


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2015-0061</p> <p>Date: 20 April 2015</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>	
<p>This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EU 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<p>Design Approval Holder's Name: BAE SYSTEMS (Operations) Ltd</p>	<p>Type/Model designation(s): Jetstream Series 3100 and 3200 aeroplanes</p>	
<p>TCDS Number:</p>	<p>EASA.A.191</p>	
<p>Foreign AD:</p>	<p>Not applicable</p>	
<p>Supersedure:</p>	<p>None</p>	
<p>ATA 32</p>	<p>Landing Gear – Main Landing Gear Trunnion Cap Tension Bolts – Inspection</p>	
<p>Manufacturer(s):</p>	<p>British Aerospace plc, British Aerospace (Commercial Aircraft) Ltd, British Aerospace Regional Aircraft Ltd, Jetstream Aircraft Ltd and British Aerospace (Operations) Ltd.</p>	
<p>Applicability:</p>	<p>Jetstream 3100 and 3200 aeroplanes, all models, all serial numbers.</p>	
<p>Reason:</p>	<p>The review of the BAE production drawing for main landing gear (MLG) fitting installation identified a risk of omitting installation of a countersunk washer under the head of the MLG trunnion cap tension bolts, potentially causing fatigue in the bolt shank under the head of such tension bolt(s).</p> <p>This condition, if not detected and corrected, could lead to failure of the bolt(s), thereby compromising the structural integrity of the other MLG tension bolts holding the MLG in place, possibly resulting in collapse of the MLG on take-off or landing with consequent damage to the aeroplane and injury to occupants.</p> <p>Although so far, no in-service bolt head failures have been reported since entry in to service of the type design in 1986, to address this potential unsafe condition, BAE Systems (Operations) Ltd issued Service Bulletin (SB) 57-JA120141 to provide inspection instructions.</p> <p>For the reasons described above, this AD requires inspection and, depending on findings, replacement of the MLG trunnion cap tension bolts.</p>	
<p>Effective Date:</p>	<p>04 May 2015</p>	

Required Action(s)
and Compliance
Time(s):

Required as indicated, unless accomplished previously:

Within 250 flight cycles (FC) after the effective date of this AD, accomplish the actions required by paragraph (1) or (2) of this AD, depending on aeroplane configuration, except as specified in paragraph (3) of this AD, in accordance with the instructions of the BAE Systems (Operations) Ltd SB 57-JA120141.

(1) For Pre-Mod JM5218 aeroplanes:

- (1.1) Accomplish a Magnetic Particle Inspection (MPI) of each MLG trunnion cap tension bolt.
- (1.2) If, during any MPI as required by paragraph (1.1) of this AD, no crack is found, before next flight, re-install crack-free bolts, or install replacement bolts, having the same Part Number (P/N), and install a countersunk washer under each bolt, having a P/N as identified in Table 1 of this AD, as applicable.
- (1.3) If, during any inspection as required by paragraph (1.1) of this AD, a cracked bolt is found, before next flight, replace the bolt with a serviceable one, including installation of a washer, as identified in Table 1 of this AD, as applicable.

Table 1 – Pre-Mod JM5218 Replacement Parts

Bolt P/N	Washer P/N
MS21250H06040	PKS1000-6-2-S (washer)
MS21250H07040	PKS1000-7-2-S (washer)

(2) For Post-Mod JM5218 aeroplanes, visually inspect the bolts to determine which type of bolt is installed.

If installed bolts, determined as required by paragraph (2) of this AD, are P/N MS21134H07045 or P/N MS21134H07059, before next flight (except as specified in paragraph (4) of this AD), replace each bolt with a bolt having a P/N identified as 'new' in Table 2 of this AD, as applicable, and install a washer having P/N PKS1000-7-2-S under each bolt.

- (3) If no 'new' replacement bolt is available to comply with paragraph (2) of this AD, the 'old' bolt may be reinstalled without a countersunk washer, provided that, within 500 FC after reinstallation, and, thereafter, at intervals not to exceed 500 FC, each affected bolt is inspected by MPI, in accordance with the instructions of the BAE Systems (Operations) Ltd SB 57-JA120141.
- (4) Within 2 000 FC after reinstallation of a bolt as allowed by paragraph (3) of this AD, or before next flight, in case a crack is detected during any MPI as required by paragraph (3) of this AD, replace the bolt with a bolt having a P/N identified as 'new' in Table 2 of this AD and install a countersunk washer having P/N PKS1000-7-2-S under that bolt, in accordance with the instructions of the BAE Systems (Operations) Ltd SB 57-JA120141.

Table 2 – Post-Mod JM5218 Replacement Parts

Bolt P/N 'Old'	Bolt P/N 'New'
MS21134H07045	MS21134H07046, or MS21250H07046
MS21134H07059	MS21134H07060, or MS21250H07060

	<p>(5) If installed bolts, determined as required by paragraph (2) of this AD, are P/N MS21250H07046 or P/N MS21250H07060 and <u>no countersunk washer is installed</u>, before next flight, accomplish an MPI of each MLG trunnion cap tension bolt, in accordance with the instructions of the BAE Systems (Operations) Ltd SB 57-JA120141.</p> <p>(6) If, during the MPI as required by paragraph (5) of this AD, no crack is detected, before next flight, reinstall crack-free bolts, or install replacement bolts, having a P/N identified as 'new' in Table 3 of this AD, and install a countersunk washer P/N PKS1000-7-2-S under each bolt, in accordance with the instructions of the BAE Systems (Operations) Ltd SB 57-JA120141.</p> <p>(7) If, during the MPI as required by paragraph (5) of this AD, any crack is detected, before next flight, replace each cracked bolt with a serviceable one, having a P/N identified as 'new' Table 3 of this AD and install a countersunk washer P/N PKS1000-7-2-S under each bolt, in accordance with the instructions of the BAE Systems (Operations) Ltd SB 57-JA120141.</p> <p style="text-align: center;">Table 3 – Replacement Parts</p> <table border="1" data-bbox="568 801 1386 992"> <thead> <tr> <th data-bbox="568 801 855 864">Bolt P/N 'Old'</th> <th data-bbox="855 801 1386 864">Bolt P/N 'New'</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 864 855 927">MS21250H07046</td> <td data-bbox="855 864 1386 927">MS21250H07046, or MS21134H07046</td> </tr> <tr> <td data-bbox="568 927 855 992">MS21250H07060</td> <td data-bbox="855 927 1386 992">MS21250H07060, or MS21134H07060</td> </tr> </tbody> </table>	Bolt P/N 'Old'	Bolt P/N 'New'	MS21250H07046	MS21250H07046, or MS21134H07046	MS21250H07060	MS21250H07060, or MS21134H07060
Bolt P/N 'Old'	Bolt P/N 'New'						
MS21250H07046	MS21250H07046, or MS21134H07046						
MS21250H07060	MS21250H07060, or MS21134H07060						
Ref. Publications:	<p>BAE Systems (Operations) Ltd SB 57-JA120141 original issue dated 31 July 2012, or Revision 1 dated 08 April 2014.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>						
Remarks:	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 19 March 2015 as PAD 15-025 for consultation until 16 April 2015. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: BAE Systems (Operations) Ltd, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; Telephone +44 1292 675207, Facsimile +44 1292 675704; E-mail: Rpublications@baesystems.com. 						