

number of airplanes in the operator's fleet on which the modification has been accomplished and the number of unmodified airplanes remaining in the operator's fleet. Additionally the operator would be asked to submit a schedule for accomplishing the modification on the airplanes remaining in its fleet.

Requirements Redundant to Part 121

One commenter requests that proposed paragraph (b) be deleted since the proposed inspection and repair of components (referenced in Notes 8, 9, and 10 of the Accomplishment Instructions on page 91 of Boeing Alert Service Bulletin 747-54A2156, dated December 15, 1994) are redundant to the requirements of part 121 of the Federal Aviation Regulations (14 CFR 121).

The FAA does not concur with the commenter that the requirements of paragraph (b) should be deleted from the final rule. According to section 39.1 of the Federal Aviation Regulations (14 CFR 39.1), the issuance of an AD is based on the finding that an unsafe condition exists or is likely to develop in aircraft of a particular type design.

Further, it is within the FAA's authority to issue an AD to require actions to address unsafe conditions that are not otherwise being addressed (or addressed inadequately) by normal maintenance procedures. The FAA points out that fatigue cracking and corrosion in the strut-to-wing attachments have resulted in several incidents and catastrophic accidents. Although 14 CFR 121 addresses damage found on components during other maintenance activities, the FAA has determined that the catastrophic consequences of the unsafe condition are such that reiterating the necessity of performing inspections and repairs when any damage or corrosion is found while performing the modification of the nacelle strut and wing structure is warranted and necessary. The AD is the appropriate vehicle for mandating such actions.

Clarification of Note 11 in the Alert Service Bulletin

This same commenter also notes that a torque check would be more appropriate to detect loose fasteners of the diagonal brace fittings (referenced in Note 11 of the alert service bulletin). Further, the commenter asserts that these torque checks should be accomplished in accordance with the actual Accomplishment Instructions of the Boeing Alert Service Bulletin 747-54A2156, rather than in accordance with a Note that precedes the actual

Accomplishment Instructions as stated in proposed paragraph (b).

The FAA concurs that a torque check would be more appropriate to detect loose fasteners. The FAA's intent was to require a torque check and the follow-on corrective action indicated in Note 11 of the alert service bulletin. Obviously, the torque check was inadvertently omitted from that version of the alert service bulletin; however, the follow-on action to "torque any loose fasteners" was included in that version of the alert service bulletin. The manufacturer has notified the FAA that Revision 1 of the alert service bulletin, planned for release later this year, will correct this omission. However, the FAA does not consider that delaying this action until after the release of the revision of the service bulletin is warranted. Therefore, paragraph (b) of the final rule has been revised to clarify that a torque check must be performed to detect loose fasteners.

Clarification of Cost Estimate Information

One commenter requests that the cost estimate be revised to include the cost of out-of-service time for each aircraft during the time that the modification is accomplished, and the additional fuel costs that would be incurred due to the additional weight added to each aircraft by the modification hardware. Another commenter, Boeing, requests that the cost estimate be revised to indicate that it will absorb the cost of labor to accomplish the proposed modification of the nacelle strut and wing structure. However, the commenter states that any costs in excess of those quoted in Boeing Alert Service Bulletin 747-54A2156, dated December 15, 1994, will be borne by the operator.

The FAA concurs that a revision to the cost estimate is necessary to remove the labor costs that the manufacturer will incur; therefore, the economic impact information, below, has been revised accordingly. However, the FAA does not concur that a revision is necessary to include the costs for out-of-service time or the costs for additional fuel. The appropriate number of hours required to accomplish the required actions, specified as 6,253 work hours in the economic impact information, below, was developed with data provided by the manufacturer.

Note: The manufacturer has informed the FAA that it will incur labor costs up to a maximum of 6,253 work hours.

This number represents the time required to gain access, remove parts, inspect, modify, install, and close up. The cost analysis in AD rulemaking

actions typically does not include out-of-service time for each aircraft or additional fuel costs, as was suggested by the commenter. These costs would be impossible to calculate accurately due to the differences in out-of-service time for each operator. Furthermore, the increase in fuel costs due to the weight added by the modification, would vary greatly from operator to operator, depending upon airplane utilization.

The Air Transport Association of America (ATA) requests that the FAA include costs "beyond just parts and labor costs" when calculating the estimated costs to accomplish the proposed actions. The ATA points out that the FAA should consider such costs to avoid requiring actions that the ATA considers inconsequential.

The FAA does not concur. Contrary to the ATA's assertion, in establishing the requirements of all AD's, the FAA does consider cost impact to operators beyond the estimates of parts and labor costs contained in AD preambles. For example, where safety considerations allow, the FAA attempts to impose compliance times that generally coincide with operator's maintenance schedules. However, because operators' schedules vary substantially, the FAA is unable to accommodate every operator's optimal scheduling in each AD. Each AD does allow individual operators to obtain approval for extensions of compliance times, based on a showing that the extension will not affect safety adversely. Therefore, the FAA does not consider it appropriate to attribute to the AD, the costs associated with the type of special scheduling that might otherwise be required.

Furthermore, because the FAA generally attempts to impose compliance times that coincide with operator's scheduled maintenance, the FAA considers it inappropriate to attribute the costs associated with aircraft "downtime" to the cost of the AD, because, normally, compliance with the AD will not necessitate any additional downtime beyond that of a regularly scheduled maintenance hold. Even if, in some cases, additional downtime is necessary for some airplanes, the FAA does not possess sufficient information to evaluate the number of airplanes that may be so affected or the amount of additional downtime that may be required. Therefore, attempting to estimate such costs would be futile.

The FAA points out that this AD is an excellent example of the fact that costs to operators are fully considered beginning at the earliest possible stages of AD development. In this case, the alert service bulletin that is referenced