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## DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

## 14 CFR Part 39

[Docket No. FAA-2019-0252; Product Identifier 2019-NM-048-AD; Amendment 39-21007; AD 2019-24-18]

## RIN 2120-AA64

## Airworthiness Directives; the Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

**SUMMARY:** The FAA is adopting 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 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. This AD requires a general visual inspection of the AOA sensors for certain AOA sensors, and replacement of affected AOA sensors. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 3, 2020.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 3, 2020.

**ADDRESSES:** For service information identified in this final rule, 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 https://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 https://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 final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is 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:** 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: Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 727 airplanes, Model 757 airplanes, and Model 767-200, -300, -300F, and -400ER series airplanes. The NPRM published in the Federal Register on July 9, 2019 (84 FR 32667). The NPRM was prompted by reports of nuisance stick shaker activation while the airplane accelerated to cruise speed at the top of climb. The NPRM was also prompted by an investigation of those reports that revealed that the AOA 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. The NPRM proposed to require a general visual inspection of the AOA sensors for certain AOA sensors, and replacement of affected AOA sensors.

The FAA is 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.

## Changes Since the NPRM Was Issued

The FAA has reviewed Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 2019 (the FAA referred to Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019, as an appropriate source of service information for accomplishing the actions specified in the NPRM) and have revised this AD to refer to Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 2019. This service information adds airplanes to the effectivity, but specifies that no additional work is needed if the actions in Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019, have been accomplished. The FAA has added paragraph (i) to this AD to provide credit for actions done prior to the effective date of this AD using Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019. Subsequent paragraphs have been redesignated accordingly.

Although Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 2019, adds airplanes to the effectivity, the FAA has not added those airplanes to the applicability of this AD. In paragraph (c) of this AD, the FAA refers to the airplanes identified in Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 2019, except for the additional airplanes (variable numbers QB065, QD191, QD192, QD402, QD403, QD407, and QD410). Adding airplanes to the applicability of this AD would necessitate (under the provisions of the Administrative Procedure Act) reissuing the notice, reopening the comment period, considering additional comments subsequently received, and eventually issuing a final rule. In consideration of the urgency of the unsafe condition identified in this final rule, the FAA has determined that delay of this final rule is not appropriate. However, the FAA might consider further rulemaking on this issue to address the additional airplanes.

## Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

## Effect of Winglets on Accomplishment of the Proposed Actions

Aviation Partners Boeing (APB) stated that they have reviewed the NPRM and have determined that the installation of winglets per Supplemental Type Certificate (STC) ST01518SE (for Model 757 airplanes) and STC ST01920SE (for Model 767 airplanes) do not affect the accomplishment of the manufacturer's service instructions.

The FAA agrees with the commenter that STC ST01518SE and STC ST01920SE do not affect the accomplishment of the manufacturer's service instructions. Therefore, the installation of STC ST01518SE or STC ST01920SE does not affect the ability to accomplish the actions required by this AD. The FAA has not changed this AD in this regard.

## **Request To Reduce Compliance Time**

The Air Line Pilots Association, International (ALPA) requested the compliance time in the proposed AD be shortened from within 36 months after the effective date of this AD to within 24 months after the effective date of this AD for all airplanes. The ALPA stated that it agrees with the intent of the proposed AD, but does not agree that a 36-month compliance time is sufficient when considering the publication dates of the service information, the low estimated time to complete the repairs, and the high risk associated with inaccurate AOA readings and nuisance stick shaker indications.

The FAA does not agree with the request. The FAA has determined that the compliance time specified in this AD for each airplane model will accommodate the time necessary to accomplish the actions required by this AD and maintain an adequate level of safety. In addition, the commenter did not provide adequate data to justify a shortened compliance time. Lastly, the suggested compliance time change would alter the requirements of this AD to be more restrictive, so additional rulemaking would be required, ultimately delaying issuance of the AD. The FAA finds that delaying this action is inappropriate in light of the identified unsafe condition. However, if additional data are presented that would justify a shorter compliance time, the FAA may consider further rulemaking on this issue. The FAA has not changed this AD in this regard.

