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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2016-3984; Directorate Identifier 2014-NM-119-AD; Amendment 39-18945; AD 2017-14-01]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** We are superseding Airworthiness Directive (AD) 2013-10-03, which applied to all Airbus Model A330-200, -200 Freighter, and -300 series airplanes; and Model A340-200, -300, -500, and -600 series airplanes. AD 2013-10-03 required one-time inspections for deformation and damage of the bogie beams of the main landing gear (MLG); repetitive inspections for damage and corrosion of the sliding piston sub-assembly on certain airplanes; and related investigative and corrective actions if necessary. This new AD removes Model A340-500 and 600 series airplanes from the applicability; removes certain one-time inspections of the MLG bogie beams and the sliding piston sub-assembly; revises certain compliance times; and requires replacement of certain MLGs with MLGs having an improved bogie beam, which constitutes terminating action for the repetitive inspections on the modified MLG. This AD was prompted by reports of corroded and cracked bogie beams under the bogie stop pad. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective August 10, 2017.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of August 10, 2017.

**ADDRESSES:** For Airbus 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>.

For Messier-Bugatti-Dowty service information identified in this final rule, contact Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; phone: 703-450-8233; fax: 703-404-1621; Internet: <https://techpubs.services/messier-dowty.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-2016-3984.

### **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-2016-3984; 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 (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 supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 to supersede AD 2013-10-03, Amendment 39-17456 (78 FR 31386, May 24, 2013) ("AD 2013-10-03"). AD 2013-10-03 applied to all Airbus Model A330-200, -200 Freighter, and -300 series airplanes; and Model A340-200, -300, -500, and -600 series airplanes. The SNPRM published in the Federal Register on March 22, 2017 (82 FR 14642) ("the SNPRM"). We preceded the SNPRM with a notice of proposed rulemaking (NPRM) that published in the Federal Register on March 1, 2016 (81 FR 10540) ("the NPRM"). The NPRM was prompted by reports of corroded and cracked bogie beams under the bogie stop pad. The NPRM proposed to remove Model A340-500, and -600 series airplanes from the applicability, remove certain one-time inspections of the MLG bogie beams and the sliding piston sub-assembly; revise certain compliance times and provide, for certain airplanes, an optional terminating action for the repetitive actions. The SNPRM proposed to require replacement of a MLG having part number (P/N) 201252 series and P/N 201490 series with a MLG that has an improved bogie beam, which would constitute terminating action for the repetitive inspections on the modified MLG. We are issuing this AD to detect and correct damage or corrosion under the bogie stop pad of both MLG bogie beams; this condition could result in a damaged bogie beam and consequent detachment of the beam from the airplane, collapse of the MLG, or departure of the airplane from the runway, possibly resulting in damage to the airplane and injury to occupants.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2016-0108, dated June 8, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Airbus Model A330-200, -200 Freighter, and -300 series airplanes; and Model A340-200 and -300 series airplanes. The MCAI states:

During a scheduled maintenance inspection on the Main Landing Gear (MLG), the bogie stop pad was found deformed and cracked. Upon removal of the bogie stop pad for replacement, the bogie beam was also found cracked. The results of a laboratory investigation indicated that an overload event had occurred and no fatigue propagation of the crack was evident. A second bogie beam crack was subsequently found on another aeroplane, located under a bogie stop pad which only had superficial paint damage.

This condition, if not detected and corrected, could lead to landing gear bogie detachment from the aeroplane, or landing gear collapse, or a runway excursion, possibly resulting in damage to the aeroplane and injury to the occupants and/or people on the ground.

To address this potential unsafe condition, EASA issued AD 2008-0223 [which corresponds to FAA AD 2010-02-10, Amendment 39-16181 (75 FR 4477, January 28, 2010)] to require accomplishment of a one-time detailed inspection under the bogie stop pad of both MLG bogie beams. As a result of the one-time inspection required by that [EASA] AD, numerous bogie stop pad were found corroded and a few cracked. The one-time inspection was retained in EASA AD 2011-0211 [which corresponds to FAA AD 2013-10-03], which superseded EASA AD 2008-0223, which also introduced repetitive inspections, except for A340-500/-600 aeroplanes.

After EASA AD 2011-0211 was issued, further investigation led to the conclusion that the one-time inspection was no longer necessary and only the repetitive inspections should remain. In addition, it was determined that repetitive inspections were also necessary for MLG on A340-500/-600 aeroplanes.

