

# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

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***This is information only. Recommendations aren't mandatory.***

## **Introduction**

This Special Airworthiness Information Bulletin alerts owners, operators, pilots, and mechanics of **Robinson R22 helicopters**, to adhere to the manufacturer's service information regarding operation and maintenance of the main rotor blades.

## **Background**

Accidents have occurred in Australia and England involving failure of R22 main rotor blades. The foreign authorities examined the failed blades and determined that metal fatigue had occurred in the root fittings. Further investigation has revealed that some of the failures occurred after the blade had been operated in excess of the main rotor blade retirement life. Other failures occurred after warning signs of main rotor blade problems went unnoticed or unheeded by mechanics and pilots. Robinson Helicopter Company has released service information to help operators focus their attention on potential failures. **Some of the accidents may have been avoided if the operators had followed these procedures.**

## **Recommendations**

- Read R22 Safety Notice SN-39 issued July 2003, titled "Unusual Vibration Can Indicate a Main Rotor Blade Crack". This instructs pilots to land immediately if main rotor vibration increases rapidly or becomes severe during a flight.
- Read R22 Safety Notice SN-37, "Exceeding Approved Limitations Can Be Fatal", issued in December 2001, which gives an explanation of the hazards and causes of metal fatigue, and the need to retire parts within their life limits.
- Read R22 Service Letter SL-53, "Visual Inspection of Main Rotor Blade Root Area", dated November 21, 2001. This details inspections for cracks of the main rotor blade root area that can occur if the main rotor blade is operated past its service life.
- Assure that the helicopter is not operated beyond the part retirement lives as currently published in the R22 Maintenance Manual, Section 3, Table 3-1 "Fatigue Life - Limited Parts".
- Perform procedures in R22 Service Letter SL-21A, issued May 31, 2002, which advises a check for main rotor blade sealant and filler cracking.

For service information, contact Robinson Helicopter Company at (310) 539-0508 or on the internet at [www.robsonheli.com](http://www.robsonheli.com)

**For Further Information Contact**

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