

[Federal Register: February 17, 2009 (Volume 74, Number 30)]  
[Rules and Regulations]  
[Page 7310-7313]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr17fe09-6]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2006-25730; Directorate Identifier 2006-NE-31-AD; Amendment 39-15798; AD 2009-02-08]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Turbomeca Turmo IV A and IV C Series Turboshift Engines**

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

**ACTION:** Final rule; request for comments.

---

**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD) for Turbomeca Turmo IV A and IV C series turboshaft engines. That AD is applicable to engines with oil-tank-to-oil-cooler flexible lubrication pipes, part number (P/N) 0 249 92 813 0 or P/N 0 249 92 916 0, installed. That AD currently requires identifying, inspecting, and replacing affected flexible lubrication pipes manufactured after April 1, 2003. That AD also requires initial and repetitive borescope inspections of affected pipes, visual inspections for oil leakage, and visual inspections of the oil filter. That AD also requires that if both engines on the same helicopter each have an affected pipe, replacing one of the affected pipes before further flight. This AD does not contain that requirement. This AD requires the same inspections as the superseded AD and adds inspection of oil-pump-to-intermediate-bearing flexible lubricating pipe, P/N 0 249 92 808 0. This AD also requires all remaining affected flexible lubrication pipes, P/N 0 249 92 813 0, P/N 0 249 92 916 0, and P/N 0 249 92 808 to be replaced as terminating action to the repetitive inspections for those affected pipes. This AD results from additional shutdowns caused by pipes, P/N 0 249 92 808 0, and the introduction of Turbomeca Modifications TU 231 and TU 233 that replace pipes, P/N 0 249 92 813 0, P/N 0 249 92 916 0, and P/N 0 249 92 808. We are issuing this AD to prevent helicopter engine in-flight shutdown of one or both engines resulting in an emergency auto-rotation landing or accident.

**DATES:** Effective March 4, 2009. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of March 4, 2009.

We must receive any comments on this AD by April 20, 2009.

**ADDRESSES:** Use one of the following addresses to comment on this AD.

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: (202) 493-2251.

**FOR FURTHER INFORMATION CONTACT:** James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** On October 12, 2006, we issued AD 2006-21-11, Amendment 39-14796 (71 FR 61642, October 19, 2006). That AD requires identifying and inspecting oil-tank-to-oil-cooler flexible lubrication pipes, P/N 0 249 92 813 0 or P/N 0 249 92 916 0, manufactured after April 1, 2003. If both engines on the same helicopter each have an affected pipe, then that AD requires replacing one of the affected pipes before further flight. That AD also requires initial and repetitive borescope inspections of affected pipes, visual inspections for oil leakage, and visual inspections of the oil filter, on engines that are not required to have an affected pipe replaced before further flight. That AD resulted from seven reports of oil leakage due to the deterioration of certain flexible lubrication pipes manufactured after April 1, 2003. That condition, if not corrected, could result in helicopter engine in-flight shutdown of one or both engines resulting in an emergency auto-rotation landing or accident.

#### **Actions Since AD 2006-21-11 Was Issued**

Since AD 2006-21-11 was issued, the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, notified us that Turbomeca reported two additional occurrences of deterioration in a third P/N flexible lubrication pipe, P/N 0 249 92 808 0. EASA also notified us that Turbomeca issued mandatory service bulletins to add pipe P/N 0 249 92 808 0 to the list of affected pipes, to replace affected pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0 with a new P/N pipe, and to replace affected pipes, P/N 0 249 92 808 0 with a new P/N pipe. This AD requires the same inspections as AD 2006-21-11 but requires replacing all remaining affected lubrication pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0, with either a new P/N pipe or a pipe manufactured before April 1, 2003, as terminating action to the repetitive pipe inspections in this AD.

#### **Relevant Service Information**

We have reviewed and approved the technical contents of Turbomeca Alert Mandatory Service Bulletin (MSB) No. A249 72 0802, Update No. 2, dated February 23, 2007. That Alert MSB describes procedures for identifying affected flexible lubrication pipes by their curing batch number, and describes procedures for performing repetitive borescope inspections of all other affected pipes and visual inspections of the oil filter. We have also reviewed and approved the technical contents of Turbomeca MSB No. 249 72 0231, Update No. 1, dated October 11, 2007. That MSB describes procedures for replacing remaining affected flexible lubrication pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0, with pipes introduced by Modification TU 231. We have also reviewed and approved the technical contents of Turbomeca MSB No. 249 72 0233, dated September 1, 2008. That MSB describes procedures for replacing remaining affected flexible lubrication pipes, P/N 0 249 92 808 0, with pipes introduced by Modification TU 233. EASA classified these service bulletins as mandatory and issued AD 2008-0194 to ensure the airworthiness of these Turbomeca Turmo IV A and IV C series turboshaft engines in Europe.

## **Bilateral Airworthiness Agreement**

These engine models are manufactured in France and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Under this bilateral airworthiness agreement, France has kept the FAA informed of the situation described above. We have examined the findings of EASA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

## **FAA's Determination and Requirements of This AD**

The unsafe condition described previously is likely to exist or develop on other Turbomeca Turmo IV A and IV C series turboshaft engines of the same type design. We are issuing this AD to prevent engine in-flight shutdown of one or both helicopter engines resulting in an emergency auto-rotation landing or accident. This AD requires:

- Identifying and inspecting certain flexible lubrication pipes manufactured after April 1, 2003; and
- Initial and repetitive borescope inspections of affected pipes, visual inspections for oil leakage, and visual inspections of the oil filter, on engines that are not required to have an affected pipe replaced before further flight; and
- Replacing all remaining affected lubrication pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0, and all remaining affected lubrication pipes, P/N 0 249 92 808 0, with new P/N pipes or pipes manufactured before April 1, 2003, within 45 days or 50 operating hours after the effective date of the AD, whichever occurs first, as terminating action to the repetitive pipe inspections in this AD.

