

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

**Airworthiness Directive**

**92-03-12 BOEING:** Amendment 39-8169. Docket 91-NM-138-AD. Supersedes AD 91-11-06, Amendment 39-7002.

Applicability: Model 707/720 series airplanes; as listed in Boeing Service Bulletin 3240, Revision 3, dated October 18, 1985; certificated in any category.

Compliance: Required as indicated, unless previously accomplished.

To ensure continued structural integrity of the wing rear spar upper chord, accomplish the following:

(a) Perform a close visual inspection for cracks and corrosion of the wing rear spar upper chord from wing station (WS) 109.45 to WS 360 for Model 707-300 series airplanes; or from WS 180.71 to WS 360 for Model 720, 707-100, and 707-200 series airplanes; at rib and stiffener locations. Inspect in accordance with Boeing Service Bulletin 3240, Revision 3, dated October 18, 1985, prior to the later of the times specified in subparagraphs (a)(1) and (a)(2) of this AD, unless previously accomplished within the last 900 flight cycles or 335 days. Repeat the inspection at intervals not to exceed 1,000 flight cycles or one year, whichever occurs first.

(1) Within the next 30 days or 100 flight cycles after June 19, 1991 (the effective date of Amendment 39-7002, AD 91-11-06); or

(2) Prior to the accumulation of 10,000 flight cycles.

(b) If cracks or corrosion areas are found, prior to further flight, accomplish either subparagraph (b)(1) or (b)(2) of this AD:

(1) Repair, other than by stop drill procedure, in accordance with Part III, Figure 2, of Boeing Service Bulletin 3240, Revision 3, dated October 18, 1985 (this is considered the "final repair"), or

(2) Repair in accordance with the stop drill procedures specified in Part III, Figure 2, of Service Bulletin 3240, Revision 3, dated October 18, 1985. This repair method may only be used provided that the limitations specified in Part III, Figure 2, Items 5a and 5b, of the service bulletin are met.

(i) Immediately after stop drilling, conduct an eddy current inspection of the stop drill hole in accordance with the instructions in Section 5-5-1 of D6-7170, Non-destructive Test Document, to ensure that the crack does not extend beyond the stop drill. Thereafter, inspect visually for crack growth beyond the stop drill at intervals not exceeding 300 flight cycles.

(ii) If crack growth beyond the stop drill occurs, prior to further flight, accomplish the final repair in accordance with paragraph (b)(1) of this AD.

(iii) Within 1,000 flight cycles or one year, whichever occurs first, after the stop drill has been accomplished, accomplish the final repair in accordance with paragraph (b)(1) of this AD.

(c) If previously stop drilled cracks are found as a result of the inspection required by paragraph (a) of this AD, conduct an eddy current inspection of the stop drill hole for crack growth beyond the stop drill, in accordance with the instructions in Section 5-5-1 of Boeing Document D6-7170, Non-destructive Test Document.

(1) If growth beyond the stop drill has occurred, prior to further flight, repair in accordance with paragraph (b)(1) of this AD.

(2) If growth beyond the stop drill has not occurred, and the limitations specified in Part III, Figure 2, Items 5a and 5b, of Boeing Service Bulletin 3240, Revision 3, dated October 18, 1985, are met, prior to further flight accomplish either subparagraph (c)(1)(i) or (c)(1)(ii) of this AD:

(i) Repair in accordance with paragraph (b)(1) of this AD; or

(ii) Reinspect visually for crack growth beyond the stop drill at intervals not exceeding 300 flight cycles.

(A) If crack growth beyond the stop drill occurs, prior to further flight, accomplish the final repair in accordance with paragraph (b)(1) of this AD.

(B) Within 1,000 flight cycles or one year, whichever occurs first after the initial inspection revealed the stop drill crack, accomplish the final repair in accordance with paragraph (b)(1) of this AD.

(d) After each of the inspections and repairs required by this AD have been performed, apply BMS 3-23 corrosion inhibitor, or equivalent, to the affected areas.

(e) An alternative method of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. The request shall be forwarded through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Seattle ACO.

(f) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

(g) The inspections and repairs shall be done in accordance with Boeing Service Bulletin 3240, Revision 3, dated October 18, 1985. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51, at 56 FR 25356. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. Copies may be inspected at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington, or at the Office of the Federal Register, 1100 L Street NW., Room 8401, Washington, D.C.

(h) This amendment (39-8169, AD 92-03-12) becomes effective on March 10, 1992.