



United Kingdom Civil Aviation Authority

AIRWORTHINESS DIRECTIVE

AD No: G-2005-0028 R1

Issue Date: 18 October 2005

This AD is issued by the UK CAA acting for and on behalf of the European Aviation Safety Agency as the Primary Aviation Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

Approved by the European Aviation Safety Agency under approval number 2005-6350 on 3 October 2005.

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.

No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

Type/Model Designation(s):

ROLLS-ROYCE PLC

RB211-524, RB211-535E4, RB211-535C

Type Certificate Data Sheet No: 1043, 1044, 1046, 1048, 1049

Revised AD: G-2005-0028

ATA 72 – ENGINE COMPRESSOR SECTION – HIGH PRESSURE COMPRESSOR – INSPECTION

Manufacturer(s): Rolls-Royce plc

Applicability: Models 524B2-I9, 524B-02, 524B3-02, 524C2-I9, 524B4-02, 524B4-D-02, 524D4-I9, 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.

Reason: 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.

This Revision has been raised to remove engine models no longer certified and to clarify the intent of the compliance time.

Effective Date: 30 September 2005

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

Reference Publications: Rolls-Royce Alert Service Bulletins may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone +44 (0) 1332 242424 Fax +44 (0) 1332 249936.

Remarks: Enquiries regarding this Airworthiness Directive may be directed to Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573641 Fax: +44 (0) 1293 573979 E-mail: christophe.denis@srg.caa.co.uk.