
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/PA-38/27 Amdt 1 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.

Piper PA-38 (Tomahawk) Series Aeroplanes

AD/PA-38/27
Amdt 2

Wing Fatigue

5/2004

Applicability: All PA-38-112 aircraft.

Requirement: 1. Retire the wing and associated structure OR install a spar strap per FAA STC SA01130SE (Sterling Aviation Technologies Inc.), issued 10 October 2002.

2. If the spar strap has been installed, visually inspect the spar caps and strap for cracking. Refer to Piper PA-38-112 Maintenance Manual, Periodic Inspection, Section E, Wing Group, items 9 and 10. The visual inspection can be done at the same time as these items.

Compliance: 1. Within 200 hrs time in service (TIS) after 26 February 1998 or at 11000 hrs TIS, whichever occurs last.

If a wing strap is installed per FAA STC SA01130SE (Sterling Aviation Technologies Inc - See Note 2), then the new retirement life is to be calculated using the following formula:

New retirement life = 21,950 hrs - (0.3 x hrs accumulated prior to modification)

Note 1: Example 1, an aircraft with 9,000 hours already accumulated without the modification:

New retirement life = 21,950 - (0.3 x 9,000) = 19,250 hours.

Example 2, an aircraft with 11,000 hours already accumulated without the modification:

New retirement life = 21,950 - (0.3 x 11,000) = 18,650 hours.

Note 2: For assistance with incorporating this STC, write to the STC owner, Mr Paul M. Sterling, 13113 SE 228th Place, Kent, WA, USA, 98031.

2. Initially, at 100 flight hours after installation of the wing spar strap, then every 100 flight hours thereafter.

Piper PA-38 (Tomahawk) Series Aeroplanes

AD/PA-38/27 Amdt 2 (continued)

This Amendment becomes effective on 13 May 2004.

Background: This AD mandates the replacement requirements and schedule listed in the Maintenance Manual and the Country of Origin FAA Type Certificate Data Sheet.

This amendment includes a note with contact details for the STC owner, so that owners and operators may obtain assistance in incorporating the modification. There is no change to the requirements or compliance.

Amendment 1 provided an option for the incorporation of an FAA approved Supplemental Type Certificate (STC), which provides for a wing spar reinforcement strap to be installed to extend wing life. A formula is also provided so that a new retirement life can be calculated for aircraft that incorporate the modification listed in the STC. An ongoing inspection requirement, which is specified in the STC, is also added for aircraft that have the spar strap installed.

The original issue of this AD became effective on 26 February 1998.



David Villiers
Delegate of the Civil Aviation Safety Authority

2 April 2004