



AIRWORTHINESS BULLETIN

AWB 28-017 Issue 1 – 1 February 2018

Robinson R22 Fuel Tanks

1. Effectivity

All Robinson Helicopter Company (RHC) R22 helicopters.

2. Purpose

To ensure that all operators and maintainers are aware of the manufacturers latest revision to Service Bulletins pertaining to fuel tank modifications. The manufacturer modifications are designed to improve the R22 fuel system's resistance to a post-accident fuel leak.

This AWB is to act as a timely reminder to operators and maintainers that they have a responsibility to ensure that they follow their approved system of maintenance or the manufacturer's maintenance program which includes ensuring compliance to all RHC service bulletins.

3. Background

To date there have been multiple crashes of Robinson R22 helicopters with post-crash fires in Australia.

A majority of these post-crash fires have been associated with non-survivable high energy impacts consistent with the type of work or the environment where the helicopters are operated.

One crash however, involved a survivable training flight where the occupants were able to egress the helicopter before the ruptured fuel tanks ignited.

Robinson Helicopter Company (RHS) have recently amended R22 Service Bulletin [SB-109A](#) "Bladder Fuel Tank Retrofit" on 15 January 2018.

This Service Bulletin requires R22 helicopters with all-aluminium fuel tanks to be retrofitted with bladder-type tanks to improve the fuel system's resistance to a post-accident fuel leak. The Service Bulletin provides information on a discount kit and a rebate available for each field installation by way of incentive to accomplish the Service Bulletin.

The revised Service Bulletin gives a revised compliance time as soon as practical but no later than next 2200-hour overhaul, 12 year inspection, or 15 January 2020, whichever occurs first.



The design features introduced by Service Bulletin [SB-109A](#) increase the level of safety in the event of a survivable crash by either decreasing the likelihood or delaying the onset of post-crash fire. The features minimize crash-induced fuel leaks and their contact with potential fuel ignition sources both during and after the crash, and increase the time occupants have available to egress before a post-crash fire could become critical).

4. Recommendations

CASA strongly recommends that all operators of RHC R22 helicopters incorporate the following modification listed below at their earliest convenience.

- [SB-109A](#) Bladder Fuel Tank Retrofit

5. Supporting Documentation

ATSB Occurrence Investigation [200000125](#)

FAA SAIB [SW-17-31](#) Fuel System

Robinson Helicopters Technical Publications

6. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

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