## THE WRIGHT STUFF

There's only one way to fly like Wilbur and Orville.
Written by Madeline Bailey

"Less than 200 people in the history of the world have ever flown a 1902 airplane. So you're going to join some elite company."

That's how head instructor Bruce Weaver leads-off his ground-training for Kitty Hawk Kites' 1902 Wright Glider Experience. Staring out over Jockey's Ridge the next day, his words still echo in my ears. My helmets on. I'm buckled in. My gaze is fixed on the horizon ahead. Both hands are on the controls. And yet its hard to fully grasp the situation at hand. *Is this really happening?* I think to myself. *Will I crash this thing? Am I ready?* I barely hear the instructors shouting tips as they hold onto the wings of aircraft, facing the wind ahead. And then it just happens: the glider lifts off. A huge smile erupts over my face — and I feel nothing but wonder. Just like Orville and Wilbur Wright felt more than a century ago.

"You aren't in the clouds or anything, say Weaver, who's logged hundreds of hours of soaring time. "You're just a few feet off the ground for about 150 yards. But it's just an overwhelming feeling being able to fly something that the Wright Brothers flew."

Weaver first got the sensation 17 years ago. As a lead-up to 2003's Centennial of Flight Celebration, organizers hired renowned replica expert, Ken Hyde, President of the Wright Experience, to construct versions of the 1902 and 1903 models. It was no small feat. Hyde didn't just rebuild the planes, he relived the experience, relying on the same tools the Wright Brothers used – and a lot of the same ingenuity.

"I thought we would go to the Smithsonian and get blueprints," says Hyde. "But the Wrights didn't do blueprints. So we found sketches in their letters, diaries, and little notebooks, plus photographs of when they doing the demonstration. It was six months before we cut the first pieces of wood, because the data wasn't there."

Nevertheless, Hyde produced two entirely functional airplanes – the 1903 model that still stands inside the Wright Memorial, and the 1902 model that still flies on the dune. But while the 1903 gets all the honors, the 1902 was actually the first to achieve controllable flight.

Perhaps that's why the sensation is so similar to hang gliding. To move laterally, the pilot uses his body weight to morph the shape of the wings. For longitudinal motion, the pilot movies the front rudder – in modern aircraft it's called a canard – back and forth. Mostly, it flies by feel as opposed to gauges – or, in most high-tech airplanes – computers.

"An interesting anecdote is that, back during the Centennial of Flight, they had pilots from all branches of the military fly the 1902 glider," say Weaver. "None of them flew it as good as a hang glider pilot, just because a hang glider pilot is familiar with using their eight to shift side to side and feeling their way through the air."

In 2012, Kitty Hawk Kites finally began offering the same feeling to the public. Seven years later, fewer than 200 people in the history of the world have flown this type of aircraft. (That's 336 fewer humans than have been into space.) Some are aviation junkies or hang glider pilots – others are just people looking for something different to do. The man joining me on the dune is a Silicon Valley engineer named – coincidentally enough – Jim Wright. And while he's not related to the original inventors, he can't help but share a certain closeness after his first flight.

"Your feel this sense of freedom," says Wright. "You're actually in the air, let loose from gravity for a little bit. I definitely kept going back in my mind to what it must have been like for the Wright Brothers to do this so many years."

That's the real thrill. More than soaring through the air, you get transported back in time, to being right there with Wilbur and Orville, on their very first leap of faith. It's a connection to aviation history that just can't be experienced by videos or photographs – much less today's airlines, where millions of people travel the world every year without ever really noticing they've left the ground.

"It's incredible, says Weaver. "For thousands and thousands of years, people dreamed of being able to get their feet off the ground. Kings would have given their entire kingdoms to be able to fly like a bird. And it's just second nature now."

Back on the dune, Wright and I keep taking turning flying the 1902. Some attempts go father. Other higher. Once, the glider tries so hard to break free, it sends Weaver tumbling into the sand. But that same childlike amazement that made me smile the first try, stays with me every flight. And I believe it will stay with me for every flight to come.

"You can see some of the films of the Wright Brothers," says Weaver. "If you're a VIP at the Smithsonian, you can put on a white glove and touch the 1903. But none of that is going to get you as close to actually feeling what they felt flying through the air."