Adoption of the Amendment

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

2010-02-04 The Boeing Company:

Amendment 39–16175. Docket No. FAA–2009–0657; Directorate Identifier 2009–NM–048–AD.

Effective Date

(a) This airworthiness directive (AD) is effective February 18, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 737–600, –700, –700C, –800, –900, and –900ER series airplanes, certificated in any category; as identified in Boeing Service Bulletin 737–28–1272, dated October 31, 2008.

Subject

(d) Air Transport Association (ATA) of America Code 28: Fuel.

Unsafe Condition

(e) This AD requires replacing engine fuel shutoff valves for the left and right main tanks. This AD results from a report of a failed engine start, which was caused by an internally fractured engine fuel shutoff valve. We are issuing this AD to prevent the failure of the valve in the closed position, open position, or partially open position, which could result in engine fuel flow problems and possible uncontrolled fuel leak or fire.

Compliance

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

Replacement of the Engine Fuel Spar Valve Body of the Left and Right Wing Main Tanks

(g) Within 60 months after the effective date of this AD: Replace the engine fuel spar valve bodies of the left and right wing main tanks in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737–28–1272, dated October 31, 2008.

Note 1: Boeing Service Bulletin 737–28–1272, dated October 31, 2008, refers to ITT Aerospace Controls Service Bulletin 125334D–28–02, dated August 27, 2008, as an additional source of guidance for modifying the valve body assembly.

Parts Installation

(h) As of the effective date of this AD, no person may install any engine fuel shutoff valve with ITT Aerospace Controls part number 125334D–1 (Boeing part number S343T003–40) on any airplane at the spar valve location. A valve that has been modified in accordance with Boeing Service Bulletin 737–28–1272, dated October 31, 2008, to the new ITT 125334D–2 part number (Boeing part number S343T003–67) may be installed at the spar valve location.

(i) As of the effective date of this AD, no valve with ITT Aerospace Controls part number 125334D–1 (Boeing part number S343T003–40) that has been removed from the spar location may be reinstalled on any airplane in any location unless it has been modified in accordance with Boeing Service Bulletin 737–28–1272, dated October 31, 2008, to the new ITT 125334D–2 part number (Boeing part number S343T003–67).

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Seattle Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Samuel Spitzer, Aerospace Engineer, Propulsion Branch, ANM–140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 917–6510; fax (425) 917–6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Material Incorporated by Reference

(k) You must use Boeing Service Bulletin 737–28–1272, dated October 31, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, Washington 98124–2207; telephone 206–544–5000, extension 1; fax 206–766–5680; e-mail me.boecom@boeing.com; Internet https://www.myboeingfleet.com.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425–227–1221 or 425–227–1152.

(4) You may also review copies of the service information that is incorporated by reference 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on December 30, 2009.

Ali Bahrami.

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2010-398 Filed 1-13-10; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0236; Directorate Identifier 2009-NE-06-AD; Amendment 39-16162; AD 2010-01-05]

RIN 2120-AA64

Airworthiness Directives; CFM International, S.A. CFM56–7B Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for CFM International, S.A. CFM56-7B series turbofan engines. This AD requires initial and repetitive eddy current inspections (ECIs) of certain part number (P/N) low-pressure (LP) turbine rear frames. This AD results from a refined life analysis by the engine manufacturer that shows the need to identify an initial and repetitive inspection threshold for inspecting certain LP turbine rear frames. We are issuing this AD to prevent failure of the LP turbine rear frame from low-cyclefatigue cracks. Failure of the LP turbine rear frame could result in engine separation from the airplane, possibly leading to loss of control of the airplane.

DATES: This AD becomes effective February 18, 2010. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of February 18, 2010.

ADDRESSES: You can get the service information identified in this AD from CFM International, Technical Publications Department, 1 Neumann Way, Cincinnati, OH 45215; telephone (513) 552–2800; fax (513) 552–2816.

The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.

FOR FURTHER INFORMATION CONTACT:

Antonio Cancelliere, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: antonio.cancelliere@faa.gov; telephone (781) 238–7751; fax (781) 238–7199. SUPPLEMENTARY INFORMATION: The FAA

proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to CFM International, S.A. CFM56–7B series turbofan engines. We published the proposed AD in the Federal Register on May 11, 2009 (74 FR 21772). That action proposed to require initial and repetitive ECIs of certain P/N LP turbine rear frames.

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 provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Request To Supersede or Revise Existing AD 2008–03–09

One commenter, the Air Transport Association (ATA), requests that we should supersede or revise existing AD 2008–03–09 to incorporate the requirements and P/Ns affected by the proposed AD.

