The Bandera PROPHET

August 17, 2023

Lakehills residents channel common love for aeronautics, build flight simulator training center

By Jessica Nohealapa'ahi The Bandera Prophet

After a local USAF veteran opened his home to the international exchange program years ago, an unexpected friendship, turned mentorship, turned professional partnership evolved with a young dreamer who lived right under his nose. Now entering his sophomore year at the esteemed Embry-Riddle Aeronautical University in Florida, the Bandera High School graduate returned to his Lakehills home and mentor this summer, and together, the pair built an authentic flight simulation training center.

Ron Clarke served in the Air Force for nearly 20 years. He followed up his military career as a private pilot, but in 2015, he was deemed unable to fly due to a disability. Clarke met David Guerra after the teenager befriended a CETUSE foreign exchange student, whom Clarke was hosting. Over dinners and movies and countless conversations, Clarke discovered that he and Guerra shared a common passion - the love of flight.

After a long search, Clark found a U.S. Army military surplus mobile telephone command center - and the mission was assigned. He preserved the vintage exterior - with original Army markings and woodland camouflage - then completely gutted the interior, save for an original rack.

The duo researched different cockpit designs, pulled from their own technical expertise, and flexed their creative muscles to build a one-of-a-kind simulator equipped with the latest Microsoft flight simulation technology software. Integrated with authentic flight controls, Boeing

pilot seats and a flight attendant jump seat for observers, students can pilot a trainer aircraft, or a Boeing 747 multi-passenger plane.

"The entire idea here was to create a simulation environment where the simulator pilot literally forgets that they are on the ground. We believe we have achieved that. We strived for authenticity and realism in the simulator build so it would carry over to the actual flight experience. The use of the Microsoft programming and compatible flight controls allows us to take off from any airport in the world, fly in real world weather, and handle emergency situations. It's something you must experience to truly appreciate," Clarke said.

In July, after three months of construction, the Jeffrey C. Selby Flight Training Center was christened. Once the final software and hardware testing is complete, Clarke and Guerra plan to invite local students interested in STEM (Science, Technology, Engineering and Math) to experience the simulation. Because the cockpit is true to scale, only three people can fit at one time. A panoramic screen displays actual satellite imagery, and recorded air-traffic control voices issue instruction within the light-tight compartment, creating a realistic flight and landing experience.

"[Flight simulators] are important as they provide a safe environment for training without the risk of a real flight, including challenging weather conditions. They allow for skills to become better, promote muscle memory, and allow interaction with tower and approach controllers as you would in the real world. Additionally, they are more cost-effective than using an actual aircraft as they cost less to operate. The best part for me was the ability to learn how a pilot and co-pilot work together flying the aircraft, learning commands, and working with the systems of a large aircraft versus a small one. The first landing gave me the high adrenaline feel that you would get in the real flight. It all seemed and still seems so real," Guerra said.

The Jeffrey C. Selby Flight Training Center was tested by two independent pilots, who described the simulator as "very real" and "better than the flight simulators I trained on at work."

Named for Clarke's "brother" from the Big Brother program, Jeffrey C. Selby was also a USAF veteran, and pilot. He worked at American Airlines for nearly 30 years, and piloted the AA Flagship Detroit - a vintage DC-3 - in airshows around the country. Selby and Clarke always aspired to build a simulator together, but Selby passed in December 2022, before that wish could become a reality.

"Jeff would have loved this," Selby's widow Charmaine said. Guerra, who graduated from BHS in 2022, is doing very well at Embry-Riddle. He made the Dean's List in his freshman year, and plans to become an aeronautical engineer for NASA Houston.

Questions may be directed to hillcountryflight78063@gmail.com. To book a flight, or learn more about the simulator, go to www.hillcountryflight.org.