

Citation

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113 and 44701; 14 CFR 21.16 and 21.101 for STC or 21.17 for TC; and 14 CFR 11.38 and 11.19.

The Proposed Special Conditions

The FAA has determined that this project will be accomplished on the basis of not lowering the current level of safety for the Air Tractor Model AT-401, -402, -502, -602, and -802 series occupant restraint design. Accordingly, the (FAA) proposes the following special conditions as part of the type certification basis for Air Tractor series airplanes AT-401, AT-402, AT-502, AT-602, and AT-802 modified by Goodrich Aircraft Interior Products.

4-Point Inflatable Restraints for Agricultural Airplanes

1. It must be shown that the inflatable seatbelt will deploy and provide protection under crash conditions where it is necessary to prevent serious injury. A dynamic test is required to verify that the system operates as intended when subjected to the 26 G deceleration pulse described in § 23.562(b)(2). The dynamic test need only be performed using a 50 percentile male ATD.

2. The means of protection must take into consideration a range of stature from a 5 percentile female to a 95 percentile male. The inflatable seatbelt must provide a consistent level of energy absorption throughout that range.

3. The design must prevent the inflatable seatbelt from either being incorrectly buckled or incorrectly installed, or both, such that the airbag would not properly deploy.

4. It must be shown that an inadvertent deployment does not cause an unsafe condition (or hazard to the airplane). Consideration needs to be given as a result of wear and tear, or inertial loads resulting from in-flight or ground maneuvers (including gusts and hard landings), likely to be experienced in service. The seat belt must have the same strength capability after the inflatable portion of the restraint has been deployed.

5. It must be shown that deployment of the device is not hazardous to the occupant. In addition, the seated occupant must not be injured as established by criteria in § 23.562 as a result of the inflatable seatbelt deployment, including keeping the lap belt located on the pelvis.

6. It must be shown that the inflatable seatbelt will not impede rapid egress of

the occupant 10 seconds after its deployment.

7. For the purpose of complying with HIRF and lightning requirements, the inflatable seatbelt system is considered a "critical system" if its deployment could have a hazardous effect on the airplane; otherwise, it is considered an "essential" system.

8. It must be shown that the inflatable seatbelt will not release hazardous quantities of gas or particulate matter into the cabin.

9. The inflatable seatbelt installation must be protected from the effects of fire such that no hazard to occupants will result.

10. There must be a means to verify the integrity of the inflatable seatbelt activation system before each flight or it must be demonstrated to reliably operate between inspection intervals.

11. A life limit needs to be established for appropriate system designs.

12. Qualification testing of the internal firing mechanism must be accomplished using the vibration levels appropriate for an agricultural airplane.

Michael Gallagher,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02-30325 Filed 11-29-02; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. 99-NE-12-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca Turmo IV A and Turmo IV C Series Turboshaft Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The Federal Aviation Administration (FAA) proposes to adopt a new airworthiness directive (AD) that is applicable to Turbomeca Turmo IV A and IV C series turboshaft engines. This proposal would require initial and repetitive borescope and eddy current or ultrasonic inspections of centrifugal compressor intake wheel blades for cracks and evidence of corrosion pitting, and, if found cracked or if there is evidence of corrosion pitting, replacement with serviceable parts. This proposal is prompted by reports of cracked centrifugal compressor intake wheel blades, resulting in the release of

one or more blade fragments. The actions specified by the proposed AD are intended to prevent centrifugal compressor intake wheel blade cracks, which can result in in-flight engine power loss or shutdown.

DATES: Comments must be received by January 31, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 99-NE-12-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may be inspected at this location, by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. Comments may also be sent via the Internet using the following address: *9-ane-adcomment@faa.gov*. Comments sent via the Internet must contain the docket number in the subject line.

