

[Federal Register Volume 78, Number 72 (Monday, April 15, 2013)]
[Rules and Regulations]
[Pages 22172-22175]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2013-08191]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1094; Directorate Identifier 2011-NM-070-AD; Amendment 39-17412; AD 2013-07-08]

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 757 airplanes. This AD was prompted by reports that inspections of the wing center section revealed defective, misapplied, or missing secondary fuel vapor barriers on the center fuel tank. This AD requires inspecting for discrepancies and insufficient coverage of the secondary fuel barrier, determining the thickness of the secondary fuel barrier, and corrective actions if necessary. We are issuing this AD to detect and correct defective surfaces and insufficient thickness of the secondary fuel barrier, which could allow fuel leaks or fumes into the pressurized cabin, and allow fuel or fuel vapors to come in contact with an ignition source, which could result in a fire or an explosion.

DATES: This AD is effective May 20, 2013.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of May 20, 2013.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and

other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, 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: Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 917-6501; fax: (425) 917-6590; email: kevin.nguyen@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on October 26, 2011 (76 FR 66200). That NPRM proposed to require inspecting for discrepancies and insufficient coverage of the secondary fuel barrier, determining the thickness of the secondary fuel barrier, and corrective actions if necessary.

Actions Since NPRM (76 FR 66200, October 26, 2011) Was Issued

The NPRM (76 FR 66200, October 26, 2011) referred to Boeing Service Bulletin 757-57-0060, Revision 2, dated May 24, 2007; and Boeing Service Bulletin 757-57-0061, Revision 1, dated May 24, 2007; as the appropriate sources of service information for accomplishing the proposed actions.

Since we issued the NPRM (76 FR 66200, October 26, 2011), we have reviewed Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012. We also reviewed Boeing Service Bulletin 757-57-0060, Revision 3, dated May 9, 2012; and Boeing Service Bulletin 757-57-0061, Revision 2, dated May 4, 2012. Among other things, these service bulletins eliminate a reference to the "upper panel" from certain steps of the Accomplishment Instructions. Boeing Service Bulletin 757-57-0061, Revision 2, dated May 4, 2012, also removed references to Group 2 airplanes from certain parts of the Accomplishment Instructions.

This final rule has been revised to reference the latest revisions of this service information. In addition, the reference to "upper panel" has been removed from paragraph (h) of this AD.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (76 FR 66200, October 26, 2011) and the FAA's response to each comment. Boeing supported the NPRM. FedEx had no technical objections to the NPRM.

Request To Extend the Compliance Time

American Airlines (AA) requested that we revise the NPRM (76 FR 66200, October 26, 2011) to extend the compliance time specified in paragraph (g) of the NPRM from 60 months to 72 months to align with the regular heavy check interval for Model 757 airplanes. AA added that, based on current findings and the design of the vapor barrier, safety of flight is not affected by extending the compliance time.

We agree with extending the compliance time to 72 months. The purpose of the secondary fuel barrier on Model 757 airplanes is to contain leaks due to fastener failures, primary tank sealant failures, and/or structural cracking of the center fuel tank. Model 757 airplanes have not had a history of those failures, thus extending the compliance time from 60 months to 72 months is acceptable for

operators to accomplish the inspections during a regularly scheduled heavy maintenance check. We revised paragraphs (g), (h), (i), and (j) of this AD accordingly.

Request To Provide Credit for Previous Actions

British Airways PLC requested that we revise the NPRM (76 FR 66200, October 26, 2011) to provide credit for Groups 1, 2, and 3 airplanes for accomplishing the actions specified in Boeing Service Bulletin 757-57-0060, dated January 9, 2003; or Boeing Service Bulletin 757-57-0060, Revision 1, dated April 10, 2003. European Air Transport Leipzig GmbH/DHL Air Ltd. also requested that the NPRM be amended to provide credit for previous actions performed using Boeing Service Bulletin 757-57-0060, Revision 1, dated April 10, 2003. British Airways PLC indicated that not providing credit for previous actions would represent an unnecessary cost to the aviation industry that would provide no safety benefit. Both commenters stated that unless credit is provided, operators that choose to accomplish the actions proactively using those earlier revisions of this service bulletin would be penalized.

We partially agree. We agree to provide credit for the actions for Model 757-200 airplanes identified as Group 3 airplanes. We have added paragraph (k)(1) of this AD to provide credit for Group 3 airplanes if those actions were performed using Boeing Service Bulletin 757-57-0060, Revision 1, dated April 10, 2003; or Boeing Service Bulletin 757-57-0060, dated January 9, 2003.

However, we disagree to provide credit for any Model 757-200 airplane group other than Group 3. As discussed in the NPRM (76 FR 66200, October 26, 2011), Boeing Service Bulletin 757-57-0060, Revision 2, dated May 24, 2007, contains further detailed inspection requirements for the secondary fuel barrier for Model 757-200 airplanes identified as Group 1 and Group 4, Configuration 1; and for Model 757-200CB and 757-200PF airplanes identified as Group 2. Boeing Service Bulletin 757-57-0060, Revision 2, dated May 24, 2007, had additional requirements that were not included in earlier revisions. These additional requirements are inspection for air bubbles or blister-like areas, solid metallic particles, and defective surfaces that are found in the secondary fuel barrier, not just found between the secondary fuel barrier and the structure. Also, Boeing Service Bulletin 757-57-0060, Revision 2, dated May 24, 2007, provides procedures for thickness measurements for Model 757-200 airplanes identified as Group 4, Configuration 1; and Group 4, Configuration 2 airplanes.

