

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 98-NM-337-AD; Amendment 39-11132; AD 99-08-23]

RIN 2120-AA64

**Airworthiness Directives; Boeing Model 737-100, -200, -200C, -300, -400, and -500 Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that is applicable to all Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. This action requires repetitive inspections to detect cracking in the web of the aft pressure bulkhead at body station 1016 at the aft fastener row attachment to the "Y" chord; and corrective actions, if necessary. This amendment is prompted by several reports of fatigue cracking found at that location on Model 737 series airplanes. The actions specified in this AD are intended to detect and correct such fatigue cracking, which could result in rapid decompression of the fuselage.

**DATES:** Effective May 10, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 10, 1999.

Comments for inclusion in the Rules Docket must be received on or before June 22, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-337-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**FOR FURTHER INFORMATION CONTACT:** Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2557; fax (425) 227-1181.

**SUPPLEMENTARY INFORMATION:** The FAA has received reports of fatigue cracking found on Boeing Model 737-200 series airplanes in the web of the aft pressure bulkhead at body station 1016 at the aft fastener row attachment to the "Y" chord. An 11-inch crack was found on an airplane with 40,000 total flight cycles, and a 3.5-inch crack was found

on an airplane with 28,000 total flight cycles. Investigation revealed 43 fasteners installed in improperly drilled holes at the web-to-"Y" chord attachment in the area of the 11-inch crack. Such fatigue cracking, if not detected and corrected, could result in rapid decompression of the fuselage.

**Explanation of the Requirements of the Rule**

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to detect and correct fatigue cracking at certain fastener holes of the aft pressure bulkhead, which could result in rapid decompression of the fuselage. This AD requires repetitive inspections of the web of the aft pressure bulkhead at body station 1016 at the aft fastener row attachment to the "Y" chord, and corrective actions, if necessary. For compliance with this inspection requirement, operators may perform either a low frequency eddy current (LFEC) inspection from the aft side of the bulkhead or a detailed visual inspection from the forward side of the bulkhead. Corrective actions include a high frequency eddy current inspection to detect cracking of the web at the "Y" chord attachment; a detailed visual inspection of the bulkhead, if necessary; and repair in accordance with a method approved by the FAA.

**Differences Between AD and Relevant Service Information**

This AD refers to Boeing 737 Nondestructive Test (NDT) Manual D6-37239, Part 6, Subject 53-10-54, as the appropriate source of service information for accomplishment of the LFEC inspection. Operators should note that, unlike the procedures described in the NDT manual, which specifies that the web be inspected only from stringer 9 left to stringer 9 right, this AD expands the area to be inspected. Because of the safety implications and consequences associated with fatigue cracking and because of the unknown nature of the source of the subject cracking, the FAA has determined that an LFEC inspection, if accomplished, must be performed from stringer 15 left to stringer 15 right of the upper section of the bulkhead at body station 1016.

**Interim Action**

This is considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking.

**Determination of Rule's Effective Date**

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

**Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-NM-337-AD." The postcard will be date stamped and returned to the commenter.

**Regulatory Impact**

The regulations adopted herein will not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

#### PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

##### § 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

**99-08-23 Boeing:** Amendment 39-11132. Docket 98-NM-337-AD.

**Applicability:** All Model 737-100, -200, -200C, -300, -400, and -500 series airplanes; certificated in any category.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of

the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking at certain fastener holes of the aft pressure bulkhead, which could result in rapid decompression of the fuselage, accomplish the following:

#### Initial Inspection

(a) Perform either inspection specified by paragraph (a)(1) or (a)(2) of this AD at the time specified in paragraph (b) of this AD.

(1) Perform a low frequency eddy current inspection from the aft side of the aft pressure bulkhead to detect discrepancies (including cracking, misdrilled fastener holes, and corrosion) of the web of the upper section of the aft pressure bulkhead at body station 1016 at the aft fastener row attachment to the "Y" chord, from stringer 15 left to stringer 15 right, in accordance with Boeing 737 Nondestructive Test Manual D6-37239, Part 6, Section 53-10-54, dated December 5, 1998.

(2) Perform a detailed visual inspection of the aft fastener row attachment to the "Y" chord from the forward side of the aft pressure bulkhead to detect discrepancies (including cracking, misdrilled fastener holes, and corrosion) of the entire web of the aft pressure bulkhead at body station 1016.

(b) Perform the inspection required by paragraph (a) of this AD at the time specified by paragraph (b)(1), (b)(2), or (b)(3) of this AD, as applicable.

(1) For airplanes that have accumulated 40,000 or more total flight cycles as of the effective date of this AD: Inspect within 375 flight cycles or 60 days after the effective date of this AD, whichever occurs later.

(2) For airplanes that have accumulated 25,000 or more total flight cycles and fewer than 40,000 total flight cycles as of the effective date of this AD: Inspect within 750 flight cycles or 90 days after the effective date of this AD, whichever occurs later.

(3) For airplanes that have accumulated fewer than 25,000 total flight cycles as of the effective date of this AD: Inspect prior to the accumulation of 25,750 total flight cycles.

#### Repetitive Inspections

(c) Within 1,200 flight cycles after performing the initial inspection required by paragraph (a) of this AD, and thereafter at intervals not to exceed 1,200 flight cycles: Perform either inspection specified by paragraph (a)(1) or (a)(2) of this AD.

