

Allison Turbine Engines - 250 Series

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**AD/AL 250/41  
Amdt 5**

**Third Stage Turbine Wheel - Inspection  
and RPM Operational Restrictions**

**5/84**

Applicability: All models 250-C20, C20B, C20F, B17, B17B, B17C and B17D not fitted with solid blade shroud third stage turbine wheels.

Document: 1. Allison 250-C20, C20B, C20F, CEB-A-1174 Rev. 3; or  
2. Allison 250-B17, B17B, B17C B17D, CEB-A-1146 Rev. 3.

*Note: FAA AD 83-03-02 R1 also refers.*

In addition, until all affected turbine wheels have been replaced with solid blade shroud wheels, it will be necessary to install a placard on or adjacent to the aircraft installed N2 tachometer, prohibiting sustained operation between 90 and 98% N2.

And

For C20, C20B, C20F powered aircraft only install a placard in clear view of the pilot stating that:

**“DURING ALL GROUND OPERATION, THE ENGINE N1 SPEED MUST BE MAINTAINED AT GROUND IDLE EXCEPT DURING TRANSIENT OPERATION, WHEN PERFORMING REQUIRED OPERATIONAL CHECKS, IN HIGH OR GUSTY WIND CONDITIONS OR WHERE SAFETY WOULD BE ADVERSELY AFFECTED.”**

And

For B17, B17B, B17C B17D powered aircraft only install a placard in clear view of the pilot stating that:

**“DURING ALL GROUND OPERATION, THE ENGINE N2 SPEED MUST BE MAINTAINED BELOW 90%N2 RPM EXCEPT DURING TRANSIENT OPERATION, WHEN PERFORMANCE REQUIRED OPERATIONAL CHECKS IN HIGH OR GUSTY WIND CONDITIONS OR WHERE SAFETY WOULD BE ADVERSELY AFFECTED.”**

Compliance: In accordance with the reference document.

Background: This Directive is raised in issue to ensure compliance with Revision 3 of the manufacturers document which is a complete reissue. It now requires replacement of non-sold blade shroud wheels on a tighter phased schedule and it is no longer allowable to re-install any superseded wheel.

Installation of third stage turbine wheel with solid blade shroud deletes the engine operating speed restrictions imposed by this Directive.

