DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Airbus Model A330–243, –243F, –341, –342, and –343 airplanes equipped with Rolls-Royce Trent 700 engines. This AD was prompted by reports of extensive damage to engine air intake cowlings as a result of acoustic panel collapse. This AD requires repetitive inspections of the three inner acoustic panels of both engine air intake cowls to detect disboding, and corrective actions if necessary. We are issuing this AD to detect and correct disboding, which could result in detachment of the engine air intake cowl from the engine leading to ingestion of parts which could cause failure of the engine, and possible injury to persons on the ground.

DATES: This AD becomes effective December 31, 2012.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of December 31, 2012.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC.


SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on June 21, 2012 (77 FR 37344). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Two operators of A330 aeroplanes fitted with Rolls-Royce Trent 700 engines reported finding extensive damage to engine air intake cowls as a result of acoustic panel collapse, most probably caused by panel disboding. This condition, if not detected and corrected, could lead to the detachment of the engine air intake cowl from the engine, possibly resulting in ingestion of parts by, and consequence damage to, the engine, or injury to persons on the ground.

For the reasons described above, this [European Aviation Safety Agency (EASA)] AD requires repetitive special detailed inspections (tap tests) of the 3 inner acoustic panels of both engine air intake cowls to detect any disboding and, depending on findings, applicable corrective actions.

The unsafe condition is detachment of the engine air intake cowl from the engine, which could result in ingestion of parts causing failure of the engine, and possible injury to persons on the ground. Corrective actions include repair or replacement of the affected engine air intake cowl. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Request To Change Unsafe Condition Statement

Airbus stated that the MCAI does not refer to reduced controllability of the airplane as a potential consequence, but to injury to persons on the ground.

We infer that the commenter requests that we modify the unsafe condition statement specified in the NPRM (77 FR 37344, June 21, 2012). We agree to change the unsafe condition statement in the AD to remove the reference to reduced airplane controllability. We have changed the AD accordingly.

Request To Delete References to Airbus Service Information Appendices

US Airways requested that we delete references to Appendices 01 and 02 of Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, dated September 27, 2011, unnecessary to accomplish the requirements of this AD. We agree to clarify the AD. There are no references to Appendix 01 and/or Appendix 02 of Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, dated September 27, 2011, in paragraph (h) or any other regulatory section of the AD. However, we have revised the references to this service information in paragraphs (g), (h), (l), and (m) of this AD to exclude Appendices 01 through 03, because the information provided in those appendices is not necessary to accomplish the requirements of this AD. We consider Appendix 03 of Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, dated September 27, 2011, unnecessary to accomplish the requirements of this AD, because it is a Gantt chart outlining elapsed time assumptions for the actions described in that service information.

Request To Delete References to Rolls-Royce Service Information Appendix

US Airways requested that we state in the NPRM (77 FR 37344, June 21, 2012) that Appendix 1 of Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, dated May 10, 2011, does not need to be accomplished. US Airways stated that Appendix 1 of Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, dated May 10, 2011, noted that accomplishing of this service information should be marked on the engine air inlet cowl label plate and that Rolls-Royce and/or Bombardier should be notified of the inspection results. US Airways stated that it, and most other operators/carriers in the world, use an electronic database to issue, track, and record mandatory inspections on their airplanes, and, consequently, there is no need to mandate marking the inspection service information reference on the inlet cowl label plate. US Airways also stated that notification of a Rolls-Royce or Bombardier representative is burdensome and does not improve the safety aspects of the inlet cowl inspection.

We partially agree. We do not agree to remove the reference to Appendix 1 of Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, dated May 10, 2011, because Item 1 of Appendix 1 specifies that...
accomplishment of this service information should be marked on the engine air inlet cowl label plate using metal stamp, vibro etch, or electro etch on the engine air intake cowl modification plate. Not all operators use an electronic data base to track inspections. In case of the airplane transfer to another operator, this marking will ensure the evidence of the accomplishment of required actions. We agree that Items 2 and 3 of Appendix 1 of Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, dated May 10, 2011, which specify reporting, are not necessary. We have added new paragraph (j) to this AD to specify that the reporting specified in Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, is not required by this AD, and have re-identified subsequent paragraphs accordingly. We have also revised paragraph (i) of this AD to include the paragraph (j) exclusion.

