DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0558; Directorate Identifier 2007-NM-365-AD; Amendment 39-15783; AD 2009-01-04]

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: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Some operators have reported occurrences of loss of the AC BUS 1 with subsequent loss of the AC ESS BUS and DC ESS BUS, resulting in the loss of 5 upper Display Units and the loss of integral lighting. In this situation, flight crew[s] have reported concerns in reading the standby instruments when the DOME lights were selected to OFF.

This situation, if not corrected, could increase the workload of the flight crew **.*.

*   *   *   *   *

The unsafe condition is reduced ability of the flight crew to maintain the safe flight and landing of the airplane in adverse operating conditions. We are issuing this AD to require actions to correct the unsafe condition on those products.

DATES: This AD becomes effective February 27, 2009.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of February 27, 2009.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.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.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on May 20, 2008 (73 FR 29089). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Some operators have reported occurrences of loss of the AC BUS 1 with subsequent loss of the AC ESS BUS and DC ESS BUS, resulting in the loss of 5 upper Display Units and the loss of integral lighting. In this situation, flight crews[s] have reported concerns in reading the standby instruments when the DOME lights were selected to OFF.

This situation, if not corrected, could increase the workload of the flight crew * * *

This Airworthiness Directive (AD) mandates the modification of the electrical supply logic by adding a back-up supply on the battery hot bus for the under glare shield flood lighting.

The unsafe condition is reduced ability of the flightcrew to maintain the safe flight and landing of the airplane in adverse operating conditions. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Request To Include Revised Service Information

Airbus, United Airlines, and the Air Transport Association on behalf of its member U.S. Airways, ask that Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008, be referred to in the AD for doing the proposed modification. Airbus Service Bulletin A320-33-1057, dated May 11, 2007, was referred to in the NPRM as the appropriate source of service information for doing the modification.

We agree and we have changed paragraphs (f) and (h) of this AD to include Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008, as the appropriate source of service information for doing the modification. No additional work is necessary for airplanes modified in accordance with Airbus Service Bulletin A320-33-1057, dated May 11, 2007. We have also included credit for accomplishing Airbus Service Bulletin A320-33-1057, dated May 11, 2007, to do the modification before the effective date of the AD.

Request To Reduce Compliance Time

The Airline Pilots Association, International (ALPA) asks that the 42-month compliance time proposed in the NPRM be reduced to 18 months. ALPA states that, given the potentially serious
consequences of a flightcrew being unable to view their standby instruments, a shorter compliance time should be imposed.

We do not agree that the compliance time should be reduced. In developing the compliance time for this AD action, we considered not only the safety implications of the identified unsafe condition, but the average utilization rate of the affected fleet, the practical aspects of modifying the fleet during the compliance time, and the availability of required parts. In addition, we have coordinated with the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community. We have determined that the 42-month compliance time to do the modification addresses the identified unsafe condition and ensures an adequate level of safety for the affected fleet. We have made no change to the AD in this regard.

Request To Allow Another Source of Service Information

Northwest Airlines (NWA) asks that we allow accomplishing the actions specified in either Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007; or Airbus Service Bulletin A320-33-1057, dated May 11, 2007; as a method of complying with the NPRM. The NPRM proposes to require accomplishing the modification in accordance with Airbus Service Bulletin A320-33-1057, dated May 11, 2007, and makes no reference to Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007. NWA states that Airbus Service Bulletin A320-33-1057, dated May 11, 2007, does not correct the root cause of the problem, and does not alleviate other operational consequences of the faults. NWA notes that Airbus Service Bulletin A320-33-1057, dated May 11, 2007, adds the provision for lighting of the standby instruments if there is a loss of AC BUS1, and AC and DC ESS BUS. NWA adds that the majority of commercial air traffic occurs during daylight when the illumination of standby instruments by the glare shield lighting is not required. NWA states that no lost systems are recovered and the flightcrew must work through COM procedures, possibly during critical flight phases. NWA notes that the only additional margin of safety provided is at night, under some flight phases. NWA states that it prefers to accomplish the modification specified in Airbus Service Bulletin A320-24-1120, dated December 19, 2007, because it negates the need for the improved lighting specified in Airbus Service Bulletin A320-33-1057, dated May 11, 2007. NWA adds that Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007, addresses the unsafe condition by installing an automatic switching system for the AC and DC ESS BUS fault to recover all lost systems in approximately five seconds. NWA adds that the automatic recovery resolves the display outage, loss of VHF radios, and nose wheel steering with no flightcrew intervention.

