

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

[Docket No. 2003-CE-43-AD; Amendment 39-13328; AD 2003-20-10]

RIN 2120-AA64

**Airworthiness Directives; Raytheon Aircraft Company Beech Models 1900, 1900C, and 1900D Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

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

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) that applies to all Raytheon Aircraft Company (Raytheon) Beech Models 1900, 1900C, and 1900D airplanes. This AD requires you to make a correction to the elevator trim system maintenance procedures, incorporate a temporary revision to the applicable maintenance manual, and incorporate procedures that will enhance the existing elevator trim operational check every time you have maintenance done on the elevator trim system. This AD is the result of an analysis of the maintenance procedures of the elevator trim system. We are issuing this AD to detect and correct any maintenance-induced problems with the elevator trim system installation before problems occur during operation. Such a condition could lead to difficulties in controlling the airplane or a total loss of pitch control.

**DATES:** This AD becomes effective on October 15, 2003.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation as of October 15, 2003.

We must receive any comments on this AD by December 7, 2003.

**ADDRESSES:** Use one of the following to submit comments on this AD:

- *By mail:* FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-43-AD, 901 Locust, Room 506, Kansas City, Missouri 64106.
- *By fax:* (816) 329-3771.
- *By e-mail:* 9-ACE-7-Docket@faa.gov.

Comments sent electronically must contain "Docket No. 2003-CE-43-AD" in the subject line. If you send comments electronically as attached electronic files, the files must be formatted in Microsoft Word 97 for Windows or ASCII.

You may get the service information identified in this AD from Raytheon Aircraft Company, 9709 E. Central,

Wichita, Kansas 67201-0085; telephone: (800) 429-5372 or (316) 676-3140.

You may view the AD docket at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-43-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. Office hours are 8 a.m. to 4 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:**

Chris B. Morgan, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4154; facsimile: (316) 946-4107.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

*What Events Have Caused This AD?*

On August 26, 2003, a Raytheon Model Beech 1900D twin-turboprop airplane was involved in an accident in the Nantucket Sound off southeastern Massachusetts. The Raytheon Beech Model 1900D is designed to carry 19 passengers. According to initial reports, the airplane took off of Runway 24 at Barnstable Municipal Airport on Cape Cod. The pilot immediately declared an emergency and, while en route to make an emergency landing on Runway 33, crashed into the water.

While there is no determination of the cause of the accident and the investigation is ongoing, FAA's review of the current maintenance procedures of the elevator trim system reveals the following:

- The figures in the applicable maintenance manuals depict the elevator trim cable drum at 180 degrees from the installed position and show the open, keyed side of the drum instead of the flat side of the drum. Following these figures when installing the control cables on the forward control cable drum could reverse the action of the elevator manual trim system; and
- The existing procedure can be enhanced by visually confirming the trim wheel position and the trim tab position are consistent. Such a check would detect and correct any problems with the elevator trim system installation before problems occur during operation.

Although the figures (figure 9 for the 1900/1900C and figure 201 for the 1900D) in the existing maintenance manuals are incorrectly depicted, following the step-by-step written instructions in the existing procedure and referring to the orientation of the parts removed would result in the correct installation and action of the elevator trim system.

*What Are the Consequences if the Condition Is Not Corrected?*

An incorrectly installed elevator trim system component, if not detected and corrected, could result in difficulties in controlling the airplane or a total loss of pitch control.

*Is There Service Information That Applies to This Subject?*

Raytheon has issued Safety Communiqué No. 234, dated September 2003, to address this issue.

*What Are the Provisions of This Service Information?*

The safety communiqué includes information about the incorrect depictions of the figures in the applicable maintenance manuals and also references the following temporary maintenance manual revisions:

- Temporary Revision No. 27-5 to the Model 1900/1900C Airliner Maintenance Manual: Revised ELEVATOR TRIM OPERATIONAL CHECK; and
- Temporary Revision No. 27-9 to the Model 1900D Airliner Maintenance Manual: Added MANUAL ELEVATOR TRIM OPERATIONAL CHECK.

