Continuing Airworthiness Notice – 64-001



Robinson R44 Series – Fatigue Cracks in Tail Rotor Blades with P/N C029-1 and C029-2

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Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91.

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

Robinson R44 series helicopters fitted with Tail Rotor Blades (TRBs) P/N C029-1 or C029-2.

Purpose:

To advise aircraft operators and maintainers that the CAA has received a number of reports of finding cracked TRBs with P/N C029-1 and C029-2 installed on Robinson R44 series helicopters.

Background:

The CAA and Robinson Helicopter Corporation (RHC) have received reports of finding fatigue cracks in the leading edge of TRBs with P/N C029-1 and C029-2. The cracks are caused by high fatigue stresses during manoeuvres with large left pedal inputs. TRB P/N C029-3 incorporates design features to reduce fatigue stresses. RHC SB-83 requires the introduction of a Special Pilot Caution into the AFM until TRBs with P/N C029-3 are installed. (P/N C029-3 TRBs require a G062-1 hub assembly.)

Recommendations:

The CAA recommends that operators and maintainers accomplish the following:

- 1. Introduce the requirements in RHC SB-83, dated 30 May 2012 into the AFM.
- 2. Advise the pilot to inspect the leading edges of the tail rotor blades for cracks before every flight.
- 3. To reduce fatigue damage to the TRBs, avoid manoeuvres which require large left pedal inputs.

Enquiries:

Enquiries regarding this Continuing Airworthiness Notice should be sent to:

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