

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2016-8851; Directorate Identifier 2016-NM-070-AD; Amendment 39-18831; AD 2017-06-07]

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 A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-200, -300, -500, and -600 series airplanes. This AD was prompted by reports that nonconforming aluminum alloy was used to manufacture several structural parts on the inboard flap. This AD requires identification of the potentially affected inboard flap parts, a one-time eddy current inspection to identify which material the parts are made of, and, depending on findings, replacement with serviceable parts. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective May 15, 2017.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of May 15, 2017.

**ADDRESSES:** For service information identified in this final rule, 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](mailto: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 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-2016-8851.

**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-2016-8851; 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 Office (telephone 800-647-5527) is 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 20590.

**FOR FURTHER INFORMATION CONTACT:** 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.

**SUPPLEMENTARY INFORMATION:****Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-500 and -600 series airplanes. The NPRM published in the **Federal Register** on August 31, 2016 (81 FR 59922) (“the NPRM”). The NPRM was prompted by reports that nonconforming aluminum alloy was used to manufacture several structural parts on the inboard flap. The NPRM proposed to require identification of the potentially affected inboard flap parts, a one-time eddy current inspection to identify which material the parts are made of, and, depending on findings, replacement with serviceable parts. We are issuing this AD to detect and correct structural parts of inboard flaps made of nonconforming aluminum alloy, which could result in reduced structural integrity of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2016-0231, dated November 22, 2016 (“EASA AD 2016-0231”) (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), which superseded EASA Airworthiness Directive 2016-0082, dated April 27, 2016 (“EASA AD 2016-0082”), to correct an unsafe condition all Airbus Model A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-200, -300, -500 and -600 series airplanes. The MCAI states:

Following an Airbus quality control review on the final assembly line, it was discovered that non-conforming aluminium alloy was used to manufacture several structural parts on the inboard flap.

This condition, if not detected and corrected, could reduce the structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus issued Service Bulletin (SB) A330-57-3120 and SB A340-57-5036 to provide instructions to identify and inspect the potentially affected parts.

Consequently, EASA issued AD 2016-0082 to require identification of the potentially affected inboard flap parts, a one-time special detailed inspection (SDI) [eddy current measurement] to identify which material they are made of and, depending on findings, replacement with serviceable parts.

Since EASA AD 2016-0082 was issued, it was confirmed that flaps, initially installed on A340-500 and A340-600 aeroplanes, may also have been installed in service on A340-200 or A340-300 aeroplanes. As this installation was not done during production, no SB was published for these models.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2016-0082 [which corresponded to the FAA NPRM], which is superseded, expands the Applicability to include A340-200 and A340-300 aeroplanes, corrects a typographical error in Appendix 1 of this [EASA] AD for one affected flap, Right Hand (RH) serial number (s/n) “TB 11411” in place of “TB 14411” (date of first operation: 19/04/13) and identified in bold in Appendix 1, and adds the prefix “TB” to the s/n’s of all Left Hand (LH) and RH flaps, which was inadvertently omitted in Appendix 1 of [EASA] AD 2016-0082. This [EASA] AD also allows, under certain conditions, installation of an affected inboard flap on an aeroplane.

Airbus Model A340-200 and -300 series airplanes have been added to the applicability of this AD. Since there are currently no domestic operators of these added airplanes, notice and opportunity for public comment before issuing this AD are unnecessary.

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-2016-8851.

**Comments**

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

**Request To Account for a Superseding EASA Airworthiness Directive**

Airbus commented that EASA was planning to supersede EASA AD 2016-0082 with EASA AD 2016-0231, which would update the AD applicability, correct a certain part serial number, and add the prefix “TB” to the serial

numbers of all flaps. (These changes are described in the MCAI.)

We agree with the commenter and have revised this AD to update the applicability, correct a serial number for a right-hand flap (from TB14411 to TB11411), and add the prefix “TB” before each flap serial number.

**Requests To Extend Compliance Time for Part Replacement**

Airbus and American Airlines requested that the requirement to replace an affected part within 30 days after performing the eddy current inspection be changed to allow a longer compliance time. Paragraph (i) of the proposed AD states that if a part requires replacement due to a nonconforming material finding per paragraph (h) of the proposed AD, the part must be replaced within 30 days after the finding in accordance with a method approved by the FAA, EASA, or Airbus’s EASA Design Organization Approval (DOA). EASA AD 2016–0082, paragraph (3), states, for the same nonconforming material finding, to contact Airbus within 30 days of the finding for approved replacement instructions, and within the compliance time(s) specified in those instructions to replace the nonconforming parts accordingly. The commenters stated that

this allows more flexibility for replacement actions.

We agree that additional time can be allowed for replacement of affected parts if 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). We have revised paragraph (i) of this AD accordingly. This provision corresponds to EASA AD 2016–0231, which superseded EASA AD 2016–0082.

