DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2011–0571; Directorate Identifier 2010–NM–263–AD; Amendment 39–16950; AD 2012–03–09]

RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Model 747SP series airplanes. This AD was prompted by a report of a rudder hard-over event on a Model 747–400 series airplane, caused by a rudder power control module (PCM) manifold cracking and separating in the area of the yaw damper cavity end-cap. This condition could result in a hard-over of the rudder surface leading to an increase in pilot workload and a possible high-speed runway excursion upon landing, in the event of failure of the lower or upper rudder PCM manifold. This AD requires replacing or modifying the upper and lower rudder PCMs. We are issuing this AD to correct the unsafe condition on these products.

DATES: This AD is effective March 19, 2012.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of March 19, 2012.

ADDRESSES: For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, Washington 98124–2207; telephone 206–544–5000, extension 1; fax 206–766–5680; email: *me.boecom@boeing.com;* Internet *https://www.myboeingfleet.com.* For Parker service information identified in this AD, contact Parker Aerospace, 14300 Alton Parkway, Irvine, California 92618; telephone 949–833–3000; Internet *http://www.parker.com.* You may review copies of the referenced 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.

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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800–647–5527) is 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.

FOR FURTHER INFORMATION CONTACT: Marie Hogestad, Aerospace Engineer, Systems and Equipment Branch, ANM–130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057–3356; phone: 425–917–6418; fax: 425–917–6590; email: *marie.hogestad@faa.gov.*

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 June 22, 2011 (76 FR 36390). That NPRM proposed to require replacing or modifying the upper and lower rudder PCMs.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA's response to each comment.

Support for the NPRM (76 FR 36390, June 22, 2011)

The National Transportation Safety Board fully supports the NPRM (76 FR 36390, June 22, 2011).

Request To Clarify the Discussion Section and Paragraph (e) of NPRM (76 FR 36390, June 22, 2011)

Boeing requested that we revise the Discussion section and paragraph (e) of the NPRM (76 FR 36390, June 22, 2011) to clarify that the corrective actions are not intended to prevent the manifold from cracking, but rather to prevent the cracking of the manifold from progressing to a rudder surface hard-over. Boeing pointed out that the secondary retention device incorporated in Boeing Alert Service Bulletin 747–27A2497, dated September 30, 2010, prevents the yaw damper modulating piston assembly from shifting after a manifold failure, therefore, preventing a rudder surface hard-over. Boeing suggested removing the phrase, ''if not corrected,'' from the sentence, ''Cracking in a rudder PCM manifold, if not corrected, could result in a failure of the upper or lower rudder PCM manifold which could result in a hard-over of the rudder surface leading to an increase in pilot workload and a possible high-speed runway excursion upon landing.'' In addition, Boeing suggested revising the sentence, ''Although commanding full retract, pilot pedal inputs were ineffective in moving the lower rudder back to the right,'' to replace the term ''retract'' with ''right rudder,'' and revising the sentence, ''These events did not result in a hard-over, but created the need for a retention feature solution specified in AD 2008–13–03, Amendment 39–15566, for Model 747–400, –400D, and –400F series airplanes,'' to clarify that the additional three events did not result in end-cap separation or a hard-over.

We agree that replacement or modification of the upper and lower rudder PCMs is intended to prevent the yaw damper modulating piston assembly from shifting after a manifold failure, consequently preventing a rudder surface hard-over. Therefore, we have revised paragraph (e) and the corresponding language in the Summary of this AD to clarify the intent. However, we cannot revise the Discussion section of this AD, because that section is not re-stated in this final rule.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 36390, June 22, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 36390, June 22, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects 7 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replace rudder PCM (P/N 241700–1007)	11 work-hours × $85 per hour = $935	$5,856	$6,791	$47,537
Replace rudder PCM (P/N 241700–1005)	11 work-hours × $85 per hour = $935	8,568	9,503	66,521
Modify rudder PCM (P/N 241700–1007) ..	3 work-hours × $85 per hours = $255	1,374	1,629	11,403
Modify rudder PCM (P/N 241700–1005) ..	3 work hours × $85 per hour = $255	4,086	4,341	30,387

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

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),

(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.

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 airworthiness directive (AD):

2012–03–09 The Boeing Company: Amendment 39–16950; Docket No. FAA–2011–0571; Directorate Identifier 2010–NM–263–AD.

