

## Continued Airworthiness Notification to the International Community

**To:** Civil Aviation Authorities

Date: April 6, 2018

**From:** Federal Aviation Administration  
Aircraft Certification  
System Oversight Division, AIR-800  
2200 South 216<sup>th</sup> Street  
Des Moines, WA 98198

**Subject:** This message is to advise you of the FAA's ongoing activities related to The Boeing Company Model 787 airplanes powered by Rolls-Royce Trent 1000 engines.

**Situation description:** The Rolls-Royce (RR) Trent 1000 engine on the 787 has experienced airworthiness issues involving failures on Intermediate-Pressure Compressor (IPC) blades. Continued investigation of these events by RR has led them to provide the European Aviation Safety Agency (EASA) and the FAA additional insight into the IPC blade failures. Rolls Royce and Boeing are working together with the authorities to provide additional airplane operational guidance that will minimize the potential for future IPC blade failures.

**Aircraft make, model, and series:** Boeing Model 787 airplanes equipped with certain Rolls-Royce Trent 1000 engines.

**U.S.-registered fleet:** approximately 14; **Worldwide fleet:** approximately 262

**Operators:** There are 21 affected operators worldwide. The largest fleets include All Nippon Airways, British Airways, LATAM Airlines Chile, Ethiopian Airlines, Norwegian, Virgin Atlantic Airways, Scoot Airlines, Norwegian, Air China, Avianca, Air New Zealand, Air Europa, LOT Polish Airlines, and Thai Airways.

**Ongoing activities:** FAA, EASA, RR, and Boeing Safety Boards are working to address this safety issue, and may recommend some type of airplane operational limitation. These actions would supplement the actions already taken by EASA on the Trent 1000 engines, including the AD 2018-0073 released on March 30, 2018, superseding EASA AD 2017-0248.

The FAA is considering issuance of an airworthiness directive (AD) to address this issue on Boeing 787 airplanes powered by certain RR Trent 1000 engines to mitigate the airplane level risk caused by this engine issue. We expect to issue this airworthiness action once the manufacturers finalize their guidance. The Boeing 787 airplane can be safely operated in the interim with on-going engine inspections until mandatory airplane-level airworthiness action is developed and issued by the FAA.

For additional questions regarding this safety issue, please contact Scott Fung, AIR-784, at (206) 231-3550; or Tom Stafford, AIR-785, at (206) 231-3561.

**Next update, if any:** N/A

**FAA contact:** Jeffrey E. Duven, Director, System Oversight Division  
Telephone and Fax: (206) 231-3245

**Note: This information is for the use of civil aviation authorities only  
and should not be released to the public at this time.**