



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2010-0219; Directorate Identifier 2010-NE-14-AD; Amendment 39-18556; AD 2016-12-07]**

**RIN 2120-AA64**

**Airworthiness Directives; Turbomeca S.A. Turboshift Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are superseding airworthiness directive (AD) 2010-11-10 for all Turbomeca S.A. Astazou XIV B and XIV H turboshift engines. AD 2010-11-10 requires inspection of certain third stage turbine wheels and removal of any damaged wheel. This AD requires expanding the population and frequency of repetitive inspections. This AD was prompted by a report of a third stage turbine wheel crack detected during engine overhaul. We are issuing this AD to prevent uncontained failure of the third stage turbine wheel, which could result in damage to the engine and damage to the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Turbomeca S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2010-0219.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2010-0219; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Brian Kierstead, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7772, fax: 781-238-7199; email: [brian.kierstead@faa.gov](mailto:brian.kierstead@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2010-11-10, Amendment 39-16315 (75 FR 30270, June 1, 2010), (“AD

2010-11-10”). AD 2010-11-10 applied to the specified products. The NPRM published in the *Federal Register* on March 11, 2016 (81 FR 12843) (“the NPRM”). The NPRM proposed to continue to require inspection of certain third stage turbine wheels and removal of any damaged wheel. The NPRM also proposed to expand the population and frequency of repetitive inspections.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM.

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

### **Related Service Information under 1 CFR Part 51**

Turbomeca S.A. has issued Mandatory Service Bulletin (MSB) No. 283 72 0804, Version D, dated July 24, 2015. The MSB describes procedures for inspecting the third stage turbine wheels.

Turbomeca S.A. has issued Service Bulletin (SB) No. 283 72 0805, Version B, dated December 15, 2010. That SB describes optional terminating action for the inspections.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Costs of Compliance**

We estimate that this AD affects seven engines installed on helicopters of U.S. registry. We also estimate that it would take about 5 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$2,975.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2010-11-10, Amendment 39-16315 (75 FR 30270, June 1, 2010), (“AD 2010-11-10”), and adding the following new AD:  
  
2016-12-07 **Turbomeca S.A.**: Amendment 39-18556; Docket No. FAA-2010-0219; Directorate Identifier 2010-NE-14-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD supersedes AD 2010-11-10.

**(c) Applicability**

This AD applies to Turbomeca S.A., Astazou XIV B and XIV H turboshaft engines with the following part number (P/N) and serial number (S/N) third stage turbine wheels that incorporate modification AB 173 (Turbomeca S.A. Service Bulletin (SB) No. 283 72 0091) or modification AB 208 (Turbomeca S.A. SB No. 283 72 0117). This AD does not apply to third stage turbine wheels that incorporate Turbomeca S.A. SB No. 283 72 805.

(1) Third stage turbine wheels, P/N 0 265 25 700 0, all S/Ns;

(2) Third stage turbine wheels, P/N 0 265 25 702 0, all S/Ns;

(3) Third stage turbine wheels, P/N 0 265 25 706 0, all S/Ns;

(4) Third stage turbine wheels, P/N 0 265 25 705 0, with an S/N listed in

Appendix 2.1 of Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 283 72 0804, Version D, dated July 24, 2015.

**(d) Unsafe Condition**

This AD was prompted by a report of a third stage turbine wheel crack detected during engine overhaul. We are issuing this AD to prevent uncontained failure of the third stage turbine wheel, which could result in damage to the engine and damage to the helicopter.

**(e) Compliance**

Comply with this AD within the compliance times specified, unless already done.

(1) Perform a dye penetrant inspection of the third stage turbine wheel. Use paragraph 2.4.2.2 of Turbomeca S.A. MSB No. 283 72 0804, Version D, dated July 24, 2015, to do the inspection, as follows:

(i) Inspect third stage turbine wheels with 300 engine cycles (EC) or more accumulated since last inspection, or since new, or since last overhaul, or since repair, within 100 EC after the effective date of this AD.

(ii) Inspect third stage turbine wheels with less than 300 EC accumulated since last inspection, or since new, or since last overhaul, or since repair, within 400 EC since last inspection, or since new, or since last overhaul, or since repair.

(2) Repeat the inspection required by this AD within 400 EC since last inspection.

(3) Remove from service any third stage turbine wheels that fail the inspection required by this AD.

**(f) Optional Terminating Action**

Application of Turbomeca S.A. SB No. 283 72 0805, Version B, dated December 15, 2010 is terminating action for the inspections required by paragraphs (e)(1) and (2) of this AD.

**(g) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(h) Related Information**

(1) For more information about this AD, contact Brian Kierstead, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7772; fax: 781-238-7199; email: brian.kierstead@faa.gov.

(2) Refer to MCAI EASA AD 2015-0211, dated October 15, 2015, for related information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2010-0219.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Turbomeca S.A. Mandatory Service Bulletin No. 283 72 0804, Version D, dated July 24, 2015.

(ii) Turbomeca S.A. Service Bulletin No. 283 72 0805, Version B, dated December 15, 2010.

(3) For Turbomeca S.A. service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on June 7, 2016.

Colleen M. D'Alessandro,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

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