**Removal of Note From Regulatory Text**

We have removed Note 2 to paragraph (h) of the proposed AD, and added text to paragraph (h) of this AD to clarify that the date of the first operation of the flap is specified in figure 1 to paragraphs (g), (j)(1), and (j)(2) of this AD.

**Conclusion**

We reviewed the relevant data, considered 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 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.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

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

We reviewed Airbus Service Bulletin A330–57–3120, dated September 18, 2015; and Airbus Service Bulletin A340–57–5036, dated September 18, 2015. The service information describes procedures for inspecting inboard flaps using eddy current inspection methods to determine the materials used. These documents are distinct since they apply to different airplane models. 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.

**Costs of Compliance**

We estimate that this AD affects 31 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**ESTIMATED COSTS**

| Action           | Labor cost                                 | Parts cost | Cost per product | Cost on U.S. operators |
|------------------|--|------------|------------------|------------------------|
| Inspection ..... | 5 work-hours × \$85 per hour = \$425 ..... | \$0        | \$425            | \$13,175               |

We estimate the following costs to do any necessary replacements that would

be required based on the results of the required inspection. We have no way of

determining the number of aircraft that might need these replacements:

**ON-CONDITION COSTS**

| Action                        | Labor cost                                    | Parts cost        | Cost per product |
|-------------------------------|---|-------------------|------------------|
| Remove and Replace Flap ..... | 60 work-hours × \$85 per hour = \$5,100 ..... | Unavailable ..... | \$5,100          |

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. The cost of purchasing a flap spare is not available. As a result, we have included only labor costs in our 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.

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.

**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 (AD):

**2017-06-07 Airbus:** Amendment 39-18831; Docket No. FAA-2016-8851; Directorate Identifier 2016-NM-070-AD.

**(a) Effective Date**

This AD is effective May 15, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus Model A330-223F and -243F airplanes; A330-201, -202, -203, -223, and -243 airplanes; A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; A340-211, -212, and -213 airplanes; A340-311, -312, and -313 airplanes; A340-541 airplanes; and A340-642 airplanes; certificated in any category, all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by reports that nonconforming aluminum alloy was used to manufacture several structural parts on the inboard flap. We are issuing this AD to detect and correct structural parts of inboard flaps made of nonconforming aluminum alloy, which could result in reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Inboard Flap Serial Number Identification**

Within 24 months after the effective date of this AD: Inspect each left-hand (LH) and right-hand (RH) inboard flap, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3120, dated September 18, 2015; or Airbus Service Bulletin A340-57-5036, dated September 18, 2015; as applicable; to identify the serial number. A review of airplane delivery and maintenance records is acceptable in lieu of inspecting the inboard flaps, provided those records can be relied upon for that purpose and the serial number of the affected parts can be conclusively identified from that review. The serial numbers of affected inboard flaps are identified in figure 1 to paragraphs (g), (j)(1), and (j)(2) of this AD.

**Note 1 to paragraphs (g) and (h) of this AD:** Airbus Service Bulletin A330-57-3120, dated September 18, 2015; and Airbus Service Bulletin A340-57-5036, dated September 18, 2015; list the serial numbers of potentially affected LH and RH inboard flaps and the corresponding airplane serial number on which these parts were installed during production. The airplane serial number list is for information only, as it cannot be excluded that a potentially affected inboard flap has been removed from an airplane and later re-installed on another airplane.

FIGURE 1 TO PARAGRAPHS (g), (j)(1), AND (j)(2) OF THIS AD—AFFECTED FLAP SERIAL NUMBERS (S/N)

| Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   | Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   | Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   |
|------------------------------------|----------|----------|------------------------------------|----------|----------|------------------------------------|----------|----------|
| 29/09/10                           | TB 11004 | TB 11004 | 28/02/11                           | TB 11202 | TB 11201 | 19/12/12                           | TB 11349 | TB 11349 |
| 21/07/09                           | TB 11030 | TB 11028 | 22/02/11                           | TB 11198 | TB 11202 | 17/12/12                           | TB 11352 | TB 11352 |
| 17/08/09                           | TB 11034 | TB 11002 | 07/03/11                           | TB 11203 | TB 11203 | 15/11/12                           | TB 11353 | TB 11353 |
| 21/05/10                           | TB 11031 | TB 11031 | 30/03/11                           | TB 11204 | TB 11204 | 30/10/12                           | TB 11354 | TB 11354 |
| 09/08/10                           | TB 11071 | TB 11071 | 31/05/11                           | TB 11205 | TB 11229 | 22/10/12                           | TB 11355 | TB 11355 |
| 10/07/09                           | TB 11033 | TB 11057 | 15/03/11                           | TB 11206 | TB 11206 | 31/10/12                           | TB 11383 | TB 11357 |
| 06/08/10                           | TB 11036 | TB 11098 | 24/03/11                           | TB 11208 | TB 11208 | 30/10/12                           | TB 11380 | TB 11356 |
| 29/07/09                           | TB 11035 | TB 11035 | 04/04/11                           | TB 11209 | TB 11209 | 26/11/12                           | TB 11359 | TB 11393 |
| 19/08/09                           | TB 11057 | TB 11036 | 22/03/11                           | TB 11210 | TB 11210 | 30/11/12                           | TB 11361 | TB 11361 |
| 23/12/09                           | TB 11037 | TB 11033 | 23/03/11                           | TB 11211 | TB 11213 | 16/11/12                           | TB 11358 | TB 11358 |
| 14/09/09                           | TB 11038 | TB 11038 | 24/03/11                           | TB 11212 | TB 11212 | 30/11/12                           | TB 11325 | TB 11360 |
| 17/09/10                           | TB 11042 | TB 11039 | 14/04/11                           | TB 11213 | TB 11214 | 12/12/12                           | TB 11399 | TB 11365 |
| 23/09/09                           | TB 11040 | TB 11040 | 14/04/11                           | TB 11229 | TB 11215 | 26/11/12                           | TB 11362 | TB 11362 |
| 11/09/09                           | TB 11041 | TB 11041 | 11/04/11                           | TB 11215 | TB 11217 | 09/11/12                           | TB 11363 | TB 11363 |
| 12/05/10                           | TB 11046 | TB 11042 | 06/04/11                           | TB 11216 | TB 11216 | 30/11/12                           | TB 11364 | TB 11364 |
| 01/10/09                           | TB 11043 | TB 11043 | 12/04/11                           | TB 11217 | TB 11219 | 23/11/12                           | TB 11365 | TB 11368 |
| 01/10/09                           | TB 11044 | TB 11044 | 15/04/11                           | TB 11218 | TB 11218 | 07/12/12                           | TB 11366 | TB 11366 |
| 08/09/09                           | TB 11047 | TB 11045 | 04/05/11                           | TB 11219 | TB 11221 | 06/12/12                           | TB 11367 | TB 11367 |
| 07/09/09                           | TB 11049 | TB 11046 | 29/04/11                           | TB 11220 | TB 11220 | 19/12/12                           | TB 11368 | TB 11370 |
| 18/09/09                           | TB 1970  | TB 11047 | 11/05/11                           | TB 11238 | TB 11222 | 11/12/12                           | TB 11369 | TB 11369 |
| 30/09/09                           | TB 11048 | TB 11048 | 13/05/11                           | TB 11222 | TB 11223 | 21/12/12                           | TB 11370 | TB 11372 |
| 26/10/09                           | TB 11055 | TB 11049 | 06/05/11                           | TB 11223 | TB 11224 | 13/12/12                           | TB 11372 | TB 11375 |
| 03/09/10                           | TB 11051 | TB 11051 | 19/05/11                           | TB 11224 | TB 11225 | 20/12/12                           | TB 11373 | TB 11373 |
| 30/10/09                           | TB 11054 | TB 11054 | 19/05/11                           | TB 11225 | TB 11205 | 21/12/12                           | TB 11374 | TB 11374 |
| 19/11/09                           | TB 11053 | TB 11053 | 29/06/11                           | TB 11226 | TB 11226 | 16/01/13                           | TB 11375 | TB 11377 |
| 28/10/10                           | TB 11008 | TB 11019 | 25/05/11                           | TB 11227 | TB 11227 | 11/01/13                           | TB 11376 | TB 11376 |
| 27/10/09                           | TB 11015 | TB 11055 | 16/05/11                           | TB 11228 | TB 11228 | 15/01/13                           | TB 11377 | TB 11350 |
| 28/10/09                           | TB 11059 | TB 11059 | 10/06/11                           | TB 11092 | TB 11092 | 05/02/13                           | TB 11378 | TB 11381 |
| 29/10/09                           | TB 11060 | TB 11060 | 23/11/11                           | TB 11231 | TB 11231 | 25/01/13                           | TB 11379 | TB 11379 |
| 16/11/10                           | TB 11063 | TB 11063 | 08/07/11                           | TB 11232 | TB 11232 | 18/01/13                           | TB 11382 | TB 11380 |
| 23/12/09                           | TB 11061 | TB 11061 | 23/06/11                           | TB 11234 | TB 11234 | 22/03/13                           | TB 11381 | TB 11382 |