**FAA's Determination and Requirements of the AD**

*What Has FAA Decided?*

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design.

Since the unsafe condition described previously is likely to exist or develop on other Raytheon Beech Models 1900, 1900C, and 1900D airplanes of the same type design, this AD is being issued to detect and correct any maintenance-induced problems with the elevator trim system installation before problems occur during operation. Such a condition could lead to difficulties in controlling the airplane or a total loss of pitch control.

*What Does This AD Require?*

This AD requires you to:

- Make a correction to the elevator trim system maintenance procedures;
- Incorporate a temporary revision to the applicable maintenance manual; and
- Incorporate procedures that will enhance the existing elevator trim operational check every time you have maintenance done on the elevator trim system.

*How Does the Revision to 14 CFR Part 39 Affect This AD?*

On July 10, 2002, we published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

**Comments Invited**

*Will I Have the Opportunity To Comment Prior to the Issuance of the Rule?*

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under **ADDRESSES**. Include "AD Docket No. 2003-CE-43-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it. If a person contacts us through a nonwritten communication, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may

amend the AD in light of those comments.

**Regulatory Findings**

*Will This AD Impact Various Entities?*

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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.

*Will This AD Involve a Significant Rule or Regulatory Action?*

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include "AD Docket No. 2003-CE-43-AD" in your request.

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

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

**Adoption of the Amendment**

- Accordingly, under 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. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2003-20-10 Raytheon Aircraft Company:**  
Amendment 39-13328; Docket No. 2003-CE-43-AD.

**When Does This AD Become Effective?**

- (a) This AD becomes effective on October 15, 2003.

**Are Any Other ADs Affected by This Action?**

- (b) None.

**What Airplanes Are Affected by This AD?**

- (c) This AD affects Models Beech 1900, 1900C, and 1900D airplanes, all serial numbers, that are certificated in any category.

**What Is the Unsafe Condition Presented in This AD?**

- (d) This AD is the result of an analysis of the maintenance procedures of the elevator trim system. We are issuing this AD to detect and correct any maintenance-induced problems with the elevator trim system installation before problems occur during operation. Such a condition could lead to difficulties in controlling the airplane or a total loss of pitch control.

**What Must I Do To Address This Problem?**

- (e) To address this problem, you must accomplish the following:

Actions	Compliance	Procedures
<p>(1) Using pen and ink, mark the applicable figure in the maintenance manual as referenced below. The depiction in the referenced figures is incorrect for the elevator trim drum only and depicts the cable drum at 180 degrees from the installed position and shows the open, keyed side of the drum instead of the flat side of the drum. Insert corrected figure (Figure 1 of this AD) into the applicable maintenance manual and identify it accordingly:</p> <ul style="list-style-type: none"> <li>(i) Figure 9 of Chapter 27-10-00 of the Model 1900/1900C Airliner Maintenance Manual (114-590021-7B) Clearly note in pen that existing portion of Figure 9 is correct for the aileron trim drum only and insert corrected figure (Figure 1 of this AD) marked in pen as correct for the elevator trim drum only; or</li> </ul>	<p>Before the next time you have maintenance done on the elevator trim system.</p>	<p>As specified in Raytheon Safety Communiqué No. 234, dated September 2003.</p>

