



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 20-162**

**Issued: 12 October 2020**

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

BAE SYSTEMS (OPERATIONS) Ltd

**Type/Model designation(s):**

BAe 146 and AVRO 146-RJ aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**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 will supersede 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.



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. This Proposed AD will be closed for consultation on 09 November 2020.
2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD 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.
4. For any question concerning the technical content of the requirements in this PAD, 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: [RApublications@baesystems.com](mailto:RApublications@baesystems.com).



## Appendix 1 – Chapters

| 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  |

\* 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 SIs in Section 6 of the MRBR.

