



Safety Information Bulletin

CAAS SIB No.	2016-01
Issued	11 January 2016
Subject	High Pressure Compressor Blade Fracture on IAE V2500-A5 Engine
Ref. Publications	1) IAE Service Bulletin 72-0642
Applicability	All Singapore Air Operator Certificate (AOC) Holders
Description	<p>Recently, there have been a number of air-turn-backs reported on the Airbus 320 fleet operated by Singapore operators. Some of these air-turn-backs were due to abnormal Engine Gas Temperature (EGT) readings in flight. CAAS conducted a safety investigation and concluded that in two cases, the failure was due to blade root cracks on the Stage 7 High Pressure Compressor (HPC) of the V2500-A5 SelectOne engine. In both cases, the cracks resulted in the liberation of one blade . The debris was found contained within the engine.</p> <p>Investigation by OEM revealed that the cracks were due to the accelerated degradation of the Dry Film Lubricant (DFL) coating on the HPC stage 6, 7 and 8 blade roots. The combination of the deteriorated DFL coating and high contact pressure will likely lead to galling and fatigue cracks.</p> <p>This is a known problem and IAE had developed Service Bulletin No. V2500-ENG-72-0642 to introduce damper wires to HPC stages 6, 7, and 8 rotor discs on V2500-A5 SelectOne engine. The damper wires can reduce the risk of below platform failures caused by fatigue cracks.</p>
Recommendation(s)	<p>Incorporation of damper wires on stages 6, 7 and high pressure compressor blades on IAE V2500-A5 SelectOne Engines</p> <p>Singapore AOC holders are recommended to incorporate IAE Service Bulletin No. V2500-ENG-72-0642 dated 21 March 2014 or later revisions.</p>
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