Actions	Compliance	Procedures
<p>(ii) Mark out Figure 201 of Chapter 27-30-04 of the Model 1900D Airliner Maintenance Manual (125-590000-15). Insert corrected figure (Figure 1 of this AD)</p> <p>(2) Incorporate the applicable temporary revision into the maintenance manuals as follows:</p> <p>(i) Temporary Revision No. 27-5 to the Model 1900/1900C Airliner Maintenance Manual: Revised ELEVATOR TRIM OPERATIONAL CHECK; or</p> <p>(ii) Temporary Revision No. 27-9 to the Model 1900D Airliner Maintenance Manual: Added MANUAL ELEVATOR TRIM OPERATIONAL CHECK.</p> <p>(3) Do the elevator trim operational check that is specified in the applicable maintenance manual and temporary revisions to the maintenance manual as referenced in paragraph (e)(2) of this AD</p>	<p>Before the next time you have maintenance done on the elevator trim system.</p> <p>Prior to further flight after each time you have maintenance done on the elevator trim system.</p>	<p>As specified in Raytheon Safety Communiqué No. 234, dated September 2003.</p> <p>As specified in Raytheon Safety Communiqué No. 234, dated September 2003; and Temporary Revision No. 27-5 to the Model 1900/1900C Airliner Maintenance Manual: Revised ELEVATOR TRIM OPERATIONAL CHECK; or Temporary Revision No. 27-9 to the Model 1900D Airliner Maintenance Manual: Added MANUAL ELEVATOR TRIM OPERATIONAL CHECK, both dated September 12, 2003, as applicable.</p>

BILLING CODE 4910-13-P

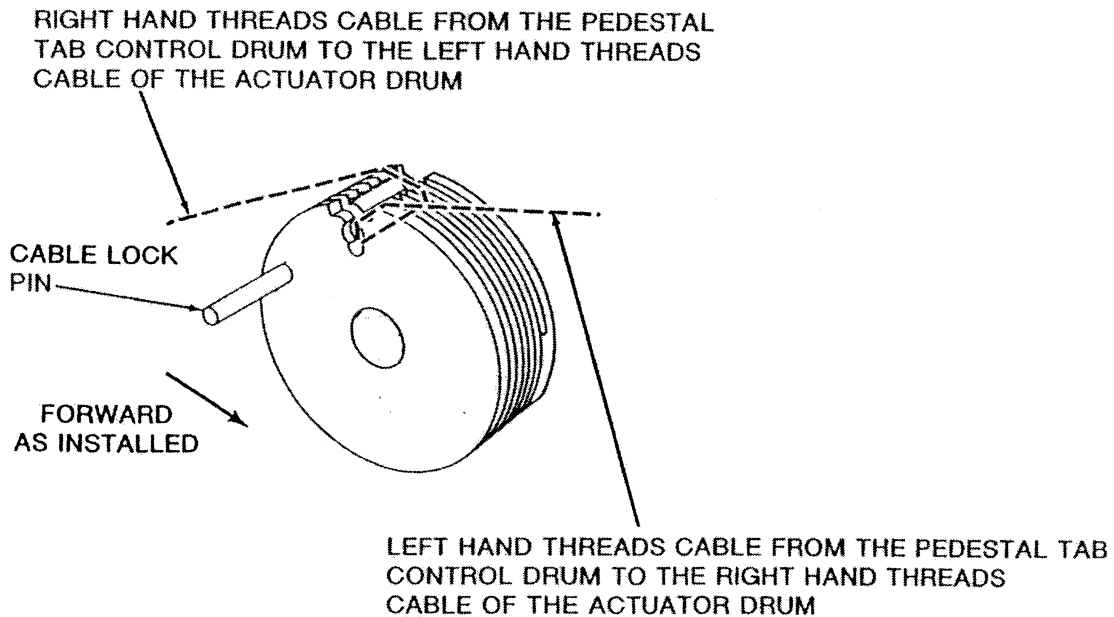


Figure 1

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**What About Alternative Methods of Compliance?**

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.13. Send your request to the Manager, Wichita Aircraft Certification Office (ACO), FAA. For information on any already approved alternative methods of compliance, contact Chris B. Morgan, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4154; facsimile: (316) 946-4107.

**Is There Material Incorporated by Reference?**

(g) You must do the actions required by this AD per Raytheon Safety Communiqué No. 234, dated September 2003; and either Raytheon Temporary Revision No. 27-5 to the Model 1900/1900C Airliner Maintenance Manual: Revised ELEVATOR TRIM OPERATIONAL CHECK, or Raytheon Temporary Revision No. 27-9 to the Model 1900D Airliner Maintenance Manual: Added MANUAL ELEVATOR TRIM OPERATIONAL CHECK, both dated September 12, 2003. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Raytheon Aircraft Company, 9709 E. Central, Wichita, Kansas 67201-0085; telephone: (800) 429-5372 or (316) 676-3140. You may review copies at FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Issued in Kansas City, Missouri, on October 2, 2003.

