

[Federal Register: September 6, 2007 (Volume 72, Number 172)]  
[Rules and Regulations]  
[Page 51164-51167]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr06se07-3]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2007-27776; Directorate Identifier 2006-NM-170-AD; Amendment 39-15189; AD 2007-18-09]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus Model A318, A319, A320, and A321 Airplanes**

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

**ACTION:** Final rule.

---

**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD), which applies to all Airbus Model A318-100, A319-100, A320-200, A321-100, and A321-200 series airplanes, and Model A320-111 airplanes. That AD currently requires an inspection to determine whether certain braking and steering control units (BSCUs) are installed or have ever been installed. For airplanes on which certain BSCUs are installed or have ever been installed, the existing AD requires an inspection of the nose landing gear (NLG) upper support, and corrective action if necessary; and a check of the NLG strut inflation pressure, and an adjustment if necessary. For some of these airplanes, the existing AD also requires a revision to the aircraft flight manual to incorporate an operating procedure to recover normal steering in the event of a steering failure. This new AD instead requires repetitive inspections of the NLG upper support, and related investigative/corrective actions in accordance with new service information; and removes the one-time inspection that was required by the existing AD. This new AD also provides an optional terminating action for the repetitive inspections. This AD results from a report of an incident where an airplane landed with the NLG turned 90 degrees from centerline, and from additional reports of NLG upper support anti-rotation lugs rupturing in service. We are issuing this AD to prevent landings with the NLG turned 90 degrees from centerline, which could result in reduced controllability of the airplane.

**DATES:** This AD becomes effective October 11, 2007.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of October 11, 2007.

On November 30, 2005 (70 FR 70715, November 23, 2005), the Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for service information identified in this AD.

**FOR FURTHER INFORMATION CONTACT:** Tim Dulin, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2141; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Examining the Docket**

You may examine the airworthiness directive (AD) docket on the Internet at <http://dms.dot.gov> or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647-5527) is located on the ground floor of the West Building at the DOT street address stated in the ADDRESSES section.

### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2005-24-06, amendment 39-14386 (70 FR 70715, November 23, 2005). The existing AD applies to all Airbus Model A318-100, A319-100, A320-200, A321-100, and A321-200 series airplanes, and Model A320-111 airplanes. That NPRM was published in the Federal Register on April 5, 2007 (72 FR 16749). That NPRM proposed to continue to require an inspection to determine whether certain braking and steering control units (BSCUs) are installed or have ever been installed. For airplanes on which certain BSCUs are installed or have ever been installed, that NPRM proposed to continue to require a revision to the aircraft flight manual (AFM) to incorporate an operating procedure to recover normal steering in the event of a steering failure. That NPRM also proposed to require repetitive inspections of the nose landing gear (NLG) upper support, and related investigative/corrective actions, and an optional terminating action for the repetitive inspections.

### **Comments**

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

### **Support for the AD**

The National Transportation Safety Board supports the adoption of the AD.

### **Request To Revise "Optional Terminating Action" Reference**

Airbus requests that we rephrase the heading of paragraph (I), "Optional Terminating Action," of the NPRM. Airbus states that the terminating action for the issue addressed by the NPRM is not yet available. According to Airbus, the terminating action will include implementation of a new BSCU standard, which is currently being defined. Therefore, Airbus suggests that instead of the title "Optional Terminating Action," we use a different title, such as "Action that Renders Void the Requirements of this AD," or equivalent wording. Airbus states that it is correct to say that the actions proposed in paragraph (I) of the NPRM would render void the requirements of this AD, and

that no further action would be required by this AD. However, the terminating action for the issue will require installation of a new future BSCU standard. Airbus anticipates that it will require the installation of the future BSCU standard as a terminating action.

We disagree with the request to rephrase the title of paragraph (l) of this AD. We consider the phrase "Action that Renders Void the Requirements of this AD," to be equivalent to the existing title "Optional Terminating Action." Furthermore, this AD is fully consistent with European Aviation Safety Agency (EASA) airworthiness directive 2006-0174, dated June 21, 2006, which is the parallel EASA airworthiness directive to this AD. If EASA supersedes airworthiness directive 2006-0174 for any reason, we will consider additional rulemaking. We have not changed the AD in this regard.

**Explanation of Editorial Change to Paragraph (l)**

Paragraph (l) of the NPRM referred to "standard L4.1 and L4.5." That paragraph should refer to "standard L4.1 or L4.5." We have revised paragraph (l) of the final rule accordingly. This change will not affect accomplishment of the optional terminating action.

**Clarification of Alternative Method of Compliance (AMOC) Paragraph**

We have revised this action to clarify the appropriate procedure for notifying the principal inspector before using any approved AMOC on any airplane to which the AMOC applies.

