



**FAA**  
**Aviation Safety**

## **SPECIAL AIRWORTHINESS INFORMATION BULLETIN**

**SAIB:** NE-15-19

**Date:** July 14, 2015

**SUBJ:** Turbine Section

*This is information only. Recommendations aren't mandatory.*

### **Introduction**

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, operators, and certified repair facilities of airplanes equipped with certain **Pratt & Whitney Division (PW) PW4000 series turbofan engines** to potential low pressure turbine (LPT) 4<sup>th</sup> stage vane crack due to a non-conforming fillet radius in a high stress area. Affected engines are PW4052(-3); PW4056(-3); PW4060(-3); PW4062(-3); PW4062A(-3); PW4152(-3); PW4156A(-3); PW4158(-3); PW4460(-3); PW4462(-3) with LPT 4<sup>th</sup> stage vane cluster assembly, part number (P/N) 51N674-01, and PW4164; PW4164-1D; PW4168; PW4168A; PW4168-1D; PW4168A-1D; PW4170 with LPT 4<sup>th</sup> Stage Vane Cluster Assembly, P/N 51N774-01 or P/N 52N774-01.

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

### **Background**

We have received reports of LPT 4<sup>th</sup> stage vane liberations, which have resulted in multiple engine failures and one low-energy case uncontainment on PW4000 series engines. All failures resulted in safe landings. Investigations revealed some 4<sup>th</sup> stage vane clusters manufactured between May 1992 and February 1999, from certain casting die, have a non-conforming vane outer diameter shroud pressure side fillet radius in a high stress area.

This SAIB provides information on LPT 4<sup>th</sup> stage vane fractures and lists service information intended to prevent further occurrences of vane fracture and possible engine failure. PW Service Bulletins (SBs) No. PW4ENG 72-804 and PW4G-100-72-251 were issued to specify inspection of 4<sup>th</sup> stage vane cluster assemblies when the subassembly is disassembled.

### **Recommendation**

The FAA recommends that you follow the instructions in PW SBs No. PW4ENG 72-804 and PW4G-100-72-251 to inspect and remove the affected parts.

### **For Further Information Contact**

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### **For Related Service Information Contact**

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