



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0719; Product Identifier 2016-NE-24-AD]

RIN 2120-AA64

Airworthiness Directives; Honeywell International Inc. Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2017-20-01, which applies to certain Honeywell International Inc. (Honeywell) TFE731-20 and TFE731-40 turbofan engines. AD 2017-20-01 requires removing the affected fan disk and replacing it with a fan disk eligible for installation. Since we issued AD 2017-20-01, we determined that some turbofan engine models were omitted from the applicability of AD 2017-20-01. This proposed AD would add these turbofan engine models to the applicability, remove the Honeywell TFE731-20 turbofan engine from the applicability, and prohibit installation of affected fan disks. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Honeywell International Inc., 111 S. 34th Street, Phoenix, AZ, 85034-2802; phone: 800-601-3099 (Toll Free U.S.A./Canada); 602-365-3099 (International Direct); website: www.myaerospace.com; email: engine.reliability@honeywell.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call (781) 238-7759.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0719; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Joseph Costa, Aerospace Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA, 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section.

Include “Docket No. FAA-2018-0719; Product Identifier 2016-NE-24-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We issued AD 2017-20-01, Amendment 39-19058 (82 FR 45173, September 28, 2017), (“AD 2017-20-01”), for certain Honeywell TFE731-20 and TFE731-40 turbofan engines with fan disk part number, (P/N) 3060287-2, and a serial number (S/N) listed in Table 9 of Honeywell Service Bulletin (SB) TFE731-72-5256, Revision 0, dated October 7, 2016. AD 2017-20-01 requires removing the affected fan disk and replacing it with a part eligible for installation. AD 2017-20-01 resulted from two fan disks found with surface rollovers in the dovetail slot area. We issued AD 2017-20-01 to address the unsafe condition on these products.

Actions Since AD 2017-20-01 Was Issued

Since we issued AD 2017-20-01, we determined that Honeywell TFE731-20R, -20AR, -20BR, and TFE731-40R, -40AR, and -40BR turbofan engine models listed in Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016, were omitted from the applicability of AD 2017-20-01. We also determined that the Honeywell TFE731-20 turbofan engine model was never produced and should be removed from the applicability; and that affected fan disks, P/N 3060267-2, should be prohibited from installation unless they have “T43374” marked adjacent to the engine P/N or S/N. This

proposed AD would add Honeywell TFE731-20R, -20AR, -20BR, and TFE731-40R, -40AR, and -40BR turbofan engine models to the applicability, remove the Honeywell TFE731-20 turbofan engine from the applicability, and prohibit installation of affected fan disks.

Related Service Information under 1 CFR part 51

We reviewed Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016. The SB identifies affected fan disks by S/N and describes procedures for removing, inspecting, and replacing the affected fan disks. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

We are proposing 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.

Proposed AD Requirements

This proposed AD would retain certain requirements of AD 2017-20-01. This proposed AD would add Honeywell TFE731-20R, -20AR, -20BR, and TFE731-40AR, -40BR, and -40R turbofan engines with fan disk, P/N 3060287-2, and a S/N listed in Table 9 of Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016. This proposed AD would also remove the Honeywell TFE731-20 turbofan engine from the applicability and prohibit installation of affected fan disks that do not have "T43374" marked adjacent to the engine P/N or S/N.

Costs of Compliance

We estimate that this proposed AD affects 61 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Remove fan disk and send to Honeywell for inspection	8 work-hours x \$85 per hour = \$680	\$0	\$680	\$41,480
Install reworked or new fan disk	26 work-hours x \$85 per hour = \$2,210	\$0	\$2,210	\$134,810

The new requirements of this proposed AD add no additional economic burden. We estimate the following costs to do any necessary fan disk replacements that would be required based on the results of the proposed inspection. We estimate that 6 engines will need this replacement.

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replace the non-serviceable disk with a new fan disk	1 work-hour x \$85 per hour = \$85	\$50,000	\$50,085

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2017-20-01, Amendment 39-19058; (82 FR 45173, September 28, 2017), and adding the following new AD:

Honeywell International Inc. (Type Certificate previously held by AlliedSignal Inc.):

Docket No. FAA-2018-0719; Product Identifier 2016-NE-24-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2017-20-01, Amendment 39-19058 (82 FR 45173, September 28, 2017).

(c) Applicability

This AD applies to all Honeywell International Inc. (Honeywell) TFE731-20R, -20AR, -20BR, and TFE731-40, -40AR, -40BR, and -40R turbofan engines with a fan

disk, part number (P/N) 3060287-2, and with a serial number (S/N) listed in Table 9 of Honeywell Service Bulletin (SB) TFE731-72-5256, Revision 0, dated October 7, 2016, that do not have “T43374” marked adjacent to the engine P/N or S/N.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

(e) Unsafe Condition

This AD was prompted by a report of two fan disks found with surface rollovers in the dovetail slot area. We are issuing this AD to prevent uncontained failure of the fan disks. The unsafe condition, if not addressed, could result in uncontained fan disk release, damage to the engine, and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Remove the affected fan disk using the following criteria:

(1) Remove fan disks with 9,000 cycles-since-new (CSN) or more as of the effective date of this AD, within 100 cycles-in-service (CIS), or at the next engine shop visit, or at next access, whichever occurs first, after the effective date of this AD.

(2) Remove fan disks with between 8,000 and 8,999 CSN, inclusive, as of the effective date of this AD, within 9,100 CSN or within 1,000 CIS, or at the next engine shop visit, or at next access, whichever occurs first, after the effective date of this AD.

(3) Remove fan disks with fewer than 8,000 CSN as of the effective date of this AD, before exceeding 9,000 CSN, or at the next engine shop visit, or at next access, whichever occurs first, after the effective date of this AD.

(4) Replace any removed fan disk with a part eligible for installation.

(h) Installation Prohibition

Do not install an affected fan disk, P/N 3060267-2, unless “T43374” is marked adjacent to the engine P/N or S/N.

(i) Definitions

(1) For the purposes of this AD, an “engine shop visit” is defined as the removal of the tie-shaft nut from the engine.

(2) For the purposes of this AD, “access” is defined as the removal of the fan rotor assembly from the engine.

(3) For the purposes of this AD, a “part eligible for installation” is:

(i) a fan disk not listed in the Accomplishment Instructions, Table 9, in Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016; or

(ii) a fan disk listed in Table 9, in Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016, that has been inspected, reworked, and marked with “T43374” adjacent to the P/N or S/N. Guidance on returning affected parts to Honeywell for inspection and rework is found in the Accomplishment Instructions, paragraph 3.D., of Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Joseph Costa, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA, 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

(2) For service information identified in this AD, contact Honeywell International Inc., 111 S. 34th Street, Phoenix, AZ, 85034-2802; phone: 800-601-3099 (Toll Free U.S.A./Canada); phone: 602-365-3099 (International Direct); website: www.myaerospace.com; email: engine.reliability@honeywell.com. You may view this referenced service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

Issued in Burlington, Massachusetts, on September 6, 2018.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.

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