K	AIRWORTHINESS DIRECT		Distribution:	Issue date: February 04, 2004	Page : <b>1/2</b>
Direction générale de l'aviation civile France	This Air	worthiness Directive is published by the DGAC on behalf of EASA, the Primary Airworthiness affected product.  as the Registration Airworthiness Authority for aircraft.	Authority for the	Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.	
GSAC publication	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.				
Corresponding foreign Airworthiness Directive(s):			Airworthiness Directive(s) replaced:		
Not applicable			F-2001-235, cancelled by its Revision 1		
Person in charge of airworthiness: TURBOMECA			Type(s): ARTOUSTE III turboshaft engines		
Type certificate(s) No. <b>M12</b>					
TCDS No M12					
ATA chapter:	ATA chapter: Subject:				
72		Engine - Turbine shaft labyrinth inspection			

#### 1. **EFFECTIVITY**:

This Airworthiness Directive (AD) applies to TURBOMECA turboshaft engines ARTOUSTE III B, B1 and D.

# 2. REASONS:

The deterioration of the labyrinth may induce overheating and consequently a loss of mechanical properties of the turbine shaft material. This situation may lead to the distortion of the turbine shaft and ultimately cause in-flight shutdowns.

This AD introduces mandatory actions to be applied to restore the required level of safety.

This Airworthiness Directive replaces AD F-2001-235 in which content has been changed to incorporate the latest information from in-service events.

# 3. MANDATORY ACTIONS AND COMPLIANCE TIME:

## 3.1. Check for smoke

After each flight, check for smoke during engine rundown and once the engine has stopped.

If smoke is detected, inspect the fuel system before the next flight or at the latest after the last flight of the day.

The above inspections, and the actions to be taken depending on inspection findings, must be carried out according to TURBOMECA Alert Service Bulletin No. A218 72 0099.



# AIRWORTHINESS DIRECTIVE No F-2004-016

Distribution:

Α

Issue date:

February 04, 2004

Page: **2/2** 

## 3.2. Inspection of the turbine shaft labyrinth

Regardless of the engine operating hours, inspect the turbine shaft central labyrinth every 1,750 hours and replace it if it is found damaged.

If the labyrinth operating hours are unknown, or if the labyrinth operating time since new (TSN) or since last inspection is higher than 1,750 hours, inspect the central labyrinth within the next 50 flight hours or 6 months (whichever occurs first).

The information necessary to determine the labyrinth operating hours for each engine and the actions to be taken are detailed in TURBOMECA Alert Service Bulletin No. A218 72 0100.

#### 4. REFERENCE PUBLICATIONS:

Alert Service Bulletin No. A218 72 0099 Alert Service Bulletin No. A218 72 0100

#### 5. **EFFECTIVE DATE**:

February 14, 2004.

#### 6. REMARK:

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

ARTOUSTE III Operator Support TURBOMECA 40220 TARNOS – France

Phone number: 33 (0) 5 59 74 40 32 (ou 40 71) Fax number: 33 (0) 5 59 74 45 15 (ou 45 16)

## 7. APPROVAL:

This AD is approved under EASA reference No 2004-750 dated January 28, 2004.