

Continued Airworthiness Notification to the International Community

To: Civil Aviation Authorities

Date: April 12, 2018

From: Federal Aviation Administration
Aircraft Certification
System Oversight Division, AIR-800
2200 South 216th 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/engine make, model, and series: Boeing Model 787 airplanes equipped with certain Rolls-Royce Trent 1000 engines.

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

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. The FAA has been working closely with EASA as the state of design authority for the RR engine. We anticipate EASA will issue a further AD on the RR Trent 1000 engine shortly that will complement the planned FAA airplane level AD. These actions would supplement the actions already taken by EASA on the Trent 1000 engines, including the EASA (airworthiness directive) AD 2018-0073 released on March 30, 2018, which superseded EASA AD 2017-0248.

The FAA is planning issuance of an airplane 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 within 7 days. The AD will limit Extended Twin Engine Operations (ETOPS) operating weights, diversion times, and diversion speeds. These actions will minimize IPC blade damage during diversion operations. The Boeing 787 airplane can continue to be safely operated with these on-going engine inspections and the additional ETOPS operating limitations.

For additional questions regarding this safety issue, please contact Ross Landes, AIR-780, at (206) 231-3500.

Next update, if any: N/A

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