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[Page 55236-55239]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-22452; Directorate Identifier 2001-NM-336-AD; Amendment 39-14277;
AD 2005-19-12]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A330-301, -321, -322, -341, and -342 Airplanes; and Model A340-200 and A340-300 Series Airplanes

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

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Model A330-301, -321, -322, -341, and -342 airplanes; and Model A340-200 and A340-300 series airplanes. This AD requires repetitive inspections for cracks of the inboard lower flange and radius of the left- and right-hand outboard floor beams at frame (FR) 48, and related investigative and corrective actions if necessary. This AD also provides an optional terminating action for the repetitive inspections. This AD results from reports that cracks were found during fatigue tests at the attachment between the canted lower flange of the floor beam and the pressure diaphragm in front of FR48 on both left- and right-hand floor beams; and that an additional crack was found in the flange radius of the floor beam. We are issuing this AD to detect and correct such cracking, which could propagate and result in reduced structural integrity of the fuselage.

DATES: Effective October 6, 2005.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of October 6, 2005.

We must receive comments on this AD by November 21, 2005.

ADDRESSES: Use one of the following addresses to submit comments on this AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, Room PL-401, Washington, DC 20590.

- Fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for service information identified in this AD.

You may examine the contents of the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL-401, Washington, DC. This docket number is FAA-2005-22452; the directorate identifier for this docket is 2001-NM-336-AD.

FOR FURTHER INFORMATION CONTACT: Tim Backman, Aerospace Engineer, ANM-116, International Branch, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2797; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

Although this is a final rule that was not preceded by notice and an opportunity for public comment, we invite you to submit any relevant written data, views, or arguments regarding this AD. Include "Docket No. FAA-2005-22452; Directorate Identifier 2001-NM-336-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

Discussion

The Direction Generale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, notified us that an unsafe condition may exist on certain Airbus Model A330-301, -321, -322, -341, and -342 airplanes; and Model A340-200 and A340-300 series airplanes. The DGAC advises that cracks were found during fatigue tests at the attachment between the canted lower flange of the floor beam and the pressure diaphragm in front of frame (FR) 48 on both left- and right-hand floor beams. The cracks extended between two fasteners close to FR48 on the canted lower flange of the floor beam. In addition, another crack was found in the flange radius of the floor beam. Further investigation revealed that the cracks resulted from excessive bending of the canted lower flange of

the floor beam. Fatigue cracks could propagate from one fastener to another. This condition, if not corrected, could result in reduced structural integrity of the fuselage.

Relevant Service Information

Airbus has issued Service Bulletin A330-53-3014, Revision 05, dated June 20, 2003 (for Model A330-301, -321, -322, -341, and -342 airplanes); and Service Bulletin A340-53-4022, Revision 05, dated June 16, 2003 (for Model A340-200 and A340-300 series airplanes). The service bulletins describe procedures for doing repetitive high-frequency eddy current (HFEC) inspections for cracks of the inboard lower flange and radius of the left- and right-hand outboard floor beams at FR48. The service bulletins also describe procedures for reporting inspection findings to Airbus. If no cracks are found during an HFEC inspection, the service bulletins specify that operators repeat the inspection. If any crack is found during any HFEC inspection, the service bulletins give procedures for related investigative and corrective actions as follows:

- For cracks at the radius, the service bulletins specify that operators should contact Airbus for repair instructions before further flight.
- For cracks at the flange, the service bulletins specify that operators should measure the total length of the crack. If the crack is within certain limits, the service bulletins give procedures for stop-drilling the crack before further flight, and for repairing the crack within 500 flight cycles after the stop-drilling by installing stainless steel doublers under the floor beams. If the crack is outside certain limits, the service bulletins specify that operators should contact Airbus for repair instructions before further flight.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition. The DGAC mandated the service information and issued French airworthiness directives 2001-506(B), dated October 17, 2001, and 2001-507(B), dated October 17, 2001, to ensure the continued airworthiness of these airplanes in France.

Airbus has also issued Service Bulletins A330-53-3013, Revision 03 dated December 23, 1999 (for Model A330-301, -321, -322, -341, and -342 airplanes); and Service Bulletin A340-53-4021, Revision 05, dated January 27, 2003 (for Model A340-200 and A340-300 series airplanes). These service bulletins provide an optional terminating action for the repetitive inspections of the inboard lower flange. The terminating action is installing new stainless steel doublers under the floor beam to limit the bending movement of the canted lower flange. The installation involves removing certain fasteners and doing a rotating probe inspection for cracks of the fastener holes. If any crack is found, the service bulletins specify contacting Airbus for repair instructions.