We do not agree. Superseding or revising that AD to incorporate these requirements would make the requirements of existing AD 2008–03–09 and this AD confusing. AD 2008–03–09 requires a change to the Airworthiness Limitations Section (ALS) for the introduction of the new LP turbine rear frame life limits, with inspections, while this AD introduces limits for LP turbine rear frame P/Ns that were introduced to the field before the ALS changes occurred. We did not change the AD.

Request To Reference the Latest Service Bulletins (SBs)

ATA and CFM International, S.A. request that we reference the latest version of CFM International, S.A. SB

No. CFM56–7B S/B 72–0579, which is Revision 5, dated March 30, 2009. CFM International also requests that we reference the latest version of CFM International, S.A. SB No. CFM56–7B S/B 72–0558, which is Revision 3, dated March 30, 2009.

We agree and changed the SB references in the AD.

Request To Include LP Turbine Rear Frame P/Ns

ATA requests that we include turbine rear frame P/Ns 340–166–251–0; 340–166–252–0; and 340–166–253–0. These P/Ns are included in the effectivity section of CFM International, S.A. SB No. CFM56–7B S/B 72–0579, and Engine Manual 05–21–03. ATA also requests that we include LP turbine rear frame P/Ns 340–027–110–0 and 370–027–120–0. These P/Ns are included in the effectivity section of CFM International, S.A. SB No. CFM56–7B S/B 72–0568.

We do not agree. This AD addresses LP turbine rear frame P/Ns introduced in the field by CFM International, S.A. through SB No. CFM56–7B S/B 72–0527, before the ALS could be modified to include the LP turbine rear frame P/Ns affected by this AD. The LP turbine rear frame P/Ns listed by ATA are already listed in the ALS. We did not change the AD.

Question Regarding Inclusion of LP Turbine Rear Frame P/Ns

Japan Airlines (JAL) questions whether the LP turbine rear frame P/Ns 340–166–251–0; 340–166–252–0; and 340–166–253–0 should be listed in this AD.

The LP turbine rear frame P/Ns referred to by JAL are already listed in the ALS. We did not change the AD.

Request To Remove Engine Models

ATA requests that we remove engine models CFM56–7B26/B2; CFM56–7B26/3B2; and CFM56–7B26/3B2F from the proposed AD, as they are not affected.

We agree and removed those models from the AD. We also advised CFM International, S.A., to remove those models from the effectivity list of SB No. CFM56–7B S/B 72–0579.

Request To Remove Repeated P/Ns

ATA requests that we remove the repeated listings of LP turbine rear frame P/N 340-166-254-0 from the AD.

We agree and removed the repeated P/N listings from the AD.

Request To Review and Correct an Engine Model

ATA and CFM International, S.A. request that we review the engine model

-7B27/3 in the proposed AD, as it appears to be incorrect. ATA states also that engine model -7B27/B3 is missing from the proposed AD.

We agree. We corrected the -7B27/3 engine model in paragraph (g) to read "-7B27/B3". We also corrected the typographical error in paragraph (c)(1) so that engine model -7B27/3 is not duplicated. We changed the duplicate model to read "-7B27/B3".

Request To Remove an Engine Model

ATA requests that we remove engine model –7B27A from paragraph (f) of the proposed AD, as it is not affected by the AD action.

We agree and removed that engine model from the AD.

Previous Credit Paragraphs Added

Since we issued the proposed AD, we became aware that we need to allow previous credit for initial inspections done before the effective date of the AD, using earlier versions of the applicable SBs. We added two previous credit paragraphs to the compliance section of the AD.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

We estimate that this AD will affect 1,228 CFM56-7B series turbofan engines installed on airplanes of U.S. registry. We estimate that it will take about 3 work-hours to perform an eddy current inspection of an LP turbine rear frame. The average labor rate is \$80 per work-hour. A new replacement LP turbine rear frame costs about \$275,000. We estimate that all but the first of the recurrent inspections would occur during normally scheduled maintenance. Therefore, the cost of only the first inspection is included as directly attributable to this AD and we included that cost in the first year. Also, while we estimate that all 1,228 LP turbine rear frames will need replacement at some point in their 30year useful life, only the unused cost of the part is attributable to this AD. Therefore, based on the service history of the LP turbine rear frame, we estimate the total cost of the AD to U.S. operators to be less than \$11,266,490 annually based on a 30-year fleet life expectation.

