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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0860; Directorate Identifier 2012-NM-123-AD; Amendment 39-17369; AD 2013-04-11]

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 737-600, -700, -800, and -900ER series airplanes. This AD was prompted by incorrect wire support clamps installed within the left environmental control systems (ECS) bay, which could allow wiring to come in contact with the exposed metal of the improper clamp. This AD requires inspections to identify the part number of the wire support clamp, related investigative actions, and corrective actions if necessary. We are issuing this AD to prevent electrical arcing and a potential ignition source within the ECS bay, which in combination with flammable fuel vapors, could result in a center wing fuel tank explosion, and consequent loss of the airplane.

DATES: This AD is effective April 11, 2013.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of April 11, 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: Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6482; fax: 425-917-6590; email: georgios.roussos@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 August 27, 2012 (77 FR 51720). That NPRM proposed to require inspections to identify the part number (P/N) of the wire support clamp, related investigative actions, and corrective actions if necessary.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal (77 FR 51720, August 27, 2012) and the FAA's response to each comment.

Statement To Address Effects of NPRM (77 FR 51720, August 27, 2012) on Winglets

Aviation Partners Boeing stated that the installation of winglets per Supplemental Type Certificate (STC) ST00830SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/408E012E008616A7862578880060456C?OpenDocument&Highlight=st00830se) does not affect the actions specified by the NPRM (77 FR 51720, August 27, 2012).

Requests To Remove or Change the "Parts Installation Prohibition" Section

Boeing requested the "Parts Installation Prohibition," paragraph (h) of the NPRM (77 FR 51720, August 27, 2012), be removed because there are other types of clamps installed within the ECS bay that are not included in either Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, or the NPRM (77 FR 51720, August 27, 2012). Boeing also requested that we include P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P wire support clamps because they are interchangeable with P/N TA0930034-10. Alaska Airlines requested that the "Parts Installation Prohibition" paragraph be changed to clarify affected airplanes, and pointed out that AD 2010-24-11, Amendment 39-16530 (75 FR 74616, December 1, 2010), also addresses clamps installed in the left ECS bay, but allows installation of clamp P/N TA0930034-11 at the same clamp position. Delta Air Lines (Delta) requested that we ensure that paragraph (h) of the NPRM, only applies to those airplanes subject to the NPRM. Japan Airlines requested that we specify, in paragraph (h) of the NPRM, the locations within the left ECS bay that P/N TA0930034-10P clamps may be installed.

We agree to revise paragraph (i) of this AD (referred to as paragraph (h) in the NPRM (77 FR 51720, August 27, 2012)). We agree to allow installation of wire support clamps P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P, in addition to P/N TA0930034-10, and to limit the prohibition to the locations specified in Figures 1 through 4 of Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012. We have revised paragraph (i) of this AD accordingly.

In addition, we agree to clarify the phrase "on any airplane" used in paragraph (i) of this AD. The applicability statement in all AD actions lists all airplanes affected by that AD. All of the

requirements stated in an AD are applicable only to the airplanes listed in the applicability of that AD. We have not changed the final rule regarding this issue.

Requests To Allow Use of Certain Other Wire Support Clamps

Boeing and Japan Airlines requested that the NPRM (77 FR 51720, August 27, 2012) allow use of certain other wire support clamps in addition to P/N TA0930034-10, as specified by Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012. Japan Airlines requested that we allow the use of clamp P/N TA0930034-10P, and referred to discussions with Boeing that support use of this part number clamp, that is also fully cushioned. Boeing requested the corrective actions statement in the "Relevant Service Information" section of the preamble of the NPRM (77 FR 51720, August 27, 2012) be revised to read, "Corrective actions include replacing the discrepant clamp with a new or serviceable TA0930034-10, TA0930034-10P, TA0930034-11, or TA0930034-12P wire support clamp if the part number is incorrect, and repairing or replacing chafed wiring." Boeing stated that P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P are interchangeable with P/N TA0930034-10.

We agree to allow installation of P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P wire support clamps. We have added new paragraph (h) in this final rule to provide an exception to Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, allow use of P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P wire support clamps. We have re-identified subsequent paragraphs accordingly.

We partially agree with the intent of Boeing's request to revise the "Relevant Service Information" section of the NPRM (77 FR 51720, August 27, 2012). Boeing's request included removing the phrase "or if the flange cushions do not completely surround the two metal strap sections of the wire support clamp." This phrase is based on the procedures specified in Step 1 of Figures 1 and 2 of Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, and is part of the inspection required by this AD. Therefore, we do not agree that this phrase should be removed from the description of the inspection. As stated previously, we do agree that installing P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P wire support clamps is acceptable for accomplishing the corrective action. However, the "Relevant Service Information" section of the NPRM is not restated in this AD, so we have not revised this AD in this regard.