FIGURE 1 TO PARAGRAPHS (g), (j)(1), AND (j)(2) OF THIS AD—AFFECTED FLAP SERIAL NUMBERS (S/N)—Continued

| Date of first operation (dd/mm/yy) | LH s/n    | RH s/n   | Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   | Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   |
|------------------------------------|-----------|----------|------------------------------------|----------|----------|------------------------------------|----------|----------|
| 23/11/09                           | TB 11066  | TB 11066 | 22/06/11                           | TB 11233 | TB 11233 | 27/02/13                           | TB 11371 | TB 11371 |
| 03/11/10                           | TB 11070  | TB 11070 | 24/06/11                           | TB 11237 | TB 11237 | 08/03/13                           | TB 11385 | TB 11383 |
| 30/11/09                           | TB 11065  | TB 11065 | 15/06/11                           | TB 11235 | TB 11235 | 06/02/13                           | TB 11384 | TB 11384 |
| 30/11/09                           | TB 11032  | TB 11032 | 01/07/11                           | TB 11236 | TB 11236 | 05/02/13                           | TB 11386 | TB 11385 |
| 18/11/09                           | TB 11067  | TB 11067 | 12/07/11                           | TB 11239 | TB 11239 | 19/02/13                           | TB 11406 | TB 11389 |
| 17/12/09                           | TB 11072  | TB 11072 | 25/11/11                           | TB 11115 | TB 11115 | 16/03/13                           | TB 11387 | TB 11387 |
| 24/11/09                           | TB 11074  | TB 11074 | 29/07/11                           | TB 11240 | TB 11240 | 25/02/13                           | TB 11388 | TB 11388 |
| 17/09/10                           | TB 11147  | TB 11147 | 06/10/11                           | TB 11243 | TB 11243 | 15/02/13                           | TB 11390 | TB 11390 |
| 23/12/09                           | TB 11095  | TB 11095 | 29/07/11                           | TB 11244 | TB 11241 | 25/02/13                           | TB 11392 | TB 11392 |
| 10/12/09                           | TB 11075  | TB 11075 | 03/08/11                           | TB 11245 | TB 11245 | 01/03/13                           | TB 11391 | TB 11403 |
| 07/12/09                           | TB 11076  | TB 11076 | 29/08/11                           | TB 11246 | TB 11244 | 01/03/13                           | TB 11394 | TB 11394 |
| 23/12/09                           | TB 11077  | TB 11077 | 22/08/11                           | TB 11247 | TB 11247 | 11/03/13                           | TB 11393 | TB 11395 |
| 22/12/09                           | TB 11069  | TB 11069 | 20/12/11                           | TB 11248 | TB 11246 | 08/03/13                           | TB 11397 | TB 11397 |
| 07/12/09                           | TB 11079  | TB 11079 | 30/08/11                           | TB 11249 | TB 11249 | 14/03/13                           | TB 11395 | TB 11399 |
| 19/01/10                           | TB 11078  | TB 11078 | 25/08/11                           | TB 11136 | TB 11248 | 18/03/13                           | TB 11396 | TB 11396 |
| 11/02/10                           | TB 11081  | TB 11081 | 06/09/11                           | TB 11250 | TB 11250 | 18/03/13                           | TB 11356 | TB 11400 |
| 26/03/10                           | TB 11080  | TB 11080 | 27/09/11                           | TB 11252 | TB 11254 | 28/03/13                           | TB 11398 | TB 11398 |
| 28/01/10                           | TB 11082  | TB 11082 | 28/09/11                           | TB 11221 | TB 11251 | 22/03/13                           | TB 11401 | TB 11401 |
| 28/01/10                           | TB 11084  | TB 11084 | 15/09/11                           | TB 11214 | TB 11255 | 09/04/13                           | TB 11400 | TB 11402 |
| 04/02/10                           | TB 11098  | TB 11030 | 20/10/11                           | TB 11266 | TB 11256 | 21/03/13                           | TB 11404 | TB 11404 |
| 29/01/10                           | TB 11085  | TB 11085 | 19/12/11                           | TB 11258 | TB 11258 | 09/04/13                           | TB 11402 | TB 11405 |
| 05/02/10                           | TB 11039  | TB 11037 | 19/10/11                           | TB 11255 | TB 11259 | 26/04/13                           | TB 11403 | TB 11407 |
| 29/03/10                           | TB 11086  | TB 11086 | 10/11/11                           | TB 11259 | TB 11260 | 15/04/13                           | TB 11360 | TB 11406 |
| 09/03/10                           | TB 11087  | TB 11087 | 05/10/11                           | TB 11261 | TB 11261 | 11/04/13                           | TB 11407 | TB 11408 |
| 15/04/10                           | TB 11088  | TB 11088 | 17/10/11                           | TB 11260 | TB 11263 | 19/04/13                           | TB 11409 | TB 11409 |
| 16/04/10                           | TB 11089  | TB 11089 | 10/11/11                           | TB 11254 | TB 11252 | 24/04/13                           | TB 11410 | TB 11410 |
| 29/03/10                           | TB 11090  | TB 11090 | 17/11/11                           | TB 11262 | TB 11262 | 19/04/13                           | TB 11411 | TB 11411 |
| 11/06/10                           | TB 11091  | TB 11091 | 16/11/11                           | TB 11263 | TB 11264 | 22/04/13                           | TB 11408 | TB 11412 |
| 22/06/11                           | TB 11230  | TB 11230 | 16/11/11                           | TB 11264 | TB 11265 | 26/04/13                           | TB 11413 | TB 11413 |
| 23/03/10                           | TB 11093  | TB 11093 | 25/11/11                           | TB 11265 | TB 11266 | 30/04/13                           | TB 11414 | TB 11414 |
| 23/02/10                           | TB 11094  | TB 11094 | 28/11/11                           | TB 11267 | TB 11267 | 22/04/13                           | TB 11412 | TB 11415 |
| 24/03/10                           | TB 11073  | TB 11073 | 05/12/11                           | TB 11268 | TB 11268 | 15/07/13                           | TB 11416 | TB 11416 |
| 31/03/10                           | TB 11096  | TB 11096 | 29/11/11                           | TB 11270 | TB 11270 | 17/05/13                           | TB 11405 | TB 11417 |
| 16/03/10                           | TB 11097  | TB 11097 | 06/12/11                           | TB 11271 | TB 11271 | 28/05/13                           | TB 11415 | TB 11418 |