#### Corrective Actions

(d) If any discrepancy is detected during any inspection required by this AD: Prior to

further flight, accomplish the actions specified by paragraphs (d)(1) and (d)(3), and paragraph (d)(2) if applicable, of this AD.

(1) Perform a high frequency eddy current inspection from the forward side of the bulkhead to detect cracking of the web at the "Y" chord attachment, around the entire periphery of the "Y" chord, in accordance with Boeing 737 Nondestructive Test Manual D6-37239, Part 6, Section 51-00-00, Figure 23, dated November 5, 1997.

(2) If the most recent inspection performed in accordance with paragraph (a) of this AD was not a detailed visual inspection: Accomplish the actions specified by paragraph (a)(2) of this AD. If the inspection was a detailed visual inspection, it is not necessary to repeat that inspection prior to further flight.

(3) Repair any discrepancy such as cracking or corrosion or misdrilled fastener holes in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; 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 Manager, Seattle ACO, to make such findings.

#### Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

#### Special Flight Permits

(f) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

#### Incorporation by Reference

(g) The eddy current inspections shall be done in accordance with Boeing 737 Nondestructive Test Manual D6-37239, Part 6, Section 53-10-54, dated December 5, 1998; or Boeing 737 Nondestructive Test Manual D6-37239, Part 6, Section 51-00-00, Figure 23, dated November 5, 1995; as applicable. These references contain the specified list of effective pages:

Page No.	Revision level shown on page	Date shown on page
Title Page .....	Not Shown .....	February 5, 1995.
List of Effective Pages—Pages 1, 6-12 .....	Not Shown .....	December 5, 1998.
List of Effective Pages—Page 2 .....	Not Shown .....	August 5, 1998.
List of Effective Pages—Pages 2A, 3 .....	Not Shown .....	November 5, 1997.
List of Effective Pages—Page 4 .....	Not Shown .....	November 5, 1995.

Page No.	Revision level shown on page	Date shown on page
List of Effective Pages—Page 5 .....	Not Shown .....	May 5, 1997.

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. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on May 10, 1999. .

Issued in Renton, Washington, on April 9, 1999.

**Darrell M. Pederson,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 99-9739 Filed 4-22-99; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-SW-44-AD; Amendment 39-11139; AD 99-09-06]

RIN 2120-AA64

#### **Airworthiness Directives; Eurocopter France Model AS-350B, B1, B2, B3, BA, and D Helicopters, and Model AS 355E, F, F1, F2 and N Helicopters**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) that is applicable to Eurocopter France Model AS-350B, B1, B2, B3, BA, and D helicopters, and Model AS 355E, F, F1, F2 and N helicopters. This action requires inspecting the tail rotor spider plate bearing (bearing) for the proper bearing rotational torque, axial play, and for any brinelling of the bearing. This amendment is prompted by service difficulty reports citing the need to prematurely replace bearings due to wear, and by two in-flight incidents of increased tail rotor vibration levels due to bearing wear. This condition, if not corrected, could result in seizure of the bearing, loss of tail rotor control and subsequent loss of control of the helicopter.

**DATES:** Effective May 10, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 10, 1999.

Comments for inclusion in the Rules Docket must be received on or before June 22, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 98-SW-44-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Shep Blackman, Aerospace Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5296, fax (817) 222-5961.

**SUPPLEMENTARY INFORMATION:** The Direction Generale De L'Aviation Civile (DGAC), which is the airworthiness authority for France, recently notified the FAA that an unsafe condition may exist on Eurocopter France Model AS-350B, B1, B2, B3, BA, and D helicopters, and Model AS 355E, F, F1, F2 and N helicopters. The DGAC advises that a one-time measurement of bearing rotational torque and repetitive inspections of the bearing for axial play, binding, or brinelling is necessary to prevent seizure of the bearing and loss of control of the helicopter.

Eurocopter France has issued Eurocopter AS 350 Service Bulletin (SB) No. 05.00.29, applicable to Model AS-350 helicopters, and SB No. 05.00.30, applicable to Model AS 355 helicopters, both dated February 8, 1999. These SB's specify a periodic check of the pitch change spider plate bearing to prevent any blocking of the bearing. The DGAC classified these SB's as mandatory and issued AD 1999-084-057(A), and AD 1999-085-076(A), both dated February 24, 1999, applicable to Model AS 355 and Model AS-350 helicopters, respectively, in order to assure the continued airworthiness of these helicopters in France.

These helicopter models are manufactured in France and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DGAC has

kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

The FAA estimates that 507 helicopters will be affected by this AD, that it will take approximately 1 work hour to accomplish the inspection, and 4 work hours to replace a bearing, if required, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$60 per helicopter. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$182,520 to inspect and replace one bearing in each helicopter in the fleet.

Since an unsafe condition has been identified that is likely to exist or develop on other Eurocopter France Model AS-350B, B1, B2, B3, BA, and D helicopters, and Model AS 355E, F, F1, F2 and N helicopters of the same type design registered in the United States, this AD is being issued to prevent seizure of the bearing, loss of tail rotor control, and subsequent loss of control of the helicopter. This AD requires, within 50 hours TIS, measuring the bearing rotational torque, and thereafter at intervals not to exceed 100 hours TIS, inspecting the bearing for axial play, binding, or brinelling. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability of the helicopter. Therefore, inspecting the bearing for the proper rotational torque within the next 50 hours time-in-service (TIS), and for any bearing roughness at intervals not to exceed 100 hours TIS is required, and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

#### **Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons