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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-1421; Product Identifier 2014-NM-177-AD; Amendment 39-19302; AD 2018-11-14]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 767-300 and -300F series airplanes. This AD was prompted by reports of fatigue cracking on airplanes with Aviation Partners Boeing winglets installed. This AD requires high frequency eddy current (HFEC) inspections for cracking of the lower outboard wing skin, and repair or modification if necessary. This AD also requires one of three follow-on actions: Repeating the HFEC inspections, modifying certain internal stringers and oversizing and plugging the existing fastener holes of the lower wing, or modifying the external doubler/tripler and doing repetitive post-modification inspections. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective July 10, 2018.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of July 10, 2018.

ADDRESSES: For service information identified in this final rule, contact Aviation Partners Boeing, 2811 S. 102nd Street, Suite 200, Seattle, WA 98168; telephone 206-762-1171; internet https://www.aviationpartnersboeing.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-2015-1421.

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-2015-1421; 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 (phone: 800-647-5527) is Docket Operations, 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: Allen Rauschendorfer, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA; phone and fax: 206-231-3528; email: allen.rauschendorfer@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We 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 767-300 and -300F series airplanes. The NPRM published in the Federal Register on June 5, 2015 (80 FR 32066). The NPRM was prompted by reports of fatigue cracking on airplanes with Aviation Partners Boeing winglets installed. The NPRM proposed to require a HFEC inspection for cracking of the lower outboard wing skin, and repair or modification if necessary. The NPRM also proposed to require one of three follow-on actions: Repeating the HFEC inspections, modifying certain internal stringers and oversizing and plugging the existing fastener holes of the lower wing, or modifying the external doubler/tripler and doing repetitive post-modification inspections.

We issued an SNPRM to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 767-300 and -300F series airplanes. The SNPRM published in the Federal Register on November 27, 2017 (82 FR 55958). The SNPRM proposed adding new HFEC inspections for cracking of an expanded area of the lower outboard wing skin for certain airplanes.

We are issuing this AD to address fatigue cracking in the lower outboard wing skin, which could result in failure and subsequent separation of the wing and winglet and consequent reduced controllability of the airplane.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the SNPRM and the FAA's response to each comment. One commenter, Matt Leritz, supported the content of the SNRPM.

Request To Correct Compliance Time

Aviation Partners Boeing (APB) and United Airlines (UAL) asked that we correct the compliance time in paragraphs (h)(2)(ii) and (h)(3)(ii) of the proposed AD (in the SNPRM). The commenters stated that those paragraphs would require the initial post-repair HFEC inspection of the lower wing skin at stringer L-6.5 at the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017. The commenters added that the compliance time for the Part 3 HFEC inspection specified in paragraph 1.E. does not begin after doing the Part 2 repair, but instead begins after the initial issue of the service bulletin (after the effective date of the AD). UAL stated that, as written, this would require doing post-repair inspections on airplanes above the total flight-hour and flight-cycle threshold within 18 months after the effective date of the AD, regardless of if or when the repair was actually done. APB confirmed that the calendar-based compliance time in the referenced service information, for airplanes in Group 1, Configurations 2 and 3, and Groups 2 and 3, should be the same as for airplanes in Group 1, Configuration 1, on which the Part 2 repair has been done. The commenters asked that the compliance time for the Part 3 HFEC inspection be corrected to the following: "Within 6,000

flight cycles after doing the Part 2 repair, or within 18,000 flight hours since doing the Part 2 repair, whichever occurs first."

We agree with the commenters' request for the reasons provided. We have added paragraph (j)(3) of this AD to include this compliance-time exception.

Request To Remove a Certain Terminating Action

Boeing asked that we remove the terminating action sentence at the end of paragraph (g)(2) of the proposed AD (in the SNPRM). Paragraph (g)(2) of the proposed AD (in the SNPRM) applies to Group 3 airplanes with external doublers, and if a crack is found it requires a repair using a method approved by the FAA. That paragraph also specifies that "[a]n approved repair terminates the repetitive inspections required by paragraph (g)(2) of this AD." Boeing stated that any repair for cracks found will require follow-on repetitive inspections, which would be approved as part of the AMOC repair approval process.

We agree that the repairs for Group 3 airplanes will have an approved follow-on inspection program, but the repairs may apply to the cracked areas only. We do not agree with removing the terminating action provision because other areas may require the repetitive inspections specified in paragraph (g)(2) of this AD, for which approved terminating action would be appropriate. We have revised that sentence as follows: "An approved repair terminates the repetitive inspections required by paragraph (g)(2) of this AD for the repaired area only."

Request To Add Grace Period for Post-Repair (Modification) Inspections

American Airlines (AAL), APB, UAL, and Delta Airlines (Delta) asked that we add a grace period for the proposed post-repair (modification) inspections.

AAL stated that Table 4 of paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, includes numerous inspections that are due within a specified number of flight hours or flight cycles after previous repair or modification of the airplane. AAL added that since it has completed many repairs and modifications using previous revisions of the referenced service information, there will be airplanes out of compliance with the AD requirements on the effective date because there is no grace period based on the AD due date.

APB and Delta stated that paragraph (g) of the proposed AD (in the SNPRM) specifies compliance times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, for initial post-repair inspections. APB added that the referenced service information added a flight-hour threshold of 90,000 total flight cycles to the existing flight-cycle threshold of 30,000 total flight cycles for the initial compliance time. APB noted that the grace period published in the referenced service information for airplanes on which the flight-hour or flight-cycle threshold has been reached is set to 18 months after accomplishment of the repair. APB stated that this creates a drop-dead inspection situation for airplanes on which either the flight-hour or flight-cycle threshold has been reached, and on which the Part 8 or Part 11 repair was accomplished over 18 months ago. Delta stated that the compliance table on pages (i) and (ii) of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, should be added to paragraph 1.E., "Compliance" and included in the AD.

UAL stated that paragraph (g) of the proposed AD (in the SNPRM) would require the repetitive post-repair inspections specified in Parts 9 and 13 of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, in airplane total times or within 18 months after accomplishment of Part 8 and 11 repairs, respectively. UAL is concerned that older airplanes on which the repair was done more than 18 months ago could be out of compliance on the effective date of the AD. UAL noted that the 18-month grace period covers the initial inspection, but does not cover post-repair inspections. UAL suggested that we provide similar relief for airplanes on which the threshold has been exceeded.

We do not agree with the commenters' requests to add a grace period. The current revisions of the referenced service information provide a compliance time of 18 months for the initial inspection for all airplanes. The compliance times for certain conditional inspections are in terms of airplane threshold or time since accomplishment of the specified repair or modification. Those previously installed repairs or modifications may have been done using a version of Aviation Partners Boeing Service Bulletin AP767-57-010 before Revision 11 or alternative method, and may involve deviations, additional repair activity, and previous repairs. Under the provisions of paragraph (k) of this AD, we will consider requests for approval of AMOCs to extend the compliance time if sufficient data are submitted to substantiate that it would provide an acceptable level of safety. We have determined that each situation must be handled separately in the AMOC evaluation. We have not changed this AD in this regard.

Request To Add Compliance Tables to Certain Service Information

Delta asked that a compliance table be added to Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, for airplanes on which the actions specified in Aviation Partners Boeing Service Bulletin AP767-57-010 have been previously accomplished. Delta noted that page i of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, provides a compliance information table only for Group 3 airplanes; there are no tables for Groups 1 and 2 airplanes.

We do not agree with the commenter's request. The compliance information table on page i of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, provides only a description of additional work, if any, necessary based on work accomplished using the previous revision. These tables are reference information only, and do not reflect all the actions required by the AD. The necessary compliance tables are provided in paragraph 1.E., "Compliance" of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017. Therefore, we have not changed this AD in this regard.

