



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1323; Directorate Identifier 2010-NM-212-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Model A330-200 and -300 series airplanes; Model A330-223F and -243F airplanes; and Model A340-200, -300, -500, and -600 series airplanes. This proposed AD was prompted by a report that during the evaluation of specific engine failure cases at take-off on Airbus flight simulators. It has been shown that with flight control primary computer (FCPC)1 inoperative, in worst case scenario, when FCPC2 and FCPC3 resets occur during rotation at take off, a transient loss of elevator control associated with a temporary incorrect flight control law reconfiguration could occur. This proposed AD would require revising the Limitations section of the applicable airplane flight manual. We are proposing this AD to prevent movement of the elevators to zero position, which could result in inducing a pitch down movement instead of a pitch up movement needed for lift off, resulting in loss of controllability of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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 this proposed AD, 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.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2011-1323; Directorate Identifier 2010-NM-212-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2010-0109, dated June 28, 2010 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

On A330/A340 aeroplanes, the Flight Control Primary Computer 2 (FCPC2) and FCPC3 are supplied with power from the 2PP bus bar. Electrical transients on the 2PP bus bar occur, in particular during engine n.2 failure on A330 aeroplanes or engine n.3 failure on A340 aeroplanes. Such electrical transients lead to a FCPC2 reset. FCPC3 reset does not occur thanks to the introduction of second electrical power supply to FCPC3 from 1PP bus bar

associated to the Electrical Contactor Management Unit (ECMU) standard 5.

During the evaluation of specific engine failure cases at take-off on Airbus flight simulators, it has been evidenced that with FCPC1 inoperative, in the worst case, when FCPC2 and FCPC3 resets occur during rotation at take off, a transient loss of elevator control associated with a temporary incorrect flight control law reconfiguration could occur. This condition leads to a movement of the elevators to the zero position, which induces a pitch down movement instead of a pitch up movement needed to lift off. In addition, it leads to a limitation of the pilot control on pitch axis and limits the pilot capacity to counter the pitch down movement during this flight phase, which constitutes an unsafe condition.

To prevent such condition, [EASA] Emergency Airworthiness Directive (EAD) 2008-0010-E was issued to prohibit aeroplanes dispatch with FCPC1 inoperative (from GO to NO-GO) for certain aeroplane configurations. For other configurations, dispatch is allowed when the integrity of the FCPC3 second electrical power supply is ensured.

EASA AD 2008-0010R1 was issued to:

- For A340-500/-600, alleviate the dispatch restriction on aeroplanes fitted with new FCPC Standard W11 (part number (P/N) LA2K2B100GA0000)

and

- For A330 and A340-200/-300, to take into account the possibility to embody in service a new FCPC3 second electrical power supply equivalent to the production one.

This [EASA] AD, which supersedes EASA AD 2008-0010R1 retaining its requirements, is issued to extend the applicability to the newly certified models A330-223F and A330-243F.

The FAA did not issue corresponding ADs for EASA Airworthiness Directive

2008-0010-E and EASA Airworthiness Directive 2008-0010R1 since it was determined

at that time that the FAA Master Minimum Equipment List (MMEL) was an acceptable method for controlling exposure of the U.S. fleet to the safety issue addressed in the EASA ADs. Since that decision was made, the FAA determined that an AD is needed to control dispatch restrictions. In addition, EASA Airworthiness Directive 2010-0109 added two new Airbus models in the applicability and we are proceeding with this FAA AD in order to address the identified unsafe condition for the U.S. fleet.

You may obtain further information by examining the MCAI in the AD docket.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 55 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$4,675, or \$85 per product.

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 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.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

Airbus: Docket No. FAA-2011-1323; Directorate Identifier 2010-NM-212-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes; certificated in any category; all serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 27: Flight Controls.

(e) Reason

This AD was prompted by a report that during the evaluation of specific engine failure cases at take-off on Airbus flight simulators. It has been shown that with flight control primary computer (FCPC)1 inoperative, in worst case scenario, when FCPC2 and FCPC3 resets occur during rotation at take off, a transient loss of elevator control associated with a temporary incorrect flight control law reconfiguration could occur. We are issuing this AD to prevent movement of the elevators to zero position, which could result in inducing a pitch down movement instead of a pitch up movement needed for lift off, resulting in loss of controllability of the airplane.

(f) Compliance

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

(g) Airplane Flight Manual (AFM) Revision for Certain Airplanes

For airplanes identified in paragraph (c) of this AD, except for airplanes identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD: Within 30 days after the effective date of this AD, revise the Limitations section of the applicable AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

"Dispatch with the FCPC "PRIM 1" inoperative is prohibited."

(1) Model A330-223F and -243F airplanes.

(2) Model A330-200 and -300 series airplanes, and Model A340-200 and -300

series airplanes, on which Airbus modification 44385 has been embodied either in production or in service by Airbus Service Bulletin A330-27-3159 or Airbus Service Bulletin A340-27-4158; and on which Airbus modification 44431 has been embodied either in production or in service by Airbus Service Bulletin A330-24-3011 or Airbus Service Bulletin A340-24-4019.

(3) Model A340-500 and -600 series airplanes on which Airbus modification 57698 has been embodied either in production or in service by Airbus Service Bulletin A340-27-5046.

Note 1: When a statement identical to that in paragraph (g) 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.

Note 2: This dispatch restriction applies notably to Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes, which have embodied Airbus Service Bulletin A330-27-3040 or Airbus Service Bulletin A340-27-4046 in service.

(h) AFM Revision for Certain Other Airplanes

For Model A330-200 and -300 series airplanes, and Model A340-200 and -300 series airplanes, on which Airbus modification 44385 has been embodied either in production or in service by Airbus Service Bulletin A330-27-3159 or Airbus Service Bulletin A340-27-4158; and Airbus modification 44431 has been embodied either in production or in service by Airbus Service Bulletin A330-24-3011 or Airbus Service Bulletin A340-24-4019: Within 30 days after the effective date of this AD, revise the

Limitations section of the applicable AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

“Dispatch with the FCPC “PRIM 1” inoperative is allowed provided that the operational test of the FCPC3 second electrical power supply is successfully performed, in accordance with the instructions of Airbus AOT A330-27A3158, or AOT A340-27A4157, as applicable, before the first flight of the MMEL interval.

If the test is not successful, repair in accordance with the instructions of Airbus AOT A330-27A3158 or AOT A340-27A4157, as applicable, before dispatch with FCPC “PRIM 1” inoperative.”

Note 3: Model A330-223F and -243F airplanes are not affected by paragraph (h) of this AD.

Note 4: 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.

(i) AFM Revision for Model A330-223F and A330-243F Airplanes

For Model A330-223F and A330-243F airplanes: Within 30 days after the effective date of this AD, revise the Limitations section of the AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

“Dispatch with the FCPC “PRIM 1” inoperative is allowed provided that the operational test of the FCPC3 second electrical power supply is successfully performed in accordance with the instructions of Airbus AOT A330-27A3158, before the first flight of the MMEL interval.

If the test is not successful, repair in accordance with the instructions of Airbus AOT A330-27A3158, before dispatch with FCPC “PRIM 1” inoperative.”

Note 5: When a statement identical to that in paragraph (i) 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.

(j) Other FAA AD Provisions

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. 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, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. 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.

(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.

(k) Related Information

Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0109, dated June 28, 2010, for related information.

Issued in Renton, Washington, on December 14, 2011.

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

[FR Doc. 2011-32845 Filed 12/21/2011 at 8:45 am; Publication Date: 12/22/2011]