

This monthly article highlights one of our branch members. We hope that you enjoy knowing a little more about your fellow members and the interesting life they have had. If you have someone you would like to nominate or if you would like to help author an article, please email the editor, Ron Nakamoto, at [ron.nakamoto\(at\)yahoo.com](mailto:ron.nakamoto(at)yahoo.com).

Lawrence (Larry) Yelowitz



“Did you know, at age 15 I replaced Neil Sedaka as music counselor at Trail’s End Camp, Beach Lake, PA (Summer ’59). Neil, scheduled to return for a second season, bowed out to pursue his music career, which soon soared with his Billboard Hot 100 hit "Breaking Up is Hard to Do" in the summer of 1962. Decades later, my wife and I saw Neil headlining a fundraiser for our synagogue at Flint Center, Cupertino. Although I did not get to meet him, a wave of exciting memories came back to me of my two great summers at Trail’s End Camp.

“I was born the younger of two siblings in a family of four in Brooklyn, NY. My mother was a kindergarten teacher who taught for over two decades and was admired and respected by her young students and their parents. Our apartment was located about a 20- minute walk from

Ebbets Field, home of the Brooklyn Dodgers. Despite this proximity my absolute favorite baseball player in my youth was Willie Mays of the NY Giants. In those days before mega- salaries for star players, many of the Dodgers would walk past my apartment on the way to the stadium as the subway stop was right around the corner from me.



Larry on his family piano at age 3

“To get out of the hot city streets in the summer, my mother took a job as the Girls’ Head Counselor at Camp Mayfair in upstate NY. For many years my sister and I got an eight-week free, summer camp experience as a perk. Fortunately, there was a piano in our apartment and I "had an ear" for music and would play popular radio tunes on the piano, including chords with one listen. I started piano lessons at age eight and continued for about eight years. I always enjoyed improvising with a spontaneous vs. repetitive style with sheet music.

“I attended Erasmus Hall high school and thrived in their musical program. I played trumpet and later trombone with the band. My favorite activity was as pianist for “Sing,” an annual activity



Math Society President and VP Tie the Knot

put on by each Class, which included our writing a 30-40-minute skit with song parodies. I was honored to be voted Class Musician by my graduating class of over 1,500 Seniors. “After graduation I enrolled at Brooklyn College. I had always enjoyed math, so picked that as a major. As a resume-enhancer I ran for and became President of the Brooklyn College Math Society in my junior year. The Vice President that year was a cute freshman girl named Rhoda; she asked me about her duties as V.P. and I told her “to make the President happy.” (This was well before the Me- Too era). We hit it off from our first date. Rhoda laughed at all my dumb jokes, had a beautiful smile, and there was an easy-going relationship that we both found very enjoyable with mutual attraction. Her father liked

me because he was also a piano player (and composer) and admired my playing. In 2020 we celebrated our 55th wedding anniversary.

“As a senior I received an unsolicited, unexpected offer from Harvard University to pursue a one-year Master of Arts in Teaching (MAT) degree in math. The fellowship covered full tuition plus room and board so who am I to refuse the offer?

“Following my MAT degree, I took a position teaching math and decided to join the US Public Health Service Commissioned Corps which would fulfill my military obligation. I went to Washington, DC, and worked for the National Center for Health Statistics, programming in Fortran on applications dealing with health/demographic statistics. Computers were very useful for data intensive tasks, but due to limited resident memory there was a need to constantly load/unload magnetic tapes. I mastered computer programming early on and was able to solve the magnetic tape problem with a program that required minimal memory.

“In April '68 Rhoda and I took our first vacation to CA and we both immediately fell in love with the Golden State. This was a three-week vacation starting at San Diego and ending in Marin. We both still remember driving the red Mustang on Route 1, cruising around Carmel with its easy beach access, outstanding restaurants, and romantic atmosphere.

“Computer Science was emerging as an academic discipline, so I enrolled at Johns Hopkins University and pursued their PhD program. My dissertation area was Program Correctness – the ability to prove with logical rigor that a computer program performed its intended function, rather than merely test it on a sampling of data points. Program proving was a new theory that had originated at Stanford with an article by Prof. Robert Floyd in 1967, “Assigning Meanings to Programs”. The ultimate goal was that if you could prove that a program was correct, there would be less need for extensive and

exhaustive testing which would save time and money. After receiving my PhD, I was on the Computer Science faculty at three universities for the next seven years, including UC Irvine and the University of Pittsburgh.

