
Purpose: This InFO serves to remind owners, operators, and maintenance providers of Garlick Helicopters, Inc’s OH-58A, OH-58A+, and OH-58C helicopters with Rolls Royce 250-C20 & 250-C18 engines of the importance of properly applying the life-limit formula to engine parts and components.

Background: On September 28, 2016, the Federal Aviation Administration (FAA) received a Safety Hotline Complaint that identified owners/operators of commercially used OH-58A, A+, and C helicopters using incorrect calculation methods to determine the life-limit of engine parts and components. Although these parts and components should have a life-limit based on hours, not cycles, the complainant specified that the Garlick ICA and the Type Certificate Data Sheet (TCDS) contain limits that exceed FAA-approved specific criteria for the OH-58A, A+, and C aircraft.

Discussion: The FAA reviewed applicable documents, specifically revision 8 of TCDS R00006DE, dated August 1, 2012. This TCDS is currently held by Rotorcraft Development Corporation, and was previously held by Garlick Helicopter, Inc. and Garlick Helicopter Corporation. The TCDS references the Garlick ICA report, dated August 15, 1996, and later revisions, and indicates the report is part of the ICA. The TCDS states the retirement times are listed in the FAA-approved Airworthiness Limitations Section of the TCDS, and includes engine components. The TCDS also references the most current FAA-approved revision of the serial number list report, No. RDC-TC03.

The FAA review confirmed the information provided by the complainant. Section II, Airworthiness Limitations Section, of the Garlick ICA references Allison Engine Company publication 5W2 & 1 OW2 for retirement intervals. The FAA reviewed these documents, identified the life-limit requirements for the 250-C20 & 250-C18 engines, and confirmed that engine components are life-limited by hours and/or cycles. The ICA document identifies an FAA-accepted formula for computing initial cycles of life-limited engine components not being tracked by cycles. The formula multiplies engine or engine component total time (in hours) by 2.5, which gives the cycle count. The serial number list in the TCDS identifies a total of 47 registration/serial numbers of OH-58A, A+, & C rotorcraft. The safety concern is that this formula, used for military surplus life-limited OH-58 engines and engine components, is being used universally for all military surplus life-limited engines and engine components not previously tracked using the cycle count method.
The formula in the Garlick ICA is specifically for military surplus life-limited OH-58 model engines and engine components listed in the No. RDC-TC03. The formula is not intended to be used on engines and engine components that have not been previously tracked using the cycle count method.

**Recommended Action:** Owners, operators, and maintenance providers of Garlick Helicopters, Inc.’s OH-58 series helicopters should ensure they are familiar with the content contained in this InFO and ensure the life-limit formula is being correctly applied to engine parts and components.

**Contact:** Questions or comments regarding this InFO should be directed to the Aircraft Maintenance Division, General Aviation Branch, AFS-350 at (202) 267-1675.