Electric aircraft breaks speed records

Research aircraft „e-Genius“ of the University of Stuttgart flies faster than any other electric aircraft.

The two-seat research aircraft „e-Genius“ of the University of Stuttgart has set two new speed records over different flight distances. On the 1st of November 2017 the e-Genius reached an average speed of 235 km/h over 15 km and 222 km/h during a second record flight over 100 km. The previous records have thus been improved by 9 km/h and 44 km/h respectively.

In the past, ranges of up to 400 km in purely motor-powered flight could already be demonstrated by the battery-powered aircraft. With the new records the e-Genius shows that electrically-powered aircraft are not only extremely efficient but also astonishingly fast. The research aircraft was designed and built specifically around its electric drive at the University of Stuttgart - the installation of the engine at the rear is a special feature of the aircraft and is largely responsible for the achievement of the records.

The electric aircraft „e-Genius“ takes off for one of two the record flights
The aircraft was flown by record pilot Klaus Ohlmann und Ingmar Geiß of the Institute of Aircraft Design. Both of the new world records were set in accordance with the regulations of the World Air Sports Federation FAI. In the category „electric aircraft“ the e-Genius already holds five other FAI world records over different distances and reached altitudes.

The „e-Genius“ project is part of several research projects at the Institute of Aircraft Design with the aim of investigating how to reduce CO₂ and noise emissions with battery-powered and hybrid-electric aircraft, in order to contribute to the reduction of aviation’s environmental impact and thus improving its social acceptance.

The Institute of Aircraft Design is part of the Faculty of Aerospace Engineering and Geodesy of the University of Stuttgart. The institute has three professorships with about 65 research assistants. In the sector of „Aircraft Design“ the research group „Manned Aircraft Projects“ under the direction of Prof. Andreas Strohmayer deals with energy-efficient and low-emission aviation. The practical research of electric aviation at the institute already started in 1996 with the first flight of the solar airplane „Icaré 2“. Other core research areas of the institute are lightweight construction, manufacturing technologies and wind energy.