DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0589; Directorate Identifier 2014-NM-069-AD; Amendment 39-18148; AD 2015-09-03]

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 certain Airbus Model A318-111 and -112 airplanes and Model A319, A320, and A321 series airplanes. This AD was prompted by reports of cracks on the forward corner fittings of engine pylon aft secondary structures. This AD requires repetitive inspections of certain forward corner fittings of the pylon aft secondary structures, and corrective actions if necessary. This AD also provides optional terminating action for the repetitive inspections. We are issuing this AD to detect and correct detachment of the lower fairing attachment and/or loss of the aft fixed fairing with the movable fairing from the airplane in flight, which could result in damage to the airplane.

DATES: This AD becomes effective June 4, 2015.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of June 4, 2015.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0589 or in person at the 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.

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 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-2014-0589.

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 certain Airbus Model A318-111 and -112 airplanes and Model A319, A320, and A321 series airplanes. The NPRM published in the Federal Register on September 3, 2014 (79 FR 52267). The NPRM was prompted by reports of cracks on the forward corner fittings of engine pylon aft secondary structures. The NPRM proposed to require repetitive inspections of certain forward corner fittings of the pylon aft secondary structures, and corrective actions if necessary. The NPRM also proposed to provide optional terminating action for the repetitive inspections. We are issuing this AD to detect and correct detachment of the lower fairing attachment and/or loss of the aft fixed fairing with the movable fairing from the airplane in flight, which could result in 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 2014-0064, dated March 14, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition. The MCAI states:

Several operators of A320 family aeroplanes have reported finding cracks on the forward corner fittings of engine pylon aft secondary structures, on the lateral face (lateral panel side). In some cases, these cracks had propagated onto the forward face (Rib 11 side). Investigation results have highlighted that these cracks are initiated by stress corrosion.

This condition, if not detected and corrected, could lead to loss (i.e. detachment from the aeroplane) of the lower fairing attachment at Rib 10, and/or loss of the aft fixed fairing with the movable fairing, possibly resulting in *** [damage to the airplane].

For the reasons described above, this [EASA] AD requires repetitive detailed inspections (DI) of the right hand (RH) Part Number (P/N) D54530014201 and left hand (LH) P/N D54530014200 corner fittings of engine pylon aft secondary structures (pre-mod 38067 or pre-Airbus Service Bulletin (SB) A320-54-1019) to detect cracks or deformation in the splicing area with corner fitting between Ribs 11-12 and, depending on findings, replacement of the corner fittings.

This [EASA] AD also recognizes that replacement of the corner fittings with improved parts (as per Airbus SB A320-54-1019) constitutes a terminating action for the repetitive DI required by this [EASA] AD.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0589-0003.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 52267, September 3, 2014) and the FAA's response to each comment.
Requests to Reference Revised Service Bulletins


We agree with the commenters' requests to reference revised service bulletins. Airbus Service Bulletin A320-54-1019, Revision 02, dated April 15, 2014, improves the test procedures, and Airbus Service Bulletin A320-54-1022, Revision 03, dated April 15, 2014, specifies that certain actions in the Accomplishment Instructions are required for compliance (RC). Both service bulletins state that no additional work is required for airplanes modified by any previous issue. We have revised paragraphs (g) and (h) of this AD to reference Airbus Service Bulletin A320-54-1022, Revision 03, dated April 15, 2014, and paragraphs (h)(2) and (i) of this AD to reference Airbus Service Bulletin A320-54-1019, Revision 02, dated April 15, 2014, as the appropriate sources of service information for accomplishing the required actions.

We have redesignated paragraph (l) of the NPRM (79 FR 52267, September 3, 2014) as paragraph (l)(1) of this AD and revised it to give credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-54-1022, Revision 02, dated July 12, 2013. We have added new paragraph (l)(2) to this AD to give credit for actions required by paragraph (i) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-54-1019, Revision 01, dated April 10, 2008.

Airbus Service Bulletin A320-54-1022, Revision 03, dated April 15, 2014, steps that are identified as RC must be done to comply with the AD. However, steps that are not identified as RC are recommended. We have added an explanation of RC steps in the preamble of this AD. We have also added new paragraph (m)(3) to this AD to specify compliance with RC steps.

Conclusion

We reviewed the relevant data, considered the comments 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 (79 FR 52267, September 3, 2014) for correcting the unsafe condition; and
• Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 52267, September 3, 2014).

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

Explanation of "RC" Steps in Service Information

The FAA worked in conjunction with industry, under the Airworthiness Directives Implementation Aviation Rulemaking Committee (ARC), to enhance the AD system. One enhancement was a new process for annotating which procedures and tests in the service information are required for compliance with an AD. Differentiating these procedures and tests from other tasks in the service information is expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The procedures and tests identified as RC (required for compliance) in any service information have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.
 Procedures and tests that are identified as RC in any service information must be done to comply with the AD. However, procedures and tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an alternative method of compliance (AMOC), provided the procedures and tests identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to procedures or tests identified as RC will require approval of an AMOC.

