

Press release

Palaiseau, May, 30, 2024

First flight of electric Scaled Flight Demonstrator



On the 2nd of May 2024, a scaled version of a large passenger aircraft with distributed electric propulsion undertook its maiden flight. Further testing will follow to qualify and measure its dynamic flying behaviour, aimed at understanding the advantages of this Distributed Electric Propulsion technology for large passenger aircraft. The objective of the project was to reach 20% of block fuel reduction for the full-scale aircraft combining a cruise speed reduction with the associated straight wing and the use of distributed electric propulsion.

The flight was at Aeroporto di Taranto-Grottaglie in the south of Italy. The aircraft with a wingspan of 4 metres, a take-off mass of 167 kg, and a cruise speed of 100 knots, took off, completed a 10-minute flight, including an approach just over the runway, and landed successfully. Subsequent flights will aim to qualify the aircraft for measurement flights, during which dynamic manoeuvres will be executed. Through these efforts, we shall learn about the feasibility to harvest the benefits of DEP technology for large passenger aircraft.

Partners of the project are Airbus, NLR, ONERA, CIRA and TU Delft supported by Orange Aerospace.

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