Request To Specify Revised Service Information

US Airways requested that we revise paragraph (i) of the NPRM (77 FR 37344, June 21, 2012) to specify Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, as the correct service information. We agree to revise the reference to Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, to correctly identify that document as Revision 1. We have changed paragraphs (i)(1), (i)(1)(i), (i)(1)(ii), (i)(1)(iii), (i)(2), and (i)(1)(ii) (paragraph (k)(1)(ii) of the NPRM (77 FR 37344, June 21, 2012)), of the AD to correctly reference Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 37344, June 21, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 37344, June 21, 2012).

Costs of Compliance

We estimate that this AD will affect 22 products of U.S. registry. We also estimate that it will take about 20 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be $37,400, or $1,700 per product.

In addition, we estimate that any necessary follow-on actions would take up to 34 work-hours, for a cost of $2,890 per product. We have received no definitive data that would enable us to provide parts cost estimates for the on-condition actions specified in this AD. We have no way of determining the number of products that may need these actions.

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.

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 that this AD:
1. Is not a “significant regulatory action” under Executive Order 12866; and
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.

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

Examing 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 the NPRM (77 FR 37344, June 21, 2012), 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.

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:


(a) Effective Date

This airworthiness directive (AD) becomes effective December 31, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Model A330–243, -243F, -341, -342, and -343 airplanes; certificated in any category; all manufacturer serial numbers; equipped with Rolls-Royce Trent 700 engines.

(d) Subject

Air Transport Association (ATA) of America Code 71, Powerplant.

(e) Reason

This AD was prompted by reports of extensive damage to engine air intake cowls as a result of acoustic panel collapse. We are issuing this AD to detect and correct disbonding, which could result in detachment of the engine air intake cowl.
from the engine leading to ingestion of parts, which could cause failure of the engine, and possible injury to persons on the ground.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Repetitive Detailed Inspection

At the applicable compliance time specified in paragraph (g)(1) or (g)(2) of this AD: Do a tap test inspection of the three inner panels of each engine air intake cowl for disbonding, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, excluding Appendices 01 through 03, dated September 27, 2011. Repeat the inspection thereafter at intervals not to exceed 24 months, except as required by paragraphs (h) and (i) of this AD.

(i) Corrective Actions

(1) If any disbonding is found during any inspection required by this AD, and the findings are within the permitted allowable damage limits (ADLs) specified in Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, except as specified in paragraph (j)(1)(i) of this AD: Do the actions specified in paragraph (i)(1)(i), (i)(1)(ii), or (i)(1)(iii) of this AD.

(ii) Repair the affected engine air intake cowl before further flight, in accordance with the Accomplishment Instructions of Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, except as specified in paragraph (j)(2)(i) of this AD. Repeat the inspection specified in paragraph (g) of this AD thereafter at the applicable compliance time specified in paragraph (g) of this AD.

(ii) Replace the affected engine air intake cowl before further flight, in accordance with the Accomplishment Instructions of Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, except as specified in paragraph (j)(2)(ii) of this AD. Repeat the inspection specified in paragraph (g) of this AD thereafter at the applicable compliance time specified in paragraph (g) of this AD.

(h) Inspection of Replaced Engine Air Intake Cowl

For airplanes on which an engine air intake cowl is replaced after the effective date of this AD, at the applicable compliance time specified in paragraph (h)(1) or (h)(2) of this AD: Do a tap test inspection of the three inner acoustic panels of the affected engine air intake cowl for disbonding, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, excluding Appendices 01 through 03, dated September 27, 2011. Repeat the inspection thereafter at intervals not to exceed 24 months.

(1) Within 24 months after the engine air intake cowl has accumulated 5,000 total flight cycles or 20,000 total flight hours, whichever occurs first, since its first installation on an airplane as of the effective date of this AD: Within 24 months after the engine air intake cowl has accumulated 5,000 total flight cycles or 20,000 total flight hours, whichever occurs first, since its first installation on an airplane.

(2) For an engine air intake cowl that has accumulated 5,000 or more total flight cycles or 20,000 or more total flight hours, whichever occurs first, since its first installation on an airplane as of the effective date of this AD: Within 24 months after the effective date of this AD.

(i) No Reporting Requirement

Although Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(k) Other FAA AD Provisions

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. 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 International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone (425) 227–1138; fax (425) 227–1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use those 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.

(l) Related Information

(1) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2011–0173, dated September 13, 2011, and the service information specified in paragraphs (j)(1)(i) and (j)(1)(ii) of this AD, for related information.

(2) Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, excluding Appendices 01 through 03, dated September 27, 2011.

(3) Rolls-Royce Non-Modification Service Bulletin RB.211–71–AG419, Revision 1, including Appendix 1, dated May 10, 2011.

(4) For Airbus 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; email airworthiness.a330-a340@airbus.com; Internet http://www.airbus.com.

(5) For Rolls-Royce service information identified in this AD, contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, England; telephone 011 44 1332 24124; fax 011 44 1332 24124; email Rolls-Royce.service.com; Internet https://www.aeromanager.com.

You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

(m) 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) Airbus Mandatory Service Bulletin A330–71–3024, Revision 01, excluding Appendices 01 through 03, dated September 27, 2011.


(iii) For Airbus 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; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. For Rolls-Royce service information identified in this AD, contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, England; telephone 011 44 1332 242424; fax 011 44 1332 249936; Internet https://www.aeromanager.com.

(iv) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

(v) You may view this service information that is incorporated by reference on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:
Discussion
We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on July 2, 2012 (77 FR 39186). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information (MCAI) states:

Two occurrences on Airbus A320 aeroplanes have been reported where the escape slide raft inflation system did not deploy when activated, due to the rotation of the cable guide in a direction which resulted in jamming of the inflation control cable. Additionally, there has been one reported case where the system did not deploy properly due to a cracked inflation hose fitting. Investigation conducted by the slide raft manufacturer showed that the hose fitting could be subject to a bending moment if improperly packed. Subsequently, the hose fitting could separate from the reservoir and the inflation of the slide raft may be impaired. This condition, if not corrected, could delay the evacuation from the aeroplane in case of emergency, possibly resulting in injury to the occupants.

For the reasons described above, this [European Aviation Safety Agency (EASA)] AD requires modification of the affected slide rafts or [optional] replacement thereof with modified units.

The modification includes installing a cable guide adaptor, an anti-rotation bracket, and a new hose assembly. You may obtain further information by examining the MCAI in the AD.

Comments
We gave the public the opportunity to participate in developing this AD. We considered the comments received. United Airlines (UAL) supports the compliance time of 36 months after the effective date of this AD.

Request To Clarify Concurrent Requirements
UAL requested that we highlight that Air Cruisers Service Bulletin S.B.A.320 004–25–85 has a concurrent requirement to accomplish Air Cruisers Service Bulletin S.B.A.320 004–25–56. UAL stated that it would like to receive a confirmation that Air Cruisers Service Bulletin S.B.A.320 004–25–56 must also be accomplished to comply with the proposed AD (77 FR 39186, July 2, 2012).

We agree with UAL’s comment. For the optional replacement in paragraph (h) of this final rule, we have clarified that the concurrent requirement specified in paragraph 1.B. of Air Cruisers Service Bulletin S.B. A.320 004–25–85, Revision 2, dated January 3, 2012, is necessary. We have revised paragraphs (h), (j)(1), and (j)(2) in this final rule accordingly.

Request To Remove the Parts Installation Limitation in Paragraph (j)(1) of the Proposed AD (77 FR 39186, July 2, 2012)

UAL requested that the parts installation limitation in paragraph (j)(1) of the proposed AD (77 FR 39186, July 2, 2012) be removed. UAL stated that the proposed requirement will remove the operator’s flexibility to replace a post-AD part number with a pre-AD part number prior to the AD limit. UAL stated that, after the proposed AD effective date, it agrees that any new slide-rafts released by the home shop should have the AD requirements incorporated to prevent unit on-wing installation beyond the AD limit, but not on the ones currently installed on-wing. UAL stated that it believes the intent of the proposed AD is to eliminate pre-AD part numbers after 36 months of the effective date.