
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Turbomeca Turbine Engines - Arriel Series**AD/ARRIEL/21****Free Turbine Containment Shield****12/2005
DM**

Applicability: Turbomeca ARRIEL 2B and 2B1 engines, pre-mod TU 22.

Note 1: These engines are installed in but not limited to AS 350 B3 and EC 130 helicopters.

Requirement:

1. Carry out a visual inspection of the free turbine shield in accordance with paragraph 2 of TURBOMECA Mandatory Service Bulletin (MSB) No 292 72 2821 dated 27 June 2005 or later DGAC approved revisions.
2. Remove free turbine shield from service, if the length or position of the crack(s) exceed(s) the criteria laid down in paragraph 2 of MSB No. 292 72 2821 or later DGAC approved revisions.

Note 2: DGAC AD F-2005-162 EASA Approval No. 2005-6251 dated 20 September 2005 refers.

Compliance:

1. Within 10 operating hours after the effective date of this directive, thereafter at a frequency dependent on the results of the inspection, as specified in paragraph 2 of MSB No. 292 72 2821 or later DGAC approved revisions.

Note 3: The inspection interval is based on the results of each ongoing inspection.

2. Before further flight.

This Airworthiness Directive becomes effective on 12 October 2005.

Background: On several pre-mod TU 22 ARRIEL 2 engines, large circular cracks have been found on the free turbine shield at the blending radius between the containment shield and the rear flange.

Turbomeca Turbine Engines - Arriel Series

AD/ARRIEL/21 (continued)

Under the effects of manoeuvring loads, such cracks may potentially cause a loss of alignment of the engine and lead to its shutdown.



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Delegate of the Civil Aviation Safety Authority

6 October 2005