DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


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 all Airbus Model A300 series airplanes. This AD was prompted by an evaluation by the design approval holder (DAH) that indicates that a section of the wing and aft fuselage is subject to widespread fatigue damage (WFD). This AD requires an inspection to determine if certain modifications have been done. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective April 7, 2017.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of April 7, 2017.

ADDRESSES: For service information identified in this final rule, contact Airbus SAS, Airworthiness Office—EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: continued.airworthiness-wh.external@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–2016–9298.

Examining the AD Docket

Required actions include an inspection to determine if certain modifications have been done. For airplanes on which the specified modifications have not been done, this AD requires accomplishing those modifications, including doing related investigative and corrective actions if necessary. Depending on airplane configuration, the compliance times for modifying the airplane structure range between 13,300 flight cycles and 48,000 flight cycles since first flight of the airplane. 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–2016–9298.

Comments
We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion
We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.
Related Service Information Under 1 CFR Part 51

Airbus issued the following service information:

  This service information describes procedures to modify the longitudinal junction. The modification includes the addition of external doublers and installation of interference fit attachments and related investigative and corrective actions. The related investigative actions are rotary probe inspections for cracking of the fastener holes. The corrective action is repair.
- Airbus Service Bulletin A300–53–247, Revision 2, dated July 20, 1990. This service information describes procedures to modify the fuselage upper door frame structure, which consists of eddy current inspections of certain structure for cracks, and structural modification or repair.
- Airbus Service Bulletin A300–53–0271, Revision 05, dated June 21, 2013. This service information describes procedures to modify the fuselage frame (FR), which includes cold expansion of the fastener holes between FR 41 and FR 54, and related investigative and corrective actions. The related investigative actions include rotary probe inspections for cracking of the fastener holes. The corrective action is repair.
- Airbus Service Bulletin A300–53–0366, dated April 7, 2005. This service information describes procedures to modify the fuselage frame, which includes installing an additional external doubler on the fuselage lap joint at fuselage stringers (STGR) 22, left and right, between FR 26 and FR 40.
- Airbus Service Bulletin A300–53–0368, dated April 7, 2005. This service information describes procedures to modify the rear fuselage, which includes installing an additional external doubler on the fuselage lap joint at STGR 51, left and right, between FR 72 and FR 80.
- Airbus Service Bulletin A300–53–0369, Revision 03, dated September 1, 2010. This service information describes procedures to modify the rear fuselage, which includes reinforcing the butt joint at FR 72 by installation of an additional external doubler at the butt joint of FR 72 at STGR 14, left and right.
- Airbus Service Bulletin A300–53–0373, Revision 03, dated September 1, 2010. This service information describes procedures to modify the rear fuselage, which includes reinforcing the butt joint at FR65 by installation of an additional external doubler at the butt joint of FR65 between STGR 13 left and right.
- Airbus Service Bulletin A300–53–0374, Revision 04, dated July 5, 2013. This service information describes procedures to modify the rear fuselage, which includes reinforcing the butt joints at FR55 and FR58 by installation of additional external doublers without cutout at certain butt joints.
- Airbus Service Bulletin A300–53–0375, Revision 01, dated June 24, 2013. This service information describes procedures to modify the forward fuselage, which includes reinforcing the fuselage circumferential butt joint at FR 26 by installation of an additional external doubler at the butt joint of FR 26 between STGR 13 left and STGR 13 right.
- Airbus Service Bulletin A300–53–0393, dated September 27, 2013. This service information describes procedures to modify the fuselage frame which includes reinforcing the longitudinal butt joints with additional butt straps at certain fuselage frames and stringers.
- Airbus Service Bulletin A300–57–0203, Revision 04, dated February 18, 2013. This service information describes procedures to modify the outer wing, which includes removal of the wing stringer and run-out plate at STGR 19 on the bottom wing skin; replacement of the taper-lok bolts with interference fit parallel bolts; and related investigative and corrective actions. Related investigative actions include detailed visual and high frequency eddy current (HFEC) inspections of the stringer runouts for cracks; eddy current inspections for cracks of the fastener holes; and detailed visual and HFEC inspections of the stringer run-outs for cracks and damage. Corrective actions include repair.
- Airbus Service Bulletin A300–57–0258, dated September 30, 2014 (for Model A300 B4–103 and A300 B4–2C airplanes). This service information describes procedures to modify the wing structure, which includes a first oversize of the critical holes on certain wing stringers, and related investigative and corrective actions. Related investigated actions include detailed visual inspections for damage of the top wing skin external surface and the stringer joint; and roto-probe inspections for damage of the fastener holes. Corrective actions include repair.
- Airbus Service Bulletin A300–57–0259, dated September 30, 2014 (for Model A300 B2–1C, A300 B2–203, and A300 B2K–3C airplanes). This service information describes procedures to modify the wing structure, which includes a first oversize of the critical holes on certain wing stringers, and related investigative and corrective actions. Related investigated actions include detailed visual inspections for damage of the top wing skin external surface and the stringer joint; and roto-probe inspections for damage of the fastener holes. Corrective actions include repair.

