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. 2001–NM–232–AD]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes Equipped with General Electric CF6–45 or CF6–50 Series Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to Boeing Model 747 series airplanes equipped with General Electric CF6–45 and CF6–50 series engines. This proposal would require an inspection to detect chafing of the fuel line or incorrect clearance between the fuel line and pneumatic duct insulation blanket; a fuel leak check and strut drain test; corrective action if necessary; replacement of the outboard strut fuel line coupling O-rings and retaining rings with new parts; replacement of the pneumatic duct boot with a new part; and, for certain airplanes, installation of a flame arrestor and drain line entry screens. This action is necessary to prevent leaking fuel line couplings, chafed fuel lines, restricted or clogged strut drain lines, migrating fluids or vapors toward ignition sources, and flashback of external flame into the strut; these conditions could result in an uncontained engine strut fire. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by March 17, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket 2001–NM–232–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227–1232. Comments may also be sent via the Internet using the following address: *9-anm-nprmcomment@faa.gov*. Comments sent via fax or the Internet must contain ''Docket No. 2001–NM–232–AD'' in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Dan Kinney, Aerospace Engineer, Propulsion Branch, ANM–140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2666; fax (425) 227–1181.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (*e.g.*, reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket 2001–NM–232–AD.'' The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–114, Attention: Rules Docket 2001–NM–232–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The FAA has received reports of fires inside and outside the outboard struts of Boeing Model 747 series airplanes equipped with General Electric CF6–45 and CF6–50 series engines. The fires were caused by leaking strut fuel line couplings, improperly installed fuel lines that chafed against a pneumatic duct insulation blanket, and clogged or restricted strut drain lines. Fuel leakage into the hot engine compartment and/or onto the hot engine case can ignite and result in a fire. In certain cases, external flame flashback through the strut drain holes has ignited fuel that had leaked and accumulated in the strut. These fires have occurred outside a designated ''fire zone'' where there is no means to detect, contain, or extinguish a fire. All known cases of engine strut fires have occurred on the ground during taxi-in after landing; such fires could result in airplane damage and an emergency evacuation. Leaking fuel line couplings, chafed fuel lines, restricted or clogged strut drain lines, fluids or vapors migrating to ignition sources, and flashback of external flame into the strut, if not corrected, could result in an uncontained engine strut fire.

Explanation of Relevant Service Information

The FAA has reviewed and approved the service information listed in the following table:

Service information	Procedures described
Boeing Service Bulletin 747–36–2111, dated February 20, 1992.	Inspection to detect chafing of the fuel line and measure the clearance between the fuel line and the pneumatic duct insulation blanket; and follow-on and corrective actions (including rework of the fuel line by blending nicks and scratches, determining the maximum thickness of the damaged area, and performing a penetrant inspection to detect cracking of the damaged area; remeasuring the clearance between the fuel line and the insulation blanket; adjusting the duct and fuel line positions; and performing repetitive inspections for chafing).
Boeing Service Bulletin 747–28–2162, dated July 30, 1992.	Replacement of the number 4 strut fuel tube with a new part if sufficient clearance between the fuel line and the insulation blanket cannot be achieved by incorporation of Service Bulletin 747–36–2111.
Boeing Service Bulletin 747–28–2230, dated September 30, 1999.	Fuel pressure leak check of the fuel line in the strut area, a strut drain test for the aft strut drain tubes to detect blockage, and corrective action for any discrepancy.
Boeing Service Letter 747–SL–28–052–B, dated August 30, 1998.	Repetitive replacement of the outboard strut fuel line coupling O-rings and retaining rings with new parts.
Boeing Service Bulletin 747–36–2118, dated January 28, 1993.	Replacement of the pneumatic duct boot with a new part.
Boeing Service Bulletin 747–54–2137, dated February 6, 1992.	Installation of a flame arrestor in each aft condensate drain hole of the engine struts.
Boeing Service Bulletin 747–54–2122, Revision 4, dated August 29, 1991.	Installation of a drain line entry screen at each drain tube entry.

The FAA has reviewed Notice of Status Change 747–54–2122 NSC 2, dated May 14, 1992, which revises Boeing Service Bulletin 747–54–2122, Revision 4, and was issued to notify certain operators of part number changes. The FAA has also reviewed Information Notice 747–54–2122 IN 03, dated August 19, 1999, which was issued to notify operators of errors in certain Figures in Boeing Service Bulletin 747–54–2122, Revision 4.

Accomplishment of the actions specified in the service information is intended to adequately address the identified unsafe condition.

