Sonex Factory Transition Training

Written by Jim Hicke, Waiex 162
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I apply full power smoothly and have to assertively add right rudder in proportion to the throttle to stay anywhere near the centerline. My instructor, Joe Norris, calmly watches the excursions and lets me handle them as I settle into my comfort zone. The aircraft launches into the sky behind the powerful Jabiru 3300 which is trying to corkscrew me to the left but I tame her with firm right rudder and slight amount of forward pressure. What follows is an amazing rocket ride up into the beautiful Oshkosh sky as I start my factory transition training in a Sonex conventional gear aircraft.

The EAA has gotten behind the NTSB safety recommendations from the report they issued in May of 2012. One of the recommendations was for transition training. Sonex Aircraft, LLC wasted no time in setting up a factory course. Hopefully, the FAA will issue other instructors permission to provide transition training across the country so everyone has convenient access.

If you've been to one of the Sonex builders workshops you've already experienced the hospitality of the Monnett family and their employees. They have a great setup in a few hangars on the Wittman Regional Airport at Oshkosh, including the infamous Hornets' Nest Cafe and the R&D facility where new ideas like the SubSonex Jet were born. As far as transition training goes, they have setup a dedicated classroom with a conference table and chairs. There is coffee, drinks, and a microwave. Joe Norris, Sonex Flight Operations, presents the syllabus for the transition training which has been adopted and co-produced by the Sonex Builders & Pilots Foundation (www.sonexfoundation.org) which is an officially recognized type club for all Sonex aircraft. The syllabus contains the basic maneuvers you'd expect and information on the history and construction of the Sonex aircraft. So far, it is turning out to be a very professional program and should be a great help to builders and prospective builders.

I've been in my garage and, more recently, in my hangar cave making aluminum dust and scraping my knuckles for the past 2 1/2 years as my Waiex aircraft took shape. The building process was very satisfying and I was amazed that I enjoyed it so much. I realized at some point that I had spent more time building by a factor of two than I had in my glider and power logbooks. Somehow though I didn't mind this as the building process allowed me to get in touch with aviation in a whole new way. As I worked on my Waiex, I met all the airport characters and established relationships with folks who share my interests, but whom I never would have met otherwise. Helpful suggestions, borrowed tools, and quite a few BBQs followed. Becoming part of this community was, perhaps, the best thing about building my aircraft.

Meanwhile, back in the transition training aircraft, the Sonex climbs briskly to our practice altitude of 3,000 feet. I can hardly hold altitude within a few hundred feet once I get there. How did I ever get a pilot's license I wonder to myself? I settle in, perfect my scan, adjust to the new aircraft and am soon back within standards. The problem I'm having is that with full down trim I still have to hold forward stick pressure. I let Joe know and he has me go back for a landing to get it looked at. My first landing was a straight in to 09 at Oshkosh with a slight crosswind. Joe had to guard the stick so that I didn't let off back pressure but it was a fairly nice landing -- or two.

I'm pumped up when we get back and let out a loud 'whoot' to John Monnett who is coming out of the R&D hangar to look at our trim issue. He smiles the knowing smile of someone who seen many Sonex grins. I tell him that it was a large leap of faith to build for so long without having flown in one. He said it was larger leap of faith flying the first prototype of a new design! It turns out that my training is actually in that first article. I am within weeks of flying my own copy and getting my very first taste of what so many other people already experience on a daily basis.

John adjusts the trim in a few minutes of time and quips 'that will be five bucks' and I respond that he sure works for cheap. He says something about the story of his life and we have a good laugh. John is a well-known lifetime EAA member with a lot of history in the kit-plane industry. He has designed aircraft such as the Monex Racer, Sonerai I, II, and the Monerai Sailplane. He was well-known back in the day for his Volkswagen engine conversions and now sells the self-assembled AeroVee engine for the complete homebuilt experience. He left the aircraft business for a while and when he returned he designed the Sonex along with his friend Pete Buck. These aircraft hit the sweet spot of performance, cost, and ease of building.

Back in the aircraft again, I’m having a blast as I'm flying over the famous Fisk Arrival railroad tracks. The trim allows me to hold altitude with ease. Departure stalls, approach stalls, Dutch rolls, slips, steep turns are simple and honest in this aircraft. My arm rests on my leg and Joe and I have carved out our places in the cockpit which holds two big guys just fine. Small wrist movements are all I'm using to fly. The Sonex seems to read my mind and is begging me to do more with her. The rules of transition training don't allow aerobatics so we're limited to the basics but the promise of more to come is on my mind. I'm in heaven.

I made several modifications to my Waiex to make it fit my mission. I wanted a fun flyer that can also serve as a decent cross country machine. I've added an extra 10 gallons in the wings with a transfer pump to the main tank and I increased the size of the panel to hold one 10" -

Dynon screen. I left room for a Garmin 430 for when I have more money and I've got a two axis auto-pilot. I can fill the main tank and fit my wife and me with light luggage for a hop to Vegas or I can load up all three tanks with 5 hours of fuel and all the camping gear I need for a few hops to AirVenture from San Diego.

On final to 09 again and I'm learning the landing habits of this aircraft. Let's just say that those flaps get you down quickly. High approaches are no problem and low approaches require power. I will probably operate with high approaches as the norm so that an engine out would be a non-event. I come over the fence at 80 and pull back the remaining power. I head towards the ground at 70 and round out just above the runway. Attitude is everything and I can feel Joe's practiced hand making sure that I keep the nose in the landing attitude as the plane settles onto the ground. The titanium landing gear absorbs the landing with a gentle little bounce. I over control the rudder pedals as I push the flap handle forward but this is no problem in a Sonex with direct tail wheel steering. It just does what you tell it and has no tendency to go anywhere else. As we go round and round the pattern, I start getting the sight picture and I even have a real perfect landing. Now I know what it should feel like.

The next day I finish up the remainder of the 5 hours. We're basically just smashing bugs, avoiding birds, and trying to get a few more of those perfect landings. I'm having a blast doing touch-and-goes on runway 36, while flights are going off on 27, and Young Eagles are flying at Pioneer Field. What a perfect aviation experience. I don't feel that I've made it to perfection, but Joe is happy with my performance and my insurance company will now insure me. We've made the NTSB, FAA, EAA, and an insurance company happy. Not bad for a couple of days work.

Jim is a software engineer who works on unmanned air vehicles and flies whenever he can. His Waiex website is www.n716wx.hicke.com.