

AlliedSignal (Garrett/AiResearch) Turbine Engines - TFE731 Series

AD/TFE731/22

**Low Pressure Turbine Third Stage
Disc Material Anomalies**

3/93 DM

Applicability: Garrett Engine Models TFE731-2, -3, -3A, -3AR and -3R equipped with Part Number 3072068-X, 3072544-X, 3073015-X, or 3073115-X low pressure turbine rotor discs identified by the serial numbers listed in the Allied-Signal Aerospace Company Garrett Engine Division Alert Service Bulletin TFE731-A72-3474 dated 3 April 1992.

Requirement: Action in accordance with the requirements of the Allied-Signal Aerospace Company Garrett Engine Division Alert Service Bulletin TFE731-A72-3474 dated 3 April 1992.

Note: FAA AD 92-21-06 refers.

Compliance: At the next access to the turbine rotor assembly or before accumulating 50 hours time in service after 25 January 1993.

Background: Investigation into a turbine hub and disc failure in an Auxiliary Power Unit revealed random oxide inclusions in a heat lot from which a number of Low Pressure Turbine discs for TFE731-2 and -3 series engines was manufactured. An examination of some rotor discs manufactured from this heat lot material revealed that these anomalies had caused cracking in a significant number of them which could lead to uncontained engine failure. The requirement document service bulletin identifies items made from the heat lot by serial number, and it gives procedures for their removal and replacement.