Boeing Service Bulletins 747–28–2230 and 747–36–2122 recommend accomplishment of certain actions specified by other service bulletins; however, those additional actions are not included in this proposed AD because they are required by existing ADs or are not necessary to address the identified unsafe condition of this proposed AD. Those other service bulletins are described in the following table:

The actions specified in Boeing Service Bulletin—	Are included in—	Which applies to Model 747 series airplanes equipped with—	To require—	Within—
747–28–2155, Revision 3, dated September 28, 1984.	Telegraphic (emergency) AD 86–01–51 R1, amendment 39–5269 (51 FR 10820, March 31, 1986).	GE CF6 engines	Clearing of the engine strut drains.	72 hours after the effective date of April 18, 1986.
747–28–2160, dated July 23, 1992, or Revision 1, dated December 16, 1993.	AD 95–02–07, amendment 39–9126 (60 FR 8292, February 14, 1995).	Certain GE or Pratt & Whitney T9D series engines.	Installation of a seal on the wing front spar at each engine strut.	18 months after the effective date of March 16, 1995.
747–54A2117, Revision 1, dated November 8, 1985.	AD 86–08–03, amendment 39–5289 (51 FR 12836, April 16, 1986).	Certain General Electric and Pratt & Whitney engines.	An inspection for cracking in the brace and application of sealant in the strut lower aft bulkhead.	200/400 landings after the effective date of May 27, 1986.

In addition, Boeing Service Bulletin 747–54–2122 recommends the prior or concurrent accomplishment of the actions specified in Boeing Service Bulletin 747–54–2083, which addresses hydraulic fluid leak problems; however, those actions would not be required by this proposed AD because there has been no evidence of a recent hydraulic fluid leak problem.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require accomplishment of the actions specified in the service information described previously, except as discussed below.

Differences Between Proposed AD and Relevant Service Information

Although Boeing Service Bulletin 747–28–2230 recommends

accomplishing the leak check and drain inspection within 18 months (after the release of the service bulletin), we have determined that an interval of 18 months would not address the identified unsafe condition in a timely manner. In developing an appropriate compliance time for this proposed AD, we considered not only the manufacturer's recommendation, but the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the actions. In light of all of these factors, we find a 12-month compliance time for completing the proposed actions to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

Boeing Service Bulletin 747–36–2111 specifies that, if the ultimate corrected clearance achieved between the fuel line and the pneumatic duct insulation blanket (for any strut position) is 0.50 inch or less, operators may repetitively inspect the area every 1,000 flight hours. However, this proposed AD would require replacement of the fuel tube on the number 4 engine strut position, as specified in Boeing Service Bulletin 747–28–2162, if clearance of at least 0.40 inch cannot be achieved during accomplishment of the actions specified in Boeing Service Bulletin 747–36–2111.

Boeing Service Bulletin 747–54–2122 specifies that accomplishment of some of the actions that are specified in this proposed AD are to be done in accordance with either the Boeing 747 Airplane Maintenance Manual (AMM) or an ''operator's equivalent procedure.'' However, this proposed AD would require that the actions be accomplished in accordance with the procedures specified in the applicable subject of the Boeing 747 AMM. An ''operator's equivalent procedure'' may be used only if approved as an alternative method of compliance in accordance with paragraph (i) of this AD.

In addition, Boeing Service Bulletin 747–36–2111 recommends that operators ''tell Boeing'' if the fuel line is chafed. Operators may report these findings to Boeing, but this proposed AD would not require a report.

The applicability of this proposed AD is different from the effectivity of some of the cited service bulletins. The unsafe condition identified by this proposed AD is limited to the outboard struts on Model 747 series airplanes equipped with General Electric CF6–45 and CF6–50 series engines. However, the effectivity in Service Bulletins 747–54–2122, 747–36–2118, and 747–28–2162, and Service Letter 747–SL–28–052–B is broader to encompass additional features common to other engine model structures not addressed by this proposed AD.

Cost Impact

The following table provides the cost estimates to accomplish the proposed actions:

Boeing service information for proposed actions	Work hours per airplane	Labor rate per hour	Parts cost per airplane	Per-airplane cost	Number of U.S. airplanes affected	U.S. fleet cost
Service Bulletin 747–36–2111	10	$60	$0	$600	32	$19,200
Service Bulletin 747–28–2230	4	60	0	240	32	7,680
Service Letter 747-SL–28–052B	4	60	0	240	32	7,680
Service Bulletin 747–36–2118	10	60	1,269	1,869	32	59,808
Service Bulletin 747–54–2137	48	60	3,047	5,927	30	177,810
Service Bulletin 747–54–2122	56	60	2,590	5,950	30	178,500

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this proposed AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that 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); and (3) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

Boeing: Docket 2001–NM–232–AD.

Applicability: Model 747 series airplanes equipped with General Electric CF6–45 or CF6–50 series engines, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (i) of this AD. The

request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent leaking fuel line couplings, chafed fuel lines, restricted or clogged strut drain lines, fluids or vapors migrating to ignition sources, and flashback of external flame into the strut, which could result in uncontained engine strut fire, accomplish the following:

Inspection for Chafing and Clearance

Note 2: Paragraph (a) of this AD refers to certain portions of Boeing Service Bulletin 747–36–2111, dated February 20, 1992, for information regarding inspection and measurement actions. Further, paragraph (a) of this AD requires replacement of the fuel tube as corrective action for certain repair conditions; that action is not included in the service bulletin. Where this AD and Service Bulletin 747–36–2111 differ, the AD prevails.

