[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9187; Directorate Identifier 2016-NM-032-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Defense and Space S.A. (Formerly Known as Construcciones Aeronauticas, S.A.) 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 Defense and Space S.A. Model C-212 airplanes. This proposed AD was prompted by multiple reports of damaged and cracked rudder torque tube shafts. This proposed AD would require repetitive general visual and high frequency eddy current (HFEC) inspections of the inner rudder torque tube shaft for cracks, deformation, and damage; repetitive detailed inspections, and HFEC inspections if necessary, of the inner and outer rudder torque tube shaft for cracks, deformation, and damage; and corrective actions if necessary. This proposed AD also provides a modification which terminates the repetitive inspections. We are proposing this AD to detect and correct damaged and cracked rudder torque tube shafts, which could lead to structural failure of the affected rudder torque tube shaft and possible reduced control 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, using the procedures found in 14 CFR 11.43 and 11.45, 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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus Defense and Space, Services / Engineering Support, Avenida de Aragón 404, 28022 Madrid, Spain; telephone: +34 91 585 55 84; fax: +34 91 585 31 27; email: MTA.TechnicalService@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-2016-9187; 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: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1112; 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-2016-9187; Directorate Identifier 2016-NM-032-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 2016-0052, dated March 14,

2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus Defense and Space S.A. Model C-212 airplanes. The MCAI states:

> Occurrences were reported of finding a damaged and cracked rudder torque tube shaft, Part Number (P/N) 212-46237-01. Subsequent investigation determined that this damage occurred after parking of the aeroplane during a heavy wind gust, without having set the flight control surfaces in locked position.
>
> This condition, if not detected and corrected, could lead to structural failure of the affected rudder torque tube shaft, possibly resulting in reduced control of the aeroplane.
>
> To address this potential unsafe condition, EADS-CASA issued Alert Operators Transmission (AOT) AOT-C212-27-0001 to provide inspection instructions, and Service Bulletin (SB) SB-212-27-0058 providing modification instructions.
>
> For the reasons described above, this [EASA] AD requires repetitive inspections of the affected rudder torque tube shaft, and introduces an optional modification [replacement], which constitutes terminating action for those repetitive inspections.

This proposed AD would require repetitive general visual and HFEC inspections of the inner rudder torque tube shaft for cracks, deformation, and damage; repetitive detailed inspections, and HFEC inspections if necessary, of the inner and outer rudder torque tube shaft for cracks, deformation, and damage; a general visual inspection to verify rudder alignment if necessary; and corrective actions if necessary. Repetitive inspections are done depending on conditions (wind conditions, gust lock engagement, and rudder deviation) identified in Airbus Defense & Space Alert Operators Transmission AOT-C212-27-0001, dated July 15, 2015. Damage may include bulging,

dents, peeled paint, or visible corrosion. Corrective actions include replacement of the rudder torque tube shaft with a new rudder torque tube shaft and repair. The optional terminating action includes replacement of the rudder torque tube shaft with an improved rudder torque tube shaft. 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-2016-9187.

Related Service Information under 1 CFR part 51

We reviewed the following EADS CASA service information.

- EADS CASA Service Bulletin SB-212-27-0058, dated April 25, 2014. This service information describes procedures for replacement of the rudder torque tube shaft with an improved rudder torque tube shaft.

- Airbus Defense & Space Alert Operators Transmission AOT-C212-27-0001, dated July 15, 2015. This service information describes procedures for general visual and HFEC inspections of the inner rudder torque tube shaft for cracks, deformation, and damage; detailed inspections, and HFEC inspections if necessary, of the inner and outer rudder torque tube shaft for cracks, deformation, and damage; a general visual inspection to verify rudder alignment; and corrective actions if necessary.

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.

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.

Costs of Compliance

We estimate that this proposed AD affects 49 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
Inspections	Up to 33 work-hours X $85 per hour = $2,805 per inspection cycle	$0	Up to $2,805 per inspection cycle	Up to $137,445 per inspection cycle

Estimated costs for optional actions

Action	Labor cost	Parts cost	Cost per product
Optional modification	Up to 48 work-hours X $85 per hour = $4,080	$48,729	Up to $52,359

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions and parts cost 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 adding the following new airworthiness directive (AD):

Airbus Defense and Space S.A. (Formerly Known as Construcciones Aeronauticas, S.A.): Docket No. FAA-2016-9187; Directorate Identifier 2016-NM-032-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

None.

(c) Applicability

This AD applies to Airbus Defense and Space S.A (formerly known as Construcciones Aeronauticas, S.A.) Model C-212-CB, C-212-CC, C-212-CD, C-212-CE,

C-212-CF, C-212-DF, and C-212-DE airplanes, certificated in any category, all manufacturer serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Reason

This AD was prompted by multiple reports of damaged and cracked rudder torque tube shafts. We are issuing this AD to detect and correct damaged and cracked rudder torque tube shafts, which could lead to structural failure of the affected rudder torque tube shaft and possible reduced control of the airplane.

(f) Compliance

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

(g) Repetitive Inspections

For airplanes equipped with a rudder torque tube shaft having part number (P/N) 212-46237-01: Do the actions specified in paragraphs (g)(1) and (g)(2) of this AD.

(1) Within 30 days after the effective date of this AD; do general visual, detailed, and high frequency eddy current (HFEC) inspections of the inner and outer surfaces of the rudder torque tube shaft, as applicable, for cracks, deformation, and damage, in accordance with the instructions of Airbus Defense & Space Alert Operators Transmission AOT-C212-27-0001, dated July 15, 2015.

(2) Thereafter, before further flight after the conditions identified in paragraph 3.1.1.1 of Airbus Defense & Space Alert Operators Transmission AOT-C212-27-0001, dated July 15, 2015, do the applicable inspections identified for each condition.

(h) Corrective Actions

If, during any inspection required by paragraph (g) of this AD, any crack, deformation, or damage is found, before further flight do all applicable corrective actions, in accordance with Airbus Defense & Space Alert Operators Transmission AOT-C212-27-0001, dated July 15, 2015. Where Airbus Defense & Space Alert Operators Transmission AOT-C212-27-0001, dated July 15, 2015, specifies to contact Airbus for corrective action: Before further flight, accomplish corrective actions in accordance with paragraph (k)(2) of this AD.

(i) Optional Modification

Modification of an airplane by replacing the rudder torque tube shaft P/N 212-46237-01 with an improved part, in accordance with the Accomplishment Instructions of EADS-CASA Service Bulletin SB-212-27-0058, dated April 25, 2014, constitutes terminating action for the inspections required by paragraphs (g)(1) and (g)(2) of this AD for the modified airplane.

(j) Credit for Previous Actions

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 Airbus Military All Operator Letter (AOL) AOL-212-037, Revision 01, dated April 11, 2014.

(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: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1112; 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.

(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 EADS CASA's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA 2016-0052, dated March 14, 2016, 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-2016-9187.

(2) For service information identified in this AD, contact Airbus Defense and Space, Services / Engineering Support, Avenida de Aragón 404, 28022 Madrid, Spain; telephone: +34 91 585 55 84; fax: +34 91 585 31 27; email: MTA.TechnicalService@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.

Issued in Renton, Washington, on September 29, 2016.

Dionne Palermo,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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