



DATE: June 10, 2014

AD #: 2014-12-52

Emergency airworthiness directive (AD) 2014-12-52 is sent to owners and operators of Honeywell International Inc. (Type Certificate previously held by AlliedSignal Inc., Garrett Turbine Engine Company) TFE731-4, -4R, -5AR, -5BR, -5R, -20R, -20AR, -20BR, -40, -40AR, -40R, -40BR, -50R, and -60 turbofan engines.

Background

This emergency AD was prompted by reports of 2nd stage low-pressure turbine (LPT2) blade separations. Analysis indicates the presence of casting anomalies at or near the root of the LPT2 blade. This condition, if not corrected, could result in LPT2 blade failure, multiple engine in-flight shutdowns, and damage to the airplane.

Relevant Service Information

We reviewed Honeywell Alert Service Bulletins (ASB) No. TFE731-72-A3792, dated June 5, 2014, ASB No. TFE731-72-A5242, dated June 5, 2014 and ASB No. TFE731-72-A5243, dated June 5, 2014. The service information describes procedures for identifying affected engines and follow-on actions.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires before further flight a review of the engine log book maintenance records to determine if any affected engines are installed.

This AD prohibits operation of an airplane with two or more affected engines that have LPT2 blades with less than 250 operating hours since new after receipt of this emergency AD.

Differences Between This AD and the Service Information

None.

Interim Action

We consider this AD to be an interim action. We anticipate that further AD action will follow.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Presentation of the Actual AD

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2014-12-52 Honeywell International Inc (Type Certificate previously held by AlliedSignal Inc., Garrett Turbine Engine Company): Directorate Identifier 2014-NE-09-AD.

(a) Effective Date

This Emergency AD is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

Honeywell International Inc. TFE731-4, -4R, -5AR, -5BR, -5R, -20R, -20AR, -20BR, -40, -40AR, -40R, -40BR, -50R, and -60 turbofan engines with 2nd stage low-pressure turbine (LPT2) blades, part number (P/N) 3075424-1, -2, or -3 installed.

(d) Unsafe Condition

This AD was prompted by reports of LPT2 blade separations. Analysis indicates the presence of casting anomalies at or near the root of the LPT2 blade. We are issuing this AD to prevent LPT2 blade failure, multiple engine in-flight shutdowns, and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done. Upon receipt of this AD:

(1) Before further flight, review engine log book maintenance records to determine if any LPT2 blade P/N 3075424-1, -2, or -3 with less than 250 operating hours since new are installed in an engine.

(2) For two-engine airplanes that have two engines with LPT2 blades installed that have less than 250 operating hours since new, remove all affected engines before further flight.

(3) For three-engine airplanes that have two or more engines with LPT2 blades installed that have less than 250 operating hours since new, remove all affected engines before further flight.

(4) After the effective date of this AD, do not approve for return to service any engine with LPT2 blades, P/N 3075424-1, -2, or -3 installed that has less than 250 operating hours since new.

(f) Special Flight Permit

Special flight permits are permitted for one over-land ferry flight to a maintenance facility where an engine can be removed.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Los Angeles Aircraft Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

(2) Honeywell International Alert Service Bulletins (ASB) No. TFE731-72-A3792, dated June 5, 2014, ASB No. TFE731-72-A5242, dated June 5, 2014, and ASB No. TFE731-72-A5243, dated June 5, 2014 pertain to the subject of this AD.

(3) For copies of the service information referenced in this AD, contact: Honeywell International Inc., 111 S. 34th Street, Phoenix, AZ 85034-2802; phone: (800) 601-3099; Internet: <http://www.myaerospace.com>.

Issued in Burlington, Massachusetts, on June 10, 2014.

Colleen M. D'Alessandro,
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Aircraft Certification Service.