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## AIRWORTHINESS DIRECTIVE

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On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/APU/19 and issues the following 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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### Auxiliary Power Units

#### **AD/APU/19                      Micorturbo - Overspeed Protection Channel                      5/2007** **Amdt 1**

**Applicability:** Auxiliary Power Unit (APU) SAPHIR 20 model 095. These APUs are installed on Eurocopter AS332 and EC225 helicopters.

**Requirement:** Unless already accomplished, replace the existing ECU and the Drain Valve by an ECU and Drain Valve, modified in accordance with the instructions of MICROTURBO Alert Service Bulletin (ASB) 095-49A11, Edition 2, dated 7 October 2005 or later NAA approved revisions.

*Note 1: The modified ECU includes the new EGT limit setting.*

*Note 2: Edition 2 of the ASB 095-49A11 dated 7 October 2005 contains revised torque values.*

*Note 3: DGAC AD F-2005-146 EASA reference No 2005-6137 dated 9 August 2005 refers.*

**Compliance:** Within 60 days, after the effective date of this AD.

This Amendment becomes effective on 10 May 2007.


**Background:** With the existing configuration, a certain failure could cause over-speed of the gas generator rotor resulting in uncontained burst of the turbine, liberating high-energy fragments. The occurrence that the high-energy fragments would be uncontained is considered a potentially dangerous situation which requires imperative corrective action. The purpose of the modification is to limit gas generator speed during acceleration towards over-speed by installation of a modified Electronic Control Unit (ECU) and Drain Valve. In addition, the modification also renders the EGT control function compliant with the certificated specifications. In operation, if EGT exceeds the certificated limit value, turbine blade shedding could occur.

The current amendment of the AD makes reference to the service document ASB 095-49A11 at the latest revision status.

**Auxiliary Power Units**

AD/APU/19 Amdt 1 (continued)

The original issue of this AD became effective on 27 October 2005.

A handwritten signature in black ink, appearing to read 'Charles Lenarcic', with a long horizontal stroke extending to the right.

Charles Lenarcic  
Delegate of the Civil Aviation Safety Authority

27 March 2007