
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 39.001(1) of CASR 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.

Propellers - Variable Pitch - Hartzell

AD/PHZL/81

Propeller Attachment Bolts

10/2005

Applicability: Hartzell Propeller Inc. models HC-B3TN-2, HC-B3TN-3, HC-B3TN-5, HC-B3MN-3, HC-B4TN-3, HC-B4TN-5, HC-B4MN-5, HC-B4MP-3, HC-B4MP-5, and HC-B5MP-3 propellers installed with propeller mounting bolts, part number (P/N) B-3339.

Requirement: **Visual Inspections and Torque Checks**

1. Perform initial visual inspection and torque check of all eight mounting flange bolts when P/N B-3339 bolts from LFC manufacturing Lot No. 12 or Lot No. 56 are present. For the location of bolt identification marks, see Figure 1 of Hartzell Propeller Inc. Alert Service Bulletin (ASB) No. HC-ASB-61-279, Revision 2, dated 6 May 2005.
2. For all aeroplanes except Aerospatiale (Nord) Model 262(A) aeroplanes modified by STC SA2369SW, perform repetitive torque checks on all eight mounting flange bolts when P/N B-3339 bolts from LFC Manufacturing Lot No. 12 or Lot No. 56 are present.
3. For Aerospatiale (Nord) Model 262(A) aeroplanes modified by STC SA2369SW, perform repetitive torque checks on all eight mounting flange bolts when P/N B-3339 bolts from LFC Manufacturing Lot No. 12 or Lot No. 56 are present.
4. If any bolt fails the torque check, replace all eight bolts with P/N B-3339 bolts that are not from LFC Manufacturing Lot No. 12 or Lot No. 56, or with approved equivalent part number bolts.

Perform the actions specified in Requirements 1, 2, 3 and 4 of this Directive, using paragraphs 3.A through 3.B.(5) of the Accomplishment Instructions of Hartzell Propeller Inc. ASB No. HC- ASB-61-279, Revision 2.

Mandatory Terminating Action

5. Replace all P/N B-3339, LFC Manufacturing Lot No. 12 and Lot No. 56 bolts with P/N B-3339 bolts that are not from LFC Manufacturing Lot No. 12 or Lot No. 56, or with approved equivalent part number bolts in accordance with paragraph 3.C of Accomplishment Instructions of Hartzell Propeller Inc. ASB No. HC- ASB-61-279, Revision 2.

Note: FAA AD 2005-14-12 Amendment 39-14189 refers.

Propellers - Variable Pitch - Hartzell

AD/PHZL/81 (continued)

- Compliance:
1. Within 50 hours time-in-service (TIS) or 12 months after the effective date of the Directive, whichever occurs first.
 2. Within 120 hours TIS since-last-inspection.
 3. Within 100 hours TIS since-last-inspection.
 4. Before further flight.
 5. Within 12 months after the effective date of this Directive.

This Airworthiness Directive becomes effective on 29 September 2005.

Background: This Directive results from the discovery during routine propeller installation that a bolt from a certain manufacture lot did not properly absorb the installation torque. This Directive also results from the discovery that other bolts of the same part number from a different manufacture lot had material surface pitting. This Directive is being issued to prevent propeller mounting bolt failures or improperly secured propellers, which could lead to separation of the propeller from the aeroplane.



James Coyne
Delegate of the Civil Aviation Safety Authority

18 August 2005