[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2015-6550; Directorate Identifier 2013-NM-162-AD]

**RIN 2120-AA64** 

Airworthiness Directives; Airbus Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 90-11-05 for certain Airbus Model A300 series airplanes and Model A300 B4-600 series airplanes. AD 90-11-05 currently requires repetitive detailed inspections for cracking in the aft hinge brackets of the outer shroud box that is located in the outer wing box, and related investigative and corrective actions if necessary. Since we issued AD 90-11-05, we have determined that a change to certain compliance times is needed. This proposed AD would continue to require doing repetitive detailed inspections for cracking in the hinge brackets of the forward and aft outer shroud boxes that are located in the outer wing box, and related investigative and corrective actions if necessary; and would add airplanes to the applicability. We are proposing this AD to detect and correct cracking of the aft hinge brackets of the outer shroud box; such cracking could affect the structural integrity of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**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 W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airwortheas@airbus.com; Internet http://www.airbus.com. You may view this 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.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-6550; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed 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:** Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-2125; fax 425-227-1149.

#### SUPPLEMENTARY INFORMATION:

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2015-6550; Directorate Identifier 2013-NM-162-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on 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 proposed AD.

#### Discussion

On May 4, 1990, we issued AD 90-11-05, Amendment 39-6603 (55 FR 20129, May 15, 1990). AD 90-11-05 requires actions intended to address an unsafe condition on certain Airbus Model A300 series airplanes and Model A300 B4-600 series airplanes.

Since we issued AD 90-11-05, Amendment 39-6603 (55 FR 20129, May 15, 1990), we have determined that a change to certain compliance times is needed.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2013-0818R1, dated August 20, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Model A300 series airplanes and Model A300 B4-600 series airplanes. The MCAI states:

In the past, aft hinge brackets of the outer wing box were found cracked. Fracture of a bracket would allow vertical movement of the inner shroud box structure, which could result in damage to the top skin of the inboard flap. In addition, the loads carried by the brackets will be transferred to the remaining supports, which may also crack and cause extensive structural damage.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

To address this potential unsafe condition, DGAC [Direction Générale de l'Aviation Civile] France issued AD 1998-449-265(B) (later revised) to require repetitive inspections of the hinge bracket of the outer box and, depending on findings, corrective action(s).

Since that [DGAC] AD was issued, a fleet survey and updated Fatigue and Damage Tolerance analysis were performed in order to substantiate the A300 Extended Service Goal (ESG) and A300-600 Extended Service Goal (ESG2) exercise.

The results of these analyses led to a change in the inspection thresholds and intervals in Flight Cycles (FC) and the introduction of Flight Hours (FH) limits.

For the reasons described above, this [EASA] AD retains the requirements of DGAC France AD 1998-449-265(B)R1, which is superseded, but requires those actions within the new thresholds and intervals given by Airbus Service Bulletin (SB) A300-57-0142 Revision 04 or A300-57-6010 Revision 05, as applicable to aeroplane model.

Revision 1 of this [EASA] AD is issued to add model A300B4-203 aeroplanes to the applicability and compliance time tables. This model is covered by Airbus SB A300-57-0142, but was mistakenly omitted from the original [EASA] AD issue.

The corrective action for a hinge bracket that is cracked or fractured is replacing the damaged hinge bracket with a new bracket.

For airplanes on which a crack is found in one half bracket or both half brackets, related investigative actions include a general visual inspection for secondary damage (e.g., cracks, wear damage, pitting, and gouging) in the following areas:

- The inner shroud-box forward attachments and the attachment brackets at the inboard end.
  - The inner and outer shroud-box structure, adjacent to the fractured bracket.
  - The top skin of the inboard flap.

The corrective action for damage findings during the related investigative action is repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA Design Organization Approval (DOA).

The compliance time for related investigative actions and corrective actions is before further flight.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-6550.

# Related Service Information under 1 CFR part 51

We reviewed the following service information.

