

[Federal Register: March 12, 2008 (Volume 73, Number 49)]  
[Rules and Regulations]  
[Page 13093-13096]  
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[DOCID:fr12mr08-9]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2007-0229; Directorate Identifier 2007-NM-042-AD; Amendment 39-15417; AD 2008-06-05]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus Model A330-200, A330-300, A340-200, and A340-300 Series Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD), which applies to all Airbus Model A330-200, A330-300, A340-200, and A340-300 series airplanes. That AD currently requires a revision of the airplane flight manual to include procedures for a pre-flight elevator check before each flight, repetitive inspections for cracks of the attachment lugs of the mode selector valve position transducers on the elevator servo controls, and corrective actions if necessary. This new AD retains the existing requirements, reduces the applicability of the existing AD, and adds terminating actions. For certain airplanes, this AD requires upgrading the flight control primary computers. This AD results from a report of cracks of the transducer body at its attachment lugs. We are issuing this AD to ensure proper functioning of the elevator surfaces, and to prevent cracking of the attachment lugs, which could result in partial loss of elevator function and consequent reduced controllability of the airplane.

**DATES:** This AD becomes effective April 16, 2008.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of April 16, 2008.

**ADDRESSES:** For service information identified in this AD, contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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 the Document 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:** Tim Backman, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2797; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2004-03-24, amendment 39-13468 (69 FR 6549, February 11, 2004). The existing AD applies to all Airbus Model A330-200, A330-300, A340-200, and A340-300 series airplanes. That NPRM was published in the Federal Register on November 26, 2007 (72 FR 65897). That NPRM proposed to retain the existing requirements, reduce the applicability of the existing AD, and add terminating actions.

### **New Service Information**

Airbus has issued Revision 03 of Airbus Service Bulletins A330-27-3115 and A340-27-4119, both dated April 22, 2005. In the NPRM, we referred to Revision 02 dated December 30, 2003, of those service bulletins as the appropriate sources of service information for accomplishing certain required actions. Revision 03 of the service bulletins updates the operator and aircraft effectivity to show the latest information. No additional work is required by this revision of the service bulletins. We have changed paragraph (h) of this AD to refer to Airbus Service Bulletins A330-27-3115 and A340-27-4119, both Revision 03, both dated April 22, 2005. We have also added paragraph (h)(3) to the AD to give credit to operators that have done the actions previously in accordance with Revision 02 of those service bulletins.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We have considered the comment that has been received on the NPRM.

### **Request To Extend Compliance Time for the Modification**

Air Transport Association (ATA) and one of its members, Northwest Airlines (NWA), state that the terminating action specified in the proposed AD should be mandated at a maximum of 24 months after the effective date for coordination with the aircraft C-check intervals. NWA adds that the repetitive tests of the elevator servo-loops will ensure continued safe operation until terminating action is accomplished.

We do not agree with the request from ATA and NWA to extend the compliance time. In developing an appropriate compliance time for this action, we considered the urgency associated with the subject unsafe condition, the availability of required parts, and the practical aspect of accomplishing the required modification within a period of time that corresponds to the normal scheduled maintenance for most affected operators. In light of these items, we have determined that a 17-month compliance time is appropriate. However, according to the provisions of paragraph (p) of the AD, we might approve requests to adjust the compliance time if the request includes data that justify that the new compliance time would provide an acceptable level of safety.

## Conclusion

We have carefully reviewed the available data, including the comment that has been received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

## Costs of Compliance

The following table provides the estimated costs for U.S. operators of the affected Model A330-200 and A330-300 series airplanes to comply with this AD.

Estimated Costs					
Action	Work hours	Average labor rate per hour	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
AFM revision (required by AD 2004-03-24)	1	\$80	\$80	29	\$2,320
Inspection (required by AD 2004-03-24)	4	\$80	\$320, per inspection cycle	29	\$9,280, per inspection cycle
Inspection (new action)	1	\$80	\$80	29	\$2,320

Currently, there are no affected Model A340-200 and A340-300 series airplanes on the U.S. Register. However, if an affected airplane is imported and placed on the U.S. Register in the future, the upgrade of the flight control primary computers (FCPCs) would take about 2 work hours, at an average labor rate of \$80 per work hour. The manufacturer states that it would supply required parts to the operators at no cost. Based on these figures, we estimate the cost of this AD for Model A340-200 and A340-300 series airplanes to be \$160 per airplane.

## 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 have 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 DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

### **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 Federal Aviation Administration (FAA) amends § 39.13 by removing amendment 39-13468 (69 FR 6549, February 11, 2004) and by adding the following new airworthiness directive (AD):



**2008-06-05 Airbus:** Amendment 39-15417. Docket No. FAA-2007-0229; Directorate Identifier 2007-NM-042-AD.

**Effective Date**

(a) This AD becomes effective April 16, 2008.

**Affected ADs**

(b) This AD supersedes AD 2004-03-24.

**Applicability**

(c) This AD applies to the airplanes identified in Table 1 of this AD, certificated in any category.

**Table 1 – Applicability**

<b>Airbus Model –</b>	<b>Excluding those airplanes on which any of the following –</b>	<b>Has been installed –</b>
A330-200, A330-300, A340-200, and A340-300 series airplanes	Airbus Modification 50394, 52195, 53969, or 54833	In production
	Airbus Service Bulletin A330-27-3128, dated May 3, 2005	In service
	Airbus Service Bulletin A340-27-4129, dated May 3, 2005	In service
	Airbus Service Bulletin A330-27-3136, Revision 01, dated July 19, 2006	In service
	Airbus Service Bulletin A340-27-4135, dated January 12, 2006	In service
	Goodrich Actuation Systems Service Bulletin SC4800-27-16, Revision 3, dated May 19, 2006	In service

**Unsafe Condition**

(d) This AD results from a report of cracks of the transducer body at its attachment lugs. We are issuing this AD to ensure proper functioning of the elevator surfaces, and to prevent cracking of the attachment lugs, which could result in partial loss of elevator function and consequent reduced controllability of the airplane.

**Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

## Requirements of AD 2004-03-24

### Airplane Flight Manual (AFM) Revision

(f) Within 30 days after February 26, 2004 (the effective date of AD 2004-03-24), revise the Limitations section of the AFM to include a pre-flight elevator check, by including the following language. This may be done by inserting a copy of this AD into the applicable AFM. Thereafter perform the pre-flight check before every flight in accordance with the procedure.

#### **Prior or During Taxi:**

#### **"FLIGHT CONTROLS–CHECK**

1. AT A CONVENIENT STAGE, PRIOR TO OR DURING TAXI, AND BEFORE ARMING THE AUTOBRAKE, THE PF SILENTLY APPLIES FULL LONGITUDINAL AND LATERAL SIDESTICK DEFLECTION. ON THE F/CTL PAGE, THE PNF CHECKS FULL TRAVEL OF ALL ELEVATORS AND ALL AILERONS, AND THE CORRECT DEFLECTION AND RETRACTION OF ALL SPOILERS. THE PNF CALLS OUT "FULL UP," "FULL DOWN," "NEUTRAL," "FULL LEFT," "FULL RIGHT," "NEUTRAL," AS EACH FULL TRAVEL/NEUTRAL POSITION IS REACHED. THE PF SILENTLY CHECKS THAT THE PNF CALLS ARE IN ACCORDANCE WITH THE SIDESTICK ORDER.

NOTE: IN ORDER TO REACH FULL TRAVEL, FULL SIDESTICK MUST BE HELD FOR A SUFFICIENT PERIOD OF TIME.

2. THE PF PRESSES THE PEDAL DISC PUSHBUTTON ON THE NOSEWHEEL TILLER, AND SILENTLY APPLIES FULL LEFT RUDDER, FULL RIGHT RUDDER, AND NEUTRAL. THE PNF CALLS OUT "FULL LEFT," "FULL RIGHT," "NEUTRAL," AS EACH FULL TRAVEL/NEUTRAL POSITION IS REACHED.

3. THE PNF APPLIES FULL LONGITUDINAL AND LATERAL SIDESTICK DEFLECTION, AND SILENTLY CHECKS FULL TRAVEL AND CORRECT SENSE OF ALL ELEVATORS AND ALL AILERONS, AND CORRECT DEFLECTION AND RETRACTION OF ALL SPOILERS, ON THE ECAM F/CTL PAGE."

Note 1: Full and complete elevator travel (position commanded) can be verified on the ECAM Flight Control Page. A determination of "correct sense" should include verification that there is complete and full motion of the sidesticks without binding.

(g) If any pre-flight check required by paragraph (f) of this AD reveals improper function of the elevator: Before further flight, perform the inspections required by paragraph (h) of this AD.

#### **Inspections**

(h) At the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, except as required by paragraph (g) of this AD: Perform a dye penetrant inspection of the attachment lugs of the mode selector valve position transducers on each elevator servo control installed at damping positions 3CS1 and 3CS2. Do the inspection in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3115 or A340-27-4119, both Revision 03, both including Appendix 01, both dated April 22, 2005, as applicable (in paragraphs (h) through (k) of this AD, referred to as "the service bulletin"). An inspection that is done before February 26, 2004, is acceptable for compliance with the

initial inspection requirement of this paragraph, if the inspection is done in accordance with any of the following Airbus all operators telexes (AOTs): AOT A330-27A3115 or A340-27A4119, dated September 11, 2003, or Revision 01 of each AOT dated September 25, 2003; as applicable. Repeat the inspection thereafter at intervals not to exceed 350 flight cycles, until the applicable actions required by paragraphs (m) and (n) of this AD have been done.

(1) If the age of the servo control from the date of its first installation on the airplane can be positively determined: Do the inspection before the accumulation of 1,000 total flight cycles on the elevator servo control, or within 350 flight cycles on the servo control after February 26, 2004, whichever occurs later.

(2) If the age of the servo control from the date of its first installation on the airplane cannot be positively determined, do the inspection within 350 flight cycles on the servo control after February 26, 2004.

(3) Actions done before the effective date of this AD in accordance with Airbus Service Bulletin A330-27A3115 or A340-27A4119, both Revision 02, both including Appendix 01, both dated December 30, 2003, are acceptable for compliance with the corresponding requirements of this AD.

Note 2: The service bulletin refers to Goodrich Actuation Systems Inspection Service Bulletin SC4800-27-13 as an additional source of service information for the inspection.

### **Corrective Actions**

(i) If any crack is found during any inspection required by paragraph (h) of this AD: Before further flight, replace either the transducer or servo control with a new part, in accordance with the service bulletin.

### **Reporting Requirement**

(j) If any crack is found during any inspection required by paragraph (h) of this AD: Submit a report in accordance with the service bulletin at the applicable time(s) specified in paragraphs (j)(1) and (j)(2) of this AD: Submit reports to Airbus Customer Services, Engineering and Technical Support, Attention: J. Laurent, SEE53, fax +33/(0)5.61.93.44.25, Sita Code TLSBQ7X. Under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements contained in this AD and has assigned OMB Control Number 2120-0056.

(1) For an initial inspection done before February 26, 2004: Submit the report within 30 days after February 26, 2004.

(2) For an inspection done after February 26, 2004: Submit the report within 30 days after the inspection.

### **Parts Installation**

(k) As of February 26, 2004, no person may install the following part on any airplane: a transducer, or a transducer fitted on an elevator servo control, in the operator's inventory before September 25, 2003, unless that transducer has been inspected in accordance with the service bulletin and is crack free.

### **New Requirements of This AD**

## Upgrade Flight Control Primary Computers (FCPCs)

(l) For Model A340-200 and -300 series airplanes: Within 2 months after the effective date of this AD, upgrade the three FCPCs in accordance with the Accomplishment Instructions of Airbus Service Bulletin A340-27-4131, dated February 21, 2005.

