Three new business jets are certified and ready for service with Safran Nacelles’ thrust reversers

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The use of Safran Nacelles’ PERT®-type thrust reverser, shown here during assembly, has expanded with its application on the Cessna Citation Longitude business jet.

A trio of new business jets equipped with thrust reversers from Safran Nacelles are entering service following their certification by airworthiness authorities – reinforcing the company’s role as a preferred nacelle system component supplier in this high-end aircraft sector.

The three business jets are Bombardier’s Global 5500 and Global 6500, powered by Rolls-Royce Pearl 15 engines; and the Cessna Citation Longitude from Textron Aviation, which is outfitted with Honeywell HTF7000 powerplants. All of them use variants of Safran Nacelles’ in-production thrust reversers, benefitting from the maturity and service experience gained during decades of operation.

Type Certification of the Global 5500/Global 6500 was issued by Canada and EASA’s airworthiness authorities in September and October, followed days later by the Global 6500’s service entry. These twin-engine aircraft are follow-ons to Bombardier’s Global 5000 and Global 6000, featuring a newly optimized wing and the Pearl 15 engines to provide 500 and 600 nautical miles of additional range, respectively, along with up to a 13-percent reduction in fuel burn.

The Global 5500 seats 16 passengers and can operate to a range of 5,700 nautical miles, while the Global 6500 carries 17 passengers over a distance of 6,600 nautical miles.

The Global 5500/Global 6500’s Pearl 15 engines

The Pearl 15 is the first in a new family of engines evolved by Rolls-Royce for business jet applications. Its thrust reverser is an evolution of the BR710 thrust reverser supplied by Safran Nacelles to Rolls-Royce and used on the Bombardier Global 5000/Global 6000 aircraft, as well as Gulfstream’s G650.
Thrust reversers for Rolls-Royce Pearl 15 jet engines are assembled at Safran Nacelles’ Casablanca, Morocco facility.

"The Pearl 15 engine opens new opportunities for Safran Nacelles in its role as the thrust reverser supplier to manufacturers of business aircraft, and further consolidates our company's relations with Rolls-Royce as a leading jet engine supplier," explained Elvis Thachil, the BR710-Pearl 15 Program Manager at Safran Nacelles.

Thrust reversers on both the Pearl 15 and BR710 are produced by Safran Nacelles with the extensive use of composites, benefitting from the company’s expertise in the application of such lightweight materials. These target-type two-door thrust reversers with a fixed nozzle are built at Safran Nacelles’ Casablanca facility in Morocco, with the thrust reverser doors assembled at SAVI Nacelles – the joint venture of Safran Nacelles and AVIC Aircraft Company, located in the Chinese city of Xi'an.

Safran Nacelles thrust reversers on Honeywell HTF7000s for Citation Longitude

With the Cessna Citation Longitude's certification by the U.S. Federal Aviation Administration (FAA) airworthiness authority, this business jet marks the fifth use of Safran Nacelles' PERT®-type thrust reversers on aircraft powered by Honeywell HTF7000 engines – joining Bombardier’s Challenger 300/Challenger 350, the Embraer Legacy 450 and Legacy 500, as well as Gulfstream's G280.

"The Longitude continues a series of thrust reversers that we have designed, developed and manufactured during the past 20 years to meet the growing customer requirements in this challenging market sector," said Lee Ormerod, the HTF7000 Program Manager at Safran Nacelles. "Safran Nacelles' teams, especially at the sites of Burnley in the United Kingdom, and Saclay, Toulouse and Le Havre in France, have worked closely with Textron to ensure the success of this project."

With a seating capacity of 12 passengers, the Citation Longitude has a range of 3,500 nautical miles.