The service information referenced in the proposed rule 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 FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

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:**Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this

proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NE-12-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRM's

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 99-NE-12-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

Discussion

The Direction Generale de L'Aviation Civile (DGAC), which is the airworthiness authority for France, recently notified the FAA that an unsafe condition may exist on Turbomeca Turmo IV A and IV C series turboshaft engines. The DGAC advises that they have received reports of cracked centrifugal compressor intake wheel blades. The phenomena of blade cracking occurs in two phases; initiation after a single event, such as foreign object damage or surge, and crack propagation due to operating at a gas generator speed, between 80 percent and 83 percent, that appears to set up a vibration. Although the exact cause of the initiation of cracks has not yet been identified, cracks could initiate at corrosion pits. The investigation is continuing. This condition, if not corrected, could result in centrifugal compressor intake wheel blade cracks, which can result in in-flight engine power loss or shutdown.

Manufacturer's Service Information

Turbomeca has issued Turmo IV Service Bulletin (SB) No. 249 72 0100, Update No. 4, dated January 25, 2000, that specifies procedures for the centrifugal compressor intake wheel blade inspections. The DGAC classified this SB as mandatory and issued airworthiness directive (AD) DGAC AD 97-122(A), Revision 3, dated April 5, 2000, in order to ensure the airworthiness of these engines in France. Turbomeca has also issued Turmo IV SB No. 249 72 0117, dated March 11, 2000, that specifies procedures for installation of modification TU 224.

Bilateral Agreement Information

This engine model is manufactured in France and is 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. Pursuant to this bilateral airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, 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.

Proposed Requirements of This AD

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require:

- Initial and repetitive borescope and eddy current or ultrasonic inspections of centrifugal compressor intake wheel blades for cracks and evidence of corrosion pitting; and
- Replacement with serviceable parts if found cracked or if there is evidence of corrosion pitting.

At this time there is no modification available as terminating action; as the investigation is ongoing into the cause of crack initiation, future rulemaking may be necessary. The actions would be required to be done in accordance with the SB described previously.

Economic Analysis

There are approximately 1,110 engines of the affected design in the worldwide fleet. The FAA estimates that there are currently 11 engines installed on helicopters of U.S. registry that would be affected by this proposed AD, that it would take approximately 41 work hours per engine to perform the proposed inspections, including disassembling and assembling engines, and that the average labor rate is \$60 per work hour. A replacement centrifugal compressor assembly costs approximately \$21,651. Based on these figures, the cost per inspection is estimated to be \$265,221.

Regulatory Analysis

This proposed 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 proposed rule.

For the reasons discussed above, I certify that 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) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action 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, Safety.

The Proposed Amendment

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

Turbomeca: Docket No. 99-NE-12-AD.

Applicability: This airworthiness directive (AD) is applicable to Turbomeca Turmo IV A and IV C series turboshaft engines. These engines are installed on but not limited to Aerospatiale FA 330-PUMA 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 (e) 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 is required as indicated, unless already done

To prevent centrifugal compressor intake wheel blade cracks, which can result in in-flight engine power loss or shutdown, do the following:

(a) For engines that have been modified to TU 197 standard, but have not been modified to TU 191 or TU 224 standard, do the following:

(1) Remove modification TU 197 and install modification TU 224 in accordance with Turmo IV SB 249 72 0117, dated March 11, 2000, within the next 50 cycles or six months after the effective date of the AD, whichever occurs first.

(2) Within 1,000 flight hours (FH) after the installation of modification TU 224 standard, do the following:

(i) Perform a visual inspection and an ultrasonic inspection (USI) in accordance with paragraph 2.B.(3) of Turbomeca Turmo IV SB 249 72 0100, Update 4, dated January 25, 2000.

(ii) Thereafter, perform a visual inspection and a USI at intervals not to exceed 1,000 FH in accordance with paragraph 2.B.(3) of Turbomeca Turmo IV SB 249 72 0100, Update 4, dated January 25, 2000.

(b) For engines that have not been modified to TU 191, TU 197, or TU 224 standard, do the following in accordance with Turbomeca Turmo IV SB 249 72 0100, Update 4, dated January 25, 2000:

(1) For centrifugal compressor intake wheels that, on the effective date of this AD, have been operated for more than 250 FH since the last inspection of the centrifugal compressor intake wheel blades, do the following:

(i) Perform an initial borescope inspection of the blades for evidence of corrosion within the next 50 FH, or six months after the effective date of this AD, whichever occurs first, in accordance with paragraph 2.B.(1) of the SB.

