2009-21-11 Turbomeca S.A.: Amendment 39-16050. Docket No. FAA-2009- 0348; Directorate Identifier 2008-NE-39-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective November 20, 2009.

Affected Airworthiness Directives (ADs)

(b) None.

Applicability

(c) This AD applies to Turbomeca S.A. ARRIUS 1A turboshaft engines with balancing pistons, part number (P/N) 0 319 20 152 0, installed. These engines are installed on, but not limited to, Eurocopter AS355N helicopters.

Reason

(d) Cycle life limit value for ARRIUS 1A balancing piston Part Number (P/N) 0 319 20 152 0, initially set at 40 000 cycles, has been reduced to 16 000 cycles, following the discovery of a calculation error during a recent review of the ARRIUS 1 engine family files.

We are issuing this AD to prevent failure of the balancing piston, which could result in an engine in-flight-shutdown and the release of high-energy debris and damage to the helicopter.

Actions and Compliance

(e) Unless already done, for ARRIUS 1A engines with a balancing piston, P/N 0 319 20 152 0, installed, remove the engine from service before the balancing piston accumulates 16,000 cycles-since- new (CSN).

Installation Prohibition

(f) After the effective date of this AD, don't return to service any engine that has a balancing piston that has accumulated 16,000 or more CSN.

FAA AD Differences

(g) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) or service information as follows:

(1) This AD requires removing from service, any ARRIUS 1A engine that has a balancing piston, P/N 0 319 20 152 0, with 16,000 CSN installed.

(2) We prohibit returning to service any ARRIUS 1A engine that has a balancing piston, P/N 0 319 20 152 0, with 16,000 or more CSN.

Other FAA AD Provisions

(h) Alternative Methods of Compliance (AMOCs): The Manager, Engine 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

(i) Refer to MCAI Airworthiness Directive 2008-0133, dated July 17, 2008 for related information.

(j) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238- 7199, for more information about this AD.

Material Incorporated by Reference

(k) None.