

# **STUDIES ON PERFORMANCE DETERIORATION OF A LOW BYPASS TURBOFAN ENGINE IN SERVICE**

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## **Abstract**

The performance deterioration of a low bypass turbofan engine is analyzed to find out its causes. The performance parameters are compared with their limitations for a specific throttle setting. Dirt buildup, soot deposit, de-twisting of turbine blades, malfunction of atomizers and fuel system accessories are found to degrade the engine health and performance before the intended service period. Periodic compressor wash and engine maintenance, cleaning or replacement of fuel filters and good assembly practices are found beneficial in addressing the issues and retaining the engine performance.

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