Request To Clarify Group 4 Airplanes Not Affected

UAL asked that we include a clarification in the proposed AD (in the SNPRM) that Group 4 airplanes are not affected. UAL stated that Group 4 airplanes are identified in the effectivity table in paragraph 1.A. of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017. UAL noted that an equivalent change to the service information was incorporated during winglet installation with no additional work being necessary. UAL asked that we add paragraph (g)(3) to the AD to clarify that Group 4 airplanes are not affected by the requirements in the AD.

We agree with the commenter for the reasons provided. Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, specifies that an equivalent change has been incorporated in APB winglet retrofit kits for Group 4 airplanes, and that no more work is necessary on those airplanes. We have included a clarification in paragraph (g)(3) of this AD that specifies that Group 4 airplanes are not affected by the actions required by paragraph (g) of this AD.

Request To Remove an Airplane Having a Certain Line Number

FedEx asked that we remove the airplane having line number 1027 from the applicability in the proposed AD (in the SNPRM), or allow Aviation Partners Boeing Service Bulletin AP767-57-012, dated September 2015, as an AMOC. FedEx stated that it will be modifying that airplane by removing the winglets and installing Boeing wing tips in accordance with Aviation Partners Boeing Service Bulletin AP767-57-012, dated September 2015. FedEx anticipated that the modification will be completed prior to the effective date of the AD. FedEx added that the unsafe condition will be addressed when the winglets are removed.

We do not agree with the commenter's request. There are many factors that led to the cracking of the lower wing skin, and the additional loading of the winglet is only one of those factors. Other contributory factors are design details with the added internal wing structure, which resulted in shortening the fatigue life of the blended winglet installation. We have not changed this AD in this regard.

Request Approval for Alternative Open Hole HFEC Inspection

UAL asked that provisions be added to paragraph (g) of the proposed AD (in the SNPRM) to allow an alternative open-hole HFEC inspection procedure to inspect for cracking at the five inboard fastener locations. UAL stated that an open-hole HFEC inspection with the fasteners removed, in accordance with nondestructive test (NDT) Part 6, Chapter 51-00-16, using the same notch sensitivity provides an equivalent crack detection method. UAL added that APB has concurred with the inspection. UAL concluded that it has been performing the optional preventive modification, which trims out the skin containing the five fastener holes, and allows for the open-hole HFEC to be performed easily because the fasteners in the doubler are removed.

We do not agree with the commenter's request. Although UAL developed an inspection method that works better for its situation, the HFEC inspection specified in the referenced service information is required by this AD to address all situations. However, under the provisions of paragraph (k) of this AD, we will consider requests for approval of AMOCs if sufficient data are submitted to substantiate that the open-hole HFEC inspection procedure provides an acceptable level of safety. We have not changed this AD in this regard.

Request To Clarify Credit for Previously Accomplished Repairs Approved by an Organization Designation Authorization (ODA)

All Nippon Airways (ANA), AAL, APB, and Delta asked that we clarify credit in paragraph (i) of the proposed AD (in the SNPRM), for previously accomplished repairs approved by a Boeing ODA prior to June 15, 2017.

ANA stated that during discussions with the FAA, it was informed that repair deviations approved by Boeing ODAs prior to the FAA approval of the APB revised fatigue analysis issued on June 15, 2017, and the release of Aviation Partners Boeing Service Bulletins AP767-57-010, Revision 11, AP767-57-013, Revision 1, and AP767-57-014, Revision 1, do not qualify for AMOC credit to the AD after it is released. ANA added that the proposed AD (in the SNPRM) would provide AMOC credit for repair deviations approved by Boeing ODAs with 8100-9 forms dated after June 15, 2017, because the Boeing ODAs would be using the APB revised fatigue analysis.

