DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0584; Directorate Identifier 2014-NM-092-AD; Amendment 39-18158; AD 2015-10-03]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2014-09-05, for certain Airbus Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes. AD 2014-09-05 required repetitive inspections of certain sidestay upper cardan pins of the main landing gear (MLG) and associated nuts and retainer assemblies, and pin replacement if necessary. This AD was prompted by a determination that a previously optional measurement is necessary to address the identified unsafe condition. This new AD continues to require a detailed inspection for visible chrome of each affected MLG sidestay upper cardan pin, associated nuts, and retainer assembly, and pin replacement if needed, and adds new requirements for measuring cardan pin clearance dimensions (gap check), doing corrective actions, and reporting all findings. We are issuing this AD to detect and correct migration of the sidestay upper cardan pin, which could result in disconnection of the sidestay upper arm from the airplane structure, and could result in a landing gear collapse and consequent damage to the airplane and injury to occupants.

DATES: This AD becomes effective July 6, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 14, 2014 (79 FR 23909, April 29, 2014).

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0584; 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 SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind

SUPPLEMENTARY INFORMATION:

Discussion


The European Aviation Safety Agency, which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0066, corrected March 20, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition on certain Airbus Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes. The MCAI states:

An A330 aeroplane equipped with Basic (main landing gear) MLG was rolling out after landing when it experienced a nose wheel steering fault (unrelated to the safety subject addressed by this [EASA] AD), which resulted in the crew stopping the aeroplane on the taxiway after vacating the runway.

The subsequent investigation revealed that the right-hand MLG sidestay upper cardan pin had migrated out of position. The sidestay upper cardan nut and retainer were found in the landing gear bay detached from the upper cardan pin. The nut and the retainer were still bolted together.

This condition, if not detected and corrected, could lead to a complete migration of the sidestay upper cardan pin and a disconnection of the sidestay upper arm from the aeroplane structure, possibly resulting in MLG collapse with consequent damage to the aeroplane and injury to occupants.

To address this potential condition, Airbus published Alert Operators Transmission (AOT) A32L003-14, providing inspection instructions.

For the reasons described above, this [EASA] AD requires accomplishment of repetitive [detailed inspections for visible chrome] of the MLG upper cardan pin, nut and retainer [and pin replacement if necessary]. This [EASA] AD also requires accomplishment of a gap check between wing rear spar fitting lugs and the bush flanges [and corrective actions if necessary. Corrective actions include repair or replacement of the cardan pin assembly].

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0584-0003.
Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (79 FR 50863, August 26, 2014) and the FAA's response to each comment.

Request To Match the Applicability of Terminating Action to Inspections

U.S. Airways requested that we revise the affected airplanes of paragraph (h) of the NPRM (79 FR 50863, August 26, 2014) to match those of paragraph (g) of the NPRM. U.S. Airways stated that paragraph (g) of the NPRM limits the repetitive inspections to MLG that have exceeded 8 years since first overhaul but not yet had a second overhaul; whereas paragraph (h) of the NPRM provides a new terminating action to the repetitive inspections, but does not limit the applicability to MLG that have exceeded 8 years since first overhaul but not yet had a second overhaul.

We agree to revise the affected airplanes of paragraph (h) of this AD because the terminating action provisions of paragraph (h) of the NPRM (79 FR 50863, August 26, 2014) was intended to apply to the same subset of affected airplanes identified in paragraph (g)(1) of the NPRM. We have changed the language in paragraph (h) of this AD by limiting the affected airplanes to those identified in paragraph (g)(1) of this AD.

Request To Change Compliance Time of Sending Results of Gap Check

U.S. Airways requested that we revise the compliance time for sending the results of the inspection and gap check to Airbus from "before further flight" to "within 30 days." U.S. Airways stated that paragraph (h)(2)(i) of the NPRM (79 FR 50863, August 26, 2014) states to send inspection findings to Airbus "before further flight," if the gap check result measures between 0.6 mm and 1.5 mm, and paragraph (h)(2)(ii) states to repair within 30 days. U.S. Airways stated that mechanics who inspect the cardan pin typically do not send data directly to Airbus and that since the repair is not required for 30 days after the inspection, communicating the inspection findings should not restrict aircraft flight.

