

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:

BAE SYSTEMS (OPERATIONS) LTD

vpe/Model Designation(s): etstream 4100 series aeroplanes

Effective Date:	12 April 2022
TCDS:	EASA.A.189
Foreign AD (if applicable):	Not applicable
Supersedure:	This AD supersedes EASA AD 2017-0187 issued 22 September 2017 &
	EASA AD 2014-0043 issued 21 February 2014

# 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 Ltd and British Aerospace (Operations) Ltd

# Applicability:

Jetstream 4100 Series aircraft, all models, all serial numbers

## **Definitions:**

- **The ALS:** BAE Systems (Operations) Ltd Jetstream J41 AMM Revision 44, dated 15 June 2021 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 Jetstream 4100 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 Jetstream J41 Aircraft Maintenance Manual (AMM), includes the following chapters:

05-10-10 "Airworthiness Limitations", and

05-10-20 "Certification Maintenance Requirements" and

05-10-30 "Critical Design Configuration Control Limitations (CDCCL) - Fuel System".

The maintenance tasks and limitations contained in theses chapters have been identified as mandatory actions for continued airworthiness. EASA issued AD 2014-0043, (which superseded earlier AD 2010-0098), to require operators to comply with the instructions.

In 2016 BAE Systems (Operations) Ltd identified the need to amend the following SSIs: 52-20-013, 53-10-006, 53-10-025, 53-10-029 and 53-10-079. The amended requirements were contained in BAE Systems (Operations) Ltd SB J41-51-001 (Revision 4) and Alert SB J41-A53-058 (initial issue). The requirements of these two SBs were mandated by EASA AD 2017-0187.

The two SBs requirements were incorporated into AMM Chapter 5 at Revision 43, dated May 2019. However, the repetitive inspection requirements for SSI 53-10-029 were not addressed in AD 2017-0187. Failure to comply with the new and more restrictive actions could result in an unsafe condition. Additionally, in 2017 BAE Systems (Operations) Ltd identified the need for additional SSI inspections: 54-10-070, 55-40-010, 57-30-010, 57-40-045, 57-40-046, 57-50-020 and 57-50-021 to inspect for cracking of Hi-Shear (now LISL) collars. These were incorporated into AMM Chapter 5 at Revision 44, dated 15 June 2021.

For these reasons, this AD is issued. All current SSI requirements are now fully referenced in AMM Chapter 5 Revision 44, dated June 2021.

This AD supersedes ADs: 2017-0187 and 2014-0043.

# 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 in BAE Systems (Operations) Ltd Jetstream J41 AMM Revision 44, dated 15 June 2021 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.

#### Table 1 AMM chapters

Chapter No.	Chapter name
05-10-10	Airworthiness Limitations
05-10-20	Certification Maintenance Requirements
05-10-30	CDCCL – Fuel System

Note for the newly introduced SSI inspections: 54-10-070, 55-40-010, 57-30-010, 57-40-045, 57-40-046, 57-50-020 and 57-50-021. A 2-year compliance period from the effective date of this AD is authorised for the initial inspection.

## **Corrective Action(s):**

(2) In the case of discrepancies found during accomplishment of any task as required by paragraph (1) of this AD, before next 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, before flight, contact BAE Systems (Operations) Ltd for approved instructions and accomplishment those instructions accordingly.

#### Aircraft Maintenance Programme (AMP) Revision:

(3) Within 12 months after the effective date of this AD, revise the approved AWP, by incorporating all applicable maintenance tasks, airworthiness limitations and CDCCL – Fuel System items included in the chapters of BAE Systems (Operations) Ltd Jetstream J41 AMM at Revision 44, dated 15 June 2021, as listed in Table 1 of this AD, as applicable to aeroplane model.

#### Credit:

(4) If, before the effective date of this AD, the AMP has been revised to incorporate the maintenance tasks as specified in BAE Systems (Operations) Ltd Jetstream J41 AMM Revision 44, dated 15 June 2021, as listed in Table 1 of this AD, that action ensures the continued accomplishment of these requirements.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive requirements as specified in BAE Systems (Operations) Ltd Jetstream J41 AMM Revision 44, dated 15 June 2021 as listed in Table 1 of this AD, applicable to aeroplane model and depending on aeroplane configuration, within compliance times as specified in BAE Systems (Operations) Ltd Jetstream J41 AMM Revision 44, dated 15 June 2021 to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and/or more restrictive requirements, as specified, 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 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 continuing basis.

# **Reference Publications:**

BAE Systems (Operations) Limited Jetstream J41 AMM, at Revision 44, dated 15 June 2021.

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

## Remarks:

- This AD was originally posted on 17 February 2022 as PAD 1992 for consultation until 17 March 2022. The Comment Response Document (CRD) has been published at the same time as the AD, on our website page List of UK Airworthiness Directives from 1 January 2021 Once the AD is incorporated into the <u>CAP 747: Mandatory Requirements for Airworthiness</u>, the CRD can be requested via email <u>Continued.Airworthiness@caa.co.uk</u>
- 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 <u>Occurrence reporting | UK Civil Aviation Authority</u>. 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: <u>Continued.Airworthiness@caa.co.uk</u>
- 5. For any questions concerning the technical content of the requirements in this AD, 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