

Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-28381; Directorate Identifier 2006-NM-164-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 707 Airplanes, and Model 720 and 720B Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Boeing Model 707 Airplanes, and Model 720 and 720B series airplanes. This proposed AD would require revising the FAA-approved maintenance program by incorporating new airworthiness limitations (AWLs) for fuel tank systems to satisfy Special Federal Aviation Regulation No. 88 requirements. This proposed AD would also require the initial performance of certain repetitive AWL inspections to phase in those inspection, and repair if necessary. This proposed AD results from a design review of the fuel tank systems. We are proposing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: We must receive comments on this proposed AD by August 17, 2007.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD.

- *DOT Docket Web site:* Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
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- *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.

- *Fax:* (202) 493-2251.

- *Hand Delivery:* Room W12-140 on the ground floor of the West Building, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for the service information identified in this proposed AD.

FOR FURTHER INFORMATION CONTACT:

Kathrine Rask, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6505; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number "FAA-2007-28381; Directorate Identifier 2006-NM-164-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR

19477-78), or you may visit <http://dms.dot.gov>.

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647-5527) is located on the ground floor of the West Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

Discussion

The FAA has examined the underlying safety issues involved in fuel tank explosions on several large transport airplanes, including the adequacy of existing regulations, the service history of airplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, we issued a regulation titled "Transport Airplane Fuel Tank System Design Review, Flammability Reduction and Maintenance and Inspection Requirements" (66 FR 23086, May 7, 2001). In addition to new airworthiness standards for transport airplanes and new maintenance requirements, this rule included Special Federal Aviation Regulation No. 88 ("SFAR 88," Amendment 21-78, and subsequent Amendments 21-82 and 21-83).

Among other actions, SFAR 88 requires certain type design (*i.e.*, type certificate (TC) and supplemental type certificate (STC)) holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport airplanes and for subsequent modifications to those airplanes. It requires them to perform design reviews and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. As explained in the preamble to the rule, we intended to adopt airworthiness directives to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these design reviews, we have established four criteria intended to define the unsafe conditions

associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: Single failures, single failures in combination with a latent condition(s), and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

We have determined that the actions identified in this AD are necessary to reduce the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Relevant Service Information

We have reviewed the following sections of Boeing 707/720 Airworthiness Limitations (AWL) Document D6-7552-AWL, Original Release March 2006 (referred to hereafter as "D6-7552-AWL March 2006" or "document D6-7552-AWL," depending upon the associated text):

- Section B, "FUEL SYSTEMS AIRWORTHINESS LIMITATIONS"
- Section C, "SYSTEM AWL PAGE FORMAT"
- Section D, "AIRWORTHINESS LIMITATIONS—FUEL SYSTEMS"

Those sections of D6-7552-AWL March 2006 describe new airworthiness limitations (AWLs) for fuel tank systems. The new AWLs include:

- An AWL inspection, which is a periodic inspection of certain features for latent failures that could contribute to an ignition source; and
- Critical design configuration control limitations (CDCCL), which are limitation requirements to preserve a critical ignition source prevention feature of the fuel tank system design that is necessary to prevent the occurrence of an unsafe condition. The purpose of a CDCCL is to provide instruction to retain the critical ignition source prevention feature during configuration change that may be caused by alterations, repairs, or maintenance actions. A CDCCL is not a periodic inspection.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. For this reason, we are proposing this AD, which would require revising the FAA-approved maintenance program by incorporating the information in the service information described previously. The proposed AD also would require initial accomplishment of the repetitive inspection specified in the AWLs to phase in that repetitive inspection, and repair if necessary.

Explanation of Compliance Time

In most ADs, we adopt a compliance time allowing a specified amount of time after the AD's effective date. In this case, however, the FAA has already issued regulations that require operators to revise their maintenance/inspection programs to address fuel tank safety issues. The compliance date for these regulations is December 16, 2008. To provide for efficient and coordinated implementation of these regulations and this proposed AD, we are using this same compliance date in this proposed AD, instead of the 18-month compliance time recommended by Boeing.

