

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2015-6539; Directorate Identifier 2015-NM-036-AD; Amendment 39-18504; AD 2016-09-06]

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 all Airbus Model A318-111 and -112 airplanes; Model A319-111, -112, -113, -114, and -115 airplanes; Model A320-211, -212, and -214 airplanes; and Model A321-111, -112, -211, -212, and -213 airplanes. This AD was prompted by the results of an evaluation by the design approval holder (DAH). During a residual fatigue test, the forward engine mount failed prior to reaching the threshold/interval for the detailed inspections of the forward engine mounts specified in the airworthiness limitations. This AD requires repetitive detailed inspections of the right and left forward engine mounts, and corrective action if necessary. These inspections are required by AD 2015-05-02. This AD reduces the compliance times for those inspections. We are issuing this AD to detect and correct fatigue cracking in the forward engine mounts. Such cracking could result in reduced structural integrity of the airplane and could lead to in-flight loss of an engine, possibly resulting in reduced controllability of the airplane.

DATES: This AD is effective June 6, 2016.

ADDRESSES: For service information identified in this final rule, contact Airbus, Airworthiness Office—EIAS, 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.

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-

6539; 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 AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A318-111 and -112 airplanes; Model A319-111, -112, -113, -114, and -115 airplanes; Model A320-211, -212, and -214 airplanes; and Model A321-111, -112, -211, -212, and -213 airplanes. The NPRM published in the **Federal Register** on November 30, 2015 (80 FR 74723) (“the NPRM”).

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0038, dated March 4, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus Model A318-111 and -112 airplanes; Model A319-111, -112, -113, -114, and -115 airplanes; Model A320-211, -212, and -214 airplanes; and Model A321-111, -112, -211, -212, and -213 airplanes. The MCAI states:

During a A320 Extended Service Goal (ESG) residual fatigue test, in which new loads were used, taking into account the results of the 2006 fleet survey, the CFM56-5A/5B forward engine mount experienced a failure before reaching the threshold/interval for the detailed inspection of that forward engine mount, as identified in Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS) Part 2 (hereafter referred to in this [EASA] AD as ‘the ALS’) task 712111-01. In case of total loss of the primary load path, the current maintenance requirements do not ensure the design integrity of the remaining structure.

This condition, if not corrected, could lead to in-flight loss of an engine, possibly resulting in reduced control of the aeroplane and injury to persons on the ground.

For the reasons described above, this [EASA] AD requires implementation of a reduced threshold and interval for the detailed inspections (DET) of the forward engine mount on both right hand (RH) and left hand (LH) sides, as specified in the ALS, task 712111-01.

Once further investigations and test are completed, the threshold and interval of the ALS task 712111-01 will likely be modified accordingly.

Required actions include repair of discrepancies (cracks) found during the inspection. 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-2015-6539.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA’s response.

Request To Clarify That This Final Rule Was Not Prompted by Widespread Fatigue Damage (WFD)

Airbus requested that all references to WFD be removed from the NPRM. Airbus stated that the root cause of the unsafe condition was not associated with WFD. The unsafe condition was revealed during a residual fatigue test of the CFM56-5A/5B forward engine mount. The forward engine mount failed prior to reaching the threshold/interval for the detailed inspections specified in the Airbus A318/A319/A320/A321 Airworthiness Limitations Section Part 2—Damage-Tolerant Airworthiness Limitation Items.

Based on the information provided by the commenter we agree to remove all references to WFD from the preamble and regulatory text and include an explanation that this final rule was prompted by the results of an evaluation by the DAH.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 940 airplanes of U.S. registry.

We also estimate that it will take about 1 work-hour 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 on U.S. operators to be \$79,900, or \$85 per product.

We have received no definitive data that will enable us to provide cost estimates for the on-condition parts cost specified in 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 that 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);
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.

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 airworthiness directive (AD):

2016-09-06 Airbus: Amendment 39-18504. Docket No. FAA-2015-6539; Directorate Identifier 2015-NM-036-AD.

(a) Effective Date

This AD is effective June 6, 2016.

(b) Affected AD

This AD affects AD 2015-05-02, Amendment 39-18112 (80 FR 15152, March 23, 2015) ("AD 2015-05-02").

(c) Applicability

This AD applies to all Airbus airplanes, certificated in any category, identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD.

- (1) Model A318-111 and -112 airplanes.
- (2) Model A319-111, -112, -113, -114, and -115 airplanes.
- (3) Model A320-211, -212, and -214 airplanes.
- (4) Model A321-111, -112, -211, -212, and -213 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 05, Periodic Inspections.

(e) Reason

This AD was prompted by the results of an evaluation by the design approval holder. During a residual fatigue test the forward engine mount failed prior to reaching the threshold/interval for the detailed inspections of the forward engine mounts specified in the airworthiness limitations. We are issuing this AD to detect and correct fatigue cracking in the forward engine mounts. Such cracking could result in reduced structural integrity of the airplane and could lead to in-flight loss of an engine, possibly resulting in reduced controllability of the airplane.

