

# AIRWORTHINESS DIRECTIVES FINAL RULES: 98-24-28

**CITATION:** [Federal Register: December 03, 1998 (Volume 63, Number 232)]

**PAGE NUMBER:** [Page 66735]

**DOCKET NUMBER:** 98-ANE-23-AD

**AMENDMENT:** 39-10915

**AD NUMBER:** 98-24-28

**SUBJECT HEADING:** Airworthiness Directives; Allison Engine Company 250-B and 250-C Series Turboshaft and Turboprop Engines

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Allison Engine Company 250-B and 250-C series turboshaft and turboprop engines, that requires replacing existing beryllium copper main fuel control (MFC) bellows assemblies with Inconel 718 stainless steel welded MFC bellows assemblies. This amendment is prompted by reports of leaking MFC bellows assemblies resulting in an uncommanded minimum fuel flow condition, loss of engine fuel flow control and subsequent forced landing. The actions specified by this AD are intended to prevent MFC bellows assembly leakage, which can result in an uncommanded minimum fuel flow condition and subsequent loss of engine fuel flow control.

**DATES:** Effective January 7, 1999. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 7, 1999.

**ADDRESSES:** The service information referenced in this AD may be obtained from Allison Engine Company, P.O. Box 420, Speed Code U-15, Indianapolis, IN 46206-0420, telephone (317) 230-6674. This information may be examined 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:** John Tallarovic, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2350 E. Devon Avenue, Room 323, Des Plaines, IL 60018; telephone (847) 294-8180, fax (847) 294-7834.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Allison Engine Company 250-B and 250-C series turboshaft engines was published in the Federal Register on June 8, 1998 (63 FR 31138). That action proposed to require replacing the existing beryllium copper main fuel control (MFC) bellows assemblies at the next repair or overhaul of the MFC bellows assembly, or, since corrosion was a factor, by the calendar end-dates specified, whichever occurs first. Since that issuance of that proposal, the FAA has discovered that the turboprop aircraft were inadvertently omitted from the applicability section, which has been corrected in this final rule.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. This final rule references only one Allison Commercial Engine Bulletin (CEB) CEB-A-282, Revision 2, dated April 15, 1998, that also serves as the seven other CEBs listed in paragraph (b) of the proposed rule. It serves as the cover document for the AlliedSignal Aerospace Equipment Systems service bulletin GT-242, revision 2, dated April 15, 1998, the manufacturer of the MFC. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

The FAA estimates that 2,500 engines installed on aircraft of U.S. registry will be affected by this AD, that it will take no additional work hours per engine to accomplish the proposed actions at regularly scheduled overhaul, and required parts would cost approximately \$1,495 per engine. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$3,737,500.

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.

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 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 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, 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 adding the following new airworthiness directive:

#### **REGULATORY TEXT:**

98-24-28 Allison Engine Company: Amendment 39-10915. Docket 98-ANE-23-AD.

Applicability: Allison Engine Company 250-B15, 250-B17, 250-B17F, series turboprop engines and 250-C18, 250-C20, 250-C20R, 250-C28, 250-C30 series turboshaft engines, installed on but not limited to AeroSpace Technologies of Australia Pty Ltd Models N22B, N22S, and N24A; Beech Aircraft Corporation Model 35; Cessna Aircraft Company Model 210; Maule Aerospace Technology Corp. Models MX-7-420 and MXT-7-420; Partenavia Construzioni Aeronauticas S.p.A. Models AP68TP 300 and AP68TP 600; Pilatus Britten-Norman Models BN-2T and BN-2T-4R; SIAI Marchetti S.r.l. Models SF600 and SF600A airplanes; AGUSTA Models A109, A109A, A109AII, A109C; Bell Helicopter Textron Models 47, 206, 206A, 206B, 206L, 206L-1, 206L-4, 230; Enstrom Helicopter Models TH-28 and 480; Eurocopter Canada Model BO 105 LS A-3; Eurocopter Deutschland Models BO-105A, BO-105C, BO-105S and BO-105LS A-1; Eurocopter France Models AS355E, AS355F, AS355F1 and AS355F2; Hiller Model FH-1100; McDonnell Douglas Helicopter Company Models 369D, 369E, 369F, 369H, 369HM, 369HS, 369HE, 369FF, 500N; Rogerson Hiller Corp. Model UH-12E, Schweizer Model 269D; and Sikorsky Model S-76A rotorcraft; and Lockheed Martin Tactical Defense System Model GZ-22 airship.

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 (c) 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 main fuel control (MFC) bellows assembly leakage, which can result in an uncommanded minimum fuel flow condition and subsequent loss of engine fuel flow control, accomplish the following:

(a) Replace existing beryllium copper MFC bellows assemblies, part numbers (P/Ns) 2523722, 2539647, 2540539, 2540767, and 2542526, with Inconel 718 stainless steel welded MFC bellows assemblies, P/N 2543598, in accordance with Allison Commercial Engine Bulletin (CEB) CEB-A-282/AlliedSignal Aerospace Equipment Systems Service Bulletin (SB) GT-242, Revision 2, dated April 15, 1998, at the earlier of the following:

(1) The next time after the effective date of this AD the MFC is being repaired or overhauled; or

(2) The following populations of MFCs, as applicable

(i) All MFCs listed by P/Ns in Tables 1 and 2 of the CEB/SB by March 31, 1999; or

(ii) All MFCs listed by P/Ns in Table 3 of the CEB/SB by August 31, 1999.

(iii) All MFCs listed by P/Ns in Tables 4 and 5 of the CEB/SB by October 31, 1999.

Note 2: Allison CEB-A-282, Revision 2, dated April 15, 1998, also serves as CEB-A-1329 for the 250-C20 series engines, CEB-A-73-2053 for the 250-C28 series engines, CEB-A-73-3068 for the 250-C30 series engines, CEB-A-73-4029 for the 250-C20R series engines, Turboprop (TP) CEB-A-158 for the 250-B15G series engines, TP CEB-A-1286 for the 250-B17 series engines, and TP CEB-A-73-2014 for the 250-B17F series engines.

(b) Perform the replacement of MFC bellows assemblies required by paragraph (a) of this AD in accordance with the accomplishment instructions paragraph of Allison CEB-A-282/AlliedSignal Aerospace Equipment Systems Service Bulletin (SB) SB GT-242 Revision 2, dated April 15, 1998.

(c) 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 request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Chicago Aircraft Certification Office.

Note 3: 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.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) The actions required by this AD shall be done in accordance with the following Allison Engine Company CEB/AlliedSignal Aerospace Equipment Systems SB GT-242, Revision 2, dated April 15, 1998:

Document No.	Pages	Revision	Date
CEB-A-282	1-28	2	April 15, 1998
Total Pages: 28.			

This incorporation by reference was 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 Allison Engine Company, P.O. Box 420, Speed Code U-15, Indianapolis, IN 46206-0420, telephone (317) 230-6674. 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.

(f) This amendment becomes effective on January 7, 1999.

#### FOOTER: