

## Notes for Mooney Talk

Hello! I'm Curt LoPresti it is great to be here with you tonight. I am here to tell you about my father Roy LoPresti's aviation career and how he ended up at Mooney designing the 201, 231, 252 and 301. My father was a sharp kid who graduated high school, earned his pilot's license, and started his aeronautical engineering degree at NYU at the age of 16. He went through ROTC to pay for college. It was his desire to design and fly small planes. Unfortunately, there were no jobs available in general aviation when he graduated. He found a job at Grumman in New York and was there for only a short period of time when he got a letter telling him to report to Lackland Air Force Base in San Antonio, Texas because he was being sent to Korea. By this time, he was married to my mom, Peggy. He attended pilot training in Texas and then he was stationed in Korea for about two years during the Korean War. When he returned, he went back to work at Grumman designing missiles. He was in the Preliminary Design Group when they received a RFP for the lunar module. He was one of twenty-six engineers in the Preliminary Design Group working on the project. Grumman won the contract and as a reward Roy was sent to work at the Kennedy Space Center to be part of the team. It was an extremely exciting project, mankind's greatest adventure. Roy was happy and proud to be a small part of it. As the race to the moon was winding down Roy thought maybe he would finally get to work on small planes. He was right!

The LoPresti's were always building something. By this time, we were a family of seven. We built race cars using semi monocoque aluminum aircraft construction, sailboats, power boats, and finally airplanes. I had a custom surfboard business that I ran out of our garage. We all loved the water. Roy wanted to combine his love for flying with his love of water and wanted to design a seaplane that looked good and performed as well as a landplane. We designed and built a seaplane called Spectra in our garage. Roy wrote a business plan and started looking for investors and found a great potential investor that wanted to build the plane at Ramey Air Force base in Puerto Rico. Unfortunately, Puerto Rico started making noise about becoming a state and

the investor lost interest. About that time, Grumman bought American Aviation and it became Grumman American Aviation. They were looking for a chief engineer and Roy put up his hand and got the job. He developed the Tiger, Cheetah, and the beginning of the Cougar. Additionally, efforts were underway to develop the TR2, as an aerobatic aircraft. Roy raced the cars that we built with the Sports Car Club of America and became pretty good at it. His boss at Grumman American found out that Roy was racing cars and told him he needed to quit racing because if he got hurt it would delay his programs. Roy told him that what he did in his spare time was his business. A four-day weekend was coming up and his boss told him to spend the weekend thinking about whether he wanted to work at Grumman American or drive race cars. Unbeknownst to his boss, Republic Steel had been talking to Roy about becoming chief engineer at Mooney. They liked what Roy did for Grumman American with the Tiger and their other products and wanted him to do the same thing at Mooney. They flew him to Kerrville, Texas on Saturday and showed him the planes and the facility. He and his wife Peggy discussed it and decided to move to Kerrville. On Tuesday morning, he walked into his boss's office and told him he was going to drive race cars. He gave his notice and his boss told him to leave that day. They packed and moved to Kerrville. My parents loved Texas; they spent a number of years there when Roy was in the Air Force. They loved Texans and their wonderful sense of humor.

Several months after Roy began his tenure at Mooney, I completed my first two semesters of college and determined that I wanted to change my major, although I had not yet decided on a new field of study. Roy said Mooney was going to build a new cowling for a Continental Tiara engine installation in a M20F and since I had lots of master building and mold building experience that I should consider working there for a while. I accepted the job in the Mooney Experimental Shop. I built the cowling for a Continental Tiara engine, designed and built the first 201 windshield, and parts of the inboard gear doors. I left Mooney and started to pursue an aeronautical engineering degree at Embry Riddle Aeronautical University in Daytona Beach. I worked at Mooney during the summers in the flight test and aerodynamics department

and the structures department on the 201, 231 and what became the 252. It was a fantastic learning experience.

Roy's first big project at Mooney was for a new instrument panel for the E and F models. The panel was well-executed; however, the FAA expressed concerns regarding the placards on certain push-pull controls. They required changes to the placards, thus delaying certification by two weeks. His boss, the president of Mooney, Jerry Vaverick, was very unhappy that the certification was late. Jerry had no aircraft certification experience and didn't realize that being two weeks late on a certification project was really like being on time. He demoted Roy, took his office away and gave him a new office in what used to be a storage closet. Roy wanted to leave Mooney, but he had recently bought property in Kerrville, and he had three children in college and two at home. He decided that he had better stay where he was and make sure that his next project was the best product he ever developed. This was Roy's mindset at the beginning of the 201 and it was an "I will show you dammit!" Sometimes passion like that is what it takes to make a brilliant design. Roy's design philosophy was simple. Start with a great idea, pick a small team of talented and enthusiastic staff, set a goal that is out of reach, and make it happen.

The 201 development team had five members, Bob Greco - power plant engineer, Fen Taylor worked in aerodynamics and flight test, Dick Jarvis ran the Experimental Shop, Jim Weimer was the fabricator, and Roy LoPresti ran the project. This team worked very well together. They designed, developed, tested, and certified the changes to the F model that became the 201.

This same team, with the addition of Karl Mittag as Chief test pilot, also did the 231. After the 231 the team that did the 252 was much larger. The team that did the 301 was much larger still.