### **Request To Extend Compliance Time**

American Airlines (AAL) and United Airlines (UAL) requested that the FAA extend the compliance time for the Boeing Model 767 fleet from within 36 months or 3,470 flight hours (FH) after the effective date of this AD, whichever occurs first, to match the compliance time of the Boeing Model 757 fleet, which is within 36 months or 9,960 FH after the effective date of this AD, whichever occurs first. AAL reasoned that the Boeing Model 757 and 767 fleets share the same parts for both the AOA sensors and air data computers and operate similar missions with similar cold-soak times on the AOA vanes, and argued that the risk should be the same. AAL asserted that matching the FH compliance times will ensure that accomplishing this proposed AD can be effectively and economically planned, while allowing for the components to be handled the same regardless of fleet. AAL concluded this method would maintain an equivalent level of safety.

UAL also pointed out that UAL's Boeing Model 757 and 767 fleets are equipped with equivalent AOA sensors and air data computers, and the operation and cold-soak times of the AOA sensors are the same. UAL argued that changing the FH compliance time for Model 767 airplanes to match the FH compliance time for Model 757 airplanes would provide an equivalent level of safety, stating that

the AOA sensors of both airplane models are exposed to the same adverse conditions in the air and on the ground.

The FAA does not agree with the request. The FAA has determined that the flight-hour compliance times identified in the service information, without a time threshold, will not ensure that the identified unsafe condition is addressed in a timely manner. In developing an appropriate compliance time for this AD, the FAA 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, the FAA finds 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. However, under the provisions of paragraph (j) of this AD, the FAA will consider requests for approval of an extension of the compliance time if sufficient data are submitted to substantiate that the new compliance time would provide an acceptable level of safety. The FAA has not changed the AD in this regard.

#### **Request To Include Records Review**

All Nippon Airways (ANA) requested that the FAA add a statement to the proposed AD that allows a review of the airplane maintenance records for the part number (P/N) of the AOA sensor, if the P/N of the AOA sensor can be conclusively determined from that review. ANA stated that they have installed AOA sensor P/N 0861FL1 (new Boeing P/N S233T913-5) on their Boeing Model 767 fleet because it began accomplishing Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018, since the issue date of the service information. ANA argued that the proposed AD would require them to repeat accomplishment of Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018. ANA stated that it manages the P/N of the AOA sensor within its airplane maintenance records, and the installation of the new AOA sensor P/N 0861FL1 (new Boeing P/N S233T913-5) on each airplane can be traced by reviewing its airplane maintenance records.

The FAA agrees with the commenter's request to add a records review. The FAA has added paragraph (h)(2) to this AD to allow a review of airplane maintenance records in lieu of the inspections for the AOA sensor P/Ns. The FAA also notes that paragraph (f) of this AD states to accomplish the required actions within the compliance times specified, "unless already done." Therefore, if operators have accomplished the actions required for compliance with this AD before the effective date of this AD and have records that show the actions were done as specified in the AD, no further action is necessary.

### **Request To Reference Later Revisions of Service Information**

AAL requested that the applicability, required actions, and exceptions to service information in the proposed AD be revised to include any future FAA approved revisions of service information. AAL requested that the FAA add the phrase "or later FAA approved revisions" to Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; and Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018. AAL suggested that any requirement that references service information would state, for example, "Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019, or later FAA approved revisions." AAL argued that allowing later FAA approved revisions of service information would avoid extra work and delays in implementation required for an alternative method of compliance (AMOC) approval should either service information require a revision due to an error or omission of data.

The FAA does not agree with the request. The FAA may not refer to any document that does not yet exist. In general terms, the FAA is required by Office of the Federal Register (OFR) regulations for approval of materials incorporated by reference, as specified in 1 CFR 51.1(f), to either publish the service document contents as part of the actual AD language; or submit the service document to the OFR for approval as referenced material, in which case the FAA may only refer to such material

in the text of an AD. The AD may refer to the service document only if the OFR approved it for incorporation by reference. See 1 CFR part 51.

To allow operators to use later revisions of the referenced document (issued after publication of the AD), either the FAA must revise the AD to reference specific later revisions, or operators must request approval to use later revisions as an AMOC with this AD under the provisions of paragraph (j) of this AD.

