Open Rotor wins Aviation Week’s Laureate Award for propulsion

Washington D.C., March 14, 2019

The Open Rotor engine, developed by Safran Aircraft Engines through the European “green aviation” research program Clean Sky[1], won the Propulsion category at the 62nd Aviation Week Laureate Awards ceremony, held today in Washington, D.C.

A key part of Safran’s Research & Technology strategy, the Open Rotor is the only engine architecture that will enable reducing fuel consumption and CO$_2$ emissions by 15% in relation to the commercial aircraft engines now in service. Featuring a disruptive architecture with dual counter-rotating unshrouded fans, the Open Rotor project was launched in 2008 at the initiative of Safran. The engine has reached several major development milestones since then: wind tunnel tests at the French aerospace research agency ONERA, assembly of a demonstrator in 2015 and a series of ground tests on the open-air test rig at Istres (southern France) at the end of 2017. All test data was analyzed in 2018 and the demonstrator disassembled, steps that will help understand how all constituent parts performed during the tests.

“We are very proud of this award, which recognizes over ten years of all-out efforts along with our partners in Clean Sky to develop the Open Rotor and show the excellent maturity of this type of architecture,” noted Olivier Andriès, Chief Executive Officer of Safran Aircraft Engines. “The ground tests allowed us to meet our acoustic and other performance objectives, and to validate the thrust reversal function.”

Continued work on the Open Rotor will above all be shaped by the choices made by aircraft manufacturers for the 2030-2035 timeframe, and by changing regulations. Jérôme Bonini, Vice President for R&T at Safran Aircraft Engines, added, “In addition to checking out the demonstrator, the series of tests carried out at Istres was designed to validate the high-value-added technology building blocks we developed, which will be integrated in tomorrow’s engines.”
For over 60 years, Aviation Week Network’s Laureate Awards have recognized the extraordinary achievements of individuals and teams in aviation, space, and defense. "This year's winners exemplify the spirit and innovations that are transforming our industry to meet the challenges of tomorrow," said Aviation Week Network Editorial Director Joe Anselmo.

[1] Clean Sky is a public-private European research program designed to improve the aviation industry’s environmental performance, jointly launched in 2008 by the European Commission and members of this industry.