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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NE-33-AD; Amendment 39-12937; AD 2002-22-11]

RIN 2120-AA64

Airworthiness Directives; Turbomeca Artouste III Series Turboshaft Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), that is applicable to Turbomeca Artouste III series turboshaft engines with injection wheels part numbers (P/N's) 218.25.700.0, 218.25.704.0, 243.25.709.0, 243.25.713.0, 0.218.27.705.0, 0.218.27.709.0, and 0.218.27.713.0 installed. That AD currently requires smoke emission checks after every ground engine shutdown. If smoke is detected, that AD requires inspecting for fuel flow. If fuel flow is not detected, the engine may have injection wheel cracks, which requires removing the engine from service for repair. If fuel flow is detected, the engine may have a malfunctioning electric fuel cock, which requires removing the electric fuel cock from service and replacing with a serviceable part. This amendment has similar requirements as the original AD, except that the smoke emissions are to be checked after the last flight of the day, as opposed to after every flight, as required by the original AD. This amendment also requires inspection of central labyrinths not previously inspected or not replaced after the engine logged 1,500 operating hours, and, replacement of these labyrinths if necessary. This amendment is prompted by reports and analyses of in-flight shutdowns (IFSD's) occurring since the issuance of AD 2000-06-12. The actions specified by this AD are intended to prevent injection wheel cracks and excessive central labyrinth wear, which could result in an IFSD.

DATES: Effective December 13, 2002. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 13, 2002.

ADDRESSES: The service information referenced in this AD may be obtained from Turbomeca, 40220 Tarnos, France; telephone +33 05 59 64 40 00, fax +33 05 59 64 60 80. This information may be examined, by appointment, at the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Antonio Cancelliere, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7751; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 2000-06-12, Amendment 39-11653 (65 FR 19300, April 11, 2000), which is applicable to Turbomeca Artouste III B, B1, and D series turboshaft engines with injection wheels part numbers (P/N's) 218.25.700.0, 218.25.704.0, 243.25.709.0, 243.25.713.0, 0.218.27.705.0, 0.218.27.709.0, and 0.218.27.713.0 installed, was published in the Federal Register on May 10, 2002, 67 FR 31737). That action proposed to require in accordance with Turbomeca Artouste III alert service bulletin (ASB) No. A218 72 0099, Update 1, dated June 6, 2001, smoke emission checks after every ground engine shutdown. If smoke is detected, that action proposed to require inspecting for fuel flow. If fuel flow is not detected, the engine may have injection wheel cracks, which would require removing the engine from service for repair. If fuel flow is detected, the engine may have a malfunctioning electric fuel cock, which would require removing the electric fuel cock from service and replacing with a serviceable part. That action also proposed to require the smoke emissions to be checked after the last flight of the day as opposed to after every flight as required by the original AD. That action also proposed to require inspection of central labyrinths not previously inspected or not replaced after the engine logged 1,500 operating hours, and, replacement if necessary, in accordance with Turbomeca Artouste III ASB No. A218 72 0100, Update 1, dated March 13, 2001. That action also proposed to require the removal of injection wheels at a new lower life limit.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comment received.

Injection Wheels Not Life-Limited

One commenter, the manufacturer, states that injection wheels on Turbomeca Artouste III series turboshaft engines are not life-limited. The commenter requests that the FAA remove paragraph (c) and (d) of the proposal. Paragraph (c) states that injection wheels are now life-limited to no more than 3,000 flight hours time-since-new (TSN) or time-since-overhaul (TSO), or 6,000 cycles-since-new (CSN) or cycles-since overhaul (CSO), whichever occurs first. Paragraph (d) requires replacement of all injection wheels that are over the life limits, before further flight, and to replace all other injection wheels before reaching the new life limits.

