


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2014-0047 [Correction: 26 February 2015]</p> <p>Date: 04 March 2014</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 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): BAe 146 and AVRO 146-RJ aeroplanes</p>	
<p>TCDS Number:</p>	<p>EASA.A.182</p>	
<p>Foreign AD:</p>	<p>Not applicable</p>	
<p>Supersedure:</p>	<p>This AD supersedes EASA AD 2009-0014 dated 21 January 2009.</p>	
<p>ATA 57</p>	<p>Wings – Fixed Wing Leading Edge and Front Spar Structure – Inspection / Repair</p>	
<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>Corrosion of the wing fixed leading edge structure was detected on a BAe 146 aeroplane during removal of wing removable edge for a repair. The review of available scheduled tasks intended to detect environmental and fatigue deteriorations of the wing revealed that they may not have been sufficient to identify corrosion or fatigue damage in the affected structural area.</p> <p>This condition, if not detected and corrected, could lead to degradation of the structural integrity of the wing.</p> <p>To address this potential unsafe condition, EASA issued AD 2009-0014 to require repetitive inspections of fixed wing leading edge and front spar structure in accordance with BAE Systems (Operations) Ltd Inspection Service Bulletin (ISB) ISB.57-072 which incorporated two possible inspection procedures, either method 1, a combination of a detailed visual inspection (DVI) and a visual inspection (VI) after removal of the outer fixed leading edge only, or method 2, a DVI only, after removal of the inner, centre and outer fixed leading edges.</p> <p>Since that AD was issued, BAE Systems (Operations) Ltd issued ISB. 57-072 Revision 1 to correct a material reference number, Revision 2, which removed method 1 as an available inspection procedure to detect fatigue and environmental damage of the wing structure and Revision 3 to delete the requirement to install weights if the engines were removed when the leading</p>	