| 10/03/10                           | TB 11101  | TB 11101 | 12/12/11                           | TB 11272 | TB 11272 | 23/05/13                           | TB 11419 | TB 11419 |
| 15/03/10                           | TB 11099  | TB 11099 | 07/12/11                           | TB 11275 | TB 11275 | 17/05/13                           | TB 11417 | TB 11421 |
| 23/03/10                           | TB 11100  | TB 11100 | 14/12/11                           | TB 11269 | TB 11269 | 30/05/13                           | TB 11418 | TB 11420 |
| 16/06/10                           | TB 11105  | TB 11105 | 15/12/11                           | TB 11274 | TB 11274 | 30/05/13                           | TB 11357 | TB 11386 |
| 07/12/10                           | TB 11102  | TB 11130 | 12/12/11                           | TB 11276 | TB 11276 | 27/05/13                           | TB 11420 | TB 11422 |
| 13/04/10                           | TB 11106  | TB 11106 | 11/01/12                           | TB 11279 | TB 11279 | 13/06/13                           | TB 11421 | TB 11423 |
| 27/04/10                           | TB 11104  | TB 11104 | 20/01/12                           | TB 11278 | TB 11278 | 04/06/13                           | TB 11424 | TB 11424 |
| 30/04/10                           | TB 11103  | TB 11103 | 19/01/12                           | TB 11164 | TB 11164 | 17/06/13                           | TB 11426 | TB 11378 |
| 07/04/10                           | TB 11108  | TB 11108 | 12/01/12                           | TB 11277 | TB 11277 | 10/06/13                           | TB 11423 | TB 11427 |
| 16/04/10                           | TB 11133  | TB 11133 | 19/01/12                           | TB 11280 | TB 11281 | 27/06/13                           | TB 11428 | TB 11428 |
| 10/05/10                           | TB 11114  | TB 11114 | 23/01/12                           | TB 11298 | TB 11282 | 20/06/13                           | TB 11425 | TB 11425 |
| 10/05/10                           | TB 11110  | TB 11110 | 17/01/12                           | TB 11282 | TB 11284 | 27/06/13                           | TB 11429 | TB 11426 |
| 06/05/10                           | TB 11116  | TB 11116 | 30/01/12                           | TB 11283 | TB 11283 | 21/06/13                           | TB 11427 | TB 11429 |
| 27/05/10                           | TB 11112  | TB 11112 | 01/02/12                           | TB 11284 | TB 11285 | 01/07/13                           | TB 11434 | TB 11434 |
| 13/07/11                           | TB 11241  | TB 11238 | 24/02/12                           | TB 11286 | TB 11286 | 01/07/13                           | TB 11432 | TB 11432 |
| 11/05/10                           | TB 11111  | TB 11034 | 17/02/12                           | TB 11285 | TB 11287 | 23/07/13                           | TB 11430 | TB 11430 |
| 17/06/10                           | TB 11118  | TB 11118 | 29/02/12                           | TB 11287 | TB 11289 | 31/07/13                           | TB 11431 | TB 11431 |
| 09/06/10                           | TB 11120  | TB 11120 | 22/02/12                           | TB 11288 | TB 11288 | 19/07/13                           | TB 11436 | TB 11436 |
| 16/07/10                           | TB 11122  | TB 11122 | 23/02/12                           | TB 11289 | TB 11291 | 12/07/13                           | TB 11433 | TB 11433 |
| 06/07/10                           | TB 11123  | TB 11123 | 24/02/12                           | TB 11290 | TB 11290 | 01/08/13                           | TB 11437 | TB 11437 |
| 21/05/10                           | TB 11124  | TB 11124 | 21/02/12                           | TB 11291 | TB 11293 | 15/07/13                           | TB 11435 | TB 11435 |
| 12/07/10                           | TB 11126  | TB 11126 | 04/04/12                           | TB 11292 | TB 11292 | 19/07/13                           | TB 11438 | TB 11316 |
| 28/06/10                           | TB 11127  | TB 11127 | 05/04/12                           | TB 11293 | TB 11294 | 13/11/13                           | TB 11440 | TB 11438 |
| 18/06/10                           | TB 11129  | TB 11129 | 20/03/12                           | TB 11294 | TB 11296 | 06/08/13                           | TB 11441 | TB 11441 |
| 22/06/10                           | TB 11130  | TB 11102 | 09/03/12                           | TB 11295 | TB 11295 | 02/08/13                           | TB 11439 | TB 11439 |
| 24/09/10                           | TB 11135  | TB 11135 | 30/03/12                           | TB 11296 | TB 11298 | 05/08/13                           | TB 11442 | TB 11440 |
| 25/06/10                           | TB 11132  | TB 11132 | 29/03/12                           | TB 11297 | TB 11297 | 09/08/13                           | TB 11443 | TB 11391 |
| 26/07/10                           | TB E11006 | TB 11111 | 16/03/12                           | TB 11299 | TB 11175 | 27/08/13                           | TB 11446 | TB 11442 |
| 23/07/10                           | TB 11138  | TB 11138 | 29/03/12                           | TB 11300 | TB 11300 | 19/08/13                           | TB 11447 | TB 11443 |
| 14/09/11                           | TB 11251  | TB 11136 | 18/04/12                           | TB 11281 | TB 11301 | 04/09/13                           | TB 11444 | TB 11444 |
| 15/07/10                           | TB 11062  | TB 11062 | 12/04/12                           | TB 11302 | TB 11180 | 03/09/13                           | TB 11445 | TB 11445 |
| 23/07/10                           | TB 11141  | TB 11141 | 26/04/12                           | TB 11301 | TB 11303 | 25/09/13                           | TB 11449 | TB 11446 |
| 23/08/10                           | TB 11145  | TB 11145 | 20/04/12                           | TB 11303 | TB 11306 | 13/09/13                           | TB 11450 | TB 11447 |
| 27/08/10                           | TB 11117  | TB 11117 | 24/04/12                           | TB 11304 | TB 11307 | 29/10/13                           | TB 11448 | TB 11448 |
| 13/08/10                           | TB 11146  | TB 11146 | 27/04/12                           | TB 11305 | TB 11305 | 26/09/13                           | TB 11453 | TB 11449 |
| 13/09/10                           | TB 11149  | TB 11149 | 25/04/12                           | TB 11306 | TB 11308 | 02/12/13                           | TB 11454 | TB 11450 |