Note 3: Airbus Service Bulletin A340-27-4131 refers to Airbus Vendor Service Bulletins LA2K0-27-017 and LA2K1-27-009, both dated January 25, 2005, as additional sources of service information for upgrading the FCPCs.

### Terminating Actions

(m) Within 17 months after the effective date of this AD, do the actions specified in Table 2 of this AD.

**Table 2 – Terminating Actions**

<b>Inspect –</b>	<b>In Accordance with the Accomplishment Instructions of Airbus Service Bulletin –</b>	<b>And if –</b>	<b>Then –</b>	<b>In Accordance with –</b>
(1) The elevator servo control to determine whether part number (P/N) SC4800-7A or -9 is installed	A330-27-3128, dated May 3, 2005 (for Model A330-200 and -300 series airplanes); or A340-27-4129, dated May 3, 2005 (for Model A340-200 and -300 series airplanes); as applicable	P/N SC4800-7A or -9 is found installed	Modify the four elevator servo controls	The Accomplishment Instructions of the applicable Airbus service bulletin
(2) The elevator servo controls, P/N SC4800-10 and SC4800-11 to determine the serial number (S/N) installed	None	S/N 2324 or below is found installed	Replace the mode selector valve position transducer (MVT) of the elevator servo controls with a new MVT	Paragraphs 3.A.(2) and 3.B.(2) of the Accomplishment Instructions of Goodrich Actuation Systems Service Bulletin SC4800-27-16, Revision 3, dated May 19, 2006

Note 4: Airbus Service Bulletins A330-27-3128 and A340-27-4129 refer to Goodrich Actuation Systems Service Bulletin SC4800-27-16, Revision 3, dated May 19, 2006, as an additional source of service information for accomplishing the modification of the four elevator servo controls.

(n) Prior to or concurrently with the replacement, if required, specified in paragraph (m)(2) of this AD, replace the eye-end equipped with a self-lubricated bearing with a new eye-end equipped with a roller bearing, grease the new eye-end, and reidentify the servo control, in accordance with paragraph 2.A. of the Accomplishment Instructions of TRW Service Bulletin SC4800-27-34-09, Revision 1, dated November 9, 2001.

(o) Accomplishing all of the applicable actions required by paragraphs (m) and (n) of this AD constitutes terminating action for paragraphs (f) through (k) of this AD.

**Alternative Methods of Compliance (AMOCs)**

(p)(1) The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

**Related Information**

(q) European Aviation Safety Agency airworthiness directive 2007-0011, dated January 9, 2007, also addresses the subject of this AD.

**Material Incorporated by Reference**

(r) You must use the applicable service information contained in Table 3 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise.

**Table 3 – Material Incorporated by Reference**

<b>Service Bulletin</b>	<b>Revision Level</b>	<b>Date</b>
Airbus Service Bulletin A330-27-3115, including Appendix 01	03	April 22, 2005
Airbus Service Bulletin A330-27-3128	Original	May 3, 2005
Airbus Service Bulletin A340-27-4119, including Appendix 01	03	April 22, 2005
Airbus Service Bulletin A340-27-4129	Original	May 3, 2005
Airbus Service Bulletin A340-27-4131	Original	February 21, 2005
Goodrich Actuation Systems Service Bulletin SC4800-27-16	3	May 19, 2006
TRW Service Bulletin SC4800-27-34-09	1	November 9, 2001

Goodrich Actuation Systems Service Bulletin SC4800-27-16, Revision 3, contains the following effective pages:

<b>Page No.</b>	<b>Revision level shown on page</b>	<b>Date shown on page</b>
1, 6, 8	Original	May 9, 2005.
2-5, 7	3	May 19, 2006.

(1) The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France.

(3) You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or 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, 2008.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-4488 Filed 3-11-08; 8:45 am]