

Civil Aviation Authority

AIRWORTHINESS DIRECTIVE



Number: G-2023-0001

Issue date: 08 February 2023

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].

This is a Final AD with Request for Comments and is issued in accordance with the UK CAA Continuing Airworthiness Process. All interested persons may send their comments, referencing the AD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated in the Remarks section.

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

BRITTEN-NORMAN AIRCRAFT LTD BN2 Islander and Trislander aeroplanes

Effective Date:	22 February 2023
TCDS:	UK.TC.00042 (BN2 Islander) and UK.TC.00043 (BN2A Mk III Trislander)
Foreign AD (if applicable):	Not Applicable
Superseding AD:	This AD supersedes UK AD G-2003-0013 dated 05 November 2003

ATA 32 - Landing Gear - Nose and Main Landing Gear - Recording of life / Replacement

Manufacturer(s):

Britten-Norman Aircraft Ltd

Applicability:

All BN2, BN2A, BN2B, BN2T, BN2T-4R and BN2T-4S series Islander aeroplanes fitted with FHL or BNA Landing Gear, and

All BN2A-MkIII series Trislander aeroplanes fitted with FHL or BNA Landing Gear.

Definitions:

The SB: Britten-Norman Service Bulletin 298 (SB 298).

Reason:

It was determined that in order to ensure the continued structural integrity of certain Islander and Trislander landing gear and associated components that it is necessary to require removal of these components from service prior to exceeding established fatigue lives. Accordingly, finite fatigue lives were previously introduced for Fairey Hydraulics Ltd (FHL) landing gear and associated components, installed on affected aeroplanes by Service Bulletin 298 at revision 1 and CAA AD G-2003-0013, issued in October 2003. Since this time, landing gear have also been manufactured by Claverham and Britten Norman Aircraft (BNA) which are identified by new part numbers.

For the reasons described above, this CAA AD retains the requirements of CAA AD G-2003-0013, which is superseded and introduces a revised applicability.

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

Required as indicated, unless accomplished previously.

Check

(1) Within one month after the effective date of this AD, determine the number of landings accumulated on affected main and nose landing gear and components (identified in Tables 1, 2 and 3).

Table 1 Landing Gear Fatigue Lives - Nose Landing Gears

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Assembly No. (Part No.)	Fatigue Life (Landings)			
3501H1	30000			
3501H2	40000			
3511H1	No Limit			
3811H1	No Limit			
3811H2 or BN-NLG01 or BN-NLG03	No Limit			
4823H1 or BN-NLG02	40000			

Table 2 Landing Gear Fatigue Lives – Main Landing Gears

 		
Assembly No. (Part No.)	Fatigue Life (Landings)	
3499H1	30000	
3499H2 or BN-MLG01	40000	
3570H1	30000	
3570H2 or BN-MLG03	40000	
4825H1 or BN-MLG02	40000	

Table 3 Landing Gear Components - Fatigue Lives

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Assembly No.	Component	Part No.	Fatigue Life (Landings)
3499H1	Cylinder	46171	4000
3507H1	Cylinder	46021	4000
	Pin	46043	20000
3507H2	Pin	46043	20000
or BN-MLG03	Link	46071	30000
4825H1	Link	46071	30000
or BN-MLG02			

Corrective action

(2) Any main or nose landing gear or component which exceed the fatigue life stated in Tables 1,2 or 3 must be withdrawn from service immediately.

Installation of used landing gear components

(3) Do not install an affected part on any aircraft unless the life of part has been established to be below the associated fatigue life, as stated in Tables 1, 2 or 3.

Reference Publications:

Britten-Norman Service Bulletin 298 Issue 2 dated 13 December 2022.

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

Remarks:

- 1. This AD will be closed for consultation on 08 March 2023.
- 2. The safety assessment has warranted immediate publication and notification without implementing the full consultation process.
- 3. If requested and appropriately substantiated, CAA can approve Alternative Methods of Compliance for this AD.
- 4. 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 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 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.
- 5. Enquiries regarding this AD should be referred to: Continued.Airworthiness@caa.co.uk
- 6. For any questions concerning the technical content of the requirements in this AD, please contact: Britten-Norman Aircraft Ltd at email: customer.support@britten-norman.com