	<p>edges were removed.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2009-0014, which is superseded, but requires accomplishment of the inspections in accordance with updated inspection procedures, i.e. method 2 only.</p> <p>This AD is re-published to correct a typographical error in Table 1, restoring a compliance time as previously required by EASA AD 2009-0014.</p>								
Effective Date:	18 March 2014								
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within the threshold as defined in Table 1 of this AD, as applicable, except as specified in paragraph (2) or (3) of this AD, inspect the wing fixed leading edge and front spar structure in accordance with the instructions of paragraph 2.C of BAE Systems (Operations) Ltd ISB.57-072 Revision 3.</p> <p style="text-align: center;">Table 1 Inspection Threshold</p> <table border="1" data-bbox="539 745 1431 1335"> <thead> <tr> <th data-bbox="539 745 922 887">Aeroplane age since new, accumulated on 04 February 2009 [the effective date of EASA AD 2009-0014]</th> <th data-bbox="922 745 1431 887">Initial Inspection Compliance Time</th> </tr> </thead> <tbody> <tr> <td data-bbox="539 887 922 1055">Less than 9 years</td> <td data-bbox="922 887 1431 1055">Within 18 months after 04 February 2009 [the effective date of EASA AD 2009-0014] or before exceeding 9 years since new, whichever occurs later</td> </tr> <tr> <td data-bbox="539 1055 922 1227">Equal to or more than 9 years but less than 15 years</td> <td data-bbox="922 1055 1431 1227">Within 18 months after 04 February 2009 [the effective date of EASA AD 2009-0014] or before exceeding 16 years since new, whichever occurs first</td> </tr> <tr> <td data-bbox="539 1227 922 1335">Equal to or more than 15 years</td> <td data-bbox="922 1227 1431 1335">Within 12 months after 04 February 2009 [the effective date of EASA AD 2009-0014]</td> </tr> </tbody> </table> <p>Note 1: See paragraph (6) for acceptable alternative methods of compliance for inspections and repairs accomplished before the effective date of this AD.</p> <p>(2) For a fleet with 2 or more aeroplanes, which on 04 February 2009 [the effective date of EASA AD 2009-0014], accumulated equal to or more than 14 but less than 15 years since new, within 24 months after 04 February 2009 [the effective date of EASA AD 2009-0014], inspect the wing fixed leading edge and front spar structure in accordance with the instructions of paragraph 2.C of BAE Systems (Operations) Ltd ISB.57-072 at Revision 3, provided that at least 50 % of the operator's fleet is inspected within 12 months after 04 February 2009 [the effective date of EASA AD 2009-0014], and no corrosion is detected.</p> <p>(3) For a fleet with 4 or more aeroplanes, which on 04 February 2009 [the effective date of EASA AD 2009-0014], accumulated equal to or more than 15 years since new, within 24 months after 04 February 2009 [the effective date of EASA AD 2009-0014], inspect the wing fixed leading edge and front spar structure in accordance with the instructions of paragraph 2.C of BAE Systems (Operations) Ltd ISB.57-072 at Revision 3, provided that at least 50 % of the operator's fleet, including at least 50 % of the oldest quartile of the fleet is inspected within 12 months after 04 February 2009 [the effective date of EASA AD 2009-0014], and no corrosion is detected.</p> <p>Note 2: The oldest quartile is the oldest 25% of the operator's fleet accumulated</p>	Aeroplane age since new, accumulated on 04 February 2009 [the effective date of EASA AD 2009-0014]	Initial Inspection Compliance Time	Less than 9 years	Within 18 months after 04 February 2009 [the effective date of EASA AD 2009-0014] or before exceeding 9 years since new, whichever occurs later	Equal to or more than 9 years but less than 15 years	Within 18 months after 04 February 2009 [the effective date of EASA AD 2009-0014] or before exceeding 16 years since new, whichever occurs first	Equal to or more than 15 years	Within 12 months after 04 February 2009 [the effective date of EASA AD 2009-0014]
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	<p>over 15 years in service since new.</p> <p>(4) Thereafter, at intervals not to exceed the values as defined in paragraph 1.D.2 of BAE Systems (Operations) Ltd ISB.57-072 at Revision 3, depending on applied enhanced corrosion protection scheme, inspect the wing fixed leading edge and front spar structure in accordance with the instructions of paragraph 2.C of BAE Systems (Operations) Ltd ISB.57-072 at Revision 3.</p> <p>(5) If, during any inspection as required by paragraph (1) or (2) or (3) or (4) of this AD, as applicable, any structural defect is detected as defined in BAE Systems (Operations) Ltd ISB.57-072 at Revision 3, before next flight, accomplish the repair in accordance with approved BAE Systems (Operations) Ltd repair instruction.</p> <p>(6) Inspections and repairs accomplished before the effective date of this AD in accordance with the instructions of BAE Systems (Operations) Ltd ISB.57-072 at Initial Issue, or Revision 1, or Revision 2 are acceptable to comply with paragraph (1) or (2) or (3) or (4) or (5) of this AD. After the effective date of this AD, the instructions of BAE Systems (Operations) Ltd ISB.57-072 at Revision 3 must be used.</p> <p>(7) Accomplishment of any repair, as required by paragraph (5) of this AD, does not constitute terminating action for inspections required by this AD.</p> <p>(8) Accomplishment of inspections and, depending on findings, corrective actions as required by this AD, provide an equivalent level of safety as, and therefore constitute terminating action for, the maintenance tasks defined in Table 2 of this AD.</p> <p style="text-align: center;">Table 2</p> <table border="1" data-bbox="539 1025 1319 1391"> <thead> <tr> <th data-bbox="539 1025 959 1106">BAE Systems Continuing Airworthiness Document</th> <th data-bbox="959 1025 1319 1106">Task Designation</th> </tr> </thead> <tbody> <tr> <td data-bbox="539 1106 959 1232" rowspan="3">Maintenance Review Board Report Supplemental Structural Inspection Tasks</td> <td data-bbox="959 1106 1319 1144">57-20-101</td> </tr> <tr> <td data-bbox="959 1144 1319 1182">57-20-102</td> </tr> <tr> <td data-bbox="959 1182 1319 1232">57-40-105</td> </tr> <tr> <td data-bbox="539 1232 959 1312">Corrosion Prevention and Control Programme</td> <td data-bbox="959 1232 1319 1312">C57-520-03-00</td> </tr> <tr> <td data-bbox="539 1312 959 1391">Supplemental Structural Inspection Document</td> <td data-bbox="959 1312 1319 1391">S57-40-105</td> </tr> </tbody> </table>	BAE Systems Continuing Airworthiness Document	Task Designation	Maintenance Review Board Report Supplemental Structural Inspection Tasks	57-20-101	57-20-102	57-40-105	Corrosion Prevention and Control Programme	C57-520-03-00	Supplemental Structural Inspection Document	S57-40-105
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Ref. Publications:	<p>BAE Systems (Operations) Ltd ISB.57-072 Initial Issue dated 22 February 2008, or Revision 1 dated 25 September 2008, or Revision 2 dated 29 April 2010, or Revision 3 dated 31 August 2010.</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 09 January 2014 as PAD 14-005 for consultation until 06 February 2014. The Comment Response Document can be found at http://ad.easa.europa.eu. 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; 										

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