FAA's Determination and Requirements of This AD

These airplane models are manufactured in France and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. We have examined the DGAC's findings, evaluated all pertinent information, and determined that we need to issue an AD for products of this type design that are certificated for operation in the United States.

Therefore, we are issuing this AD to detect and correct cracks between the canted lower flange of the floor beam and the pressure diaphragm in front of FR48 on both left- and right-hand floor beams; and cracks in the flange radius of the floor beam; which could propagate and result in reduced structural integrity of the fuselage. This AD requires accomplishing the actions specified in the service information described previously, except as discussed under "Differences Among the AD, the French Airworthiness Directives, and the Service Bulletins."

Operators should note that, in consonance with the findings of the DGAC, this proposed AD allows operators to continue the repetitive inspections instead of doing the terminating action. Additionally, in certain cases, operators that detect cracking may defer the repair for a specified period of time. In making these determinations, we consider that, in the case of this AD, long-term continued operational safety is adequately assured by doing the repetitive inspections to detect cracking before it represents a hazard to the airplane, and by doing repairs within the specified time limits.

Differences Among the AD, the French Airworthiness Directives, and the Service Bulletins

The applicability of the French airworthiness directives excludes airplanes on which Airbus Service Bulletin A330-53-3013 or A340-53-4021 was accomplished in service. However, we have not excluded those airplanes in the applicability of this AD; rather, this AD includes a requirement to accomplish the actions specified in those service bulletins. This requirement will ensure that the actions specified in the applicable service bulletin and required by this AD are accomplished on all affected airplanes. Operators must continue to operate the airplane in the configuration required by this AD unless an alternative method of compliance is approved. This difference has been coordinated with the DGAC.

The French airworthiness directives specify a compliance time based on the time "since new." However, this AD specifies a compliance time after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness. This decision is based on our determination that "since new" may be interpreted differently by different operators. We find that our proposed terminology is generally understood within the industry and records will always exist that establish these dates with certainty.

The service bulletins specify that you may contact the manufacturer for instructions on how to repair certain conditions, but this AD would require you to repair those conditions using a method that we or the DGAC (or its delegated agent) approve. In light of the type of repair that would be required to address the unsafe condition, and consistent with existing bilateral airworthiness agreements, we have determined that, for this AD, a repair we, or the DGAC, approve would be acceptable for compliance with this AD.

Although the Accomplishment Instructions of Airbus Service Bulletins A330-53-3014, Revision 05, and A340-53-4022, Revision 05, provide procedures for reporting certain information to the manufacturer, this AD would not require those actions.

Clarification of Optional Terminating Action

The service bulletins describe procedures for installing a stainless steel doubler, which is an optional terminating action for the repetitive inspections of both the inboard lower flange and the radius. The manufacturer has determined that the crack in the radius is a direct consequence of the load re-distribution following cracking of the fastener holes. The stainless steel doubler reinforces the area of the fastener holes.

Costs of Compliance

None of the airplanes affected by this action are on the U.S. Register. All airplanes affected by this AD are currently operated by non-U.S. operators under foreign registry; therefore, they are not directly affected by this AD action. However, we consider this AD necessary to ensure that the unsafe condition is addressed if any affected airplane is imported and placed on the U.S. Register in the future.

The following table provides the estimated costs to comply with this AD for any affected airplane that might be imported and placed on the U.S. Register in the future.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts cost	Cost per airplane
HFEC inspection, per inspection cycle	2	\$65	None	\$130, per inspection cycle.
Optional terminating action	18	65	\$1,930	\$3,100.

FAA's Determination of the Effective Date

No airplane affected by this AD is currently on the U.S. Register. Therefore, providing notice and opportunity for public comment is unnecessary before this AD is issued, and this AD may be made effective in less than 30 days after it is published in the Federal Register.

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 have 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 the 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); 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. See the ADDRESSES section for a location to examine the regulatory evaluation.

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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at www.faa.gov/aircraft/safety/alerts/

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2005-19-12 Airbus: Amendment 39-14277. Docket No. FAA-2005-22452; Directorate Identifier 2001-NM-336-AD.

