

that the currently required repetitive tests continue to be done until the terminating modifications specified in paragraph (c) of this supplemental NPRM are installed. We have, however, added a new Note 2 to this supplemental NPRM for clarification.

Paragraph (c)(2) of the supplemental NPRM, to be done per Revision 5 of Boeing Service Bulletin 747-78-2152, does restate the requirements for the modification required by AD 94-10-10, which is to be done per Revision 3 of the service bulletin. However, as specified in the revised service information section above, airplanes having old microswitch packs and thrust lever clutch pack two-step cams cannot be modified per the procedures in Revision 3 of the service bulletin. If the modification has already been done on airplanes that do not have the old microswitch packs and thrust reverser clutch pack two-step cams, it does not have to be repeated.

New Dispatch Limitations

Paragraphs (e) and (f) have been added to this supplemental NPRM and would allow the option to dispatch an airplane with one thrust reverser deactivated and operate the airplane for up to 10 days with one thrust reverser deactivated. This option would be allowed in the event of unsuccessful accomplishment of the repetitive inspections and tests specified in paragraphs (a) and (b) of this AD or installation of a spare thrust reverser assembly with a different configuration than that installed on the other engines of the airplane.

Explanation of Requirements of Supplemental NPRM

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, this supplemental NPRM would supersede AD 95-16-02 to continue to require repetitive operational tests of the reversible gearbox pneumatic drive unit (PDU) or the reversing air motor PDU to ensure that the unit can restrain the thrust reverser sleeve, and correction of any discrepancy found. This supplemental NPRM also would add installation of a terminating modification, and repetitive functional tests of that installation to detect discrepancies, and repair, if necessary. The new action would require accomplishment of the installation of an additional locking system on each thrust reverser, as specified in the service bulletins described previously, except as discussed below.

Differences Between Supplemental NPRM and Boeing Service Bulletin 747-78-2152

The service bulletin recommends no specific compliance time for accomplishment of the additional locking system installation, but we have determined that an unspecified compliance time would not address the identified unsafe condition in a timely manner. In developing an appropriate compliance time for this 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, the time necessary to perform the installation, and comments received. In light of all of these factors, we find a 48-month compliance time for completing the required actions to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

Although the service bulletin does not specify repetitive functional testing of the additional lock installation following accomplishment of that installation, we have determined that repetitive functional tests of the additional lock installation on each thrust reverser, at intervals not to exceed 3,000 flight hours, will support continued operational safety of thrust reversers with actuation system locks.

Conclusion

Since these changes expand the scope of the originally proposed rule, we have determined that it is necessary to reopen the comment period to provide additional opportunity for public comment.

Cost Impact

There are approximately 455 airplanes of the affected design in the worldwide fleet. The FAA estimates that 218 airplanes of U.S. registry would be affected by this proposed AD.

The operational tests that are currently required by AD 95-16-02, and retained in this AD, take approximately 16 work hours (4 per engine) per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions is estimated to be \$960 per airplane, per test cycle.

It would take approximately 544 work hours per airplane, to accomplish the proposed wiring modifications, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$21,600 per airplane. Based on these figures, the cost impact

of the wiring modifications proposed by this AD on U.S. operators is estimated to be \$11,824,320, or \$54,240 per airplane.

It would take approximately 104 work hours (26 per engine) per airplane to accomplish the proposed removal of the thrust reverser sequencing mechanism and installation of a solenoid-operated shutoff valve, at an average labor rate of \$60 per work hour. The cost of required parts is minimal. Based on these figures, the cost impact of the removal and installation proposed by this AD on U.S. operators is estimated to be \$1,360,320, or \$6,240 per airplane.

It would take approximately 568 work hours per airplane to accomplish the proposed sync lock hardware installation, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$166,000 per airplane. Based on these figures, the cost impact of the installation proposed by this AD on U.S. operators is estimated to be \$43,617,440, or \$200,080 per airplane.

It would take approximately 8 work hours (2 per engine) per airplane to accomplish the functional test, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the functional test proposed by this AD on U.S. operators is estimated to be \$104,640, or \$480 per airplane, per test cycle.

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 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