

Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-23809; Directorate Identifier 2005-NE-52-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca Arriel 2B Series Turboshaft Engines

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Turbomeca Arriel 2B, 2B1, and 2B1A turboshaft engines. This proposed AD would require visually inspecting the splines of the high-pressure (HP) pump drive gear shaft and coupling shaft assembly for wear. This proposed AD results from reports of uncommanded in-flight shutdowns of engines. We are proposing this AD to detect wear on the splines of the HP pump drive gear shaft and coupling shaft assembly, which could interrupt the fuel flow and cause an uncommanded in-flight shutdown of the engine on a single-engine helicopter. The in-flight shutdown of the engine could result in a forced autorotation landing or accident.

DATES: We must receive any comments on this proposed AD by April 10, 2006.

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

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building,

Room PL-401, Washington, DC 20590-0001.

- Fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. Contact Turbomeca, 40220 Tarnos—France; Tel (33) 05 59 74 40 00; Telex 570 042; Fax (33) 05 59 74 45 15 for the service information identified in this proposed AD.

FOR FURTHER INFORMATION CONTACT:

Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7175; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send us any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include “Docket No. FAA-2006-23809; Directorate Identifier 2005-NE-52-AD” in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.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 DMS Web site, anyone can find and read the comments in any of our dockets, including 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) or you may visit <http://dms.dot.gov>.

Examining the AD Docket

You may examine the docket that contains the proposal, any comments received, and any final disposition in

person at the Docket Management Facility Docket Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is on the plaza level of the Department of Transportation Nassif Building at the street address stated in **ADDRESSES**. Comments will be available in the AD docket shortly after the Docket Management Facility receives them.

Discussion

The Direction générale de l’aviation civile (DGAC), which is the airworthiness authority for France, recently notified us that an unsafe condition may exist on Turbomeca Arriel 2B, 2B1, and 2B1A turboshaft engines. The DGAC advises that they have received two reports of uncommanded in-flight engine shutdowns. Worn splines on the drive shaft of the HP pump assembly caused an interruption of the fuel flow to the engine and caused the engine to shutdown.

Relevant Service Information

We have reviewed and approved the technical contents of Turbomeca Mandatory Service Bulletin (MSB) No. 292 73 2812, Update No. 2, dated June 28, 2005. That MSB describes procedures for visually inspecting the splines of the coupling shaft assembly and the splines of the HP pump drive gear shaft for wear. The DGAC classified this MSB as mandatory and issued airworthiness directive F-2005-188, dated November 23, 2005, in order to ensure the airworthiness of these Turbomeca Arriel 2B series turboshaft engines in France.

FAA’s Determination and Requirements of the Proposed AD

These engines, manufactured in France, 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. In keeping with this bilateral airworthiness agreement, the DGAC kept us informed of the situation described above. We have examined the DGAC’s findings, 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. For this reason, we are proposing this AD, which would require:

- For hydromechanical units (HMUs) that have accumulated 450 hours or more on the effective date of the proposed AD, an initial visual inspection of the splines of the coupling shaft assembly and HP pump drive gear shaft for wear within 50 hours after the effective date of the proposed AD, and
- For HMUs that have fewer than 450 hours on the effective date of the proposed AD, an initial visual inspection of the splines of the coupling shaft assembly and HP pump drive gear shaft for wear after accumulating 450 hours, but before accumulating 500 hours, and
- A repetitive visual inspection of the splines of the coupling shaft assembly and HP pump drive gear shaft for wear every time you remove or install the HMU, and
- Replacing the HMU and coupling shaft assembly if worn beyond limits.

The proposed AD would require you to use the service information described previously to perform these actions.

Costs of Compliance

We estimate that this proposed AD would affect 107 engines installed on helicopters of U.S. registry. We also estimate that it would take about 1.0 work hours per engine to perform the proposed actions, and that the average labor rate is \$65 per work hour. There are no required parts. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$6,955.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

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. Would 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 regulatory evaluation of the estimated costs to comply with this proposed AD. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Under the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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 adding the following new airworthiness directive:

Turbomeca: Docket No. FAA-2006-23809; Directorate Identifier 2005-NE-52-AD.

Comments Due Date

- (a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by April 10, 2006.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Turbomeca Arriel 2B, 2B1, and 2B1A turboshaft engines. These engines are installed on, but not limited to, Eurocopter AS350B3 and EC130B4 helicopters.

Unsafe Condition

- (d) This AD results from reports of uncommanded in-flight shutdowns of

engines. We are issuing this AD to detect wear on the splines of the high-pressure (HP) pump drive gear shaft and the coupling shaft assembly, which could interrupt the fuel flow and cause an uncommanded in-flight shutdown of the engine on a single-engine helicopter. The in-flight shutdown of the engine could result in a forced autorotation 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 Visual Inspection

- (f) Perform an initial visual inspection of the splines of the coupling assembly and the HP pump drive gear shaft for wear. Use 2.A. through 2.C.(2) of the Instructions to be Incorporated of Turbomeca Mandatory Service Bulletin (MSB) No. 292 73 2812, Update No. 2, dated June 28, 2005, as follows:

(1) For hydraulic mechanical units (HMUs) that have accumulated 450 or more hours time-since-new (TSN) or time-since-overhaul (TSO) on the effective date of this AD, inspect within 50 hours after the effective date of this AD. Replace the HMU if worn beyond limits.

(2) For HMUs that have fewer than 450 hours TSN or TSO on the effective date of this AD, inspect after accumulating 450 hours TSN or TSO, but before accumulating 500 hours TSN or TSO. Replace the HMU if worn beyond limits.

Repetitive Visual Inspections

- (g) Thereafter, perform a visual inspection of the splines of the coupling shaft assembly and the HP pump drive gear shaft for wear every time you remove or install the HMU. Use 2.A. through 2.C.(2) of the Instructions to be Incorporated of Turbomeca MSB No. 292 73 2812, Update No. 2, dated June 28, 2005. Replace the HMU and coupling shaft assembly if worn beyond limits.

Alternative Methods of Compliance

- (h) 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

- (i) DGAC airworthiness directive F-2005-188, dated November 23, 2005, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on March 2, 2006.

Thomas A. Boudreau,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. E6-3352 Filed 3-8-06; 8:45 am]

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