Related Service Information Under 1 CFR Part 51

We reviewed Airbus Service Bulletin A320-54-1022, Revision 03, dated April 15, 2014. This service information describes procedures for inspections of forward corner fittings of the engine pylon aft secondary structures, and corrective actions.

We also reviewed Airbus Service Bulletin A320-54-1019, Revision 02, dated April 15, 2014. This service information describes procedures for replacement of the corner fittings on the engine pylons.

This service information is reasonably available at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0589. Or see ADDRESSES for other ways to access this service information.

Costs of Compliance

We estimate that this AD affects 851 airplanes of U.S. registry.

We also estimate that it would take about 30 work-hours 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 $2,170,050, or $2,550 per product.

In addition, we estimate the optional terminating modification would take about 60 work-hours and require parts costing about $932 per product, for a cost of $6,032 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for This Rulemaking


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.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0589; 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 Operations office (telephone 800-647-5527) is in the ADDRESSES section.

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):

(a) Effective Date

This AD becomes effective June 4, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, except for airplanes on which Airbus Modification 33844 or Modification 33847, as applicable, has been embodied in production.

(1) Airbus Model A318-111 and -112 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Reason

This AD was prompted by reports of cracks on the forward corner fittings of engine pylon aft secondary structures. We are issuing this AD to detect and correct detachment of the lower fairing attachment and/or loss of the aft fixed fairing with the movable fairing from the airplane in flight, which could result in damage to 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 for cracking of forward corner fittings having part number (P/N) D54530014201 (right-hand (RH)) and P/N D54530014200 (left-hand (LH)) of the pylon aft secondary structures, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-54-1022, Revision 03, dated April 15, 2014, except as provided by paragraph (j) of this AD. Repeat the inspection thereafter at intervals not to exceed 15,000 flight cycles or 22,500 flight hours, whichever
occurs first. Accomplishment of the actions specified in paragraph (i) of this AD terminates the actions required by this paragraph.

(1) Within 15,000 flight cycles or 22,500 flight hours, whichever occurs first since first flight of the airplane.

(2) Within 5,000 flight cycles or 7,500 flight hours after the effective date of this AD, without exceeding 40,750 flight cycles or 60,750 flight hours, whichever occurs first since first flight of the airplane.

(3) Within 750 flight cycles or 750 flight hours, whichever occurs first after the effective date of this AD.

(h) Related Investigative and Corrective Actions

If any crack is found on the corner fittings of a pylon during any inspection required by paragraph (g) of this AD: Before further flight, do a detailed inspection for cracking of the lower and medium spars, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-54-1022, Revision 03, dated April 15, 2014.

(1) 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 the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

(2) If no damage is found: Within 5,000 flight cycles or 7,500 flight hours, whichever occurs first after the detailed inspection specified in the introductory text to paragraph (h) of this AD, modify the airplane, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-54-1019, Revision 02, dated April 15, 2014.

(i) Optional Terminating Action

Modification of an airplane by installation of corner fittings having P/N D0041092120000 (RH) and P/N D0041092120100 (LH) on both pylons, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-54-1019, Revision 02, dated April 15, 2014, constitutes terminating action for the repetitive inspections required by paragraph (g) of this AD.

(j) Parts Installation Limitation

Airplanes on which Airbus Modification 38067 (installation of new corner fittings) has been embodied in production, and airplanes already modified in service as described in Airbus Service Bulletin A320-54-1019, are not affected by the requirements of paragraph (g) of this AD, provided that no corner fittings having P/N D54530014201 (RH) or P/N D54530014200 (LH) have been installed since first flight of the airplane, or since modification, as applicable.

(k) Parts Installation Prohibition

(1) As of the effective date of this AD, for airplanes on which Airbus Modification 38067 has been embodied in production on both pylons, and for airplanes previously modified in service as described in Airbus Service Bulletin A320-54-1019: Do not install any corner fittings having P/N D54530014201 (RH) or P/N D54530014200 (LH).

(2) After modification as required by paragraph (h) of this AD, or after optional modification as specified in paragraph (i) of this AD, as applicable: Do not install any corner fittings having P/N D54530014201 (RH) or P/N D54530014200 (LH).
(l) Credit for Previous Actions

(1) This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using a service bulletin identified in paragraph (l)(1)(i), (l)(1)(ii), or (l)(1)(iii) of this AD; this service information is not incorporated by reference in this AD.


(2) This paragraph provides credit for actions required by paragraphs (h)(2) and (i) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-54-1019, Revision 01, dated April 10, 2008, which is not incorporated by reference in this AD.

(m) 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.

(3) Required for Compliance: Except as required by paragraph (i) of this AD: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(n) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information EASA Airworthiness Directive 2014-0064, dated March 14, 2014, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0589-0003.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (o)(3) and (o)(4) of this AD.

(o) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
   (i) Airbus Service Bulletin A320-54-1019, Revision 02, dated April 15, 2014.

(3) 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.

(4) 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.

(5) You may view this service information that is incorporated by reference 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.

Issued in Renton, Washington, on April 17, 2015.
Victor Wicklund,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.