

**2010-13-01 Microturbo:** Amendment 39-16332.; Docket No. FAA-2010- 0512; Directorate Identifier 2010-NE-21-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective July 16, 2010.

### **Affected ADs**

(b) None.

### **Applicability**

(c) This AD applies to Microturbo Saphir 20 model 095 auxiliary power units (APUs). These APUs are installed on, but not limited to, Eurocopter EC225 and AS332 helicopters.

### **Reason**

(d) This AD results from mandatory continuing airworthiness information (MCAI) issued by the European Aviation Safety Agency (EASA) to identify and correct an unsafe condition on an aviation product. EASA AD 2010-0079 states:

The turbine wheel, part number (P/N) 095-01-015-03, of the SAPHIR 20 Model 095 APU is a life-limited part. Microturbo had determined through "fleet leader" testing and inspection that the published life limit of this turbine wheel should be reduced to 9,000 cycles. Use of the turbine wheel beyond 9,000 cycles could lead to the release of high energy debris that could jeopardize aircraft safety.

For the reasons described above, EASA AD 2008-0084 required the implementation of the new life limit on the affected parts and the replacement parts that had exceeded the new life limit.

Microturbo has now determined that the life limit of the turbine wheel should be further reduced to 4,225 cycles. Use of the turbine wheel beyond 4,225 cycles could lead to the release of high energy debris that could jeopardize aircraft safety.

We are issuing this AD to prevent an uncontained burst of the APU turbine that could liberate high-energy fragments resulting in injury and damage to the aircraft.

### **Actions and Compliance**

(e) Unless already done, do the following actions:

(1) Remove turbine wheels P/N 095-01-015-03 or P/N 095-01-015- 20, before exceeding the new reduced life limit of 4,225 cycles-in- service, and replace it with a new or serviceable part.

(2) Thereafter, remove turbine wheels P/N 095-01-015-03 or P/N 095-01-015-20, before exceeding the new reduced life limit of 4,225 cycles-in-service, and replace it with a new or serviceable part.

## **FAA AD Differences**

(f) The initial compliance time for the EASA AD is within one month after the effective date of the AD or upon accumulating 4,225 cycles-in-service, whichever occurs later. The initial compliance time for this AD is before exceeding the new reduced life limit of 4,225 cycles-in-service.

## **Alternative Methods of Compliance**

(g) The Manager, Boston Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

## **Related Information**

(h) Refer to EASA AD 2010-0079, dated April 26, 2010, and Microturbo Service Bulletin No. 095-49-17, dated March 16, 2010, for related information. Contact Microturbo, Technical Publications Department, 8 Chemin du pont de Rupe, BP 62089, 31019 Toulouse Cedex, France; telephone 33 0 5 61 37 55 00; fax 33 0 5 61 70 74 45 for a copy of this service bulletin.

(i) Contact Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [michaelschwetz@faa.gov](mailto:michaelschwetz@faa.gov); telephone (781) 238-7761; fax (781) 238- 7170, for more information about this AD.

## **Material Incorporated by Reference**

(j) None.