



### 1. Effectivity

All Robinson Helicopter Company (RHC) R44 helicopters.

### 2. Purpose

To ensure that all operators and maintainers are aware of the manufacturer's latest revisions to Service Bulletins pertaining to fuel tank modifications. The manufacturer's modifications are designed to improve the R44 fuel system's resistance to a post-accident fuel leak.

### 3. Background

Recent R44 post-crash fires have heightened the awareness of improvements available to operators that improve the post-crash survivability of the R44 rotorcraft. Since the previous issue of this AWB, Robinson has issued SB-78B further reducing the manufacturer's compliance date to the 30 April 2013 for the installation of bladder tanks to the R44.



Images highlighting how the RHC SB 78 bladder fuel tank modification, survived the impact forces, and the absence of post-crash fire.





# AIRWORTHINESS BULLETIN

Robinson R44 Fuel Tanks

**AWB** 28-012 Issue : 2  
**Date :** 6 February 2013

CASA wrote to all affected R44 operators on 6 February 2013, to ensure they were aware of this matter and to learn of the status of the Australian fleet. The letter to operators is attached to this bulletin.

## 4. Recommendations

CASA strongly recommends that all operators of RHC R44 helicopters subject to Robinson SB-78B incorporate the manufacturers modified bladder tanks at their earliest opportunity.

## 5. Supporting Documentation

ATSB Occurrence Investigation AO-2011-016

ATSB Occurrence Investigation AO-2012-21

Images courtesy of ATSB document AO-2011-016 showing a bladder tank post collision with terrain.

Robinson Helicopters Technical Publications.

## 6. References

- SB-82 Rotor Brake Switch
- SB-78B Bladder fuel tank Retrofit (which incorporates SB-68 below)
- SB-69 Gascolator Assembly
- SB-68 Rigid fuel line replacement
- SB-67 Fuel hose supports

## 7. Enquiries

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

[AirworthinessBulletin@casa.gov.au](mailto:AirworthinessBulletin@casa.gov.au)

Airworthiness & Engineering Branch  
Civil Aviation Safety Authority  
GPO Box 2005, Canberra, ACT, 2601



# Australian Government

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## Civil Aviation Safety Authority

Standards Division  
File Ref: D13/36518  
5 February 2013  
Notice to all R44 Operators

**Subject: Fuel Tanks - R44 helicopters, S/N 0001 thru 2064 and  
R44 II helicopters, S/N 10001 thru 12890.**

You may be aware of recent incidents and accidents involving Robinson R44 helicopters that, in some cases, have resulted in post-crash fires following helicopter rollover and/or low velocity impact events. The Type Certificate holder (manufacturer) is recommending the incorporation of a bladder fuel tank kit to improve the integrity of the tank after impact or rollover events. The manufacturer's recommendation comes in the form of Service Bulletin (SB) 78B, which specifies the requirements for the installation of the modified fuel tanks, with a compliance date of April 2013.

Operators are reminded of their responsibility to ensure that aircraft are in a safe and airworthy state. This requires the operator to review manufacturer's recommendations and associated data and, where appropriate, to incorporate those recommendations.

Civil Aviation Regulation (CAR) 42A (4) 1988 states the following;

*(4) If a person has elected to use a manufacturer's maintenance schedule for an aircraft's maintenance, all instructions issued by the manufacturer of components permanently, or from time to time, included in, or fitted to, the aircraft, being instructions for the continued airworthiness of the components, are to be taken to form part of the manufacturer's maintenance schedule and election has effect accordingly.*

At this time, CASA strongly recommends that all operators of R44 helicopters, which are subject to the Robinson SB (78B), incorporate the manufacturer's modified bladder tanks at the earliest opportunity.

To enable CASA to determine the current and projected status of the R44 fleet, you are requested to advise CASA on the status of the fuel tank installation on your aircraft and whether the Service Bulletin modification has been installed. This can be achieved by completing the attached form and returning it by facsimile, mail or e-mail at the earliest opportunity. If you own multiple aircraft, it would be appreciated if a separate form for each aircraft is returned

Thank you for your consideration of this matter.

Yours sincerely

[ORIGINAL SIGNED BY]

Peter Boyd  
Executive Manager  
Standards Division  
Civil Aviation Safety Authority

Please return the following details to the CASA SDR cell.

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Fax: +61 2 6217 1914

Mail: Civil Aviation Safety Authority  
GPO Box 2005  
Canberra ACT 2601

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Owner/Operator's Name .....

Registration Mark .....

Serial # .....

Is the aircraft used for charter operations? .....

Is the aircraft modified in accordance with SB 78B? .....

If modified, in what month/year was the modification installed? .....

If not yet modified, when is the modification likely to be installed? .....