Prompted by these conclusions, EASA issued AD 2014-0120, partially retaining the requirements of EASA AD 2011-0211, which was superseded, and introducing repetitive detailed inspections of the MLG on A340-500 and A340-600 aeroplanes. Subsequently, further analysis indicated that repetitive inspections of the MLG on A340-500/-600 aeroplanes were not necessary after all. In addition, the threshold for the inspection of MLG P/N 10-210 series was raised from 24 to 126 months, and Airbus developed a modification of the MLG P/N 10-210 series which provides an (optional) terminating action for the repetitive inspections.

Consequently, EASA AD 2014-0120 was revised to delete the requirements for A340-500/-600 aeroplanes, to amend the inspection threshold for MLG P/N 10-210 series, and to introduce an optional terminating action for aeroplanes with MLG P/N 10-210 series.

Since EASA AD 2014-0120R1 was issued, Airbus developed a modification (mod 205289) of the MLG P/N 201252 series and P/N 201490 series that must be embodied in service with Airbus SB A330-32-3275 or SB A340-32-4305. It was also identified that A340-500/-600 aeroplanes could be removed from the applicability of this [EASA] AD as no more actions were required on these aeroplanes.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2014-0120R1, which is superseded, removes the A340-500/-600 aeroplanes from the Applicability and requires the modification of the MLG P/N 201252 series and P/N 201490 series, which constitutes terminating action for the repetitive inspections required by this [EASA] AD.

The required actions include repetitive detailed inspections for damage and corrosion of the sliding piston sub-assembly, and related investigative and corrective actions if necessary. Related investigative actions include a test for indications of corrosion and damage to the bogie assembly base material, and a magnetic particle inspection for cracks, corrosion, and damage of the bogie beam. Corrective actions include repairing affected parts.

The required terminating action (for a MLG having P/N 201252 series or P/N 201490 series) and the optional terminating action (for a MLG having P/N 10-210 series) are modifications of the bogie beam of a MLG, which consist of installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets.

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-2016-3984.

## **Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comment received. Air Line Pilots Association, International supported the SNPRM.

## **Conclusion**

We reviewed the available data, including the comment received, 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 SNPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the SNPRM.

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

Airbus has issued the following service information.

- Airbus Service Bulletin A330-32-3248, Revision 05, including Appendix 1, dated May 4, 2016; and Airbus Service Bulletin A340-32-4286, Revision 02, including Appendix 1, dated January 5, 2016; which describe procedures for doing an inspection for damage and corrosion of the MLG sliding piston sub-assembly, bogie beam stop pad and the bogie beam under the stop pad, and related investigative and corrective actions. These documents are distinct since they apply to different airplane models.
- Airbus Service Bulletin A330-32-3268, Revision 01, dated September 21, 2015, which describes procedures for modification of the bogie beam of a MLG having P/N 10-210 series on Model A330 airplanes that includes installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets.
- Airbus Service Bulletin A330-32-3275, dated December 23, 2015, which describes procedures for modification of the bogie beam of a MLG having P/N 201252 series or P/N 201490 series on Model A330 airplanes that includes installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets.
- Airbus Service Bulletin A340-32-4300, dated April 20, 2015; and Revision 01, dated September 21, 2015; which describe procedures for modification of the bogie beam of a MLG having P/N 10-210 series on Model A340 airplanes that include installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets. These service bulletins are distinct due to editorial revisions.
- Airbus Service Bulletin A340-32-4305, dated December 23, 2015, which describes procedures for modification of the bogie beam of a MLG having P/N 201252 series or P/N 201490 series on Model A340 airplanes that includes installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets.

Messier-Bugatti-Dowty has issued the following service information.

- Messier-Bugatti-Dowty Service Bulletin A33/34-32-305, including Appendix A, dated April 13, 2015, which describes procedures for modification of the bogie beam of a MLG having

MLG P/N 10-210 series that includes installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets.

- Messier-Bugatti-Dowty Service Bulletin A33/34-32-306, Revision 1, including Appendix A, dated May 31, 2016, which describes procedures for modification of the bogie beam of a MLG having P/N 201252 series or P/N 201490 series that includes installing a nickel under chrome coating, a new bogie beam stop pad, and new stop pad brackets.

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 89 Model A330-200, -200 Freighter, and -300 series airplanes of U.S. registry.