We agree to revise the compliance time because the proposed compliance time for sending the results of the inspection and gap check does not affect the compliance time for accomplishment of the repair. We have changed the compliance time in paragraph (h)(2)(i) of this AD from before further flight, to 30 days. This difference has been coordinated with EASA.

Request To Allow Replacement of Cardan Pin Assembly as Terminating Action

U.S. Airways requested that we allow the replacement of the cardan pin assembly to be considered as a terminating action. Paragraph (h)(1) of the NPRM (79 FR 50863, August 26, 2014) would mandate the replacement of the cardan pin if the gap is found to be greater than 1.5mm. However paragraph (h)(2) of the NPRM would require an approved repair for smaller gaps. US Airways suggested that the AD also allow the replacement of the cardan pin assembly before further flight as an alternative to the actions specified in paragraphs (h)(2)(i) and (h)(2)(ii) of the NPRM.

We agree with the request to allow replacement of the cardan pin assembly as an alternative to small repairs because replacing the cardan pin assembly is terminating action regardless of the size of the gap. We have revised paragraph (h) of this AD to provide for replacement of the cardan pin assembly as an option to doing a repair.

Related Service Information Under 1 CFR Part 51

The manufacturer has issued Airbus AOT A32L003-14, dated March 10, 2014. The service information describes procedures for inspecting sidestay upper cardan pins of the MLG and
associated nuts and retainer assemblies. 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 AD.

Conclusion

We reviewed the available data, including 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 changes:
• Are consistent with the intent that was proposed in the NPRM (79 FR 50863, August 26, 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 50863, August 26, 2014).

Costs of Compliance

We estimate that this AD affects 83 airplanes of U.S. registry.

The actions required by AD 2014-09-05, Amendment 39-17840 (79 FR 23909, April 29, 2014),
and retained in this AD take about 1 work-hour per product, at an average labor rate of $85 per work-
hour. Required parts cost $0 per product. Based on these figures, the estimated cost of the actions that
were required by AD 2014-09-05 is $85 per product.

We also estimate that it will take about 1 work-hour per product to comply with the new 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 $7,055, or $85 per product.

In addition, we estimate that any necessary follow-on actions will take about 4 work-hours and
require parts costing $7,530, for a cost of $7,870 per product. We have no way of determining the
number of aircraft that might need these actions.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor
shall a person be subject to penalty for failure to comply with a collection of information subject to
the requirements of the Paperwork Reduction Act unless that collection of information displays a
current valid OMB control number. The control number for the collection of information required by
this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of
Compliance section of this document and includes time for reviewing instructions, as well as
completing and reviewing the collection of information. Therefore, all reporting associated with this
AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the
burden should be directed to the FAA at 800 Independence Ave. SW., Washington, DC 20591,
ATTN: Information Collection Clearance Officer, AES-200.

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.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0584; 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 removing Airworthiness Directive (AD) 2014-09-05, Amendment 39-17840 (79 FR 23909, April 29, 2014), and adding the following new AD:

(a) Effective Date

This AD becomes effective July 6, 2015.

(b) Affected ADs

This AD replaces AD 2014-09-05, Amendment 39-17840 (79 FR 23909, April 29, 2014).

(c) Applicability

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

(1) Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers (MSNs), equipped with basic (201252 series) main landing gear (MLG), or growth (201490 series) MLG.

(2) Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes, all MSNs, equipped with basic (201252 series) MLG or growth (201490 series) MLG.

(d) Subject

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

(e) Reason

This AD was prompted by a report of a sidestay upper cardan pin of the MLG migrating out of position. We are issuing this AD to detect and correct migration of the sidestay upper cardan pin, which could result in disconnection of the sidestay upper arm from the airplane structure, and could result in a landing gear collapse and consequent damage to the airplane and injury to occupants.

(f) Compliance

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

(g) Retained Repetitive Detailed Inspections With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2014-09-05, Amendment 39-17840 (79 FR 23909, April 29, 2014), with no changes.

(1) For airplanes identified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD on which the affected MLG has exceeded 8 years since first overhaul, as of May 14, 2014 (the effective date of AD 2014-09-05, Amendment 39-17840 (79 FR 23909, April 29, 2014), except those MLG that have had a second overhaul: Within 30 days after May 14, 2014, accomplish a detailed inspection for visible chrome of each affected MLG sidestay upper cardan pin, and associated nut and retainer assembly, in
accordance with the instructions of Airbus Alert Operators Transmission (AOT) A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices).

