Airworthiness Directive Schedule

Aeroplanes De Havilland DH83 Series (Fox Moth) 26 April 2018

Notes

- 1. This AD schedule is applicable to De Havilland DH83 (Fox Moth) series aircraft.
- 2. The UK CAA is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) and Mandatory Permit Directives (MPDs) for these aircraft.

State of Design ADs are listed in UK CAA CAP 476 and CAP 747, which can be obtained from the UK CAA web site at http://www.caa.co.uk/Commercial-Industry/Aircraft/Airworthiness/Continuing-airworthiness/Airworthiness-Directives/

Prior to July 2003, UK ADs for UK products were a number only linked to a CAA declared Mandatory Service Bulletin issued by the Type Certificate Holder. If you have the SB you have the AD. These AD and SB numbers are listed in CAP 476, which is current at final issue (September 2004) and no longer amended. Those Service Bulletins remain mandatory, unless cancelled and/or superseded by a new AD. Mandatory Requirements issued by the UK CAA are available for download from the UK CAA web site until they are published in UK CAA publication CAP 747.

 State of Design MPDs are listed in CAP 661 and can be obtained form the UK CAA web site at http://www.caa.co.uk/Commercial- Industry/Aircraft/Airworthiness/Continuing-airworthiness/Mandatory-Permit-Directives/

UK CAA CAP 661 contains all issued MPDs up until 31 January 2012, when the publication ceased to be amended. The MPDs in CAP 661 remain valid and are not 'withdrawn', unless stated on the UK CAA web site at http://www.caa.co.uk/Commercial-Industry/Aircraft/Airworthiness/Continuing-airworthiness/Mandatory-Permit-Directives/, where the entry will state that it has been cancelled/superseded.

- 4. The date above indicates the amendment date of this schedule.
- 5. New or amended ADs are shown with an asterisk *

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DCA/DH83/101 Damage to pilot's seat - Inspection

Applicability: All

Requirement: Cases have occurred where the elevator control lever in the forward part of the

fuselage has penetrated the dome-shaped shield at the back of the pilot's seat.

The seat is to be inspected and, if found defective or damaged, is to be repaired to drawing Nr DH M2431. In no circumstances may the shield over the clearance hole be left off during flight. If defective or damaged the shield must be repaired or

replaced immediately.

Compliance: Every periodic inspection

Effective Date: December 1969

DCA/DH83/102B Cancelled – De Havilland Support TNS No. 32 Issue 3 refers

Effective Date: 26 March 2009

DCA/DH83/103B Fuselage Lateral Tie Rods – Inspection and Life Limitation

Applicability: All model DH 83 series aircraft.

Note 1: Revision B of this AD revised to clarify the requirement.

Requirement: To prevent failure of the fuselage lateral tie rods, the port and starboard lower

fuselage longerons, and the spar joint fittings, accomplish the following:

Inspect the fuselage structure and the spar joint fittings, and repair/replace any defects found per the instructions in paragraph 2.A. of British Aerospace TNS 29

issue 3 or later UK CAA approved revisions.

Replace the aft and forward lateral fuselage tie rods per paragraph 2.A. of TNS 29

before further flight.

(UK CAA AD 006-10-97 refers)

Compliance: Within the next 50 hours TIS or by 17 January 2010 whichever occurs sooner, unless

previously accomplished within the last 2000 hours TIS or 18 years, and thereafter at

intervals not to exceed 2000 hours TIS or 18 years whichever occurs sooner.

Note 2: The 2000 hour/18 year life limitation applicable to the fuselage lateral tie rods is

classified mandatory by the UK CAA.

Effective Date: DCA/DH83/103 - 18 December 1998

DCA/DH83/103A - 29 October 2009 DCA/DH83/103B - 17 December 2009

DCA/DH83/104 Cancelled - DH83 Maintenance Documentation refers

Effective Date: 30 April 2009

From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and you can obtain them directly from the National Airworthiness Authority (NAA) web sites. Links to the NAA web sites are available on the CAA web site at

http://www.caa.govt.nz/airworthiness-directives/states-of-design/

If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ, they will be added to the list below.

UK CAA AD G-2014-0003-E Lower Fuselage Tie-Rods - Inspection

Effective Date: 12 September 2014

UK CAA AD 007-03-99 Cockpit Safety Harness Installation - Inspection and Life Limitation

Applicability: De Havilland DH60 series, DH82 series, DH83 series and DH94 series aircraft fitted

with Sutton harnesses.

Requirement: To prevent harness failure, inspect each Sutton harness per the instructions in British

Aerospace Mandatory Technical News Sheet (TNS) No. 33, issue 2, dated 21 March

2002, or later revision.

Inspect for evidence of broken stitches, cuts and tears, chafing, signs of

contamination due to acid, oil, grease or water, and deterioration due to sunlight.

Where any signs of degradation are found the harness is to be replaced before further

flight.

(UK CAA MPD 2001-012R2 also refers)

Note: British Aerospace has issued Mandatory Technical News Sheet No. 33 (CAA AD No.

007–03–99 refers) applicable to De Havilland DH60, DH60G, DH60M, DH60X, DH82, DH82A, Queen Bee, DH83, and DH94 aircraft. UK CAA AD 002-12-2001 revision 2 is applicable for other aircraft types fitted with Sutton harnesses not covered by the

British Aerospace TNS 33.

Compliance: Initial compliance required before the issue of a New Zealand Certificate of

Airworthiness, or at the next Review of Airworthiness (RA), whichever is the sooner,

unless previously accomplished.

