

[Federal Register Volume 81, Number 52 (Thursday, March 17, 2016)]

[Rules and Regulations]

[Pages 14370-14372]

From the Federal Register Online via the Government Publishing Office [www.gpo.gov]

[FR Doc No: 2016-06000]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2006-25970; Directorate Identifier 99-NE-12-AD; Amendment 39-18426; AD 2016-05-08]**

**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) 2006-23-17 for certain Turbomeca S.A. Turmo IV A and IV C turboshift engines. AD 2006-23-17 required repetitive inspections of the centrifugal compressor intake wheel (inducer) blades for cracks and corrosion, replacement of parts that fail inspection, and replacement of the TU 197 standard centrifugal compressor. This AD requires the same inspections, but at revised intervals, adds the replacement of the TU 215 standard centrifugal compressor, and requires replacement of parts that fail inspection. This AD was prompted by a centrifugal compressor inducer blade loss. This AD was also prompted by a Turbomeca S.A. review of the engine service experience and their determination that more frequent borescope inspections (BSIs) are required on engines not modified to the TU 191, TU 197, or TU 224 standard. We are issuing this AD to prevent failure of the centrifugal compressor inducer, which could lead to an uncontained blade release, damage to the engine, and damage to the airplane.

**DATES:** This AD is effective April 21, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 21, 2016.

**ADDRESSES:** For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 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-2006-25970.

## **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-2006-25970; 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:** Kenneth Steeves, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7765; fax: 781-238-7199; email: [kenneth.steeves@faa.gov](mailto:kenneth.steeves@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2006-23-17, Amendment 39-14829 (71 FR 66664, November 16, 2006), ("AD 2006-23-17"). AD 2006-23-17 applied to the specified products. The NPRM published in the Federal Register on November 25, 2015 (80 FR 73681). The NPRM proposed to require the same inspections, but at revised intervals, add the replacement of the TU 215 standard centrifugal compressor, and require replacement of parts that fail inspection.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 73681, November 25, 2015).

### **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**

We reviewed Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A249 72 0100, Version H, dated May 21, 2015. The Alert MSB describes procedures for the inspection and replacement of the centrifugal compressor inducer blades. 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 36 engines installed on airplanes of U.S. registry. We estimate that two of these engines will require compressor replacement. We also estimate that about 40 hours per engine are required to comply with this AD. The average labor rate is \$85 per hour. Parts cost about \$40,000 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$202,400.

## **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) 2006-23-17, Amendment 39-14829 (71 FR 66664, November 16, 2006) ("2006-23-17"), and adding the following new AD:



---

**2016-05-08 Turbomeca S.A.:** Amendment 39-18426; Docket No. FAA-2006-25970; Directorate Identifier 99-NE-12-AD.

**(a) Effective Date**

This AD is effective April 21, 2016.

**(b) Affected ADs**

This AD replaces AD 2006-23-17.

**(c) Applicability**

This AD applies to Turbomeca S.A. Turmo IV A and IV C turboshaft engines.

**(d) Unsafe Condition**

This AD was prompted by a centrifugal compressor inducer blade loss. We are issuing this AD to prevent failure of the centrifugal compressor inducer, which could lead to an uncontained blade release, damage to the engine, and damage to the airplane.

**(e) Compliance**

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

(1) Remove the TU 197 and TU 215 standard centrifugal compressors and install the TU 224 standard centrifugal compressor, within 30 days after the effective date of this AD.

(2) Perform initial and repetitive ultrasonic inspections (UIs) or eddy current inspections (ECIs) of the centrifugal compressor (inducer). Use Accomplishment Instructions, paragraph 6.B.(1)(b) of Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A249 72 0100, Version H, dated May 21, 2015 to do the inspections. Use Appendix 1 of Turbomeca S.A. Alert MSB No. A249 72 0100, Version H, dated May 21, 2015 for the schedule of inspections.

(3) Perform initial and repetitive borescope inspections (BSIs) of the centrifugal compressor inducer. Use Accomplishment Instructions, paragraphs 6.B.(1)(a) of Turbomeca S.A. Alert MSB No. A249 72 0100, Version H, dated May 21, 2015 to do the inspections. Use Appendix 1 of Turbomeca S.A. Alert MSB No. A249 72 0100, Version H, dated May 21, 2015 for the schedule of inspections.

(4) If, during any inspection required by paragraphs (e)(2) or (e)(3) of this AD, any crack, corrosion, or other damage is detected on the inducer, then before next flight, replace the centrifugal compressor.

(5) Accomplishment of a UI or ECI of the centrifugal compressor inducer, required by paragraph (e)(2) of this AD, is acceptable in lieu of a BSI required by paragraph (e)(3) of this AD for that engine.

(6) Replacement of a centrifugal compressor required by paragraph (e)(4) of this AD, does not constitute terminating action for the repetitive inspections required by paragraphs (e)(2) and (e)(3) of this AD.

**(f) Credit for Previous Actions**

You may take credit for the inspections and corrective actions required by paragraphs (e)(2) and (e)(3) of this AD, if you performed the inspections and corrective actions before the effective date of this AD, using Turbomeca S.A. Alert MSB No. A249 72 0100, Version G, or an earlier version.

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

The Manager, Engine Certification Office, FAA, 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**

For more information about this AD, contact Kenneth Steeves, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7765; fax: 781-238-7199; email: kenneth.steeves@faa.gov.

**(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. Alert Mandatory Service Bulletin (MSB) No. A249 72 0100, Version H, dated May 21, 2015.

(ii) Reserved.

(3) For Turbomeca S.A. service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 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 February 26, 2016.  
Colleen M. D'Alessandro,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.