**Conclusion**

We have carefully reviewed the available data, including the comments 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**

This AD affects about 720 airplanes of U.S. registry. The following table provides the estimated costs for U.S. operators to comply with this AD. The average labor rate is \$80 per work hour.

**Estimated Costs**

<b>Action</b>	<b>Work hours</b>	<b>Parts</b>	<b>Cost per airplane</b>	<b>Fleet cost</b>
Records review (required by AD 2005-24-06)	1	None	\$80	\$57,600
AFM revision (required by AD 2005-24-06)	1	None	\$80	\$57,600
Special detailed inspection in accordance with new service information (new action)	1	None	\$80, per inspection cycle	\$57,600, per inspection cycle

**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 39-14386 (70 FR 70715, November 23, 2005) and by adding the following new airworthiness directive (AD):



**2007-18-09 AIRBUS:** Amendment 39-15189. Docket No. FAA-2007-27776; Directorate Identifier 2006-NM-170-AD.

**Effective Date**

- (a) This AD becomes effective October 11, 2007.

**Affected ADs**

- (b) This AD supersedes AD 2005-24-06.

**Applicability**

- (c) This AD applies to all Airbus Model A318, A319, A320, and A321 airplanes.

**Unsafe Condition**

(d) This AD results from a report of an incident where an airplane landed with the nose landing gear (NLG) turned 90 degrees from centerline, and from additional reports of NLG upper support anti-rotation lugs rupturing in service. We are issuing this AD to prevent landings with the NLG turned 90 degrees from centerline, which could result in 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.

**Restatement of Certain Requirements of AD 2005-24-06**

**Records Review**

(f) Within 5 days after November 30, 2005 (the effective date of AD 2005-24-06), perform a records review to determine whether the airplane is equipped with or has ever been equipped with an enhanced manufacturing and maintainability (EMM) braking and steering control unit (BSCU) part number (P/N) E21327001 (standard L4.1, installed by Airbus Modification 26965, or Airbus Service Bulletin A320-32-1912) or P/N E21327003 (standard L4.5, installed by Airbus Modification 33376, or Airbus Service Bulletin A320-32-1261). Airbus Service Bulletin A320-32-1310, dated February 8, 2006, is one approved method for doing the records review.

(g) For airplanes on which a records review required by paragraph (f) of this AD conclusively determines that the airplane is not and never has been equipped with a BSCU P/N E21327001 or P/N E21327003, no further action is required by this AD.

## Airplane Flight Manual (AFM) Revision

(h) For airplanes that are not specified in paragraph (g) of this AD and on which Airbus Modification 31152 has not been incorporated in production (i.e., applicable only to aircraft with steering powered by the green hydraulic system): Within 10 days after November 30, 2005, revise the Limitation Section of the Airbus A318/319/320/321 Aircraft Flight Manual (AFM) to include the following information. This may be done by inserting a copy of this AD into the AFM:

"The ECAM message, in case of a nose wheel steering failure, will be worded as follows:

- "WHEEL N/W STRG FAULT" for aircraft with the FWC E3 and subsequent standards
- "WHEEL N.W. STEER FAULT" for aircraft with the FWC E2 Standard.

- If the L/G SHOCK ABSORBER FAULT ECAM caution is triggered at any time in flight, and the WHEEL N/W STRG FAULT ECAM caution is triggered after the landing gear extension:
  - When all landing gear doors are indicated closed on ECAM WHEEL page, reset the BSCU:
    - A/SKID&N/W STRG----- OFF THEN ON
  - If the WHEEL N/W STRG FAULT ECAM caution is no longer displayed, this indicates a successful nose wheel re-centering and steering recovery.
    - Rearm the AUTO BRAKE, if necessary.
  - If the WHEEL N/W STRG FAULT ECAM caution remains displayed, this indicates that the nose wheel steering remains lost, and that the nose wheels are not centered.
    - During landing, delay nose wheel touchdown for as long as possible.
    - Refer to the ECAM STATUS.
  
- If the WHEEL N/W STRG FAULT ECAM caution appears, without the L/G SHOCK ABSORBER FAULT ECAM caution:
  - No specific crew action is requested by the WHEEL N/W STRG FAULT ECAM caution procedure.
  - Refer to the ECAM STATUS."

