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**AIRWORTHINESS DIRECTIVE**

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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.

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**Agusta A109 Series Helicopters****AD/A109/62****Engine - Power Turbine  
Speed - Operational Limitation****4/2009  
TX**

**Applicability:** Agusta S.p.A. A109A, A109AII and A109C helicopters, all serial numbers if equipped with Rolls-Royce Corporation (formerly Allison) engine model 250-C20B or 250-C20R/1 with a third stage turbine wheel having part number (P/N) 23065833 installed.

**Requirement:** Accomplish the requirements specified below in accordance with the instructions of Agusta BT 109-129 dated 16 February 2009.

1. Avoid steady-state operation in the 95-97% N2 range for more than 60 seconds in single or cumulative events. If steady-state operation in the 95-97% N2 range exceeds 60 seconds in single or cumulative events, before further flight perform specific corrective actions as per Rolls-Royce CEB A-1400 Rev. 3.

*Note 1: Steady-state operation is defined as any manoeuvre during which an attempt is being made to maintain a constant engine speed within 2% N2.*

2. Install on the instruments panel below or near the "ENGINE & ROTOR RPM POWER TURBINE (N2)" indicator, in an area visible by the pilot(s), one of the two decals (depending on the applicable instruments panel configuration) shown in figure 1 of Agusta BT 109-129 reporting the following text:

"MIN. CONT. 97% N2 - MIN. TRANS. 95% N2"

3. A109A and A109AII helicopters:

Insert page 5 or 6, as applicable depending on the helicopter model, of Agusta BT 109-129 in the Flight Manual, Section I - OPERATING LIMITATIONS, paragraph "POWER PLANT LIMITATIONS".

4. A109C helicopters:

Insert page 7 of Agusta BT 109-129 in the Flight Manual, Section I - LIMITATIONS, paragraph "POWER PLANT AND TRANSMISSION LIMITATIONS".

The use of later approved revisions of the documents detailed in this AD is acceptable for compliance with the requirements of this AD.

**Agusta A109 Series Helicopters**

AD/A109/62 (continued)

*Note 2: EASA Emergency AD 2009-0037-E dated 19 February 2009 refers.*

Compliance: For Requirements 1 through 4 - Within the next 5 flight hours after the effective date of this AD but no later than 28 February 2009, whichever occurs first.

This Airworthiness Directive becomes effective on 23 February 2009.

Background: Following several third stage turbine wheel failures, the engine Type Certificate holder, Rolls-Royce Corporation, issued Commercial Engine Bulletin (CEB) A-1400 Rev. 3 to introduce an operational limitation on the power turbine N2 speed range (95% - 97%) for more than 60 seconds in single or cumulative events for engines with a third stage turbine wheel having P/N 23065833 installed.

Thereafter, Agusta issued Bollettino Tecnico (BT) 109-129 to introduce the same operating limitation, which is also required by this AD, on the affected helicopters.



David Villiers  
Delegate of the Civil Aviation Safety Authority

20 February 2009