(a) Effective Date

This AD is effective March 19, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 747SP series airplanes, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/ Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by a report of a rudder hard-over event on a Model 747–400 series airplane, caused by a rudder power control module (PCM) manifold cracking and separating in the area of the yaw damper cavity end-cap. We are issuing this AD to prevent a hard-over of the rudder surface leading to an increase in pilot workload and a possible high-speed runway excursion upon landing, in the event of failure of the lower or upper rudder PCM manifold.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Replace or Modify Rudder PCMs

Within 24 months or 8,400 flight hours after the effective date of this AD, whichever occurs first, do the replacement specified in paragraph (g)(1) of this AD or the modification specified in paragraph (g)(2) of this AD for the upper and lower rudder PCMs, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747–27A2497, dated September 30, 2010.

(1) Replace any rudder PCM having Boeing part number (P/N) 60B80093–3 (Parker P/N 241700–1005) or Boeing P/N 60B80093–4 (Parker P/N 241700–1007) with rudder PCM having Boeing P/N 60B80093–104 (Parker P/N 241700–9007).

(2) Modify any rudder PCM having Boeing P/N 60B80093–3 (Parker P/N 241700–1005) or Boeing P/N 60B80093–4 (Parker P/N 241700–1007).

Note 1 to paragraph (g): Boeing Alert Service Bulletin 747–27A2497, dated September 30, 2010, refers to Parker Service Bulletin 241700–27–333, dated January 26, 2010, as an additional source of guidance for modifying the upper and lower rudder PCM manifold access caps provided in Option 2 of Work Packages 1 and 2 of Boeing Alert Service Bulletin 747–27A2497, dated September 30, 2010.

(h) Parts Installation

As of the effective date of this AD, no person may install a rudder PCM having Boeing P/N 60B80093–3 (Parker P/N 241700–1005) or Boeing P/N 60B80093–4 (Parker P/N 241700–1007), on any airplane.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: *9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.*

(2) 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.

(j) Related Information

For more information about this AD, contact Marie Hogestad, Aerospace Engineer, Systems and Equipment Branch, ANM–130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057–3356; phone: 425–917–6418; fax: 425–917–6590; email: *marie.hogestad@faa.gov.*

(k) Material Incorporated by Reference

You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the

following service information on the date specified:

(1) Boeing Alert Service Bulletin 747–27A2497, dated September 30, 2010, approved for IBR March 19, 2012.

(2) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, Washington 98124–2207; telephone 206–544–5000, extension 1; fax 206–766–5680; email *me.boecom@boeing.com;* Internet *https://www.myboeingfleet.com.* You may review copies of the referenced 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.

(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 an NARA facility, 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 January 27, 2012.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012–3115 Filed 2–10–12; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2012–0112; Directorate Identifier 2011–NM–055–AD; Amendment 39–16952; AD 2012–03–10]

RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

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

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Airbus Model A340–600 series airplanes. This AD requires modifying the fire extinguishing system from a three-bottles solution with 4 flow metering compact unit into a two-bottles solution with 2 flow metering systems equipped with upgraded water absorbing filter elements. This AD was prompted by reports of partial blockage of a certain water absorbing filter element. We are issuing this AD to prevent partial blockage of a certain water absorbing filter element, which could lead to reduction of the halon outflow, which leads to incapacity to maintain fire extinguishing agent concentration. Combined with fire, this condition could result in an uncontrolled fire in the affected compartment.

DATES: This AD becomes effective February 28, 2012.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of February 28, 2012.

We must receive comments on this AD by March 29, 2012.

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 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 2010–0255, dated December 6, 2010 (referred to after this as ''the MCAI''), to correct an unsafe condition for the specified products. The MCAI states:

> During the qualification test campaign of the prototype Flow Metering Compact Unit (FMCU) Part Number (P/N) QA07907–03, partial blockage of the water absorbing filter element P/N QA06123 was observed several times. The blockage was created by carbon debris from the cartridge and from the burst disc of the Halon bottle.
>
> This water absorbing filter element is part of the FMCU, which are part of the Lower Deck Cargo Compartment (LDCC) fire extinguisher system used in some A340–600 aeroplanes.
>
> Blockage of the water absorbing filter element could lead to reduction of the Halon outflow, leading to incapacity to maintain fire extinguishing agent concentration. Combined with fire, this condition could result in an uncontrolled fire in the affected compartment, which would constitute an unsafe condition.
>
> To avoid water absorbing filter element blockage, this [EASA] AD requires to convert the fire extinguishing system from the three-bottles-system with 4 FMCU into a two-bottles-system with 2 Flow Metering Systems (FMS) equipped with upgraded water absorbing filter elements.

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

Relevant Service Information

Airbus has issued Mandatory Service Bulletin A340–26–5020, including Appendix 01, dated June 3, 2010. 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.

There are no products of this type currently registered in the United States. However, this rule is necessary to ensure that the described unsafe condition is addressed if any of these products are placed on the U.S. Register in the future.