

Stealth discovery



Lake Jackson dentist's aviation innovation created a new technology

About Artifacts

This regular feature will tell the stories behind items found in Brazoria County museums. This month we feature a display at the Lake Jackson Historical Museum.

Story by
WES WOLFE

Photos by
JENNA KIESER

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Chemical executives, learning along the way the things Dow was doing with chemicals that could be shaped into solid, strong and light products. So, he built a plane from these compounds, and it worked.

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The Windecker Eagle hangs from the ceiling of the Lake Jackson Historical Museum.



Historical Museum. "The military didn't have anything that could do that. So, basically, even though he made the plane himself, it became a top-secret thing."

Windecker's life story would be interesting enough on its own without creating aerospace history in his spare time. He was born in Saskatchewan in 1921, but grew up south of San Antonio. Windecker

composite material appeared once Windecker began taking flying lessons in 1956, and he approached Mac Pruitt in 1959. At the time, Pruitt was a Dow engineer involved with foams, plastics and resins. Experimental work later allowed Windecker to secure a grant from Dow Chemical.

"He and (second wife) Fairfax closed their dental practice and

spent the rest of their careers researching the application of composites to aircraft," according to Windecker's obituary in 2010. He was 88 years old. "The project moved to Midland, Texas, in 1962. The Windecker 'Eagle' made its first flight in 1967 and won Federal Aviation Administration certification in 1969, the

first all-composite airplane ever approved."

For such an achievement, the purchase of the first Eagle manufactured only made Page 6 of The Facts' Sept. 27, 1970, edition. Some called the plane the greatest advance in general aviation since the all-metal airframe.

The future looked bright.



A flight simulator at the Lake Jackson Historical Museum provides an opportunity for visitors to try flying the Windecker Eagle.

served as a medic in the Army Medical Corps in the Pacific Theater of World War II, where he earned a Purple Heart after surviving a Japanese bombing run. The dental practice in Lake Jackson came after the war, following his graduation from the University of Texas Dental School in Houston in 1948.

Thoughts of using a fiberglass

"Realizing that diversification is the key to success of any industry, we also have signed three contracts for non-aircraft production projects," said Robert Hefner, announcing the sale. Hefner, a former Lake Jackson resident and Dow employee, served as chief executive officer of Windecker Research Inc. in 1970. "One, an automotive type application which will be turnkey just as are the aircraft. Another, an industrial equipment application of reinforced plastics technology, and a third which, under terms of the contract, cannot be divulged at this time."

But the potential didn't play out, and the company went out of business.

"It is tragic that the Eagle never went into production," Pruitt said to *The Facts* in March 1988. "This was the leading technology in airplanes in the '70s, and it probably still is."

There's something to what Pruitt said.

The last word was a Chinese entrepreneur had an Eagle fixed up in North Carolina and shipped out to China for study and reproduction. The plane shipped out in 2015, and in 2017 a new Windecker Aircraft company announced a 970,000-square-foot manufacturing facility in an undisclosed location within the country. The models were supposed to be marketed in China and around Asia. A model for sale in Europe and North America was to follow, but news has since dried up.

Windecker provided the plane now hanging in the museum to the Air Force for testing and evaluation at its White Sands, N.M., facility in 1972. The Air Force kept those results under wraps and six years later announced the development of stealth aircraft.

The plane became the museum's centerpiece exhibit five years before the building's anticipated completion. It was one of five models in existence in 1988, along with ones at the Smithsonian Institution and Army Air Corps Museum.

The museum has flight simulators with



A historic photo of a Windecker Eagle in flight is seen at the Lake Jackson Historical Museum.

the Eagle exhibit, so people can get a little bit of a look of what it's like to fly the small but innovative craft.

"It's pretty intriguing that some private citizen sort of accidentally developed a stealth aircraft," Thomas said. "You would think the military did it on purpose."

The Lake Jackson Historical Association is also working on raising money for what should be another top attraction once it's completed – renovation of Aiden B. Dow's original Lake Jackson office. The association raised \$136,000 in the first phase of the effort in 2019, and Phase 2 of the project is estimated at \$175,000. The National Trust for Historic Preservation, the Texas Historical Foundation and the Aiden and Vada Dow Family Foundations already endorsed and made grant pledges toward the project.