[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0186; Directorate Identifier 2011-NM-268-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 737-600, -700, -700C, -800, -900, and -900ER series airplanes. This proposed AD was prompted by reports of flight crew failure to activate air data probe heat. This proposed AD would require modifying the anti-icing system for the angle of attack sensor, the total air temperature, and the pitot probes. We are proposing this AD to prevent ice from forming on air data system sensors and consequent loss of or misleading airspeed indication on all airspeed indicating systems, which could lead to loss of control 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, 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; e-mail 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: Frank Carreras, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6442; fax: 425-917-6590; e-mail: frank.carreras@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-2012-0186; Directorate Identifier 2011-NM-268-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

The air data sensor heating system, when ON, heats the pitot probes that measure air pressure resulting from the airplane's motion through the air in order to provide airspeed indications to the flight crew. This heating prevents ice from forming inside the pitot probes, which would degrade or block the probes' ability to measure air pressure. The pitot heat switch, however, is not always set to ON. Although the existing ice protection system provides indication of activation to the flight crew, three reported incidents on Model 737 airplanes were attributed to failure to activate the air data sensor heating system. The affected airplanes do not have an automatic activation of the air data sensor heating system; pilots activate the system manually as a pretakeoff checklist item. Failure to activate the air data sensor heating system could result in ice formation on air data system sensors, which could lead to misleading airspeed data or loss of all airspeed indicating systems, and loss of control of the airplane.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin 737-30A1063, dated November 16, 2011. This service bulletin describes procedures for modifying the anti-icing system for the angle of attack sensor, the total air temperature, and the pitot probes. The modification involves the following:

• Changing the wires and replacing the P5-9 window/pitot heat module on the P5 overhead panel in the flight compartment (the modified P5-9 window/pitot heat module changes the current ON and OFF positions of the pitot heat switch to ON and AUTO);

• Replacing two circuit breakers; installing relay supports, relays, and decals; and changing wiring at the P18 circuit breaker panels in the flight compartment; and

• Changing the wiring at the E2-2 and E3-1 electronics shelves in the electrical/electronics compartment.

These modifications to the air data sensor heating system provide automatic activation of the heating system when the modified pitot heat switch is set to AUTO and either engine is running.

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.

Costs of Compliance

We estimate that this proposed AD affects 1,025 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
Modification	60 to 79 work-hours X $85 per hour = $5,100 to $6,715	$4,991 to $7,506	Up to $14,221	Up to $14,576,525

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-2012-0186; Directorate Identifier 2011-NM-268-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 The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes; certificated in any category; as identified in Boeing Alert Service Bulletin 737-30A1063, dated November 16, 2011.

(d) **Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 3030, Pitot/Static Anti-Ice System.

(e) **Unsafe Condition**

This AD was prompted by reports of flight crew failure to activate air data probe heat. We are issuing this AD to prevent ice from forming on air data system sensors and consequent loss of or misleading airspeed indication on all airspeed indicating systems, which could lead to loss of control of the airplane.

(f) **Compliance**

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

(g) **Modification**

Within 24 months after the effective date of this AD: modify the anti-icing system for the angle of attack sensor, the total air temperature, and the pitot probes, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-30A1063, dated November 16, 2011.

(h) **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 e-mailed 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.

(i) **Related Information**

(1) For more information about this AD, contact Frank Carreras, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft

Certification Office (ACO), 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6442; fax: 425-917-6590; e-mail: frank.carreras@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; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail 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 February 10, 2012.

Kalene C. Yanamura,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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