

[Federal Register Volume 83, Number 138 (Wednesday, July 18, 2018)]  
[Rules and Regulations]  
[Pages 33817-33821]  
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]  
[FR Doc No: 2018-13362]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2018-0073; Product Identifier 2017-NM-100-AD; Amendment 39-19318; AD 2018-13-06]**

**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 in the lower outboard wing skin at the farthest outboard fastener of the inboard segment of a certain stringer. This AD requires repetitive high frequency eddy current (HFEC) inspections for cracking of the lower outboard wing skin at the inboard segment of a certain stringer, and repair if necessary. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective August 22, 2018.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of August 22, 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-2018-0073.

#### **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-2018-0073; 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 98198; 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 February 9, 2018 (83 FR 5738). The NPRM was prompted by reports of fatigue cracking in the lower outboard wing skin at the farthest outboard fastener of the inboard segment of stringer L-9.5 on airplanes with winglets installed per Supplemental Type Certificate ST01920SE. The NPRM proposed to require repetitive high frequency eddy current (HFEC) inspections for cracking of the lower outboard wing skin at the inboard segment of a certain stringer, and repair if necessary. 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 NPRM and the FAA's response to each comment. Aviation Partners Boeing (APB) concurred with the NPRM.

### **Request To Provide Credit for Previously Approved Repairs**

All Nippon Airways (ANA) and American Airlines (AAL) asked that credit be given for repair deviations approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) using 8100-9 forms dated after June 15, 2017. ANA stated that Boeing ODAs will be using APB analysis methodology to evaluate and approve the repairs. ANA and AAL stated that Boeing indicated in Multi-Operator Message MOM-MOM-17-0480-01B, dated August 29, 2017, that repairs approved after June 15, 2017, would be acceptable as alternative methods of compliance (AMOCs) to the final rule if using the referenced service information. Both commenters asked that credit language for those previously approved repairs be added to the content of the proposed AD.

We agree with the commenters' requests for the reasons provided. The revised APB analysis methodology was approved by the FAA on June 15, 2017. Therefore, we have added paragraph (i)(2) to this AD to include that approval.

### **Request To Allow Alternative Oversize Fastener Holes**

AAL asked that we allow oversize fasteners of at least 1/64 inch to be installed at all fastener locations common to inboard stringer L-9.5. AAL stated that the referenced service information and the APB modification drawing are very restrictive regarding oversize fasteners that are outside of the five critical fasteners at each end of inboard stringer L-9.5. AAL added that hole damage during fastener removal at the existing stringer L-9.5 is common.

We do not agree with the commenter's request. This type of deviation would require an engineering evaluation to assess inboard stringer L-9.5 and the skin fastener locations to determine if it is feasible for the oversize fasteners to be installed. However, under the provisions of paragraph (j)

of this AD, we will consider requests for approval of an AMOC, if sufficient data are submitted to substantiate that installing 1/64-inch oversize fasteners at all fastener locations common to inboard stringer L-9.5 will provide an acceptable level of safety. We have not changed this AD in this regard.

### **Request To Add Alternative Alodine Type**

Delta Air Lines (Delta) asked that we add a new paragraph to the proposed AD specifying that Alodine coating “Bonderite M-CR 600 Aero” is an acceptable alternative to “Alodine 600” coating. Delta stated that APB Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, calls out Alodine 600 in paragraph 2.B.2, “Parts and Materials Supplied by the Operator,” and in Drawing 767-9420, Sheet 1, in paragraph 3.B, Part 2, Steps 4 and 5, as an “RC” (Required for Compliance) step. Delta noted that the name of the Alodine coating “Alodine 600” has been changed to “Bonderite M-CR 600 Aero.” Delta added that the FAA issued a Special Airworthiness Information Bulletin (SAIB) that cited an AMOC for the use of Bonderite products.

We agree with the commenter's request, for the reason provided. Alodine products made by Henkel manufacturing have been renamed to Bonderite. We issued SAIB HQ-18-09, dated February 5, 2018, which cited the AMOC that allows the use of Henkel Bonderite products as an alternative to Henkel Alodine products. We have revised paragraphs (g)(1)(ii)(A) and (g)(2)(i) of this AD to allow the use of Bonderite M-CR 600 Aero and Bonderite M-CR 600 RTU Aero as an alternative coating.

### **Requests To Clarify Compliance Time Definition**

United Airlines (UAL) and Delta asked that we clarify the “Compliance Times” definition specified in the preamble of the NPRM. The commenters stated that the initial compliance time is defined as 1,500 flight cycles or 7,500 flight cycles after winglet installation, but it should be 1,500 flight cycles or 7,500 flight hours after winglet installation. The commenters noted that this should be corrected to be consistent with the compliance time specified in the referenced service information.

We agree with the commenters that the compliance time definition in the NPRM is inaccurate, and should specify “The initial compliance time is the later of: 1,500 flight cycles or 7,500 flight hours after winglet installation, whichever occurs first.” This language provided notice regarding compliance times that were specified in the referenced service information. The compliance time is correct in the referenced service information and does not conflict with this AD. Since that section of the preamble does not reappear in the final rule, no change to this AD is necessary.

### **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 NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

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 AP767-57-013, Revision 1, dated April 11, 2017. The service information describes procedures for an HFEC inspection for cracking of the lower outboard wing skin at the inboard segment of stringer L-9.5, and on-condition actions that include repetitive HFEC inspections, a preventive modification (repair) that includes installing new stringers, repetitive post-modification (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	1 work-hour × \$85 per hour = \$85, per inspection cycle	\$0	\$85, per inspection cycle	\$11,900, per inspection cycle.