- Airbus Service Bulletin A300-57-0142, Revision 04, dated March 30, 2011, which describes procedures for doing an inspection of the forward and aft hinge brackets on the outer shroud box.
- Airbus Service Bulletin A300-57-6010, Revision 05, dated February 21, 2011, which describes procedures for doing an inspection of the forward and aft hinge brackets on the outer shroud box.
- Airbus Service Bulletin A300-57-6011, Revision 2, dated July 10, 1989, which
  describes procedures for replacing the aft aluminum alloy brackets on the outer shroud
  box with new steel brackets.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

# FAA's Determination and Requirements of this Proposed 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 proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

# Differences Between this Proposed AD and the MCAI or Service Information

Although the MCAI or service information allows further flight after cracks are found during compliance with the required action, paragraph (g) of this proposed AD would require replacement of any cracked hinge bracket of the outer shroud box before further flight. This replacement before further flight is due to the safety implications and consequences of such cracking.

# **Costs of Compliance**

We estimate that this proposed AD affects 3 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

# **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	8 work-hours X \$85 per hour = \$680 per inspection cycle	\$0	\$680 per inspection cycle	\$2,040 per inspection cycle

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these replacements:

#### **On-condition costs**

Action	Labor cost	Parts cost	Cost per product
Replacement	27 work-hours X \$85 per hour = \$2,295	\$25,650	\$27,945

We have received no definitive data that would enable us to provide cost estimates for the on-condition related investigative and corrective actions specified in this proposed 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed 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);
  - 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.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 removing Airworthiness Directive (AD) 90-11-05, Amendment 39-6603 (55 FR 20129, May 15, 1990), and adding the following new AD:

Airbus: Docket No. FAA-2015-6550; Directorate Identifier 2013-NM-162-AD.

#### (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (b) Affected ADs

This AD replaces AD 90-11-05, Amendment 39-6603 (55 FR 20129, May 15, 1990).

# (c) Applicability

This AD applies to Airbus Model A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes; Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes; and Model A300 B4-605R airplanes; certificated in any category; except airplanes on which Airbus Modification Number 6661 has been embodied during production.

# (d) Subject

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

#### (e) Reason

This AD was prompted by reports of cracks in the aft hinge brackets of the outer shroud box that is located in the outer wing box, which were found during routine maintenance checks, and our subsequent determination that a change in inspection compliance times is needed. We are issuing this AD to detect and correct cracking of the aft hinge brackets of the outer shroud box; such cracking could affect the structural integrity of the airplane.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Repetitive Inspections

At the applicable compliance time specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD: Do a detailed inspection for cracks and fractures of the hinge brackets of the forward and aft outer shroud boxes, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-0142, Revision 04, dated March 30, 2011; or Airbus Service Bulletin A300-57-6010, Revision 05, dated February 21, 2011; as applicable. Repeat the inspection thereafter at the applicable interval specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-0142, Revision 04, dated March 30, 2011; or Airbus Service Bulletin A300-57-6010, Revision 05, dated February 21, 2011; as applicable. Doing the replacement specified in paragraph (j) of this AD terminates the repetitive inspections required by this paragraph.

- (1) For Model A300B4-601, B4-603, B4-605R, B4-620, B4-622, B4-2C, and B4-203 airplanes: Do the inspection at the later of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD. Repeat the inspection thereafter at intervals not to exceed 1,000 flight cycles or 2,000 flight hours, whichever occurs first.
- (i) Before the accumulation of 5,000 flight cycles or 10,400 flight hours since first flight, whichever occurs first.
  - (ii) Within 100 flight cycles after the effective date of this AD.

- (2) For Model A300B2-1C, B2-203, and B2K-3C airplanes: Do the inspection at the later of the times specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD. Repeat the inspection thereafter at intervals not to exceed 1,000 flight cycles or 1,000 flight hours, whichever occurs first.
- (i) Before the accumulation of 5,000 flight cycles or 5,400 flight hours since first flight, whichever occurs first.
  - (ii) Within 100 flight cycles after the effective date of this AD.
- (3) For Model A300B4-103 airplanes: Do the inspection the later of the times specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this AD. Repeat the inspection thereafter at intervals not to exceed 1,000 flight cycles or 1,300 flight hours, whichever occurs first.
- (i) Before the accumulation of 5,000 flight cycles or 6,600 flight hours since first flight, whichever occurs first.
  - (ii) Within 100 flight cycles after the effective date of this AD.

