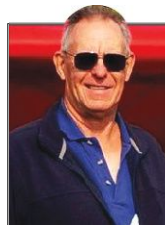




# Legal Eagle XL ORV and the Kitty Hawk Adventure

Back to the beginning

BY LES HOMAN



**MY INTEREST IN AVIATION** was spurred by my dad, a glider mechanic during World War II, and hearing him speak about his experiences. As a child growing up in Kansas, I witnessed a Piper Cub land in a hayfield across from where I lived. The pilot, whose airplane was low on gas, promised me a ride. My mom took him into town for gas, but I never got my ride. In spite of that early disappointment,

these events instilled a dream in me that still lives. In the third grade, I read about Wilbur and Orville Wright, and it made me want to fly where they had started it all. I have always dreamed of flying to Kitty Hawk and First Flight Airport in North Carolina. When building my red Legal Eagle XL, ORV (for off-road vehicle), this was one of the things that drove me on. It was a lifelong goal to fulfill, and this year it finally happened.

As it turned out, the goal was extended a bit by first flying over the Pacific Ocean in Eureka, California, in May of this year. When flying Part 103, with a 5-gallon fuel tank and 2.4 gph fuel burn, at 50 mph groundspeed, flying long cross-countries is out of the question, so

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ORV was loaded in a Jayco Octane Super Lite 26-foot toy hauler and towed to a local airport near where I was planning to fly. This was the 15th time I had loaded ORV in the trailer for adventures. Loading and unloading has become easier with many design hours and

lots of trial and error resulting in a system that allows me to disassemble and reassemble ORV and load/unload by myself. It now takes about one hour to load, down from two hours, and about one hour and 20 minutes to unload and be ready to fly, down from four hours. Of course, as I have grown older, heat, high humidity, and winds tend to increase my times.

On Friday, June 28, I loaded ORV into the trailer and made ready to travel to North Carolina. On Monday, July 1, 2019, at o-dark-thirty, I was eastbound from California. When driving across the country, I always think about flying where I am traveling. I experienced lots of wind crossing Texas and western Oklahoma, and very bad gusts and wind with rain near Memphis, Tennessee. If I was flying in these areas, it would have resulted in ground delays and days without flying. Lots of areas out West are far between airports, too far for the amount of fuel onboard and fuel burn per hour. It was so hot in Oklahoma, it took my breath away when stopping for fuel. All the green from grass, crops in fields, and trees was refreshing.

Midday Sunday, July 7, I arrived at Currituck County Regional Airport and was welcomed by William Nelson and his

crew. This location is about 40 miles north of Kitty Hawk. It was hot and humid. As I was finishing assembly, I started to wonder if I would get it together before I had to take a break. Then, the sound of a raindrop hitting fabric. Good, maybe it would cool off a bit. But within seconds, the sprinkles had become a major downpour. Within 30 minutes, it must have rained 2 inches. Over the course of the week at Currituck, I believe it rained at least 4 inches.

When traveling with ORV I always allow a week's time for unpredictable weather and winds. Here in North Carolina, there was a lot of rain through Sunday afternoon and Monday. Tuesday was very windy, so I drove to Kitty Hawk and spent the day at the Wright Brothers National Memorial.

The forecast for Wednesday's weather looked good, and daylight dawned on a beautiful day. I was airborne shortly after sunup, headed for Kitty Hawk and First Flight Airport. Early morning takeoffs are always the best, as the wind is calm, the air is cool, and watching the early morning dew disappear gives it a special meaning. Flight instruments included an airspeed indicator, vertical speed indicator, and altimeter, all by Belite, and an iPhone with ForeFlight.

*Sitting there with Kill Devil Hill and the monument in front of me was the culmination of a 65-year-long dream.*



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Over the Atlantic at Kitty Hawk.

I was concerned that winds might come up later in the day, so I flew directly to First Flight. I cruised at 900 MSL showing 50 mph across the ground at 2050 rpm, with a fuel burn of 2.1 gph. Now, I hate flying over water. If I cannot glide to shore, it really bothers me, but today I had no choice. I flew over about 10 miles of water southbound and even more miles more northbound. Kitty Hawk and Kill Devil Hills are on the Outer Banks, and water must be crossed to get there. The Wright brothers had to load their machine on a barge and ferry it over. Flight time was 0.8 hours.

I arrived before the tourist and banner towing flights began, and before people started flying in to spend the day at the beach. On approach to landing, the Wright Brothers National Memorial was to my right and was very impressive. The landing was uneventful. I taxied to the tie-down area at First Flight and marveled at the Wright brothers monument through the windshield. Sitting there with Kill Devil Hill and the monument in front of me was the culmination of a 65-year-long dream. Long ago I learned how to fulfill a dream — you must keep working at it and keep your priorities straight.

TRIP TO KITTY HAWK

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## TRIP TO KITTY HAWK



View of the chase cam.

I took lots of pictures and answered questions from several people who gathered to see the strange red flying machine. After about 45 minutes, I taxied out and made a straight-out takeoff to a point over the Atlantic Ocean and flew up the coast a few miles. I was hoping to be able to get close to the beach, but it was populated. I settled for staying up at about 500 feet MSL. I found a sparsely populated area and turned inland and headed back to Currituck County Regional Airport. Local air traffic was going strong as I crossed the coast with aircraft above and below my flight path pulling banners and hauling tourists. As I paralleled the coast on a northward trek, low scattered clouds were just above us and gave way to lots of white fluffy clouds as I neared Currituck. I seldom see these types of clouds where I fly in California. Flight time northbound was 0.8 hours, and I had time to reflect on what I had just accomplished.

The Verner 3V three-cylinder radial engine never missed a beat. It was refreshing to listen to the quiet smoothness turning that 67-inch prop knowing that each cylinder had its own ignition system providing a measure of safety. I had not flown with this system before except in larger aircraft with dual mags. After landing at Currituck, I refueled, changed to the chase cam, and went flying with these white fluffy clouds as a background. The chase cam is a tetrahedron-shaped plastic cardboard device, pointy end forward, with small winglets, that provides resistance and stability for a GoPro Fusion camera attached at the front that I pull behind ORV. It is adjusted as to distance with a hand reel and small nylon cord. I was able to take some beautiful chase cam footage and stills.

On Thursday, the winds were back up, and weather was moving through the area, so I made plans to depart on Friday and head to Oshkosh and the Fun Fly Zone for EAA AirVenture Oshkosh 2019. ORV was loaded Friday morning, and I departed the area for Charlottesville, Virginia. I had about 530 hours' flying time on ORV, and a little over 25,000 miles in the trailer. This year marked my fifth trip to Oshkosh with ORV. It was the best experience I have had. *EAA*

**Les Homan**, EAA 1063924 and member of EAA Chapter 90, is a private pilot and has built a Starduster Too, Starduster SA-101, Legal Eagle UL, and a Legal Eagle XL. Learn more about Les at his blog [LegalEagleFlyingAdventures.com](http://LegalEagleFlyingAdventures.com), find him on YouTube at [LesHomanLegalEagleXL](https://www.youtube.com/user/LesHomanLegalEagleXL), or email him at [lesh@homanengineering.com](mailto:lesh@homanengineering.com).

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