DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0674; Product Identifier 2020-NM-070-AD; Amendment 39-21382; AD 2021-01-06]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus SAS Model A330-200 and A330-300 series airplanes, and all Model A340-200 and A340-300 series airplanes. This AD was prompted by reports of hydraulic system failure due to fatigue failure of the screws attaching the manual valve to the ground service manifold (GSM). This AD requires, for certain GSMs, repetitive replacement of the hydraulic system GSM manual valve attachment screws having certain part numbers; and, for certain other GSMs with certain screws installed, replacement of those screws, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
**ADDRESSES:** For EASA material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this IBR material on the EASA website at https://ad.easa.europa.eu. For Airbus material incorporated by reference in this AD, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 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 IBR material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0674.

**Examining the AD Docket**

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0674; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is 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:** Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3229; email vladimir.ulyanov@faa.gov.

**SUPPLEMENTARY INFORMATION:**

Discussion
The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2020-0093, dated April 24, 2020 (EASA AD 2020-0093) (also referred to as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus SAS Model A330-200 and A330-300 series airplanes, and all Model A340-200 and A340-300 series airplanes.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus SAS Model A330-200 and A330-300 series airplanes, and all Model A340-200 and A340-300 series airplanes. The NPRM published in the Federal Register on July 31, 2020 (85 FR 46012). The NPRM was prompted by reports of hydraulic system failure due to fatigue failure of the screws attaching the manual valve to the GSM. The NPRM proposed to require, for certain GSMs, repetitive replacement of the hydraulic system GSM manual valve attachment screws having certain part numbers; and, for certain other GSMs with certain screws installed, replacement of those screws, as specified in an EASA AD.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Support for the NPRM

The Air Line Pilots Association, International (ALPA) stated its support for the NPRM.

Request to Include Applicability Exception

Delta Air Lines (Delta) asked that the FAA include an exception statement in paragraph (c) of the proposed AD related to Airbus modification 58345. Delta stated that EASA AD 2020-0093 includes the statement “except those on which Airbus modification (mod) 58345 has been embodied in production.” Delta added that this would remove the
need for operators of post mod 58345 airplanes to demonstrate compliance with an AD for which compliance is impossible.

The FAA does not agree with the commenter’s request. Paragraph (c) of this AD identifies the affected airplane models and specifies that this AD is applicable to the airplanes identified in EASA AD 2020-0093. Because the applicability identified in EASA AD 2020-0093 excludes airplanes on which Airbus modification 58345 is embodied in production, it is not necessary to restate that exclusion in this AD. EASA AD 2020-0093 is incorporated by reference in its entirety, which includes the applicability therein. Therefore, the FAA has not changed this AD in this regard.

Request to Change AOT Reference

Delta asked that the “in accordance with” statement in paragraph (g) of the proposed AD be replaced by “refer to” Airbus Alert Operators Transmission (AOT) A29L010-19, Revision 01, dated February 18, 2020, paragraphs 4.4.2.1.(8), 4.4.2.1.(10), 4.4.2.2.(9) and 4.4.2.2.(11). Delta stated that the EASA AD mandates accomplishment of the referenced AOT, and the AOT includes the following note: “NOTE 2: The accomplishment instructions of this AOT include procedures given in other documents or in other sections of the AOT. When the words ‘refer to’ are used and the operator has a procedure accepted by the local authority he belongs to, the accepted alternative procedure can be used. When the words ‘in accordance with’ are used then the given procedure must be followed.” Delta added that paragraphs 4.4.2.1.(8) and 4.4.2.2.(9) of the AOT use both “refer to” and “in accordance with,” and paragraphs 4.4.2.1.(10) and 4.4.2.2.(11) of the AOT use “in accordance with” when referencing the Airplane Maintenance Manual (AMM) wirelocking procedures. Delta further noted that in all cases, the AOT refers to standard AMM procedures, testing and wirelocking. As standard
procedures, Delta recommended that the “in accordance with” statement be replaced by “refer to” for paragraphs 4.4.2.1.(8), 4.4.2.1.(10), 4.4.2.2.(9) and 4.4.2.2.(11) of the AOT.

The FAA agrees with the commenter’s request for further clarification. It should be clear to operators whether specific procedures are mandatory. Paragraph (h)(3) of the proposed AD specified compliance with “paragraph 4.4.2., Accomplishment Instructions, of the AOT” only. This means that these actions must be completed in accordance with certain procedures specified in the Airbus AMM tasks defined in Airbus AOT A29L010-19, Revision 01, dated February 18, 2020. The FAA has clarified paragraph (h)(3) of this AD as follows: “Where EASA AD 2020-0093 specifies to comply with “the instructions of the AOT,” and “the AOT” specifies that “the accomplishment instructions marked as Required for Compliance (RC) must be done” this AD requires compliance with “paragraph 4.4.2., Accomplishment Instructions, of the AOT [Airbus Alert Operators Transmission A29L010-19, Revision 01, dated February 18, 2020] only; except paragraphs 4.4.2.1(1) and 4.4.2.2(1) which specify gaining access to the ground service manifold and preparation for update and may be accomplished in accordance with the operator’s maintenance or inspection program.”

**Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the change described previously, and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.
The FAA also determined that this change will not increase the economic burden on any operator or increase the scope of this AD.

**Related Service Information under 1 CFR Part 51**

EASA AD 2020-0093 describes procedures for replacement of the hydraulic system GSM manual valve attachment screws. For GSMs with part number (P/N) 70902-3 or P/N 70902-4 installed with screws having P/N NAS1101-3H8, EASA AD 2020-0093 describes procedures for repetitive replacement of those screws with new screws having P/N NAS1101-3H8. For GSMs with P/N 70902-5 installed with screws having P/N NAS1101-3H8, EASA AD 2020-0093 describes procedures for replacement of those screws with new bolts having P/N EWB0420D-3H-3 or four new screws having P/N NAS1101-3H8; if new screws are installed, EASA AD 2020-0093 describes procedures for replacing them with new bolts having P/N EWB0420D-3H-3 before the screws exceed 10,000 flight cycles since installation on an airplane. EASA AD 2020-0093 also describes an optional terminating modification (replacement of all affected GSMs), which would terminate the repetitive replacements of the attachment screws.

Airbus AOT A29L010-19, Revision 01, dated February 18, 2020, describes procedures for initial and repetitive replacement of certain GSM manual-valve screws and a one-time visual inspection to determine if certain GSM manual-valve screws are installed instead of the correct bolts.

This material 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.

**Costs of Compliance**

The FAA estimates that this AD affects 107 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:
Estimated costs for required actions

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 work-hours X $85</td>
<td>$0*</td>
<td>$595 per cycle</td>
<td>$63,665 per cycle</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>cycle</td>
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</tbody>
</table>

*The FAA has received no definitive data that would enable the agency to provide parts cost estimates for the required actions specified in this AD.

Estimated costs for optional actions

<table>
<thead>
<tr>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 work-hours X $85</td>
<td>$0*</td>
<td>$850</td>
</tr>
<tr>
<td>per hour = $850</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The FAA has received no definitive data that would enable the agency to provide parts cost estimates for the optional actions specified in this AD.

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the cost estimate.

**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.

The FAA is 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**
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) Will not affect intrastate aviation in Alaska, and
(3) 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:

2021-01-06 Airbus SAS: Amendment 39-21382; Docket No. FAA-2020-0674; Product Identifier 2020-NM-070-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.
(c) Applicability

This AD applies to Airbus SAS airplanes specified in paragraphs (c)(1) through (4) of this AD, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2020-0093, dated April 24, 2020 (EASA AD 2020-0093).


(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic power.

(e) Reason

This AD was prompted by reports of hydraulic system failure due to fatigue failure of the screws attaching the manual valve to the ground service manifold (GSM). The FAA is issuing this AD to address the failure of hydraulic system manual valve attachment screws. This condition, if not addressed, could lead to the loss of one or more hydraulic systems and damage to surrounding structure and components, possibly resulting in reduced control of the airplane, or injury to maintenance staff working in the main landing gear bay.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2020-0093.

(h) Exceptions to EASA AD 2020-0093

1. Where EASA AD 2020-0093 refers to its effective date or to “the effective date of EASA AD 2019-0314,” this AD requires using the effective date of this AD.
(2) The “Remarks” section of EASA AD 2020-0093 does not apply to this AD.

(3) Where EASA AD 2020-0093 specifies to comply with “the instructions of the AOT [Alert Operators Transmission],” and “the AOT” specifies that “the accomplishment instructions marked as Required for Compliance (RC) must be done,” this AD requires compliance with “paragraph 4.4.2., Accomplishment Instructions, of the AOT [Airbus Alert Operators Transmission A29L010-19, Revision 01, dated February 18, 2020]” only; except paragraphs 4.4.2.1(1) and 4.4.2.2(1), which specify gaining access to the ground service manifold and preparation for update, may be accomplished in accordance with the operator’s maintenance or inspection program.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2020-0093 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Large Aircraft Section, International Validation Branch, 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 Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) **Required for Compliance (RC):** For any service information referenced in EASA AD 2020-0093 that contains RC procedures and tests: Except as required by paragraphs (h)(3) and (j)(2) of this AD, RC 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 an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) **Related Information**

For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3229; email vladimir.ulyanov@faa.gov.

(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) For EASA AD 2020-0093, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at https://ad.easa.europa.eu.

(4) For Airbus service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 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 material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0674.

(6) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on December 30, 2020.

Lance T. Gant, Director, Compliance & Airworthiness Division, Aircraft Certification Service.