



United Kingdom Civil Aviation Authority

AIRWORTHINESS DIRECTIVE

AD No: G-2005-0022

Issue Date: 17 August 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 2005-6169 on 15 August 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):

BAE SYSTEMS (OPERATIONS) LTD

JETSTREAM 4100

Type Certificate Data Sheet No: BA27

Superseded/ Revised ADs: 002-05-97

ATA 32 – LANDING GEAR – MAIN WHEEL – TIE BOLTS – INTRODUCTION OF REVISED MAINTENANCE INSTRUCTIONS, LIFE REQUIREMENTS AND MODIFIED WHEELS

Manufacturer(s): Jetstream Aircraft Ltd, British Aerospace Regional Aircraft Ltd, British Aerospace (Commercial Aircraft) Ltd, British Aerospace (Operations) Ltd.

Applicability: All Model Jetstream Series 4100 aeroplanes.

Reason: Following a series of failures to the 5/16" diameter wheel tie bolts which could result in wheel and/or tyre failure with consequential damage or impaired directional control Service Bulletin J41-32-058 Revision 1 was mandated by CAA AD 002-05-97. The service bulletin initially required an inspection of the tie bolts during each tyre change, subsequently changed at revision 1 to introduce a retirement life for wheel tie bolt sets after every fifth tyre change, or following failure of any individual wheel tie bolt in service.

Revision 2 of SB J41-32-058 covers revised Dunlop vendor service bulletin AHA1837-32-1157 at Revision 4 which changes the maintenance procedure for the main wheel tie bolts and, if carried out, removes the retirement life that was imposed on the bolts.

Improvements to the wheel design were made in 2000 by way of optional service bulletin J41-32-072. This later wheel variant incorporates tie bolts increased in diameter to 3/8" that do not require a retirement life. Its embodiment provides terminating action for the requirements of mandatory SB J41-32-058.

Effective Date: 30 September 2005

Compliance/Action:

- a) At the next main wheel tyre change after the effective date of this AD, carry out the accomplishment instructions detailed in paragraph 2 of BAE Systems Service Bulletin J41-32-058 Revision 1.

At every 5th main wheel tyre change the main wheel tie bolts must be discarded and replaced in accordance with paragraph 2 of BAE Systems Service Bulletin J41-32-058 Revision 1.

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For wheel bolts previously subject to AD 002-05-97, the five allowable tyre changes shall continue to be counted from the initial installation of the bolts when new.

OR

- b) From the effective date of this AD inspect the main wheel tie bolts at each tyre change in accordance with the instructions detailed in paragraph 2 of BAE Systems Service Bulletin J41-32-058 Revision 2. Wheel bolts maintained in accordance with this paragraph are not subsequently eligible for compliance in accordance with paragraph (a) of this AD.

BAE Systems Service Bulletin J41-32-072 Revision 1 or later EASA approved revision introduces a modified main wheel assembly incorporating larger diameter wheel tie bolts. Incorporation of this Service Bulletin/modification may be used as the terminating action for this AD.

Reference Publications: BAE Systems (Operations) Service Bulletins may be obtained from Project Management Group, Customer Information Department, BAE Systems (Operations) Limited, 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 Airworthiness Directive should be referred to Certification and Approvals Department, Civil Aviation Authority, Aircraft Certification Section, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Telephone: +44 (0) 1293 573313 Facsimile: +44 (0) 1293 573976 E-mail: department.certification@srg.caa.co.uk