BOMBARDIER RAMPS UP SECOND TEST PHASE OF ECOJET RESEARCH PROJECT

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Bombardier unveiled exclusive images of its EcoJet research project' second test phase. The promising flight tests were conducted with an 18-foot-wide demonstrator and have generated important results, contributing to the advancement of this pivotal project. Bombardier EcoJet research project aims to reduce aircraft emissions by up to 50% through a combination of aerodynamic, propulsion and other enhancements. EcoJet is a sustainability-focused research and technology initiative which started 15 years ago.

This project has successfully materialized into a family of Blended Wing Body test vehicles, with flight tests being conducted to develop and mature relevant technologies. The analysis of the data gathered from the 18-foot-wide prototype will allow Bombardier's engineering team to perfect its knowledge of new aviation control laws that are adapted to the radically different BWB geometry, bound to be applied to more sustainable, future business aircraft.

Stephen McCullough, Senior Vice President of Engineering and Product Development, commented: “Our engineers are eager to start working with the results yielded by this second phase of the flight test program. Building on the significant data drawn from the initial flight-testing phase, and now leveraging a model twice as large as the first prototype, we can further refine our analysis. With each additional experimental stage, we are paving the way for more sustainable aircraft designs and new technologies.’’

Flight campaigns on scaled test vehicles allow the organization and its academic partners to explore the behavior of BWB designed vehicles in free flight. Comprised of several free-flight campaigns, the flight-testing program will be held over multiple years to generate increasingly precise data in real-world, representative environments. The 18-foot-wide prototype of Bombardier’s EcoJet research project has flown for the first time in 2022 and can fly autonomously. Bombardier’s Research and Technology team has started testing real life feasibility of their theoretical work back in 2017 with the first prototype, which had a wingspan of approximately 8 feet. While laying the foundation for more sustainable business jets, Bombardier will also leverage its EcoJet prototypes to continue creating incredible customer experience.

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