



Airworthiness Bulletin

AWB 62-007 Issue 1 – 4 February 2022

R22 Main Rotor Blade Spindle Bearings

An Airworthiness Bulletin is an advisory document that alerts, educates and makes recommendations about airworthiness matters. Recommendations in this bulletin are not mandatory.

1. Effectivity

Robinson R22 helicopters

2. Purpose

To notify operators of an increased trend in reports of worn or brinelled MRB spindle bearings (typical part number A159-3).

3. Background

The CASA has detected an increasing trend in reports of Main Rotor Blade (MRB) spindle bearings which have exhibited signs of wear/damage leading to premature removal in some instances.

Whilst this appears to be a progressive wear characteristic, it nonetheless may not become apparent until anomalies in the cyclic control and abnormal vibration appears or it is otherwise discovered during scheduled/unscheduled maintenance.

Because in some cases bearings have been degrading at lower hours than expected, frequent disassembly of the spindle to replace them may cause further issues.

At this time, the airworthiness concern described in this Airworthiness Bulletin is not considered an unsafe condition that would warrant an Airworthiness Directive to be issued under Part 39 of the Civil Aviation Safety Regulations 1998.

4. Recommendations

All operators should be aware of the potential for the MRB spindle bearings to exhibit some wear/notchiness and this may be detectable by an unusual feeling in the cyclic control and also if the spindles are rotated by hand. This could indicate a deteriorating bearing set.

In the first instance this should be reported by SDR report to CASA and also to the OEM (TC holder), with detailed photos and operational service information provided, including a history of any abnormal operations or any operational exceedances.



5. Reporting

Report any findings to CASA SDR system and the Type Certificate Holder.

6. Enquiries

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

AirworthinessBulletin@casa.gov.au

or in writing, to:

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