
AIRWORTHINESS DIRECTIVE

On the commencement date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below repeals Airworthiness Directive (AD) AD/PHS/10 Amdt 1 and issues the following AD under subregulation 39.001 (1) of CASR 1998 and subsection 33 (3) of the *Acts Interpretation Act 1901*. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct an 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 - Hamilton Standard

AD/PHS/10 **Hydromatic Propeller - Aluminium Blades** **4/2017**
Amdt 2

Applicability: Hamilton Standard Hydromatic (non-counterweighted) propellers with aluminium blades that use engine oil for pitch control (does not apply to propellers with integral oil control or to propellers with steel blades) of the following types: 22D30, 22D40, 23D40, 23E50, 23E60, 24D50, 24E60, 33D50, 33E60, 34D50, 34D51, 34E60, 43D50, 43D51, 43E60, and 43H60, as installed on an aircraft.

Requirement: 1. Remove blades and visually inspect for evidence of corrosion in the blade fillet and shank area, particularly under the Teflon friction reduction strip and the resin corrosion barrier, in accordance with Hamilton Standard Aluminium Blade Overhaul Manual No. 130B dated 1 March 1980, as in force at the date of this AD.

 2. For propellers fitted to Limited Category aircraft for which the Australian Warbirds Association Ltd (AWAL) is the administering authority under Part 132 of CASR 1998:

 Comply with the requirements in AWAL Maintenance Direction No: 16-001, as in force from time to time.

Compliance: 1. For propellers, other than those described in requirement 2:
 At periods not exceeding 6 years calendar time in service.

 2. For propellers described in requirement 2:
 As detailed in AWAL Maintenance Direction No: 16-001, as in force from time to time.

Note 1: AWAL Maintenance Direction No: 16-001 expresses additional requirements at the Annual inspection of the propeller. The blade removal inspection must be completed at periods not exceeding 12 years calendar time in service.

Note 2: Calendar periods are deemed to commence from the time the propeller is first installed on an aircraft following reconditioning or inspection in accordance with the AD and shall be uninterrupted including all subsequent service and storage periods.

Note 3: The AWAL Maintenance Direction does not apply to any aircraft that has been flown off salt water.

This AD commences on 20 February 2017.

Propellers - Variable Pitch - Hamilton Standard

AD/PHS/10 Amdt 2 (continued)

Background: The FAA advise the possibility of fatigue cracking, leading to blade separation, initiated by severe corrosion around the shank and blade fillet area, particularly under the Teflon friction strip. FAA AD 81-13-06 R2 refers.

Amendment 1 (1987) of this Directive was issued to extend the inspection period after initial inspection.

Amendment 2 of this AD allows for Limited Category aircraft administered by the Australian Warbird Association Ltd to have an extended inspection period by compliance with the requirements contained in AWAL Maintenance Direction 16-001.

AWAL requested that CASA review the AD and submitted maintenance reports and statements that demonstrated that no significant corrosion had been found at the previous propeller disassembly inspections at the 6 yearly intervals.

A handwritten signature in black ink, appearing to read 'van Dijk', with a large, sweeping flourish extending downwards and to the left.

Pieter van Dijk
Delegate of the Civil Aviation Safety Authority

15 February 2017