

Subject: MD HELICOPTER - 369 registered SE-JVI, on 26/09/2017, at Högheden, Västerbotten County, - Sweden

Reply to Safety Recommendation SWED-2018-003 received on 20/08/2018

<p>Safety Recommendation:</p>	<p>EASA is recommended to: Evaluate whether the construction of the Rolls-Royce engine RR 250-C20 and other models using the same type of B-nut without any other safety measures than the tightening torque and the prescribed nut checks in accordance with EASA AD 2004-0009R3, provides sufficiently secure protection against engine failure in single-engine configurations. (RL 2018:08 R3)</p>
<p>Final response:</p>	<p>In response to an inquiry from the European Union Aviation Safety Agency (EASA), the RR 250-C20 engine Type Certificate holder has stated that numerous actions and communications have successfully reduced the number of pneumatic tube B-nut connection events in the past 10 years. As a result, over that same period, loose air pressure pipe B-nut events have occurred at a rate in the order of 2.10E-7 events per flight hour, which is well within the regulatory limits for engine loss of power events. The maintenance best practices for these B-nut connections are detailed in the Rolls-Royce Incorporated Customer Service Letter A-1166 document, revision 1 dated February 2007, and compliance with this document is mandated by the EASA Airworthiness Directive (AD) 2004-0009R3.</p> <p>Thorough design improvement reviews performed by the engine Type Certificate holder have shown that the current B-nut design was the most adequate for tubing connection. The engine Type Certificate holder also verified by testing that a correctly torqued B-nut connection would not become loose during engine operation. EASA also found that the majority of the B-nut connection related occurrences collected in the EASA Internal Occurrence Reporting System (IORS) result from an improper torquing of the connection. On that basis and following coordination with FAA, EASA considers that the existing engine construction, and associated safety measures in place, provide sufficiently secure protection against engine failure in single-engine configurations.</p>
<p>EASA Status:</p>	<p>Closed – Agreement</p>