## **FAA's Determination of the Effective Date**

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

## **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to send us any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2006-25730; Directorate Identifier 2006-NE-31-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is

the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

### **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 the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. 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.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under ADDRESSES.

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

Air transportation, Aircraft, Aviation safety, Safety.

### **Adoption of the Amendment**

Under the authority delegated to me by the Administrator, the Federal Aviation Administration 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 Amendment 39-14796 (71 FR 61642, October 19, 2006), and by adding a new airworthiness directive, Amendment 39-15798, to read as follows:



**2009-02-08 Turbomeca:** Amendment 39-15798. Docket No. FAA-2006-25730; Directorate Identifier 2006-NE-31-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective March 4, 2009.

**Affected ADs**

- (b) This AD supersedes AD 2006-21-11, Amendment 39-14796.

**Applicability**

(c) This AD applies to Turbomeca Turmo IV A and IV C series turboshaft engines with oil-tank-to-oil-cooler flexible lubrication pipes, part number (P/N) 0 249 92 813 0, or P/N 0 249 92 916 0, or oil-pump-to-intermediate-bearing flexible lubrication pipes, P/N 0 249 92 808 0 installed. These engines are installed on, but not limited to, Eurocopter SA 330F, G, or J PUMA helicopters.

**Unsafe Condition**

(d) This AD results from:

- (1) Additional shutdowns caused by flexible oil-pump-to-intermediate-bearing-lubrication pipes, P/N 0 249 92 808 0; and
  - (2) The introduction of a new P/N pipe through Turbomeca Modification TU 231, as a replacement for affected oil-tank-to-oil-cooler flexible lubrication pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0; and
  - (3) The introduction of a new P/N pipe through Turbomeca Modification TU 233, as a replacement for affected oil-pump-to-intermediate-bearing flexible lubrication pipes, P/N 0 249 92 808 0.
- (4) We are issuing this AD to prevent helicopter engine in-flight shutdown of one or both engines resulting in an emergency auto-rotation landing or accident.

**Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

**Initial Actions**

- (f) Before further flight:
  - (1) Identify the curing batch of the flexible lubricating pipes listed in paragraph (c) of this AD.
  - (2) For oil-tank-to-oil-cooler flexible lubrication pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0, and for oil-pump-to-intermediate-bearing flexible lubrication pipes, P/N 0 249 92 808 0, with a curing batch of "2T03" (meaning 2nd quarter of 2003), or subsequent batch:

(i) Borescope-inspect the pipe for deterioration, visually inspect for oil leakage, and visually inspect the oil filter for black particle deterioration from the pipe.

(ii) Replace the pipe with a serviceable pipe, if deterioration or leakage is found.

### **Repetitive Actions**

(g) Within an additional 25 operating hours, on engines still having an affected flexible lubrication pipe, P/N 0 249 92 813 0, P/N 0 249 92 916 0, or P/N 0 249 92 808 0 installed:

(1) Borescope-inspect the pipe for deterioration, visually inspect the pipe for oil leakage, and visually inspect the oil filter for black particle deterioration from the pipe.

(2) Replace pipes with serviceable pipes, if deterioration or leakage is found.

### **Terminating Action for Affected Flexible Lubricating Pipes**

(h) Within 45 days or 50 operating hours after the effective date of this AD, whichever occurs first, as terminating action to the repetitive inspections required by this AD:

(1) Replace oil-tank-to-oil-cooler flexible lubrication pipes, P/N 0 249 92 813 0 and P/N 0 249 92 916 0 that have a curing batch of "2T03" or later, with a serviceable pipe.

(2) Replace oil-pump-to-intermediate-bearing flexible lubrication pipes, P/N 0 249 92 808 0 that have a curing batch of "2T03" or later, with a serviceable pipe.

### **Definitions**

(i) For the purposes of this AD, a serviceable oil-tank-to-oil-cooler flexible lubrication pipe is one with a curing batch before April 1, 2003 (before "2T03"), or one incorporating Modification TU 231. Information about Modification TU 231 can be found in Turbomeca Mandatory Service Bulletin (MSB) No. 249 72 0231.

(j) For the purposes of this AD, a serviceable oil-pump-to-intermediate-bearing flexible lubrication pipe is one with a curing batch before "2T03" or one incorporating Modification TU 233. Information about Modification TU 233 can be found in Turbomeca MSB No. 249 72 0233.

### **Alternative Methods of Compliance**

(k) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

### **Related Information**

(l) Information on performing the initial and repetitive actions in this AD can be found in Turbomeca Alert Mandatory Service Bulletin (MSB) No. A249 72 0802.

(m) Contact Turbomeca S.A., 40220 Tarnos, France; e-mail: [noria-dallas@turbomeca.com](mailto:noria-dallas@turbomeca.com); telephone 33 05 59 74 40 00, fax 33 05 59 74 45 15, or go to: <http://www.turbomeca-support.com>, for a copy of the service information identified in this AD.

(n) European Aviation Safety Agency AD 2008-0194, dated October 31, 2008, also addresses the subject of this AD.

(o) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and 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.

Issued in Burlington, Massachusetts, on January 14, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.