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 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, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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:

2010-01-05 CFM International, S.A:

Amendment 39–16162. Docket No. FAA–2009–0236; Directorate Identifier 2009–NE–06–AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective February 18, 2010.

Affected ADs

(b) None.

Applicability

- (c) This AD applies to:
- (1) CFM International, S.A. CFM56–7B20; -7B22; -7B24; -7B26; -7B27; -7B22/B1; -7B24/B1; -7B24/B1; -7B24/B1; -7B24/B1; -7B24/B1; -7B24/3; -7B24/3; -7B24/3; -7B26/3; -7B27/3; -7B22/3B1; -7B24/3B1; -7B27/3B1; -7B26/3B1; -7B26/3F; -7B27/B3; -7B27/3F; -7B27/3B1F; and -7B27/3B3 turbofan engines assembled with a low-pressure (LP) turbine rear frame, part number (P/N) 340–166–254–0; 340–166–257–0; 340–166–258–0; or 340–166–259–0; and
- (2) CFM International, S.A. CFM56–7B20/2; –7B22/2; –7B24/2; –7B26/2; and –7B27/2 turbofan engines assembled with a dual annular combustor and an LP turbine rear frame, P/N 340–177–551–0; 340–177–552–0; 340–177–553–0; 340–177–555–0; or 340–177–556–0.
- (3) These engines are installed on, but not limited to, Boeing 737–600, 737–700, 737–800, and 737–900 series airplanes.

Unsafe Condition

(d) This AD results from a refined life analysis by the engine manufacturer that shows the need to identify an initial and repetitive inspection threshold for inspecting certain LP turbine rear frames. We are issuing this AD to prevent failure of the LP turbine rear frame from low-cycle-fatigue cracks. Failure of the LP turbine rear frame could result in engine separation from the airplane, possibly leading to loss of control of the airplane.

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.

Inspections of LP Turbine Rear Frames

- (f) For CFM International, S.A. CFM56–7B20; -7B22; -7B24; -7B26; -7B27; -7B22/B1; -7B24/B1; -7B24/B1; -7B27/B1; -7B20/3; -7B22/3; -7B24/3; -7B26/3; -7B27/3; -7B22/3B1; -7B24/3B1; -7B27/3B1; -7B26/3F; -7B27/3F; and -7B27/3B1F turbofan engines with an LP turbine rear frame, P/N 340–166–254–0; 340–166–255–0; 340–166–257–0; 340–166–258–0; or 340–166–259–0, do the following:
- (1) Perform an initial eddy current inspection (ECI) of the LP turbine rear frame within 25,000 cycles-since-new (CSN) on the LP turbine rear frame.

- (2) For engines with unknown LP turbine rear frame CSN, perform an initial ECI within 300 cycles from the effective date of this AD.
- (3) Perform repetitive ECIs of the LP turbine rear frame, using the inspection intervals in paragraph 3.A. (8) of the Accomplishment Instructions of CFM International, S.A. SB No. CFM56–7B S/B 72–0579, Revision 5, dated March 30, 2009.
- (4) Use paragraphs 3.A. through 3.A. (7)(d) of the Accomplishment Instructions of CFM International, S.A. Service Bulletin (SB) No. CFM56–7B S/B 72–0579, Revision 5, dated March 30, 2009, to do the ECIs.
- (5) Remove LP turbine rear frames from service that have a total cumulated crack length at any location, of 0.79 inch (20 mm) or longer.
- (g) For CFM International, S.A. CFM56–7B26/B1; -7B27/B3; -7B26/3B1; and -7B27/3B3 turbofan engines with an LP turbine rear frame, P/N 340–166–254–0; 340–166–255–0; 340–166–257–0; 340–166–258–0; or 340–166–259–0, do the following:
- (1) Perform an initial ECI of the LP turbine rear frame within 19,000 CSN on the LP turbine rear frame.
- (2) For engines with unknown LP turbine rear frame CSN, perform an initial ECI within 300 cycles from the effective date of this AD.
- (3) Perform repetitive ECIs of the LP turbine rear frame, using the inspection intervals in paragraph 3.A. (9) of the Accomplishment Instructions of CFM International, S.A. SB No. CFM56–7B S/B 72–0579, Revision 5, dated March 30, 2009.
- (4) Use paragraphs 3.A. through 3.A. (7)(d) of the Accomplishment Instructions of CFM International, S.A. Service Bulletin (SB) No. CFM56–7B S/B 72–0579, Revision 5, dated March 30, 2009, to do the ECIs.
- (5) Remove LP turbine rear frames from service that have a total cumulated crack length at any location, of 0.79 inch (20 mm) or longer.
- (h) For CFM International, S.A. CFM56–7B20/2; –7B22/2; –7B24/2; –7B26/2; and –7B27/2 turbofan engines assembled with a dual annular combustor and an LP turbine rear frame, P/N 340–177–551–0; 340–177–552–0; 340–177–553–0; 340–177–556–0, do the following:
- (1) Perform an initial ECI of the LP turbine rear frame within 16,350 CSN on the LP turbine rear frame.
- (2) For engines with unknown LP turbine rear frame CSN, perform an initial ECI within 300 cycles from the effective date of this AD.
- (3) Perform repetitive ECIs of the LP turbine rear frame, using the inspection intervals in paragraph 3.A. (8) of the Accomplishment Instructions of CFM International, S.A. SB No. CFM56–7B S/B 72–0558, Revision 3, dated March 30, 2009.
- (4) Use paragraphs 3.A. through 3.A. (7)(d) of the Accomplishment Instructions of CFM International, S.A. SB No. CFM56–7B S/B 72–0558, Revision 3, dated March 30, 2009, to do the ECIs.
- (5) Remove LP turbine rear frames from service that have a total cumulated crack length at any location, of 0.43 inch (11 mm) or longer.