In addition, we have determined that it is also appropriate to provide credit for actions done for Model 757-300 airplanes identified as Group 2 airplanes. We have added paragraph (k)(4) of this AD to provide credit for Model 757-300 airplanes identified as Group 2 airplanes if those actions were performed using Boeing Service Bulletin 757-57-0061, dated February 6, 2003, before the effective date of this AD.

Additional Changes Made to This AD

As previously explained, since the NPRM (76 FR 66200, October 26, 2011) was issued, Boeing released Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012. Therefore, we find it appropriate to provide credit in paragraph (k) of this final rule for Boeing Service Bulletin 757-57-0060, Revision 3, dated May 9, 2012; Boeing Service Bulletin 757-57-0060, Revision 2, dated May 24, 2007; Boeing Service Bulletin 757-57-0061, Revision 2, dated May 4, 2012; and Boeing Service Bulletin 757-57-0061, Revision 1, dated May 24, 2007.

Note 1 to paragraph (g) of the NPRM (76 FR 66200, October 26, 2011) defined a detailed inspection. We have removed that note in this final rule, since the appropriate service information contains the inspection definition.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD 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 (76 FR 66200, October 26, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 66200, October 26, 2011).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects 619 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts cost	Cost per product	Cost on U.S. operators
Access and inspect secondary fuel barrier	42 work-hours × \$85 per hour = \$3,570 per inspection.	\$0	\$3,570	\$2,209,830

We estimate the following costs to do any necessary repairs 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 repairs:

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Apply secondary fuel barrier	7 work-hours × \$85 per hour = \$595 per secondary fuel barrier application.	\$0	\$595

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 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.

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):



2013-07-08 The Boeing Company: Amendment 39-17412; Docket No. FAA-2011-1094; Directorate Identifier 2011-NM-070-AD.

(a) Effective Date

This AD is effective May 20, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 757-200, 757-200PF, and 757-200CB series airplanes, certificated in any category, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Model 757-300 series airplanes, certificated in any category, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57: Wings.

(e) Unsafe Condition

This AD was prompted by reports that inspections of the wing center section revealed defective, misapplied, or missing secondary fuel vapor barriers on the center fuel tank. We are issuing this AD to detect and correct defective surfaces and insufficient thickness of the secondary fuel barrier, which could allow fuel leaks or fumes into the pressurized cabin, and allow fuel or fuel vapors to come in contact with an ignition source, which could result in a fire or an explosion.

(f) Compliance

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

(g) Detailed Inspection

For Group 1, Group 2, and Group 4, Configuration 1 airplanes, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Group 1 and Group 3, Configuration 1 airplanes, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012: Within 72 months after the effective date of this AD, do a detailed inspection to detect discrepancies of the secondary fuel barrier at the front spar and the upper panel of the wing center section, and if any discrepancy exists, repair before further flight; in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable.

(h) Inspection of Minimum Application Coverage Area

For Group 3 airplanes, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Group 2 airplanes, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012: Within 72 months after the effective date of this AD, do a detailed inspection of the front spar to ensure the secondary fuel barrier application covers the minimum area specified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable. If the secondary fuel barrier does not cover the minimum specified area, apply more secondary fuel barrier before further flight, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable.

(i) Measurement of Thickness of Secondary Fuel Barrier

For Group 1, Group 2, and Group 4, Configuration 1, airplanes, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and for Group 1 and Group 3, Configuration 1, airplanes, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012: Within 72 months after the effective date of this AD, measure the thickness of the secondary fuel barrier. If the thickness is less than or more than the acceptable limits defined in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable; apply more secondary fuel barrier or repair before further flight, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable.

(j) Records Review or Measurement of Thickness of Secondary Fuel Barrier

For Group 4, Configuration 2, airplanes, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Group 3, Configuration 2, airplanes, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012: Within 72 months, review the maintenance records to determine if there was a minimum of 0.005 inch of new secondary fuel barrier applied, or if the thickness of the secondary fuel barrier cannot be determined from the maintenance records, measure the thickness of the secondary fuel barrier. If the thickness is less than or more than the acceptable limits specified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable; apply more secondary fuel barrier or repair before further flight, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; or Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; as applicable.

(k) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraphs (g), (h), (i), and (j) of this AD, if those actions were performed before the effective date of this AD using the applicable service information specified in paragraphs (k)(1) through (k)(4) of this AD, which are not incorporated by reference in this AD.

(1) For Group 3 airplanes, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; Boeing Service Bulletin 757-57-0060, Revision 1, dated April 10, 2003; or Boeing Service Bulletin 757-57-0060, dated January 9, 2003.

(2) For all airplanes, as identified in Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; Boeing Service Bulletin 757-57-0060, Revision 2, dated May 24, 2007; or Boeing Service Bulletin 757-57-0060, Revision 3, dated May 9, 2012.

(3) For all airplanes, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; Boeing Service Bulletin 757-57-0061, Revision 1, dated May 24, 2007; or Boeing Service Bulletin 757-57-0061, Revision 2, dated May 4, 2012.

(4) For Group 2 airplanes, as identified in Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; Boeing Service Bulletin 757-57-0061, dated February 6, 2003.

(l) No Reporting Requirement

Although Boeing Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012; and Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012; specify to submit certain information to the manufacturer, this AD does not include that requirement.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: - 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.

(n) Related Information

(1) For more information about this AD, contact Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 917-6501; fax: (425) 917-6590; email: kevin.nguyen@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(o) 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 Service Bulletin 757-57-0060, Revision 4, dated December 7, 2012.

(ii) Boeing Service Bulletin 757-57-0061, Revision 3, dated December 7, 2012.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view copies of 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 Renton, Washington, on March 29, 2013.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.