AAL stated that paragraph (i) of the proposed AD (in the SNPRM) specifies that repairs accomplished before June 15, 2017, and before the AD effective date approved by a Boeing ODA can be considered approved repairs in accordance with paragraphs (g) and (h) of the proposed AD (in the SNPRM). AAL added that Boeing has indicated through Multi-Operator Message MOM-MOM-17-0480-01B that repairs approved prior to June 15, 2017, can be re-evaluated and approved on a new 8100-9 form. AAL noted that the language in paragraph (i) should be clarified to indicate that repairs accomplished prior to June 15, 2017, are also acceptable, as long as they have an 8100-9 approval from a Boeing ODA dated after June 15, 2017.

APB requested that we clarify paragraph (i) of the proposed AD (in the SNPRM) to state that accomplishment of previous revisions of Aviation Partners Boeing Service Bulletins AP767-57-010 should be acceptable for credit for previously accomplished repairs and modifications of the lower outboard wing skin. APB stated that after the effective date of the AD, operators that did not seek relief for previously completed actions would need to request approval of AMOCs.

Delta stated that paragraph (i) of the proposed AD (in the SNPRM) provides repair approval for repairs of the lower outboard wing skin done after June 15, 2017, and before the effective date of the AD, that are approved by the Boeing ODA authorized by the Manager, Seattle ACO Branch, are

approved for the applicable repairs required by paragraphs (g) and (h) of the AD. Delta added that prior to issuance of the referenced service information, both inspection and repair instructions for stringers L-9.5 and L-6.5 were contained in Revisions 1, 2, 4, 6, 7, 8, and 9 of Aviation Partners Boeing Service Bulletin AP767-57-010. Delta added that it has performed many inspections and repairs for stringers L-9.5 and L-6.5 with those revisions. Delta suggested that credit be provided for repairs approved by a Boeing 8100-9 or previously accomplished using Revisions 1, 2, 4, 6, 7, 8, and 9 of Aviation Partners Boeing Service Bulletin AP767-57-010. Delta added that AMOCs will have to be obtained for each approved 8100-9 if no credit is provided.

We agree to clarify the language in paragraph (i) of this AD to include certain language provided by the commenters' for the reasons provided. We have clarified the language in paragraph (i) of this AD by adding that the ODA repairs approved after June 15, 2017, and before the effective date of this AD, will have post-installation inspection requirements in lieu of the post-inspection instructions specified in Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.

Request To Correct Error in Service Information

APB and UAL asked that we correct an error specified in Part 13 of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.

APB and UAL stated that paragraphs (g)(1)(i)(D)(2), (g)(1)(ii)(B)(2), and (g)(1)(iii)(B)(2) of the proposed AD (in the SNPRM) would require the post-repair HFEC inspection in accordance with Part 13 of the referenced service information. UAL stated that Part 13, Step 1.d., specifies repeating the Part 9 HFEC inspection; however, it should specify repeating the Part 13 HFEC inspection because Part 9 applies to airplanes without the stringer replacement. UAL noted that the paragraphs in the proposed AD (in the SNPRM) correctly specify repeating the Part 13 HFEC inspection. UAL added that the steps in the referenced service information are listed as RC (required for compliance), and must be done to comply with the AD.

We agree that the error exists in the service information. We have added an exception in paragraph (j)(4) of this AD that specifies repeating the Part 13 HFEC inspection instead of the Part 9 inspection.

Request To Provide Credit for Previous Service Information

AAL, UAL, and United Parcel Service (UPS) asked that we provide credit for doing the modification required by paragraph (i) of the proposed AD (in the SNPRM) using previous revisions of the referenced service information. UAL and UPS noted that paragraph (i) of the proposed AD (in the NPRM), which provided credit for previous actions using previous revisions of the referenced service information, was deleted in the SNPRM.