We estimate that it will take about 13 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$98,345, or \$1,105 per product.

Currently, there are no Model A340-200 or -300 series airplanes on the U.S. Register. However, if an affected airplane is imported and placed on the U.S. Register in the future, it would be subject to the same per-airplane cost specified above for the Model A330-200, -200 Freighter, and -300 series airplanes.

In addition, we estimate that any necessary follow-on actions will take about 24 work-hours and require parts costing \$78, for a cost of \$2,118 per product. We have no way of determining the number of aircraft that might need these actions.

According to the manufacturer, all of the parts costs of the optional terminating action specified in this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate. We have received no definitive data that would enable us to provide the work-hour cost estimates for the optional terminating action specified in this AD.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this 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 removing Airworthiness Directive (AD) 2013-10-03, Amendment 39-17456 (78 FR 31386, May 24, 2013), and adding the following new AD:



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**2017-14-01 Airbus:** Amendment 39-18945; Docket No. FAA-2016-3984; Directorate Identifier 2014-NM-119-AD.

**(a) Effective Date**

This AD is effective August 10, 2017.

**(b) Affected ADs**

This AD replaces AD 2013-10-03, Amendment 39-17456 (78 FR 31386, May 24, 2013) ("AD 2013-10-03").

**(c) Applicability**

This AD applies to Airbus airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category, all serial numbers, except those airplanes that have embodied Airbus Modification 204421 or Airbus Modification 205289 in production.

(1) Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(2) Model A340-211, -212, -213, -311, -312, and -313 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of corroded and cracked bogie beams under the bogie stop pad. We are issuing this AD to detect and correct damage or corrosion under the bogie stop pad of both main landing gear (MLG) bogie beams; this condition could result in a damaged bogie beam and consequent detachment of the beam from the airplane, collapse of the MLG, or departure of the airplane from the runway, possibly resulting in damage to the airplane and injury to occupants.

**(f) Compliance**

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

**(g) Repetitive Inspections, Related Investigative Actions, and Corrective Actions**

For Model A330-200, -200 Freighter, and -300 series airplanes; and Model A340-200 and -300 series airplanes; equipped with a MLG having part number (P/N) 201252 series, P/N 201490 series, or P/N 10-210 series: Do the applicable actions required by paragraph (g)(1) or (g)(2) of this AD.

(1) For airplanes equipped, as of the effective date of this AD, with a MLG that has been previously inspected, as specified in Airbus Service Bulletin A330-32-3220, Airbus Service Bulletin A330-32-3248, Airbus Service Bulletin A340-32-4264, or Airbus Service Bulletin A340-32-4286, as

applicable: At the applicable times specified in paragraphs (h)(1) and (h)(2) of this AD, do a detailed inspection for damage (e.g., cracking and fretting) and corrosion of the MLG sliding piston sub-assembly, bogie beam stop pad, and the bogie beam under the stop pad; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-32-3248, Revision 05, including Appendix 1, dated May 4, 2016; or Airbus Service Bulletin A340-32-4286, Revision 02, including Appendix 1, dated January 5, 2016; as applicable; except as required by paragraph (j) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection of the MLG sliding piston sub-assembly, bogie beam stop pad, and the bogie beam under the stop pad, thereafter, at intervals not to exceed 2,500 flight cycles or 24 months, whichever occurs first.

(2) For airplanes equipped, as of the effective date of this AD, with a MLG that has not been previously inspected, as specified in Airbus Service Bulletin A330-32-3220, Airbus Service Bulletin A330-32-3248, Airbus Service Bulletin A340-32-4264, or Airbus Service Bulletin A340-32-4286, as applicable: At the applicable times specified in paragraphs (h)(3) and (h)(4) of this AD, do a detailed inspection for damage (e.g., cracking and fretting) and corrosion of the MLG sliding piston sub-assembly, bogie beam stop pad, and the bogie beam under the stop pad; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-32-3248, Revision 05, including Appendix 1, dated May 4, 2016; or Airbus Service Bulletin A340-32-4286, Revision 02, including Appendix 1, dated January 5, 2016; as applicable; except as required by paragraph (j) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection of the MLG sliding piston sub-assembly, bogie beam stop pad, and the bogie beam under the stop pad, thereafter, at intervals not to exceed 2,500 flight cycles or 24 months, whichever occurs first.

