	AIRWORTHINESS DIRECTIVE No F-2005-146		Distribution: AB	Issue date: August 17, 2005	Page : 1/2
	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.			<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>	
Direction générale de l'aviation civile France GSAC publication	<p style="text-align: center;">No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive, unless otherwise agreed with the Authority of the State of Registry.</p>				
Corresponding foreign Airworthiness Directive(s): Not applicable			Airworthiness Directive(s) replaced: None		
Person in charge of airworthiness: MICROTURBO			Type(s): Equipment : Auxiliary Power Unit (APU) SAPHIR 20		
Type certificate(s) No. None TCDS No None					
ATA chapter: 49		Subject: Auxiliary Power Unit (APU) - Overspeed protection channel			

1. **EFFECTIVITY:**

The present Airworthiness Directive (AD) is applicable to Auxiliary Power Unit (APU) SAPHIR 20 models 095.

These APUs are installed on AS332 and EC225 helicopters.

2. **REASONS :**

It has been reported that with the existing configuration, a certain failure could cause overspeed 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, which has been made mandatory, is to limit gas generator speed during an acceleration towards overspeed 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.


3. **MANDATORY ACTIONS AND COMPLIANCE TIME:**

The following actions are made mandatory from the effective date of this AD:

Prior to the 31 December 2005, replace the existing ECU and the Drain Valve by an ECU and Drain Valve, modified in accordance with the instructions of the Service Bulletin. The modified ECU includes the new EGT limit setting.

4. **REFERENCE PUBLICATION:**

MICROTURBO Alert Service Bulletin 095-49A11, original issue.

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5. EFFECTIVE DATE:

Upon receipt, as of August 17, 2005.

6. REMARK:

For questions concerning the technical contents of this AD's requirements, contact:

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7. APPROVAL:

This AD is approved under EASA reference n° 2005-6137 dated August 09, 2005.