

Outbound Progress Report 13 9-18-17

Flight Testing of the Wing

We now have over 60 hours of flight time on the 141 wing. This includes going to the Black Hills Fly-in, where you can really get an idea of how it stacks up against not only RANS planes but other brands. I must say I came away very impressed with the performance and handling at the higher elevation. Prior to departure I opted to pitch down the prop by 1 degree. This created a shorter take off, but no real increase in climb rate. The V_y is about 65 to 70 IAS, and V_x is 60 MPH. With only the 100 HP Rotax we saw respectable climb-outs from all the sites we landed at, even with full fuel and a 230 pound passenger. I really wished I had not down pitched the prop, because I lost about 12 MPH in cruise speed. Even with less pitch I was able to cruise at 103 MPH typically, turning 5500 RPM. One more degree was giving me a solid 115 MPH. With the 100 HP you simply have to let the plane build a little speed then it really takes off. This does mean with greater power you will see shorter take off runs and greatly improved climb rates. All in all, the wing is performing equal with the original wing when it comes to take off and landing distances, and rates of climb but, does have a higher cruise speed, even with the prop pitched down. The only change we are making to the basic geometry of the 141 wing is the aileron and flap spans, see below for details on this.



Wing Tips

Wing tips have been giving us some production headaches. We are re-tooling them over to a better material. This will cause a week delay in shipments. If we still have issues we will delay shipping the wing tips with the fuselage, or finishing kits.



Kits are Shipping!

We are packing kits daily. Production has been full speed ahead, but we are finding our speed is coming up a bit slower than we hoped. We are gaining daily, and hope you will be patient. We will not compromise quality for the sake of speed.



Tailcone Repair

After the damage the mock up received heading to Oshkosh we decided to add a two bulkheads. They are placed between station 4 and 5. The main reason has nothing to with strength or the big dent the flying off the trailer induced. It is all about getting the skins to lay with no pillowing between the stations and still be able to use the light weight pre-drilled stringers.

Once the fuselage is back together we will do limit load testing and then complete assembly of this "rough " prototype for flight testing.

Thanks for stopping in, more to follow, RJS