Effective Date

- (a) This AD becomes effective October 6, 2005.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Airbus Model A330-301, -321, -322, -341, and -342 airplanes; and Model A340-211, -212, -213, -311, -312, and -313 airplanes; certificated in any category; on which Airbus Modification 42418 has not been accomplished in production.

Unsafe Condition

(d) This AD results from reports that cracks were found during fatigue tests at the attachment between the canted lower flange of the floor beam and the pressure diaphragm in front of frame (FR) 48 on both left- and right-hand floor beams; and that an additional crack was found in the flange radius of the floor beam. The FAA is issuing this AD to detect and correct such cracking, which could propagate and result in reduced structural integrity of the fuselage.

Compliance

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

Repetitive Inspections

(f) At the applicable times in paragraph (f)(1) or (f)(2) of this AD: Do high-frequency eddy current inspection for cracks of the inboard lower flange and radius of the left-hand and right-hand outboard floor beams at FR48. Do all inspections in accordance with the Accomplishment Instructions of the applicable service bulletin in Table 1 of this AD. Doing the action in paragraph (h) of this AD terminates the repetitive inspection requirements of this paragraph.

(1) For Airbus Model A330-301, -321, -322, -341, and -342 airplanes: Do the first inspection before the accumulation of 8,400 flight cycles since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness, or within 6 months after the effective date of this AD, whichever occurs later; and repeat the inspection thereafter at intervals not to exceed 3,860 total flight cycles or 15,050 flight hours, whichever occurs earlier.

(2) For Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes: Do the first inspection before the accumulation of the earlier of 9,200 flight cycles or 70,000 flight hours since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness, or within 6 months after the effective date of this AD, whichever occurs later; and repeat the inspection thereafter at intervals not to exceed 3,070 flight cycles.

TABLE 1.—SERVICE BULLETINS

For airbus model—	Airbus service bulletin—
A330–301, –321, –322, –341, and –342 airplanes	A330–53–3014, Revision 05, dated June 20, 2003.
A340–211, –212, –213, –311, –312, and –313 airplanes	A340–53–4022, Revision 05, dated June 16, 2003.

Related Investigative and Corrective Actions

(g) If any crack is found during any inspection required by paragraph (f) of this AD: Do the applicable actions in paragraph (g)(1) and (g)(2) of this AD.

(1) For cracks at the radius: Before further flight, repair the crack according to a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the Direction Ge[acute]ne[acute]rale de l'Aviation Civile (DGAC) (or its delegated agent).

(2) For cracks at the flange: Before further flight, measure the total length of the crack and do the applicable action in paragraph (g)(2)(i) and (g)(2)(ii) of this AD.

(i) If the crack is less than 12 mm (0.472 inch) in length: Before further flight, stop-drill the crack and, within 500 flight cycles after stop-drilling the crack, do the action in paragraph (h) of this AD.

(ii) If the crack is greater than or equal to 12 mm (0.472 inch) in length: Before further flight, repair the crack according to a method approved by either the Manager, International Branch, ANM-116; or the Direction Ge[acute]ne[acute]rale de l'Aviation Civile (DGAC) (or its delegated agent).

Optional Terminating Action

(h) Installing a stainless steel doubler in accordance with Airbus Service Bulletin A330-53-3013, Revision 03, December 23, 1999; or Airbus Service Bulletin A340-53-4021, Revision 05, dated January 27, 2003; as applicable; terminates the repetitive inspection requirements of paragraph (f) of this AD. If any crack is found during this installation while doing the rotating probe inspection of the fastener holes: Before further flight, repair the crack according to a method approved by either the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

No Reporting Required

(i) Although the Accomplishment Instructions of the service bulletins identified in Table 1 of this AD describe procedures for reporting certain information to the manufacturer, this AD would not require those actions.

Alternative Methods of Compliance (AMOCs)

(j) The Manager, International Branch, ANM-116, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

Related Information

(k) French airworthiness directives 2001-506(B) and 2001-507(B), both dated October 17, 2001, also address the subject of this AD.

Material Incorporated by Reference

(l) You must use the service information identified in Table 2 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

TABLE 2.—MATERIAL INCORPORATED BY REFERENCE

Service Bulletin	Revision level	Date
A330-53-3013	03	December 23, 1999.
A330-53-3014	05	June 20, 2003.
A340-53-4021	05	January 27, 2003.
A340-53-4022	05	June 16, 2003.

Issued in Renton, Washington, on September 9, 2005.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-18522 Filed 9-20-05; 8:45 am]

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