
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CAR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

DHC-6 (Twin Otter) Series Aeroplanes

AD/DHC-6/73

Wing Spar Strut Lug

12/2002

Applicability: Model DHC-6 Series 1, 100, and 200 aircraft, with PreMod 6/1117 wings that have accumulated less than 17,400 flight hours or 34,800 flight cycles.

Requirement:

1. Conduct a high frequency eddy current inspection of the wing spar strut lug fastener holes. Perform the inspection in accordance with the wing spar strut lug fastener hole inspection procedure detailed in Part 3, Inspection Requirements Manual - PSM 1-6-7.
2. Assess the results and comply with any additional action required in accordance with the acceptance/rejection criteria detailed in the wing spar strut lug fastener hole inspection of Part 3, Inspection Requirements Manual - PSM 1-6-7.
3. If corrosion, cracking or damage is found in any fastener hole, report findings to Bombardier within 14 days of the inspection.

Note: Transport Canada AD CF-2002-40 refers.

Compliance: Within 12 months after 28 November 2002. Thereafter at intervals not to exceed 10 years.

This Airworthiness Directive becomes effective on 28 November 2002.

Background: Non-destructive testing inspection of the wing spar strut fastener holes of several aircraft with PreMod 6/1117 wings has revealed corrosion in the critical fastener holes. While the inspection of these critical holes is addressed under AD CF-2000-14 (AD/DHC-6/31), some low-utilisation aircraft have yet to reach the fatigue based inspection threshold of 17,400 flight hours or 34,800 flight cycles. Undetected corrosion in the critical fastener holes could lead to lug cracking, compromising the structural integrity of the wing.



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Delegate of the Civil Aviation Safety Authority

21 October 2002