We do not agree to allow accomplishing the actions specified in Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007, as an option to accomplishing the actions in Airbus Service Bulletin A320-33-1057, dated May 11, 2007; or Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008. We have determined that accomplishment of actions in Airbus Service Bulletin A320-33-1057, dated May 11, 2007; or Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008, not only ensures adequate lighting to the standby instruments in all phases of flight, but also provides backup power to the conventional standby attitude indicator itself from the hot battery bus. We agree that accomplishing the modification specified in Airbus Service Bulletin A320-33-1057, dated May 11, 2007; or Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008; does not address the root cause of the problem or alleviate all other operational problems related to the AC BUS 1 failures. We have not determined the root cause for loss of first officer displays following failure of AC BUS 1, but we know the root cause of this failure condition is not addressed by accomplishing Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007. Although we agree that accomplishing Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007, would alleviate some of the other operational problems related to the AC BUS 1 failures, the auto switching may not restore power to AC BUS1 and AC and DC ESS BUS. The modification specified in Airbus Service Bulletin A320-33-1057, dated May 11, 2007; or Airbus Mandatory Service Bulletin
A320-33-1057, Revision 01, dated January 31, 2008; will ensure that the standby instruments are visible in night operations and will continue to function for at least 30 minutes after failure of AC BUS 1 with no pilot action. In light of these factors, we may consider further rulemaking related to Airbus Service Bulletin A320-24-1120, Revision 01, dated December 19, 2007, in the future. We have made no change to 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 the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

**Differences Between This AD and the MCAI or Service Information**

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a note within the AD.

**Costs of Compliance**

We estimate that this AD will affect 550 products of U.S. registry. We also estimate that it will take about 30 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $80 per work-hour. Required parts will cost about $0 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these costs. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of the AD on U.S. operators to be $1,320,000, or $2,400 per product.

**Authority for This Rulemaking**


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 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); 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.

**Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**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 adding the following new AD:

Effective Date

(a) This airworthiness directive (AD) becomes effective February 27, 2009.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Airbus Model A318, A319, A320, and A321 airplanes, certificated in any category; all certified models; all serial numbers; on which classical standby instruments have been installed per Airbus Modification 20011 or 21999 in production, or per Airbus Service Bulletin A320-34-1280 in service; excluding airplanes identified in paragraphs (c)(1) or (c)(2) of this AD.

(1) Airplanes on which ISIS equipment was installed per Airbus Modification 27620 in production or per Airbus Service Bulletin A320-34-1261 or Airbus Service Bulletin A320-34-1372 in service.

(2) Airplanes on which Airbus Modification 37329 or 37330 was installed in production or per Airbus Service Bulletin A320-33-1057 in service.

Subject

(d) Air Transport Association (ATA) of America Code 33: Lights.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

"Some operators have reported occurrences of loss of the AC BUS 1 with subsequent loss of the AC ESS BUS and DC ESS BUS, resulting in the loss of 5 upper Display Units and the loss of integral lighting. In this situation, flight crews[s] have reported concerns in reading the standby instruments when the DOME lights were selected to OFF.

"This situation, if not corrected, could increase the workload of the flight crew * * *

"This Airworthiness Directive (AD) mandates the modification of the electrical supply logic by adding a back-up supply on the battery hot bus for the under glare shield flood lighting."

The unsafe condition is reduced ability of the flightcrew to maintain the safe flight and landing of the airplane in adverse operating conditions.
Actions and Compliance

(f) Unless already done, within 42 months after the effective date of this AD: Modify the electrical supply logic of the under glare shield flood lighting in accordance with the instructions given in Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008. Modifications done before the effective date of this AD in accordance with Airbus Service Bulletin A320-33-1057, dated May 11, 2007, are acceptable for compliance with the modification in this paragraph.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, 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.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information


Material Incorporated by Reference

(i) You must use Airbus Mandatory Service Bulletin A320-33-1057, Revision 01, dated January 31, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Airbus, Airworthiness Office–EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; fax +33 5 61 93 44 51; e-mail: account.airworth-eas@airbus.com; Internet http://www.airbus.com.

(3) You may review copies of the service information that is incorporated by reference at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 or 425-227-1152.
You may also review copies of the service information 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on December 28, 2008.
Linda Navarro,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.