

Whitney Model JT9D-70 series engines, and requires modification of the nacelle strut and wing structure, inspections and checks to detect discrepancies, and correction of discrepancies.

AD 95-10-16, amendment 39-9233 (60 FR 27008, May 22, 1995). That AD references Boeing Alert Service Bulletin 747-54A2159, dated November 3, 1994, for accomplishment of the specified actions. That AD is applicable to Boeing Model 747 series airplanes equipped with Pratt & Whitney Model JT9D series engines (excluding Model JT9D-70 engines), and requires modification of the nacelle strut and wing structure, inspections and checks to detect discrepancies, and correction of discrepancies.

Actions Since Issuance of Previous Rulemaking

Since issuance of the ADs specified previously, there have been equivalent production changes to airplanes having line numbers 1047 and subsequent. The strut and wing modifications required by those ADs, in addition to the equivalent production changes, increase the level of safety for damage tolerance and structural fail-safe capability of the new and modified structure. The actions specified in this proposed AD are intended to provide repetitive inspections and overhaul of the nacelle strut-to-wing attachment structure to maintain damage tolerance and ensure long-term structural integrity for all Model 747 series airplanes.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-54A2182, dated July 12, 2001, which describes procedures for repetitive baseline and supplemental inspections for discrepancies (including cracks, corrosion, or damage; and loose, missing, or broken fasteners) of the nacelle strut-to-wing attachment structure, and follow-on and corrective actions if necessary. The follow-on actions include a one-time visual inspection of all side link fuse pin installations to verify that the correct fuse pins are installed; a one-time detailed inspection of all strut-to-wing attachment joints to verify correct installation of hardware; and repetitive inspections, as applicable; and an inspection of the strut-to-wing attachment structure for damage and to verify structural integrity. The service bulletin recommends contacting the manufacturer if any damage is found or structural integrity of the strut-to-wing structure cannot be verified.

The service bulletin also describes procedures for repetitive overhaul of the diagonal brace and spring beam load paths, and nondestructive testing of the fuse pin and secondary pin.

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

The service bulletin also recommends prior accomplishment of Boeing Alert Service Bulletins 747-54A2156, 747-54A2157, 747-54A2158, and 747-54A2159. Those service bulletins are referenced for accomplishment of the actions required by the related rulemaking described previously.

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 bulletin described previously, except as discussed below.

Difference Between Service Bulletin and This Proposed AD

The service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions; however, this proposed AD would require the repair of those conditions to be accomplished per a method approved by the FAA, or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle Aircraft Certification Office, to make such findings.

Changes to 14 CFR Part 39/Effect on the Proposed AD

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. Because we have now included this material in part 39, we no longer need to include it in each individual AD; however, this AD identifies the office authorized to approve alternative methods of compliance.

Change to Labor Rate Estimate

We have reviewed the figures we have used over the past several years to calculate AD costs to operators. To account for various inflationary costs in the airline industry, we find it necessary to increase the labor rate used in these

calculations from \$60 per work hour to \$65 per work hour. The cost impact information, below, reflects this increase in the specified hourly labor rate.

Cost Impact

There are approximately 991 airplanes of the affected design in the worldwide fleet. The FAA estimates that 187 airplanes of U.S. registry would be affected by this proposed AD.

It would take approximately 280 work hours per airplane to accomplish the repetitive baseline, supplemental, and fuse pin inspections at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the proposed inspections on U.S. operators is estimated to be \$3,403,400, or \$18,200 per airplane, per inspection cycle.

It would take approximately 48 work hours per airplane to accomplish the repetitive overhaul of the diagonal brace at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the proposed overhaul on U.S. operators is estimated to be \$583,440, or \$3,120 per airplane, per overhaul.

It would take approximately 40 work hours per airplane to accomplish the repetitive overhaul of the spring beam at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the proposed overhaul on U.S. operators is estimated to be \$486,200, or \$2,600 per airplane, per overhaul.

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