DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A318, A319, and A320 series airplanes. This proposed AD was prompted by a cracked upper cardan in the main landing gear (MLG). This proposed AD would require revising the maintenance or inspection program, as applicable, to reduce the life limits for the MLG upper cardan for certain installations. We are proposing this AD to prevent failure of the upper cardan in the MLG, which could result in MLG collapse and subsequent damage to the airplane and injury to occupants.

DATES: We must receive comments on this proposed AD by April 20, 2015.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- 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, 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. Because this service information is incorporated by reference in AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015), it is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA–2013–0692.

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–2015–0244; 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:

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–2015–0244; Directorate Identifier 2014–NM–127–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

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014–0141, dated June 4, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus Model Airbus A318, A319, and A320 series airplanes. The MCAI states:

During an A320–200 77T main landing gear (MLG) fatigue test by Messier Bugatti-Dowty (MBD), an upper cardan was found with a crack, emanating from the grease hole/main lug intersection. The affected upper cardan, Part Number (P/N) 201163620, is listed in the applicable Airworthiness Limitation Items Section (ALS) Part 1 with a demonstrated fatigue life of 60,000 landings. This condition, if not corrected, could lead to MLG upper cardan failure, possibly resulting in MLG collapse and subsequent damage to the aeroplane and injury to occupants.

Prompted by these findings and further to analysis, it has been decided to reduce the life limit for certain installations of the P/N 201163620 MLG upper cardan.

For the reasons described above, this AD requires implementation of the new life limits, as applicable, and replacement of any affected MLG upper cardan units that have already exceeded the reduced limit.

The reduced life limits for the affected MLG upper cardan are expected to be incorporated in a next revision of the Airbus A318/A319/A320/A321 ALS Part 1.


Related AD

AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015), applicable to all Airbus Model A318, A319, A320, and A321 series airplanes, requires revising the maintenance or inspection program, as applicable, to incorporate certain Airworthiness Limitation Items. Paragraph (n)(1) of AD 2014–23–15 requires incorporating Part 1—Safe Life Airworthiness Limitation Items, of the Airbus A318/A319/A320/A321 ALS, Revision 02, dated May 13, 2011. AD 2014–23–15 corresponds to EASA AD 2013–0147, dated June 17, 2013. This proposed AD would not supersede AD 2014–23–15, but would require a reduced life limit for MLG upper cardans having part number (P/N) 201163620 and installed in certain airplane configurations. Accomplishing the requirement specified in paragraph (g) of this proposed AD terminates the life limit required by paragraph (n)(1) of AD 2014–23–15 for P/N 201163620, which is installed in certain airplane configurations identified in this proposed AD.

Related Service Information Under 1 CFR Part 51

Airbus has issued A318/A319/A320/A321 ALS Part 1—Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011. This document provides revised instructions.
and life limits for airworthiness limitations items. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI. This service information is incorporated by reference in AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015). It is reasonably available; see ADDRESSES for ways to access this service information.

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 these same type designs.

Differences Between This Proposed AD and the MCAI or Service Information

EASA AD 2014–0141, dated June 4, 2014, requires replacement of each MLG upper cardan having P/N 201163620 with a serviceable part within 3 months after the effective date of that EASA AD, or prior to exceeding new life limits, whichever occurs later. Instead of requiring the part replacement, this proposed AD would require only a revision to the maintenance or inspection program, as applicable, to incorporate the new reduced life limits. The affected airplanes operated in the U.S. fleet are below the reduced life limit thresholds and will not reach those thresholds within 3 months after the effective date of this proposed AD. Therefore this proposed AD would require revising the maintenance or inspection program, as applicable, within 30 days after the effective date of this proposed AD. Requiring a revision to the maintenance or inspection program, as applicable, rather than requiring individual repetitive actions (such as repetitively replacing a part prior to a life limit), requires operators to record AD compliance only at the time the revision is made. Repetitive actions specified in the airworthiness limitations must be complied with in accordance with section 91.403(c) of the Federal Aviation Regulations (14 CFR 91.403(c)).

Costs of Compliance

We estimate that this proposed AD affects 851 airplanes of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour. Required parts would cost about $0 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be $72,335, or $85 per product.

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 adding the following new airworthiness directive (AD):


(a) Comments Due Date

We must receive comments by April 20, 2015.

(b) Affected ADs

Paragraph (g) of this AD terminates the life limit specified in paragraph (n)(1) of AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015), for airplanes having a main landing gear (MLG) upper cardan part number (P/N) 201163620.

(c) Applicability

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


(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by a cracked upper cardan in the MLG. We are issuing this AD to prevent failure of the upper cardan in the MLG, which could result in MLG collapse and subsequent damage to the airplane and injury to occupants.

(f) Compliance

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

(g) Revision to Maintenance or Inspection Program

For airplanes having a MLG upper cardan part number (P/N) 201163620: Within 30 days after the effective date of this AD revise the maintenance or inspection program, as applicable, to incorporate the applicable life limits for the MLG upper cardan P/N 201163620 specified in paragraphs (g)(1) through (g)(5) of this AD and the life limit clarifications specified in paragraph (h) of this AD. The initial compliance time for replacing the MLG upper cardan is prior to the applicable life limit specified in
paragraphs (g)(1) through (g)(5) of this AD, or within 30 days after the effective date of this AD, whichever occurs later. Accomplishing this revision terminates the life limit required by paragraph (n)(1) of AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015), for the MLG upper cardan specified in Airbus A318/A319/A320/A321 airplanes, post-Airbus Modification 26644, having weight variant (WV) WV011, WV012, WV016, or WV018: The life limit is 50,590 total flight cycles.

(4) For Airbus Model A320 series airplanes post-Airbus Modification 26644, having WV001, WV011, WV012, or WV016: The life limit is 56,480 total flight cycles.

(5) For Airbus Model A320 series airplanes post-Airbus Modification 26644, having WV015 or WV017: The life limit is 42,140 total flight cycles.

(b) Additional Life Limit Clarifications

(1) The life limits specified in paragraphs (g)(1) through (g)(5) of this AD are total flight cycles accumulated by the MLG since first installation on an airplane.

(2) The life limits specified in paragraphs (g)(1) through (g)(5) of this AD are applicable only for the airplane model, configuration and WV specified in those paragraphs.

(3) If a part is transferred between airplanes having a different life limit for the MLG unit, adjust the life limit using the method specified in Airbus A318/A319/A320/A321 ALS Part 1—Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011, which is incorporated by reference in AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015).

(4) An MLG upper cardan having P/N 201163620 may be installed on an airplane, provided the life has not exceeded the applicable life limit specified in paragraphs (g)(1) through (g)(5) of this AD. As of the effective date of this AD, a MLG upper cardan having P/N 201163620 may be installed on an airplane, provided the life has not exceeded the applicable life limit specified in paragraphs (g)(1) through (g)(5) of this AD. This revision terminates the life limit required by paragraph (n)(1) of AD 2014–23–15, Amendment 39–18031 (80 FR 3871, January 26, 2015).

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency Airworthiness Directive 2014–0141, dated June 4, 2014, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for Docket No. FAA–2015–0244. If approved by the DOA, the approval must include the AMOC-REQUEST@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 European Aviation Safety Agency (EASA); and Airbus’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.