DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

SUMMARY: We propose to supersede two existing airworthiness directives (ADs) that apply to certain Airbus Model A330–200, A330–200 Freighter, A300–300, A340–200, A340–300, A340–500, and A340–600 series airplanes. One existing AD currently requires revising the airplane flight manual (AFM) to include appropriate operational procedures to prevent the air data inertial reference unit (ADIRU) from providing erroneous data to other airplane systems. The other existing AD currently requires revising the AFM to provide appropriate operational procedures to prevent the airplane flight directors (FDs), autopilot (AP), and auto-thrust re-engagement in the event of airspeed sources providing similar but erroneous data. Since we issued that AD, we have determined that new software standards for the flight control primary computers (FCPCs) are necessary to inhibit autopilot re-engagement under unreliable airspeed conditions. This proposed AD would require that operators modify or replace all three FCPCs with new software standards. This proposed AD would also remove certain airplanes from the applicability. We are proposing this AD to prevent autopilot engagement under unreliable airspeed conditions, which could result in reduced controllability of the airplane.

DATES: We must receive comments on this proposed AD by May 31, 2013.

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. 
• Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.

On January 23, 2009, we issued AD 2009–04–07, Amendment 39–15813 (74 Federal Register 612.0x792.0 2013 NOC 0023@ee.doe.gov
instructions for submitting comments.
BILLING CODE 6450–01–P

VERBATIM DOCUMENT:

The docket is available for review at www.regulations.gov including Federal Register notices, public meeting attendee lists and transcripts, comments, and other supporting documents/materials. All documents in the docket are listed in the www.regulations.gov index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

The Secretary of Energy has approved publication of today’s notice of open meeting.

Issued in Washington, DC, on April 9, 2013.

Kathleen B. Hogan,
Deputy Assistant Secretary for Energy Efficiency and Renewable Energy.

Since we issued those ADs, we have determined that new software standards for the FCPCs are necessary to inhibit autopilot re-engagement under unreliable airspeed conditions. The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2011–0199R1, dated February 17, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

It has been determined that, 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.

Further analyses have shown that, after such an event, if two airspeed sources become similar while still erroneous, the flight guidance computers will display the FD bars again, and enable the re-engagement of AP and A/THR. However, in some cases, the AP orders may be inappropriate, such as possible abrupt pitch command.

In order to prevent such events which may, under specified circumstances, constitute an unsafe condition, EASA issued AD 2010–0271 [which corresponds to FAA AD 2011–02–09, Amendment 39–16583 (76 FR 4219, January 25, 2011)] to require an amendment of the Flight Manual to ensure that flight crews apply the appropriate operational procedure.

Since that [EASA] AD was issued, new FCPC software standards have been developed that will inhibit autopilot engagement under unreliable airspeed conditions.

Consequently, EASA issued AD 2011–0199 to require software standard upgrade of the three FCPCs by either modification or replacement, as follows:


—software standard P12A/M21A on FCPC 2K1 hardware and M21A on FCPC 2K0 hardware for A330–200/–300 aeroplanes [with mechanical rudder], through Airbus SB A330–27–3177.

—software standard L22A on FCPC 2K1 hardware and L22A on FCPC 2K0 hardware for A340–200/–300 aeroplanes [with mechanical rudder], through Airbus SB A340–27–4174, and

—software standard L21A on FCPC 2K2 hardware for A340–500 aeroplanes [with electrical rudder], through Airbus SB A340–27–4162.

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

Relevant Service Information

Airbus has issued the following service bulletins:

• Mandatory Service Bulletin A330–27–3176, Revision 02, dated April 24, 2012


• Mandatory Service Bulletin A340–27–4162, Revision 01, dated September 17, 2012


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 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 the proposed AD would affect about 59 products of U.S. registry. The actions that are required by AD 2009–04–07, Amendment 39–15813 (74 FR 7549, February 18, 2009), and retained in this proposed AD take about 1 work-hour per product, at an average labor rate of $85 per work hour. Required parts cost about $0 per product. Based on these figures, the estimated cost of the actions currently required by AD 2009–04–07 is $85 per product.

The actions that are required by AD 2011–02–09, Amendment 39–16583 (76 FR 4219, January 25, 2011), and retained in this proposed AD take about 1 work-hour per product, at an average labor rate of $85 per work hour. Required parts cost about $0 per product. Based on these figures, the estimated cost of the actions currently required by AD 2011–02–09 is $85 per product.

