## EASA AD No.: 2014-0071 **EASA AIRWORTHINESS DIRECTIVE** AD No.: 2014-0071 Date: 19 March 2014 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. This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption] **Design Approval Holder's Name:** Type/Model designation(s): BAE SYSTEMS (OPERATIONS) Ltd BAe 146 and AVRO 146-RJ aeroplanes TCDS Number: EASA.A.182 Foreign AD: Not applicable This AD supersedes EASA AD 2012-0004 dated 12 January 2012. Supersedure: Time Limits / Maintenance Checks - Airworthiness Limitations -**ATA 05** Amendment / Implementation BAE Systems (Operations) Ltd, British Aerospace plc, British Aerospace Manufacturer(s): (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: The BAe 146 / AVRO 146-RJ Aircraft Maintenance Manual (AMM) includes the Chapters as listed in Appendix 1 of this AD. Compliance with these chapters has been identified as a mandatory action for continued airworthiness and EASA AD 2012-0004 was issued to require operators to comply with those instructions. Since that AD was issued, BAE Systems (Operations) Ltd revised the AMM (Revision 107), introducing a new defined life limit for the Fire Bottle Cartridge Firing Unit into Chapter 05-10-15. Subsequently, Revision 108 of the AMM introduced in Chapter 05-20-00 inspection tasks for repairs applied to fatigue critical structures and also introduced a new Chapter 05-20-07 to provide Structural Repair Manual (SRM) references for these tasks, applicable to

repairs accomplished after the publication of AMM Revision 108. Finally, AMM Revision 111 introduced safe life limitations into Chapter 05-10-15 for rollers of main landing gear and door up-locks.
Furthermore, Section 6 of the Maintenance Review Board Report (MRBR) Document MRB 146-01, Issue 2, Revision 18 was published (as referenced in Chapter 05-20-01 of the AMM) to correct discrepancies in inspection tasks for a number of Structurally Important Items (SIIs). Grace periods for these

	revised inspection tasks are included in BAE Systems (Operations) Ltd Inspection Service Bulletin (ISB) ISB.53-237.
	Failure to comply with the new and more restrictive tasks and limitations referenced above could result in an unsafe condition.
	For the reasons described above, this AD retains the requirements of EASA AD 2012-0004, which is superseded, and requires implementation of the maintenance tasks and/or airworthiness limitations as specified in the defined parts of Chapter 05 of the AMM at Revision 112.
Effective Date:	02 April 2014
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:
	(1) From the effective date of this AD, accomplish the following actions, in accordance with the instructions as specified (or included by reference) in the chapters of BAE Systems (Operations) Limited BAe 146 / Avro 146-RJ AMM at Revision 112, as listed in Appendix 1 of this AD.
	(1.1) Replace each component before exceeding the applicable life limit.
	(1.2) Within the thresholds and intervals, accomplish all applicable maintenance tasks.
	(1.3) Ensure the continuing airworthiness of the aeroplane by compliance with each Critical Design Configuration Control Limitations (CDCCL) – Fuel System item.
	(2) Compliance with the requirements of paragraph (1) of this AD can be demonstrated by:
	(2.1) Revising as follows the approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane:
	Incorporate all applicable maintenance tasks, airworthiness limitations and CDCCL – Fuel System items as specified (or included by reference) in the chapters of BAE Systems (Operations) Limited AMM at Revision 112, as listed in Appendix 1 of this AD,
	and
	(2.2) Complying with the approved AMP described in paragraph (2.1) of this AD.
Ref. Publications:	BAE Systems (Operations) Limited documents:
	BAe 146/AVRO 146-RJ AMM, at Revision 112 dated 15 October 2013.
	Corrosion Prevention Control Program (CPCP) Document No. CPCP-146-01, Revision 4 dated 15 September 2010.
	Supplemental Structural Inspections Document (SSID) Document No. SSID- 146-01, Revision 2 dated 15 August 2012.
	MRBR Document No. MRB 146-01, Issue 2 Revision 19 dated August 2012.
	ISB ISB.53-237 Revision 1 dated 2 April 2013.
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>
	<ol> <li>This AD was posted on 13 February 2014 as PAD 14-037 for consultation until 13 March 2014. No comments were received during the consultation</li> </ol>

	period.
3.	Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u> .
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: <u>RApublications@baesystems.com</u> .

## Appendix 1

Chapter	Subject
05-10-01	Airframe Airworthiness Limitations before Life Extension Programme
05-10-05 *	Airframe Airworthiness Limitations, Life Extension Programme - Landings Life Extended
05-10-10 **	Airframe Airworthiness Limitations, Life Extension Programme - Calendar Life Extended
05-10-15	Aircraft Equipment - Airworthiness Limitations
05-10-17	Power Plant - Airworthiness Limitations
05-15-00	CDCCL - Fuel System Description and Operation
05-20-00	Scheduled Maintenance, paragraphs 6, 7 and 8 only, on the CPCP, the SSID and the SRM detail inspection tasks for published repairs to fatigue critical structure as defined in the AMM Chapter 05-20-07.
05-20-01	Airframe Scheduled Maintenance – Before Life Extension Programme (MRBR Section 6)
05-20-05 *	Airframe Scheduled Maintenance, Life Extension Programme Landings Life Extended
05-20-07	Airframe Scheduled Maintenance – Published Repairs
05-20-10 **	Airframe Scheduled Maintenance, Life Extension Programme Calendar Life Extended
05-20-15	Aircraft Equipment Scheduled Maintenance

\* Applicable only to aeroplanes post-modification HCM20011A or HCM20012A or HCM20013A.

\*\* Applicable only to aeroplanes post-modification HCM20010A.

Note 1: Within Chapter 05-20-00, the current relevant issues of the supporting documents are:

- CPCP Document No. CPCP-146-01, Revision 4 dated 15 September 2010.

- SSID Document No. SSID-146-01, Revision 2 dated 15 August 2012.

**Note 2:** Within Chapter 05-20-01, the current relevant issue of the supporting document is MRBR Document No. MRB 146-01, Issue 2 Revision 19 dated August 2012.

**Note 3:** ISB.53-237 Revision 1 allows grace periods for the implementation of some of the SIIs in Section 6 of the MRBR.

