JetZero Finalizes Contracts with Major Suppliers for Demonstrator's Flight Control Systems

Contract completion is a major milestone with Tier One suppliers

LONG BEACH, CA – Nov. 4, 2024 – JetZero has finalized partnership agreements with Tier One suppliers for the key components of the Flight Control System on its full-scale blended wing body (BWB) demonstrator. The execution of contracts marks a critical step in the path toward build and demonstration, with test flights scheduled to begin in 2027.

"Finalizing supplier contracts for the Flight Control Systems is a significant milestone on our journey from design, to test, to demonstration," said Dan da Silva, chief operating officer for JetZero. "It's just the latest example of the steady progress JetZero is making toward building this airplane. These suppliers are the best at what they do, and we're so pleased to see their shared enthusiasm and belief in the blended wing airplane we're building at JetZero."

All hardware being integrated onto the airplane already flies on Part 25 commercial air transport airplanes, lowering risk and eliminating barriers to eventual certification. JetZero has intentionally selected partners and components with high technology and integration readiness levels.

Flight Control Systems suppliers include:

BAE Systems: Pilot Controls and Actuation Controllers

Active control sidesticks give immediate and intuitive feedback directly into the pilot's hands, which enables them to safely make use of the airplane's full flight envelope. Another significant benefit of this technology is the ability to link the controls electronically from pilot to pilot across the cockpit. This link enables both pilots to feel the forces and see the movement generated by the other. Active control sticks also require less complexity, weight, and volume than mechanically linked control sticks.

Actuator Control Units translate flight control signals, including the pilot inputs from the active control sticks, to commands that control the aircraft's control surfaces, providing precise coordination and responsiveness. These units work seamlessly with the flight control system, enhancing overall flight performance.

"This order is another significant step for BAE Systems in the aviation market and furthers the company's pursuit of a greener tomorrow," said Adam Taylor, business development & capability director at BAE Systems. "As the aerospace industry works diligently to lower emissions, we are proud to be part of JetZero's project to help further the industry's sustainability vision."

Moog: Flight Control Actuation

Moog will provide the complete set of flight control actuators for this industry-leading program. Moog is the foremost leader in the aerospace industry providing flight control equipment and systems to the world's leading commercial platforms. This includes design, development, test and certification.

"Moog's extensive experience in actuation technology allows us to provide the right solution optimized for performance, weight and reliability", said Mark Brooks, Moog senior vice president for commercial aircraft. "Moog is proud and excited to be part of the groundbreaking program that will lead to more efficient and environmentally friendly aircraft."

Safran: Pilot Controls

Safran Electronics & Defense will develop and manufacture pilot controls and provide engineering services for JetZero's Blended Wing Body demonstrator aircraft. As part of this collaboration, Safran will supply the Throttle Quadrant, Rudder Brake Pedal, Speedbrake, Flap Control Lever, and additional cockpit components for all development and qualification laboratories, as well as the demonstrator itself.

"This partnership underscores Safran and JetZero's shared commitment to innovation and environmental sustainability within the aerospace industry, addressing one of the sector's most significant challenges: the reduction of CO_2 emissions" said Bruno Vazzoler, Safran Electronics & Defense Avionics GBU EVP.

Thales: Flight Control Computers

Field-proven for over 40 years and installed on board more than 12,000 aircraft, Thales's Fly-by-Wire flight control solution is perfectly suited to JetZero's needs. The Fly-by-Wire flight control systems offer substantial benefits in terms of flight safety, aircraft performance, reliability and availability. Those benefits encompass flight envelope protection, reduced pilot workload, minimized aircraft weight, improved handling qualities and reliability.

"Actively engaged in a low carbon future, Thales is proud to support JetZero in their innovative pursuit of net zero flights," said Yanik Doyon, VP of Sales & Business Development for Flight Avionics, Thales North America. "Our proven flight controls solution is the perfect fit for a disruptive aircraft paving the way for a sustainable future in aviation."

Woodward: Trim Control Panel

Woodward's Trim Control Module contains pilot interfaces intended for yaw trim, pitch trim and reset functions that relieves the pilot from having to maintain constant pressure on the flight controls. The mechanism works with the airplane through two Rotary Variable Differential Transformers (RVDT) essential to the product. The RVDTs are designed and manufactured by Woodward at its Niles, IL facility.

“Woodward is proud to be chosen as a collaborator on the JetZero Blended Wing Body Demonstrator. This pioneering endeavor in sustainable aircraft has potential to revolutionize the aviation industry. Our Trim Control Module is the ideal fit for the demonstrator objectives, and another example of our commitment to working alongside trailblazers in line with our purpose to design and deliver energy control solutions our partners count on to power a clean future,” said Terry Voskuil, President of Aerospace, Woodward.

About JetZero

JetZero, co-founded by aerospace legend Mark Page, is developing the world’s first commercial blended wing body (BWB) airplane. With 50% lower fuel burn and carbon emissions compared to existing commercial airliners, JetZero's BWB offers the aviation industry a clear path to achieving its 2050 net-zero goals. Working alongside the US Air Force, NASA, and the FAA, and backed by decades of investment and research into blended wing technology, JetZero looks to enter commercial service by 2030.