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## AIRWORTHINESS DIRECTIVE

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For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (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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### Rolls Royce Turbine Engines - RB211 Series

**AD/RB211/34**

**High Pressure Compressor**

**1/2006**

**Applicability:** Rolls-Royce plc Engine Models 524B2-19, 524B-02, 524B3-02, 524C2-19, 524B4-02, 524B4-D-02, 524D4-19, 524D4-39, 524B-B-02, 524B2-B-19, 524D4-B-19, 524D4-B-39, 524C2-B-19, 524D4X-19, 524D4X-B-19, 524G2-19, 524G3-19, 524H-36, 524H2-19, 535E4-37, 535E4-B-37, 535E4-C-37, 535E4-B-75 and 535C-37 engines installed on Boeing 747, 757, 767, Lockheed L1011, Tristar and Tupolev 204 aeroplanes.

**Requirement:** Inspect the engine HP compressor interstage weld for evidence of cracks in accordance with the accomplishment instructions and subject to the acceptance criteria of Rolls-Royce Alert Service Bulletin RB211-72-AE359 initial issue or later EASA approved revision.

*Note: CAA UK G-2005-0028R1 EASA approval No. 2005-6350 dated 3 October 2005 refers.*

**Compliance:** Within 30 days after the effective date of this Airworthiness Directive, repetitively at every shop visit where the HP Compressor Stage 1-2 Rotor has been removed from the HP Stage 3 Disc.

This Airworthiness Directive becomes effective on 19 January 2006.

**Background:** Overhaul inspection of HP Compressor 1 and 2 rotors has identified cracks running in an axial direction in the region of the weld land between the stage 1 and 2 rotor discs. If cracking of the weld land were allowed to propagate for extended periods then it could potentially hazard rotor integrity.

This Airworthiness Directive instructs an enhanced shop visit NDT inspection of the HP compressor interstage 1-2 weld for the whole fleet, in order to preclude the risk of a potentially uncontained failure of the HP compressor.



James Coyne  
Delegate of the Civil Aviation Safety Authority

30 November 2005