FIGURE 1 TO PARAGRAPHS (g), (j)(1), AND (j)(2) OF THIS AD—AFFECTED FLAP SERIAL NUMBERS (S/N)—Continued

| Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   | Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   | Date of first operation (dd/mm/yy) | LH s/n   | RH s/n   |
|------------------------------------|----------|----------|------------------------------------|----------|----------|------------------------------------|----------|----------|
| 27/09/10                           | TB 11150 | TB 11150 | 26/04/12                           | TB 11307 | TB 11196 | 25/09/13                           | TB 11451 | TB 11451 |
| 14/11/11                           | TB 11148 | TB 11148 | 14/05/12                           | TB 11308 | TB 11310 | 25/09/13                           | TB 11472 | TB 11464 |
| 17/09/10                           | TB 11151 | TB 11151 | 10/05/12                           | TB 11310 | TB 11312 | 27/09/13                           | TB 11457 | TB 11453 |
| 28/09/10                           | TB 11107 | TB 11107 | 11/05/12                           | TB 11312 | TB 11317 | 28/10/13                           | TB 11458 | TB 11454 |
| 27/09/10                           | TB 11159 | TB 11159 | 09/05/12                           | TB 11309 | TB 11299 | 22/10/13                           | TB 11456 | TB 11455 |
| 25/10/10                           | TB 11153 | TB 11153 | 25/05/12                           | TB 11311 | TB 11311 | 11/10/13                           | TB 11455 | TB 11456 |
| 29/09/10                           | TB 11155 | TB 11155 | 29/05/12                           | TB 11313 | TB 11313 | 25/10/13                           | TB 11459 | TB 11459 |
| 08/10/10                           | TB 11156 | TB 11156 | 31/05/12                           | TB 11314 | TB 11314 | 20/11/13                           | TB 11460 | TB 11458 |
| 13/10/10                           | TB 11157 | TB 11157 | 28/06/12                           | TB 11317 | TB 11315 | 17/10/13                           | TB 11461 | TB 11461 |
| 15/10/10                           | TB 11168 | TB 11168 | 15/06/12                           | TB 11316 | TB 11336 | 21/10/13                           | TB 11462 | TB 11460 |
| 13/10/10                           | TB 11186 | TB 11160 | 15/06/12                           | TB 11318 | TB 11318 | 23/10/13                           | TB 11463 | TB 11463 |
| 22/10/10                           | TB 11161 | TB 11161 | 31/05/12                           | TB 11319 | TB 11319 | 05/11/13                           | TB 11465 | TB 11462 |
| 22/10/10                           | TB 11163 | TB 11163 | 08/06/12                           | TB 11320 | TB 11320 | 04/11/13                           | TB 11466 | TB 11466 |
| 25/01/12                           | TB 11256 | TB 11280 | 22/06/12                           | TB 11321 | TB 11321 | 13/11/13                           | TB 11452 | TB 11473 |
| 22/11/10                           | TB 11165 | TB 11165 | 19/07/12                           | TB 11322 | TB 11322 | 04/11/13                           | TB 11389 | TB 11465 |
| 10/11/10                           | TB 11167 | TB 11167 | 29/06/12                           | TB 11323 | TB 11323 | 22/11/13                           | TB 11468 | TB 11457 |
| 02/12/10                           | TB 1960  | TB 1960  | 11/07/12                           | TB 11324 | TB 11324 | 27/11/13                           | TB 11467 | TB 11467 |
| 15/11/10                           | TB 11169 | TB 11169 | 26/06/12                           | TB 11348 | TB 11325 | 11/12/13                           | TB 11470 | TB 11468 |
| 30/11/10                           | TB 11178 | TB 11170 | 09/07/12                           | TB 11326 | TB 11326 | 18/11/13                           | TB 11469 | TB 11469 |
| 10/11/10                           | TB 11171 | TB 11171 | 03/07/12                           | TB 11327 | TB 11327 | 02/12/13                           | TB 11474 | TB 11470 |
