



Oil-Flow Visualizations on Juncture-Flow Model with F6 Wings

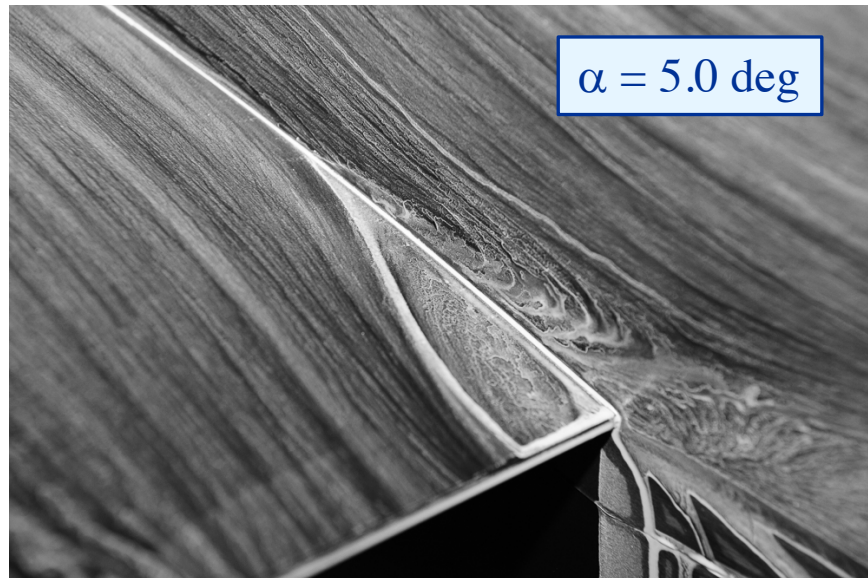
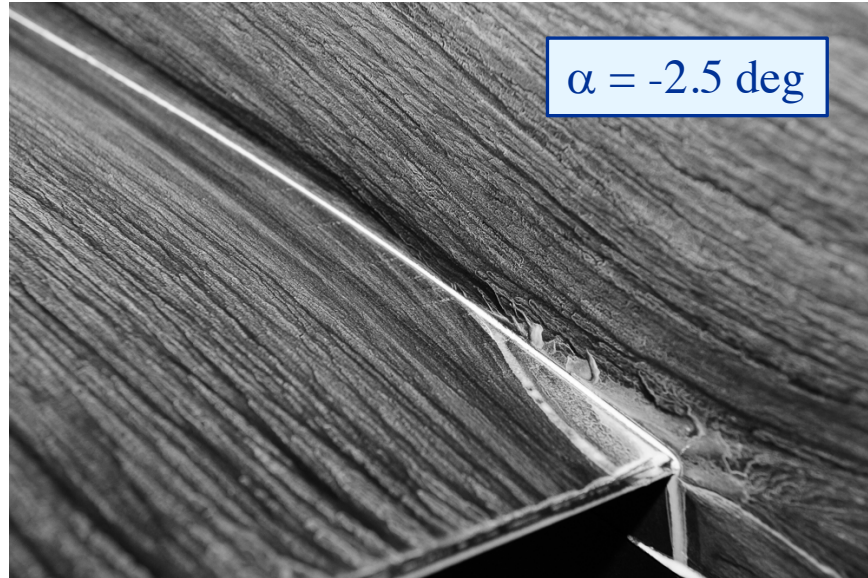
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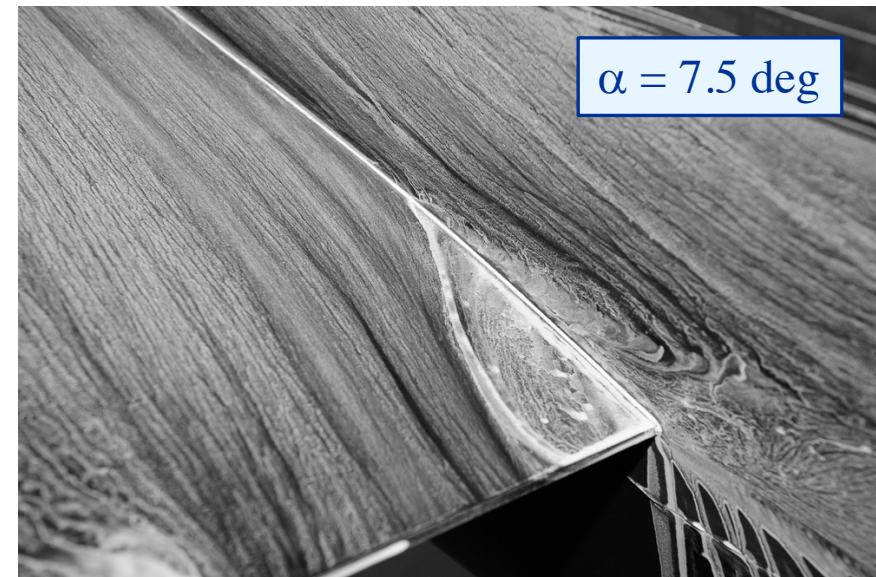


