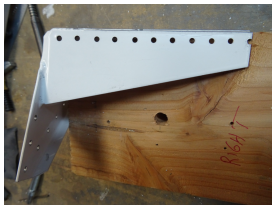
24/01/2019 - Welding engine mounts - 1h

Category: 3.1. Firewall
Published: Friday, 08 February 2019 08:41
Hits: 1315

you may remember from previous posts that my engine mount were screwed up the first time because of wrong clamping. Then I reordered them and drilled them again and finally came out with edge distance that was acceptable (also confirmed by Vans Support). The only remaining problem with them was that the last hole was way to close to the end and on the passenger side, it even cut in half at then end (see image below).
The reason for this is that the spacing on the fuselage gussert and longeron is closer in the front than the last 3 holes which are not in the engine mount. You can hardly see it on the plans and I overlooked that.

See previous article: [link][title][/link]



since remaking longerons is no option, I made some drawings and sent them to Vans Support and proposed them to cut couple of mm of from then end to clear the hole. Then cut a part of steel from my previous engine mounts and weld them together. I extended the whole engine mount upper tab now so that it would cover the 3 extra holes as well for extra strength.
All I had to do now was find a TIG welder. That was not as easy but finally I found the right guy through a friend who's specialty is welding innox steel.

He did a wonderfull job and here are my pieces after I got them returned from the welder. Except for the flange that sits near the join, it looks absolutely smooth and perfect. The bend was very hard to weld as
you don't want to harm or mark the other flange It looks good but and is certainly ok, only visually it's not that straight there.

Here are the parts (powder coat slightly off of course.

Passenger side:

Phoca PDF

24/01/2019 - Welding engine mounts - 1h

Category: 3.1. Firewall
Published: Friday, 08 February 2019 08:41
Hits: 1315

Pilot side

Happy about the result and after some priming, they will be ready to go on permanently.

Phoca PDF