



# EMBRAER AND PRATT & WHITNEY COMPLETE 100% SAF FLIGHT TESTING OF GTF-POWERED E195-E2 AIRCRAFT

News / Manufacturer



Embraer and Pratt & Whitney have successfully tested a GTF-powered E195-E2 aircraft on 100% sustainable aviation fuel (SAF). The test, with one engine running on 100% SAF, validated that GTF engines and the E-Jets E2 family can fly on both engines with blends of up to 100% SAF without any compromise to safety or performance. The aircraft completed two days of ground tests at Fort Lauderdale International Airport, culminating in a 70-minute flight test at Vero Beach Regional Airport in Florida.

Rodrigo Silva e Souza, vice president strategy and sustainability, Embraer Commercial Aviation, commented: “The E2 is already the most efficient single aisle aircraft flying today, saving up to 25% CO2 emissions compared to previous generation aircraft. This reduction in emissions can be increased up to an impressive 85% with 100% SAF. Replacement of older aircraft by new generation products and scaling up SAF production are the two most effective actions commercial aviation can take now to achieve a significant reduction in emissions. Embraer and Pratt & Whitney are leading the industry with products that are more efficient for our customers and more sustainable for our society. This test demonstrates that the E2 is ready for 100% SAF certification and operation once the

industry finalizes standards.”



All Pratt & Whitney engines and Embraer aircraft are currently certified to operate with SAF blended up to 50% with standard Jet A/A1 kerosene, according to ASTM International specifications. Future specifications will enable blends of up to 100% SAF to maximize the emissions reduction potential of using fuel derived from sustainable, non-fossil-based feedstocks.

“SAF is a core part of our sustainability road map, and we continue to work with industry partners and regulators to support the development of a drop-in standard for 100% SAF,” said Graham Webb, chief sustainability officer at Pratt & Whitney. “This test proves that GTF engines can operate on any fuel, and that the E-Jets E2 family is ready for 100% SAF certification once the industry finalizes the standard for unblended SAF.”



The SAF used by Embraer and Pratt & Whitney was 100% Hydroprocessed Esters and Fatty Acids Synthetic Paraffinic Kerosine (HEFA-SPK) acquired from World Energy. HEFA-SPK is a specific type of hydrotreated renewable feedstock fuel used in aviation and is considered a leading alternative replacement for conventional jet fuel by the Commercial Aviation Alternative Fuels Initiative (CAAFI), due to the sustainability of its feedstock.

The Pratt & Whitney GTF™ engine is the only geared propulsion system delivering industry-leading sustainability benefits and world-class operating costs. The Embraer E195-E2 powered by GTF engines represent the most environmentally friendly combination of airframe and engine delivering the lowest level of noise and emissions.



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