences and lectures. I learned first hand that this is not always true.

Many years ago, I was honored to be chosen to be the General Chair of the IEEE North Atlantic Test Workshop. My primary responsibilities were to provide a prominent speaker and to find a cost-effective location to hold the workshop. Getting the then CEO of TeraDryne, Mr. George Charmillot was considered a great accomplishment by my peers for the new girl on the block. I found selecting a suitable venue to hold the workshop far more challenging. My adventure resulted in meeting one of the most brilliant individuals of my lifetime, my friend Larry.

I decided a nice location off the beautiful coast of Cape Ann, would be the most appealing. I must confess, I also wanted a location close to home. When I have to travel long distances and am sleep deprived, I usually look disheveled and feel like a rag. Finally, this was my chance to allow my colleagues to see me as they had never seen me before, refreshed.

I made arrangements to visit a beautiful inn on the ocean. I was greeted by the inn's owner Larry. I handed him my business card and he looked quite surprised. He said, "You have a Ph.D in Electrical Engineering?" "Yes," I responded. He informed me that he had never met a woman Electrical Engineer, never mind one with a Ph.D. I told him that my Ph.D. was indeed legitimate. He was correct knowing that finding a female Electrical Engineer was still considered quite an anomaly in both industry and academia. One would be far more likely to encounter a female truck driver than a female Electrical Engineer, which unfortunately, is a true statistic.

Rather than Larry launching into a conversation about the menu choices for the IEEE workshop, he began asking me questions about electromagnetics. For a moment, I froze as I relived my Ph.D. qualifying exams and the horror of the 30 pounds I gained studying for them. When I regained consciousness, we began what would become the beginning of many fascinating discussions and thus my informal "post-doctoral" studies in the real life history of our country's existence. They include pictures of sailors covering their eyes from the blast. It's no wonder that there are very few survivors among us today.

Larry left the armed services to the dismay of his superiors, but there was a far more powerful commander guiding Larry to pursue an industrial career, namely, his wife. Larry went into industry and talk about developing electron microscope long before the patent was filed by another scientist. He also worked for Boeing which he says was one of the most enjoyable jobs he ever had.

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Apparently, Albert Einstein did teach or summer during the summer at Princeton and Larry was in his class. Larry still has his notes. I now tell my students to keep my handwritten notes because they could be worth something someday!

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Being a new professor at the time, I h to ask, "What kind of teacher we Einstein?" Larry responded, "Brilliant, b a terrible lecturer". I wondered if Einstein were alive today, how he would h responded to students' unsensored opinions of his teaching posted on the internet.

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during the Bikini Atoll atomic testing and is one of the few living survivors.

Larry was born in New York and his love of science came from his mother, who taught him his first chemistry set. He jokes about how as a young child he was able to walk into chemical factories and purchase dangerous chemicals to create explosive concoctions. I wondered if his mother dragged him up to meet Albert Einstein and announced, "Some day, my son will be a scientist too!"

Larry went to Brooklyn Polytech and got his degree in physics. He went into the service and became very well respected by his superiors and his peers. One of his strongest supporters and good friend was an aviator named Laurence Hanscom, the fellow who now has an Airforce base named after him.

During one of President Bill Clinton’s visits to Boston, he met with Larry to hear Larry’s experiences from the Bikini Atoll experiments, experiences that you won’t find discussed in any history book.

Larry described how he was in a small boat a few hours after the detonation. He was accompanied by a graduate student from a prominent Boston area institution. Larry had his camera and the graduate student had a Geiger counter. Unfortunately, the graduate student had the Geiger counter on the wrong scale. Larry and his colleagues were receiving 10 times the amount of radiation they initially thought they were exposed to as they moved closer to the island. This prompted Larry to remind me to teach my students the importance of using laboratory equipment properly.

Larry still has one of the rarest collections of photos from the bikini atoll testing in existence. They include pictures of sailors covering their eyes from the blast. It’s no wonder that there are very few survivors among us today.

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So, how did Larry go from being a scientist to an owner of the most beautiful inn on Cape Ann, where numerous famous movie stars and political figures have stayed? He says his wife came home one day and announced she had put a down payment on an inn. This was the beginning of Larry’s new retirement career.

Larry and I have now been friends for over a decade. I enjoy visiting him at his inn, where I got treated not only to the most fabulous food and gorgeous views of the Atlantic Ocean, but I get to talk about physics, communications, electromagnetics and grand theories that Einstein never got to solve. Patrons sitting nearby stare at us, the two nerds, speaking in geek speak. I have to tell you that in the many years that Larry and I have debated any scientific or historic issue, I lose miserably, that was until last September.

I told Larry I was attending the IEEE Boston Fessenden Milestone for the first wireless voice transmission. He informed me that it was not Fessenden but Marconi who held that honor. We went into a deep discussion on the history of communications long past closing time. Finally, Larry called one of his managers to search the web on Fessenden and Marconi to settle the debate.

Larry was convinced after he saw the list and dates of Fessenden’s patents. Needless to say, I was well versed on the subject when I attended the milestone ceremony the following day.

Larry reminds me of the reasons I became an engineer; the excitement of understanding scientific phenomena, the never ending quest to learn and being smart enough to know that we really know very little about our vast universe. I only hope that I can inspire my students as much as Larry has inspired me.

Larry will be 91 years old this month. I am looking forward to finishing our discussions on black holes, while enjoying the best pecan pie on the planet at his inn.

Happy Birthday Larry, from all of us at IEEE.