Previous Credit

(i) Initial inspection of LP turbine rear frames before the effective date of this AD performed using the Accomplishment Instructions of CFM International, S.A. SB No. CFM56-7B S/B 72-0579, original issue, Revision 1, Revision 2, Revision 3, or Revision 4, satisfy the requirements of paragraphs (f)(1), (f)(2), (g)(1), and (g)(2) of this AD.

(j) Initial inspection of LP turbine rear frames before the effective date of this AD performed using the Accomplishment Instructions of CFM International, S.A. SB No. CFM56-7B S/B 72-0558, original issue, Revision 1, or Revision 2, satisfy the requirements of paragraphs (h)(1) and (h)(2) of this AD.

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) European Aviation Safety Agency AD 2009-0009 (corrected), dated January 27, 2009, also addresses the subject of this AD.

(m) Contact Antonio Cancelliere, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: antonio.cancelliere@faa.gov; telephone (781) 238-7751; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(n) You must use the service information specified in the following Table 1 to perform the inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in the following Table 1 in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact CFM International, Technical Publications Department, 1 Neumann Way, Cincinnati, OH 45215; telephone (513) 552-2800; fax (513) 552-2816, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or 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/ibrlocations.html.

TABLE 1—INCORPORATION BY REFERENCE

Service Bulletin No.	Page	Revision	Date
CFM56-7B S/B 72-0558	All	3	March 30, 2009.
CFM56-7B S/B 72-0579	All	5	March 30, 2009

overspeed of the Power Turbine and,

flight shutdown. This could lead to an

subsequently, an uncommanded engine in-

emergency autorotation landing on a single-

Issued in Burlington, Massachusetts, on December 23, 2009.

Francis A. Favara,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. E9-31043 Filed 1-13-10: 8:45 am]

BILLING CODE 4910-13-P

We are issuing this AD to prevent the rupture of the reduction gear box

intermediate pinion, which could result in an overspeed of the power turbine, an uncommanded in-flight shutdown of the engine, and an emergency autorotation

landing.

engine helicopter.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0503; Directorate Identifier 2009-NE-12-AD; Amendment 39-16172; AD 2010-02-01]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Model Arriel 1B, 1D, and 1D1 **Turboshaft Engines**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This 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:

The rupture of the Reduction Gear Box Intermediate Pinion may result in an

DATES: This AD becomes effective February 18, 2010. The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 18, 2010.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

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:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR

part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on June 12, 2009 (74 FR 27946). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Several events of rupture of the Arriel 1 Reduction Gear Box Intermediate Pinion have been reported in service. The ruptures have been determined to be originated at the pinion teeth root due to increased vibratory stresses. This increase in vibratory stresses is mainly caused by increased teeth wear over engine life time.

The rupture of the Reduction Gear Box Intermediate Pinion may result in an overspeed of the Power Turbine and, subsequently, an uncommanded engine inflight shutdown. This could lead to an emergency autorotation landing on a singleengine helicopter.

To reduce the level of vibratory stresses and improve tooth resistance, Turboméca modification incorporates the addition of a damping ring below the teeth and a shot peening of the teeth roots. These modifications reduce the risk of incipient fatigue cracks.

This AD requires the replacement of all Reduction Gear Box Intermediate Pinions with Pinions incorporating Turboméca modification TU 232.

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

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or