| 30/11/10                           | TB 11183 | TB 11172 | 12/07/12                           | TB 11328 | TB 11328 | 02/12/13                           | TB 11471 | TB 11471 |
| 26/11/10                           | TB 11173 | TB 11173 | 16/07/12                           | TB 11329 | TB 11329 | 30/12/13                           | TB 11503 | TB 11488 |
| 14/12/10                           | TB 11174 | TB 11174 | 24/08/12                           | TB 11330 | TB 11330 | 16/12/13                           | TB 11476 | TB 11474 |
| 15/06/12                           | TB 11175 | TB 11302 | 13/07/12                           | TB 11331 | TB 11331 | 16/12/13                           | TB 11477 | TB 11477 |
| 19/11/10                           | TB 11177 | TB 11177 | 23/07/12                           | TB 11332 | TB 11332 | 06/12/13                           | TB 11475 | TB 11475 |
| 23/12/10                           | TB 11172 | TB 11178 | 29/08/12                           | TB 11333 | TB 11333 | 03/12/13                           | TB 11479 | TB 11476 |
| 11/04/12                           | TB 11315 | TB 11304 | 10/08/12                           | TB 11334 | TB 11334 | 09/12/13                           | TB 11480 | TB 11480 |
| 16/12/10                           | TB 11181 | TB 11181 | 23/07/12                           | TB 11335 | TB 11335 | 09/12/13                           | TB 11478 | TB 11489 |
| 15/12/10                           | TB 11184 | TB 11183 | 30/08/12                           | TB 11337 | TB 11337 | 09/12/13                           | TB 11481 | TB 11481 |
| 15/12/10                           | TB 11187 | TB 11184 | 30/07/12                           | TB 11336 | TB 11309 | 17/12/13                           | TB 11482 | TB 11482 |
| 14/01/11                           | TB 11188 | TB 11188 | 31/08/12                           | TB 11180 | TB 11339 | 09/01/14                           | TB 11483 | TB 11483 |
| 25/01/11                           | TB 11189 | TB 11187 | 18/09/12                           | TB 11340 | TB 11340 | 21/01/14                           | TB 11484 | TB 11484 |
| 21/01/11                           | TB 11160 | TB 11189 | 30/11/12                           | TB 11339 | TB 11341 | 27/02/14                           | TB 11486 | TB 11486 |
| 12/01/11                           | TB 11190 | TB 11190 | 12/09/12                           | TB 11341 | TB 11343 | 27/01/14                           | TB 11487 | TB 11487 |
| 25/01/11                           | TB 11192 | TB 11186 | 15/10/12                           | TB 11343 | TB 11345 | 17/01/14                           | TB 11485 | TB 11485 |
| 07/02/11                           | TB 11191 | TB 11191 | 17/09/12                           | TB 11346 | TB 11347 | 31/01/14                           | TB 11489 | TB 11490 |
| 07/02/11                           | TB 11193 | TB 11192 | 28/09/12                           | TB 11345 | TB 11344 | 14/01/14                           | TB 11490 | TB 11491 |
| 18/02/11                           | TB 11195 | TB 11193 | 09/10/12                           | TB 11342 | TB 11342 | 29/01/14                           | TB 11488 | TB 11492 |
| 24/02/11                           | TB 11196 | TB 11195 | 24/09/12                           | TB 11344 | TB 11346 | 30/01/14                           | TB 11492 | TB 11493 |
| 25/02/11                           | TB 11199 | TB 11211 | 15/10/12                           | TB 11347 | TB 9015  | 24/01/14                           | TB 11493 | TB 11479 |
| 25/02/11                           | TB 11200 | TB 11198 | 21/09/12                           | TB 11338 | TB 11348 | 27/02/14                           | TB 11491 | TB 11494 |
| 21/02/11                           | TB 11201 | TB 11199 | 19/10/12                           | TB 11350 | TB 11359 | 16/06/14                           | TB 11495 | TB 11495 |
| 14/02/11                           | TB 11170 | TB 11200 | 17/10/12                           | TB 11351 | TB 11351 | 14/02/14                           | TB 11498 | TB 11498 |

