

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).

PETER BARBA



My Barba ancestors came to America from Baden, Germany near the Black Forest to Pennsylvania Dutch country near Bethlehem, PA in the early 1800's. My genealogy investigation discovered that he was a machinist and at one time managed the largest pump in a zinc mine near Hellertown, Pennsylvania. My great-grandfather was a machinist, my grandfather and father were all mechanical engineers so guess what profession I chose? Here is my story.

I was born in New Haven, Connecticut where my father was working for Vacuum Oil Company. When I was four, we moved to Webster Groves Missouri (a suburb of St. Louis) where my father joined my mother's family grocery business. When I was thirteen, my grandfather passed away and I inherited his dark room which stimulated my life-long hobby and love of photography. I attended Webster Groves High School where I was a school photographer, president of the school camera club and photo editor of the high school yearbook. I was quite athletic, loved running and lettered in track as a "miler". I was also active in boy scouts and became an Eagle Scout inspired by my dad who was also an Eagle Scout. Some of my favorite times were camping in the foothills of the Ozarks.

My grandfather, my father, and now I chose to attend and graduate from Lehigh University, each with a BS in Mechanical Engineering. As a freshman, I enrolled in Air Force ROTC until my senior year when the Air Force priorities changed to only accept aviators. Unfortunately, I did not qualify as I wore glasses, so I was dropped from the program. I was able to finish my senior year with a deferment from the draft. After graduation, I applied for US Navy Officer Candidate School and was accepted for the 1955 class at Newport, Rhode Island.

After being commissioned as an Ensign I was sent to Damage Control school in Philadelphia, then to radar school at Great Lakes Naval Station near Chicago. While there, I spent a weekend traveling to St. Louis to marry my fiancée and brought my bride back to Great Lakes. After the Great Lakes school, I was assigned to the Aircraft

Carrier USS Lexington CVA 16, stationed in San Diego. I drove to San Diego with my new wife where she finished her college degree while my ship was operating in the Western Pacific.

When I reported to the Lexington I was assigned as Division Officer for the Repair Division in the Engineering Department. My division had about 120 sailors in 3 shops. My men were shipfitters, pipefitters and carpenters. The responsibilities of the division were to repair the flight deck after crashes and to be sure the ships plumbing was functioning, Repair of the teak decks occurred quite frequently. After three years I finished my required active duty and left as a Lt JG. I remained in the reserve another six years leaving with the rank of Lieutenant (*Editor's note: The Navy is unique in the titles they assign their officers. Lieutenant JG is a Captain and a Navy Captain is a Colonel in their sister services*).

I decided to move to Albuquerque, New Mexico where I worked at Sandia Corporation. I loved New Mexico for its breathtaking high deserts, outdoor camping and of course skiing. While there I worked on classified programs and learned Fortran programming to code my mathematical models. I used an IBM 704 series computer which was used at Eniwetok Atoll for nuclear tests during 1950s. I heard that when Sandia got the computer back, they had to clear it of sand and sand crabs from the Atoll. I earned my master's degree from the University of New Mexico and subsequently moved to Stanford to continue my graduate studies in Mechanical and Aerospace engineering. By this time, we had two children, a boy and a girl.

After completing my PhD thesis on "Passive Attitude Stabilization of Earth Satellites" I joined Philco-Ford because they built satellites and had a need for my expertise. My work was in dynamics and control of spacecraft where I created computer programs that are still in use today. I was a board member of the prestigious American Institute of Aeronautics & Astronautics Association where I shared my expertise on Guidance, Control and Dynamics with the world community. I wrote and published several papers on the subject to include, "Satellite attitude acquisition by momentum transfer" in 1976 and "Reorientation maneuver for spinning spacecraft" in 1991. I was privileged to work with Dr Robert Barry and Dr Bill Young both pioneers in the growth and maturation of space satellite science. (*Editor's note: Dr Barry was a SIR member who has since passed on. Dr Young is your current Attendance Chairman.*) A few of the satellite systems I worked on were the GOES weather satellites and Intelsat global communications satellites. (*Editor's note: Satellites as spaceborne objects required attitude control to orient it in space. Early satellites used spin-stabilization to perform this function. A significant amount of math modeling was used in simulations and operational control of the orbiting satellites. As the science improved these math models evolved to more sophisticated and complex models from single to dual-spin and now to three axis attitude and articulation systems. Dr.'s Barba, Young, Barry(deceased), and probably others in our member ranks played key roles in maturing the nation's space satellite knowledge.*)

I have always been an active person and remain so today. As I mentioned earlier, I lettered in track in high school and continue to run throughout my life. I've run in three marathons and several 10K races. I never had particularly fast times, but I loved running races such as the Bay to Breakers.



Sailing at Coyote Point

After my kids graduated from High School and my marriage had ended; at 50, I discovered windsurfing which was at that time, in its infancy. I had always enjoyed sailing and windsurfing provided a wonderful way to get on the water without great set up time or expense. In order to increase my proficiency on sailboards I joined Fleet 18 which held weekly races in Foster City. (*Editor's note: Fleet 18 is a group dedicated to the promotion of windsurfing regattas in the SF Bay Area.*) Also, to improve my ability I participated in a 100-mile race through the British Virgin Islands which increased my skill level so that I was comfortable windsailing in the San Francisco Bay and under the Golden Gate Bridge.

I took up skiing when I moved to Albuquerque and I was an active skier for many years. My most memorable run was down Corbett's Couloir at Jackson Hole. Alas, I gave up the sport recently because it was time.

I met my second wife Sherry Dyce at the Stanford Singles Club. She was a mathematician, so we instantly hit it off and after a year of courtship we married. We enjoy travelling and have made many bike or bike and barge trips to various regions in Europe. The barge would drop us off at a river city and we would bicycle, sightsee, dine and get picked up at the dock of another city along the route. The 30-60- mile bicycle trip was a great way to experience the country and cultures as many of the European civilizations concentrated near their water highways.



Biking in Friedrichshafen Germany

On my wife's 80th birthday we spent a wonderful night in Paris, FR and were on our dual tandem bicycle along the Moselle River between Metz and the Rhone river. Sherry was not feeling well so we went to the local hospital where she was diagnosed with an advanced case of pancreatic cancer. We endured the shock traveling back to our home where she died three weeks later. We were married for some

25 years.

I joined SIR in 2001 and noticed an absence of a bike group so I started one and mapped several trails which are still used by the group today. The current Activity chair is Jim Lunt and they go out monthly to various trails in and around the area. After starting the bike group, I was elected to the board of directors and later served as the Membership Director for two terms. While still on the board I inherited the job of producing the Holiday Party for six years. Moving to where the need was, I served as the Membership Roster publisher and editor for the next five years. I participated with Jim Dinkey, John Goldsborough, and Bill Young in setting up the name badge system that we currently use. I am always promoting SIR and have sponsored more than 30 new members. I was made an Honorary Life Member in 2011. It was a complete surprise and an honor to have been nominated and awarded the position.

I will end with a bit of trivia by mentioning the Bill Young's in my life. There was the Bill Young that sponsored me at SIR and there is the Dr. Bill Young that I sponsored when he retired from Loral. My sponsored Bill and I go way back, serving on the USS Lexington and later as employees at Ford Aerospace Corporation. I conclude by saying that I've always operated with a philosophy that if you see a need, treat it as an opportunity and "do it".