

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendments 39–8983 (59 FR 37933, July 26, 1994) and 39–8989 (59 FR 41233, August 11, 1994), and by adding a new airworthiness directive (AD), to read as follows:

Boeing: Docket 2003–NM–47–AD.

Supersedes AD 94–15–12, amendment 39–8983, and AD 94–15–18, amendment 39–8989.

Applicability: All Model 747 series airplanes, 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 per paragraph (g)(1) 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 ensure the continued structural integrity of the entire fleet of Model 747 series airplanes, accomplish the following:

Note 2: Where there are differences between this AD and the Supplemental Structural Inspection Document (SSID) specified in this AD, the AD prevails.

Inspection Program Required by AD 94–15–12

(a) For Model 747–100SR series airplanes having line numbers 346, 351, 420, 426, 427, and 601: Within 1 year after August 10, 1994 (the effective date of AD 94–15–12, amendment 39–8983), incorporate a revision into the FAA-approved maintenance inspection program that provides no less than the required damage tolerance rating (DTR) for each structural significant item (SSI) listed in Boeing Document No. D6–35655, “Supplemental Structural Inspection Document (SSID) for 747–100SR,” dated April 2, 1986. The revision to the maintenance program must include and be implemented per the procedures specified in Sections 5.0 and 6.0 of the SSID D6–35655. Revision to the maintenance program shall be per the SSID D6–35655, dated April 2, 1986, until Revision G of the SSID D6–35022 is incorporated into the FAA-approved maintenance or inspection program per the requirements of paragraph (c) of this AD.

Note 3: For the purposes of this AD, an SSI is defined as a principal structural element (PSE). A PSE is a structural element that contributes significantly to the carrying of flight, ground, or pressurization loads, and whose integrity is essential in maintaining the overall structural integrity of the airplane.

Inspection Program Required by AD 94–15–18

(b) For airplanes listed in Boeing Document No. D6–35022, Volumes 1 and 2, “Supplemental Structural Inspection Document (SSID) for Model 747 Airplanes,” Revision E, dated June 17, 1993; and manufacturer’s line numbers 42, 174, 221, 231, 234, 239, 242, and 254: Within 12 months after September 12, 1994 (the effective date of AD 94–15–18, amendment 39–8989), incorporate a revision into the FAA-approved maintenance inspection program that provides no less than the required DTR for each SSI listed in Boeing Document No. D6–35022, Volumes 1 and 2, “Supplemental Structural Inspection Document (SSID) for Model 747 Airplanes,” Revision E, dated June 17, 1993, or Revision F, dated May 1996. (The required DTR value for each SSI is listed in the document.) The revision to the maintenance program shall include Sections 5.0 and 6.0 of the SSID D6–35022 and shall be implemented per the procedures contained in those sections. Revision to the maintenance program shall be per Revision E or F of SSID D6–35022, until Revision G of the SSID D6–35022 is incorporated into the FAA-approved maintenance or inspection program per the requirements of paragraph (c) of this AD.

New Inspection Program Requirements

(c) For all Model 747 series airplanes: Prior to reaching either of the thresholds specified in paragraph (d)(1)(i) or (d)(2)(i) of this AD, or within 12 months after the effective date of this AD, whichever occurs later, incorporate a revision into the FAA-approved maintenance or inspection program that provides no less than the required DTR for each SSI listed in Boeing Document No. D6–35022, “Supplemental Structural Inspection Document,” Revision G, dated December 2000 (hereinafter referred to as “Revision G”). (The required DTR value for each SSI is listed in Revision G.) The revision to the maintenance or inspection program shall include and shall be implemented per the procedures in Section 5.0, excluding paragraphs 5.1.2, 5.1.6, item 5; 5.1.8; 5.2; 5.2.1; 5.2.2; 5.2.3; and 5.2.4; “Damage Tolerance Rating (DTR) System Application;” and Section 6.0, “SSI Discrepancy Reporting;” of Revision G. Upon incorporation of Revision G required by this paragraph, the revision required by either paragraph (a) or (b) of this AD, as applicable, may be removed.

Initial Inspection

(d) For all Model 747 series airplanes: Perform an inspection to detect cracks of all structure identified in Revision G of SSID D6–35022 at the time specified in paragraph (d)(1) or (d)(2) of this AD, as applicable.

(1) For wing structure: At the times specified in paragraph (d)(1)(i) or (d)(1)(ii) of this AD, whichever occurs later.

(i) Prior to the accumulation of 20,000 total flight cycles or 100,000 total flight hours, whichever comes first. Or,

(ii) Within 1,000 flight cycles measured from 12 months after the effective date of this AD.

(2) For all other structure: At the times specified in paragraph (d)(2)(i) or (d)(2)(ii) of this AD, whichever occurs later.

(i) Prior to the accumulation of 20,000 total flight cycles, or

(ii) Within 1,000 flight cycles measured after 12 months from the effective date of this AD.

Note 4: Notwithstanding the provisions of paragraphs 5.1.2, 5.1.6, item 5, 5.2, 5.2.1, 5.2.2, 5.2.3, and 5.2.4 of the General Instructions of Revision G, which would permit operators to perform fleet and rotational sampling inspections to perform inspections on less than whole airplane fleet sizes and to perform inspections on substitute airplanes, this AD requires that all airplanes that exceed the threshold be inspected per Revision G. Paragraph 5.1.8 allows provisions for touch-and-go training flights, fleet averaging, and 10% escalations of flight cycles to achieve the required DTR. This AD does not allow for these provisions as well.

Note 5: Once the initial inspection has been performed, operators are required to perform repetitive inspections at the intervals specified in Revision G in order to remain in compliance with their maintenance or inspection programs, as revised per paragraph (c) of this AD.

Repair

(e) Cracked structure found during any inspection required by this AD shall be repaired, prior to further flight, in accordance with an FAA-approved method.

Inspection Program for Transferred Airplanes

(f) Before any airplane that is subject to this AD and that has exceeded the applicable compliance times specified in paragraph (d) of this AD can be added to an air carrier’s operations specifications, a program for the accomplishment of the inspections required by this AD must be established per paragraph (f)(1) or (f)(2) of this AD, as applicable.

(1) For airplanes that have been inspected per this AD, the inspection of each SSI must be accomplished by the new operator per the previous operator’s schedule and inspection method, or the new operator’s schedule and inspection method, at whichever time would result in the earlier accomplishment date for that SSI inspection. The compliance time for accomplishment of this inspection must be measured from the last inspection accomplished by the previous operator. After each inspection has been performed once, each subsequent inspection must be performed per the new operator’s schedule and inspection method.

(2) For airplanes that have not been inspected per this AD, the inspection of each SSI required by this AD must be accomplished either prior to adding the airplane to the air carrier’s operations specification, or per a schedule and an inspection method approved by the Manager, Seattle Aircraft Certification Office (ACO). After each inspection has been performed once, each subsequent inspection must be performed per the new operator’s schedule.