(ii) If corrosion is found, perform an ECI or USI, as applicable, of the blades for cracks within 50 FH after the borescope inspection performed in accordance with paragraph 2.B.(3) of the SB, and if necessary, replace with serviceable parts.

(iii) If corrosion is not found, perform an ECI or USI, as applicable, of the blades for cracks within 250 FH after the borescope inspection performed in accordance with paragraph (b)(1)(i) of this AD, and if necessary, replace with serviceable parts.

(iv) Thereafter, perform borescope inspections and ECI's or USI's, as applicable, of the blades for cracks and evidence of corrosion, alternating at intervals not to exceed 250 FH since the last inspection.

(v) Remove from service centrifugal compressor intake wheels found cracked and replace with serviceable parts.

(2) For centrifugal compressor intake wheels that, upon the effective date of this AD, have been operated for less than or equal to 250 FH since the last inspection of the blades, do the following:

(i) Perform an initial borescope inspection of the blades for evidence of corrosion prior to accumulating 250 FH since the last inspection of the blades in accordance with paragraph 2.B.(1) of the SB.

(ii) If corrosion is found, perform an ECI or USI, as applicable, of the blades for cracks, and, if necessary, replace with serviceable parts, within 50 FH after the borescope inspection performed in accordance with paragraph 2.B.(3) of the SB.

(iii) If corrosion is not found, perform an ECI or USI, as applicable, of the blades for cracks, and, if necessary, replace with serviceable parts, within 250 FH after the borescope inspection performed in accordance with paragraph (b)(2)(i) of this AD.

(iv) Thereafter, perform borescope inspections and ECI's or USI's, as applicable, of the blades for cracks and evidence of corrosion, alternating at intervals not to exceed 250 FH since the last inspection.

Note 2: Alternating intervals means that if the last inspection was an ECI or a USI, the next inspection will be a borescope inspection. If the last inspection was a borescope inspection, the next 250 FH inspection will be an ECI or a USI as applicable.

(v) Remove from service centrifugal compressor intake wheels found cracked and replace with serviceable parts.

(c) For engines not modified to TU 197 but have been modified to TU 191 or TU 224 standard, that have been operated for more than 1,000 flight hours since the last inspection of the blades, do the following in accordance with Turbomeca Turmo IV SB 249 72 0100, Update 4, dated January 25, 2000:

(1) Perform an initial ECI or USI, as applicable, of the blades for cracks, in accordance with paragraph 2.B.(3) of the SB, within the next 50 FH, or 6 months after the effective date of this AD, whichever occurs first.

(2) Thereafter, inspect at intervals not to exceed 1,000 FH.

(3) Remove from service centrifugal compressor intake wheels found cracked, and replace with a serviceable part

Alternative Methods of Compliance

(e) 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 3: 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

(f) 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.

Note 4: The subject of this AD is addressed in Direction Generale de L'Aviation Civile airworthiness directive AD97-122(B), dated May 21, 1997.

Issued in Burlington, Massachusetts, on November 21, 2002.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NE-10-AD]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Model RB211-22B Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The Federal Aviation Administration (FAA) proposes to adopt a new airworthiness directive (AD) that is applicable to Rolls-Royce plc (RR) model RB211-22B turbofan engines with intermediate pressure (IP) compressor stage 6 to 7 rotor shaft assembly part number (P/N) UL37094 installed. This proposal would require removal from service of IP compressor stage 6 to 7 rotor shaft assemblies P/N UL37094 before reaching newly reduced life limits. This proposal is prompted by the discovery of corrosion during inspection and analysis of IP compressor stage 6 to 7 rotor shaft assemblies returned from the field. The actions specified by the proposed AD are intended to prevent corrosion-induced cracking of the IP compressor stage 6 to 7 rotor shaft assembly, resulting in an uncontained engine failure and damage to the airplane.

DATES: Comments must be received by January 31, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2002-NE-10-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may be inspected at this location, by appointment, between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. Comments may also be sent via the Internet using the following address: "9-ane-adcomment@faa.gov". Comments sent via the Internet must contain the docket number in the subject line.