We do not agree with the commenters' requests. No credit is given for previously installed repairs or modifications due to each situation being unique; therefore, a re-evaluation will have to be done and may involve additional work for certain airplanes. Under the provisions of paragraph (k) of this AD, we will consider requests for approval of AMOCs if sufficient data are submitted to substantiate that work done using previous revisions of the service information provides an acceptable level of safety. We have not changed this AD in this regard.

Conclusion

We 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. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the SNPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the SNPRM. We 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

We reviewed APB Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017. The service information describes procedures for an HFEC inspection for cracking of the external surface of the lower outboard wing skin at stringer L-9.5, and on-condition actions that include repetitive HFEC inspections, modification by oversizing and plugging the existing fastener holes of the wing skin, repair (modification) of the stringer with new stringer, and repair (modification) of the stringer with external doubler/tripler; repetitive post-repair inspections for cracking, and repair.

We also reviewed APB Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017. The service information describes procedures for an HFEC inspection for cracking of the lower outboard wing skin at stringer L-6.5 and on-condition actions that include repetitive HFEC inspections, repair (modification) of the stringer with new stringer, repetitive post-repair HFEC inspections for cracking, and repair.

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

We estimate that this AD affects 140 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated Costs-Required Actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
HFEC Inspections	6 work-hours × \$85 per hour = \$510	\$0	\$510	\$71,400

We estimate the following costs to do any necessary on-condition actions that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need these on-condition actions.

Estimated Costs-On-Condition Actions

Action	Labor cost	Parts cost	Cost per product
Post-repair Inspections	6 work-hours \times \$85 per hour = \$510 per inspection cycle	\$0	\$510
Repair/Modification	262 work-hours × \$85 per hour = \$22,270	0	22,270

We have received no definitive data that would enable us to provide cost estimates for oncondition repairs for the post-repair inspections specified in this AD.

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 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) Is not a "significant rule" under 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.

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

2018-11-14 The Boeing Company: Amendment 39-19302; Docket No. FAA-2015-1421; Product Identifier 2014-NM-177-AD.

(a) Effective Date

This AD is effective July 10, 2018.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 767-300 and -300F series airplanes, certificated in any category, with Aviation Partners Boeing winglets installed; as identified in Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by reports of fatigue cracking in the lower outboard wing skin at the inboard fastener of stringer L-9.5, and the lower outboard wing skin of stringer L-6.5, on airplanes with winglets installed per Supplemental Type Certificate ST01920SE. We are issuing this AD to prevent fatigue cracking in the lower outboard wing skin, which could result in failure and subsequent separation of the wing and winglet and consequent reduced controllability of the airplane.

(f) Compliance

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

(g) Repetitive Stringer L-9.5 Inspections, Modification, Repair (Modification), Repetitive Post-Repair Inspections, and Repair

(1) For Group 1 and Group 2 airplanes identified in Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017: At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, except as required by paragraph (j)(1) of this AD: Do a high frequency eddy current (HFEC) inspection for cracking of the lower outboard wing skin at stringer L-9.5, in accordance with Part 1 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.

- (i) For airplanes on which "Condition 1" is found, as defined in the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, during any inspection required by paragraph (g)(1) or (g)(1)(i)(A) of this AD: Do the applicable actions required by paragraph (g)(1)(i)(A), (g)(1)(i)(B), (g)(1)(i)(C), or (g)(1)(i)(D) of this AD.
- (A) Repeat the inspection specified in paragraph (g)(1) of this AD thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (B) Do the applicable actions required by paragraphs (g)(1)(i)(B)(1), (g)(1)(i)(B)(2), and (g)(1)(i)(B)(3) of this AD.
- (1) Before further flight, do actions (modifications and repair (modification)) in accordance with Part 2, Part 3, Part 4, and Part 5, as applicable, of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) For airplanes on which the repair (modification) specified in Part 5 of Aviation Partners Boeing Service Bulletin AP767-57-010 was done: At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 12 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(i)(B)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (C) Do the actions required by paragraphs (g)(1)(i)(C)(1) and (g)(1)(i)(C)(2) of this AD, and do all applicable actions required by paragraph (g)(1)(i)(C)(3) of this AD.
- (1) Before further flight, repair (modify) in accordance with Part 8 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 9 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(i)(C)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (D) Do the actions required by paragraphs (g)(1)(i)(D)(1) and (g)(1)(i)(D)(2) of this AD, and do all applicable actions required by paragraph (g)(1)(i)(D)(3) of this AD.
- (1) Before further flight, repair (modify) in accordance with Part 11 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 13 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; except as required by paragraph (j)(4) of this AD.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(i)(D)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

