AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/PR/33 Amdt 2 and issues the following 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 - Dowty Rotol

AD/PR/33 Amdt 3 — Hub Assembly — 3/2009

Applicability: Dowty Aerospace Propellers Models R389/4-123-F/25, R389/4-123-F/26 and R390/4-123-F/27 propellers, all serial numbers, fitted with Part Number (P/N) 660714241 or P/N 660714255 hub assemblies, including P/N 660714241 hub assemblies that have been reworked in accordance with Dowty drawing 660714259.

Note 1: These propellers are known to be installed on Saab SF340A and 340B aircraft.

Requirement:

1. Inspect the propeller hubs in accordance with the instructions of Dowty Propellers ASB SF340-61-95.

   Inspections and corrective actions accomplished prior to the effective date of this AD, in accordance with Dowty ASB SF340-61-95 at original issue or Revision 1 or Revision 2 or Revision 3 or Revision 4, are acceptable to comply with the initial requirements of paragraph (1) of this AD. After the effective date of this AD, repetitive inspections and corrective actions must be accomplished in accordance with Dowty ASB SF340-61-95 at Revision 5.

2. Send an inspection report to Dowty Propellers in accordance with paragraph 2.B of Dowty ASB SF340-61-95.

3. When cracks are detected during any inspection as required by this AD, replace the hub with a serviceable unit. Replacement of the hub does not constitute terminating action for the repetitive inspection requirements of this AD.

The use of later approved revisions of these documents is acceptable for compliance with requirements of this AD.

Terminating Action

Modification of the affected propellers in accordance with Dowty Service Bulletin (SB) SF340-61-105 (at any revision) constitutes terminating action for the repetitive inspection requirements of this AD.

Note 2: EASA AD 2009-0005 dated 8 January 2009 refers. This AD supersedes CAA UK AD 006-10-99.

Propellers - Variable Pitch - Dowty Rotol

AD/PR/33 Amdt 3 (continued)

Compliance: For Requirement 1 - Within 1,200 Flight Hours (FH) after 24 February 2000 (the original issue of this AD) and thereafter at intervals not to exceed 1,200 FH.

For Requirement 2 - Within 30 days after each inspection as detailed in Requirement 1 of this AD.

For Requirement 3 - Before further flight.

This Amendment becomes effective on 12 March 2009.

Background: Current propeller maintenance philosophy recognizes the possibility of hub cracks and the need for Non-Destructive Testing (NDT) checks. This condition, if not detected and corrected, could cause premature failure of a propeller hub, resulting in propeller detachment and consequent damage to and loss of control of the aircraft.

The standard time between overhaul (TBO) for Dowty R389 and R390 propeller hubs has been established at 7,500 flight hours (FH), when hubs must be scanned for cracks in accordance with the applicable Dowty Component Maintenance Manual (CMM). The CMM describes the so-called 'B scan' NDT method, which is not convenient for aircraft operators to perform. To adequately address this safety issue, Dowty published Alert Service Bulletin (ASB) SF340-61-95 that describes additional NDT checks that can be accomplished by the aircraft operator.

In October 1999, the UK Civil Aviation Authority (CAA) mandated the accomplishment of these NDT checks by issuing AD 006-10-99 (CASA AD/PR/33 Amendments 1 and 2). In January 2008, Dowty revised the ASB to update and improve the inspection methods that must be used for crack detection.

For the reasons described above, this AD retains the requirements of UK CAA AD 006-10-99, which is superseded, and requires the inspection of the propeller hub rear half wall in accordance with the revised method(s) as published by Dowty Propellers.

Amendment 2of this AD reduced the compliance intervals from 1,800 FH to 1,200 FH.

Amendment 1 of this AD extended the compliance interval and the repetitive inspection intervals from 1,600 FH to 1,800FH.

Amendment 2 of this AD became effective on 23 January 2003.

Amendment 1 became effective on 28 December 2000.

Propellers - Variable Pitch - Dowty Rotol

AD/PR/33 Amdt 3 (continued)

The original issue of this AD became effective on 24 February 2000.

James Coyne
Delegate of the Civil Aviation Safety Authority

27 January 2009