
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/PR/34 and issues the following AD under subregulation 39.1 (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 - Dowty Rotol**AD/PR/34
Amdt 1****Hub Through Bolts****11/2003**

Applicability: All Dowty Rotol propeller models R354/4-123-F/13, R354/4-123-F/20, R375/4-123-F/21, R389/4-123-F/25, R389/4-123-F/26, and R390/4-123-F/27 installed on SAAB 340A and 340B aircraft excluding those propellers assembled using PR1422-B2 sealant in accordance with Dowty Aerospace Service Bulletin (SB) SF340-61-97.

Requirement:

1. Unless previously accomplished in accordance with Dowty Aerospace Propellers SB SF340-61-96 Revision 1, dated 18 April 2000, inspect the propeller hub through bolts for loss of torque in accordance with Dowty Aerospace Propellers SB SF340-61-96 Revision 2, Accomplishment Instructions, Paragraph 3A(2) though 3A(9).
2. Unless previously accomplished in accordance with Dowty Aerospace Propellers SB SF340-61-96 Revision 1, advise the propeller manufacturer of the results of each inspection and record the results of each inspection in the respective propeller records in accordance with SB SF340-61-96 Revision 2, Accomplishment Instructions, Paragraphs 3B and 3C respectively.

Note: The UK CAA has declared the referenced service bulletin MANDATORY.

Compliance: For Requirement 1: Inspect affected propellers between 500 flying hours and 1800 flying hours from 31 August 2000.

Propellers inspected per the original issue of SB SF340-61-96 must be re-inspected **if** that inspection was accomplished at a period less than 500 flying hours since the hub was last assembled.

For Requirement 2: Upon compliance with Requirement 1.

This Amendment becomes effective on 30 October 2003.

Background: This Amendment changes the applicability of the propeller to exclude those propellers which have been assembled using PR 1422-B2 sealant that should prevent the hub through torque from reducing. It also clarifies the specific requirements to be complied with within the reference document.

Propellers - Variable Pitch - Dowty Rotol

AD/PR/34 Amdt 1 (continued)

This Directive was prompted by reports of cracks in the blade retention area of the hub and extensive fretting damage to the hub mating surfaces. These defects have been attributed to loss of hub through bolt torque. Dowty believes through bolt torque loss is associated with the sealant applied to the hub parting surfaces during assembly.

This Directive ensures hub through bolt torque is maintained, thereby reducing the potential for cracking and excessive fretting, and provides data for continuing investigation into this problem.

The original issue of this Airworthiness Directive became effective on 31 August 2000.



Jim Coyne
Delegate of the Civil Aviation Safety Authority

19 September 2003