



SUBJ: Turbine Engine Compressor Section -- Low-pressure turbine uncontainment

SAIB: NE-19-02
Date: February 19, 2019

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts registered owners, operators, and certified repair facilities of airplanes equipped with **Pratt & Whitney Division (P&W) PW4000-94 model turbofan engines** to potential failure of the engine P-flange resulting from low-pressure turbine (LPT) failure.

At this time, the airworthiness concern is not considered an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 39.

Background

The FAA has received reports of multiple events with P&W PW4000-94 model turbofan engines involving LPT failures that have resulted in bolt fractures and failure of the LPT case P-flange. In three LPT failure events, debris exited the flange opening and resulted in nacelle penetration.

In response to these events, P&W published Pratt & Whitney Service Bulletin (SB) PW4ENG 72-831, dated April 16, 2015, which introduces new spacers and longer bolts that improve containment capability.

These engines are installed on, but not limited to, Boeing 747, Boeing 767, Airbus A300, Airbus A310, and McDonnell Douglas MD-11 airplanes.

Recommendations

The FAA recommends the following:

1. Remove the affected P-flange bolts from service, and replace with the longer P-flange bolts and crushable spacers, using Pratt & Whitney SB PW4ENG 72-831, dated April 16, 2015.
2. If you are operating P&W PW4052, PW4056, PW4060, PW4152, PW4156A, PW4158, PW4460, or PW4462 model turbofan engines, we recommend that you perform the Concurrent Requirements in Pratt & Whitney SB PW4ENG 72-256, Revision No. 3, dated January 11, 1993, and Pratt & Whitney Division SB PW4ENG 75-53, Revision No. 2, dated July 11, 1990, at the same time as, or before, installing the longer bolts and spacers in Pratt & Whitney SB PW4ENG 72-831.

For Further Information Contact

Jo-Ann Theriault, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7105; fax: 781-238-7199; email: jo-ann.theriault@faa.gov.

For Related Service Information Contact

Pratt & Whitney Division, United Technologies Corporation, 400 Main Street, East Hartford, CT, 06118; phone: 800-565-0140; fax: 860-565-5442; email: help24@pw.utc.com.