



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-1031; Project Identifier AD-2020-00846-T; Amendment 39-21334; AD 2020-24-04]

RIN 2120-AA64

**Airworthiness Directives;** The Boeing Company Airplanes

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. This AD requires revising the existing airplane flight manual (AFM) to incorporate procedures for conducting an approach with a localizer-based navigation aid, monitoring localizer raw data, calling out any significant deviations, and performing an immediate go around if the airplane has not intercepted the final approach course as shown by the localizer deviation. This AD was prompted by reports that the autopilot flight director system (AFDS) failed to transition to the instrument landing system localizer (LOC) beam after the consistent localizer capture function in the flight control modules initiated a transition to capture LOC during approach. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this 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 <https://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 final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister 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, Airworthiness Products Section, Operational Safety 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-2020-1031.

### **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-2020-1031; 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, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3539; email: [frank.carreras@faa.gov](mailto:frank.carreras@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The FAA has received reports indicating that the AFDS failed to transition to the instrument landing system LOC beam after the consistent localizer capture function in the flight control modules initiated a transition to capture LOC during approach. This condition, if not addressed, could result in localizer overshoot leading to glideslope descent on the wrong heading. Combined with a lack of flight deck effects for a consistent localizer capture mode failure, this condition could result in a controlled flight into terrain.

### **FAA's Determination**

The FAA is issuing this AD because the agency 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.

### **AD Requirements**

This AD requires revising the existing AFM to incorporate procedures for conducting an approach with a localizer-based navigation aid, monitoring localizer raw data, calling out any significant deviations, and performing an immediate go around if the airplane has not intercepted the final approach course as shown by the localizer deviation.

### **Interim Action**

The FAA considers this AD interim action. The manufacturer is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, the FAA might consider additional rulemaking.

### **FAA's Justification and Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has

found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the failure of the AFDS to transition to the instrument LOC beam, after the consistent localizer capture function in the flight control modules initiated a transition to capture LOC during approach, could result in localizer overshoot leading to glideslope descent on the wrong heading. Combined with a lack of flight deck effects for a consistent localizer capture mode failure, this condition could result in a controlled flight into terrain. In addition, the compliance time for the required action is shorter than the time necessary for the public to comment and for publication of the final rule. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reasons stated above, the FAA finds that good cause exists for making this amendment effective in less than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written comments, data, or views about this AD. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should submit only one copy of the comments. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-1031; Project Identifier AD-2020-00846-T” at the beginning of your comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, as well as a report summarizing each substantive public contact with FAA personnel concerning this AD. The FAA will consider all

comments received by the closing date for comments. The FAA may amend this AD because of those comments.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3539; email: frank.carreras@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Regulatory Flexibility Act (RFA)**

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

### **Costs of Compliance**

The FAA estimates that this AD affects 144 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

## Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Revise the AFM	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$12,240

### 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.

### 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, and
- (2) Will not affect intrastate aviation in Alaska.

### 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):

**2020-24-04 The Boeing Company:** Amendment 39-21334 ; Docket No. FAA-2020-1031; Project Identifier AD-2020-00846-T.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 22, Auto flight.

#### **(e) Unsafe Condition**

This AD was prompted by reports indicating that the autopilot flight director system (AFDS) failed to transition to the instrument landing system localizer (LOC) beam after the consistent localizer capture function in the flight control modules initiated a transition to capture LOC during approach. The FAA is issuing this AD to address the AFDS failing to transition, which could result in localizer overshoot leading to glideslope

descent on the wrong heading. Combined with a lack of flight deck effects for a consistent localizer capture mode failure, this condition could result in a controlled flight into terrain.

**(f) Compliance**

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

**(g) Revise the Airplane Flight Manual (AFM)**

Within 14 days after the effective date of this AD, revise the limitations section of the existing AFM and applicable corresponding operational procedures to incorporate the procedures specified in figure 1 to paragraph (g) of this AD. Revising the existing AFM to include the changes specified in paragraph (g) of this AD may be done by inserting a copy of figure 1 to paragraph (g) of this AD into the existing AFM.

Figure 1 to paragraph (g) – *Operating Instructions*

<b>Operating Instructions:</b>	(Required by AD 2020-24-04)
When conducting an approach with a localizer-based navigation aid, monitor localizer raw data and call out any significant deviations. If AFDS performance is not satisfactory, the flight crew must intervene. Perform an immediate go-around if the airplane has not intercepted the final approach course as shown by the localizer deviation.	

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle 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 responsible Flight Standards 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 (i) 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 responsible Flight Standards 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, Seattle 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.

**(i) Related Information**

For more information about this AD, contact Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3539; email: frank.carreras@faa.gov.

**(j) Material Incorporated by Reference**

None.

Issued on November 13, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-26680 Filed: 12/1/2020 11:15 am; Publication Date: 12/3/2020]