ROLLS-ROYCE PARTNERS WITH BOEING AND LUFTHANSA TO TEST TECHNOLOGIES TO IMPROVE FUEL EFFICIENCY AND REDUCE NOISE

News / Airlines, Manufacturer

Rolls-Royce partners with Boeing and Lufthansa to conduct flight tests of innovations meant to improve fuel efficiency and reduce noise. The testing, which begins later this month at the Boeing site in Glasgow, Montana, is being conducted on a Boeing 787 Dreamliner jet that's serving as Boeing's 2026 ecoDemonstrator Explorer airplane. This Boeing 787-9 is scheduled to be delivered to Lufthansa at a later date and features Trent 1000 engines from Rolls-Royce. The testing is expected to run through mid-August.

Boeing Chief Technology Officer Lane Ballard commented: "Boeing works tirelessly to deliver the aerospace innovations of today and tomorrow. The more efficient inlet and Intelligent Operations flight paths we're evaluating on this year's ecoDemonstrator Explorer are among the many promising concepts we're working on. These enhancements have the potential to make our airplanes even more valuable to our partners, including customers like Lufthansa and suppliers like Rolls-Royce."

Grazia Vittadini, Chief Technology Officer, Lufthansa Group stated: "Lufthansa Group and Boeing share a long-standing partnership in aviation. We are pleased to support this year's Boeing ecoDemonstrator Explorer program alongside Rolls-Royce. Together, we aim to help advance aviation's transformation by testing technologies with the potential to improve fuel efficiency,

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

reduce noise and prove their value in real-world operations."

"This programme is the culmination of a decade of collaboration with Boeing, built on a shared ambition to reduce noise, improve efficiency and unlock more sustainable flight," said Alan Newby, Director of Research and Technology, Rolls-Royce, which provided engineering support and oversight for operating the engine with the next generation inlet installed. "With Boeing and Lufthansa, we are building on our extensive research to test technologies in real-world conditions and see how they perform where it matters most - in service. We look forward to sharing insights and demonstrating how world-class partnership and innovation can deliver benefits for our customers and the industry."

The innovations being tested are part of Phase III of the Federal Aviation Administration's CLEEN (Continuous Lower Energy, Emissions and Noise) programme. Through this initiative, CLEEN works together with industry to test and develop technologies that will enable manufacturers to create airplanes and engines with benefits such as improved fuel efficiency and reduced noise.

"These tests demonstrate how the public-private partnership of the CLEEN program supports the development and integration of advanced technologies into current and future aircraft," said Julie Marks, executive director of the FAA's Office of Environment and Energy.

Since 2012, the Boeing ecoDemonstrator programme has accelerated innovation by taking new technologies out of the lab and testing them in an operational environment to help solve real-world challenges for airlines and passengers. The ecoDemonstrator programme has tested more than 260 technologies to enhance safety, reduce fuel use, emissions and noise and improve operational efficiency and the passenger experience.

"The Boeing ecoDemonstrator program helps us continue to deliver improved products that meet our customers' needs, including better fuel economy and lower noise emissions," said Allison Melia, Boeing vice president of Sustainability. "Maturing these technologies is key to supporting their fleet modernization strategies and sustainability goals while advancing resilient aviation growth."

This project enhances the extensive testing Rolls-Royce has already undertaken to understand fan aerodynamic performance. Capitalising on the architecture and technologies of previous generations of Trent engine, the Trent 1000 has been designed and optimised to power the Boeing 787 Dreamliner family of aircraft.

Since its entry into service in 2011 Rolls-Royce has continuously improved the fuel efficiency, capability and durability of the Trent 1000, and engineers continue to explore opportunities to improve the engine and in-service support, to ensure it is always delivering the maximum value to customers.

The Trent 1000 XE is Rolls-Royce's production standard engine powering all future deliveries of the Boeing 787 Dreamliner. Rolls-Royce is already in the process of upgrading Trent 1000 TEN customers to this latest standard of engine, transforming their experience of operating their 787s.

20 JULY 2026

ARTICLE LINK:
https://50skyshades.com/index.php/news/manufacturer/rolls-royce-partners-with-boeing-and-lufthansa-to-test-technologies-to-improve-fuel-efficiency-and-reduce-noise

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.