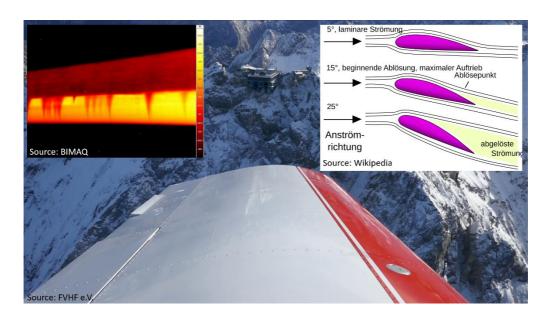


Master project New measurement technique for detection wing stall



Background:

In aviation, a wing stall is one of the most dangerous scenarios during flight. It is therefore important that the pilot is warned early on if a stall is imminent so that he can still react and avert the stall. Existing warning systems are based either on low-pressure areas at the leading edge of the wing or on the calculation of the angle of attack. This project aims to develop a new method that actually measures the flow separation instead of predicting it indirectly. Thermography will be used for this purpose.

Work structure:

- Introduction to the topic
- Estimation of temperature differences at different airspeeds
- Design and construction of a test setup
- Conduction of tests to proof the concept
- Evaluation of the test data

We are looking for students with:

- High motivation
- Background in aero- and fluid dynamics
- Knowledge in CFD
- Affinity for practical work

We offer:

- Supportive team
- Connection to current space projects
- Environment for free development and contribution of own ideas

If you are interested or have any questions, please contact:

Dr.-Ing. Florian Meyer

florian.meyer@zarm.uni-bremen.de