

Pratt and Whitney Turbine Engines - JT8D Series

AD/JT8D/37 **HP Compressor Disc Replacement** **8/99**

Applicability: All JT8D-1 through -17R series engines incorporating a high pressure compressor disc listed by serial number in Appendix 1 of FAA AD 99-01-08.

Requirement: Remove from service stage 7 through stage 14 high pressure compressor discs as specified by serial number in Appendix 1 of FAA AD 99-01-08.

Note: A review carried out when this problem first became known showed that none of the affected discs were installed in engines fitted to Australian aircraft.

Compliance: Unless previously accomplished, as detailed in FAA AD 99-01-08, Compliance (a).

This Airworthiness Directive becomes effective on 12 August 1999.

Background: This directive is prompted by advice of an uncontained HPC disc failure on a JT8D-9 engine. The investigation into this incident identified the disc failure was caused by cadmium embrittlement due to a process anomaly during nickel cadmium plating. Nickel cadmium plating is used to provide corrosion protection for the disc.

The FAA has advised that several hundred high pressure compressor discs fitted to P&W JT3D and JT8D engines may have been incorrectly processed during nickel cadmium plating at a particular repair facility. Given the potential for further uncontained failures, replacement of the suspect discs has been made mandatory unless they have operated beyond an established safe threshold.