
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/PA-32/42 Amdt 2 and issues the following AD under subregulation 39.001 (1) of CASR 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.

Piper PA-32 (Cherokee Six) Series Aeroplanes

AD/PA-32/42 **Wing Structural Fatigue Life Limitation** **2/2022**
Amdt 3

Applicability: All Piper PA-32 series aircraft, all models.

Requirement: 1. Retire from service:

- 1.1. The wing main spar assembly; and
- 1.2. The bottom cap of the wing main spar box (carry through).

OR

2. Inspect the lower wing joint for fatigue cracks in accordance with an approved inspection program.

Note 1: For Requirement 1, replace retired components in accordance with approved maintenance data; Regulations 42V and 2A of CAR refer.

Note 2: For Requirement 2, an acceptable standard for the inspection program is FAR 23.572 (a) (3) Amdt 23-48 or later or an equivalent level of safety approved by CASA.

Compliance: For models PA-32-260, PA-32-300, PA-32R-300, PA-32S-300, PA-32RT-300, PA-32RT-300T:

For Requirement 1: Retire before 11000 hours component time in service.

For Requirement 2: Inspect before 11000 hours component time in service, and thereafter at the intervals specified in the approved inspection program.

For models PA-32-301, PA-32R-301, PA-32-301T, PA-32R-301T, PA-32-301FT, PA-32-301XTC:

For Requirement 1: Retire before 13700 hours component time in service.

For Requirement 2: Inspect before 13700 hours component time in service, and thereafter at the intervals specified in the approved inspection program.

Alternative Means Of Compliance or Exclusions approved for AD/PA-32/42 Amdt 2 are approved for AD/PA-32/42 Amdt 3.

This AD commences on 27 January 2022.

Piper PA-32 (Cherokee Six) Series Aeroplanes

AD/PA-32/42 Amdt 3 (continued)

Background: Fatigue analysis predicts the possibility of cracking in the lower wing joint. Such cracking caused a fatal accident to a similar model with the same style of wing joint.

The original issue of this Airworthiness Directive became effective on 29 October 1976.

Amendment 1 re-affirmed that all Piper PA-32 series models are subject to the life limit, even those released after the original issue of this Directive. Amendment 1 minimised the structure to be retired by limiting it to the components which comprise the lower wing joint.

Amendment 1 provided the possibility of inspection as an alternative to retirement.

Amendment 2 became effective on 29 May 2009 and adjusted the life limit for Saratoga models with a semi-tapered wing following a review of Piper fatigue reports.

Amendment 3 amends Note 2 of the AD to clarify requirements for inspection programs to satisfy Requirement 2 of the AD.



David Punshon
Delegate of the Civil Aviation Safety Authority

21 January 2022