

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [64 FR 16339 NO. 64 04/05/99]

[Docket No. 99-NE-01-AD; Amendment 39-11108; AD 99-02-51]

RIN 2120-AA64

Airworthiness Directives; Allison Engine Company, Inc. AE 3007A and AE 3007C Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule, request for comments.

SUMMARY: This document publishes in the Federal Register an amendment adopting Airworthiness Directive (AD) 99-02-51 that was sent previously to all known U.S. owners and operators of Allison Engine Company, Inc. AE 3007A and AE 3007C series turbofan engines by individual telegrams. This AD prohibits, prior to further flight, all engine ground starts at oil temperatures below 32 deg. F (0 deg. C) unless pre-flight operational procedures ensure that engine oil temperature is maintained at or above 32 deg. F (0 deg. C). This amendment is prompted by reports of in-flight engine shutdowns. The in-flight engine shutdowns have been attributed to loss of engine oil from the starter shaft seal. The actions specified by this AD are intended to prevent an in-flight engine shutdown due to loss of engine oil from the starter shaft seal.

DATES: Effective April 20, 1999, to all persons except those persons to whom it was made immediately effective by telegraphic AD 99-02-51, issued on January 8, 1999, that contained the requirements of this amendment.

Comments for inclusion in the Rules Docket must be received on or before June 4, 1999.

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-01-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may also be sent via the Internet using the following address: "9-ad-engineprop@faa.gov." Comments sent via the Internet must contain the docket number in the subject line.

FOR FURTHER INFORMATION CONTACT: John Tallarovic, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Ave., Des Plaines, IL 60018; telephone (847) 294-8180, fax (847) 294-7834.

SUPPLEMENTARY INFORMATION: On January 8, 1999, the Federal Aviation Administration (FAA) issued telegraphic airworthiness directive (TAD) 99-02-51, applicable to Allison Engine Company, Inc. AE 3007A and AE 3007C series turbofan

engines that prohibits, prior to further flight, all engine ground starts at oil temperatures below 32 deg. F (0 deg. C), unless preflight operational procedures ensure that engine oil temperature is maintained at or above 32 deg. F (0 deg. C). That action was prompted by reports of three in-flight engine shutdowns since January 4, 1999. The FAA has determined that engine starting in cold temperatures can cause the starter shaft seal to become unseated, allowing oil to exit the accessory gearbox. This condition, if not corrected, could result in an in-flight engine shutdown due to loss of engine oil from the starter shaft seal.

Since the unsafe condition described is likely to exist or develop on other engines of the same type design, the FAA issued telegraphic AD 99-02-51 to prevent an in-flight engine shutdown due to loss of engine oil from the starter shaft seal. This AD prohibits all engine ground starts at oil temperatures below 32 deg. F (0 deg. C) unless preflight operational procedures ensure that engine oil temperature is maintained at or above 32 deg. F (0 deg. C). This AD is considered an interim action, and as the investigation continues, further rulemaking may be necessary. The actions are required to be accomplished in accordance with the compliance section of this AD.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual telegrams issued on January 8, 1999, to all known U.S. owners and operators of Allison Engine Company, Inc. AE 3007A and AE 3007C series turbofan engines. These conditions still exist, and the AD is hereby published in the Federal Register as an amendment to Section 39.13 of part 39 of the Federal Aviation Regulations (14 CFR part 39) to make it effective to all persons.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this 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 under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD 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-01-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from 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.

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 adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION

P.O. BOX 26460

OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department
of Transportation

**Federal Aviation
Administration**

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulations, 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 FAR Subpart 39.3).

99-02-51 Allison Engine Company, Inc.: Amendment 39-11108; Docket 99-NE-01-AD.

Applicability: Allison Engine Company, Inc. AE 3007A and AE 3007C series turbofan engines, installed on but not limited to Embraer EMB-145 and Cessna 750 series airplanes.

Note 1: This airworthiness directive (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 (b) 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: Required as indicated, unless accomplished previously.

To prevent an in-flight engine shutdown due to loss of engine oil from the starter shaft seal, accomplish the following:

(a) Prior to further flight, all ground engine starts at engine oil temperatures below 32 deg. F (0 deg. C) are prohibited except as provided in paragraphs (a) (1) and (a) (2) of this AD.

(1) For Allison Engine Company engine models AE 3007A, AE 3007A1, AE 3007A1/1, and AE 3007A1/2, if the engine oil temperature has dropped below 32 deg. F (0 deg. C) prior to flight, perform a high-power leak check on each engine (at least three minutes at takeoff power, reference Allison Engine Company AE 3007A series maintenance manual, section 72-00-00, page 505, subtask 72-00-00-790-002). No leaks above serviceable limits are permitted (0.21 quarts/hour, 200 cc/hour per Allison Engine Company AE 3007A, Fault Isolation Manual, section 79-37-00, page 212, allowable leakage).

(2) For Allison Engine Company engine model AE 3007C, if the engine oil temperature has dropped below 32 deg. F (0 deg. C) prior to flight, monitor the engine oil level using the following procedures:

(i) Operate engine at maximum continuous power for 10 minutes. Monitor the engine oil level.

(ii) If an oil level decrease of greater than 1.0 quarts occurs, maintenance is required before further flight.

(b) 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, Chicago Aircraft Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Chicago Aircraft Certification Office.

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

(c) This amendment becomes effective April 20, 1999, to all persons except those persons to whom it was made immediately effective by telegraphic AD 99-02-51, issued January 8, 1999, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT: John Tallarovic, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Ave., Des Plaines, IL 60018; telephone (847) 294-8180, fax (847) 294-7834.