[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0792; Directorate Identifier 2013-NM-118-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, and Model 777 airplanes. This proposed AD was prompted by testing reports on certain Honeywell phase 3 display units (DUs). These DUs exhibited susceptibility to radio frequency emissions in WiFi frequency bands at radiated power levels below the levels that the displays are required to tolerate for certification of WiFi system installations. The phase 3 DUs provide primary flight information including airspeed, altitude, pitch and roll attitude, heading, and navigation information to the flightcrew. This proposed AD would require replacing the existing phase 3 DUs with new phase 3A DUs and installing new DU database software. We are proposing this AD to prevent loss of flight-critical information displayed to the flightcrew during a critical phase of flight, such as an approach or takeoff, which could result in loss of airplane control at an altitude insufficient for recovery, or controlled flight into terrain or obstacles.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal Rulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: 202-493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Gregg Nesemeier, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6479; fax: 425-917-6590; email: gregg.nesemeier@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-0792; Directorate Identifier 2013-NM-118-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

This proposed AD resulted from instrumented testing on Model 737 series airplanes that were equipped with certain Honeywell DUs. This testing determined that certain Honeywell phase 3 DUs exhibited flickering and blanking when subjected to radio frequency emissions in WiFi frequency bands at radiated power levels below those that the displays are required to tolerate for certification of a WiFi installation. Display blanking durations of as long as 6 minutes were observed during testing. The phase 3 DUs provide primary flight information including airspeed, altitude, pitch and roll attitude, heading, and navigation information to the flightcrew. These Honeywell phase 3

DUs are installed on certain Model 737 and Model 777 airplanes. This condition, if not corrected, could result in loss of flight-critical information displayed to the flightcrew during a critical phase of flight, such as an approach or takeoff, which could result in loss of airplane control at an altitude insufficient for recovery, or controlled flight into terrain or obstacles.

Relevant Service Information

We reviewed Boeing Special Attention Service Bulletin 737-31-1471, dated November 29, 2012; and Boeing Special Attention Service Bulletin 777-31-0187, dated November 29, 2012. For information on the procedures, see this service information at http://www.regulations.gov by searching for Docket No. FAA-2013-0792.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information identified previously.

Costs of Compliance

We estimate that this proposed AD affects 157 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement (139 Model 737 airplanes)	2 work-hours X $85 per hour = $170	$10,200	$10,370	$1,441,430
Replacement (18 Model 777 airplanes)	3 work-hours X $85 per hour = $255	$10,200	$10,455	$188,190

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

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Is not a “significant rule” under the 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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

The Boeing Company: Docket No. FAA-2013-0792; Directorate Identifier 2013-NM-118-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company airplanes, certificated in any category, specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes.

(2) Model 777-200, 777-200LR, 777-300, 777-300ER, and 777F series airplanes.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 31, Instruments.

(e) Unsafe Condition

This AD was prompted by testing reports on certain Honeywell phase 3 display units (DUs). These DUs exhibited susceptibility to radio frequency emissions in WiFi frequency bands at radiated power levels below the levels that the displays are required to tolerate for certification of WiFi system installations. The phase 3 DUs provide primary flight information, including airspeed, altitude, pitch and roll attitude, heading, and navigation information, to the flightcrew. We are issuing this AD to prevent loss of flight-critical information displayed to the flightcrew during a critical phase of flight, such as an approach or takeoff, which could result in loss of airplane control at an altitude insufficient for recovery, or controlled flight into terrain or obstacles.

(f) Compliance

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

(g) Software and DU Installation

Within 60 months after the effective date of this AD: Do the applicable actions required by paragraphs (g)(1) and (g)(2) of this AD.

(1) For Model 737 airplanes: Install new database software into the display electronics units, and replace the existing phase 3 common display system (CDS) DUs

with new phase 3A CDS DUs, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-31-1471, dated November 29, 2012.

(2) For Model 777 airplanes: Install the DU database software into the left and right airplane information management system core processor module/graphics generator, and replace the existing phase 3 DUs with new phase 3A DUs, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-31-0187, dated November 29, 2012.

(h) 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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes ODA that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(i) Related Information

(1) For more information about this AD, contact Gregg Nesemeier, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6479; fax: 425-917-6590; email: gregg.nesemeier@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, WA 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.

Issued in Renton, Washington, on September 13, 2013.

Jeffrey E. Duven,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2013-23076 Filed 09/23/2013 at 8:45 am; Publication Date: 09/24/2013]