



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-9069; Directorate Identifier 2016-NM-012-AD; Amendment 39-18821; AD 2017-05-10]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2015-16-02 for all Airbus Model A330 series airplanes. AD 2015-16-02 required revising the maintenance or inspection program to incorporate certain maintenance requirements and airworthiness limitations. This new AD requires revising the maintenance or inspection program to incorporate new maintenance requirements and airworthiness limitations. This AD was prompted by a revision of the airworthiness limitations items (ALI) document, which provides new and more restrictive maintenance requirements and airworthiness limitations for airplane structures and systems. We are issuing this AD to address the unsafe condition on these products.

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

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of September 15, 2015 (80 FR 48019, August 11, 2015).

**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; 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-2016-9069.

#### **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-2016-9069; 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 notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2015-16-02, Amendment 39-18227 (80 FR 48019, August 11, 2015) (“AD 2015-16-02”). AD 2015-16-02 applied to all Airbus Model A330 series airplanes. The NPRM published in the Federal Register on September 12, 2016 (81 FR 62672). The NPRM was prompted by a revision of the ALI document, which provides new and more restrictive maintenance requirements and airworthiness limitations for airplane structures and systems. The NPRM proposed to require revising the maintenance or inspection program to incorporate new maintenance requirements and airworthiness limitations. We are issuing this AD to prevent reduced structural integrity and reduced control of these airplanes due to the failure of system components.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2016-0011, dated January 13, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus Model A330 and A340 series airplanes. The MCAI states:

The airworthiness limitations are currently defined and published in the Airbus A330 and A340 Airworthiness Limitations Section (ALS) documents. The airworthiness limitations applicable to the System Equipment Maintenance Requirements, which are approved by EASA, are specified in Airbus A330 and A340 ALS Part 4. Failure to comply with these instructions could result in an unsafe condition.

EASA issued AD 2013-0268 (for A330 aeroplanes) [which corresponds to FAA AD 2015-16-02] and AD 2013-0269 (for A340 aeroplanes) [which corresponds to FAA AD 2014-23-17, Amendment 39-18033 (79 FR 71304, December 2, 2014) (“AD 2014-23-17”)] to require the actions as specified in Airbus A330 and A340 ALS Part 4 at Revision 04 and Revision 03, respectively.

Since those [EASA] ADs were issued, Airbus issued Revision 05 and Revision 04, respectively, of Airbus A330 and A340 ALS Part 4, which introduce new and more restrictive maintenance requirements and/or airworthiness limitations.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2013-0268 and AD 2013-0269, which are superseded, and require accomplishment of the actions specified in Airbus A330 ALS Part 4 Revision 05, or A340 ALS Part 4 Revision 04, as applicable (hereafter collectively referred to as ‘the ALS’ in this [EASA] AD).

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-2016-9069.

### **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 Adopt ALS Variation**

American Airlines (AAL) requested that Airbus A330 ALS Part 4 – System Equipment Maintenance Requirements (SEMR) – Variation 5.1, dated December 20, 2015 (“Variation 5.1”), also be adopted in the final rule. AAL noted that Variation 5.1 was approved as an alternative method of compliance (AMOC) to AD 2015-16-02 via ANM-116-16-272, dated April 13, 2016.

We agree that AMOCs approved previously for AD 2015-16-02 continue to be approved as AMOCs for the corresponding provisions of paragraph (g) of this AD, as stated in paragraph (l)(1)(ii) of this AD. We also agree to include Variation 5.1 as a method of compliance for the requirements of paragraph (j) of this AD for components specified in Variation 5.1. We have revised paragraph (j) of this AD accordingly.

### **Request to Re-open the Comment Period**

Airbus requested that we re-open the comment period specified in the NPRM in order to introduce Revision 06 of Airbus A330 ALS Part 4 - SEMR. Airbus pointed out that, since the MCAI was published, multiple new variations to Airbus A330 ALS Part 4 have been issued and have been or are being approved by EASA. Airbus stated that these variations will be included in Revision 06 of Airbus A330 ALS Part 4 – SEMR, which is expected to be approved under Airbus's EASA Design Organization Approval in mid-January 2017. Airbus asserted that a new EASA AD will be issued to supersede EASA AD 2016-0011 once Revision 06 is issued.

We disagree. We have determined that more restrictive maintenance requirements and airworthiness limitations for airplane structures and systems are necessary to prevent reduced structural integrity and reduced control of these airplanes, due to the failure of system components. Therefore, we do not consider that delaying this action by reopening the comment period until such time as the manufacturer's planned service information is released is warranted, since the necessary service information is currently available. However, under the provisions of paragraph (l)(1) of this AD, we will consider requests for approval to use Revision 06 of Airbus A330 ALS Part 4 – SEMR once it is approved and available. We have not changed the AD in this regard.

### **Conclusion**

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these 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 A330 ALS Part 4 – SEMR, Revision 05, dated October 19, 2015. This service information describes preventative maintenance requirements and associated airworthiness limitations applicable to aircraft systems susceptible to aging effects.

