

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2011-1171; Directorate Identifier 2011-NM-101-AD]

RIN 2120-AA64

**Airworthiness Directives; The Boeing Company Airplanes**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 737-100, -200, -200C, and -300 series airplanes. This proposed AD was prompted by a report from the airplane manufacturer that airplanes were assembled with air distribution ducts in the environmental control system (ECS) wrapped with Boeing Material Specification (BMS) 8-39 or Aeronautical Materials Specifications (AMS) 3570 polyurethane foam insulation, a material with fire-retardant properties that deteriorate with age. This proposed AD would require reworking certain air distribution ducts in the ECS. We are proposing this AD to prevent ignition of the BMS 8-39 or AMS 3570 polyurethane foam insulation on the duct assemblies of the ECS due to a potential electrical arc, which could start a small fire and lead to a larger fire that may spread throughout the airplane through the ECS.

**DATES:** We must receive comments on this proposed AD by December 22, 2011.

**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.

- *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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed 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](mailto: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.

**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.

**FOR FURTHER INFORMATION CONTACT:**

Kimberly A. DeVoe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6495; fax: (425) 917-6590; email: [Kimberly.Devoe@faa.gov](mailto:Kimberly.Devoe@faa.gov).

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2011-1171; Directorate Identifier 2011-NM-101-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.

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**

We have received reports of duct assemblies in the ECS with burned BMS 8-39 polyurethane foam insulation on two Model 767-200 series airplanes. The airplane manufacturer has also notified us that certain Model 737-100,

-200, -200C, and -300 series airplanes were assembled with duct assemblies in the ECS wrapped with BMS 8-39 or AMS 3570 polyurethane foam insulation. The fire-retardant properties of BMS 8-39 and AMS 3570 polyurethane foam insulation deteriorate with age. This, along with dust, dirt, and other carbon particulate contamination of the insulation on the ducts, adds an available fuel source for a potential fire. Once ignited, the foam insulation emits noxious smoke, does not self-extinguish, and drips droplets of liquefied polyurethane, which can further propagate a fire. Because the insulation is wrapped around the duct assemblies, which are located throughout the airplane, if the insulation is ignited a fire could potentially travel along the ducts and spread throughout the airplane. This condition, if not corrected, could result in ignition of the BMS 8-39 or AMS 3570 polyurethane foam insulation on the duct assemblies of the ECS due to a potential electrical arc, which could start a small fire and lead to a larger fire that may spread throughout the airplane through the ECS.

**Other Relevant Rulemaking**

On January 14, 2008, we issued AD 2008-02-16, Amendment 39-15346 (73 FR 4061, January 24, 2008), applicable to certain Model 767-200 and 767-300 series airplanes.

On June 17, 2010, we issued AD 2010-14-01, Amendment 39-16344 (75 FR 38007, July 1, 2010), applicable to certain Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400F, 747SR, and 747SP series airplanes.

AD 2008-02-16, Amendment 39-15346 (73 FR 4061, January 24, 2008), and AD 2010-14-01, Amendment 39-16344 (75 FR 38007, July 1, 2010), require reworking certain duct assemblies in the ECS. These ADs resulted from reports of duct assemblies in the ECS with burned BMS 8-39 polyurethane foam insulation. These ADs also resulted from reports from the airplane manufacturer that airplanes were assembled with duct assemblies in the ECS wrapped with BMS 8-39 polyurethane foam insulation, a material with fire-retardant properties that deteriorate with age. We issued these ADs to prevent a potential electrical arc from igniting the BMS 8-39 polyurethane foam insulation on the duct assemblies of the ECS, which could propagate a small fire and lead to a larger fire that might spread throughout the airplane through the ECS.

## Relevant Service Information

We reviewed Boeing Service Bulletin 737–21A1132, Revision 3, dated February 16, 2011. This service bulletin describes procedures for reworking and part-marking the following affected duct assemblies ECS systems. The rework includes doing a pressure and leak test following installation of the new insulation.

- Captain's outlet air distribution ducts
- Control cabin air distribution ducts
- Distribution manifold
- Passenger air distribution gasper air ducts

## FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

## Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and the Service Information."

## Differences Between the Proposed AD and the Service Information

Boeing Service Bulletin 737–21A1132, Revision 3, dated February 16, 2011, recommends reworking the affected duct assemblies "during the next heavy maintenance check, within 24,000 flight-hours from the date on this service bulletin." This proposed AD would require operators to rework the affected duct assemblies within 72 months after the effective date of the AD. In developing the compliance time for this action, we considered the degree of urgency associated with addressing the subject unsafe condition. We also considered the availability of required

parts and the practical aspect of reworking the affected duct assemblies within an interval that parallels normal scheduled maintenance for most affected operators. The average heavy maintenance schedule for the affected fleet is between 60 and 72 months; therefore, the proposed compliance time of 72 months is equivalent to the recommended compliance time of "during the next heavy maintenance check, within 24,000 flight-hours," and it represents an appropriate interval in which an ample number of required parts will be available to modify the affected fleet without adversely affecting the safety of these airplanes. This difference has been coordinated with the Boeing Company.