Request To Clarify Impacted Fuel Tank

Boeing requested that the "Summary" and "Discussion" sections in the NPRM (77 FR 51720, August 27, 2012) be revised to add the text, "in the center wing tank," and to read, "We are proposing this AD to prevent electrical arcing and a potential ignition source in the center wing tank, which in combination with flammable fuel vapors could result in a fuel tank explosion, and consequent loss of the airplane," to clarify the area that might be potentially impacted by the unsafe condition identified in the NPRM.

We partially agree. We agree with Boeing's request to identify the center wing tank as the impacted tank, because the center wing tank located above the ECS bay is the fuel tank potentially affected by the unsafe condition identified in this AD. We disagree to state that this AD will prevent electrical arcing and a potential ignition source in the center wing tank, because the potential ignition source has been identified to be within the ECS bay, which is a flammable leakage fluid zone. A potential ignition within the ECS bay could lead to a fire in the area and potentially result in a center wing tank explosion. Therefore, we agree to identify the center wing tank as the affected fuel tank without including the misleading statement that this AD will prevent electrical arcing within the fuel tank. We further recognize that the same issue applies to paragraph (e), "Unsafe Condition," of this AD and note that the "Discussion" section that appeared in the NPRM (77 FR 51720, August 27, 2012) is not restated in the final rule. We have revised the Summary and paragraph (e) of this AD to specify that we are issuing this AD "to prevent electrical arcing and a potential ignition source within

the ECS bay, which in combination with flammable fuel vapors, could result in a center wing fuel tank explosion, and consequent loss of the airplane."

Request To Clarify Airplane Maintenance Data

Delta pointed to inconsistencies between the type design data and the aircraft illustrated parts catalog (AIPC) used for maintaining airplanes. Delta stated that the AIPC does not accurately identify all clamp locations that are needed for AD compliance, and pointed out that discrepancies within type design data and maintenance data could result in a re-occurrence of clamp installation discrepancies, which occurred in production and resulted in the airworthiness directive.

We acknowledge that if operators refer to and use an inaccurate AIPC, it could result in non-compliance with AD requirements. However, it is the responsibility of the operators to ensure that they are in compliance with AD requirements. In addition, the AIPC is not an FAA approved or controlled document. We have not changed the 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 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 (77 FR 51720, August 27, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 51720, August 27, 2012).

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 297 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	Number of airplanes	Cost on U.S. operators
Inspection Group 1 airplanes	10 work-hours × \$85 per hour = \$850.	\$0	\$850	185	\$157,250
Inspection Group 2 airplanes	2 work-hours × \$85 per hour = \$170	0	170	112	19,040

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

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Replacement of wire support clamp	1 work-hour × \$85 per hour = \$85	\$3	\$88

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.

We have received no definitive data that would enable us to provide cost estimates for the on-condition repair of chafed or damaged wiring 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.

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):



2013-04-11 The Boeing Company: Amendment 39-17369; Docket No. FAA-2012-0860; Directorate Identifier 2012-NM-123-AD.

(a) Effective Date

This AD is effective April 11, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-600, -700, -800, and -900ER series airplanes, certificated in any category, identified in Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 28, Fuel System.

(e) Unsafe Condition

This AD was prompted by incorrect wire support clamps installed within the left environmental control systems (ECS) bay, which could allow wiring to come in contact with the exposed metal of the improper clamp. We are issuing this AD to prevent electrical arcing and a potential ignition source within the ESC bay, which in combination with flammable fuel vapors, could result in a center wing fuel tank explosion, and consequent loss of the airplane.

(f) Compliance

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

(g) Inspection and Corrective Actions

Within 60 months after the effective date of this AD, do a detailed inspection for part number (P/N) TA0930034-10 wire support clamp at the locations specified in Figures 1 through 4 of Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, except as provided by paragraph (h) of this AD. Do all applicable related investigative and corrective actions before further flight.

(h) Exception to Service Information

Where Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, specifies to install P/N TA0930034-10 wire support clamp, this AD also allows installation of P/Ns TA0930034-10P, TA0930034-11, and TA0930034-12P wire support clamps.

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install a wire support clamp at the locations specified in Figures 1 through 4 of Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012, on any airplane, unless the wire support clamp is P/N TA0930034-10, TA0930034-10P, TA0930034-11, or TA0930034-12P.

(j) 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: 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.

(k) Related Information

For more information about this AD, contact Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6482; fax: 425-917-6590; email: georgios.roussos@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) Boeing Special Attention Service Bulletin 737-28-1303, dated April 26, 2012.

(ii) Reserved.

(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 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 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 February 20, 2013.
Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.