Rework Required When Implementing AWLs Into an Existing Fleet

The maintenance program revision for the fuel tank systems specified in paragraph (g) of this proposed AD, which involves incorporating the information specified in D6-7552-AWL March 2006, would affect how operators maintain their airplanes. After doing the maintenance program revision, operators would need to do any maintenance on the fuel tank system as specified in the CDCCLs. Maintenance done before doing the maintenance program revision specified in paragraph (g) would not need to be redone in order to comply with paragraph (g). For example, the AWL that requires fuel pumps to be repaired and overhauled per an FAA-approved component maintenance manual (CMM) applies to fuel pumps repaired after the AWLs are revised; spare or on-wing fuel pumps do not need to be reworked. For AWLs that require repetitive inspections, the initial inspection interval (threshold) starts from the date the maintenance program revision specified in paragraph (g) is done, except as provided by paragraph (h) of this proposed AD. This proposed AD would require only the maintenance program revision specified in paragraph (g), and initial inspection specified in

paragraph (h). No other fleet-wide inspections need to be done.

Changes to Fuel Tank System AWLs

Paragraph (g) of this proposed AD would require revising the maintenance program by incorporating certain information specified in D6-7552-AWL March 2006. Paragraph (g) also allows accomplishing the maintenance program revision in accordance with later revisions of D6-7552-AWL March 2006 as an acceptable method of compliance if they are approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. In addition, D6-7552-AWL March 2006 specifies that any deviations from the published AWL instructions, including AWL intervals, in document D6-7552-AWL must be approved by the Manager, Seattle ACO. Therefore, after doing the maintenance program revision, any further revision to an AWL or AWL interval should be done as an AWL change, not as an alternative method of compliance (AMOC). For U.S.-registered airplanes, operators must make requests through an appropriate FAA Principal Maintenance Inspector (PMI) or Principal Avionics Inspector (PAI) for approval by the Manager, Seattle ACO. A non-U.S. operator should coordinate changes with its governing regulatory agency.

Exceptional Short-Term Extensions

D6-7552-AWL March 2006 has provisions for an exceptional short-term extension of 30 days. An exceptional short-term extension is an increase in an AWL interval that may be needed to cover an uncontrollable or unexpected situation. For U.S.-registered airplanes, the FAA PMI or PAI must concur with any exceptional short-term extension before it is used, unless the operator has identified another appropriate procedure with the local regulatory authority. The FAA PMI or PAI may grant the exceptional short-term extensions described in D6-7552-AWL March 2006, without consultation with the Manager, Seattle ACO. A non-U.S. operator should coordinate changes with its governing regulatory agency. As explained in D6-7552-AWL March 2006, exceptional short-term extensions must not be used for fleet AWL extensions. An exceptional short-term extension should not be confused with an operator's short-term escalation authorization approved in accordance with the Operations Specifications or the operator's reliability program.

Ensuring Compliance With Fuel Tank System AWLs

Boeing has revised their applicable maintenance manuals and task cards to address AWLs and to include notes about CDCCLs. Operators that do not use Boeing's revision service should revise their maintenance manuals and task cards to highlight actions that are tied to CDCCLs to ensure that maintenance personnel are complying with the CDCCLs. Appendix A of D6-7552-AWL March 2006 contains a list of Air Transport Association (ATA) sections for the revised maintenance manuals. Operators may wish to use the appendix as an aid to implement the AWLs.

Recording Compliance With Fuel Tank System AWLs

The applicable operating rules of the Federal Aviation Regulations (14 CFR parts 91, 121, 125, and 129) require operators to maintain records with the identification of the current inspection status of an airplane. One AWL cited in D6-7552-AWL March 2006 is an inspection for which the applicable sections of the operating rules apply. The other AWLs are CDCCLs, which are tied to on-condition maintenance actions. An entry into an operator's existing maintenance record system for corrective action is sufficient for recording compliance with CDCCLs, as long as the applicable maintenance manual and task cards identify actions that are CDCCLs.

Changes to CMMs Cited in Fuel Tank System AWLs

Some of the AWLs in D6-7552-AWL March 2006 refer to specific revision levels of the CMMs as additional sources of service information for doing the AWLs. Boeing is referencing the CMMs by revision level in the applicable AWL for certain components rather than including information directly in document D6-7552-AWL because of the volume of that information. As a result, the Manager, Seattle ACO must approve the CMMs. Any later revision of those CMMs will be handled like a change to the AWL itself. Any use of parts (including the use of parts manufacturer approval (PMA) approved parts), methods, techniques, and practices not contained in the CMMs need to be approved by the Manager, Seattle ACO, or governing regulatory authority. For example, operators that have developed pump repair/overhaul manuals must get them approved by the Manager, Seattle ACO.

Changes to AMMs Referenced in Fuel Tank System AWLs

In other AWLs in D6-7552-AWL March 2006, the AWLs contain all the necessary data. The applicable section of the maintenance manual is usually included in the AWLs. Boeing intended this information to assist operators in maintaining the maintenance manuals. A maintenance manual change to these tasks can be made without approval by the Manager, Seattle ACO, through an appropriate FAA PMI or PAI, by the governing regulatory authority, or by using the operator's standard process for revising maintenance manuals. An acceptable change would have to maintain the information specified in the AWL such as the pass/fail criteria or special test equipment.

