

# 2010-05-06

## AIRBUS

Amendment 39-16215

Docket No. FAA-2010-0128; Directorate Identifier 2009-NM-136-AD

### PREAMBLE

#### Effective Date

(a) This airworthiness directive (AD) becomes effective March 12, 2010.

#### Affected ADs

(b) None.

#### Applicability

(c) This AD applies to Airbus Model A340-541 and -642 airplanes, certificated in any category; all serial numbers, except those on which Airbus Modification 56026 has been accomplished in production, or Airbus Service Bulletin A340-57-5010 has been accomplished in service.

#### Subject

(d) Air Transport Association (ATA) of America Code 57: Wings.

#### Reason

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

During the A340-600 full scale fatigue test, cracks were found on left and right sides of the rear spar vertical cruciform at Frame 47.

This situation, if not corrected, can affect the aircraft structural integrity.

Further to this full scale fatigue test completion, it has been determined that the current inspections values (thresholds and intervals) as specified in the ALI (Airworthiness Limitation Items) tasks 57.18.16 have to be reviewed in order to comply with certification requirements. Consequently AIRBUS Service Bulletin (SB) A340-57-5011 has been issued to supersede the ALI tasks 57.18.16.

This AD mandates a repetitive inspection program in order to detect any crack by means of two Non-Destructive Test (NDT) inspection methods (High Frequency Eddy Current and Ultra Sonic).

This AD has been revised in order to exclude from the applicability section, A340-642 aircraft on which a terminating action modification 56026 or SB A340-57-5010 has been embodied and which consists of a large cut-out of the vertical cruciform flange in order to reduce the stress level in this critical area.

## Compliance

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

## Actions

(g) Do the following actions.

(1) At the applicable time specified in the table titled, "THRESHOLDS" in paragraph 1.E.(2) of Airbus Mandatory Service Bulletin A340-57-5011, dated June 27, 2007, or within 3 months after the effective date of this AD, whichever occurs later; except that where the table expresses times in terms of "flight cycles" and "flight hours," those terms mean "total flight cycles" and "total flight hours" for purposes of this AD: Perform the NDT inspections of the cruciform fitting radius at Frame 47 on the right-hand and left-hand sides, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-57-5011, dated June 27, 2007.

(2) Submit a report of the findings of the inspection required by paragraph (g)(1) of this AD using Appendix 01 of Airbus Mandatory Service Bulletin A340-57-5011, dated June 27, 2007, to Airbus, Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex France, Attn: SDC32 Technical Data and Documentation Services; fax (+33) 5 61 93 28 06; e-mail sb.reporting@airbus.com; at the applicable time specified in paragraph (g)(2)(i) or (g)(2)(ii) of this AD.

(i) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(ii) If the inspection was accomplished prior to the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(3) If no crack is detected during an inspection required by paragraph (g)(1) of this AD, apply sealant before further flight, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-57-5011, dated June 27, 2007. Repeat the inspection required by paragraph (g)(1) of this AD thereafter at the applicable interval specified in paragraph 1.E.(2) of Airbus Mandatory Service Bulletin A340-57-5011, dated June 27, 2007.

(4) If any crack is found during any inspection required by paragraph (g)(1) of this AD, contact Airbus to get repair instructions and repair before further flight.

(5) Modifying the rear spar vertical cruciform at frame 47 in accordance with Airbus Service Bulletin A340-57-5010, Revision 01, dated April 2, 2008, terminates the inspection requirements of paragraphs (g)(1) and (g)(3) of this AD.

(6) After accomplishing the initial inspections required by paragraph (g)(1) of this AD or after the modification specified in paragraph (g)(5) of this AD is done, the limitation Tasks 57.18.16 (10 different tasks) of Airbus A340-500/600 Airworthiness Limitation Items need not be done.

(7) Modifying the rear spar vertical cruciform at frame 47 is also acceptable for compliance with the requirements of paragraph (g)(5) of this AD if done before the effective date of this AD in

accordance with Airbus Service Bulletin A340-57-5010, dated September 28, 2007.

## FAA AD Differences

### NOTE 1

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

## Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, 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

(i) Refer to MCAI European Aviation Safety Agency (EASA) Airworthiness Directive 2007-0207R1, dated November 7, 2007; Airbus Service Bulletin A340-57-5010, Revision 01, dated April 2, 2008; and Airbus Mandatory Service Bulletin A340-57-5011, dated June 27, 2007; for related information.

## Material Incorporated by Reference

(j) You must use Airbus Mandatory Service Bulletin A340-57-5011, including Appendix 01, dated June 27, 2007, as applicable, to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the optional actions specified by this AD, you must use Airbus Service Bulletin A340-57-5010, Revision 01, dated April 2, 2008, to perform those actions, 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; fax +33 5 61 93 45 80; e-mail [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>.

(3) You may review copies of the service information that is incorporated by reference 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 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**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.

Issued in Renton, Washington, on February 16, 2010.

**Stephen P. Boyd**, *Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

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[Rules and Regulations]  
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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2010-0128; Directorate Identifier 2009-NM-136-AD; Amendment 39-16215; AD 2010-05-06]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Model A340-541 and -642 Airplanes**

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

**ACTION:** Final rule; request for comments.

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**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 the A340-600 full scale fatigue test, cracks were found on left and right sides of the rear spar vertical cruciform at Frame 47.

This situation, if not corrected, can affect the aircraft structural integrity.

\* \* \* \* \*

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

**DATES:** This AD becomes effective March 12, 2010.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of March 12, 2010.

We must receive comments on this AD by April 12, 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.

**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**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2007-0207R1, dated November 7, 2007 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During the A340-600 full scale fatigue test, cracks were found on left and right sides of the rear spar vertical cruciform at Frame 47.

This situation, if not corrected, can affect the aircraft structural integrity.

Further to this full scale fatigue test completion, it has been determined that the current inspections values (thresholds and intervals) as specified in the ALI [Airworthiness Limitation Items] tasks 57.18.16 have to be reviewed in order to comply with certification requirements. Consequently AIRBUS Service Bulletin (SB) A340-57-5011 has been issued to supersede the ALI tasks 57.18.16.

This AD mandates a repetitive inspection program in order to detect any crack by means of two Non-Destructive Test (NDT) inspection methods (High Frequency Eddy Current and Ultra Sonic).

This AD has been revised in order to exclude from the applicability section, A340-642 aircraft on which a terminating action modification 56026 or SB A340-57-5010 has been embodied and which consists of a large cut-out of the vertical cruciform flange in order to reduce the stress level in this critical area.

The compliance times for the initial and repetitive inspections depend on the airplane configuration and weight variant. For the initial inspections, the earliest compliance time is 2,600 total flight cycles or 17,100 total flight hours, whichever occurs first, and the latest compliance time is 8,300 total flight cycles or 67,100 total flight hours, whichever occurs first. For the repetitive intervals, the shortest interval is 1,200 flight cycles or 8,600 flight hours, whichever occurs first, and the longest interval is 2,600 flight cycles or 17,200 flight hours, whichever occurs first. You may obtain further information by examining the MCAI in the AD docket.

## **Relevant Service Information**

Airbus has issued Mandatory Service Bulletin A340-57-5011, including Appendix 01, dated June 27, 2007; and Service Bulletin A340-57-5010, Revision 01, dated April 2, 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-2010-0128; Directorate Identifier 2009-NM-136-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**

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.

### **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: