

request to change the service bulletin reference as two separate issues.

- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-278-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-278-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has received a report of fatigue cracking of the station (STA) 340 upper deck floor beam on a Boeing Model 747-200F series airplane. The upper chord and web were completely severed by a crack which originated at a floor panel attachment fastener hole. A previous blend-out repair for corrosion was found at the crack location, and corrosion pitting was found in the fastener hole. Additionally, a 0.3-inch-long crack was found at an adjacent fastener hole. On certain Boeing Model 747-200C and -200F series airplanes, the upper chords of the floor beams at body station (BS) 340 through BS 440, and BS 500 through BS 520, are made from 7075 aluminum, which is more susceptible to fatigue cracking. BS 460 and BS 480 upper deck floor beams on these models are made from 2024 aluminum, which is known to be more durable than 7075 aluminum against fatigue. Cracking of the upper deck floor beam, if not corrected, could extend and sever floor beams adjacent to the body frame, which could result in rapid decompression and consequent loss of controllability of the airplane.

Other Relevant Rulemaking

On February 22, 2000, we issued AD 2000-04-17, amendment 39-11600 (65 FR 10695, February 29, 2000). That AD applies to certain Boeing Model 747-100, -200, and -300 series airplanes, and requires repetitive inspections to detect fatigue cracking in the upper deck floor beams located at certain body stations, and repair if necessary.

Explanation of Relevant Service Information

We have reviewed and approved Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, which describes procedures for repetitive inspections to find fatigue cracking in the upper chord of the upper deck floor beams, and repair if necessary, as follows:

- If access is gained from above, the procedures specify an open-hole high frequency eddy current (HFEC) inspection of the attachment fastener holes of the floor panel for cracks in the upper chord.
- If access is gained from below, the procedures specify modification of the clip nuts of the attachment fastener holes of the floor panel, and surface HFEC inspections of the forward and aft horizontal flanges of the floor beam upper chord for cracks.
- If any crack is found, the procedures specify accomplishment of the repair in the service bulletin or contacting Boeing for repair instruction, and repetitive inspections of the repaired area. If no crack is found, repeat the applicable inspection.

The service bulletin also describes procedures for an optional repair/modification, which would extend certain repetitive inspection intervals.

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

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 the Alert Service Bulletin and This Proposed AD

Although the alert service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, this proposed AD would require the repair of those conditions to be accomplished in

accordance with a method approved by the FAA, or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the FAA 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.

Cost Impact

There are approximately 78 airplanes of the affected design in the worldwide fleet. The FAA estimates that 21 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 30 work hours per airplane to accomplish the proposed inspections, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the inspections proposed by this AD on U.S. operators is estimated to be \$37,800, or \$1,800 per airplane, per inspection cycle.

The cost impact figure discussed above is 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.