Important Notes

- Recall that oil flow visualizations are inherently qualitative in nature
- The oil-flow visualizations on the model vertical surfaces (i.e., the fuselage) are impacted by gravity. This may bias the flow pattern revealed and may not be a true depiction of the flow
- Tape coverings over sensors on the model can act like small vortex generators and the impact of the resulting vortices can be observed in some of the surface patterns
- There are a limited number of oil-flow visualizations on the fuselage and therefore the repeatability of the surface patterns has not been quantified



Oil Flow Visualizations at TE Corner

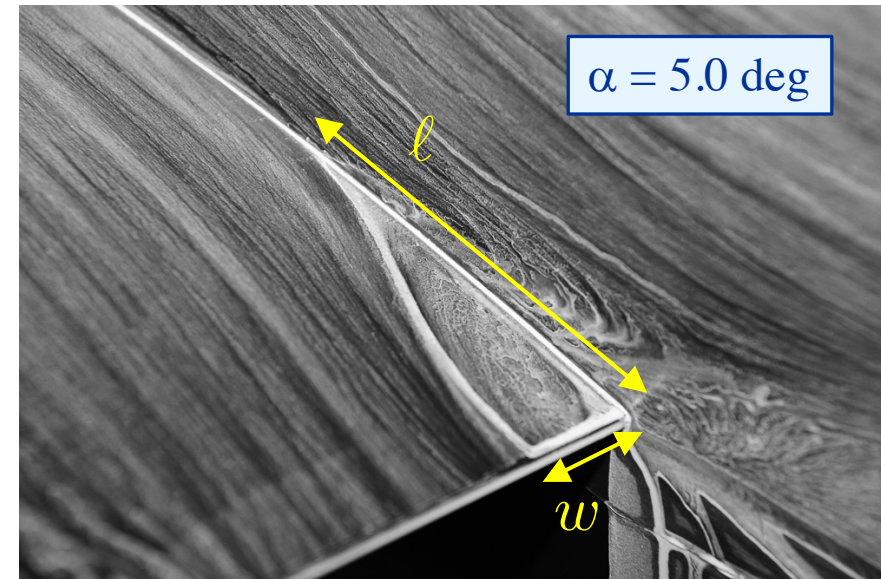
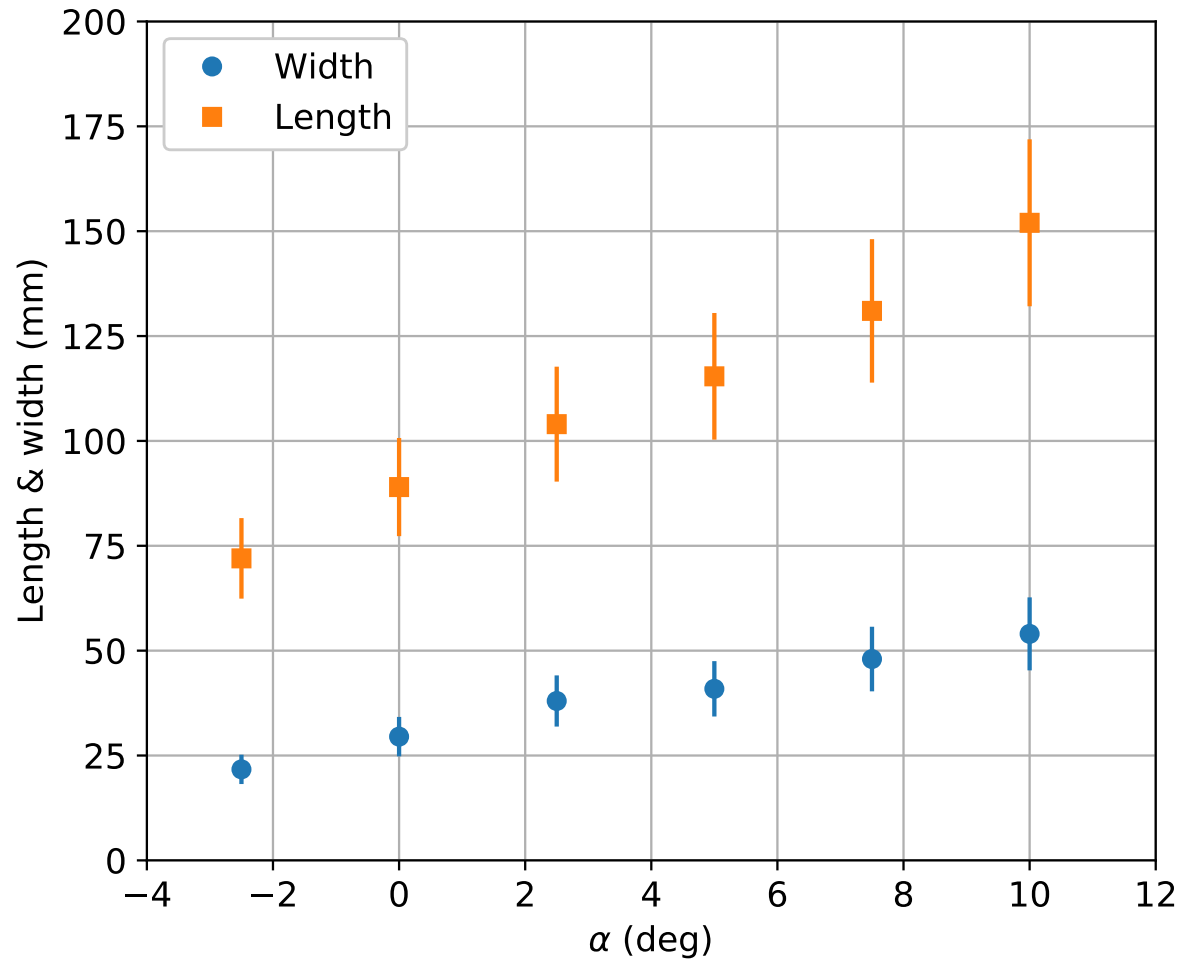




