



NEWS RELEASE

Leap engines awarded 180-minute ETOPS certification

LE BOURGET, France - 21 June 2017 -

The U.S. Federal Aviation Administration (FAA) and European Aviation Safety Agency have jointly granted 180-minute Extended-range, Twin-engine Operations (ETOPS) approval on June 19 to the LEAP-1A engine for the Airbus A320neo and the LEAP-1B for the Boeing 737 MAX aircraft families.

The engine approval now paves the way for the aircraft manufacturers, as well as airlines interested in operating ETOPS routes, to achieve their own certification.

ETOPS is defined as the number of minutes flying time from a suitable airport a twin-engine aircraft can operate in the event that one engines become inoperable. ETOPS approval, which is based on engine/aircraft reliability, provides airlines greater route-scheduling flexibility by allowing more direct routes such as long over-water flights.

"The testing required for this approval is in some of the most grueling conditions to which an engine would ever be subjected. To start, the engine is deliberately unbalanced to a level that no airline would ever be allowed to operate for even one hour," said Francois Bastin, executive vice president of CFM. "Then, in this unbalanced state with very high vibrations, it is run for 3,000 consecutive flight cycles (a simulated take-off and landing sequence). We ran this engine in a way that it will never see in commercial service. Once the testing is complete, the engine is entirely disassembled to the piece-part level and laid out on tables for the regulatory agencies to inspect. The state of the parts upon inspection was incredible; they looked practically new."

"This is a great achievement so early in the life of the product," said Allen Paxson, executive vice president of CFM International. "The CFM56-7B engine for the Boeing Next-Generation 737 was the first to be granted 180-minutes ETOPS about two years after it entered service. We are very proud of that fact that both the LEAP-1A and LEAP-1B were able to achieve this milestone in a matter of months."

The first LEAP-1A-powered A320neo aircraft entered service in August 2016 and the first LEAP-1B / 737 MAX in May 2017. The engines are in operation with 15 operators worldwide and the fleet is delivering a 15 percent improvement in fuel efficiency, with an equivalent reduction in CO2 emissions compared to today's best CFM56 engines; and lower noise and NOx emissions. To date, the fleet in service has logged more than 77,000 engine flight cycles and more than 145,000 engine flight hours while maintaining CFM's industry-leading reliability.

Contact(s)

/ Safran Company
Jamie Jewell / jamie.jewell@ge.com

/ Safran Company
Charles Soret / charles.soret@safrangroup.com

/ Safran Company
Rick Kennedy / rick.l.kennedy@ge.com