[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0252; Product Identifier 2019-NM-048-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 727 airplanes, Model 757 airplanes, and Model 767-200, -300, -300F, and -400ER series airplanes. This proposed AD was prompted by reports of nuisance stick shaker activation while the airplane accelerated to cruise speed at the top of climb. This proposed AD was also prompted by an investigation of those reports that revealed that the angle of attack (AOA) (also known as angle of airflow) sensor vanes could not prevent the build-up of ice, causing the AOA sensor vanes to become immobilized, which resulted in nuisance stick shaker activation. This proposed AD would require a general visual inspection of the AOA sensors for a part number, and replacement of affected AOA sensors. We are proposing this AD to address the unsafe condition on these products.

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 NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2019-0252.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2019-0252; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Jeffrey W. Palmer, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5351; fax: 562-627-5210; email: jeffrey.w.palmer@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-2019-0252; Product Identifier 2019-NM-048-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 nuisance stick shaker activation while the airplane was accelerating to cruise speed at the top of the climb. A review of recorded flight data and weather reports indicated that the cause of the nuisance stick shaker activation was immobilized AOA sensor vanes, which were frozen because the heaters in the AOA sensors vanes were not sufficient to prevent ice build-up in the AOA sensor faceplate and vane. This can be caused by water entering the AOA vane pivot and freezing during takeoff. This condition, if not addressed, could result in inaccurate or unreliable AOA sensor data being transmitted to airplane systems and consequent loss of controllability of the airplane.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; and

Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018. The service information describes procedures for a general visual inspection of the AOA sensors for a certain part number, and replacement of affected AOA sensors. These documents are distinct since they apply to different airplane models.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

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 accomplishment of the actions identified as "RC" (required for compliance) in the Accomplishment Instructions of Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; and Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018; described previously, except as discussed under "Differences Between this Proposed AD and the Service Information," and except for any differences identified as exceptions in the regulatory text of this proposed AD.

For information on the procedures and compliance times, see this service information at http://www.regulations.gov by searching for and locating Docket No. FAA-2019-0252.

Differences Between this Proposed AD and the Service Information

Although Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019, recommends accomplishing the inspection within 2,750 flight hours; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019, recommends

accomplishing the inspection within 9,960 flight hours; and Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018, recommends accomplishing the inspection within 3,470 flight hours, we have determined that this compliance time will not ensure that the identified unsafe condition is addressed in a timely manner. In developing an appropriate compliance time for this AD, we considered the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the modifications. In light of all of these factors, we find the compliance times specified in the applicable service information, or within 36 months after the effective date of this AD, whichever occurs first, represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety. This difference has been coordinated with the Boeing.

Costs of Compliance

We estimate that this proposed AD affects 1,287 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X $85 per hour = $85	$0	$85	$109,395
Replacement	Up to 3 work-hours X $85 per hour = Up to $255	Up to $54,000	Up to $54,255	Up to $69,826,185

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.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

We have 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 that the 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-2019-0252; Product Identifier 2019-NM-048-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action 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 airplanes, identified in paragraphs (c)(1) through (c)(3) of this AD, certificated in any category.

(1) Model 727, 727C, 727-100, 727-100C, 727-200, and 727-200F series airplanes, as identified in Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019.

(2) Model 757-200, -200PF, -200CB, and -300 series airplanes, as identified in Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019.

(3) Model 767-200, -300, -300F, and -400ER series airplanes, as identified in Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018.

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Unsafe Condition

This AD was prompted by reports of nuisance stick shaker activation while the airplane accelerated to cruise speed at the top of climb. This AD was also prompted by an investigation of those reports that revealed that the angle of attack (AOA) (also known as angle of airflow) sensor vanes could not prevent the build-up of ice, causing the AOA sensor vanes to become immobilized, which resulted in nuisance stick shaker activation. We are issuing this AD to address ice build-up in the AOA sensor faceplate and vane, which may immobilize the AOA sensor vanes, and could result in inaccurate or unreliable AOA sensor data being transmitted to airplane systems and consequent loss of controllability of the airplane.

(f) Compliance

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

(g) Required Actions

Except as specified in paragraph (h) of this AD: Within 36 months after the effective date of this AD or at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; or Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018; as applicable, whichever occurs first, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; or Boeing Alert Service

Bulletin 767-34A0828, dated December 6, 2018; as applicable. All replacements of the affected AOA sensors must be done before further flight.

(h) Exceptions to Service Information Specifications

For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; or Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018; as applicable, uses the phrase "the original issue date of this service bulletin," this AD requires using "the effective date of this AD."

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO Branch, 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 certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(j) Related Information

(1) For more information about this AD, contact Jeffrey W. Palmer, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5351; fax: 562-627-5210; email: jeffrey.w.palmer@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110 SK57, Seal Beach, CA 90740 5600; telephone 562 797 1717; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on June 10, 2019.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.
[FR Doc. 2019-14502 Filed: 7/8/2019 8:45 am; Publication Date: 7/9/2019]