(i) Airplanes equipped with any MLG sidestay upper cardan pin subassembly part number (P/N) 201267202 (on 201252 series MLG).

(ii) Airplanes equipped with any MLG sidestay upper cardan pin subassembly P/N 201483202 (on 201490 series MLG).

(2) If, during any inspection required by paragraph (g)(1) of this AD, no pin chrome is visible inboard of the wing rear spar fitting lug, repeat the detailed inspection for visible chrome specified in paragraph (g)(1) of this AD thereafter at intervals not to exceed 10 days.

(3) If, during any inspection required by paragraphs (g)(1) or (g)(2) of this AD, a pin chrome is visible inboard of the wing rear spar fitting lug, before further flight, replace the affected cardan pin assembly, in accordance with the instructions of Airbus AOT A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices). Replacement of the affected cardan pin assembly terminates the repetitive inspections required by paragraph (g)(2) of this AD.

Note 1 to paragraph (g) of this AD: MLG sidestay upper cardan pin subassembly P/N 201267202 (found in Airbus Illustrated Parts Catalogue (IPC) as item 32-11-18-01) includes the cardan pin P/N 201267600. MLG sidestay upper cardan pin subassembly P/N 201483202 (found in Airbus IPC as item 32-11-18-01) includes the cardan pin P/N 201483600.

(h) New Terminating Action–Gap Check

For airplanes identified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD on which the affected MLG has exceeded 8 years since first overhaul, as of May 14, 2014 (the effective date of AD 2014-09-05, Amendment 39-17840 (79 FR 23909, April 29, 2014), except those MLG that have had a second overhaul: Within 4 months after the effective date of this AD: Measure the cardan pin clearance dimensions (gap check) and do the applicable corrective action specified in paragraph (h)(1) or (h)(2) of this AD. Measuring the gap check and doing the applicable corrective action specified in paragraph (h)(1) or (h)(2) of this AD, as applicable, terminates the inspections required by paragraphs (g)(1) and (g)(2) of this AD for that sidestay upper cardan pin, nut, and retainer only. The measurement must be done in accordance with Airbus AOT A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices).

(1) If the total clearance dimension (gap check result) is equal to or greater than 1.5 mm, before further flight, replace the cardan pin assembly, in accordance with Airbus AOT A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices).

(2) If the total clearance dimension (gap check) is less than 1.5 mm but greater than 0.6 mm, do the actions specified in paragraphs (h)(2)(i) or (h)(2)(ii) of this AD.

(i) Do the actions specified in paragraphs (h)(2)(i)(A) and (h)(2)(i)(B) of this AD.

(A) Within 30 days after accomplishing the gap check, send the information (Appendix 2 proforma, photographs, and the movement traceability sheet) specified in paragraph 4.2.3, "Findings," of Airbus AOT A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices), to Airbus at the address specified in Appendix 2 (the issue date is not specified on this appendix) of Airbus AOT A32L003-14, dated March 10, 2014.

(B) Within 30 days after accomplishing the gap check, 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). If approved by the DOA, the approval must include the DOA-authorized signature.

(ii) Within 30 days after accomplishing the gap check, replace the cardan pin assembly, in accordance with Airbus AOT A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices).
(i) New Reporting of Inspection Results

For airplanes on which a gap check specified in paragraph (h) of this AD has been done: Except as required by paragraph (h)(2)(i) of this AD, at the applicable time specified in paragraphs (i)(1) and (i)(2) of this AD, report all findings (including no findings) to Airbus, in accordance with Airbus AOT A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3, (the issue date is not specified on the appendices).

(1) If the gap check was done on or after the effective date of this AD: Submit the report within 30 days after the gap check.

(2) If the gap check was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(j) 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: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; 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) Reporting Requirements: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(k) Related Information


(l) 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.

(3) The following service information was approved for IBR on May 14, 2014, (79 FR 23909, April 29, 2014).

(i) Airbus Alert Operators Transmission A32L003-14, dated March 10, 2014, including Appendices 1, 2, and 3 (the issue date is not specified on the appendices).

(ii) Reserved.

(4) For service information identified in this AD, contact Airbus SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com.

(5) 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.

(6) 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 30, 2015.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.