I graduated engineering school and was working for Boeing as a Flight Test Instrumentation Engineer on the 757 program. It was a fantastic job. Roy called me and asked if I wanted to oversee instrumentation on the 301 and become a test pilot and, of course, I agreed. I quit my job at Boeing and moved

to Kerrville. My timing couldn't have been worse. The bottom fell out of the steel market and Republic Steel cut funding drastically and consequently Mooney had a big cutback in workforce. I made it through the first layoff but not the second. Roy apologized but explained that keeping me and laying off others who had seniority just wasn't fair and that I had to leave. I actually made four flights in what Mooney, at the time, called special K, which later became the 252. So much for my test pilot career at Mooney. I soon found another job.

Soon thereafter Roy became President of Mooney and Republic Steel sold Mooney to LTV. He was excited about LTV because they would have ample funding to complete the 301 but the first thing they told him to do was sell the company. Mooney was purchased by a French company. Roy didn't like some of the things this new company was doing and talked to a friend of his, Burt Rutan about what was going on. Burt was working with Beechcraft on the Starship. Beech's Chief Engineer was about to retire, and they were looking for a new Chief Engineer. Burt recommended Dad to Raytheon's board of directors, and they interviewed Dad and made him an offer. They more than doubled his salary and gave him a stock option; he couldn't say no! Roy loved Mooney and had 13 great years there. My parents thought long and hard about leaving but then decided it was time to go.

Dad did not particularly like working at Beech. He called it the land of meetings. He had 1900 people working for him and worked a 60+ hours a week. He loved small planes and at Beech he hardly saw small planes. After about 2 years my mom told Roy he looked exhausted and if he did not leave that place, it would kill him. She told him it was time to quit and he agreed. Roy gave Beech notice and they generously gave him a year's severance.

Dad always liked the Swift airplane and thought that with some modifications it would be a great bird. Roy wanted a plane that would cruise at least 200 miles per hour, have a large baggage area, and have a 5-hour endurance. It had to be fun to fly and be capable of what he called gentleman aerobatics. He

secured the manufacturing rights to the Swift Type Certificate and started raising money for the project.

Dad then met Stuart Millar who had just purchased Piper Aircraft. He wanted him to be their Chief Engineer, but Dad told Stuart he just left a big company and didn't want to go to another. Stuart said OK but wanted to explore different ways that they could work together. They started LoPresti Piper Aircraft Engineering Company in Vero Beach, Florida. Dad hired me and my brothers Jim, David, and Roy. I was working at LTV as a composite design engineer, Jim was working for Burt Rutan at Scaled Composites on a military project, David was working at Boeing on a military project, and Roy was building tools for Lockheed. It was our charter to develop new products for Piper. We would develop the planes and run our own in-house testing. We would then give Piper the project and data package to certify, and we would go on to the next project. I was project engineer and project pilot on the first product that was called Swiftfury.

When we had the plane sorted out, Stuart asked us to bring it to Piper to show it to the team. We taxied the plane to Piper and gave their team a presentation. After the presentation Stuart asked the team what they thought about the product. They were not at all enthusiastic and said it's a two-place aerobatic plane with a tail wheel. We will sell it if you want us to, but we will not sell many of them. Stuart got angry and told everyone to leave the meeting except me and Dad. We thought we were about to get canned. Stuart said, "You know, THEY are not going to sell many, but you are! Sun N Fun airshow is at Lakeland in two weeks. I want you to take the plane there and see how many you can sell." Stuart asked Roy how many he thought he would sell. Roy responded that at Oshkosh he would typically sell two to three and that he would plant seeds that would become sales in the future. Stuart said that we should go to Sun N Fun and see how many we could sell. Roy told Stuart he would sell 10. We actually sold 119 Swiftfurys with cash deposits during that week long event! At the end of two years, we had 561 cash-backed orders. Unfortunately, Piper went bankrupt and the Swiftfury was an asset that got tied up in bankruptcy. We were convinced that once the bankruptcy was

settled that we would complete the project. We started a company called LoPresti Speed Merchants to keep the LoPresti's employed until the bankruptcy was settled. LSM started to grow and we developed a series of products, for Pipers, Mooneys, and Grummans. We developed cowlings, wing tips, fairing, and gap seals. We also did consulting engineering work for a number of companies like Hartzell, Cirrus, Pilatus, Hamilton Standard, and Lycoming. Lycoming was looking for new markets for their engines and asked our opinions. We recommended replacing the 210 turbo charged Continental with a light weight 260 horsepower IO-540 in the M20K. The weight difference of the TSIO-360 and the IO-540 was only nine pounds. No structural changes to the airframe were required. They agreed to fund the project and we developed the plane. It flew well and was over 185 knots. Lycoming then decided the market was too small and cancelled the project.

We started producing HID lighting STCs for many planes and it was great business for us. We had approximately 500 STCs for lighting products. We had lighting products for everything from a PA-28-140 through Gulfstream 550.

Unfortunately, Dad passed away in 2002, and we did the best we could to carry on his legacy. It was a very tough time for the family. Dad had a fantastic reputation and knew everyone in the business. He also generated about 90% of our sales. Dad's relationships in the industry and very hard work got us through those trials and tribulations. It almost sank us, but we made it.

Seven years ago, our biggest competitor in aircraft lighting made an offer to buy LoPresti Speed Merchants and we decided to sell. I retired in 2019 and my wife and I spend our time flying our 201, fishing, traveling, and visiting our kids!

Thank you for your time. Remember Life is short fly fast!!