Costs of Compliance

There are about 213 airplanes of the affected design in the worldwide fleet. This proposed AD would affect about 76 airplanes of U.S. registry. The proposed actions would take about 8 work hours per airplane, at an average labor rate of \$80 per work hour. Based on these figures, the estimated cost of the proposed AD for U.S. operators is \$48,640, or \$640 per airplane.

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 have 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 that the 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); and
3. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

Boeing: Docket No. FAA-2007-28381; Directorate Identifier 2006-NM-164-AD.

Comments Due Date

- (a) The FAA must receive comments on this AD action by August 17, 2007.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to all Boeing Model 707-100 long body, -200, -100B long body, and -100B short body series airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B series airplanes; certificated in any category.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections and maintenance actions. Compliance with these limitations is required by 14 CFR 43.16 and 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these limitations, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 43.16 and 91.403(c), the operator must request approval for revision to the airworthiness limitations (AWLs) in the Boeing 707/720 Airworthiness

Limitations (AWL) Document D6-7552-AWL, Original Release March 2006, as specified in paragraph (g) or (i) of this AD, as applicable.

Unsafe Condition

(d) This AD results from a design review of the fuel tank systems. We are issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Service Information

(f) The term "D6-7552-AWL March 2006," as used in this AD, means Boeing 707/720 Airworthiness Limitations Document D6-7552-AWL, Original Release March 2006.

Revision of AWLs Section

(g) Before December 16, 2008, revise the FAA-approved maintenance program by incorporating the information in the sections specified in paragraphs (g)(1) through (g)(3) of this AD, except that the initial inspection specified in paragraph (h) of this AD must be done at the time specified in paragraph (h). Accomplishing the revision in accordance with a later revision of Boeing 707/720 Airworthiness Limitations Document D6-7552-AWL is an acceptable method of compliance if the revision is approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

(1) Section B., "FUEL SYSTEMS AIRWORTHINESS LIMITATIONS," of D6-7552-AWL March 2006.

(2) Section C., "SYSTEM AWL PAGE FORMAT," of D6-7552-AWL March 2006.

(3) Section D., "AIRWORTHINESS LIMITATIONS—FUEL SYSTEMS," of D6-7552-AWL March 2006.

Initial Inspection and Repair if Necessary

(h) At the later of the times specified in paragraphs (h)(1) and (h)(2) of this AD: Do a detailed inspection of external wires over the center fuel tank for damaged or loose clamps, wire chafing, and wire bundles in contact with the surface of the center fuel tank, in accordance with Section D, "AIRWORTHINESS LIMITATIONS—FUEL SYSTEMS," AWL number 28-AWL-01, of D6-7552-AWL March 2006. If any discrepancy is found during this inspection, repair the discrepancy before further flight in accordance with D6-7552-AWL March 2006. Accomplishing the actions required by this paragraph in accordance with a later revision of D6-7552-AWL March 2006 is an acceptable method of compliance if the revision is approved by the Manager, Seattle ACO.

(1) Before the accumulation of 36,000 total flight cycles, or within 120 months since the date of issuance of the original standard airworthiness certificate or the date of

issuance of the original export certificate of airworthiness, whichever occurs first.

(2) Within 72 months after the effective date of this AD.

Note 2: For the purposes of this AD, a detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

Alternative Methods of Compliance (AMOCs)

(i)(1) The Manager, Seattle ACO, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Issued in Renton, Washington, on June 22, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-12818 Filed 7-2-07; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-28389; Directorate Identifier 2006-NM-171-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 777-200, -200LR, -300, and -300ER Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Boeing Model 777-200, -200LR, -300, and -300ER series airplanes. This proposed AD would require revising the Airworthiness Limitations (AWLs) section of the Instructions for Continued Airworthiness by incorporating new limitations for fuel tank systems to satisfy Special Federal Aviation Regulation No. 88 requirements. This proposed AD also would require the

initial performance of certain repetitive inspections specified in the AWLs to phase in those inspections, and repair if necessary. This proposed AD results from a design review of the fuel tank systems. We are proposing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: We must receive comments on this proposed AD by August 17, 2007.

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FOR FURTHER INFORMATION CONTACT:

Kathrine Rask, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6505; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number "FAA-2007-28389; Directorate Identifier 2006-NM-171-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date