#### Estimated Costs–On-Condition Actions

Action	Labor cost	Parts cost	Cost per product
Preventive Modification (Repair)	50 work-hours × \$85 per hour = \$4,250	\$0	\$4,250.
Post-modification (repair) Inspections	1 work-hour × \$85 per hour = \$85, per inspection cycle	0	\$85, per inspection cycle.

We have received no definitive data that would enable us to provide cost estimates for on-condition repairs that might be necessary as a result of the post-modification (repair) inspections specified in this AD.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

### 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):



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

---

**2018-13-06 The Boeing Company:** Amendment 39-19318; Docket No. FAA-2018-0073; Product Identifier 2017-NM-100-AD.

**(a) Effective Date**

This AD is effective August 22, 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 AP767-57-013, Revision 1, dated April 11, 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 farthest outboard fastener of the inboard segment of stringer L-9.5 on airplanes with winglets installed per Supplemental Type Certificate ST01920SE. 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.

**(f) Compliance**

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

**(g) Repetitive Inspections, Preventive Modification (Repair), Repetitive Post-Modification (Repair) Inspections, and Repair**

At the applicable time specified in paragraph 1.E., "Compliance," of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, except as required by paragraph (h) of this AD: Do a high frequency eddy current (HFEC) inspection for cracking of the lower outboard wing skin at the inboard segment of stringer L-9.5, in accordance with Part 1 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017.

(1) For airplanes on which “Condition 1” is found, as defined in the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, during any inspection required by the introductory text of paragraph (g) or paragraph (g)(1)(i) of this AD: Do the actions required by paragraph (g)(1)(i) or (g)(1)(ii) of this AD.

(i) Repeat the inspection specified in the introductory text of paragraph (g) of this AD thereafter at the applicable times specified in paragraph 1.E., “Compliance,” of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017.

(ii) Do the actions required by paragraphs (g)(1)(ii)(A) and (g)(1)(ii)(B) of this AD:

(A) Before further flight, do the preventive modification in accordance with Part 2 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017. The use of Alodine 600-RTU, Henkel Bonderite M-CR 600 Aero, or Henkel Bonderite M-CR 600 RTU Aero coating is an acceptable alternative to Alodine 600 coating.

Note 1 to paragraph (g)(1)(ii)(A) of this AD: Guidance on identifying alternative Henkel Bonderite Alodine coatings can also be found in Special Airworthiness Information Bulletin (SAIB) HQ-18-09, dated February 5, 2018. The SAIB may be viewed online at [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgSAIB.nsf/0/F87909D65FCE4BFA8625822B005AE82A?OpenDocument&Highlight=hq-18-09](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSAIB.nsf/0/F87909D65FCE4BFA8625822B005AE82A?OpenDocument&Highlight=hq-18-09).

(B) At the applicable time specified in paragraph 1.E., “Compliance,” of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, do an HFEC inspection for cracking, in accordance with Part 3 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., “Compliance,” of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017.

(2) For airplanes on which “Condition 2” is found as defined in the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, during any inspection required by the introductory text of paragraph (g) or paragraph (g)(1)(i) of this AD: Do the actions required by paragraph (g)(2)(i) and (g)(2)(ii) of this AD.

(i) Before further flight, repair in accordance with Part 2 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017. The use of Alodine 600-RTU, Henkel Bonderite M-CR 600 Aero, or Henkel Bonderite M-CR 600 RTU Aero coating is an acceptable alternative to Alodine 600 coating.

Note 2 to paragraph (g)(2)(i) of this AD: Guidance on identifying alternative Henkel Bonderite Alodine coatings can also be found in SAIB HQ-18-09, dated February 5, 2018. The SAIB may be viewed online at [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgSAIB.nsf/0/F87909D65FCE4BFA8625822B005AE82A?OpenDocument&Highlight=hq-18-09](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSAIB.nsf/0/F87909D65FCE4BFA8625822B005AE82A?OpenDocument&Highlight=hq-18-09).

(ii) At the applicable time specified in paragraph 1.E., “Compliance,” of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, do an HFEC inspection for cracking, in accordance with Part 3 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017; and repeat the inspection thereafter at the applicable times specified in paragraph 1.E., “Compliance,” of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017.

(3) If any crack is found during any inspection required by paragraph (g)(1)(ii)(B) or (g)(2)(ii) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (j) of this AD. Although Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, specifies to contact Boeing for repair instructions, and specifies that action as “RC” (Required for Compliance), this AD requires repair as specified in this paragraph.

## **(h) Exception to Service Information Specifications**

Where paragraph 1.E., “Compliance,” of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, specifies a compliance time of “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.

## **(i) Credit for Previous Actions**

(1) For Group 2 airplanes: This paragraph provides credit for the actions specified in Part 1 and Part 2 of the Accomplishment Instructions of Aviation Partners Boeing Service Bulletin AP767-57-013, Revision 1, dated April 11, 2017, that are required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Aviation Partners Boeing Service Bulletin AP767-57-013, dated November 30, 2016.

(2) Repairs of the lower outboard wing skin approved after June 15, 2017, and before the effective date of this AD, if approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, are approved for the applicable repairs required by paragraph (g) of this AD.

## **(j) 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 (k) 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 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.

(4) Except as required by paragraph (g)(3) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(4)(i) and (j)(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.



**(k) 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 98198; phone and fax: 206-231-3528; email: allen.rauschendorfer@faa.gov.

**(l) 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 AP767-57-013, Revision 1, dated April 11, 2017.

(ii) Reserved.

(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 June 12, 2018.

Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.