**(h) Eddy Current Conductivity Measurement**

For each affected inboard flap: Within 6 years after the effective date of this AD, or within 12 years after the date of the flap first operation, as specified in figure 1 to paragraphs (g), (j)(1), and (j)(2) of this AD, whichever occurs first, accomplish an eddy current conductivity measurement, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3120, dated September 18, 2015; or Airbus Service Bulletin A340-57-5036, dated September 18, 2015; as applicable.

**(i) Replacement**

If a part manufactured from nonconforming material is detected during the eddy current inspection required by paragraph (h) of this AD: Within 30 days after doing the eddy current inspection, obtain replacement instructions 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); and, within the compliance time specified in those instructions, accomplish the replacement accordingly.

**(j) Parts Installation Limitation**

As of the effective date of this AD, an inboard flap may be installed on any airplane, provided the part is a serviceable part. A serviceable part is:

(1) A part that is not listed by serial number in figure 1 to paragraphs (g), (j)(1), and (j)(2) of this AD; or

(2) A part that has a serial number listed in figure 1 to paragraphs (g), (j)(1), and (j)(2) of this AD, and has passed an eddy current conductivity measurement within the compliance time specified in this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-57-3120, dated September 18, 2015; or Airbus Service Bulletin A340-57-5036, dated September 18, 2015; as applicable.

**(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: 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 European Aviation Safety Agency (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, 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.

#### (l) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2016-0231, dated November 22, 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-2016-8851.

#### (m) 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.

(i) Airbus Service Bulletin A330-57-3120, dated September 18, 2015.

(ii) Airbus Service Bulletin A340-57-5036, dated September 18, 2015.

(3) 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](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>.

(4) 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.

(5) 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 March 10, 2017.

**Michael Kaszycki,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2017-05366 Filed 4-7-17; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

**[Docket No. FAA-2016-9385; Directorate Identifier 2016-NM-111-AD; Amendment 39-18844; AD 2017-07-06]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Gulfstream Aerospace Corporation Model G-1159B airplanes. This AD was prompted by a review of airplane maintenance records, which revealed that incorrect rudder assemblies were installed on certain airplanes. This AD requires certain inspections, and replacement or modification of the rudder assembly if necessary. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective May 15, 2017.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as May 15, 2017.

**ADDRESSES:** For service information identified in this final rule, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email [pubs@gulfstream.com](mailto:pubs@gulfstream.com); Internet [http://www.gulfstream.com/product\\_support/technical\\_pubs/pubs/index.htm](http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm). 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-2016-9385.

#### **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-2016-9385; 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 address for the Docket Office (phone: 800-647-5527) is 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 20590.

#### **FOR FURTHER INFORMATION CONTACT:**

Krista Greer, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5544; fax: 404-474-5606; email: [krista.greer@faa.gov](mailto:krista.greer@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Gulfstream Aerospace Corporation Model G-1159B airplanes. The NPRM published in the **Federal Register** on November 21, 2016 (81 FR 83180). The NPRM was prompted by a review of airplane maintenance records, which revealed that incorrect rudder assemblies were installed on certain airplanes. The NPRM proposed to require an inspection to determine the part number of the rudder assembly installed, verification that the part number of the rudder assembly matches what is recorded in the airplane maintenance records, an inspection of the rudder hinges if necessary, and replacement or modification of the rudder assembly if necessary. We are issuing this AD to detect and correct the installation of incorrect rudder assemblies, which could result in flutter and subsequent loss of the rudder, and consequent loss of control of the airplane.

##### **Comments**

We gave the public the opportunity to participate in developing this AD. We have considered the comment received.

##### **Support for the NPRM**

An anonymous commenter stated that the NPRM was understandable and that the FAA should retain its governmental authority.

We infer that the commenter supports the intent of the NPRM. We have not made any changes to this final rule regarding this issue.