

**Subject: Re: [c-a] Wheel Pants (Trials and Tribulations)**

**Date:** Thu, 6 Jan 2000 03:25:24 -0500

**From:** Herb Sanders <hsanders@bellsouth.net>

**To:** "canard-aviators@canard.com" <canard-aviators@canard.com>

[The Canard Aviators's Mailing list]

To those interested / here is how I mounted my wheel pants. Now would be a good time to do gear leg fairings, but that is another project. Take the load off the gear so pants will be mounted in relaxed state, as at cruise. Level the plane in pitch and roll. Drop a plumb bob from nose & center flange and pop a chalk line down center on floor. Duct tape some foam to parts you want to clear (min 1/4" on brake, 1/2" on top of tire) and rough cut out for strut and tire and put the pants in place. Bondo some 2x4 pieces to floor at nose and tail of pant.

Position pant to be zero pitch and yaw (measure from nose and tail of pant over to center line - get center of nose & tail of pant level) and bondo to 2x4s to lock in position. Duct tape over the top of pant so the spat you build will not be bonded to the pant. Pour foam (Home Depot has cans of spray foam that works OK for about \$4.00) around the strut to pant intersection and when cured, carve to pleasing radius. You want the spat you build to be permanently attached to the strut and strong enough to support the pant.

I made mine roughly the size and shape of the profile of a football, not quite as pointed - try to get both sides the same shape. I used four ply of BID and made them larger than I wanted so I could trim to shape I wanted. Draw out the shape you want and drill holes ( I think I used 10 screws total per side) # 30 before you pop the pants loose from the cured layup. Knock the boards down, take off tape, and trim and then cleco back together and lower nose to be sure the nose of wheelpant does not hit ramp first - they will be close. The lower and closer you fit the pants, the faster you go, but also the more apt you are to have wheelpant damage from taxi off edge of tarmac, hard landing, etc.

Drill up holes and install 10/32 floating nutplates, being sure no screw will conflict with tires, brakes, etc. For show finish, tape around the spat, install pants with screws, with micro about 2 to 3 " around the spat, and when cured block sand to a flush finish. If you have the right shape pant, you should be about as clean as a fixed gear can be. - Herb Sanders

Tim LoDolce wrote:

> Hey Herb, I too will be attaching new pants to my Vari (Klaus's) and your  
> idea sounds the best. Can you give me specific info on how you did yours  
> please?

>

> Tim