



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0940; Directorate Identifier 2012-NE-26-AD; Amendment 39-17654; AD 2013-22-22]**

**RIN 2120-AA64**

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

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

**ACTION:** Final rule.

**SUMMARY:** We are superseding airworthiness directive (AD) 2013-01-07 for all Turbomeca S.A. Arriel 2D turboshaft engines. AD 2013-01-07 required replacing the hydromechanical metering unit (HMU) at a reduced life. This AD maintains that requirement and also requires conducting inspections of the HMU. This AD was prompted by further cases of deterioration of HMU rotating components. We are issuing this AD to prevent an uncommanded in-flight shutdown of the engine and possible loss of the helicopter.

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

**ADDRESSES:** For service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; 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 (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7779; fax: 781-238-7199; email: frederick.zink@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2013-01-07, Amendment 39-17321 (78 FR 6725, January 31, 2013), (“AD 2013-01-07”). AD 2013-01-07 applied to the specified products. The NPRM published in the Federal Register on June 7, 2013 (78 FR 34284). The NPRM proposed to continue to require replacing the HMU at a reduced life. The NPRM also proposed to require inspections of the HMU.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 34284, June 7, 2013).

## **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for the following editorial changes. We changed paragraphs (e)(1)(iv) and (e)(2)(iv).

Paragraph (e)(1)(iv) now reads, “Guidance on replacing the complete sleeve and inspecting the complete sleeve female splines, and HP and LP male splines, can be found in Turbomeca Technical Instruction No. 292 73 2847.”

Paragraph (e)(2)(iv) now reads, “Guidance for completing the requirements of paragraph (e)(2) can be found in Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A292 73 2847.”

We changed paragraph (f) to provide credit for initial replacements specified in paragraph (e) of this AD.

We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 32484, June 7, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 32484, June 7, 2013).

## **Costs of Compliance**

We estimate that this AD affects 56 Arriel 2D turboshaft engines installed on helicopters of U.S. registry. We also estimate that it will take about two hours per engine to comply with this AD. The average labor rate is \$85 per hour. Required parts cost about \$14,400 per engine. Based on these figures, we estimate the total cost of this AD to U.S. operators is \$815,920.

## **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**

We have determined that 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 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) 2013-01-07, Amendment 39-17321 (78 FR 6725, January 31, 2013), and adding the following new AD:

2013-22-22 **Turbomeca S.A.**: Amendment 39-17654; Docket No. FAA-2012-0940; Directorate Identifier 2012-NE-26-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 2013-01-07, Amendment 39-17321 (78 FR 6725, January 31, 2013).

#### **(c) Applicability**

This AD applies to all Turbomeca S.A. Arriel 2D turboshaft engines.

#### **(d) Unsafe Condition**

This AD was prompted by further cases of deterioration of hydromechanical metering unit (HMU) rotating components. We are issuing this AD to prevent an uncommanded in-flight shutdown of the engine and possible loss of the helicopter.

#### **(e) Compliance**

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

(1) Replace inter-pump complete sleeve, and visually inspect the complete sleeve female splines and HMU high-pressure (HP) pump and low-pressure (LP) pump male splines for corrosion, scaling, cracks, and wear, at the following:

(i) Before exceeding 400 HMU operating hours since new if the HMU has 375 or fewer operating hours on the effective date of this AD; or

(ii) Within 25 HMU operating hours if the HMU has more than 375 operating hours on the effective date of this AD.

(iii) Thereafter, at intervals not to exceed 400 HMU operating hours.

(iv) Guidance on replacing the complete sleeve and inspecting the complete sleeve female splines, and HP and LP male splines, can be found in Turbomeca Technical Instruction No. 292 73 2847.

(v) If the HMU does not pass the initial or repetitive visual inspections required by paragraph (e)(1) of this AD, then before the next flight, replace the affected HMU with an HMU eligible for installation.

(2) Replace the rotating components of the HP and LP pumps, including the complete sleeve, or replace the HMU with an HMU eligible for installation at the following:

(i) Before exceeding 800 HMU operating hours since new; or

(ii) Within 800 HMU operating hours since last replacement of LP and HP fuel pumps rotating components; whichever occurs later.

(iii) Thereafter, replace the LP and HP fuel pump rotating components or the HMU within every 800 HMU operating hours.

(iv) Guidance for completing the requirements of paragraph (e)(2) can be found in Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A292 73 2847.

**(f) Credit for Previous Actions**

If before the effective date of this AD, you complied with Turbomeca S.A. Alert MSB No. A292 73 2847, Version A, dated May 29, 2012, you met the initial replacement requirements specified in paragraph (e) of this AD. However, you must still comply with the repetitive inspection requirements of this AD.

**(g) Installation Prohibition**

After the effective date of this AD, do not install any HMU onto any engine, or install any engine onto any helicopter, unless the HMU is in compliance with this AD.

**(h) 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.

**(i) Related Information**

(1) For more information about this AD, contact Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7779; fax: 781-238-7199; email: [frederick.zink@faa.gov](mailto:frederick.zink@faa.gov).

(2) Refer to MCAI European Aviation Safety Agency AD 2013-0079, dated March 22, 2013, for more information. You may examine the AD on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2012-0940-0006>.

(3) Turbomeca S.A. Alert MSB No. A292 73 2847, Turbomeca Technical Instruction No. 292 73 2847, and Turbomeca Maintenance Manual Task 73-23-00-802-A01, which are not incorporated by reference in this AD, pertain to the subject of this AD and can be obtained from Turbomeca, using the contact information in paragraph (i)(4) of this AD.

(4) For Turbomeca service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59 74 45 15.

**(j) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on October 24, 2013.

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

[FR Doc. 2013-27185 Filed 11/14/2013 at 8:45 am; Publication Date: 11/15/2013]