Civil Aviation Authority

PROPOSED AIRWORTHINESS DIRECTIVE

Number: 2008

Issue date: 02 October 2023

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 e-mail 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	BAe 146 and AVRO 146-RJ aeroplanes

Effective Date:	[TBD – Standard 14 days after AD issue date]
TCDS:	EASA.A.182 & BA29
Foreign AD (if applicable):	Not applicable
Supersedure:	Not applicable

ATA 53 - Fuselage – Centre Fuselage Forward Rib 0 Longeron – Inspection (and reporting if required)

Manufacturer(s):

BAE Systems (Operations) Ltd, British Aerospace plc, British Aerospace (Commercial Aircraft) Ltd, British Aerospace (Operations) Ltd, British Aircraft Regional Aircraft Ltd and 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 purposes of this AD, the following definition applies:

The ISB: BAE SYSTEMS (Operations) Ltd ISB.53-249 Revision – Initial issue, dated 25 August 2023 Title: Fuselage – Centre Fuselage – To Inspect Forward Rib 0 Longeron.

Reason:

An operator recently reported, during routine maintenance, cracking on the radius of the Rib 0 Forward Longeron at Frame 26. The cracking initiated close to a local blend in the radius. Failure of the Rib 0 Forward Longeron could lead to structural failure of adjacent structure, leading to failure of the fuselage skin, leading to rapid decomposition and potential loss of the aircraft.

The AD is issued to address the unsafe condition described above. The required actions are a one-off visual and one-off high frequency eddy current inspection of the radius of the Rib 0 Forward Longeron at Frame 26. Should defects be detected in the fleet by these inspections, the information obtained may lead to future mandatory actions.

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

Required as indicated, unless accomplished previously in accordance with ISB 53-249.

Inspections (and reporting, if applicable):

(1) Within four months of the effective date of this AD perform the following inspections.

i. Prepare the areas to be inspected in accordance with ISB paragraph 2.A & B.

ii. Inspect (visually and using high frequency eddy current) in accordance with ISB paragraph 2.C.

iii. If no cracking, surface defects, blending or undercutting is detected, restore protective treatments in accordance with ISB paragraphs 2.A and 2.E.

(2) If cracking, surface defects, blending or undercutting is detected, before further flight, report to BAE Systems Repair Design Office (raengliaison@baesystems.com) and await further instructions. Use a copy of the Inspection Report form in ISB Appendix 1.

Reference Publications:

BAE SYSTEMS (Operations) Ltd ISB.53-249 Revision – Initial issue, dated 25 August 2023 Title: Fuselage – Centre Fuselage – To Inspect Forward Rib 0 Longeron.

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 31 October 2023.

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 (caa.co.uk). 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**.**