We estimate that it would take about 5 work-hours per product to comply with the new basic requirements of this proposed AD. The average labor rate is $85 per work-hour. Required parts would 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 parts. 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 proposed AD on U.S. operators to be $25,075, or $425 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866; and

2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. 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 proposed 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

§ 39.13 [Amended]

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 removing airworthiness directive (AD) 2009–04–07, Amendment 39–15813 (74 FR 7549, February 18, 2009), and AD 2011–02–09, Amendment 39–16583 (76 FR 4219, January 25, 2011), and adding the following new AD:


(a) Comments Due Date
We must receive comments by May 31, 2013.

(b) Affected ADs
This AD supersedes AD 2009–04–07, Amendment 39–15813 (74 FR 7549, February 18, 2009; and AD 2011–02–09, Amendment 39–16583 (76 FR 4219, January 25, 2011), and adding the following new AD:

(b) Retained AFM Revision: Alternate Law Associated With AP and A/THR Disconnection

This paragraph restates the actions required by paragraph (g) of AD 2011–02–09, Amendment 39–16583 (76 FR 4219, January 25, 2011). Within 15 days after February 9, 2011 (the effective date of AD 2011–02–09), do the actions in paragraph (h)(1) or (h)(2) of this AD.

(1) Revise the Limitations and Abnormal Sections of the Airbus A330/A340 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. When a statement identical to that in paragraph (h)(1) of this AD has been included in the general revisions of the FM, the general revisions may be inserted into the AFM, and the TR may be removed.

(h) Retained AFM Revision: Certain NAV Faults or ATT Flag on PFD

This paragraph restates the actions required by paragraph (f) of AD 2009–04–07, Amendment 39–15813 (74 FR 7549, February 18, 2009). For all airplanes except Model A330–223F and –243F airplanes: Within 14 days after March 5, 2009 (the effective date of AD 2009–04–07), review the applicable section of the A330 or A340 (Airbus) Flight Manual (FM) by inserting a copy of A330 (Airbus) Temporary Revision (TR) 4.02.00/46, or A340 (Airbus) TR 4.02.00/54, both Issue 3, both dated May 15, 2009, as applicable. Thereafter, operate the airplane according to the limitations and procedures in the TRs. When information identical to that in the TR has been included in the general revisions of the FM, the general revisions may be inserted into the FM, and the TR may be removed.

(i) New Software Standard Upgrade

Within 10 months after the effective date of this AD, upgrade (by modification or replacement, as applicable) the three flight control primary computers (FCPCs), as specified in paragraphs (i)(1), (i)(2), (i)(3), and (i)(4) of this AD, as applicable. Accomplishment of the limitations and procedures requirements of this paragraph terminates the requirements of paragraphs (g) and (h) of this AD.


(2) For Model A330 series airplanes: Upgrade to software standard P12A/M21A on FCPC 2K1 hardware, and software standard M21A on FCPC 2K0 hardware, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330–27–3177, dated December 21, 2011.


(j) Credit for Previous Actions

(1) This paragraph provides credit for the actions specified in paragraph (i)(1) of this AD, if those actions were performed before the effective date of this AD using Airbus Mandatory Service Bulletin A330–27–3176, dated July 26, 2011; or Airbus Mandatory Service Bulletin A330–27–3176, Revision 01, dated March 27, 2012, which are not incorporated by reference.

(2) This paragraph provides credit for the actions specified in paragraph (i)(4) of this AD, if those actions were performed before the effective date of this AD using Airbus Mandatory Service Bulletin A330–27–4162, dated January 10, 2012, which is not incorporated by reference.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International
Federal Aviation Administration

14 CFR Part 39


AIRWORTHINESS DIRECTIVES; THE BOEING COMPANY AIRPLANES

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to certain The Boeing Company Model 747–400 and –400D series airplanes. The existing AD currently requires repetitive inspections to detect cracks in the floor panel attachment fastener holes of the Section 41 upper deck floor beam upper chords, and corrective actions if necessary; and repetitive post-repair and post-modification inspections, and corrective actions if necessary. Since we issued that AD, an evaluation by the design approval holder (DAH) indicated that certain upper chords of the upper deck floor beam are subject to widespread fatigue damage (WFD). A replacement was developed to support the airplane’s limit of validity (LOV) of the engineering data that support the established structural maintenance program. This proposed AD would add repetitive inspections of Section 44 upper deck floor beam upper chords, and corrective actions if necessary; repetitive post-repair and post-modification inspections, and corrective actions if necessary; and replacing the upper deck floor beam upper chords. We are proposing this AD to detect and correct fatigue cracking in certain upper chords of the upper deck floor beam, which could become large and cause the floor beams to become severed and result in rapid decompression or reduced controllability of the airplane.

DATES: We must receive comments on this proposed AD by May 31, 2013.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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.
• Hand Delivery: Deliver to Mail address above 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 Management Facility 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 Office (phone: 800–647–5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.


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–2013–0328; Directorate Identifier 2012–NM–184–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 because of those comments.