Continuing Airworthiness Notice – 72-003



Rolls-Royce 250 Series Turboshaft Engines - #5 Bearing Carbon Seal with P/N 6898764

19 February 2019

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.

The contents of this notice are ADVISORY ONLY and are NOT MANDATORY.

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

Applicability:

All Rolls-Royce/Allison 250-C20 series, 250-C28 series, 250-C30 series and 250-C47 series engines fitted with a #5 bearing carbon seal with P/N 6898764.

Purpose:

To advise affected helicopter operators and maintainers of two recent occurrences of smoking Rolls-Royce/Allison 250 series engines, due to failure of OEM supplied #5 bearing carbon seal with P/N 6898764.

Background:

This Continuing Airworthiness Notice (CAN) is prompted by two recent failures of #5 bearing carbon seals with P/N 6898764. Both failures occurred soon after carbon seal replacement at a low number of flight hours. Fortunately the visible exhaust smoke prompted an immediate landing in both cases, before significant loss of engine oil pressure.

Rolls-Royce has been advised and the CAA is investigating whether similar failures have been reported to the FAA and EASA. The NZ maintenance provider that reported these incidents is assessing the situation to determine if these failures are limited to a recent batch of seals and if any other turbines are affected.

As information becomes available the CAA will keep operators and maintainers informed. Further action may most likely follow.

Recommendation:

The CAA strongly recommends the following:

- 1. Operators of affected engines should be aware that if any visible exhaust smoke is detected, the #5 bearing carbon seal may be failing and an immediate precautionary landing should be accomplished.
- 2. If excessive engine oil consumption is experienced, then the #5 bearing carbon seal could be failing and further investigation is required.
- 3. If the engine has recently been in for maintenance, operators are advised to contact their maintenance provider for advice and to determine if an affected #5 bearing carbon seal is fitted to the engine.

Note:

If any defects, occurrences or anomalies are found with #5 bearing carbon seals with P/N 6898764, then complete a CA005 Defect Report form and submit the completed form to the CAA at <u>CA005@caa.govt.nz</u>

Please include all findings and any other relevant technical information. A CA005D Defect Report form can be obtained from http://www.caa.govt.nz/assets/legacy/Forms/CA005D_Form.pdf

Enquiries:

Please send enquiries regarding this CAN to:

Owen Olls Airworthiness Specialist Email: <u>owen.olls@caa.govt.nz</u> Phone: 04 560 9569