#### **(h) Compliance Times for the Actions Required by Paragraph (g) of This AD**

Do the applicable actions required by paragraph (g) of this AD at the applicable time specified in paragraph (h)(1), (h)(2), (h)(3), or (h)(4) of this AD.

(1) For airplanes identified in paragraph (g)(1) of this AD having a MLG P/N 201252 series or P/N 201490 series: Before the accumulation of 2,500 total flight cycles or 24 months, whichever occurs first since the later of the times specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD.

(i) Since first flight after a MLG overhaul.

(ii) Since first flight after the most recent accomplishment of an inspection of the MLG, as specified in Airbus Service Bulletin A330-32-3220, Airbus Service Bulletin A330-32-3248, Airbus Service Bulletin A340-32-4264, or Airbus Service Bulletin A340-32-4286, as applicable.

(2) For airplanes identified in paragraph (g)(1) of this AD having a MLG P/N 10-210 series: Before the accumulation of 126 months since first flight of the MLG on an airplane or since first flight on an airplane after the most recent inspection of the MLG, as specified in Airbus Service Bulletin A330-32-3248, or Airbus Service Bulletin A340-32-4286, as applicable.

(3) For airplanes identified in paragraph (g)(2) of this AD having a MLG P/N 201252 series or P/N 201490 series: At the later of the times specified in paragraphs (h)(3)(i) and (h)(3)(ii) of this AD.

(i) Before the accumulation of 2,500 total flight cycles or 24 months, whichever occurs first since the later of the times specified in paragraphs (h)(3)(i)(A) and (h)(3)(i)(B) of this AD.

(A) Since first flight of the MLG on an airplane.

(B) Since first flight after a MLG overhaul.

(ii) Within 16 months after the effective date of this AD.

(4) For airplanes identified in paragraph (g)(2) of this AD having a MLG P/N 10-210 series: Before the accumulation of 126 months since first flight of the MLG on an airplane.

### **(i) Optional Overhaul**

For the purposes of this AD, accomplishment of a MLG overhaul is acceptable instead of an inspection required by paragraph (g) of this AD. The inspections required by paragraph (g) of this AD are not terminated by a MLG overhaul, but are required at the next applicable compliance time required by paragraph (g) of this AD.

### **(j) Service Information Exception**

If the applicable service information specified in paragraph (g) of this AD specifies to contact Messier-Dowty for instructions, or if any repair required by paragraph (g) of this AD is beyond the maximum repair allowance specified in the applicable service information specified in paragraph (g) of this AD: Before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

### **(k) MLG Modification**

For airplanes equipped with a MLG having P/N 201252 series or a MLG having P/N 201490 series: Before the accumulation of 126 months since first flight of the MLG on an airplane or since first flight on an airplane after the most recent overhaul as of the effective date of this AD, as applicable, replace that MLG with a MLG having P/N 201252 series or a MLG having P/N 201490 series that has an improved bogie beam, as defined in Airbus Service Bulletin A330-32-3275, dated December 23, 2015; or Airbus Service Bulletin A340-32-4305, dated December 23, 2015; as applicable; and in accordance with the Accomplishment Instructions of Messier-Bugatti-Dowty Service Bulletin A33/34-32-306, Revision 1, including Appendix A, dated May 31, 2016.

### **(l) Terminating Action Limitation**

Accomplishment of corrective actions required by paragraph (g) of this AD does not constitute terminating action for the repetitive inspections required by this AD.

### **(m) Terminating Action for Certain Airplanes**

(1) For airplanes with any MLG having P/N 10-210 series: Modification of the bogie beam of each MLG having P/N 10-210 series, as specified in Airbus Service Bulletin A330-32-3268, Revision 01, dated September 21, 2015; or Airbus Service Bulletin A340-32-4300, dated April 20, 2015; or Revision 01, dated September 21, 2015; as applicable; and in accordance with the Accomplishment Instructions of Messier-Bugatti-Dowty Service Bulletin A33/34-32-305, including Appendix A, dated April 13, 2015; constitutes terminating action for the repetitive inspection requirements of this AD for that airplane, provided that, following in-service modification, the airplane remains in the post-service bulletin configuration.

(2) For airplanes with any MLG having P/N 201252 series or P/N 201490 series: Installation of both left-hand and right-hand MLG having P/N 201252 series or P/N 201490 series that has an improved bogie beam, as required by paragraph (k) of this AD, constitutes terminating action for the repetitive inspections requirements of this AD for that airplane, provided that, following in-service modification, the airplane remains in the post-service bulletin configuration.

