



MISSION NEXT GEN AIRCRAFT - AIR NEW ZEALAND SELECTED VOLTAERO FOR SUSTAINABLE FLEET AMBITIONS

News / Airlines, Manufacturer



Air New Zealand selected VoltAero as one of “Mission Next Gen Aircraft” demonstration partners with its Cassio electric-hybrid aircraft as a unique solution for sustainable fleet ambitions. VoltAero and Cassio are aligned to Air New Zealand goal of working with world-leading innovators in introducing zero-emission passenger/cargo flights. The Cassio aircraft family provides outstanding safety with a dual source of electric-hybrid energy, along with the ability to utilize runways as short as 1,800 feet – opening the airline’s regional airport network infrastructure for its operations.

Jean Botti, VoltAero CEO and Chief Technical Officer commented: “Our selection by Air New

Zealand is an important confirmation of VoltAero's pragmatic and realistic approach to developing the Cassio aircraft family. Instead of promises, we can respond today to Air New Zealand's requirement for the demonstration of next-generation sustainable aircraft."

Additionally, Cassio hybrid technology offers an optimized cost-of-ownership – minimizing the need for heavier battery packs that would reduce flight range, while also avoiding higher cost per kilowatt/hour and diminished battery lifetime. VoltAero proprietary electric-hybrid propulsion system has logged more than 10,000 km. since 2019, operating in its full 600-kilowatt power definition aboard the company's Cassio 1 testbed airplane – performing flights on typical regional airline routes, as well as segments over water.

The VoltAero hybrid propulsion concept is unique: Cassio aircraft will utilize electric motors in the aft fuselage-mounted propulsion system for all-electric power during taxi, takeoff, primary flight, and landing. The hybrid feature (with an internal combustion engine) comes into play as a range extender, recharging the batteries while in flight. Additionally, this hybrid element serves as a backup in the event of a problem with the electric propulsion, ensuring true fail-safe functionality.

Cassio aircraft will be built in three versions with configurations from five to 12 seats, each sharing a high degree of modularity and commonality. This family will provide a capable and reliable product line for regional commercial airline operators, air taxi/charter companies, private owners, as well as in utility-category service for cargo, postal delivery and medical evacuation (Medevac) applications.

The first production version in process of certification is the Cassio 330, with five seats and powered by a 330-kilowatt electric-hybrid propulsion system. Its service entry is targeted for the end of 2024, well ahead of Air New Zealand's objective to purchase new-generation sustainable aircraft for deliveries from 2026.

VoltAero's follow-on six-seat Cassio 480 will have an electric-hybrid propulsion power of 480 kilowatts, while the Cassio 600 is sized at a 12-seat capacity with electric-hybrid propulsion power of 600 kilowatts.

13 DECEMBER 2022

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