DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[DOCKET NO. FAA-2009-1109; DIRECTORATE IDENTIFIER 2009-NM-068-AD; AMENDMENT 39-16123; AD 2009-25-04]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A330-243 Airplanes and Model A330-341, -342, and -343 Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

An operator of A330 aeroplane fitted with Rolls-Royce (RR) Trent 772 B engines experienced an engine uncontained multiple turbine blade failure. Investigations have shown that High Pressure/Intermediate Pressure (HP/IP) oil vent tubes are prone to be affected by carbon deposit or to be damaged by their outer heat shields leading to a fire inside or outside the vent tube and resulting into IP Turbine (IPT) disc drive arm fracture and thus IPT disc overspeed.

If not corrected, IPT disc overspeed could lead to an uncontained engine failure, i.e. multiple turbine blade failure or HP/IP turbine disc burst, which would constitute an unsafe condition.

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This AD requires actions that are intended to address the unsafe condition described in the MCAI.

DATES: This AD becomes effective December 28, 2009.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of December 28, 2009.

We must receive comments on this AD by January 25, 2010.
ADDRESSES: You may send comments 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 W12-40, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.


SUPPLEMENTARY INFORMATION:

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2009-0075, dated April 6, 2009 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

An operator of A330 aeroplane fitted with Rolls-Royce (RR) Trent 772 B engines experienced an engine1 uncontained multiple turbine blade failure. Investigations have shown that High Pressure/Intermediate Pressure (HP/IP) oil vent tubes are prone to be affected by carbon deposit or to be damaged by their outer heat shields leading to a fire inside or outside the vent tube and resulting into IP Turbine (IPT) disc drive arm fracture and thus IPT disc overspeed.

If not corrected, IPT disc overspeed could lead to an uncontained engine failure, i.e. multiple turbine blade failure or HP/IP turbine disc burst, which would constitute an unsafe condition.

In order to protect IPT from overspeed, EASA AD 2008-0101 required to activate Intermediate Pressure Turbine Overspeed (IPTOS) protection function by Data Entry Plug (DEP) reprogramming, which consists in limiting the IPT speed (Engine Thrust) when overheat is detected in IPT, for all A330 aeroplanes fitted with RR Trent 700 engines and equipped with Multi Mode Receivers.

Original issue of AD 2008-0101 had a limited applicability due to Flight Warning Computer compatibility issue with aircraft not equipped with Multi Mode Receivers. Airbus has now developed a new Flight Warning Computer standard T2 whose
embodiment is also possible on A330 aeroplane fitted with RR Trent 700 engines not equipped with Multi Mode Receivers.

For the above described reasons, this AD retains the requirement of EASA AD 2008-0101, which is superseded, and extends the applicability to all A330 aeroplanes fitted with RR Trent 700 engines.

You may obtain further information by examining the MCAI in the AD docket.

**Relevant Service Information**

Airbus has issued Mandatory Service Bulletin A330-73-3049, Revision 01, dated November 13, 2008. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

**FAA's Determination and Requirements of This AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

There are no products of this type currently registered in the United States. However, this rule is necessary to ensure that the described unsafe condition is addressed if any of these products are placed on the U.S. Register in the future.

**Differences Between the AD and the MCAI or Service Information**

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a note within the AD.

**FAA's Determination of the Effective Date**

Since there are currently no domestic operators of this product, notice and opportunity for public comment before issuing this AD are unnecessary.

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2009-1109; Directorate Identifier 2009-NM-068-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD 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 AD.

**Authority for This Rulemaking**


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.

**Regulatory Findings**

We determined that 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 this AD:

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); and
3. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

**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 AD:

Effective Date

(a) This airworthiness directive (AD) becomes effective December 28, 2009.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model A330-243, -341,-342, and -343 airplanes, all manufacturing serial numbers (MSN), except those on which Airbus Modification 56722 has been embodied in production.

Subject

(d) Air Transport Association (ATA) of America Code 73: Engine fuel and control.

Reason

(e) The mandatory continued airworthiness information (MCAI) states:

An operator of A330 aeroplane fitted with Rolls-Royce (RR) Trent 772 B engines experienced an engine 1 uncontained multiple turbine blade failure. Investigations have shown that High Pressure/Intermediate Pressure (HP/IP) oil vent tubes are prone to be affected by carbon deposit or to be damaged by their outer heat shields leading to a fire inside or outside the vent tube and resulting into IP Turbine (IPT) disc drive arm fracture and thus IPT disc overspeed.

If not corrected, IPT disc overspeed could lead to an uncontained engine failure, i.e. multiple turbine blade failure or HP/IP turbine disc burst, which would constitute an unsafe condition.

In order to protect IPT from overspeed, EASA AD 2008-0101 required to activate Intermediate Pressure Turbine Overspeed (IPTOS) protection function by Data Entry Plug (DEP) reprogramming, which consists in limiting the IPT speed (Engine Thrust) when overheat is detected in IPT, for all A330 aeroplanes fitted with RR Trent 700 engines and equipped with Multi Mode Receivers.

Original issue of AD 2008-0101 had a limited applicability due to Flight Warning Computer compatibility issue with aircraft not equipped with Multi Mode Receivers. Airbus has now developed a new Flight Warning Computer standard T2 whose
embodiment is also possible on A330 aeroplane fitted with RR Trent 700 engines not equipped with Multi Mode Receivers.

For the above described reasons, this AD retains the requirement of EASA AD 2008-0101, which is superseded, and extends the applicability to all A330 aeroplanes fitted with RR Trent 700 engines.

Actions and Compliance

(f) Unless already done, do the following actions: Within 12 months after the effective date of this AD, do the actions specified in paragraph (f)(1) of this AD.

(1) Reprogram the data entry plug on both engines to activate the intermediate pressure turbine overspeed protection function, including doing applicable revisions of the Airplane Flight Manual (AFM), in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-73-3049, Revision 01, dated November 13, 2008.

Note 1: IPTOS function activation has the following operational consequences: Modification of the AFM and the flightcrew operating manual (FCOM). Accomplishment of the actions specified in Airbus Mandatory Service Bulletin A330-73-3049, Revision 01, dated November 13, 2008 (Airbus Modification 56722), cancels Airbus A330 AFM Supplement 6.03.08, dated June 2, 2006; and Volumes 1 and 3 (1.70.20, 1.70.95, and 3.02.70) of the Airbus A330 FCOM have been modified.

(2) Actions accomplished before the effective date of this AD in accordance with Airbus Mandatory Service Bulletin A330-73-3049, dated November 14, 2007, are considered acceptable for compliance with the corresponding action specified in paragraph (f)(1) of this AD.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.
Related Information


Material Incorporated by Reference

(i) You must use Airbus Mandatory Service Bulletin A330-73-3049, Revision 01, dated November 13, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Airbus SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80, e-mail airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 or 425-227-1152.

(4) You may also review copies of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on November 23, 2009.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.