





KEEPING A HOMEBUILDING

Legacy

ALIVE

RAY BEENINGA'S TWO RESTORATIONS OF THE BURT SPECIAL

BY TI WINDISCH

BOB BURT LOVED Waco aircraft, which is why when he spent three years constructing a scratch-built biplane of his own, it was unmistakably Waco-esque. Bob did not shy from the similarities — in fact, the fuselage of his airplane, the Burt Special, even displayed a Waco Aircraft Company decal.

Bob built the airplane with hand tools in his garage, plus a bench grinder, electric drill, portable table saw, and a planer to shape the rough lumber properly. He painted it with a brush, although his skill in that area made it impossible to tell unless one was inspecting it closely.

The Burt Special was completed sometime in the early-to-mid-1960s, and was flown for years by

Bob himself until an accident involving an exposed pipe due to some airport maintenance grounded the airplane. Discouraged, Bob took the airplane to a farm he owned outside of Ukiah, California, and hung it in the rafters.

A knee operation made it harder for Bob to get in and out of his tiny biplane, so he began work on a Wittman Tailwind instead. That could've been the end of the story for this particular airplane, but it happened to catch the eye of a young pilot who was learning all about this fresh world of airplanes in Chino back when the Burt Special was still airworthy. His name was Ray Beeninga, and he loved the Burt Special at first sight.

GETTING INTO AVIATION

Ray, EAA 52210, stumbled into a lifelong passion for flight on a whim. He was drag racing cars at the time and heard from a buddy he could get an airplane ride at the El Monte airport. He went up for a flight in a Piper PA-12 with Pappy, who ran a local flying service at the airport.

For roughly \$4, Ray got half an hour of flying time in that Piper. When he got back down, he let Pappy know he had fun and mentioned he figured he could match the thrill of drag racing in flying. That got quite the reaction from Pappy.

“He said, ‘What do you mean you said you were looking for a thrill out of it? Get back in the airplane,’” Ray said. “I told him I didn’t have another \$3 or \$4, whatever it was. ‘No, this one’s on me,’ he said. ‘Get up there and sit in the front seat again.’ So I got in and he taxied straight out, and the wind, it was in the wintertime if I remember right, it was a real clear day.”

From there on, Pappy gave Ray quite the thrill. He began flying toward a nearby mountain with some snow on it and gave young Ray a show he never forgot.

“I still to this day remember all of the sudden that mountain turned upside down,” Ray said. “That’s what it felt like to me. And then I realized, Oh my god, it’s doing something else, and I grabbed the two supports in front of the windshield, hanging on and closed my eyes, and I opened my eyes and that was the first time looking straight into the sun. And then I’m looking at the ground and going around, and I thought, ‘Oh my god, if this old guy gets me on the ground, I’ll never get in another airplane if I’m alive.’”

His proclamation didn’t end up lasting, as Ray couldn’t shake the incredible feelings and sights he experienced on his first-ever flights. He made another visit to Pappy and began his flight training soon after.

“That night I couldn’t go to sleep,” Ray said. “How did he make that do that? ... So, the next Saturday, on the way home from the drags, I stopped again. ‘I want to know how you made that mountain turn over, go and do that again.’ And he had me. He said, ‘Oh no. You don’t learn to do any of that ‘til you have a pilot’s license.’”

Pappy relocated airports, but Ray went and found him and paid him for that second flight, the one that entranced him. He began flying just about every day a year and a half or so after his first experiences in the air and had his private pilot certificate just a few months after that.

One flight with Pappy out of Chino ended with Ray seeing the Burt Special for the first time. Ray had never heard of homebuilding, so he asked Pappy which manufacturer made the beautiful airplane Bob Burt was flying.

“I said, ‘My god, I love that airplane. How do I get one of those? Who is selling those?’” Ray said. “And Pappy said, ‘No, no, he built that in the garage here in town.’ And he introduced me to Bob, and that’s when I heard about homebuilding.”



BUYING THE BURT SPECIAL

A YEAR OR TWO after Bob moved out to his farm, Ray called him and inquired about the Burt Special. Bob told Ray he was interested in selling the airplane, which needed a little work done on the tail and a couple of other areas. Bob said the price was \$1,500. Ray told him he would be there on Saturday.

After taking ownership of the airplane, Ray noticed the tail damage wasn't the only part of the Burt Special that needed work. Mice had eaten up the wax cord that made up the rib stitching, so all of that had to be replaced.

