



**United Kingdom
Civil Aviation Authority**

**AIRWORTHINESS
DIRECTIVE**

AD No: G-2005-0002

Issue Date: 12 January 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 2005-313 on 6 January 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:

BAE SYSTEMS (OPERATIONS) LIMITED

Type/Model Designation(s):

BAE 146 AND AVRO 146-R

Type Certificate Data Sheet No: BA16

Superseded/ Revised ADs: 007-06-2003

ATA 53 - FUSELAGE SKIN IN NOSE AREA - INSPECTION

Manufacturer(s): British Aerospace Systems (Regional Aircraft) Ltd, BAe Systems (Operations) Ltd, British Aerospace (Commercial Aircraft) Ltd, British Aerospace (Operations) Ltd, British Aerospace Plc, British Aerospace Regional Aircraft Ltd, British Aerospace Regional Aircraft Ltd T/A Avro International Aerospace

Applicability: All Models BAe 146 and AVRO RJ series aeroplanes.

Reason: Inspection of the forward fuselage structure has revealed skin cracking adjacent to the butt joint forward of frame 19. The cracks emanate from chemi-etched pockets on the internal surface of the skin. The current Maintenance Review Board (MRB) inspection requirements are not adequate to detect cracks occurring in multiple adjacent bays. In the event of multiple cracks joining into a single crack, the structural integrity of the fuselage will be compromised and a sudden loss of cabin pressure will occur. Eddy current inspection is required to locate cracks that could combine together and cause a significant structural failure.

This AD supersedes CAA AD 007-06-2003 and mandates the use of improved non-destructive inspection techniques.

Effective Date: 31 January 2005

continued on next page

Compliance/Action: For BAe 146 aeroplanes, within 4,000 landings after the effective date of superseded CAA AD 007-06-03 (27 June 2003) or before the accumulation of 16,000 landings since new, whichever occurs later, perform eddy current inspection of the forward fuselage skin in accordance with BAE Systems (Operations) Service Bulletin ISB 53-167 Issue 1 or later EASA approved revision. Thereafter repeat the inspection required by BAE Systems (Operations) Service Bulletin ISB 53-167 Issue 1 at 8,000 landing intervals.

For Avro RJ aeroplanes, within 2,000 landings after the effective date of superseded CAA AD 007-06-03 (27 June 2003) or before the accumulation of 10,000 landings since new, whichever occurs later, perform an eddy current inspection of the forward fuselage skin in accordance with BAE Systems (Operations) Service Bulletin ISB 53-167 Issue 1 or later EASA approved revision. Thereafter repeat the inspection required by BAE Systems (Operations) Service Bulletin ISB 53-167 Issue 1 at 4,000 landing intervals.

Note: Credit may be taken for the initial inspection required by this AD if the affected aircraft has been inspected in accordance with CAA AD 007-06-03. All subsequent inspections must be performed in accordance with BAE Systems (Operations) Service Bulletin ISB 53-167 Issue 1 or later EASA approved revision.

Reference Publications: BAE Systems (Operations) Ltd Service Bulletin BAe 146/Avro RJ ISB 53-167 Revision 1, may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Ltd, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland. Telephone: +44 (0) 1292 675207 Facsimile: +44 (0) 1292 675704 E-mail: RApublications@baesystems.com

Remarks: Enquiries regarding this AD may be directed to Civil Aviation Authority, Safety Regulation Group, Certification and Approvals Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Phone: +44 (0) 1293 573315 Fax: +44 (0) 1293 573976 Email: department.certification@srg.caa.co.uk

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