


<b>EASA</b>	<b>NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE</b>
	<p><b>PAD No.: 13-108</b></p> <p><b>Date: 29 July 2013</b></p> <p>Note: This Proposed Airworthiness Directive (PAD) 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>In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.</p>	
<p><b>Design Approval Holder's Name:</b></p> <p>BAE SYSTEMS (OPERATIONS) LTD</p>	<p><b>Type/Model designation(s):</b></p> <p>HP 137 Jetstream MK 1, Jetstream Series 200 and 3100 aeroplanes</p>
TCDS Number:	UK BA4 and EASA.A.191
Foreign AD:	Not applicable
Supersedure:	This AD supersedes UK CAA AD G-003-01-86.
<b>ATA 32</b>	<b>Landing Gear – Main Landing Gear – Inspection / Replacement</b>
Manufacturer(s):	British Aerospace PLC, British Aerospace (Commercial Aircraft) Ltd, British Aerospace Regional Aircraft Ltd, Jetstream Aircraft Ltd and British Aerospace (Operations) Ltd.
Applicability:	HP 137 Jetstream MK 1, Jetstream Series 200 and 3100 aeroplanes all models, all serial numbers.
Reason:	<p>Prompted by occurrences of the main landing gear (MLG) yoke pintle housing cracking, the United Kingdom Civil Aviation Authority (UK CAA) issued AD G-003-01-86 to require repetitive inspections to identify any crack in the yoke pintle housing on MLG fitted to Jetstream 3100 aeroplanes in accordance with BAE Systems (Operations) Ltd Service Bulletin (SB) 32-A-JA851226, and depending on findings, corrective action. After that AD was issued an occurrence of Jetstream 3100 MLG failure was reported after landing. The subsequent investigation revealed stress corrosion cracking of the MLG yoke pintle housing as a root cause of the MLG failure. Furthermore, the investigation report recommended a review of the effectiveness of UK CAA AD G-003-01-86 in identifying cracks in the yoke pintle housing on MLG fitted to Jetstream 3100 aeroplanes.</p> <p>Degradation of the surface protection by abrasion can occur when the forward face of the yoke pintle rotates against the pintle bearing, which introduces corrosion pits and, consequently, stress corrosion cracking.</p> <p>This condition, if not detected and corrected, could lead to structural failure of the MLG, possibly resulting in loss of control of the aeroplane during take-off or landing runs.</p>

	<p>To provide protection of the affected area of the MLG assembly spigot housing, BAE Systems (Operations) Ltd issued SB 32-JM7862 to provide instructions for installation of a protective washer, fitted at the forward spigot on both, left hand (LH) and right hand (RH), MLG. Consequently, BAE Systems (Operations) Ltd issued SB 32-A-JA851226 at Revision 5 to provide additional accomplishment instructions for Non-destructive testing inspection (NDT) of MLG equipped with the protective washer installed in accordance with BAE Systems (Operations) Ltd SB 32-JM7862 and to introduce reference to MLG manufacturer APPH Ltd SB 32-19 at Revision 4, providing instructions for re-protection of the yoke pintle.</p> <p>For the reasons described above, this AD retains the requirements of AD G-003-01-86, which is superseded, and requires implementation of revised inspection requirements, and depending on finding, corrective action. This AD introduces an optional modification, which constitutes terminating action for the inspections required by this AD.</p>						
Effective Date:	[TBD: 14 days after final AD issue date]						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) <b>For aeroplanes that, before the effective date of this AD, have never been inspected in accordance with the instructions of paragraph 2.B. Part A of BAE Systems (Operations) Ltd SB 32-A-JA851226:</b></p> <p>Within the compliance time defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 1 200 MLG flight cycles (FC) or 12 months, whichever occurs first, accomplish an NDT inspection of each MLG assembly cylinder attachment spigot housing in accordance with accomplishment instructions of paragraph 2.B. Part A of BAE Systems (Operations) Ltd SB 32-A-JA851226 at Revision 5.