It's not too often that you'll see an airworthy Curtiss OX-5 powered biplane on the flightline at EAA AirVenture Oshkosh. And it's rather unusual to encounter a young pilot who is eager to fly such an antique, but it's especially rare when he happens to be a direct descendant of the family who was inextricably involved with the development and manufacture of that very airplane.

Charles “Charlie” Laird IV of Indianapolis, Indiana, is grateful for his good fortune to own and fly this 1927 Swallow, which was built by Swallow Airplane Manufacturing Company in Wichita, Kansas. Advertised as “America’s finest commercial airplane” and touted as having “no competition in quality and performance at low cost,” the three-place biplane originally sold for $2,485 at the factory. Charlie and his father, Charles “Chuck” Laird III, of Adelanto, California, purchased the biplane about a year ago, having spotted it for sale in AircraftOwner magazine.

79 Years Young

Although NC979 is an “old-timer,” its recent restoration has it looking fresh and new, with its light yellow wings shining against a jet-black fuselage. Charlie’s brother, Will, spent many hours researching this Swallow’s history and writing it into booklet form for his family. According to his research, the Swallow was owned early on by various air service companies and later by several individuals. In July 1936, owner Selden Richter was “flying to Fort Peck, Montana, with his girlfriend (who later became his wife) and [the Swallow] developed engine trouble. He couldn’t land upwind into the Missouri River because his girlfriend couldn’t swim, so he
“That’s the nice thing about a flying airplane—people can enjoy hearing its engine, getting in it, smelling it—you know; it drips oil and it flies!”

—Charlie Laird

landed downwind into the brush along the river. The plane (though it looked intact) was ruined,” Will reports.

Afterward, the biplane was stored for more than half a century, its remains tucked away in a Montana farmer’s barn. At one point, part of the Swallow’s ignoble fate was that its lower wings were used to enclose some baby pigs.

Eventually the plane was ‘inherited’ by Bill Court [the farmer’s nephew].

The Swallow had languished long enough, and when Don Brown purchased it in 1994, he invested six years’ research, time, and labor in its restoration. Painstakingly, he brought its steel tube fuselage and wood spars and ribs back to life. Then Ray Sanders of Kalispell, Montana, acquired it in 2000. He completed the airframe restoration, installed a tail wheel in place of the original tailskid with its bungee shock absorber, and obtained a 90-hp OX-5 engine for it. Four years later, the Swallow finally returned to the sky.

**Curtiss OX-5**

Speaking of the OX-5, there are some fine points about caring for, and flying behind, this antique powerplant. The engine preflight takes about 20 minutes, since this particular engine was updated with “Millerized” grease fittings. “That means that you don’t have to oil everything—you just grease it about every five hours. And you’ll change oil—it holds 3.5 gallons—about every 20 hours, which is also when you grease the water pump,” comments Charlie, adding “it’s water-cooled, and the header tank holds about 4.5 gallons—so you always have
to make sure your water temperature runs about 140 to 150 degrees. One key thing about the OX-5 is when you land, you’ll want to open the cowling to see if you’ve had any water leaks—that’s the heart of the engine. If you see a little bit of brown streaking on the engine, you’ll know you have a water leak.”

Charlie says that flying is smooth behind the OX-5, but he adds with a laugh, “When you bring the power back, it vibrates, so that’s kind of nerve-racking the first time you do that—the whole airplane starts to shake and you’re like, oh no! What’s going on? But the engine smooths right out again.”

**Flying the Swallow**

The old engine burns about 8.5 gph from the 40-gallon tank located in front of the forward cockpit, which gives the Swallow about a five-hour range. So far, the longest leg...
that Charlie has flown is 3.5 hours, which was on the way to Oshkosh. On that flight, the Swallow’s cruising speed, per GPS, was ranging from 72 to 80 mph—while its wing-mounted Johnson airspeed indicator showed about 85 mph. Charlie is pleased with the way the biplane handles and has fun flying it.