**Dorenda D. Baker,**

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

[FR Doc. 03-25591 Filed 10-9-03; 8:45 am]

BILLING CODE 4910-13-P

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

[Docket No. 2003-SW-08-AD; Amendment 39-13329; AD 2003-20-11]

RIN 2120-AA64

**Airworthiness Directives; Eurocopter Deutschland GmbH Model EC135 P1, P2, T1, and T2 Helicopters**

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

**ACTION:** Final rule.

**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD) for Eurocopter Deutschland GmbH (ECD) Model EC135 P1 and EC135 T1 helicopters. That AD currently requires

adding the AD or a statement to the Rotorcraft Flight Manual (RFM) informing the pilot to reduce power and land as soon as practicable if a thump-like sound followed by unusual vibration occurs during flight. That AD also requires visually inspecting the main rotor drive torque strut assembly (strut) for a crack or a break, recording the inspections in the historical or equivalent record, and re-marking and relocating the strut, as appropriate, and replacing any unairworthy strut with an airworthy strut. Also, that AD establishes life limits for certain struts and revises the life limit for other struts. This amendment retains the same requirements but adds the ECD Model EC135 P2 and EC135 T2 helicopters to the applicability and requires replacing certain life-limited struts with titanium struts. This amendment is prompted by the manufacture of a titanium strut that provides a permanent correction to the unsafe condition that led to limiting the life of other struts that have failed. The actions specified by this AD are intended to prevent failure of a strut and subsequent loss of control of the helicopter.

**DATES:** Effective November 14, 2003.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 14, 2003.

**ADDRESSES:** The service information referenced in this AD may be obtained from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (972) 641-3460, fax (972) 641-3527. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:**

Richard Monschke, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5116, fax (817) 222-5961.

**SUPPLEMENTARY INFORMATION:** A proposal to amend 14 CFR part 39 by superseding AD 2001-18-13, Amendment 39-12439 (66 FR 47878, September 14, 2001), for the specified model helicopters was published in the **Federal Register** on June 5, 2003 (68 FR 33663). The action proposed retaining the requirements to add the AD or a statement to the Rotorcraft Flight Manual (RFM) informing the pilot to reduce power and land as soon as practicable if a thump-like sound

followed by unusual vibration occurs during flight. Also, the action proposed retaining the requirements to visually inspect each strut for a crack or a break; to record the inspections in the historical or equivalent record; to remark and relocate the strut, as appropriate; to replace any unairworthy strut with an airworthy strut; and to establish or revise life limits for certain struts. In addition to the requirements in the current AD, that action proposed adding the ECD Model EC135 P2 and EC135 T2 helicopters to the applicability and replacing certain life-limited struts with titanium struts.

The Luftfahrt-Bundesamt (LBA), the airworthiness authority for the Federal Republic of Germany, advises that struts, (P/N) L633M1001 103 and L633M1001 105, should not be used beyond December 31, 2004. The LBA advises replacing those struts with torque struts, P/N L633M1001 104, after January 1, 2005.

ECD has issued Alert Service Bulletin EC135-63A-002, Revision 2, dated June 26, 2002 (ASB), which specifies inspecting for a crack, marking strut locations and serial numbers, and transferring the location side of the torque struts or replacing each strut, P/N L633M1001 103 or L633M10001 105, with a torque strut, P/N L633M1001 104, that is anodized and not coated with paint, which have no life limit. The LBA classified this ASB as mandatory and issued AD No. 2001-107/2, dated September 19, 2002, to ensure the continued airworthiness of these helicopters in the Federal Republic of Germany.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we have not included it in this AD action.

The FAA estimates that this AD will affect 50 helicopters of U.S. registry. The AD will take approximately ½ work hour for the flashlight and mirror inspection; 2.5 work hours to remark, relocate, and inspect with a magnifying glass; and 1 hour to replace both struts.