Airbus also issued Airbus A330 ALS Part 4 – System Equipment Maintenance Requirements (SEMR) – Variation 5.1, dated December 20, 2015. This service information describes revising the maintenance or inspection program by increasing the life limits for certain components.

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 104 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Maintenance or inspection program revision (retained actions from AD 2015-16-02)	1 work-hours X \$85 per hour = \$85	\$0	\$85	\$8,840
Maintenance or inspection program revision (new action)	1 work-hours X \$85 per hour = \$85	\$0	\$85	\$8,840

**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) AD 2015-16-02, Amendment 39-18227 (80 FR 48019, August 11, 2015), and adding the following new AD:

**2017-05-10 Airbus:** Amendment 39-18821; Docket No. FAA-2016-9069; Directorate Identifier 2016-NM-012-AD.

#### **(a) Effective Date**

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

#### **(b) Affected ADs**

This AD replaces AD 2015-16-02, Amendment 39-18227 (80 FR 48019, August 11, 2015) (“AD 2015-16-02”).

#### **(c) Applicability**

This AD applies to Airbus Model A330-201, A330-202, A330-203, A330-223, A330-243, A330-223F, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343 airplanes, certificated in any

category, with an original certificate of airworthiness or original export certificate of airworthiness issued on or before October 19, 2015.

**(d) Subject**

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

**(e) Reason**

This AD was prompted by a revision of the airworthiness limitations items (ALI) document, which provides new and more restrictive maintenance requirements and airworthiness limitations for airplane structures and systems. We are issuing this AD to prevent reduced structural integrity and reduced control of these airplanes due to the failure of system components.

**(f) Compliance**

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

**(g) Retained Maintenance Program Revision and Actions, with No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2015-16-02, with no changes. Within 6 months after September 15, 2015 (the effective date of AD 2015-16-02), revise the maintenance program or inspection program, as applicable, by incorporating Airbus A330 Airworthiness Limitations Section (ALS) Part 4—Aging Systems Maintenance, Revision 04, dated August 27, 2013; and Airbus A330 ALS Part 4—Aging Systems Maintenance (ASM), Variation 4.1 and Variation 4.2, both dated July 23, 2014. The initial compliance times for the actions are within the applicable compliance times specified in the Record of Revisions pages of Airbus A330 ALS

Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; and Airbus A330 ALS Part 4–Aging Systems Maintenance (ASM), Variation 4.1 and Variation 4.2, both dated July 23, 2014; or within 6 months after September 15, 2015; whichever is later; except as required by paragraph (h) of this AD.

**(h) Retained Exceptions to Initial Compliance Times, with References to New Service Information**

This paragraph restates the requirements of paragraph (h) of AD 2015-16-02, with references to new service information.

(1) Where Airbus A330 ALS Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; or Airbus A330 ALS Part 4 – System Equipment Maintenance Requirements (SEMR), Revision 05, dated October 19, 2015; define a calendar compliance time for elevator servo-controls having part number (P/N) SC4800-2, SC4800-3, SC4800-4, SC4800-6, SC4800-7, or SC4800-8 as "August 31, 2004," the calendar compliance time is June 13, 2007 (34 months after August 13, 2004 (the effective date of AD 2004-13-25, Amendment 39-13707 (69 FR 41394, July 9, 2004))).

(2) Where Airbus A330 ALS Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; or Airbus A330 ALS Part 4 –SEMR, Revision 05, dated October 19, 2015; define a calendar compliance time for spoiler servo-controls (SSCs) having P/N 1386A0000-01, 1386B0000-01, 1387A0000-01, or 1387B0000-01 as "December 31, 2003," the calendar compliance time is November 19, 2005 (13 months after October 19, 2004 (the effective date of AD 2004-18-14, Amendment 39-13793 (69 FR 55326, September 14, 2004))).

(3) Where Airbus A330 ALS Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; or Airbus A330 ALS Part 4 –SEMR, Revision 05, dated October 19, 2015; define a calendar compliance time for elevator servo-controls having P/N SC4800-73, SC4800-93, SC4800-103, and SC4800-113 as "June 30, 2008," the calendar compliance time is September 16, 2009 (17 months after April 16, 2008 (the effective date of AD 2008-06-07, Amendment 39-15419 (73 FR 13103, March 12, 2008; corrected April 15, 2008 (73 FR 20367)))).

(4) The initial compliance time for replacement of the retraction brackets of the main landing gear (MLG) having a part number specified in paragraphs (h)(4)(i) through (h)(4)(xvi) of this AD is before the accumulation of 19,800 total landings on the affected retraction brackets of the MLG, or within 900 flight hours after April 9, 2012 (the effective date of AD 2012-04-07, Amendment 39-16963 (77 FR 12989, March 5, 2012)), whichever occurs later.

(i) 201478303.

(ii) 201478304.

(iii) 201478305.

(iv) 201478306.

(v) 201478307.