“After you get going down the runway, you have to push the stick forward to bring the tail up, and after that it accelerates fairly decently. About the time the tail comes up, it starts lifting off the ground—and that’s probably around 25 mph, or less. When you’re taking off, you apply power gently but smoothly all the way up, and just ease in a little rudder. It takes off in about 400 feet, so it gets off the ground very fast—it just doesn’t move far from the ground for a while,” he says, chuckling. “After that you can expect a climb rate of 100 to 200 fpm; it’s very slow, so I try and accelerate a little bit in ground effect, and after that it climbs up to 1,500 feet or so fairly rapidly. Then it plateaus, and that’s about all you’re going to get! On a long flight, you can kind of nurse it up to 2,500 feet or 3,000 feet.”

The biplane’s lever-operated trim control is mounted on the left side of the pilot’s seat, which moves the stabilizer up and down, and Charlie has found that it cruises best with full-aft trim (probably due to the removal of the heavy tailskid). He says, “The airplane picks up speed really fast as soon as you drop the nose a little bit, and it’s an airplane that you have to fly the whole time. If you make any radical movements, you’ll start losing lift and sinking fast. It has a very short aileron throw, and when you’re on the ground, you understand that if you had any more than that, you’d end up grabbing wingtips real fast. But it’s very coordinated with stick and rudder input, and it’s easy to land—it’s a floater, and just made for grass.”

Charles Laird Sr.

The Swallow neatly dovetails with Charlie’s personal family history, since the brothers Emil Matthew “Matty” Laird and Charles Lawrence Laird Sr., who were instrumental in designing and manufacturing numerous Swallow aircraft, were his great-great uncle and great-grandfather, respectively. As young boys, the brothers spent hours building model airplanes, and in 1912, they progressed to their own full-scale monoplane.

“My great-great-grandmother, Clara, allowed them to build the plane in the upstairs gable,” smiles Charlie as he recounts the story, “and they couldn’t get it out—so she paid to have the gable cut out and the whole airplane lowered to the ground. So that’s where they started. My great-grandfather, Charles, was 13, and great-great uncle Matty was 16 at the time—he was a bank clerk working at the First National Bank in Chicago. So Buck Weaver and Charles worked during the day building it, while Matty was earning money to pay for it. It was enough of a success that they were able to build the Baby Biplane in 1913.”

From that point forward, both brothers followed aviation careers, albeit on divergent pathways. While much has been written about Matty, who is well-known, in part, for his involvement in air racing, particularly as the builder of the Laird Solution and Super Solution race planes, there is less information readily available about his brother. “I’d like to share our family history as I know it, as it’s been passed down to me,” says Charlie, elaborating that the following information was gleaned by the Laird family’s own research and an informal résumé that Charles Laird Jr. dictated to his son, Chuck Laird in 1976.

According to that source, Charles Laird Sr.’s aviation career began when he was just 14 years old, while he was fabricating airframe components for Katherine and Marjorie Stinson and his brother, Matty, in Chicago. By October of 1915, he was installing aircraft fuel systems and instrument panels for Standard Aircraft Company in Plainfield, New Jersey, where he worked until April 1916. He commenced aircraft assembly and rigging for Aeromarine Plane and Motor Company in Nut-
ley, New Jersey that same month. January 1917 saw him servicing the training fleet—including the Burgess and Wright Model B—for the Stinson School of Flying in San Antonio, Texas. By May Charles had moved on to the U.S. Aerial Coast Patrol Unit No. 1 in Long Island, New York, where he repaired flying boats and seaplanes—a prelude to his work at the Naval Aircraft Factory in Philadelphia, Pennsylvania, the following year.

By November 1918 he was working at his brother’s company, E.M. Laird Airplane Company, in Wichita, Kansas (which was financed by oilman Jacob M. “Jake” Moellendick). Notably, Lloyd Stearman, Walter Beech, and Buck Weaver were integral in everyday operations. Charles supervised work in the factory and made final inspections of aircraft until January 1922. It was during this time that the Laird Swallow was designed and manufactured. Originally named the Wichita Tractor, it acquired a more becoming name when an observer on the ground, William Lassen, remarked that it “flew just like a Swallow.”

The Laird Swallow was the first production airplane in Wichita, and 43 of these biplanes were produced before Matty Laird returned to Chicago in 1923. Billed as “America’s first commercial airplane,” one of these Swallows was the first aircraft produced in the United States to bear a civil registration, NABCB.