In addition, we estimate that any necessary follow-on actions will take about 15 work-hours and require parts costing $10,000, for a cost of $11,275 per product. We have no way of determining the number of aircraft that might need this action.

### Costs of Compliance

We estimate that this AD affects 8 airplanes of U.S. operators.

We estimate the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<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>Modification</td>
<td>3,291 work-hours × $85 per hour = $279,735</td>
<td>$142,845</td>
<td>$422,580</td>
<td>$3,380,640</td>
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*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 (49 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.

**TABLE 1 TO PARAGRAPHS (g), (h), AND (i) OF THIS AD—AIRBUS MODIFICATION AND APPLICABLE SERVICE BULLETIN**

<table>
<thead>
<tr>
<th>Set</th>
<th>Airbus modification</th>
<th>Applicable Airbus service bulletin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7301</td>
<td>A300–53–0239, Revision 02, dated March 6, 2000.</td>
</tr>
<tr>
<td></td>
<td>12737</td>
<td>A300–53–0369, Revision 03, dated September 1, 2010.</td>
</tr>
<tr>
<td></td>
<td>12789</td>
<td>A300–53–0375, Revision 01, dated June 21, 2013.</td>
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<tr>
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<td>13692</td>
<td>A300–53–0369, Revision 03, dated September 1, 2010.</td>
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<tr>
<td></td>
<td>13716</td>
<td>A300–53–0375, Revision 01, dated June 24, 2013.</td>
</tr>
<tr>
<td></td>
<td>12796</td>
<td>A300–53–0373, Revision 03, dated September 1, 2010.</td>
</tr>
</tbody>
</table>

(b) **Corrective Actions for Modifications Which Have Not Been Embodied**

If, during the verification required by paragraph (g) of this AD, it is determined that no modification has not been embodied, do the applicable actions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(ii) If it is determined that any Airbus modification, specified in the applicable Airbus Service Bulletin, identified in “Set 1A” of table 1 to paragraphs (g), (h), and (i) of this AD is not embodied: Within the applicable compliance time specified in the applicable Airbus Service Bulletin identified in “Set 1A” of table 1 to paragraphs (g), (h), and (i) of this AD, or within 4 months after the effective date of this AD, whichever occurs later, do the applicable actions specified in paragraphs (h)(1)(i) through (h)(1)(xi) of this AD, except as required by paragraph (i) of this AD. Do all applicable related investigative and corrective actions before further flight.

(i) For airplanes on which Airbus Service Bulletin A300–53–0239, Revision 02, dated March 6, 2000, has not been embodied: Modify the longitudinal junction and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0239, Revision 02, dated March 6, 2000.


(iii) For airplanes on which Airbus Service Bulletin A300–53–0271, Revision 05, dated
June 21, 2013, has not been embodied: Modify the fuselage frame, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0271, Revision 05, dated June 21, 2013.

(iv) For airplanes on which Airbus Service Bulletin A300–53–0366, dated April 7, 2005, has not been embodied: Modify the fuselage frame, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0366, dated April 7, 2005.

(v) For airplanes on which Airbus Service Bulletin A300–53–0368, dated April 7, 2005, has not been embodied: Modify the rear fuselage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0368, dated April 7, 2005.

(vi) For airplanes on which Airbus Service Bulletin A300–53–0369, Revision 03, dated September 1, 2010, has not been embodied: Modify the rear fuselage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0369, Revision 03, dated September 1, 2010.

(vii) For airplanes on which Airbus Service Bulletin A300–53–0373, Revision 01, dated June 24, 2013, has not been embodied: Modify the forward fuselage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0373, Revision 01, dated June 24, 2013.

(viii) For airplanes on which Airbus Service Bulletin A300–53–0393, dated September 27, 2013, has not been embodied: Modify the fuselage frame, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0393, dated September 27, 2013.

(ix) For airplanes on which Airbus Service Bulletin A300–57–0258, dated September 30, 2014, has not been embodied: Modify the outer wing, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–57–0258, Revision 04, dated February 18, 2015.

(x) For airplanes on which Airbus Service Bulletin A300–57–0258, dated September 30, 2014, has not been embodied: Modify the wing structure and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–57–0258, dated September 30, 2014.

(xi) For airplanes on which Airbus Service Bulletin A300–57–0258, dated September 30, 2014, has not been embodied: Modify the wing structure, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–57–0258, dated September 30, 2014.

