Safety Directive

Civil Aviation Authority

AIRWORTHINESS DIRECTIVE

Number: G-2021-0011

Issue date: 08 October 2021

Note: In this Airworthiness Directive, references to EU regulations are to those regulations as retained and amended in UK domestic law under the European Union (Withdrawal) Act 2018 and are referenced as "UK Regulation (EU) year/number or UK Regulation (EU) No. number/year".

This Airworthiness Directive (AD) is issued by the UK CAA in accordance with UK Regulation (EU) No. 748/2012 Part 21.A.3B, acting as the Authority of the State of Design for the affected product(s), under Article 34 of the Air Navigation Order 2016 (ANO) and UK Regulation (EU) 2018/1139.

In accordance with UK Regulation (EU) No. 1321/2014 Annex I (Part-M), M.A.301 / Annex VB (Part-ML), ML.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 or agreed by the CAA [Part-M, M.A.303 / Part-ML, ML.A.303].

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

Effective Date:	22 October 2021
TCDS:	(UK) EASA.A.182, issue 03 dated 15 January 2015
Foreign AD (if applicable):	Not Applicable
Superseding AD:	CAA AD G-2021-0009 dated 09 September 2021

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

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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 130 (23 March 2021) and the following BAE Systems (Operations) Ltd Documents Chapters as defined in Appendix 1 of this AD:
    - Corrosion Prevention and Control Programme (CPCP) Doc No. CPCP-146-01 Revision 7 (15 June 2019).
    - Supplemental Structural Inspections (SSID) Doc No. SSID-146-01 Revision 7 (20 May 2020).

- Maintenance Review Board Report (MRBR) Doc. No. MRB 146-01 Issue 2 Revision 27 (December 2020).
- Structural Repair Manual (SRM) Doc No. SRM 146.01A Revision 70 (4 November 2019) and Doc No. SRM 146.03A Revision 48 (5 November 2019).
- ISB 53-237 Revision 2 (10 June 2014).

- The AMP. The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or owner ensures the continuing airworthiness of each aeroplane. For affected BAe 146 and AVRO 146-RJ aeroplanes operated under UK regulation, compliance with the approved AMP is required by UK Regulation (EU) No.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 & AVRO 146-RJ aeroplanes, which are approved by EASA (prior to 31/12/20), 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-2020-0254 to require accomplishment of the maintenance tasks as described in BAE Systems (Operations) Ltd BAe 146/AVRO 146-RJ AMM at Revision 127.

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.

As a consequence, CAA issued AD G-2021-0009 dated 09 September 2021. Since publication an error has been identified in AD G-2021-0009 dated 09 September 2021. Within, Required Action(s) and Compliance Time(s), Section (1.3) ‘FSSI 55-11-115’ is an incorrect reference. This superseding AD corrects this to read ‘FSII 55-11-112’. As a task with reference 55-11-115 exists and to avoid misinterpretation of mandated requirements, this AD supersedes the respective CAA UK and EASA ADs.

For the reasons described above, this AD retains the requirements of G-2021-0009 dated 09 September 2021, except for the error noted above. G-2021-0009 dated 09 September 2021, 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 ensure the continuing airworthiness of the aeroplane by compliance with each Critical Design Configuration Control Limitation (CDCCL) – Fuel System item.

(1.3) Further to (1.2) regarding the introduction of new task FSII 55-11-112. For a/c that have accumulated more than 20,000 flights at the time the AD becomes effective. Perform the initial inspection prior to the accomplishment of a further 4,000 flights.

(1.4) Referenced grace periods within earlier superseded ADs remain valid.

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, prior to further flight (or if allowed, within the compliance time specified in the ALS), accomplish applicable corrective action(s) in accordance with the applicable BAE Systems (Operations) Ltd approved maintenance documentation. If a detected discrepancy is identified that is not one that the ALS instruction was designed to identify, prior to further flight, obtain approved repair instructions from BAE Systems (Operations) Ltd 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/ 146-RJ AMM at Revision 127, that action ensures the continued accomplishment of 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 para (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 paragraphs (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 continuing basis.

Reference Publications:

- Corrosion Prevention and Control Programme (CPCP) Doc No. CPCP-146-01 Revision 7 (15 June 2019).
- Supplemental Structural Inspections (SSID) Doc No. SSID-146-01 Revision 7 (20 May 2020).
- Maintenance Review Board Report (MRBR) Doc. No. MRB 146-01 Issue 2 Revision 27 (December 2020).
- Structural Repair Manual (SRM) Doc No. SRM 146.01A Revision 70 (4 November 2019) and Doc No. SRM 146.03A Revision 48 (5 November 2019).
- ISB 53-237 Revision 2 (10 June 2014).

Remarks:

(1) Due to the simple error correction nature of this AD no PAD was posted**.**

(2) If requested and appropriately substantiated, CAA can approve Alternative Methods of Compliance for this AD.

(3) 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 CAA aviation safety 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.

(4) Enquiries regarding this Airworthiness Directive should be referred to: Continued.Airworthiness@caa.co.uk

(5) For any questions 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, The United Kingdom. Telephone: +44 1292 675207, Facsimile +44 1292 675704; E-mail: 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
05-20-01	Airframe Scheduled Maintenance - Before Life Extension Programme (MRBR Appendix H only).
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 or HCM20313A or HCM20314A or HCM20315A.

** Applicable only to aeroplanes post-modification HCM20010A.

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

- Chapters 05-20-02 & 05-20-10. CPCP Document No. CPCP-146-01 (Section 2 - Baseline programme) Revision 7 dated 15 June 2019
- Chapters 05-20-02 & 05-20-05. SSID Document No. SSID-146-01 ((Section 5 Structural Inspections) Revision 7 dated 20 May 2020
- Chapter 05-20-07. SRM Document No. 146RJ-SRM-E12 Revision 70 dated 4 November 2019
- Chapter 05-20-07. SRM Document No. 146RJ-SRM-E3 Revision 48 dated 5 November 2019

Note 2: Within Chapter 05-20-01 & 05-20-02, the current relevant issue of the supporting document is MRBR Document No. MRB 146-01 Appendix H (Structural Airworthiness Limitations) Issue 2 Revision 27 dated December 2020.

Note 3: Within Chapters 05-20-01 & 05-20-02, ISB.53-237 Revision 2 dated June 2014 allows grace periods for the implementation of some of the SIIs in Section 6 of the MRBR. Note. These SIIs were subsequently transferred from the MRBR Section 6 (Structures Programme) to the MRBR Appendix H (Structural Airworthiness Limitations) as part of the re-organisation of the MRBR at Revision 20 dated September 2013.