(a) Within 1,000 flight hours after the effective date of this AD, perform a detailed inspection to detect chafing of the fuel line and measure the clearance between the fuel line and the insulation blanket on the pneumatic duct; in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747–36–2111, dated February 20, 1992. Before further flight, accomplish all applicable corrective actions (including reworking the fuel line, remeasuring the clearance between the fuel line and the insulation blanket, adjusting the pneumatic duct and fuel line positions, adjusting the insulation blanket installation, and inspecting and cleaning the strut and strut drain ports/screens); and, if applicable, repeat the fuel line inspection at the applicable time in the Accomplishment Instructions of the service bulletin. Do the corrective and follow-on actions in accordance with Service Bulletin 747–36–2111. If, after corrective actions have been performed, a clearance of at least 0.40 inch on the number 4 strut cannot be achieved: Before further flight, replace the fuel tube with a new part in accordance with Boeing Service Bulletin 747–28–2162, dated July 30, 1992.

Note 3: For the purposes of this AD, a detailed inspection is defined as: ''An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required.''

Fuel Leak Check and Strut Drain Inspection

(b) Within 12 months after the effective date of this AD, perform a fuel pressure leak check of the fuel line in the strut area, and perform a strut drain test for the aft strut drain tubes to detect blockage; in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747–28–2230, dated September 30, 1999. If any discrepancy is found, before further flight, perform applicable corrective actions (including performing the fuel pressure check procedure, clearing the strut drain tubes, and repairing seal leaks) in accordance with the service bulletin.

Replacement of O-Rings and Retaining Rings

(c) At the earliest of the times specified by paragraphs (c)(1), (c)(2), and (c)(3) of this AD, replace the fuel line coupling O-rings and retaining rings in the outboard strut positions with new Nitrile O-rings, part number MS29513–330, in accordance with Boeing Service Letter 747–SL–28–052–B, dated August 30, 1998. Replace the rings thereafter at the time specified by paragraph (d) of this AD.

(1) Within 21,000 flight hours after the effective date of this AD.

(2) Within 5 years after the effective date of this AD.

(3) Before further flight after a coupling has been disassembled for any reason.

Repetitive Ring Replacement

(d) Replace the rings as required by paragraph (c) of this AD at intervals not to exceed the earliest of the times specified by paragraphs (d)(1), (d)(2), and (d)(3) of this AD.

(1) Every 21,000 flight hours.

(2) Every 5 years.

(3) Before further flight after a coupling has been disassembled for any reason.

Replacement of Pneumatic Duct Boot

(e) At the earlier of the times specified in paragraphs (e)(1) and (e)(2) of this AD: Replace the pneumatic duct boot with a new part, in accordance with Boeing Service Bulletin 747–36–2118, dated January 28, 1993.

(1) Within 12 months after the effective date of this AD; or

(2) Before further flight following detection of any torn boot; or within 5 days following detection of any torn boot, provided there are no leaks, liquid fuel, or vapors in the affected strut compartment.

Installation of Flame Arrestor

(f) For airplanes identified in Boeing Service Bulletin 747–54–2137, dated February 6, 1992: Within 24 months after the effective date of this AD, install a flame arrestor in each aft condensate drain hole of the engine struts, in accordance with the Accomplishment Instructions of the service bulletin.

Installation of Drain Screen

(g) For Group 2 and Group 4 airplanes listed in Boeing Service Bulletin 747–54–2122, Revision 4, dated August 29, 1991; as revised by Notice of Status Change 747–54–2122 NSC 2, dated May 14, 1992; and Information Notice 747–54–2122 IN 03, dated August 19, 1999: Within 24 months after the effective date of this AD, install a drain line entry screen at each drain tube entry at the outboard strut positions, in accordance with the Accomplishment Instructions of the service bulletin. Where the service bulletin specifies that certain actions may be accomplished in accordance with an operator's ''equivalent procedure'': Those actions must be accomplished in accordance with the applicable Boeing 747 Airplane Maintenance Manual subject specified in the service bulletin.

(h) Installation of drain screens before the effective date of this AD is also acceptable for compliance with the requirements of paragraph (g) of this AD if accomplished in accordance with Boeing Service Bulletin 747–54–2122, Revision 1, dated December 14, 1989; Revision 2, dated May 3, 1990; or Revision 3, dated October 4, 1990.

Alternative Methods of Compliance

(i) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(j) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on January 22, 2003.

Vi L. Lipski,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03–1957 Filed 1–28–03; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 35

[Docket No. RM01–12–000]

Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design

January 22, 2003.

AGENCY: Federal Energy Regulatory Commission, DOE.

ACTION: Notice of technical conference.

SUMMARY: Commission staff will convene a technical conference on February 4, 2003 to discuss issues relating to the proposed rules for cyber-security of entities interacting on the nation's electric grid. The conference will build upon the concepts found in