The FAA agrees. The FAA misunderstood the intent of the Direction Generale de L'Aviation Civile (DGAC), which is the airworthiness authority for France, regarding their reference in AD 2001-235(A) to the use of injection wheel limits. The 3,000 flight hours TSN or TSO, and 6,000 CSN or CSO limits are in the manufacturer's manual and are not mandated by the DGAC. Therefore, the FAA has removed the paragraphs for life limits from the final rule.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Regulatory Analysis

This final rule does not have federalism implications, as defined in Executive Order 13132, because it 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. Accordingly, the FAA has not consulted with state authorities prior to publication of this final rule.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to 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. Section 39.13 is amended by removing Amendment 39-11653 (65 FR 19300, April 11, 2000) and by adding a new airworthiness directive, Amendment 39-12937, to read as follows:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
Federal Aviation
Administration

We post ADs on the internet at "www.airweb.faa.gov/rgl"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-22-11 Turbomeca: Amendment 39-12937. Docket No. 99-NE-33-AD. Supersedes AD 2000-06-12, Amendment 39-11653.

Applicability: This airworthiness directive (AD) is applicable to Turbomeca Artouste III B, B1, and D series turboshaft engines with injection wheels part numbers (P/N's) 218.25.700.0, 218.25.704.0, 243.25.709.0, 243.25.713.0, 0.218.27.705.0, 0.218.27.709.0, and 0.218.27.713.0. These engines are installed on, but not limited to Eurocopter SA 315 LAMA and SA 316 Alouette III helicopters.

Note 1: This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Compliance with this AD is required as indicated, unless already done.

To prevent injection wheel cracks and excessive central labyrinth wear, which could result in an in-flight shutdown (IFSD), do the following:

Smoke Check

(a) Do the following in accordance with Turbomeca Artouste III Alert Service Bulletin (ASB) No. A218 72 0099, Update 1, dated June 6, 2001:

(1) After the last flight of every day, check for smoke emission through the exhaust pipe, air intake, or turbine casing drain during rundown.

(2) If smoke is detected, inspect for fuel flow in accordance with paragraph 2.B.(1) and 2.B.(2) of the ASB.

(i) If fuel flow is not detected, remove the engine from service and replace with a serviceable engine before further flight.

(ii) If fuel flow is detected, remove the electric fuel cock from service and replace with a serviceable part in accordance with section 2.B.(4) and 2.B.(5) of the referenced ASB.

(iii) Before entry into service, perform an engine ground run and check the fuel system again for smoke emission through the exhaust pipe, air intake, or turbine casing drain during engine rundown and after shutdown. If smoke emission still remains after replacement of the electric fuel cock, before further flight, remove the engine from service and replace with a serviceable engine.

Central Labyrinth Inspection

(b) If the central labyrinth has not been inspected or replaced since engine accumulation of 1,500 flight hours (FH) or more time-since-new (TSN) or time-since-last-overhaul (TSO), perform the checks and inspections, and, if necessary, replace the central labyrinth, in accordance with paragraph 2 of the Instructions of Turbomeca Artouste III ASB No. A218 72 0100, Update 1, dated March 13, 2001 and the following Table 1:

TABLE 1.—INSPECTION SCHEDULE

For engine hours TSN, or TSO that are:	And cycles/FH ratio is:	Then inspect central labyrinth:
(1) More than 1,500 but fewer than 2,000.	(i) Above 2 cycles	Within 250 FH time-in-service (TIS) after the effective date of this AD.
	(ii) Below or equal to 2 cycles	Within 500 FH TIS after the effective date of this AD.
(2) 2,000 or more	Not applicable	Within 50 FH TIS or 6 months after the effective date of this AD, whichever occurs first.

(c) For the purpose of this AD, a serviceable engine is defined as an engine that does not exhibit smoke emission.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators must submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be done.

Documents That Have Been Incorporated by Reference

(f) The checks, inspections, and replacements must be done in accordance with the following Turbomeca Artouste III alert service bulletins (ASB's):

Document No.	Pages	Revision	Date
ASB A218 72 0099 Total pages: 5	All	1	June 6, 2001.
ASB A218 72 0100 Total pages: 7	All	1	March 13, 2001.

These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Turbomeca, 40220 Tarnos, France; telephone +33 05 59 64 40 00; fax +33 05 59 64 60 80. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 3: The subject of this AD is addressed in Direction Generale de L'Aviation Civile airworthiness directive 2001-235(A), dated June 13, 2001.

Effective Date

(g) This amendment becomes effective on December 13, 2002.

Issued in Burlington, Massachusetts, on October 28, 2002.
Jay J. Pardee,
Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. 02-28114 Filed 11-7-02; 8:45 am]
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