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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0232; Directorate Identifier 2007-NM-309-AD; Amendment 39-15612; AD 2008-14-17]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A330-200 and A340-300 Series Airplanes

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

ACTION: Final rule.

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:

During fatigue tests (EF3) on the A340-600, multiple damage were found in the upper side shell structure at skin and frame (FR) 84 & 85 interface, from stringer 6 to 15 LH/RH. This damage occurred between 58,341 and 72,891 simulated Flight Cycles (FC).

Due to the higher Design Service Goal and different design (e.g. skin thickness) for A330-200 and A340-300 aircraft series, the damage assessment concluded on [a] potential impact on these aircraft series.

* * * * *

The unsafe condition is loss of integrity of the upper shell structure of the fuselage. We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective August 21, 2008.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of August 21, 2008.

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.

FOR FURTHER INFORMATION CONTACT: 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.

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 March 3, 2008 (73 FR 11364). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

During fatigue tests (EF3) on the A340-600, multiple damage were found in the upper side shell structure at skin and frame (FR) 84 & 85 interface, from stringer 6 to 15 LH/RH. This damage occurred between 58,341 and 72,891 simulated Flight Cycles (FC).

Due to the higher Design Service Goal and different design (e.g. skin thickness) for A330-200 and A340-300 aircraft series, the damage assessment concluded on [a] potential impact on these aircraft series.

In order to allow early detection of cracks which could avoid possible crack propagation and consequently to maintain the structural integrity of the upper side shell structure between FR84 and FR87, this Airworthiness Directive (AD) mandates an inspection program of this area [for cracking] using a high frequency eddy current (HFEC) method and a modification to improve the upper shell structure.

This Revision 1 is issued to clarify that this AD is not applicable to aircraft A340-300 series on which both AIRBUS modifications 44205 and 45012 have been embodied in production.

The unsafe condition is loss of integrity of the upper shell structure of the fuselage between FR84 and FR87. Corrective actions include contacting Airbus and repairing any crack. 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 Remove Reference to Modification

Air Transport Association (ATA) on behalf of its member Northwest Airlines (NWA), requests that we remove the reference to Airbus Modification (Mod.) 44205 from paragraph (c), "Applicability," of the NPRM. The commenters explain that Mod. 44205 defines common structure for Section 19. Mod. 45012, which is in paragraph (f)(1) of the NPRM, modifies the Section 19 upper side shell on A330-200 series airplanes.

We disagree. Cracks can develop on this area of Section 19 that affect basic airplanes fitted with the same features (i.e., post-Mod. 44205). For Model A340-300 series airplanes, Mod. 45012 addresses the unsafe condition. Therefore, only Model A340-300 series airplanes on which both Mod. 44205 and 45012 have been done in production are exempt. Analysis further to these findings established that cracking would also affect airplanes post-Mod. 45012 on Model A330-200 series

airplanes. The mandated action separates pre- or post-Mod. 45012, as specified in paragraphs (f)(1) and (f)(2) of this AD. We have made no change to the AD in this regard.

Request To Exclude Certain Airplanes

The same commenters request that we exclude from paragraph (f)(1) and Table 1 of the NPRM airplanes that have Mod. 52974 or 53223 embodied. The commenters explain that paragraph (c) excludes these airplanes, but paragraph (f)(1) and Table 1 do not exclude them. Without the exclusion, four more NWA airplanes are affected by the AD.

We disagree. Paragraph (f)(1), which includes Table 1, refers to paragraph (c) where the two modifications are listed as exclusions. There is no need to exclude the airplanes again in paragraph (f)(1) or Table 1 of the AD. We have made no change to the AD in this regard.

Request To Move "Before Further Flight" Requirement

The same commenters request that we move the requirement to "Do all applicable corrective actions before further flight" from paragraph (f)(1) of the NPRM to the "Threshold" column of Table 1 of the NPRM. The commenters explain that moving this statement would make it clear that corrective action is required at the time of the mandated inspection thresholds and not before.

We disagree. Paragraph (f)(1)(i) of this AD, which includes Table 1, gives thresholds for doing the HFEC inspection. Paragraph (f)(1)(ii) of this AD also gives a possible threshold for the HFEC inspection. The requirement is to do the applicable corrective actions before further flight. We have made no change to the AD in this regard.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD as proposed.

