

impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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:

2003-16-06 Boeing: Amendment 39-13259. 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 Outboard 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 outboard strut area, and perform an outboard strut drain test for the aft strut drain tubes to detect blockage; in accordance with the Accomplishment Instructions of Boeing Special Attention 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 fiberglass fabric pneumatic duct boot with a new NOMEX fabric 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 outboard 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