

# 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-2010-0219; Directorate Identifier 2010-NE-14-AD]

RIN 2120-AA64

#### Airworthiness Directives; Turbomeca Astazou XIV B and XIV H Turboshaft Engines

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as: Investigation of an uncommanded in-flight shutdown (IFSD) revealed that a third stage turbine wheel rupture was not contained by the turbine casings. The released portion consisted of a turbine blade together with the rim piece immediately below the blade. The rim piece was bounded by two adjacent axial slots and a fatigue crack that had developed between the holes in which the slots terminate. The slots and holes, which are closed by riveted plugs, were introduced by modification AB 173 in order to improve the vibration characteristics of the turbine wheel. Modification AB 208 brings an improvement to modification AB 173 by changing only the riveting detail. SN 283 72 0805 provides instructions for re-boring the holes at overhaul or repair in order to improve their surface condition. A manufacturing process modification has been introduced to improve the surface condition of these holes in third stage turbine wheels. Wheels subject to the improved manufacturing process have

S/Ns outside the range specified in Table 1. Although there is only one known event, and although it resulted only in an uncommanded IFSD, with no damage to the aircraft, the possibility exists that additional events may occur, potentially involving damage to the aircraft.

We are proposing this AD to prevent uncontained failures of the third stage turbine wheel, which could result in damage to the helicopter.

**DATES:** We must receive comments on this proposed AD by April 29, 2010.

**ADDRESSES:** You may send comments by any of the following methods:

- *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.

Contact Turbomeca, 40220 Tarnos, France; telephone (33) 05 59 74 40 00, fax (33) 05 59 74 45 15, for the service information identified in this proposed AD.

#### 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 proposed 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.

#### FOR FURTHER INFORMATION CONTACT:

Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [kevin.dickert@faa.gov](mailto:kevin.dickert@faa.gov); telephone (781) 238-7117, fax (781) 238-7199.

#### SUPPLEMENTARY INFORMATION:

#### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2010-0219; Directorate Identifier 2010-NE-14-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

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).

#### Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2010-0004, dated January 5, 2010 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

Investigation of an uncommanded IFSD revealed that a third stage turbine wheel rupture was not contained by the turbine casings. The released portion consisted of a turbine blade together with the rim piece immediately below the blade. The rim piece was bounded by two adjacent axial slots and a fatigue crack that had developed between the holes in which the slots terminate. The slots and holes, which are closed by riveted plugs, were introduced by modification AB 173 in order to improve the vibration characteristics of the turbine wheel. Modification AB 208 brings an improvement to modification AB 173 by changing only the riveting detail. SB 283 72 0805 provides instructions for re-boring the holes at overhaul or repair in order to improve their surface condition. A manufacturing process modification has been introduced to improve

the surface condition of these holes in third stage turbine wheels. Wheels subject to the improved manufacturing process have S/Ns outside the range specified in Table 1. Although there is only one known event, and although it resulted only in an uncommanded IFSD, with no damage to the aircraft, the possibility exists that additional events may occur, potentially involving damage to the aircraft.

To address the unsafe condition, EASA issued AD 2009-0136, mandating inspection of certain third stage turbine wheels and removal of any damaged wheel. The wheels to be inspected were those whose cycles since new (CSN) would exceed 2,000 by February 1, 2011. Following additional research by Turbomeca on crack initiation and growth, this AD mandates inspections based on new criteria and removal of any damaged wheel.

You may obtain further information by examining the MCAI in the AD docket.

### Relevant Service Information

Turbomeca has issued Mandatory Service Bulletin No. 283 72 0804, Version C, dated October 23, 2009. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

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

This product has been approved by the aviation authority of France and is approved for operation in the United States. Pursuant to our bilateral agreement with France, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require performing dye penetrant inspections for cracks on the rear face of certain third stage turbine wheels with fewer than 1,200 cycles-since-last-overhaul or repair, or since-new if the engine has never been overhauled, on the effective date of the AD, and removal of the third stage turbine wheel before further flight if found cracked.

### Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about three Astazou engines installed on products of U.S. registry. We also estimate that it would take about 5 work-hours per engine to comply with this proposed AD. The average labor rate is \$85 per work-hour. We anticipate no parts to be required. Based on these figures, we estimate the

cost of the proposed AD on U.S. operators to be \$1,275.

### 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 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 this 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. 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 regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

### List of Subjects in 14 CFR Part 39

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

### The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA 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 AD:

**Turbomeca:** Docket No. FAA-2010-0219; Directorate Identifier 2010-NE-14-AD.

### Comments Due Date

(a) We must receive comments by April 29, 2010.

### Affected Airworthiness Directives (ADs)

(b) None.

### Applicability

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

(1) Third stage turbine wheels P/N 0265257000, all serial numbers (S/Ns);

(2) Third stage turbine wheels P/N 0265257020, all S/Ns;

(3) Third stage turbine wheels P/N 0265257060, all S/Ns;

(4) Third stage turbine wheels P/N 0265257050, of the S/Ns listed in Appendix 1 of Turbomeca Mandatory Service Bulletin No. 283 72 0804, Version C, dated October 23, 2009.

(5) These engines are installed on, but not limited to, single-engine Aerospatiale AS319B "Alouette III" and AS342J "Gazelle" helicopters.

