

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-0029; Directorate Identifier 2010-NM-279-AD; Amendment 39-16583; AD 2011-02-09]**

**RIN 2120-AA64**

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

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

**ACTION:** Final rule; request for comments.

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**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:

When there are significant differences between all airspeed sources, the flight controls of an Airbus A330 or A340 aeroplane will revert to alternate law, the autopilot (AP) and the auto-thrust (A/THR) automatically disconnect, and the Flight Directors (FD) bars are automatically removed.

It has been identified that, after such an event, if two airspeed sources become similar while still erroneous, the flight guidance computers will:

- Display FD bars again, and
- Enable autopilot and auto-thrust re-engagement

However, in some cases, the autopilot orders may be inappropriate, such as possible abrupt pitch command.

\* \* \* \* \*

The unsafe condition is the potential for abrupt pitch command which may lead to unexpected maneuvers of the airplane and cause injuries of the crew and passengers, as well as reduced controllability of the airplane, and increased pilot workload. This AD requires actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** This AD becomes effective February 9, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of February 9, 2011.

We must receive comments on this AD by March 11, 2011.

**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 W12-40, 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 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:**

#### **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 2010-0271, dated December 22, 2010 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

When there are significant differences between all airspeed sources, the flight controls of an Airbus A330 or A340 aeroplane will revert to alternate law, the autopilot (AP) and the auto-thrust (A/THR) automatically disconnect, and the Flight Directors (FD) bars are automatically removed.

It has been identified that, after such an event, if two airspeed sources become similar while still erroneous, the flight guidance computers will:

- Display FD bars again, and
- Enable autopilot and auto-thrust re-engagement

However, in some cases, the autopilot orders may be inappropriate, such as possible abrupt pitch command.

In order to prevent such event which may, under specific circumstances, constitute an unsafe condition, this AD requires an amendment of the Flight Manual to ensure that flight crews apply the appropriate operational procedure.

The unsafe condition is the potential for abrupt pitch command which may lead to unexpected maneuvers of the airplane and cause injuries of the crew and passengers, as well as reduced controllability of the airplane and increased pilot workload. Required actions include revising the limitations and abnormal sections of the airplane flight manual to include a procedure for when the autopilot and auto-thrust are automatically disconnected and flight controls have reverted to alternate law. You may obtain further information by examining the MCAI in the AD docket.

### **Relevant Service Information**

Airbus has issued A330/A340 Temporary Revisions TR149 and TR150, both Issue 1.0, both dated December 20, 2010, to the Airbus A330/A340 Airplane Flight Manual. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### **FAA's Determination and Requirements of This 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 issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Differences Between the 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 FAA policies. Any such differences are highlighted in a Note within the AD.

### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of the potential for abrupt pitch command which may lead to unexpected maneuvers of the airplane and cause injuries of the crew and passengers, as well as reduced controllability of the airplane, and increased pilot workload. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2011-0029; Directorate Identifier 2010-NM-279-AD" at the

beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of 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 AD.

### **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.

### **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:



**2011-02-09 Airbus:** Amendment 39-16583. Docket No. FAA-2011-0029; Directorate Identifier 2010-NM-279-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective February 9, 2011.

**Affected ADs**

(b) None.

**Applicability**

(c) 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, and -313 airplanes; certificated in any category; all serial numbers.

**Subject**

(d) Air Transport Association (ATA) of America Code 22: Auto Flight.

**Reason**

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

When there are significant differences between all airspeed sources, the flight controls of an Airbus A330 or A340 aeroplane will revert to alternate law, the autopilot (AP) and the auto-thrust (A/THR) automatically disconnect, and the Flight Directors (FD) bars are automatically removed.

It has been identified that, after such an event, if two airspeed sources become similar while still erroneous, the flight guidance computers will:

- Display FD bars again, and
- Enable autopilot and auto-thrust re-engagement

However, in some cases, the autopilot orders may be inappropriate, such as possible abrupt pitch command.

\* \* \* \* \*

The unsafe condition is the potential for abrupt pitch command which may lead to unexpected maneuvers of the airplane and cause injuries of the crew and passengers, as well as reduced controllability of the airplane and increased pilot workload.

## Compliance

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

## Actions

(g) Within 15 days after the effective date of this AD, do the actions in paragraph (g)(1) or (g)(2) of this AD.

(1) Revise the Limitations and Abnormal Sections of the Airbus A330/A340 Airplane Flight Manual (AFM) to include the following statement and operate the airplane according to these limitations and procedures. This may be done by inserting a copy of this AD in the AFM.

### "PROCEDURE:

When autopilot and auto-thrust are automatically disconnected and flight controls have reverted to alternate law:

- Do not engage the AP and the A/THR, even if FD bars have reappeared
- Do not follow the FD orders
- ALL SPEED INDICATIONS-X-CHECK

- If unreliable speed indication is suspected:

-UNRELIABLE SPEED INDIC/ADR CHECK PROC-APPLY

- If at least two ADRs provide reliable speed indication for at least 30 seconds, and the aircraft is stabilised on the intended path:

AP/FD and A/THR-As required"

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

(2) Revise the Limitations and Abnormal Sections of the Airbus A330/A340 Airplane Flight Manual (AFM) to include the information in Airbus A330/A340 Temporary Revision (TR) TR149 (for Model A330 airplanes) or TR150 (for Model A340-200 and -300 series airplanes), both Issue 1.0, both dated December 20, 2010. These TRs introduce procedures for operation of the auto pilot and auto-thrust disconnect. Operate the airplane according to the limitations and procedures in the TRs.

Note 2: This may be done by inserting copies of Airbus A330/A340 TR TR149 or TR150, both Issue 1.0, both dated December 20, 2010; as applicable; in the Airbus A330/A340 AFM. When these TRs have been included in general revisions of the AFM, the general revisions may be inserted in the AFM, and the TRs may be removed.

## FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows: No Differences.

## **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): 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: 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.

(3) Reporting Requirements: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave., SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

## **Related Information**

(i) Refer to MCAI European Aviation Safety Agency (EASA) Airworthiness Directive 2010-0271, dated December 22, 2010; and Airbus A330/A340 TR TR149 and TR150, both Issue 1.0, both dated December 20, 2010, to the Airbus A330/A340 AFM; for related information.

## **Material Incorporated by Reference**

(j) You must use Airbus A330/A340 Temporary Revision TR149, Issue 1.0, dated December 20, 2010, to the Airbus A330/A340 Airplane Flight Manual; and Airbus A330/A340 Temporary Revision TR150, Issue 1.0, dated December 20, 2010, to the Airbus A330/A340 Airplane Flight Manual; as applicable; 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 SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; e-mail [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>.

(3) You may review copies of the service information 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.

(4) You may also review copies of the service information that is incorporated by reference 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on January 12, 2011.

Jeffrey E. Duven,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.