Ray didn't have extensive homebuilding experience at the time. His only experience was helping friends with projects and starting a Starduster build that he wound up selling when he got an offer just a little bit too good to refuse. However, a combination of his knowledge and everybody else's at the airport got him through that early restoration.

"There was plenty of guys around in those years that were building airplanes, and you could figure out how to build this and just ask questions," he said. "I was at the airport every day anyway. That's where I was working."

Ray served as the caretaker of the one and only Burt Special for about a decade. He enjoyed flying it. Many of his friends did as well when they wanted to prepare for their Pitts Specials.

"I weighed about 250, 260, just like Bob Burt did, and so weight and balance was just about perfect on it, and it landed so much slower," Ray said. "It went a lot straighter and [was] easier to land than a Pitts Special. So, a lot of guys checked out in it when I had it at Compton and then out at Chino before they'd fly their Pitts Special because it had a lot more wing, it was a bigger airplane."

All good things must come to an end, and Ray's first time owning the Burt Special was no exception. He sold it to an airline pilot. Ray let the buyer know the back step in the fuel tank could accumulate some water if left outside. He had installed a tube to help prevent that from happening, but it was still wise to pick up the tail for about 30 seconds to prevent the water from wreaking any havoc.

Unfortunately, the airline pilot must not have listened well, because Ray ended up getting a picture of Burt's Special after a rough landing.



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Top: Taut flying wires keep the wings on Bob Burt's homebuilt biplane in the correct position.

Bottom: The Burt Special's wheelpant is adjustable depending on the surface it's operating on.

 **Check out the digital edition** of *EAA Sport Aviation* for more photos of the Burt Special.

“Obviously he hadn’t picked it up to drain the water out, and he took off and it quit,” Ray said. “He figured it out up in the air, and he came down and hit hard and split the landing gear and bent the prop up, what have you. But, that kind of ended it right there. Carburetor was full of water, that’s why it quit.”

That was the last Ray would hear about the Burt Special for quite some time, but that little airplane wasn’t done with him quite yet.

SEEKING THE SPECIAL

LIFE GOES ON. Ray managed airports in Northern California and didn’t think about the Burt Special much until years later when he got a call from Bob Burt’s daughter in 1995. The family was looking for Bob’s airplane, and Ray was the last owner they knew of.

Out of curiosity, Ray decided to look into finding the little airplane he loved so much. He called buddies at the airport he last knew the Burt Special to reside at and learned nada. The folks there figured the airline pilot owner had sold any worthwhile parts and scrapped the airframe, so that’s what Ray told Bob’s daughter.

Then, a few more years later, Ray stopped on the way to a high school reunion to see Dennis Buhlen, a locally known biplane race king from Reno who he had worked with in Compton. The two were catching up as old friends do when Dennis casually asked him when he’d last seen his old Bob Burt Special.

Ray informed his old friend that the airplane was probably scrapped, but Dennis informed *him* that wasn’t the case. The airline pilot had Dennis repair it and the plane was flown until 1996, when it was sold to someone else who never flew it. That owner died, and the Burt Special had been sitting in the back of a maintenance hangar ever since.

The next morning, Ray arrived at the hangar to find that the airplane had been sold just a week earlier. Ray got the phone number of one of the two buyers and called him. He found they were having a hard time transporting the little biplane.

“The guy that had it when I talked to him ... said when they got to Albuquerque, [New Mexico,] it broke down again, and the partner had said, ‘To hell with it, you keep it, it’s all yours, I want nothing,’” Ray said. “He got on the airlines and flew home.”

Unfortunately for Ray, the remaining owner did manage to get the Burt Special back to a small town in Kentucky, and he wasn't interested in selling it to Ray at the time.

"So I said, 'Well, call me if you decide to sell it or something,'" Ray said. "I'd kind of like to rebuild it again. I'd seen the pictures of it. Still looked just like I'd sold it."

The Burt Special was still on his mind, but Ray had to move on for the moment. He got involved with an Aeronca 65TC project in the meantime, taking four years or so to rebuild it before having a blast flying it. After getting the Aeronca back in the air, Ray called again about the Burt Special.

There was good and bad news. The good news is that the owner was willing to sell, after never fixing the airplane. The bad news is that he already had, a couple of years back. Again, Ray cold-called a new owner of the airplane armed with naught but a phone number.