### Reason

(d) European Aviation Safety Agency (EASA) AD No. 2010-0004, dated January 5, 2010, states:

Investigation of an uncommanded in-flight shutdown (IFSD) revealed that a third stage turbine wheel rupture was not contained by the turbine casings. The released portion consisted of a turbine blade together with the rim piece immediately below the blade. The rim piece was bounded by two adjacent axial slots and a fatigue crack that had developed between the holes in which the slots terminate. The slots and holes, which are closed by riveted plugs, were introduced by modification AB 173 in order to improve the vibration characteristics of the turbine wheel. Modification AB 208 brings an improvement to modification AB 173 by changing only the riveting detail. SN 283 72 0805 provides instructions for re-boring the holes at overhaul or repair in order to improve their surface condition. A manufacturing process modification has been introduced to improve the surface condition of these holes in third stage turbine wheels. Wheels subject to the improved manufacturing process have S/Ns outside the range specified in Table 1. Although there is only one known event, and

although it resulted only in an uncommanded IFSD, with no damage to the aircraft, the possibility exists that additional events may occur, potentially involving damage to the aircraft.

To address the unsafe condition, EASA issued AD 2009-0136, mandating inspection of certain third stage turbine wheels and removal of any damaged wheel. The wheels to be inspected were those whose cycles since new (CSN) would exceed 2,000 by February 1, 2011. Following additional research by Turbomeca on crack initiation and growth, this AD mandates inspections based on new criteria and removal of any damaged wheel.

We are issuing this AD to prevent uncontained failures of the third stage turbine wheel, which could result in damage to the helicopter.

#### Actions and Compliance

(e) Unless already done, do the following actions.

(1) For any affected third stage turbine wheel that on the effective date of this AD has accumulated fewer than 500 cycles-since-last-overhaul or repair, or since-new if the engine has never been overhauled or repaired:

(i) Within 300 additional cycles, perform a dye penetrant inspection on the rear face of the third stage turbine wheel.

(ii) Use Section 2, Instructions to Be Incorporated, of Turbomeca Mandatory Service Bulletin (MSB) No. 283 72 0804, Version C, dated October 23, 2009, to do the inspection.

(iii) Perform a second dye penetrant inspection when the engine has accumulated between 450 and 550 cycles from the first inspection.

(2) For any affected third stage turbine wheel that on the effective date of this AD, has accumulated 500 or more but fewer than 700 cycles-since-last-overhaul or repair, or since-new if the engine has never been overhauled or repaired:

(i) Within 200 additional cycles, perform a dye penetrant inspection on the rear face of the third stage turbine wheel.

(ii) Use Section 2, Instructions to Be Incorporated, of Turbomeca Mandatory Service Bulletin (MSB) No. 283 72 0804, Version C, dated October 23, 2009, to do the inspection.

(3) For any affected third stage turbine wheel that on the effective date of this AD, has accumulated 700 or more but fewer than 1,200 cycles-since-last-overhaul or repair, or since-new if the engine has never been overhauled or repaired:

(i) Within 150 additional cycles, perform a dye penetrant inspection on the rear face of the third stage turbine wheel.

(ii) Use Section 2, Instructions to Be Incorporated, of Turbomeca Mandatory Service Bulletin (MSB) No. 283 72 0804, Version C, dated October 23, 2009, to do the inspection.

(4) If any crack indication is found, then before further flight, remove the third stage turbine wheel from service.

(5) For any affected third stage turbine wheel that on the effective date of this AD has accumulated 1,200 or more cycles-since-

last-overhaul or repair, or since-new if the engine has never been overhauled or repaired, no action is required.

#### FAA AD Differences

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and or service information as follows:

(1) EASA AD 2010-0004, dated January 5, 2010, requires removing the engine from service before further flight if a third stage turbine wheel is found cracked.

(2) This AD requires removing the third stage turbine wheel from service before further flight if a third stage turbine wheel is found cracked.

#### Alternative Methods of Compliance

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

#### Related Information

(h) Refer to MCAI EASA AD 2010-0004, dated January 5, 2010, and Turbomeca Mandatory Service Bulletin No. 283 72 0804, Version C, dated October 23, 2009, for related information. Contact Turbomeca, 40220 Tarnos, France; telephone (33) 05 59 74 40 00, fax (33) 05 59 74 45 15, for a copy of this service information.

(i) Contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [kevin.dickert@faa.gov](mailto:kevin.dickert@faa.gov); telephone (781) 238-7117, fax (781) 238-7199, for more information about this AD.

Issued in Burlington, Massachusetts, on March 23, 2010.

#### Robert Ganley,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2010-7055 Filed 3-29-10; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2010-0327; Directorate Identifier 2010-CE-012-AD]

RIN 2120-AA64

#### Airworthiness Directives; Cessna Aircraft Company Model 525A Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2009-24-13, which applies to certain Cessna Aircraft Company (Cessna) Model 525A airplanes. AD 2009-24-13 currently

requires you to repetitively inspect the thrust attenuator paddle assemblies for loose and damaged fasteners for cracks. AD 2009-24-13 also requires you to replace loose or damaged fasteners and replace cracked thrust attenuator paddles found during any inspection. Since we issued AD 2009-24-13, Cessna has developed new design thrust attenuator paddles and universal head rivets as terminating action for the repetitive inspections. Consequently, this proposed AD would retain the requirements of AD 2009-24-13 until replacement of both thrust attenuator paddles and the eight countersunk fasteners with new design thrust attenuator paddles and universal head rivets. We are proposing this AD to detect and correct loose and damaged fasteners and cracks in the thrust attenuator paddles, which could result in in-flight departure of the thrust attenuator paddles. This failure could lead to rudder and elevator damage and result in loss of control.

**DATES:** We must receive comments on this proposed AD by May 14, 2010.

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

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Fax:* (202) 493-2251.

- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, KS 67277; telephone: (316) 517-6000; fax: (316) 517-8500; Internet: <http://www.cessna.com>.

**FOR FURTHER INFORMATION CONTACT:** TN Baktha, Aerospace Engineer, ACE-118W, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments regarding this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include the docket