Safety Directive

Civil Aviation Authority

PROPOSED AIRWORTHINESS DIRECTIVE



Number: 2003

Issue date: 10 November 2022

In accordance with the CAA Continuing Airworthiness Procedures, the issuance of an Airworthiness Directive (AD) is proposed which will be applicable to the aeronautical product(s) identified below.

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

Type Approval Holder's Name: Type/Model Designation(s):

BAE SYSTEMS (OPERATIONS) Ltd ATP aeroplanes

Effective Date:	[TBD – standard: 14 days after AD issue date]
TCDS:	EASA.A.192
Foreign AD (if applicable):	Not applicable
Superseding AD:	This AD supersedes AD G-2022-0016

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

Manufacturer(s):

British Aerospace plc, British Aerospace (Commercial Aircraft) Ltd, Jetstream Aircraft Ltd, British Aerospace Regional Aircraft, British Aerospace (Operations) Ltd and BAE Systems (Operations) Ltd

Applicability:

ATP aeroplanes, all serial numbers

Definitions:

The ALS: BAE Systems (Operations) Ltd ATP Aircraft Maintenance Manual Revision 96 dated 6 September 2022. 05 Chapters as listed in Table 1 of this AD.

The AMP: The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or owner ensures the continuing airworthiness of each operated aeroplane. For ATP aeroplanes operated under UK regulation, compliance with the approved AMP is required by UK regulation (EU)1321/2014 Part M.A.301 para (c).

Reason:

The ATP Aircraft Maintenance Manual (AMM) includes the chapters defined in Table 1, which comprise the Airworthiness Limitation Section (ALS) requirements applicable to the ATP (see Definitions section).

The maintenance tasks and limitations contained in these chapters have been identified as mandatory actions for continued airworthiness. CAA issued AD G-2022-0016 which superseded EASA issued AD 2015-0107, (which superseded earlier AD 2011-0052), to require operators to comply with these instructions.

Since AD G-2022-0016 was issued, BAE Systems (Operations) Ltd has amended the AMM, including Chapter 05, to Revision 96. These changes are as follows;

Change 1: Mandatory Life Limitation (Airframe – Structures) AMM Chapter 5 05-10-12:

Following in-service failures of several main landing gear shock absorber bolts, BAE Systems (Operations) Ltd identified the need to introduce specific life limitations for the main landing gear shock absorber bolts. Previously their life limit was linked to that of the main landing gear unit assembly, with a life limit of 78000 landings.

Note: CAA issued AD G-2022-0015 referencing BAE Systems (Operations) Ltd Service Bulletin ATP-32-109 Revision 1 on 10 May 2022, which introduces a one-time application of a new, specific life limitation of the main landing gear shock absorber bolts. SSI 32-10-00 refers.

Change 2: Mandatory Life Limitations (Power Plant/Engine/APU Systems) AMM Chapter 5 05-10-14:

BAE Systems (Operations) Ltd have identified that a life limit, which was established at initial aircraft certification for a particular engine power control cable, was omitted in error from publication in the ALI AMM Chapter 05 requirements. The applicable life limit has been established and is incorporated into AMM Chapter 5 at revision 96 as MSI item 76-11-00.

Note: CAA issued AD G-2021-0006 regarding ATA 76 Engine Controls – Power Control - Engine Power Control Cables – Replacement. This AD mandates the installation of engine power control cables with improved sealing (Part number JD760J0020-030 refers). AD G-2021-0006 references that life limits applicable to these improved engine power control cables, would subsequently be introduced into AMM Chapter 05.

Failure to comply with these more restrictive requirements (as listed above) could result in an unsafe condition.

For the reasons described above, this CAA AD retains the requirements of CAA AD 2022-0016, which is superseded and requires the implementation of revised ALS, SSI & MSI maintenance requirements, as referenced above and specified in the defined parts of Chapter 05 of the AMM at Revision 96 (see Table 1 below).

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

Required as indicated, unless previously accomplished:

(1) For all tasks,

From the effective date of this AD, accomplish the following actions, in accordance with the instructions as specified in BAE Systems (Operations) Ltd ATP AMM Revision 96, as listed in Table 1 of this AD:

- (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 CDCCL Fuel System Item.

*For SSI 32-10-00 (AMM Chapter 5 05-10-12): From the effective date of this AD, aircraft with main landing gear shock absorber bolts, approaching or exceeding the newly introduced life limitation, the compliance alleviation periods (stated in AD G-2022-0015, Required Action(s) and Compliance Time(s): paragraph (1)(1.3)) are applicable for compliance with this AD. Subsequent life limitation requirements are to be in accordance with the life limitation stated for SSI 32-10-00 in BAE Systems (Operations) Limited ATP AMM Chapter 5 05-10-12.

Table 1 - AMM chapters:

Chapter No	Chapter name
05-10-11	Mandatory Life Limitations (Airframe – Systems)
05-10-12	Mandatory Life Limitations (Airframe – Structures)
05-10-14	Mandatory Life Limitations (Powerplant/Engine/APU – Systems)
05-10-15	Mandatory Life Limitations (Powerplant/Engine/APU – Structures)
05-10-17	Structurally Significant Items (SSIs)
05-20-00	Critical Design Configuration Control Limitations (CDCCL) – Fuel System
05-23-00	Certification Maintenance Requirements

Corrective Action(s):

(2) In the case of discrepancies found during accomplishment of any task as required by paragraph (1) of this AD, before further flight, accomplish the applicable corrective action(s) in accordance with the applicable BAE Systems (Operations) Ltd maintenance documentation. If a detected discrepancy cannot be corrected by using existing BAE Systems (Operations) Ltd instructions, then before further flight, contact BAE Systems (Operations) Ltd for approved instructions and accomplish these instructions accordingly.

Aircraft Maintenance Programme (AMP) Revision:

(3) Within 12 months, after the effective date of this AD, revise the approved AMP, by incorporating all applicable maintenance tasks, airworthiness limitations and CDCCL – Fuel System items included in the ALS chapter of the BAE System (Operations) Ltd AMM at Revision 96, as listed in Table 1 of this AD, as applicable to aeroplane model.

Recording AD compliance:

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

Reference Publications:

BAE Systems (Operations) Limited ATP AMM, at Revision 96, dated 6 September 2022.

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

Remarks:

- 1. This PAD will be closed for consultation on 08 December 2022
- 2. 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 CAA aviation safety reporting system. Occurrence reporting | Civil Aviation Authority. 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.
- 3. Enquiries regarding this PAD should be referred to: Continued.Airworthiness@caa.co.uk
- 4. For any questions concerning the technical content of the requirements in this PAD, please contact: BAE Systems (Operations) Ltd, Customer Technical Support Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, The United Kingdom. E-mail: raengliaison@baesystems.com