</p> <p style="text-align: center;">Table 1 Inspection threshold</p> <table border="1"> <thead> <tr> <th colspan="2">Compliance time (whichever occurs first A or B)</th></tr> </thead> <tbody> <tr> <td>A</td><td>Within 300 MLG FC or 3 month after the effective date of this AD, whichever occurs first</td></tr> <tr> <td>B</td><td>At the first overhaul of the MLG after the effective date of this AD</td></tr> </tbody> </table> <p>(2) <b>For aeroplanes that, before the effective date of this AD, have already been inspected in accordance with the instructions of paragraph 2.B. Part A of BAE Systems (Operations) Ltd SB 32-A-JA851226 at any Revision:</b></p> <p>Within 1 200 MLG FC or 12 months, whichever occurs first, after the last inspection and thereafter at intervals not to exceed 1 200 MLG FC or 12 months, whichever occurs first, accomplish an NDT inspection of each MLG assembly cylinder attachment spigot housing in accordance with the accomplishment instructions of paragraph 2.B. Part A of BAE Systems (Operations) Ltd SB 32-A-JA851226 at Revision 5.</p> <p>(3) <b>For aeroplanes that have sustained a heavy or abnormal landing:</b></p> <p>Within 300 MLG FC or 3 months, whichever occurs first after the event, accomplish an one-time NDT inspection of each MLG assembly cylinder attachment spigot housing in accordance with accomplishment instructions of paragraph 2.B. Part A of BAE Systems (Operations) Ltd SB 32-A-JA851226 at Revision 5.</p> <p>(4) If, during any inspection as required by paragraph (1) or (2) or (3) of this AD, any crack is detected, before next flight, accomplish the applicable corrective actions in accordance with BAE Systems (Operations) Ltd SB</p>	Compliance time (whichever occurs first A or B)		A	Within 300 MLG FC or 3 month after the effective date of this AD, whichever occurs first	B	At the first overhaul of the MLG after the effective date of this AD
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	<p>32-A-JA851226 Revision 5.</p> <p>(5) Within 300 MLG FC or 3 months, whichever occurs first, after accomplishment of each NDT inspection as required by paragraph (1) or (2) of this AD, as applicable, and thereafter at intervals not to exceed 300 MLG FC or 3 months, whichever occurs first, accomplish a visual inspection of each MLG in accordance with accomplishment instructions of paragraph 2.B. Part B of BAE Systems (Operations) Ltd SB 32-A-JA851226 at Revision 5.</p> <p>(6) If, during any visual inspection, as required by paragraph (5) of this AD, any discrepancy is detected, before next flight, accomplish the applicable corrective actions in accordance with BAE Systems (Operations) Ltd SB 32-A-JA851226 Revision 5.</p> <p>(7) <b>Aeroplanes with MLG incorporating a microswitch hole:</b> Within 10 600 MLG FC since new, and thereafter at intervals not to exceed 1 200 MLG FC, accomplish a NDT inspection of each MLG microswitch hole in accordance with paragraph 2.B. Part C of BAE Systems (Operations) Ltd SB 32-A-JA851226 at Revision 5.</p> <p>(8) If, during any NDT inspection as required by paragraph (7) of this AD, any crack is detected, before next flight, accomplish the applicable corrective actions in accordance with BAE Systems (Operations) Ltd SB 32-A-JA851226 Revision 5.</p> <p>(9) Accomplishment of corrective actions as required by paragraph (4) or (6) or (8) of this this AD do not constitute terminating action for the inspections required by this AD.</p> <p>(10) Modification of each MLG cylinder in accordance with BAE Systems (Operations) Ltd SB 32-JA880340 constitutes terminating action for the inspections required by this AD for that MLG.</p>
Ref. Publications:	<p>BAE Systems (Operations) Ltd SB 32-A-JA851226 Revision 5, dated 30 April 2013,</p> <p>BAE Systems (Operations) Ltd SB 32-JA880340, Original issue dated 6 January 1989</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks:	<ol style="list-style-type: none"> <li>1. This Proposed AD will be closed for consultation on 26 August 2013.</li> <li>2. Enquiries regarding this PAD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>3. For any question concerning the technical content of the requirements in this PAD, 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: <a href="mailto:RApublications@baesystems.com">RApublications@baesystems.com</a>.</li> </ol>