#### (h) Corrective Action

If any crack or fracture is found during any inspection required by paragraph (g) of this AD: Before further flight, replace the damaged hinge bracket with a new bracket, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-143, Revision 2, dated July 10, 1989 (for Model A300 series airplanes); or A300-57-6011, Revision 2, dated July 10, 1989 (for Model A300 B4-600 series airplanes); as applicable.

# (i) Related Investigative and Corrective Actions

If any crack or fracture is found during any inspection required by paragraph (g) of this AD: Before further flight, do a general visual inspection for secondary damage (e.g., cracks, wear damage, pitting, and gouging) in the areas specified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-0142, Revision 04, dated March 30, 2011; or Airbus Service Bulletin A300-57-6010, Revision 05, dated February 21, 2011; as applicable. If any damage is found, before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA Design Organization Approval (DOA).

- (1) The inner shroud-box forward attachments and the attachment brackets at the inboard end.
  - (2) The inner and outer shroud-box structure, adjacent to the fractured bracket.
  - (3) The top skin of the inboard flap.

# (j) Optional Terminating Action for Inspection Requirements of Paragraph (g) of this AD.

- (1) Replacement of the hinge bracket, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-143, Revision 2, dated July 10, 1989 (for Model A300 series airplanes); or A300-57-6011, Revision 2, dated July 10, 1989 (for Model A300 B4-600 series airplanes); as applicable, terminates the inspection requirements of paragraph (g) of this AD.
- (2) Replacement of a hinge bracket before the effective date of this AD, as described in the applicable service information listed in paragraphs (j)(2)(i) through

- (j)(2)(iv) of this AD, terminates the repetitive inspections required by paragraph (g) of this AD, provided that after the hinge bracket replacement, but before further flight after the effective date of this AD, a one-time detailed inspection of the forward and aft outer shroud box has been done with no cracking found, in accordance with paragraph (g) of this AD. The following service information is not incorporated by reference in this AD.
  - (i) Airbus Service Bulletin A300-57-143, dated December 17, 1986.
  - (ii) Airbus Service Bulletin A300-57-143, Revision 1, dated March 19, 1987.
  - (iii) Airbus Service Bulletin A300-57-6011, dated December 17, 1986.
  - (iv) Airbus Service Bulletin A300-57-6011, Revision 1, dated March 19, 1987.

# (k) Credit for Previous Actions

- (1) This paragraph provides credit for inspections required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using any of the applicable service information listed in paragraphs (k)(1)(i) through (k)(1)(viii) of this AD, which are not incorporated by reference in this AD.
  - (i) Airbus Service Bulletin A300-57-142, dated December 17, 1986.
  - (ii) Airbus Service Bulletin A300-57-142, Revision 1, dated April 9, 1990.
  - (iii) Airbus Service Bulletin A300-57-142, Revision 2, dated January 16, 1991.
- (iv) Airbus Service Bulletin A300-57-0142, Revision 03, dated February 22, 1999.
  - (v) Airbus Service Bulletin A300-57-6010, Revision 1, dated December 14, 1990.
  - (vi) Airbus Service Bulletin A300-57-6010, Revision 02, dated March 30, 1998.

- (vii) Airbus Service Bulletin A300-57-6010, Revision 03, dated September 16, 1998.
- (viii) Airbus Service Bulletin A300-57-6010, Revision 04, dated February 22, 1999.
- (2) This paragraph provides credit for replacement of the hinge bracket as specified in paragraph (j)(2) of this AD, if the replacement was performed before the effective date of this AD, using any of the applicable service information listed in paragraphs (k)(2)(i) through (k)(2)(iv) of this AD, which is not incorporated by reference in this AD.
  - (i) Airbus Service Bulletin A300-57-143, dated December 17, 1986.
  - (ii) Airbus Service Bulletin A300-57-143, Revision 1, dated March 19, 1987.
  - (iii) Airbus Service Bulletin A300-57-6011, dated December 17, 1986.
  - (iv) Airbus Service Bulletin A300-57-6011, Revision 1, dated March 19, 1987.

#### (1) 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: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW.,

Renton, WA 98057-3356; telephone 425-227-2125; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

# (m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2013-0181R1, dated August 20, 2013, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-6550.

(2) For service information identified in this AD, contact Airbus SAS,

Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email

account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this

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.

Issued in Renton, Washington, on December 4, 2015.

Michael Kaszycki,

Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

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