Differences Between This 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 our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD will affect about 7 products of U.S. registry. We also estimate that it will take about 601 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$80 per work-hour. Required parts will cost about \$52,160 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these costs. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD on the U.S. operators to be \$701,680, or \$100,240 per product.

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 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.

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 the NPRM, 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:



2008-14-17 Airbus: Amendment 39-15612. Docket No. FAA-2008-0232; Directorate Identifier 2007-NM-309-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective August 21, 2008.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Airbus Model A330-200 and A340-300 series airplanes, certificated in any category, all certified models; all serial numbers on which Airbus Modification 44205 has been embodied in production, except those on which Airbus Modification 52974 or 53223 has been embodied in production. This AD is not applicable to Model A340-300 series airplanes on which both Modifications 44205 and 45012 have been embodied in production.

Subject

- (d) Air Transport Association (ATA) of America Code 53: Fuselage.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

During fatigue tests (EF3) on the A340-600, multiple damage were found in the upper side shell structure at skin and frame (FR) 84 & 85 interface, from stringer 6 to 15 LH/RH. This damage occurred between 58,341 and 72,891 simulated Flight Cycles (FC).

Due to the higher Design Service Goal and different design (e.g. skin thickness) for A330-200 and A340-300 aircraft series, the damage assessment concluded on [a] potential impact on these aircraft series.

In order to allow early detection of cracks which could avoid possible crack propagation and consequently to maintain the structural integrity of the upper side shell structure between FR84 and FR87, this Airworthiness Directive (AD) mandates an inspection program of this area [for cracking] using a high frequency eddy current (HFEC) method and a modification to improve the upper shell structure.

This Revision 1 is issued to clarify that this AD is not applicable to aircraft A340-300 series on which both AIRBUS modifications 44205 and 45012 have been embodied in production.

The unsafe condition is loss of integrity of the upper shell structure of the fuselage between FR84 and FR87. Corrective actions include contacting Airbus and repairing any crack.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) For Airbus Model A330-200 series airplanes, as identified in paragraph (c) of this AD, on which Modification 45012 has been embodied in production: At the later of the compliance times specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, do the HFEC inspection for cracking, and corrective actions as applicable; and modify the upper shell structure of the fuselage; in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-53-3152, dated April 10, 2007. Do all applicable corrective actions before further flight.

(i) Prior to the compliance time shown in Table 1 of this AD after the first flight of the airplane, depending on airplane configuration.

Table 1 – Compliance Times for Model A330 Series Airplanes with Modification 45012 Embodied

Airplane configuration	Threshold
Pre-modification 48827 (WV20 to WV27)	25,400 total flight cycles
Post-modification 48827 (WV50 to WV56)	17,100 total flight cycles or 94,700 total flight hours, whichever occurs first

(ii) Within 90 days after the effective date of this AD.

(2) For Airbus Model A330-200 and A340-300 series airplanes as identified in paragraph (c) of this AD, on which Modification 45012 has not been embodied in production: At the later of the compliance times specified in paragraphs (f)(2)(i) and (f)(2)(ii) of this AD, modify the upper shell structure of the fuselage in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-53-3157 or Airbus Service Bulletin A340-53-4163, both dated July 5, 2006, as applicable.

(i) Prior to the compliance time shown in Table 2 of this AD after the first flight of the airplane.

Table 2 – Compliance Times for Model A330-200 and A340-300 Series Airplanes without Modification 45012 Embodied

Airplane series	Threshold
A330-200	6,600 total flight cycles
A340-300	14,000 total flight cycles

(ii) Within 90 days after the effective date of this AD.

FAA AD Differences

Note: 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 appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI European Aviation Safety Agency (EASA) Airworthiness Directive 2007-0269R1, dated October 15, 2007; Airbus Service Bulletin A330-53-3152, dated April 10, 2007; Airbus Service Bulletin A330-53-3157, dated July 5, 2006; and Airbus Service Bulletin A340-53-4163, dated July 5, 2006; for related information.

Material Incorporated by Reference

(i) You must use the applicable service information specified in Table 3 of this AD 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, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France.

(3) You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or 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>.

Table 3 – Material Incorporated by Reference

Service Bulletin	Date
Airbus Service Bulletin A330-53-3152	April 10, 2007
Airbus Service Bulletin A330-53-3157	July 5, 2006
Airbus Service Bulletin A340-53-4163	July 5, 2006

Issued in Renton, Washington, on June 27, 2008.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-15708 Filed 7-16-08; 8:45 am]