[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0151; Product Identifier 2019-NE-04-AD; Amendment 39-19604; AD 2019-06-06]

RIN 2120-AA64

Airworthiness Directives; International Aero Engines AG Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for all International Aero Engines AG (IAE) V2500 turbofan engine models. This AD requires initial and repetitive borescope inspections (BSIs) of the diffuser case M-flange and, if it fails the inspection, replacement of the diffuser case with a part eligible for installation. This AD was prompted by a crack found at the diffuser case M-flange during overhaul inspection. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this 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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact International Aero Engines AG, 400 Main Street, East Hartford, CT, 06118; phone: 800-565-0140; email: help24@pw.utc.com; internet: http://fleetcare.pw.utc.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. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2019-0151.

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-2019-0151; 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 final rule, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7146; fax: 781-238-7199; email: barbara.caufield@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We received a report that a crack at the diffuser case M-flange was found during overhaul inspection. Analysis by IAE found that the cracks were a result of pressure loads in the case wall combined with thermal gradients in the M-flange. This condition, if not addressed, could result in uncontained diffuser case rupture, damage to the engine, and damage to the airplane. We are issuing this AD to address the unsafe condition on these products.

Related Service Information under 1 CFR part 51

We reviewed IAE Alert Non-Modification Service Bulletin (NMSB) V2500-ENG-72-A0706, dated February 14, 2019. The NMSB describes procedures for inspecting the diffuser case M-flange. 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 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 initial and repetitive BSI of the diffuser case M-flange and, if it fails the inspection, replacement of the diffuser case with a part eligible for installation.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because certain IAE V2500 turbofan engine models require inspection within 250 cycles to prevent rupture of the diffuser case and damage to the engine. Therefore, we find good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reason stated above, we find that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2019-0151 and Product Identifier 2019-NE-04-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. We will consider all comments received by the closing date and may amend this final rule 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 final rule.

Costs of Compliance

We estimate that this AD affects 1,654 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Borescope inspection	1.8 work-hours X $85 per hour = $153	$0	$153	$253,062

We estimate the following costs to do any necessary replacements that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this replacement:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replacement of the diffuser case	20 work-hours X $85 per hour = $1,700	$48,300	$50,000

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

This AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under 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.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 adding the following new airworthiness directive (AD):

2019-06-06 International Aero Engines AG: Amendment 39-19604; Docket No. FAA-2019-0151; Product Identifier 2019-NE-04-AD.

(a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to International Aero Engines AG (IAE) V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, V2533-A5 turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7240, Turbine Engine Combustion Section.

(e) Unsafe Condition

This AD was prompted by a crack found at the diffuser case M-flange during overhaul inspection. We are issuing this AD to prevent failure of the diffuser case. The unsafe condition, if not addressed, could result in uncontained diffuser case rupture, 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

(1) For diffuser cases with a rear outer flange that is equal to or greater than 20,000 cycles since new (CSN) on the effective date of this AD, perform an initial borescope inspection (BSI) of zones 1, 2, and 3 of the diffuser case M-flange before accumulating the BSI Within (Cycles) listed in Table 1 to paragraph (g)(1) of this AD. Use the Accomplishment Instructions, paragraphs 2.A. through 2.G. for the appropriate engine model, of IAE Alert Non-Modification Service Bulletin (NMSB) V2500-ENG-72-A0706, dated February 14, 2019, to perform the inspection.

Table 1 to paragraph (g)(1) of this AD – *M-flange cycle inspection limits*

CSLFPI (cycles since last fluorescent penetrant inspection) on the rear outer flange	BSI Within (Cycles)
30,000 and greater	250
20,000 to 29,999	500
15,000 to 19,999	1,000
1 to 14,999	1,300
0	2,100

(2) For diffuser cases with a rear outer flange that have fewer than 20,000 CSN on the effective date of this AD, perform an initial BSI of zones 1, 2, and 3 of the diffuser case M-flange within 21,300 CSN, in accordance with the Accomplishment Instructions, paragraphs 2.A. through 2.G. for the appropriate engine model, of IAE Alert NMSB V2500-ENG-72-A0706, dated February 14, 2019.

(3) If no cracks are found, perform a repetitive BSI not to exceed every 2,100 cycles since the previous BSI.

(4) If cracks are found, remove the diffuser case and replace with a part eligible for installation or repeat the BSI within the intervals in either Table 2: Fly on Limits or Table 4: Fly on Limits, as appropriate for the affected the engine model, of IAE Alert NMSB V2500-ENG-72-A0706, dated February 14, 2019.

(h) Credit for Previous Actions

You may take credit for the actions that are required by paragraph (g)(1) and (2) of this AD, if you performed those actions before the effective date of this AD using IAE V2500 Special Instruction (SI) No. 350F-18, Rev. 1, dated December 17, 2018; IAE V2500 SI No. 356F-18, Rev. 1, dated January 9, 2019; IAE V2500 SI No. 372F-18, dated January 8, 2019; or IAE V2500 Special SI No. 04F-19, dated January 14, 2019.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, 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 (j) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(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.

(j) Related Information

For more information about this AD, contact Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7146; fax: 781-238-7199; email: barbara.caufield@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) International Aero Engines (IAE) Alert Non-Modification Service Bulletin V2500-ENG-72-A0706, dated February 14, 2019.

(ii) [Reserved]

(3) For IAE service information identified in this AD, contact International Aero Engines AG, 400 Main Street, East Hartford, CT, 06118; phone: 800-565-0140; email: help24@pw.utc.com; internet: http://fleetcare.pw.utc.com.

(4) You may view this service information at FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Burlington, Massachusetts, on March 22, 2019.

Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.

[FR Doc. 2019-05885 Filed: 3/27/2019 8:45 am; Publication Date: 3/28/2019]