

Deutsches Zentrum für Luft- und Raumfahrt German Aerospace Center

For several years, the German Aerospace Center (DLR) has been conducting research regarding Active Twist Rotor technology. One focus of the recent work was the structural integration of the piezo-ceramic actuators in a way that the strain they encounter would be reduced to a minimum in order to increase their durability and to ensure the twist performance. As a result a blade was designed, which allows twist amplitudes of plus minus 2 degrees for all relevant higher harmonics. A first blade was successfully built and tested according to this design. It is the next goal to conduct wind tunnel experiments with this new design. Just as in the HART I and HART II project it is envisioned to do these experiments in a scientific consortium. In order to set up such a consortium (*consisting of research establishments and academia only*) we will have another open door meeting prior to the 2018 ERF conference where DLR will again explain the overall test campaign and will give an update of the current status of rotor blade manufacturing. The roadmap towards the wind tunnel testing campaign will be presented as well as general guidelines for the participations in the consortium. Also the discussion on the test matrix will be initiated in this meeting.

If you plan to attend this meeting, you need to register with your name and your affiliation by mail at <u>Johannes.Riemenschneider@dlr.de</u>, since seating is limited.

- **Location:** Delft University of Technology, Aula Conference Centre, Mekelweg 5, 2628 CC Delft, Commission room 3 (ERF location, generously sponsored by the ERF)
- Date: September 17th 2018
- **Time:** 2:00 pm 5:00 pm

