

Airworthiness Directive

AD No.: 2020-0254

Issued: 13 November 2020

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name: BAE SYSTEMS (OPERATIONS) Ltd **Type/Model designation(s):** BAe 146 and AVRO 146-RJ aeroplanes

Effective Date: 27 November 2020

TCDS Number(s): EASA.A.182

Foreign AD: Not applicable

Supersedure: This AD supersedes UK CAA AD G-002-07-2001 dated 01 July 2001, UK CAA AD G-2004-0004 dated 26 February 2004, UK CAA AD G-2005-0009 dated 09 March 2005, EASA AD 2007-0307 dated 17 December 2007, EASA AD 2008-0168 dated 02 September 2008, EASA AD 2011-0097 dated 25 May 2011, EASA AD 2012-0106 dated 14 June 2012 and EASA AD 2014-0071 dated 19 March 2014.

ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations Section – Amendment

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.

Definitions:

For the purpose of this AD, the following definitions apply:

The ALS: BAE Systems (Operations) Ltd BAe 146/AVRO 146-RJ Aircraft Maintenance Manual (AMM) Revision 127, and the following BAE Systems (Operations) Ltd documents, Chapters as defined in Appendix 1 of this AD:

- Corrosion Prevention Control Program (CPCP) Document (Doc.) No. CPCP-146-01 Revision 6
- Supplemental Structural Inspections (SSID) Doc. No. SSID-146-01 Revision 6
- Maintenance Review Board Report (MRBR) Doc. No. MRB 146-01 Issue 2 Revision 26



- Structural Repair Manual (SRM) Doc. No. 146RJ-SRM-E12 Revision 70

- SRM Doc. No. 146RJ-SRM-E3 Revision 48
- Inspection Service Bulletin (ISB) ISB.53-237 Revision 2

The AMP: The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane. For affected BAe 146 and AVRO 146-RJ aeroplanes operated under EU regulation, compliance with the approved AMP is required by Commission Regulation (EU) 1321/2014, Part M.A.301, paragraph 3.

New and/or more restrictive tasks: This includes all tasks that are new and all tasks for which a threshold or interval was reduced, which were introduced into the ALS (as defined in this AD) since the previous ALS Revision that is currently incorporated in the AMP.

Reason:

The airworthiness limitations and/or certification maintenance instructions for BAe 146 and AVRO 146-RJ aeroplanes, which are approved by EASA, are currently defined and published in the BAE Systems (Operations) Ltd AMM and certain associated document(s). These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Previously, EASA issued AD 2014-0071 to require accomplishment of the maintenance tasks as described in BAE Systems (Operations) Ltd BAe 146/AVRO 146-RJ AMM at Revision 112.

Since that AD was issued, BAE Systems (Operations) Ltd published the ALS, as defined in this AD, including new and/or more restrictive tasks and limitations.

The ALS invalidates the following BAE Systems (Operations) Ltd ISB documents: ISB.53-164 Revision 2, ISB.53-170 Revision 1, ISB.53-173 Revision 5, ISB.53-177 Original Issue, ISB.53-200 Revision 1, ISB.53-229 Revision 1 and ISB.57-070 Revision 2. Consequently, this AD supersedes the respective CAA UK and EASA ADs.

For the reasons described above, this AD retains the requirements of EASA AD 2014-0071, which is superseded, and requires accomplishment of the actions specified in the ALS.

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

Required as indicated, unless accomplished previously:

Maintenance Tasks and Replacement of Life Limited Parts:

- (1) From the effective date of this AD, accomplish the following actions, as specified in the ALS, as applicable to aeroplane model and depending on aeroplane configuration:
 - (1.1) Replace each component before exceeding the applicable life limit, and
 - (1.2) Within the thresholds and intervals, accomplish all applicable maintenance tasks, and



(1.3) Ensure the continuing airworthiness of the aeroplane by compliance with each Critical Design Configuration Control Limitations (CDCCL) – Fuel System item.

Corrective Action(s):

(2) In case of finding discrepancies (as defined in the ALS) during accomplishment of any task as required by paragraph (1) of this AD, within the compliance time specified in the ALS, accomplish the applicable corrective action(s) in accordance with the applicable BAE Systems (Operations) Ltd maintenance documentation. If no compliance time is identified in the ALS, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified in the ALS, before next flight, contact BAE Systems (Operations) Ltd for approved instructions and accomplish those instructions accordingly.

AMP Revision:

(3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the limitations, tasks and associated thresholds and intervals described in the ALS, as applicable to aeroplane model and depending on aeroplane configuration.

Credit:

(4) If, before the effective date of this AD, the AMP has been revised to incorporate the maintenance tasks and life limitations as specified in BAE Systems (Operations) Ltd BAe 146/AVRO 146-RJ AMM at Revision 112, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable to aeroplane model and depending on aeroplane configuration, within the compliance times as specified in the ALS to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive tasks and limitations as specified in the ALS, as applicable to aeroplane model and depending on aeroplane configuration, into the AMP to comply with paragraph (3) of this AD.

Recording AD Compliance:

(5) When the AMP of an aeroplane has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures continued accomplishment of the tasks as required by paragraphs (1) and (2) of this AD for that aeroplane. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Ref. Publications:

BAE Systems (Operations) Ltd BAe 146/AVRO 146-RJ AMM Revision 127 dated 15 January 2020.

BAE Systems (Operations) Ltd CPCP Doc. No. CPCP-146-01 Revision 6 dated 15 November 2016.

BAE Systems (Operations) Ltd SSID Doc. No. SSID-146-01 Revision 6 dated 15 March 2017.



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BAE Systems (Operations) Ltd MRBR Doc. No. MRB 146-01 Issue 2 Revision 26 dated August 2018.

BAE Systems (Operations) Ltd SRM Doc. No. 146RJ-SRM-E12 Revision 70 dated 15 October 2019.

BAE Systems (Operations) Ltd SRM Doc. No. 146RJ-SRM-E3 Revision 48 dated 15 October 2019.

BAE Systems (Operations) Ltd ISB ISB.53-237 Revision 2 dated 10 June 2014.

The use of later approved revisions of the above-mentioned documents 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 12 October 2020 as PAD 20-162 for consultation until 09 November 2020. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the <u>EU aviation safety</u> reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
- For any question concerning the technical content of the requirements in this AD, please contact: BAE SYSTEMS Air Prestwick, BAE SYSTEMS (Operations) Limited, Business Support Team - Technical Publications, Building No. 37, Prestwick International Airport, South Ayrshire, Scotland, KA9 2RW, United Kingdom. E-mail: <u>RApublications@baesystems.com</u>.



Chapter	Subject
05-10-01	Airframe Airworthiness Limitations before Life Extension Programme
05-10-02	Airframe Airworthiness Limitations Landing - Calendar Life Extended
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)
05-20-02	Airframe Scheduled Maintenance Landing - Calendar Life Extended
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

Appendix 1 – Chapters

* 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 6 dated 15 November 2016
- SSID Document No. SSID-146-01 Revision 6 dated 15 March 2017
- SRM Document No. 146RJ-SRM-E12 Revision 70 dated 15 October 2019
- SRM Document No. 146RJ-SRM-E3 Revision 48 dated 15 October 2019

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 26 dated August 2018.

Note 3: ISB.53-237 Revision 2 allows grace periods for the implementation of some of the SIIs in Section 6 of the MRBR.