"He gives me the phone number, and I called it, and a woman answered and she says, '[Days Gone By] Museum,'" Ray said. "I said, 'Museum? That doesn't sound like what I was

looking for. I was looking for an airplane.' She says, 'Oh, we've got an airplane!'"

The woman on the phone was referring to a DC-3 parked out front, but luckily that wasn't the only airplane at this museum. The Burt Special was there as well, hanging above the tractors that serve as the main attractions at the Days Gone By Museum. The logs of the airplane starting with Ray's ownership were there, too, as was some other information he had compiled on the one-off biplane.

The family of the museum curator bought the airplane to fly it, but quickly realized none of them knew how to properly restore it first, which is how it ended up on static display. The museum curator didn't want to sell the airplane, but he was willing to trade it. He really wanted a shiny Ercoupe to reflect the green from the tractors proudly sitting below.

"Sixty days later I called him, and I said, 'We're going to be there Saturday with the Ercoupe,' and he was as good as his word," Ray said. "We got there, he had moved all the tractors back, got the cherry picker in, and the biplane was sitting on the floor."

Below: No glass here. Ray's restoration stuck to the basics in the cockpit.

Bottom: Details like this classic Venturi prove Burt's Special is a homebuilt aging with distinction.



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Finally, after years and years of searching, Ray had the Burt Special once more. Now, it was time for a second restoration.

Ray acquired the Ercoupe so quickly through an ad placed in Barnstormers that connected him with a salvage yard full of old Ercoupes. He made a deal on a nice-looking model with a broken wing spar and had it delivered to the museum in Portland, Tennessee. Finally, after years and years of searching, Ray had the Burt Special once more. Now, it was time for a second restoration.

“When I got it apart and brought it home, I checked the engine, wondered how bad [it] was after all these years,” Ray said. “There was no rust. I drained the oil out of it, put fresh oil in the thing, rolled it around, and I pulled other things open to let oil through everything. I didn’t pull a cylinder off to look at the camshaft because there wasn’t any rust in the cylinders, even. ... [I] put gas in it, flushed out the tank, and pulled it through and hooked up a battery, and it fired up and ran fine. It ran perfect.”

Even with the Burt Special still running fine, there was work to be done. Much of the airplane was original, and Ray kept it that way as often as possible. Although, sometimes some repair work was needed. The floorboards that Bob put in were one example.

“I took them out, sanded them a little, and varnished them, and they were splitting because they were plywood,” Ray said. “They were splitting out a little bit at the edges, so I just got glue in there and clamped them, put them back down, so it’s got the original floorboards still in it, too. And the original seat cushion.”

The windshield is original. Ray added leather behind the seat. A few of the ribs warped since the last time he restored the airplane, but that section didn’t take too much work.

“I think there was only one or two places that I put some glue in and clamped, and nothing was rotted in the wings anyplace, just the glue had come loose,” Ray said.

The bigger task was stripping the airplane down to bare metal, to re-oil the tubing. Ray followed that up with a new paint scheme. The fuselage is white instead

of chrome this time, the wings are orange, and Ray painted the spinner silver. The wheelpants were adjustable depending on the surface, so Ray moved them up since he was planning to fly in and out of a grass strip.

The Burt Special currently has 6.00-6 wheels and tires, ran at about 14-15 pounds. It also has an extra set of flying wires that date back to Ray’s first rebuild, to ensure the vertical stabilizer didn’t crack off the top longeron. One other change Ray had to make was to the airplane’s N-number.

Bob had a great one, N11Z. Ray never did ask him how he got it. He needed to get a new one when he first got the airplane and simply asked the FAA for the next available one. He had a different plan when he got the Burt Special back, though.

“I thought, well I’ll say 161, for 1961, [and] RB, because I’m Ray Beeninga, my initials are RB, and he’s Robert Burt, he’s RB,” Ray said. “So, it could be a 61 Ray Beeninga, or a 61 Robert Burt, or it could be a 61 Robert’s Biplane or Ray’s Biplane. They all fit. And that was the first number I asked for and sent it in, and I got it.”

GOING HOME

WHEN RAY FIRST LOOKED to reacquire the Burt Special, he just wanted to fly it. Now, he’s got a different primary mission in mind. He’s been in contact with aviation museums down near Chino, the airplane’s home, to return it there.

“I told them I’ll sell it for just the dollars I got in it. I won’t make any money on it,” Ray said. “I’d just like to see it back to its original place. I got one picture of Bob Burt standing in front of it inside of some hangars ... at Chino. That’s where he flew it from.” *EAA*

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