- (ii) For airplanes on which "Condition 2" is found, as defined in the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, during any inspection required by paragraph (g)(1) or (g)(1)(i)(A) of this AD: Do the actions required by paragraph (g)(1)(ii)(A) or (g)(1)(ii)(B) of this AD.
- (A) Do the actions required by paragraphs (g)(1)(ii)(A)(1) and (g)(1)(ii)(A)(2) of this AD, and do all applicable actions required by paragraph (g)(1)(ii)(A)(3) of this AD.
- (1) Before further flight, repair (modify) in accordance with Part 8 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 9 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(ii)(A)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (B) Do the actions required by paragraphs (g)(1)(ii)(B)(1) and (g)(1)(ii)(B)(2) of this AD, and do all applicable actions required by paragraph (g)(1)(ii)(B)(3) of this AD.
- (1) Before further flight, repair (modify) in accordance with Part 11 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 13 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; except as required by paragraph (j)(4) of this AD.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(ii)(B)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (iii) For airplanes on which "Condition 3" is found, as defined in the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, during the actions specified in paragraph (g)(1)(i)(B)(1) of this AD: Do the actions required by paragraph (g)(1)(iii)(A) or (g)(1)(iii)(B) of this AD.
- (A) Do the actions required by paragraphs (g)(1)(iii)(A)(1) and (g)(1)(iii)(A)(2) of this AD, and do all applicable actions required by paragraph (g)(1)(iii)(A)(3) of this AD.
- (1) Before further flight, repair (modify) in accordance with Part 8 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 9 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(iii)(A)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

- (B) Do the actions required by paragraphs (g)(1)(iii)(B)(1) and (g)(1)(iii)(B)(2) of this AD, and do all applicable actions required by paragraph (g)(1)(iii)(B)(3) of this AD.
- (1) Before further flight, repair (modify) in accordance with Part 11 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (2) At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, do a post-repair HFEC inspection for cracking, in accordance with Part 13 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; except as required by paragraph (j)(4) of this AD.
- (3) If any crack is found during any inspection required by paragraph (g)(1)(iii)(B)(2) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (iv) For airplanes on which "Condition 4" is found, as defined in the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, during any action specified in paragraph (g)(1)(i)(C)(1), (g)(1)(i)(D)(1) (g)(1)(ii)(A)(1), (g)(1)(ii)(B)(1), (g)(1)(iii)(A)(1), and (g)(1)(iii)(B)(1) of this AD: Repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (2) For Group 3 airplanes identified in Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017: At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, or within 6 months after the effective date of this AD, whichever occurs later, do an HFEC inspection for cracking of the lower outboard wing skin at stringer L-9.5, in accordance with Part 7 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017. Repeat the inspection thereafter at the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017. If any cracking is found during any inspection, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD. An approved repair terminates the repetitive inspections required by paragraph (g)(2) of this AD for the repaired area only.
- (3) Group 4 airplanes identified in Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, are not affected by the actions required by paragraph (g) of this AD.