“While on the faculty at the University of Pittsburgh a job became available at Ford Aerospace Corporation in Palo Alto that seemed to have been designed for me. This was the Kernelized Secure Operating System (KSOS) project, whose goal was to develop a provably secure Unix operating system. The ultimate intent was that an outside user could run all the same applications on KSOS as could be run on Unix, but with the benefit that KSOS would not permit any security breaches. This was one of the first projects sponsored by the Department of Defense to create a secure operating system for defense applications.

“The KSOS project was a great beginning for me at Ford Aerospace. I enjoyed working with a high powered academic and development team developing a new product. I was the liaison to our subcontractor, SRI, International, assigned the theoretical task of developing automated logic proofs. We were successful and were awarded a follow-on project, Provably Secure Operating System (PSOS), *that* focused on adding more automation to the labor- intensive proof technology. Unfortunately, this was too ambitious for the technology at that time. However, our pioneering work advanced DoD knowledge in secure computing and was used to create the “Orange Book” in 1983. *(Editor's note: The Orange Book, formally known as the Trusted Computer System Evaluation Criteria (TCSEC) became the reference set of requirements used by DoD to assess the effectiveness of computer security controls built into a computer system. TCSEC was sponsored by the National Computer Security Center which was an arm of the National Security Agency (NSA). Larry was one of the pioneers in the emerging area of computer security.)*

“Over the course of my 25-year career at FAC/Loral/Lockheed Martin, I have been fortunate to use my academic training in mathematical proof techniques in a variety of projects. I moved to the Tactical Reconnaissance Intelligence Ground Station (TRIGS) program. *(Editor's note: TRIGS was a transportable ground station for the U2 and SR71 blackbird reconnaissance airplanes. It gathered intelligence in various forms and would disseminate the information at various classification levels to many defense and other users.)* A proud moment for me was developing the TRIGS Computer Security Policy Model. This involved developing a mathematically rigorous definition of “secure state,” and using “precondition/postcondition” semantics to prove that the system is initialized securely and maintains a secure state. To make a long story short, after several years of rigorous work we were one of the first DoD systems to be able to certify the TRIGS system for multi-level security operation. (Our certifying agency accreditor had a PhD in mathematical logic, so we bonded instantly.)

“I retired in 2004 after a 25-year career but was requested to consult on a major new defense satellite program with multi-level security protection capabilities. I did so and after an intense period we were informed that LMC was awarded the program. I decided to retire for good on a high note and am very proud of my contribution. Pre-pandemic, I

kept an active musical life, playing piano in three different bands. On Tuesday and Friday mornings I played for the Sunnyvale Senior Nutrition Program; attendees danced to the music working up their appetite for a hot lunch. Tuesday was a banjo band and Friday was a nine-piece mini-big band. The seniors were a super-appreciative audience, applauding after nearly every dance. On Saturday mornings I played more straight-ahead jazz with six friends at the NASA Recreation Center.

“Rhoda worked as a computer programmer at HP and later as a programmer/analyst and project manager at Stanford University, which she enjoyed for 20 years prior to her retirement. Our son Aaron earned his PhD in economics from MIT and is now a professor of economics at the University of Kentucky in Lexington, KY. He has published numerous refereed journal articles including recent ones (http://yellowitz.com/#_ (click on News then Health Affairs) describing the salutary effect of shelter-in-place restrictions on the health of the KY population. Our son Jason achieved entrepreneurial success during the dot-com era. He moved from his house in Sunnyvale to Reno, NV for its more friendly business environment. We have five grandkids between them, all active and curious. Our 3 KY grandkids have all played violin in their school orchestras.

“Rhoda and I have maintained an active social/cultural life in retirement, with numerous theaters, concert, and dinner outings, by ourselves and with friends. Of the many plays we have seen, we are very impressed with the Hershey Felder series portraying great composers (part of the TheaterWorks repertoire), and of these, with his passionate portrayal of Beethoven’s agony over going deaf. We have also enjoyed traveling within the US (many National Parks, and road trips up and down the west coast, plus visits to friends and family) as well as internationally (England, France, Canada, Israel, Spain/Portugal, Holland, Italy, Central Europe, and several cruises). We especially remember our three-week trip to Italy in 1996, where we met our son Jason who was in the midst of a nine-month self- directed world tour. At that time, Rhoda and I were fairly adventurous in traveling around on our own but nowadays we prefer organized tours for international travel and have enjoyed Tauck excursions.

“I will conclude with stating that I greatly enjoy our monthly get together and being able to catch up with my fellow LM and SIR friends. The monthly speakers are tops and I also enjoy, occasionally, serving as the substitute pianist for the Trail Birds. One important lesson I have learned and am always eager to pass on is to have a sense of humor, ... about yourself as well as the situation, and to try to laugh heartily at least several times a week.”