(2) If it is determined that Airbus Service Bulletin A300–57–0258, Revision 04, dated July 5, 2013 (mod 12794) has not been embodied: Within the compliance time specified in paragraphs (h)(2)(i), (h)(2)(ii), (h)(2)(iii), and (h)(2)(iv) of this AD, as applicable, modify the rear fuselage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0374, Revision 04, dated July 5, 2013, except as required by paragraph (i) of this AD.

(i) For Model A300 B2 and A300 B4–100 airplanes, fuselage frame (FR) 55: Within 31,300 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(ii) For Model A300 B2 and A300 B4–100 airplanes, FR 58: Within 49,700 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(iii) For Model A300 B4–200 airplanes, FR 55: Within 33,600 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(iv) For Model A300 B4–200 airplanes, FR 58: Within 55,800 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(3) If it is determined that Airbus Service Bulletin A300–53–0373, Revision 03, dated September 1, 2010 (mod 12796) has not been embodied: Within the compliance time specified in paragraphs (h)(3)(i), (h)(3)(ii), and (h)(3)(iii) of this AD, as applicable, modify the rear fuselage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300–53–0373, Revision 03, dated September 1, 2010, except as required by paragraph (i) of this AD.

(i) For Model A300 B2 airplanes: Within 42,700 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(ii) For Model A300 B4–100 airplanes: Within 47,900 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(iii) For Model A300 B4–200 airplanes: Within 47,900 flight cycles since first flight of the airplane, or within 4 months after the effective date of this AD, whichever occurs later.

(i) Exception to the Service Information

Where any service information identified in table 1 to paragraphs (g), (h), and (i) of this AD specifies to contact the manufacturer for 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. Those 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.

(ii) Alternative Methods of Compliance

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM–116, Transport Aircraft 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: Dan Rodina, Aerospace Engineer, International Branch, ANM–116, Transport Aircraft Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone 425–227–1405; fax 425–227–2125. Information may be emailed to: 9-AMN-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 Aircraft Directorate, FAA; or EASA; or Airbus’s EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): 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. Those 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.

(m) Material Incorporated by Reference

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2015–0173R1, dated August 31, 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–2016–9298.
We are adopting a new airworthiness directive (AD) for Pilatus Aircraft Ltd. Models PC–6, PC–6–H1, PC–6–H2, PC–6/350, PC–6/350–H1, PC–6/350–H2, PC–6/A, PC–6/A–H1, PC–6/A–H2, PC–6/B–H2, PC–6/B1–H2, PC–6/B2–H2, PC–6/B2–H4, PC–6/C–H2, and PC–6/C–1/H2 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as certain combinations of the aileron counterweight and the attaching parts possibly resulting in reduced thread engagement and leading to disconnection of the aileron counterweight from the aileron. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective April 7, 2017.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of April 7, 2017.


**FOR FURTHER INFORMATION CONTACT:**

Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4059; fax: (816) 329–4090; email: doug.rudolph@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**


The proper installation of the aileron counterweight requires a combination, peculiar to each aileron, of anchor nut types, bolt types, number of washers, and the definition of the bolt torque. Some combinations of counterweight and attaching parts, which could result in reduced thread engagement, have been reported on a PC–6/aeroplane.

This condition, if not detected and corrected, may lead to a disconnection of the aileron counterweight from the aileron, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Pilatus issued Service Bulletin (SB) No. 57–006 (hereafter referred to as ‘the SB’ in this AD) to provide inspection instructions.

For the reason described above, this AD requires identification and inspection of the affected aileron mass–balance counterweight attachment parts and, depending on findings, accomplishment of applicable corrective actions.

The MCAI can be found in the AD docket on the Internet at: [https://www.regulations.gov](https://www.regulations.gov)/document?D=FAA-2016-9357-0002.

**Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA’s response to the comment.

**Request for Clarification on the Unsafe Condition**

Lukas Owens stated that in the event of loss of the ailerons, some degree of roll control is available by using the secondary effect of rudder. The requester stated that while not an efficient way to turn the aircraft, a pilot has at least some directional control and that short or rapid bursts of power may increase the effectiveness of the rudder to some degree, acting as a form of torque and slipstream effect. The requester asked why the AD change is needed or how it is justified.

We infer that the commenter is also concerned about the unsafe condition of the rudder to some degree, with the most efficient way to turn an aircraft is by using the primary rudder. The requester is concerned with the short or rapid bursts of power that may occur due to the loss of the aileron. We believe the AD change is needed and is justified. However, the commenter does not present solutions that address the unsafe condition of the mass balance weight potentially separating from the airplane. For this reason, we have not changed this AD based on this comment.