(f) Compliance

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

(g) Repetitive Inspections

At the latest of the times specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD: Do a detailed inspection of the left and right forward engine mounts for discrepancies (cracking), using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA. Repeat the inspection thereafter at intervals not to exceed 800 flight cycles.

Note 1 to paragraphs (g) and (h) of this AD: Guidance for the inspection and engine mount replacement can be found in Task 712111-210-040 of the Airbus A318/A319/A320/A321 Maintenance Manual.

(1) Within 800 flight cycles since the first flight of the airplane.

(2) Within 800 flight cycles since the most recent detailed inspection specified in Airbus Airworthiness Limitation Tasks 712111-01-1, 712111-01-2, 712111-01-3, or 712111-01-4, "Detailed Inspection of Forward Engine Mount Installation," as applicable.

(3) Within 800 flight cycles after the effective date of this AD.

(h) Corrective Action

If any discrepancy (cracking) is found during any inspection required by paragraph (g) of this AD: Before further flight, replace the affected forward engine mount with a serviceable part, using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

(i) No Terminating Action

Replacement of a forward engine mount does not constitute terminating action for the repetitive inspections required by paragraph (g) of this AD.

(j) Termination of Certain Tasks Required by AD 2015-05-02

Accomplishment of the inspections required by paragraph (g) of this AD terminates the initial and repetitive inspections specified in paragraph (n)(2) of AD 2015-05-02, for Airbus Airworthiness Limitation Tasks 712111-01-1, 712111-01-2, 712111-01-3, and 712111-01-4, "Detailed Inspection of Forward Engine Mount Installation."

(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: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; 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:* 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.

(l) Special Flight Permits

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0038, dated March 4, 2015, 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-2015-6539.

(2) For service information identified in this AD, contact Airbus, Airworthiness Office—EIAS, 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 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.

(n) Material Incorporated by Reference

None.

Issued in Renton, Washington, on April 20, 2016.

John P. Piccola, Jr.,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016-10117 Filed 4-29-16; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-2458; Directorate Identifier 2014-NM-122-AD; Amendment 39-18468; AD 2016-07-23]

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 all Airbus Model A318, A319, A320, and A321 series airplanes. This AD was prompted by reports of in-flight loss of fixed and hinged main landing gear (MLG) fairings, and reports of post-modification MLG fixed fairing assemblies that have wear and corrosion. This AD requires, for certain airplanes, repetitive replacements of the fixed fairing upper and lower attachment studs of both left-hand (LH) and the right-hand (RH) MLG; and repetitive inspections for corrosion, wear, fatigue cracking, and loose studs of each forward stud assembly of the fixed fairing door upper and lower forward attachment of both LH and RH MLG; and replacement if necessary. This AD also provides an optional terminating modification for the repetitive replacements of the fixed fairing upper and lower attachment studs. We are issuing this AD to prevent in-flight detachment of an MLG fixed fairing and consequent damage to the airplane.

DATES: This AD becomes effective June 6, 2016.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of June 6, 2016.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-2458; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this final rule, contact Airbus, Airworthiness Office—EIAS, 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. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-2458.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA,

1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A318, A319, A320, and A321 series airplanes. The NPRM published in the **Federal Register** on July 8, 2015 (80 FR 38992) ("the NPRM"). The NPRM was prompted by reports of in-flight loss of fixed and hinged MLG fairings, and reports of post-modification MLG fixed fairing assemblies that have wear and corrosion. The NPRM proposed to require, for certain airplanes, repetitive replacements of the fixed fairing upper and lower attachment studs of both the LH and RH MLG; and repetitive inspections for corrosion, wear, fatigue cracking, and loose studs of each forward stud assembly of the fixed fairing door upper and lower forward attachment of both LH and RH MLG; and replacement if necessary. The NPRM also proposed an optional terminating modification for the repetitive replacements of the fixed fairing upper and lower attachment studs. We are issuing this AD to prevent in-flight detachment of an MLG fixed fairing and consequent damage to the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0001R1, dated January 15, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus Model A318, A319, A320, and A321 series airplanes. The MCAI states:

Several occurrences of in-flight loss of main landing gear (MLG) fixed and hinged fairings were reported. The majority of reported events occurred following scheduled maintenance activities. One result of the investigation was that a discrepancy between the drawing and the maintenance manuals was discovered. The maintenance documents were corrected to prevent mis-rigging of the MLG fixed and hinged fairings, which could induce fatigue cracking.

Airbus issued Service Bulletin (SB) A320-52-1083, providing instructions for a one-time inspection of the MLG fixed fairing composite insert and the surrounding area, replacement of the adjustment studs at the lower forward position and adjustment to the new clearance tolerances. That SB was replaced by Airbus SB A320-52-1100 (mod 27716) introducing a re-designed location stud, rod end and location plate at the forward upper and lower leg fixed-fairing