

Turbomeca Turbine Engines - Arriel Series

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**AD/ARRIEL/10**                      **2nd Stage Turbine Nozzle Guide Vanes**                      **11/98**

Applicability: All Arriel 1 turboshaft engines.

Requirement: 1. Arriel 1A, 1A1, 1A2, 1B engines incorporating modification TU 76 but not incorporating modification TU 197 or TU 202 and, Arriel 1C, 1C1, 1C2, 1D, 1D1, 1K, 1K1, 1S engines not incorporating modification TU 197 or TU 202:

Carry out a check of the engine for unusual noises during engine run down and a check of the gas generator for free rotation in accordance with Turbomeca Service Bulletin No. 292 72 0181, revision 3 dated 15/9/95.

2. All Arriel 1 engines incorporating modification TU 197:

a. Carry out a check of the engine for unusual noises during engine run-down in accordance with the requirements of Turbomeca Service Bulletin No. 292 72 0212 Revision 3 dated 25/6/98.

b. Carry out a boroscope inspection of the 2nd stage turbine nozzle guide vane in accordance with the requirements of Turbomeca Service Bulletin No. 292 72 0212 Revision 3 dated 25/6/98.

*Note: Requirement 1 and Requirement 2a of this Directive may be performed by the pilot in command, but not a student pilot. Certification by a pilot shall be carried out by entering on the maintenance release; Compliance with AD/ARRIEL/10 Requirement 1 or 2a, as applicable, the pilot's signature and the pilot's licence number.*

*A copy of this Directive and the Requirement Document shall be carried with the applicable aircraft Maintenance Release.*

3. All Arriel 1B, 1D, 1D1 engines incorporating modification TU 76 but not incorporating modifications TU 197 or TU 202.

Replace the 2nd stage turbine nozzle guide vane in accordance with the requirements of Turbomeca Service Bulletin No. 292 72 0150 (Mod TU 202).

*Note: DGAC Airworthiness Directive 98-311(A) refers.*

Compliance: 1. As detailed in the Requirement Document with a revised effective date of 8 October 1998.

2. As detailed in the Requirement Document with a revised effective date of 8 October 1998.

3. Unless previously accomplished before further flight after the effective date of this Directive.

SCHEDULE OF AIRWORTHINESS DIRECTIVES

*Note: The manufacturer has advised completion of a program to ensure incorporation of modifications TU 197 or TU 202 in engines installed in single engine helicopters known to be in service in Australia.*

This airworthiness directive becomes effective on 8 October 1998.

Background: This AD replaces AD/ARRIEL/8 which was issued to address reports of 2<sup>nd</sup> stage turbine nozzle guide vane deterioration that resulted in a number of turbine failure events. The new Directive reflects a general update by the French DGAC and also provides for inspections based on engine cycles rather than engine hours.