2008-17-12
AIRBUS
Amendment 39-15650
Docket No. FAA-2008-0046; Directorate Identifier 2007-NM-270-AD

PREAMBLE

Effective Date

(a) This AD becomes effective October 2, 2008.

Affected ADs

(b) This AD supersedes AD 2003-26-03.

Applicability

(c) This AD applies to Airbus Model A318, A319, A320, and A321 series airplanes, certificated in any category; equipped with at least one Northrop Grumman (formerly Litton) air data inertial reference unit (ADIRU), part number (P/N) 465020-0303-0307, -0308, -0309, -0312, -0314, -0315, or -0316; except airplanes equipped with three ADIRUs having P/N 465020-0303-0316 and on which Airbus Modification 30650 or 30872 has been incorporated in production, or on which Airbus Service Bulletin A320-25-1248 has been applied in service.

Unsafe Condition

(d) This AD results from reports that "NAV IR FAULT" messages have occurred during takeoff due to failure of an ADIRU and subsequent analysis showing that the shelf modification has not sufficiently addressed failure of an ADIRU. We are issuing this AD to prevent failure of an ADIRU during flight, which could result in loss of one source of critical attitude and airspeed data and reduce the ability of the flightcrew to control 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 Requirements of AD 2003-26-03

Modification

(f) For Model A319, A320, and A321 series airplanes, equipped with any Litton ADIRU installed in accordance with Airbus Modification 24852, 25108, 25336, 26002, or 28218: Within 2 years after January 27, 2004 (the effective date of AD 2003-26-03), do the modifications specified in paragraphs (f)(1), (f)(2), and (f)(3) of this AD, as applicable, in accordance with paragraphs A.

(1) For all airplanes: Modify the shelf (floor panel) above ADIRU 3 by installing shims between the shelf and the webs of the shelf support structure.

(2) For airplanes with Airbus Modification 25900P3941 or Airbus Service Bulletin A320-25-1200 accomplished as of January 27, 2004: Modify the polycarbonate guard (umbrella) protecting the ADIRUs by installing shims between the guard and the shelf support structure.

(3) For airplanes with Airbus Modification 23027P2852 or Airbus Service Bulletin A320-52-1038 accomplished as of January 27, 2004: Modify the ladder located in the avionics compartment by machining the slot at the foot of the ladder to increase the depth by 0.236 inch.

New Requirements of This AD

Modification for Certain Airplanes

(g) For all airplanes equipped with any ADIRU installed in accordance with Airbus Modification 31070, 31742, or 35517, except airplanes on which Airbus Modification 30650 or 30872 has been accomplished in production: Within 46 months after the effective date of this AD, modify the ADIRU shelf supports by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Airbus Service Bulletin A320-25-1248, Revision 01, dated April 16, 2003.

Replacement of ADIRUs

(h) For all airplanes except those on which Airbus Modification 35517 has been incorporated in production: Within 46 months after the effective date of this AD, replace all three ADIRUs with improved ADIRUs having P/N 465020-0303-0316 in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-34-1350, dated March 20, 2006; or Airbus Service Bulletin A320-34-1350, Revision 01, dated December 12, 2007.

Alternative Methods of Compliance (AMOCs)

(i) 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. Send information to ATTN Tim Dulin, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2141; fax (425) 227-1149. 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

(j) European Aviation Safety Agency airworthiness directive 2007-0217, dated August 9, 2007, also addresses the subject of this AD.

Material Incorporated by Reference
(k) You must use service information identified in Table 1 of this AD, as applicable, to perform the actions that are required by this AD, unless the AD specifies otherwise.