(h) Repetitive Stringer L-6.5 Inspections, Repair (Modification), Repetitive Post-Repair Inspections, and Repair

- (1) For airplanes identified in Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017: At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, except as required by paragraph (j)(2) of this AD: Do an HFEC inspection for cracking of stringer L-6.5 of the lower outboard wing skin, in accordance with Part 1 of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017. If no cracking is found, repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, except as provided by paragraph (h)(3) of this AD.
- (2) If any crack is found during any inspection required by paragraph (h)(1) of this AD, do the actions required by paragraphs (h)(2)(i) and (h)(2)(ii) of this AD, and do all applicable actions required by paragraph (h)(2)(iii) of this AD.

- (i) Before further flight, repair (modify) stringer L-6.5, in accordance with Part 2 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.
- (ii) Except as required by paragraph (j)(3) of this AD: At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, except as required by paragraph (j)(2) of this AD, do an HFEC post-repair inspection for cracking, in accordance with Part 3 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.
- (iii) If any crack is found during any inspection required by paragraph (h)(2)(ii) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.
- (3) As an option to the repetitive inspections required by paragraph (h)(1) of this AD, do the actions required by paragraphs (h)(3)(i) and (h)(3)(ii) of this AD, and do all applicable actions required by paragraph (h)(3)(iii) of this AD.
- (i) Before further flight after accomplishing the most recent inspection required by paragraph (h)(1) of this AD, repair (modify) stringer L-6.5, in accordance with Part 2 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.
- (ii) Except as required by paragraph (j)(3) of this AD: At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, except as required by paragraph (j)(2) of this AD, do a post-repair HFEC inspection for cracking, in accordance with Part 3 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.
- (iii) If any crack is found during any inspection required by paragraph (h)(3)(ii) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(i) Repair Approval

Repairs of the lower outboard wing skin that were approved after June 15, 2017, and before the effective date of this AD, by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, are approved for the applicable repairs required by paragraphs (g) and (h) of this AD. The ODA repairs will have post-installation inspection requirements in lieu of the post-inspection instructions specified in Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017; and Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.

(j) Exceptions to Service Information Specifications

- (1) Where paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, specifies a compliance time "after the issue date of Revision 11 of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.
- (2) Where paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, specifies a compliance time "after the initial issue date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

- (3) For Condition 1 and Condition 2 airplanes: Where paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017, specifies a compliance time for accomplishing the Part 3 HFEC inspection of 18 months "after the initial issue date of this service bulletin," the required compliance time is 6,000 flight cycles or 18,000 flight hours, whichever occurs first, after doing the Part 2 repair.
- (4) For airplanes on which a stringer L-9.5 replacement was accomplished per Part 11 of Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017: Where Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017, specifies repeating the post-repair HFEC inspection "in Part 9," this AD requires repeating the post-repair HFEC inspection in Part 13.

(k) 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 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 (l) 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 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 Commercial Airplanes ODA that has been authorized by the Manager, Seattle ACO Branch, 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) Except as required by paragraphs (g)(1)(i)(B)(3), (g)(1)(i)(C)(3), (g)(1)(i)(D)(3), (g)(1)(ii)(A)(3), (g)(1)(ii)(B)(3), (g)(1)(iii)(B)(3), (g)(1)(iii)(B)(3), (g)(1)(iii), and (h)(3)(iii) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(4)(i) and (k)(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.

(I) Related Information

For more information about this AD, contact Allen Rauschendorfer, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA; phone and fax: 206-231-3528; email: allen.rauschendorfer@faa.gov.

(m) 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) Aviation Partners Boeing Service Bulletin AP767-57-010, Revision 11, dated April 3, 2017.
- (ii) Aviation Partners Boeing Service Bulletin AP767-57-014, Revision 1, dated April 12, 2017.
- (3) For service information identified in this AD, contact Aviation Partners Boeing, 2811 S. 102nd Street, Suite 200, Seattle, WA 98168; telephone 206-762-1171; internet https://www.aviationpartnersboeing.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, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on May 21, 2018. James Cashdollar, Acting Director, System Oversight Division, Aircraft Certification Service.