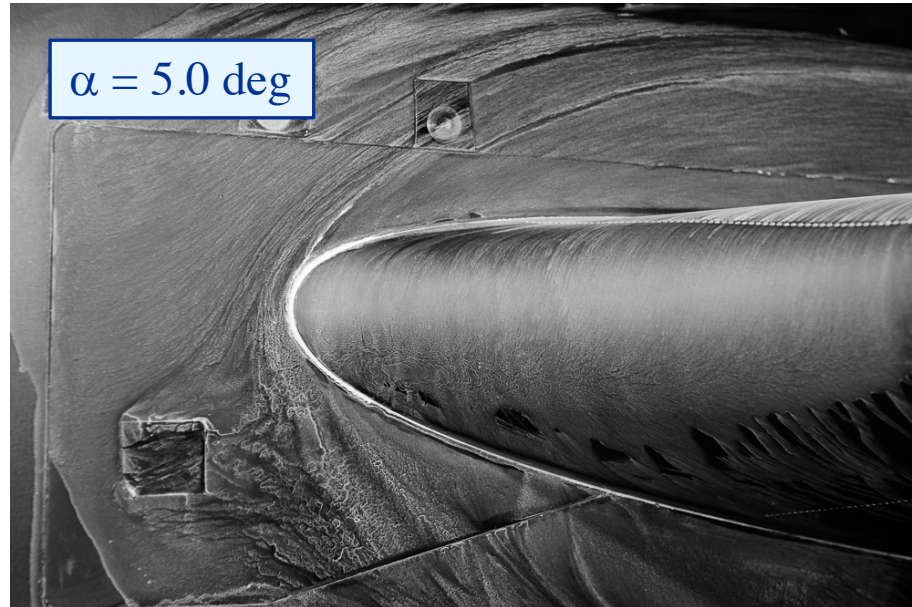
Corner Separation Length and Width Measurements with Uncertainty Estimates

α (degrees)	w (mm)	U_w (mm)	L (mm)	U_L (mm)
-2.5	21.7	3.5	72.0	9.6
0.0	29.5	4.7	89.0	11.7
2.5	38.0	6.1	104.0	13.7
5.0	40.9	6.6	115.4	15.1
7.5	48.0	7.7	131.0	17.1
10.0	54.0	8.7	152.0	19.9

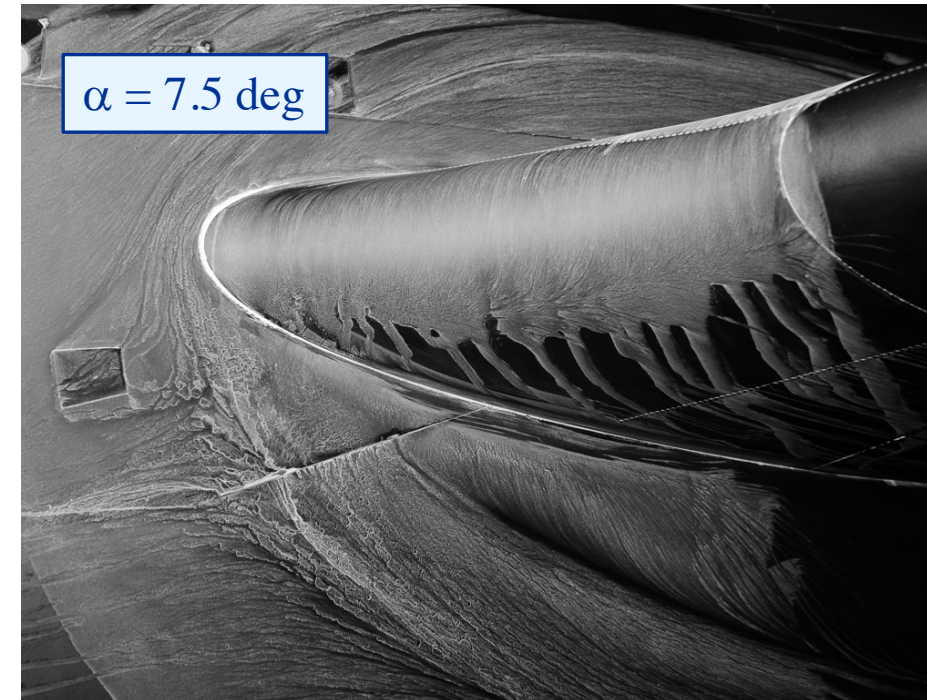
Corner Separation Length and Width



Recall that oil-flow visualizations are qualitative in nature, so view these “quantitative” values with caution...



Oil Flow Visualizations at LE of Wing-Fuselage Junction



Oil Flow Visualizations on Port Side of Model