Thereafter, compliance required with the repetitive requirements specified in TNS No.

33.

Effective Date: 31 August 2017

* DCA/DH83/105B Croydon Manufactured Wing and Aileron Spars – Flight Limitation

Applicability:

De Havilland DH83 Fox Moth series aircraft fitted with replacement wing or aileron spars <u>manufactured</u> by Croydon Aircraft Company Limited <u>prior to 31 May 2008</u>.

For DH83 Fox Moth series aircraft, affected mainplane/wing spar part numbers are as follows:

Wing spar position:	LH P/N:	RH P/N:
Top front	H34737 /C	H34738 /C
Top rear	H34356 /C	H34357 /C
Bottom front	H35096 /C	H35097 /C
Bottom rear	H36830 /C	H36831 /C

For DH83 Fox Moth series aircraft, affected aileron spar part numbers are as follows:

Aircraft:	LH P/N:	RH P/N:
For early DH83 aircraft	H18966	H18966

Aileron spars may have been supplied under STC number 0/21E/4 issued 22 March 2003, and mainplane/wing spars may have been supplied under STC number 0/21E/5 issued 22 January 2003.

Note 1:

DCA/DH83/105B revised to introduce a one-time inspection of the <u>wing spars</u>. If the spar section properties conform to the original de Havilland design shown in Figure 1, <u>or if</u> the wing spar section properties (minimum radius and dimensions) are no less than that shown in Figure 2, then no further action is required, and the previous flight limitations can be removed.

Requirement:

Review the aircraft records and determine if wing or aileron spars <u>manufactured</u> by Croydon Aircraft Company Limited (CACL) <u>prior to 31 May 2008</u> are fitted to the aircraft.

- If an affected wing or aileron spar is found installed, then aerobatics or other flights involving high load factors, including flight in turbulant conditions <u>are</u> <u>prohibited</u> until requirement 2 of this AD has been accomplished.
- 2. If an affected wing or aileron spar is found installed, accomplish the following:
 - 2.1. If an <u>affected aileron spar</u> part number is found fitted, then conform the spar to the approved type design per the original de Havilland design, or replace the affected aileron spar, before further flight.
 - 2.2. If an <u>affected mainplane/wing spar</u> is found fitted, then inspect the forward and the aft faces of the affected spars in four places, and determine if the spar section properties (i.e. area, shape) conform to the approved type design per the original de Havilland design shown in Figure 1.

<u>If the wing spar section properties conforms to</u> the original de Havilland design shown in Figure 1, then no further action is required, and the previous flight limitations can be removed.

If the wing spar section properties do not conform to the original de Havilland design shown in Figure 1, then accomplish requirement 3 of this AD, before further flight.

3. Inspect the affected wing spar and compare the spar section properties with the Croydon spar profile shown in Figure 2.

If the wing spar section properties (minimum spar web radius and dimensions) <u>are</u> found not less than that shown in Figure 2, (i.e. the inside radii of the spar cut-outs

<u>are found not less than</u> 0.25 inches as shown in Figure 2), then no further action is required, and the previous flight limitations can be removed.

If the wing spar section properties (minimum spar web radius and dimensions) <u>are found less than</u> that shown in Figure 2, (i.e. <u>the inside radii</u> of the spar cut-outs <u>are found less than</u> 0.25 inches as shown in Figure 2), then remove the affected spar from service, and replace with a serviceable part, before further flight.

Note 2:

Report any machined spars with section properties less than that shown in Fig.2 to the CAA by completing a CA005 Defect Report form. Please provide the spar part and serial numbers, and a copy of the release documentation. The form can be obtained from CA005@caa.govt.nz. The completed form can be emailed to the CAA at http://www.caa.govt.nz/Forms/CA005D_Form.pdf

Figure 1 - De Havilland Design:

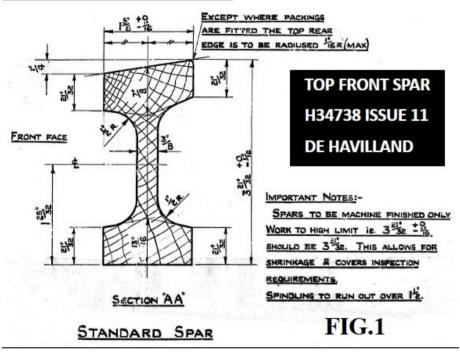
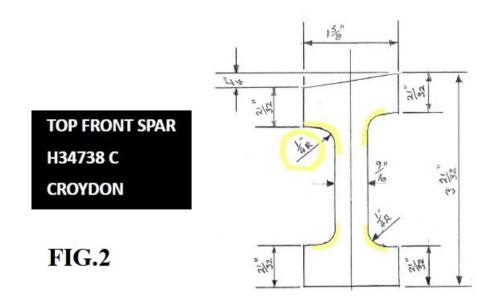


Figure 2 - Croydon Spar Profile:



Compliance:

- 1. From 4 August 2017 (the effective date of DCA/DH83/105).
- 2. At the next periodic inspection when the spar is accessible, or at the next 100 hour inspection, or at the next annual inspection, whichever is the sooner.
- 3. If the wing spar section properties do not conform to the original de Havilland design shown in Figure 1, then accomplish requirement 3 of this AD, before further flight.

Effective Date:

DCA/DH83/105 – 4 August 2017 DCA/DH83/105A – 10 August 2017 DCA/DH83/105B – 28 February 2018