(vi) 201478308.

(vii) 201428380.

(viii) 201428381.

(ix) 201428382.

(x) 201428383.

(xi) 201428384.

(xii) 201428385.

(xiii) 201428378.

(xiv) 201428379.

(xv) 201428351.

(xvi) 201428352.

(5) Where Airbus A330 ALS Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; or Airbus A330 ALS Part 4 –SEMR, Revision 05, dated October 19, 2015; define a calendar compliance time for the modification of SSCs on three hydraulic circuits having P/N MZ4339390-01X, MZ4306000-01X, MZ4339390-02X, MZ4306000-02X, MZ4339390-10X, or MZ4306000-10X as "March 5, 2010," the calendar compliance time is April 14, 2011 (18 months after October 14, 2009 (the effective date of AD 2009-18-20, Amendment 39-16017 (74 FR 46313, September 9, 2009))) ("AD 2009-18-20").

(6) Where Note (6) of "ATA 27-64-00 Flight Control–Spoiler Hydraulic Actuation," of Sub-part 4-2-1, "Life Limits," of Sub-part 4-2, "Systems Life Limited Components," of Airbus A330 ALS Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; or Note (17) of Sub-Part 1, "Life Limits," of Section 3, "System Life-Limited Components," of Airbus A330 ALS Part 4 –SEMR, Revision 05, dated October 19, 2015; define a calendar date of "September 5, 2008," as a date for the

determination of accumulated flight cycles since the aircraft initial entry into service, the date is October 14, 2009 (the effective date of AD 2009-18-20).

(7) Where Note (6) of "ATA 27-64-00 Flight Control–Spoiler Hydraulic Actuation," of Sub-part 4-2-1, "Life Limits," of Sub-part 4-2, "Systems Life Limited Components," of Airbus A330 ALS Part 4–Aging Systems Maintenance, Revision 04, dated August 27, 2013; or Note (17) of Sub-Part 1, "Life Limits," of Section 3, "System Life-Limited Components," of Airbus A330 ALS Part 4 –SEMR, Revision 05, dated October 19, 2015; define a calendar compliance time as "March 5, 2010," for the modification of affected servo controls, the calendar compliance time is April 14, 2011 (18 months after October 14, 2009 (the effective date of AD 2009-18-20)).

**(i) Retained No Alternative Actions or Intervals, with Revised Compliance Language**

This paragraph restates the requirements of paragraph (i) of AD 2015-16-02, with revised compliance language. Except as required by paragraph (j) of this AD: After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l)(1) of this AD.

**(j) New Requirement of this AD: Maintenance or Inspection Program Revision and Actions**

Within 90 days after the effective date of this AD, revise the maintenance program or inspection program, as applicable, by incorporating Airbus A330 Airworthiness Limitations Section (ALS) Part 4 –SEMR, Revision 05, dated October 19, 2015. The initial compliance times for the actions specified in Airbus A330 ALS Part 4 –

SEMR, Revision 05, dated October 19, 2015, are within the applicable compliance times specified in Airbus A330 ALS Part 4 –SEMR, Revision 05, dated October 19, 2015, or within 60 days after the effective date of this AD, whichever is later, except as required by paragraph (h) of this AD. Accomplishing the revision of the maintenance program or inspection program, as applicable, required by this paragraph terminates the requirements of paragraph (g) of this AD. Revising the maintenance program or inspection program, as applicable, by incorporating Airbus A330 ALS Part 4 – SEMR – Variation 5.1, dated December 20, 2015, is an acceptable method of compliance for the components specified in the variation.

**(k) New Requirement of this AD: No Alternative Actions or Intervals**

After accomplishing the revision required by paragraph (j) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an AMOC in accordance with the procedures specified in paragraph (l)(1) of this AD.

**(l) 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.

(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. The AMOC approval letter must specifically reference this AD.

(ii) AMOCs approved previously for AD 2015-16-02 are approved as AMOCs for the corresponding provisions of paragraph (g) of 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 Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(m) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2016-0011, dated January 13, 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-2016-9069.

**(n) 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 A330 Airworthiness Limitations Section (ALS) Part 4 – System Equipment Maintenance Requirements (SEMR), Revision 05, dated October 19, 2015.

(ii) Airbus A330 ALS Part 4 – System Equipment Maintenance Requirements (SEMR) – Variation 5.1, dated December 20, 2015.

(3) The following service information was approved for IBR on September 15, 2015 (80 FR 48019, August 11, 2015).

(i) Airbus A330 Airworthiness Limitations Section (ALS) Part 4 – Aging Systems Maintenance, Revision 04, dated August 27, 2013.

(ii) Airbus A330 ALS Part 4 – Aging Systems Maintenance (ASM), Variation 4.1, dated July 23, 2014.

(iii) Airbus A330 ALS Part 4 – Aging Systems Maintenance (ASM), Variation 4.2, dated July 23, 2014.

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

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

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

Issued in Renton, Washington, on February 28, 2017.

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

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