

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2015-0180</b></p> <p><b>Date: 28 August 2015</b></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><b>Design Approval Holder's Name:</b> BAE SYSTEMS (Operations) Ltd</p>	<p><b>Type/Model designation(s):</b> BAe 146 and AVRO 146-RJ aeroplanes</p>	
<p>TCDS Number: EASA.A.182</p>		
<p>Foreign AD: Not applicable</p>		
<p>Supersedure: This AD supersedes EASA AD 2011-0099 dated 26 May 2011.</p>		
<b>ATA 21</b>	<b>Air Conditioning – Fuselage Skin Discharge Valves – Inspection / Repair</b>	
<p>Manufacturer(s):</p>	<p>BAE Systems (Operations) Ltd, British Aerospace plc, British Aerospace (Commercial Aircraft) Ltd, British Aerospace (Operations) Ltd, British Aerospace Regional Aircraft Ltd, British Aerospace Regional Aircraft trading as Avro International Aerospace.</p>	
<p>Applicability:</p>	<p>BAe 146 and AVRO 146-RJ aeroplanes, all models, all serial numbers.</p>	
<p>Reason:</p>	<p>An operator reported finding cracking and surface anomalies (bulges and/or dents) of the fuselage skin at the water trap/air drier unit of the forward discharge valve, located between fuselage frame (FR) 22 and FR23 and between stringers 22 and 23. Further investigation established that these surface anomalies were due to corrosion beneath the water trap/air drier unit that has resulted in cracking of the fuselage skin</p> <p>This condition, if not detected and corrected, could lead to failure of the fuselage skin, possibly resulting in loss of cabin pressure and injury to occupants.</p> <p>To address this potential unsafe condition, EASA issued AD 2011-0099 to require repetitive detailed visual inspections (DVI) of the fuselage skin adjacent to the front and rear discharge valves to check for bulging, surface anomalies and cracking, and, depending on findings, accomplishment of applicable corrective action(s), and the application of additional sealant in the affected area.</p> <p>Since that AD was issued, it was found that aeroplanes that have incorporated auto-pressurisation modification No. HCM50259A during production, which were excluded from the Applicability, were also affected by this condition.</p>	

	<p>In addition, and in order to simplify instructions for applicability, BAE Systems (Operations) Limited issued Revision 4 of Inspection Service Bulletin (ISB) No. 21-162, introducing a one-time inspection to identify if water trap/air driers are installed.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2011-0099, which is superseded, expands the Applicability and requires the additional one-time inspection as specified in the latest ISB revision.</p>						
Effective Date:	11 September 2015						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 12 months after the effective date of this AD inspect the aeroplane to determine, whether water trap/air driers are installed, in accordance with the instructions of paragraph 2.C. of BAE Systems (Operations) Ltd. ISB 21-162 Revision 4.</p> <p>Accomplishment of an inspection to determine, whether water trap/air driers are installed on an aeroplane, before the effective date of this AD in accordance with the instructions of BAE Systems (Operations) Ltd. ISB 21-162 at Revision 3 or earlier, is acceptable to comply with the initial requirements of paragraph (1) of this AD for that aeroplane. If there are no water trap/air driers installed on an aircraft then no further inspections are required for this AD.</p> <p>(2) For all aeroplanes that have water trap/air driers installed, determined as required by paragraph (1) of this AD, within 12 months after the effective date of this AD, and, thereafter, at intervals not exceeding 24 months, accomplish a DVI of the external fuselage skin adjacent to the discharge valve outlets (one frame bay fore and aft, one stringer above and below) in accordance with the instructions of paragraph 2.C. of BAE Systems (Operations) Ltd. ISB 21-162 Revision 4.</p> <p>(3) If, during a DVI as required by paragraph (2) of this AD, any damage is found, before next flight, accomplish the applicable corrective action as defined in Table 1 of this AD.</p> <p style="text-align: center;">Table 1</p> <table border="1" data-bbox="568 1308 1442 1644"> <thead> <tr> <th data-bbox="568 1308 948 1357">Damage found:</th> <th data-bbox="948 1308 1442 1357">Corrective action</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 1357 948 1503">Within the criteria as specified in Structural Repair Manual (SRM) 53-00-00</td> <td data-bbox="948 1357 1442 1503">Repair in accordance with the instructions of paragraph 2.G. of BAE Systems (Operations) Ltd. ISB 21-162 Revision 4.</td> </tr> <tr> <td data-bbox="568 1503 948 1644">Exceeding the criteria as specified in SRM 53-00-00</td> <td data-bbox="948 1503 1442 1644">Contact BAE Systems (Operations) Ltd. for approved repair instructions and accomplish those instructions accordingly.</td> </tr> </tbody> </table> <p>(4) At the next maintenance opportunity, or within 24 months, whichever occurs first after the effective date of this AD, unless a repair has already been accomplished as required by paragraph (3) of this AD, apply additional sealant in accordance with the instructions of paragraph 2.C.(3) of BAE Systems (Operations) Ltd. ISB 21-162 Revision 4. Application of additional sealant on an aeroplane does not constitute terminating action for the repetitive DVI as required by paragraph (2) of this AD for that aeroplane.</p> <p>Application of additional sealant on an aeroplane, before the effective date of this AD in accordance with the instructions of BAE Systems (Operations) Ltd. ISB 21-162 at Revision 3 or earlier, is acceptable to comply with the initial requirements of paragraph (4) of this AD for that aeroplane.</p>	Damage found:	Corrective action	Within the criteria as specified in Structural Repair Manual (SRM) 53-00-00	Repair in accordance with the instructions of paragraph 2.G. of BAE Systems (Operations) Ltd. ISB 21-162 Revision 4.	Exceeding the criteria as specified in SRM 53-00-00	Contact BAE Systems (Operations) Ltd. for approved repair instructions and accomplish those instructions accordingly.
Damage found:	Corrective action						
Within the criteria as specified in Structural Repair Manual (SRM) 53-00-00	Repair in accordance with the instructions of paragraph 2.G. of BAE Systems (Operations) Ltd. ISB 21-162 Revision 4.						
Exceeding the criteria as specified in SRM 53-00-00	Contact BAE Systems (Operations) Ltd. for approved repair instructions and accomplish those instructions accordingly.						

	<p>(5) Accomplishment of a repair on the FWD and/or AFT position as required by paragraph (3) of this AD constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD for that FWD and/or AFT position.</p> <p>(6) Accomplishment of a DVI on an aeroplane, before the effective date of this AD in accordance with the instructions of BAE Systems (Operations) Ltd. ISB 21-162 at Revision 3 or earlier, is acceptable to comply with the initial requirements of paragraph (2) of this AD for that aeroplane.</p> <p>(7) For an aeroplane that, determined as required by paragraph (1) of this AD, does not have water trap/air driers installed: In case water trap/air driers are installed in service after the effective date of this AD, within 12 months after that installation (modification), and thereafter, as applicable, accomplish the actions required by this AD on that aeroplane. For that aeroplane, where this AD refers to 'the effective date of this AD', instead the date of modification is the point of reference.</p>
Ref. Publications:	<p>BAE Systems (Operations) Limited Inspection Service Bulletin No. 21-162 Revision 4 dated 28 January 2015.</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"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was posted on 08 July 2015 as PAD 15-092 for consultation until 04 August 2015. The Comment Response Document can be found at <a href="http://ad.easa.europa.eu">http://ad.easa.europa.eu</a>.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>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: <a href="mailto:Rpublications@baesystems.com">Rpublications@baesystems.com</a>.</li> </ol>