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## AIRWORTHINESS DIRECTIVE

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On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/B737/201 Amdt 3 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

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### Boeing 737 Series Aeroplanes

**AD/B737/201  
Amdt 4**

**Rudder Control System**

**16/2011**

**Applicability:** All Model 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -800, and -900 series aircraft.

**Requirement:** Action in accordance with the technical requirements of FAA AD 2007-03-07 Amdt 39-14918 Paragraph (e) through (j) as applicable.

Alternative Means of Compliance (AMOC).

FAA letter 130S-03-19 was previously approved as an alternative means of compliance with certain paragraphs of FAA AD 2002-20-07 R1. Compliance with FAA letter 130S-03-19 is also approved as an AMOC for the requirements of paragraphs (f) and (h) of FAA AD 2007-03-07.

**Compliance:** As specified in the Requirement document, with a revised effective date of 12 April 2007. For paragraph (f) of FAA AD 2007-03-07 (Requirements of AD 2002-20-07 R1), the compliance time is revised to “within 6 years after 26 December 2002”, the compliance time of the original issue of this Directive.

This Amendment becomes effective on 12 August 2011.

**Background:** The FAA has made determinations that the existing rudder control system design architecture is unsafe due to inherent failure modes, including single-jam modes and certain latent failures or jams, which, when combined with a second failure or jam, could cause an uncommanded rudder hardover event and consequent loss of control of the aircraft. Additionally, the current rudder operational procedure is not effective throughout the entire flight envelope. The actions specified by this Directive are intended to prevent the identified unsafe condition.

Amendment 1 was issued in response to a new FAA AD, which was prompted by a report of a fractured rod end of an input control rod of the main rudder power control unit (PCU) and a subsequent report of a fractured rod end of the input control rod of the standby rudder PCU. The additional actions required by this Directive for certain aircraft, are intended to prevent failure of one of the two input control rods of the main rudder PCU, which, under certain conditions, could result in reduced controllability of the aircraft; and to prevent failure of any combination of two input control rods of the main rudder PCU and/or standby rudder PCU, which could cause an uncommanded rudder hardover event and result in loss of control of the aircraft.

**Boeing 737 Series Aeroplanes**

AD/B737/201 Amdt 4 (continued)

Amendment 4 is issued to clarify the FAA approved AMOC.

Amendment 3 was issued to include reference to an FAA Approved AMOC.

Amendment 2 was issued to correct a minor typographical error in the Compliance paragraph only.

Amendment 1 of this Airworthiness Directive became effective on 12 April 2007.



Charles Lenarcic  
Delegate of the Civil Aviation Safety Authority

9 August 2011