Table 1-All Material Incorporated by Reference

<table>
<thead>
<tr>
<th>Service Bulletin</th>
<th>Revision Level</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airbus Service Bulletin A320-25-1248</td>
<td>Original</td>
<td>February 16, 2001</td>
</tr>
<tr>
<td>Airbus Service Bulletin A320-34-1350</td>
<td>Original</td>
<td>March 20, 2006</td>
</tr>
<tr>
<td>Airbus Service Bulletin A320-34-1350</td>
<td>01</td>
<td>December 12, 2007</td>
</tr>
</tbody>
</table>

(1) The Director of the Federal Register approved the incorporation by reference of the documents identified in Table 2 of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

Table 2-New Material Incorporated by Reference

<table>
<thead>
<tr>
<th>Service Bulletin</th>
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</tr>
</tbody>
</table>


(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 6, 2008.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0046; Directorate Identifier 2007-NM-270-AD; Amendment 39-15650; AD 2008-17-12]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A318, A319, A320, and A321 Series Airplanes Equipped With Certain Northrop Grumman (Formerly Litton) Air Data Inertial Reference Units

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 certain Airbus Model A319, A320, and A321 series airplanes equipped with certain Litton air data inertial reference units (ADIRUs). That AD currently requires modifying the shelf (floor panel) above ADIRU 3, modifying the polycarbonate guard that covers the ADIRUs for certain airplanes, and modifying the ladder located in the avionics compartment for certain airplanes. This new AD requires those modifications on additional airplanes. This new AD also requires replacing all three ADIRUs with improved ADIRUs. This new AD also adds Model A318 series airplanes to the applicability. This AD results from reports that "NAV IR FAULT" messages have occurred during takeoff due to failure of an ADIRU and subsequent analysis showing that the shelf modification has not sufficiently addressed failure of an ADIRU. We are issuing this AD to prevent failure of an ADIRU during flight, which could result in loss of one source of critical attitude and airspeed data and reduce the ability of the flightcrew to control the airplane.

DATES: This AD becomes effective October 2, 2008.

On January 27, 2004 (68 FR 74172, December 23, 2003), the Director of the Federal Register approved the incorporation by reference of a certain publication.

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


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 2003-26-03, amendment 39-13399 (68 FR 74172, December 23, 2003). The existing AD applies to certain Airbus Model A319, A320, and A321 series airplanes equipped with certain Litton air data inertial reference units (ADIRUs). That NPRM was published in the Federal Register on January 24, 2008 (73 FR 4129). That NPRM proposed to continue to require modifying the shelf (floor panel) above ADIRU 3, modifying the polycarbonate guard that covers the ADIRUs for certain airplanes, and modifying the ladder located in the avionics compartment for certain airplanes. That NPRM also proposed to require those modifications on additional airplanes. That NPRM also proposed to require replacing all three ADIRUs with improved ADIRUs. That NPRM also proposed to add Model A318 series airplanes to the applicability.

Actions Since NPRM Was Issued

Airbus has issued Service Bulletin A320-34-1350, Revision 01, dated December 12, 2007. In the NPRM, we referred to the original issue of the service bulletin, dated March 20, 2006, as the appropriate source of service information for replacing the ADIRUs with new, improved ADIRUs. The procedures in Revision 01 of the service bulletin are essentially the same as those in the original issue of the service bulletin. Therefore, we have revised paragraph (h) of this AD to also refer to Revision 01 of the service bulletin.

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 Revise the Applicability

Airbus requests that we revise the applicability of the NPRM to also exempt airplanes equipped with three ADIRUs having P/N 465020-0303-0316 on which Airbus Service Bulletin A320-25-1248 has been applied in service. We agree that this AD does not apply to airplanes equipped with three ADIRUs having P/N 465020-0303-0316 on which Airbus Service Bulletin A320-25-1248 was incorporated in service. We have revised paragraph (c) of this AD accordingly.
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

This AD affects about 658 airplanes of U.S. registry.

The actions that are required by AD 2003-26-03 and retained in this AD take about 4 work hours per airplane, at an average labor rate of $80 per work hour. Required parts cost about $300 per airplane. Based on these figures, the estimated cost of the currently required actions for U.S. operators is $407,960, or $620 per airplane.

The new actions take about 3 work hours per airplane, at an average labor rate of $80 per work hour. The manufacturer states that it will supply the required parts to operators at no cost. Based on these figures, the estimated cost of the new actions specified in this AD for U.S. operators is $157,920, or $240 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 39-13399 (68 FR 74172, December 23, 2003) and by adding the following new airworthiness directive (AD):