From October 1923 to August 1925, Charles was rebuilding motors for the Wichita Oakland Motor Company. Then he was employed by the Swallow Airplane Manufacturing Company in Wichita from August 1925 through October 1927. During this time, the “new” Swallow of 1924, with its single-bay wings, was produced. In 1926, Charles (along with Waverly Stearman) designed the Super Swallow, which had a steel-tube fuselage and N-struts, and he supervised construction of the airplanes (including the 1927 Swallow) and mailplanes, which were used by Varney Air Lines. This brings us up to the point when NC979, serial number 842, was built (it was originally licensed by the Department of Commerce as C-976). Approved Type Certificate Number 21 was issued for this model of Swallow in December 1927.

Charles’ aviation career took on a slightly new direction in November 1927, when he formed Laird Aircraft Corporation in Wichita and designed and supervised construction of a five-place cabin biplane (the Whippoorwill), but the Great Depression was approaching, and by January 1930 he had returned to Chicago, where he was engaged in building special order airplanes. From there, he moved to California and worked for Northrop Corporation, Consolidated Aircraft Company, and North American Aviation Corporation. Eventually, Charles became foreman for aircraft overhaul inspection at George Air Force Base in California until he passed away in 1967.

Yet his passion for airplanes and aviation lives on in the Laird family; his airplane-mechanic son, Charles L. Laird Jr., taught his own son, Chuck, about airplane restoration. Chuck Laird (III) earned his pilot certificate early on, and today his son, Charlie (IV), continues the family passion for aviation. As a young boy, Charlie spent his summers working on airplane projects with his grandfather; today he is a commercial pilot and airplane mechanic. And he’s pleased and proud that his wife, Amy, has decided to take up flying—she soloed just before AirVenture.
Sharing the Swallow

If you ask Charlie Laird what he likes best about having this antique in the family, he’ll tell you enthusiastically, “It’s the only standard category Swallow that’s still flying, and I’m just happy to be able to show it to everybody and answer their questions. That’s the nice thing about a flying airplane—people can enjoy hearing its engine, getting in it, smelling it—you know; it drips oil and it flies! It’s been so wonderful here at AirVenture—everyone stops by and wants to talk about it, and they ask, ‘Is that a real OX-5?’ It enables us to share the family history, a different side besides just great-great uncle Matty; he had a brother named Charles that many folks haven’t heard about—it’s kind of like Lloyd and Waverly Stearman—we don’t hear about Waverly too much.”

NC979 and its new family have been warmly enveloped by an avid cadre of “antiquers,” who have shared their knowledge, memorabilia, tools, hangar—and even airplanes—with the Lairds. Chuck Laird trucked the biplane from Montana across the Rocky Mountains to Des Moines, Iowa, where his son joined him for the final phase of the journey to Columbus, Indiana. Upon their arrival, Mike Williams generously provided his hangar for the reassembly of the Swallow. There’s nothing like being well-prepared before you fly a “family heirloom,” and Bob Howie of Decatur, Illinois, invited Charlie Laird to fly his Waco 10 so he could get the feel of an older flying machine. Then Rich Davidson of Hanover, Indiana, an experienced aviator of antique aircraft, agreed to check him out in the Swallow.

Other individuals have come forth with distinctive Swallow memorabilia to share. Charlie notes, “Ed Lachendro of Beaver Dam, Wisconsin, gave me a pair of ‘Follow the Swallow’ coveralls; Richard Johnson of Topeka, Kansas, gave me an original sales brochure and three letters of recommendation for Swallow; and David Mars of the American Barnstormers Tour gave me a Swallow screwdriver.”

In short, “everybody in the antique community has just been outstanding,” reflects Charlie, elaborating, “we had issues with our prop, and suddenly there were guys loaning us props—even off museum airplanes—just to see if we could get a good one. We’re very grateful for all the help we’ve had.”

And the AirVenture judges for antique aircraft took note of the collective efforts that handsomely restored this Swallow, placing their seal of approval on it by awarding it the 2006 Antique Bronze Lindy for the Golden Age (1918-1927).