## Costs of Compliance

We estimate that this proposed AD affects 292 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

## ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Duct assembly rework/part marking .....	250 work-hours × \$85 per hour = \$21,250.	\$3,545	\$24,795	\$7,240,140

## 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,

(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.

## 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 airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA–2011–1171; Directorate Identifier 2011–NM–101–AD.

## (a) Comments Due Date

We must receive comments by December 22, 2011.

## (b) Affected ADs

None.

## (c) Applicability

This AD applies to The Boeing Company Model 737–100, –200, –200C, and –300 series airplanes, certificated in any category; as identified in Boeing Service Bulletin 737–21A1132, Revision 3, dated February 16, 2011.

## (d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 21, Air conditioning.

## (e) Unsafe Condition

This AD was prompted by a report from the airplane manufacturer that airplanes were assembled with air distribution ducts in the environmental control system (ECS) wrapped with Boeing Material Specification (BMS) 8–39 or Aeronautical Materials Specifications (AMS) 3570 polyurethane foam insulation, a material with fire retardant properties that

deteriorate with age. We are issuing this AD to prevent ignition of the BMS 8–39 or AMS 3570 polyurethane foam insulation on the duct assemblies of the ECS due to a potential electrical arc, which could start a small fire and lead to a larger fire that may spread throughout the airplane through the ECS.

#### (f) Compliance

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

#### (g) Air Distribution Duct Rework

Within 72 months after the effective date of this AD, rework the applicable duct assemblies in the ECS specified in and in accordance with the Accomplishment Instructions and Appendix A of Boeing Service Bulletin 737–21A1132, Revision 3, dated February 16, 2011.

**Note 1:** The service bulletin accomplishment instructions might refer to other procedures. When the words “refer to” are used and the operator has an accepted alternative procedure, the accepted alternative procedure can be used to comply with the AD. When the words “in accordance with” are included in the instruction, the procedure in the design approval holder document must be used to comply with the AD.

#### (h) Credit for Actions Accomplished in Accordance With Previous Service Information

Reworking the applicable duct assemblies in the ECS in accordance with the Accomplishment Instructions and Appendix A of Boeing Service Bulletin 737–21A1132, Revision 2, dated June 13, 2007, before the effective date of this AD is acceptable for compliance with the corresponding actions required by paragraph (g) of this AD.

#### (i) Parts Installation

As of the effective date of this AD, no person may install an ECS duct assembly with BMS 8–39 or AMS 3570 polyurethane foam insulation on any airplane.

#### (j) 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-Requests-faa.gov](mailto:9-ANM&-Seattle-ACO-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.

#### (k) Related Information

(1) For more information about this AD, contact Kimberly A. DeVoe, Aerospace Engineer, Cabin Safety and Environmental

Systems Branch, ANM–150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057–3356; *phone:* (425) 917–6495; *fax:* (425) 917–6590; *email:* [Kimberly.Devoe@faa.gov](mailto:Kimberly.Devoe@faa.gov).

(2) For 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; *phone:* (206) 544–5000, extension 1; *fax:* (206) 766–5680; *email:* [me.boecom@boeing.com](mailto: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.

Issued in Renton, Washington, on October 26, 2011.

**Kalene C. Yanamura,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2011–28758 Filed 11–4–11; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA–2011–1169; Directorate Identifier 2010–NM–050–AD]

RIN 2120–AA64

#### Airworthiness Directives; Fokker Services B.V. Model F.28 Mark 0100 Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed 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:

[T]here have been a number of occurrences with Messier-Dowty MLG [main landing gear] units where the main fitting failed, due to fatigue cracking in the area of the filler and bleeder holes, and occurrences where the sliding member failed, due to fatigue cracking at the area of chrome run-out/lower radius of the sliding tube portion of the sliding member.

Investigation has revealed that the most probable cause of \* \* \* cracks is high compressive stress during braking at higher deceleration levels outside the regular fatigue load spectrum. [T]he high compressive stress locally exceeds the elasticity limit of the

material, leaving a residual tensile stress at release of the heavy braking load. Subsequently, this local residual tensile stress results in a negative effect on the fatigue life of the component.

This condition, if not detected and corrected, could lead to failure of the MLG, possibly resulting in loss of control of the aeroplane during the landing rollout. \* \* \*

\* \* \* \* \*

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** We must receive comments on this proposed AD by December 22, 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.

For Fokker service information identified in this proposed AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands; *telephone:* +31 (0)252–627–350; *fax:* +31 (0)252–627–211; *email:* [technicalservices.fokkerservices@stork.com](mailto:technicalservices.fokkerservices@stork.com); Internet: <http://www.myfokkerfleet.com>.

For Messier-Dowty service information identified in this proposed AD, contact Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, Virginia 20166–8910; *telephone:* (703) 450–8233; *fax:* (703) 404–1621; Internet: <https://techpubs.services.messier-dowty.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 Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the