

Rolls-Royce concludes testing of plane technology set to break electric speed record

September 29 2020, by Bob Yirka



Credit: Rolls-Royce

Rolls-Royce has announced on its blog that the company has completed testing of the technology it plans to use in its line of electrically powered planes—one of which they expect will break speed records for electric

airplanes. The new plane will be one of the core products of the company's ACCEL initiative, whose main objective will be to produce zero-emission planes and engines for other plane makers, and to be net-zero by 2050. Rolls-Royce has also created a video showing parts of the ground testing, which has been posted on YouTube.

The testing was done with a plane segment featuring a full-scale model of the front of the fuselage of the ionBird plane. It was fitted with a 500-horsepower electric engine backed up with 6,000 cells—enough, the company claims, to [power supply](#) 250 houses—which will keep the future plane going for approximately 320 km. The engine is also expected to deliver enough power to fly the plane at 480 km/h—which would be a record for an electric airplane.

Rolls-Royce has been working with electric motor maker YASA and Electroflight, an aviation start-up, and luxury watch company Bremont, which assisted with dashboard design, and which will also be the timekeeper when testing the speed of the plane.

The ground testing consisted of running the propeller at full speed (2,400 rpm), optimizing the system and putting procedures in place for using the technology in an actual airplane and analyzing data from sensors measuring aspects of the parts being tested. Officials with the [company](#) have announced that the first plane to use the new technology will fly sometime this year, with timing trials to be held early next year. That [plane](#), which has not yet been named, will be a single-seater with three axial 750R electric motors to produce a 500-horsepower powertrain.



Credit: Rolls-Royce

More information: www.rolls-royce.com/media/pres...-electric-plane.aspx

© 2020 Science X Network

Citation: Rolls-Royce concludes testing of plane technology set to break electric speed record (2020, September 29) retrieved 13 March 2024 from <https://techxplore.com/news/2020-09-rolls-royce-plane-technology-electric.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.