



Airworthiness Directive

AD No.: 2016-0225

Issued: 09 November 2016

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (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 [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

BAE SYSTEMS (OPERATIONS) Ltd

Type/Model designation(s):

BAe 146 and AVRO 146-RJ aeroplanes

Effective Date: 23 November 2016

TCDS Number(s): EASA.A.182

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2007-0270R1 dated 07 November 2007.

ATA 57 – Wings – Rear Spar Root Joint Attachment Fittings at Wing Rib 2 – Inspection

Manufacturer(s):

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.

Applicability:

BAe 146 and AVRO 146-RJ aeroplanes, all models, all serial numbers.

Reason:

British Aerospace originally issued Service Bulletin (SB) 57-033 in 1989 to detect failed fasteners along with fuel leaks in the region of the rear spar root joint attachment fitting at wing rib 2, affecting the structural integrity of the wing. Accomplishment of that SB was mandated by Civil Aviation Authority (CAA) UK AD 044-09-89. Revisions 01 through 07 of this SB were introduced to inspect pre modification (mod) HCM01447A standard installations for loose or broken bolts and fuel leaks. Mod HCM01447A introduced tension bolts in the attachment fitting instead of the previous Hi-Lok bolts. Revision 08 of the SB introduced inspection instructions for post mod HCM01447A installations because failed fasteners along with fuel tank leaks had subsequently been found on aeroplanes post mod HCM01447A. Inspections of the post mod HCM01447A standard are required to maintain the structural integrity of the wing.



BAE Systems (Operations) Ltd then published SB 57-033 Revision 09, which specified additional, calendar-time based, inspection criteria to control the stress corrosion failures of the pre and post mod HCM01447A installations.

Consequently, EASA issued AD 2007-0270 (later revised), which revised and replaced CAA UK AD 044-09-89 and required the accomplishment of inspections and corrective actions, as necessary, in accordance with BAE Systems (Operations) Ltd SB 57-033 Revision 09.

Since EASA AD 2007-0270R1 was issued, BAE Systems (Operations) Ltd published SB 57-033 Revision 12 to correct a discrepancy between the compliance text and the compliance flowchart which had been introduced with SB Revision 11. This discrepancy may have led to a miscalculation of compliance intervals.

For the reasons described above, this AD retains the requirements of EASA AD 2007-0270R1, which is superseded, and requires the use of the correct compliance intervals as specified in BAE Systems (Operations) Ltd SB 57-033 at Revision 12.

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

Required as indicated, unless accomplished previously:

Inspection(s) and Corrective Action(s):

- (1) Accomplish external fuel tank inspections at the rear spar root joint attachment fittings at wing rib 2 before exceeding the threshold(s) and, thereafter, at intervals not exceeding the value(s) specified in, and in accordance with the instructions of, BAE Systems (Operations) Ltd SB 57-033 Revision 12.
- (2) If, during any inspection as required by paragraph (1) of this AD, discrepancies are found, before next flight, accomplish an internal inspection of the affected wing fuel tank(s) and, in case of findings, accomplish the applicable corrective actions in accordance with the instructions of BAE Systems (Operations) Ltd SB 57-033 Revision 12.

Credit:

- (3) Inspections and corrective actions, accomplished before the effective date of this AD in accordance with the instructions of BAE Systems (Operations) Ltd SB 57-033 Revision 09, or Revision 10, or Revision 11, are acceptable for compliance with the requirements of this AD. From the effective date of this AD, inspections and corrective actions have to be accomplished in accordance with the instructions of BAE Systems (Operations) Ltd SB 57-033 Revision 12.

Additional Work:

- (4) For aeroplanes that have been inspected by using the compliance flowchart instructions of BAE Systems (Operations) Ltd SB 57-033 Revision 11, within 3 months after the effective date of this AD, check the aeroplane records to determine if the correct inspection intervals have been used and ensure the correct intervals, as required by this AD, are applied from the next inspection.



Ref. Publications:

BAE Systems (Operations) Ltd SB ISB 57-033 Revision 09 dated 10 October 2006, or Revision 10 dated 20 July 2011, or Revision 11 dated 29 April 2015, or Revision 12 dated 30 November 2015.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 10 October 2016 as PAD 16-146 for consultation until 07 November 2016. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. 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, Business Support Team - Technical Publications, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, The United Kingdom, Telephone +44 1292 675207, Facsimile +44 1292 675704, E-mail: RApublications@baesystems.com.

