

It's been a frustrating weekend so far.

I decided to stop using the spiess hecker 4130 wash primer. The zinc chromate just freaks me out. I see primer dust everywhere I look and this is about the most dangerous part of it.

The risk of using this for my health is just too big and not worth the extra protection it gives.

What good is it to protect the plane for 50 years if you get a nasty disease by using the products.

Zinc chromate contains chrome 6. A very nasty cancer invoking element.

Still not convinced ? Read the section 'health hazard' on the [website of Occupational safety and health administration](#).

I will only use the zinc chromate from now on with a brush. No more spraying. It's less of a problem when you are just brushing it on a piece of metal.

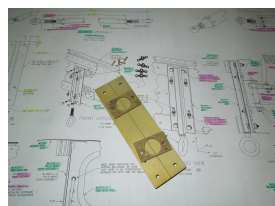
Instead of the washprimer, I will be using the same primer that also Hugo is using. It's a mechanical primer and much safer to use. No chrome in and easier to spray as well.

I also disassembled my paint booth to get rid of all the remainders of the overspray. Hell of a job and actually a step backwards instead of forwards.

I found some good second hand rotodyne engines on the internet and will be deciding on one soon. Then I have to build a large filter and reorganise the paint booth.

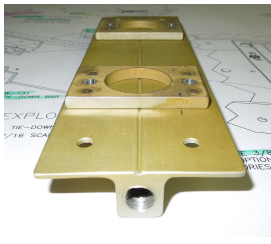
To change my mindset to something else, I decided to catch up on some work that was remaining to be done.

First, the rivetting of the tie down bracket for the left wing. I remade this one months ago after an orientation mistake and was finally able to prime it last week.

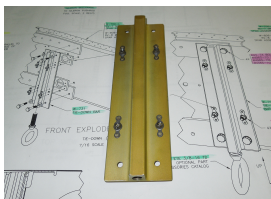


The spacers rivetted on the back side of the tie down bracket. You can see the tapped tread in the bottom of the tie down. This is where the

tie down ring will be screwed in. The tie down ring is used to strap the plane to the ground when parked overnight.



Other side view with the nutplates for the AN3 bolts installed. These AN3 bolts hold the brackets that will support the bellcrank (pivot element for the control elements that move the ailerons).

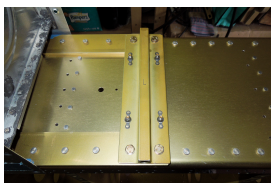


Then bolted both tie down brackets to the wing using 25 inch/lbs torque.

This is quite tough on the nutplates as they are -by nature- already providing a lot of resistance for the bolt to go in.

What I did is run the bolt in by hand until the end so that the nutplate forms to the bolt. Then given it half a turn back, and then use the torque wrench to put on the 25 inch/lbs.

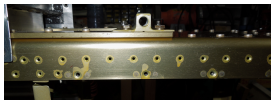
Over torqueing a bolt can increase stress due to the forces being applied on the bolt and can cause it to break.



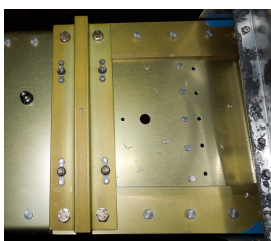
Bottom view with bellcrank brackets and lacquer applied on the torqued bolts.



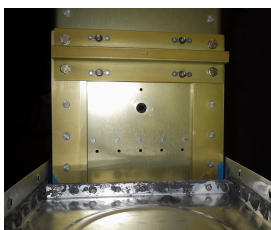
Then applied zinc chromate primer on the countersunk holes in the spar. There are a ton of holes to be done. First silicon remover on, then dry them and then apply the primer. Each hole visited 3 times.



Finally, enlarged a hole in the spar where the stall warner electric wire will pass through the main spar. This is of the largest one of the predrilled holes between the tank and the tie down bracket. Used the step drill to enlarge to 3/8 inch.



Then deburred and sanded the hole carefully and installed a -3 bushing.



Also clecoed the ribs in the leading edge skin of the left outboard leading edge.

Next session, it's rivetting time.