

## JetZero Unveils Ultra-Efficient Blended Wing Body Aircraft for the Airline Middle Market

- New aircraft reduces fuel consumption 50 percent
- 100 percent SAF capability addresses the critical need to reduce airline emissions
- Adaptable for zero-emission future fuels such as liquid hydrogen
- In development for over 30 years with current support from NASA and U.S. Air Force

Los Angeles (April 20, 2023) JetZero, an aerospace engineering company that has been operating quietly with a team of experts on blended wing body aircraft, has unveiled a new design to serve the airline middle market, with seating for 200-plus. The new airliner has multi-mission capability, including as a freighter or refueling tanker.

The first in a family of aircraft, the middle market aircraft (MMA) will be about half the weight and require half the power of aircraft it replaces, such as the Boeing 767. It will be powered by the type of modern high-bypass engines currently used on smaller single-aisle jets. The all-composite aircraft benefits from well-understood aerodynamic concepts. Systems design is mostly conventional, permitting entry into service in the 2030s.

JetZero was founded in 2021 with the sole focus of developing the next generation of sustainable jets, accelerating the path to zero emissions. The core of the JetZero team includes the engineers who pioneered the blended wing body concept, led by JetZero founder and Chief Technology Officer Mark Page. As a McDonnell Douglas program manager in the 1990s, Page led a three-year NASA initiative to investigate and define future BWB properties. NASA since that time has spent more than \$1 billion on research and development of blended wing technology.

Page continued that research at subsequent companies, including JetZero predecessor, DZYNE Technologies from 2012 to 2021. In 2021, NASA awarded JetZero a contract to analyze sustainable aircraft configurations, design a subscale model, and deliver a plan to produce and fly a full-scale Sustainable Flight Demonstrator (SFD).

JetZero is competing for the \$235 million USAF BWB demonstration program, which includes development of a full-scale demonstrator aircraft. It is simultaneously launching an outreach to private sources of funding and engaging with potential program partners.

### **Northrop Grumman's participation**

JetZero is partnering with Northrop Grumman in the proposed development and production of a full-scale demonstrator for the Air Force's BWB competition. Northrop Grumman is a world leader in advanced aircraft design and manufacturing, including the recently unveiled B-21 Raider. The company brings long expertise in aircraft prototype development and militarized derivative weapon systems integration and test for a variety of aircraft.

The addition of Northrop Grumman expertise lowers risk in the development and eventual commercial/military introduction of JetZero's BWB aircraft. The company also brings unique capabilities in advanced development through subsidiary Scaled Composites, which will contribute substantially to the BWB demonstrator.

"Northrop Grumman's expertise in advanced aircraft manufacturing and weapon systems integration align perfectly with JetZero's forward-thinking mindset to develop and demonstrate the value of blended wing body aircraft for commercial and military use," said Tom Jones, Northrop Grumman Aeronautics Systems president. "Combined with our leadership in digital engineering and prototype development, we're excited to offer new capabilities that redefine what's possible for our customers."

### **JetZero's BWB Design**

The blended wing body concept reduces weight and drag in large part by the elimination of a conventional airliner's tail section. Semi-buried engine nacelles further reduce drag. Their position above the aircraft also substantially reduces the aircraft's noise signature.

The blended wing is naturally stable and generates lift across the aircraft's entire span. With reduced surface area and weight, less power is required—a virtuous circle leading to less fuel consumption, lower operating costs, and lower emissions to meet the industry's commitment to net zero emissions by 2050.

**For more information:**

[press@jetzero.aero](mailto:press@jetzero.aero)