## **Request To Clarify the Impact of Case Heaters on Unsafe Condition**

The commenter, Alan Peterson, FedEx, stated that the proposed AD does not address the possibility that the case heaters within the AOA sensor may be contributing to the unsafe condition, noting specifically that the proposed AD does not address the case heaters within the AOA sensors for Captain and First officer positions on FedEx's large fleet of Boeing Model 757 and 767 airplanes. The commenter pointed out that the case heaters keep the dampening fluid inside the body of the AOA sensor from getting cold-soaked in flight and on the ground. The commenter explained that the wiring of the case heater is in parallel with the AOA vane heater, so in a scenario where the case heater fails, the AOA sensor vane would continue working, but the AOA sensor would become slow to move once it becomes cold-soaked due to the lack of heat from the case heater within the AOA sensor. The commenter described this as a critical oversight in the proposed AD because both the case heater and the AOA vane heater must work correctly for the AOA vanes to function properly.

The commenter stated that, in his experience, an operator may check the resistance of the case heater wiring on both AOA sensor vanes to verify that it is within the tolerance specified by the component maintenance manual (CMM) and verify the wiring is not burnt due to an open circuit. The commenter stated that this check was accomplished on the Boeing Model 757 and 767 fleet, and, if a discrepancy was discovered during the resistance check or revealed evidence of an open circuit in the case heater, the AOA vane would then be replaced. The commenter noted that a malfunction with the case heater would not be registered by the engine-indicating and crew-alerting system (EICAS) because the system only monitors the AOA vane heaters, and suggested that a malfunctioning case heater could affect reactive windshear, reduced vertical separation minimum (RVSM), and stall warning. The FAA infers that the commenter is requesting that the FAA clarify the impact of case heaters within the AOA sensors on the unsafe condition.

The FAA agrees to clarify. One of the specific mitigating design changes in this AD is the position of the case heater. Although the case heaters in the AOA vane assembly are not specifically mentioned in the preamble of the proposed AD, the new AOA sensors with supplier P/N 0861FL1 (new Boeing P/N S233T913-5) have a repositioned case heater specifically designed to mitigate the unsafe condition of moisture build-up and freezing. AOA sensors with supplier P/N 2566A-21 (new Boeing P/N 10-60878-3), 2566A-30 (new Boeing P/N 10-60878-4), and 0861FL (new Boeing P/N S233T913-4), mitigate the unsafe condition using an improved vane design. The FAA has not changed the AD in this regard.

## Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and

Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

## **Related Service Information Under 1 CFR Part 51**

The FAA reviewed Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 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 certain AOA sensors, 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.

#### **Costs of Compliance**

The FAA estimates that this AD affects 1,287 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

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

**Estimated Costs for Required Actions** 

## 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.

The FAA is 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 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**

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) Will not affect intrastate aviation in Alaska, and

(3) 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):



## AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/ www.gpoaccess.gov/fr/advanced.html

**2019-24-18 The Boeing Company:** Amendment 39-21007; Docket No. FAA-2019-0252; Product Identifier 2019-NM-048-AD.

## (a) Effective Date

This AD is effective February 3, 2020.

## (b) Affected ADs

None.

## (c) Applicability

This AD applies to The Boeing Company airplanes, identified in paragraphs (c)(1) through (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, Revision 1, dated October 1, 2019; except for airplanes having variable numbers QB065, QD191, QD192, QD402, QD403, QD407, and QD410.

(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. The FAA is 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, Revision 1, dated October 1, 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, Revision 1, dated October 1, 2019; Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 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

(1) Where Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 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."

(2) Where Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 2019; Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019; or Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018; specify to accomplish a general visual inspection of the AOA sensors and to replace affected AOA sensors, a review of the airplane maintenance records is acceptable in lieu of those actions if the part number of the installed AOA sensors can be conclusively determined during that review to have a new or serviceable AOA sensor part number identified in Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 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.

## (i) Credit for Previous Actions

This paragraph provides credit for actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 727-34A0247, dated January 2, 2019.

## (j) 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 (k) 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 (j)(4)(i) and (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.

## (k) Related Information

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.

## (I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 727-34A0247, Revision 1, dated October 1, 2019.

(ii) Boeing Alert Service Bulletin 757-34A0611, Revision 1, dated March 22, 2019.

(iii) Boeing Alert Service Bulletin 767-34A0828, dated December 6, 2018.

(3) 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.

(4) 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.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on December 9, 2019. Michael Kaszycki, Acting Director, System Oversight Division, Aircraft Certification Service. [FR Doc. 2019-27887 Filed 12-27-19; 8:45 am]