Continuing Airworthiness Notice – 27-028



MD Helicopters 500N and 600N Thruster Control Output Drum - Cracking

26 February 2024

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:

All MD 500N and MD 600N helicopters fitted with Thruster Control Output Drum Assembly P/N 500N7221-1.

Purpose:

The purpose of this Continuing Airworthiness Notice (CAN) is to advise MD helicopter operators and maintainers of a possible safety concern with the thruster control output drum assembly.

For MD500 helicopters refer: IPC 67-20-50(89) and for MD600 helicopters refer: IPC 67-20-60(95).

Note: MD500 and MD600 helicopters have similar Notar assembly configurations, therefore this safety concern could affect either helicopter type.

Background:

The CAA has received a report from a New Zealand MD 600N operator of finding cracks in the thruster control output drum assembly.

One of the three attachment points for the rotating thruster cone had completely detached, and the other two attachment points showed indications of cracking. Refer to the photograph on page 2 below.

The affected aircraft had accumulated approx. 4700 hours TTIS.

Recommendation:

The CAA recommends that aircraft operators and maintainers inspect affected aircraft at the earliest opportunity, paying particular attention to the rotating thruster cone attaching points for cracking.

If any indications of cracks are identified, please report findings to the CAA by completing a CA005 Defect Report form. Please provide as much engineering detail as possible.

The form can be obtained from: https://www.aviation.govt.nz/assets/forms/CA005D Form.pdf
The completed form can be emailed to the CAA at: ca005@caa.govt.nz

Please also report findings to MD Helicopters Customer Support.

Any questions can be directed to: warren.hadfield@caa.govt.nz



Thruster Control Output Drum Assembly P/N 500N7221-1