



Embraer and Pratt & Whitney Complete 100% SAF Flight Testing of GTF-powered E195-E2 Aircraft

Fort Lauderdale, Fla., June 30, 2022 – 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.

“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,” said Rodrigo Silva e Souza, vice president of strategy and sustainability, Embraer Commercial Aviation. “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 Kerosene (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 represents the most environmentally friendly combination of airframe and engine delivering the lowest level of noise and emissions.

Images: <https://embraer.imagerelay.com/ml/a1342f792291497483caa4379cce0634>

Follow us on Twitter: @Embraer

About Embraer

A global aerospace company headquartered in Brazil, Embraer has businesses in Commercial and Executive aviation, Defense & Security and Agricultural Aviation. The company designs, develops, manufactures and markets aircraft and systems, providing Services & Support to customers after-sales.

Since it was founded in 1969, Embraer has delivered more than 8,000 aircraft. On average, about every 10 seconds an aircraft manufactured by Embraer takes off somewhere in the world, transporting over 145 million passengers a year.

Embraer is the leading manufacturer of commercial jets up to 150 seats and the main exporter of high value-added goods in Brazil. The company maintains industrial units, offices, service and parts distribution centers, among other activities, across the Americas, Africa, Asia and Europe.