

thrust reverser systems on Model 747 series airplanes. The integrity of the fail-safe features of the thrust reverser system, if not maintained, could result in possible failure modes in the thrust reverser control system and inadvertent deployment of a thrust reverser during flight.

New Relevant Service Information

Since the issuance of that NPRM, the FAA has reviewed and approved Boeing Service Bulletins 747-78-2152, Revision 5, dated June 14, 2001; and Revision 6, dated October 24, 2002 (Boeing Service Bulletins 747-78-2152, Revision 1, dated December 12, 1996; Revision 2, dated December 18, 1997; and Revision 3, dated August 26, 1999; were referenced in the original NPRM as the appropriate sources of service information for the accomplishment of certain actions). Revision 4 of the service bulletin describes procedures for additional rework for airplanes that have a three-step clutch assembly pack located in the flight deck control stand. Those airplanes must be reworked to a two-step clutch in order for the microswitch pack, as specified in Revisions 1, 2, and 3 of the service bulletin, to function correctly. Revision 5 of the service bulletin describes further rework procedures for airplanes previously modified, and removes two airplanes from the effectivity. Revision 6 of the service bulletin describes additional procedures for modifying the sync lock by adding a new bolt, washer, and nut to the clamp-up. Accomplishment of the actions specified in Revision 5 or Revision 6 of the service bulletin is intended to adequately address the unsafe condition.

Comments

Due consideration has been given to the comments received in response to the NPRM. Certain comments have resulted in changes to the NPRM that are reflected in this supplemental NPRM. Certain other comments that are still relevant but have not resulted in any change to the NPRM will also be addressed in this supplemental NPRM.

Request To Delay Release of Final Rule

One commenter asks that the FAA delay the release of the final rule. The commenter states that it started doing the modification specified in the proposed AD but had some problems implementing the procedures specified in Revisions 1, 2, and 3 of Boeing Service Bulletin 747-78-2152. The commenter adds that airplanes having old microswitch packs and thrust lever clutch pack two-step cams cannot be

modified per the procedures in these service bulletins.

The FAA delayed release of the final rule until the service bulletin was revised, reviewed, and approved, and we are now issuing this supplemental NPRM to require Revisions 5 and 6 of the service bulletin, which contain the correct procedures for airplanes having the old microswitch packs and thrust lever clutch pack two-step cams. Paragraph (c)(3) of this supplemental NPRM has been changed to require Revisions 5 and 6 for accomplishment of the installation of an additional locking system on each thrust reverser.

Request To Change Compliance Time

One commenter asks that the compliance time specified in paragraph (c) of the NPRM be extended from 36 to 48 months. The commenter states that previous accomplishment of AD 94-10-10, amendment 39-8917 (59 FR 26105, June 20, 1994), and AD 95-16-02 has provided interim protection against in-flight deployment of the thrust reversers. The commenter adds that, taking into account the accomplishment of those ADs and the "increased controllability" of the Model 747 airplane, the compliance time should be increased to 48 months to match the time that was required to accomplish similar ADs on Model 767 series airplanes.

We acknowledge that accomplishment of the actions required by AD 94-10-10 and AD 95-16-02 provides an added level of protection against in-flight deployment of the thrust reversers, and substantiating data from the manufacturer indicate that extending the compliance time from 36 to 48 months will have a minimal, but acceptable, impact on safety. Therefore, we agree that the compliance time for paragraph (c) of this supplemental NPRM may be extended to 48 months, to maintain an adequate level of safety in the fleet. We have revised paragraph (c) of this supplemental NPRM accordingly.

Request To Change Applicability

One commenter states that the applicability paragraph in the NPRM omits references to Pratt & Whitney JT9D-7A and -7J engine models, and asks if this is an oversight.

We infer that the commenter wants us to specifically identify JT9D-7A and -7J engine models in the applicability section of the NPRM. We do not agree that such a specification is necessary. The applicability statement of this supplemental NPRM refers to airplanes powered by Pratt & Whitney engines as specified in Boeing Service Bulletin

747-78-2152, and the service bulletin clearly identifies all affected airplanes, including those having JT9D-7A and -7J engines. We have, however, clarified the applicability section to show that the -7 and -7Q series engines encompass the engine series that includes the -7A and -7J engine models.

Request To Change Cost Impact Section

One commenter, the manufacturer, asks that the Cost Impact section in the NPRM be updated. The commenter states that this section specifies that required parts for the wiring modifications would be provided by the manufacturer at no cost to the operators, but this was valid only until December 31, 1999. As of January 1, 2000, there is a charge for the kits required to do the modifications. For the modification specified in Boeing Service Bulletin 747-78-2134, the kit cost is approximately \$21,600 per airplane. For the modification specified in Boeing Service Bulletin 747-78-2152, the kit cost is approximately \$166,000 per airplane. The commenter adds that these costs are approximate because the actual costs vary with engine model and airplane effectivity.

We agree with the commenter, and we have revised the Cost Impact section in this supplemental NPRM accordingly.

Request To Remove Certain Requirements

One commenter asks that the "Restatement of Requirements of AD 95-16-02" and paragraph (c)(2) of the NPRM be removed. The commenter states that paragraph (c)(2) is a restatement of the requirements in AD 94-10-10. The commenter notes that the NPRM would require work currently mandated by those ADs, and repeating those requirements is redundant. The commenter prefers that the NPRM simply reference that those ADs must be complied with. Additionally, the commenter suggests that, after those sections are removed, paragraph (c) of the NPRM be changed to state, "Accomplishment of the actions required by paragraphs (c)(1) and (c)(3) of this AD, along with accomplishment of the actions required by AD 94-10-10, constitutes terminating action for AD 95-16-02."

We partially agree with the commenter. Paragraphs (a) and (b) of the NPRM—the "Restatement of Requirements of AD 95-16-02"—merely repeat the actions that were previously mandated by AD 95-16-02, which this supplemental NPRM proposes to supersede. The intent of including these paragraphs is to ensure