### **(n) Parts Installation Prohibition**

Do not install on any airplane a pre-Airbus modification MLG having P/N 201252 series or a pre-Airbus modification MLG having P/N 201490 series, as specified in paragraph (n)(1) or (n)(2) of

this AD, as applicable; or a pre-Airbus modification MLG having P/N 10-210 series, as specified in paragraph (n)(3) or (n)(4) of this AD, as applicable.

(1) For any airplane that is in a post-Airbus Modification 205289 configuration, or on which the modification required by paragraph (k) of this AD has been done: From the effective date of this AD.

(2) For any airplane that is in a pre-Airbus Modification 205289 configuration, or on which the modification required by paragraph (k) of this AD has not been done: After modification of that airplane, as required by paragraph (k) of this AD.

(3) For any airplane that is in post-Airbus Modification 204421 configuration, or on which the modification specified in paragraph (m)(1) of this AD has been done: From the effective date of this AD.

(4) For an airplane that is in pre-Airbus Modification 204421, or on which the modification specified in paragraph (m)(1) of this AD has not been done: After modification of that airplane, as specified in paragraph (m)(1) of this AD.

#### **(o) Credit for Previous Actions**

(1) This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraphs (o)(1)(i) through (o)(1)(vii) or (o)(2) of this AD, as applicable.

(i) Airbus Service Bulletin A330-32-3248, dated October 5, 2011, which is not incorporated by reference in this AD.

(ii) Airbus Service Bulletin A330-32-3248, Revision 01, including Appendix 01, dated December 13, 2012, which was incorporated by reference in AD 2013-10-03.

(iii) Airbus Service Bulletin A330-32-3248, Revision 02, dated April 16, 2014, which is not incorporated by reference in this AD.

(iv) Airbus Service Bulletin A330-32-3248, Revision 03, dated November 27, 2014, which is not incorporated by reference in this AD.

(v) Airbus Service Bulletin A330-32-3248, Revision 04, dated January 5, 2016, which is not incorporated by reference in this AD.

(vi) Airbus Service Bulletin A340-32-4286, dated October 5, 2011, which was incorporated by reference in AD 2013-10-03.

(vii) Airbus Service Bulletin A340-32-4286, Revision 01, dated November 27, 2014, which is not incorporated by reference in this AD.

(2) This paragraph provides credit for the actions required by paragraph (k) of this AD, if those actions were performed before the effective date of this AD using Messier-Bugatti-Dowty Service Bulletin A33/34-32-306, dated December 21, 2015, which is not incorporated by reference in this AD.

#### **(p) 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 manager of the International Branch, send it to the attention of the person identified in paragraph (q)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) 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.

(ii) AMOCs approved previously for AD 2013-10-03 are not approved as AMOCs with this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, 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 EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): Except as required by paragraph (j) of this AD: 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.

#### **(q) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2016-0108, dated June 8, 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-2016-3984.

(2) For more information about this AD, 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.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (r)(3), (r)(4), and (r)(5) of this AD.

#### **(r) 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 A330-32-3248, Revision 05, including Appendix 1, dated May 4, 2016.

(ii) Airbus Service Bulletin A330-32-3268, Revision 01, dated September 21, 2015.

(iii) Airbus Service Bulletin A330-32-3275, dated December 23, 2015.

(iv) Airbus Service Bulletin A340-32-4286, Revision 02, including Appendix 1, dated January 5, 2016.

(v) Airbus Service Bulletin A340-32-4300, dated April 20, 2015.

(vi) Airbus Service Bulletin A340-32-4300, Revision 01, dated September 21, 2015.

(vii) Airbus Service Bulletin A340-32-4305, dated December 23, 2015.

(viii) Messier Bugatti Dowty Service Bulletin A33/34-32-305, including Appendix A, dated April 13, 2015.

(ix) Messier Bugatti Dowty Service Bulletin A33/34-32-306, Revision 1, including Appendix A, dated May 31, 2016.

(3) For Airbus 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) For Messier-Bugatti-Dowty service information identified in this final rule, contact Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; phone: 703-450-8233; fax: 703-404-1621; Internet: <https://techpubs.services/messier-dowty.com>.

(5) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

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