Note 1: When a statement identical to that in paragraph (h) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

## New Requirements of This AD

### Inspection Thresholds

(i) For airplanes that are not specified in paragraph (g) of this AD, at the earlier of the times specified in paragraphs (i)(1) and (i)(2) of this AD: Do a special detailed inspection (boroscopic) for broken or cracked NLG upper support lugs and missing cylinder lugs, and do all applicable related investigative/corrective actions before further flight. Do all actions in accordance with Airbus Technical Note 957.1901/05, dated October 18, 2005; or the Accomplishment Instructions of Airbus Service Bulletin A320-32-1310, dated February 8, 2006. After the effective date of this AD, only Airbus Service Bulletin A320-32-1310, dated February 8, 2006, may be used. Where the service bulletin specifies that restoring the NLG is necessary in accordance with Airbus recommendations, this AD requires restoring the NLG in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA) (or its delegated agent). Repeat the inspection thereafter at the applicable interval specified in paragraph (j) or (k) of this AD.

(1) Within 100 flight cycles following an electronic centralized aircraft monitoring (ECAM) caution "L/G SHOCK ABSORBER FAULT" associated with at least one of the following centralized fault display system (CFDS) messages specified in paragraph (i)(1)(i), (i)(1)(ii), or (i)(1)(iii) of this AD.

- (i) "N L/G EXT PROX SNSR 24GA TGT POS."
- (ii) "N L/G EXT PROX SNSR 25GA TGT POS."
- (iii) "N L/G SHOCK ABSORBER FAULT 2526GM."

(2) At the later of the times specified in paragraphs (i)(2)(i) and (i)(2)(ii) of this AD.

(i) Within 20 months, 6,000 flight hours, or 4,500 flight cycles since the date of issuance of the original French standard airworthiness certificate, or the original French export certificate of airworthiness, whichever occurs first.

(ii) Within 6 months, 1,800 flight hours, or 1,350 flight cycles after the effective date of this AD, whichever occurs first.

### **Repetitive Inspection Intervals**

(j) For airplanes not specified in paragraph (g) of this AD that are equipped with EMM BSCU standard L4.1 or L4.5: Repeat the inspection specified in paragraph (i) of this AD thereafter at intervals not to exceed the earliest of 6 months; 1,800 flight hours; 1,350 flight cycles; or 100 flight cycles following certain ECAM cautions and CFDS messages, as specified in paragraph (i)(1) of this AD.

(k) For airplanes not specified in paragraph (g) of this AD that are equipped with EMM BSCU standard L4.8 or a non-EMM BSCU: Repeat the inspection specified in paragraph (i) of this AD thereafter at intervals not to exceed the earliest of 20 months; 6,000 flight hours; 4,500 flight cycles; or 100 flight cycles following certain ECAM cautions and CFDS messages, as specified in paragraph (i)(1) of this AD.

Note 2: For the purposes of this AD, a special detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. The examination is likely to make extensive use of specialized inspection techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedure may be required."

### **Optional Terminating Action**

(l) For airplanes that are not specified in paragraph (g) of this AD: Installation of an NLG with new upper support anti-rotation lugs and new cylinder lugs, or installation of an NLG that was never driven by EMM BSCU standard L4.1 or L4.5; combined with installation of an EMM BSCU standard L4.8 or a non-EMM BSCU; constitutes terminating action for the requirements of this AD. Do the installations in accordance with a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent). Chapter 32 of the Airbus A318/A319/A320/A321 Aircraft Maintenance Manual (AMM) is one approved method for doing the installations.

### **No Report Required**

(m) Although Airbus Service Bulletin A320-32-1310, dated February 8, 2006, specifies sending certain inspection results to Airbus, this AD does not include that requirement.

## **Credit Paragraph**

(n) Inspections done before the effective date of this AD in accordance with Chapter 12, Subject 12-14-32 of the Airbus A318/A319/A320/A321 AMM, as revised by Airbus A318/A319/A320/A321 AMM Temporary Revision 12-001, dated November 13, 2005, are acceptable for compliance with the requirements of paragraph (i) of this AD.

## **Alternative Methods of Compliance (AMOCs)**

(o)(1) The Manager, International Branch, ANM-116, 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**

(p) EASA airworthiness directive 2006-0174, dated June 21, 2006, also addresses the subject of this AD.

## **Material Incorporated by Reference**

(q) You must use Airbus Technical Note 957.1901/05, dated October 18, 2005; or Airbus Service Bulletin A320-32-1310, dated February 8, 2006; as applicable, to perform the actions that are required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Airbus Service Bulletin A320-32-1310, dated February 8, 2006, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On November 30, 2005 (70 FR 70715, November 23, 2005), the Director of the Federal Register approved the incorporation by reference of Airbus Technical Note 957.1901/05, dated October 18, 2005.

(3) Contact Airbus, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France, for a copy of this service information. 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 August 17, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-17385 Filed 9-5-07; 8:45 am]