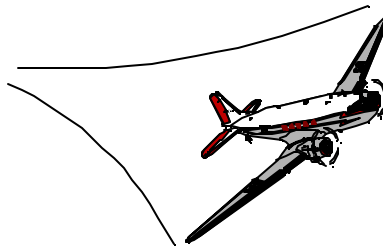


SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department
of Transportation

**Federal Aviation
Administration**

No. CE-02-20
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Aircraft Certification Service
Washington, DC

We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) informs you, registered owners and operators of Cessna Aircraft Co. Model 172R & 172S airplanes, of an Alternative Method of Compliance (AMOC) to Federal Aviation Administration (FAA) Airworthiness Directive (AD) 2001-06-17. This AMOC provides an expansion to the limits identified for the inspection of the engine idle speed and mixture range required to comply with the provisions of AD 2001-06-17.

Background

We issued AD 2001-06-17 based on reports of improper engine idle speed and mixture settings as well as a lack of information in the Pilots Operating Handbook (POH) to detect this condition. Improper engine idle speed and or engine idle fuel mixture settings could eventually result in in-flight shut down of the engine, and subsequent inability to restart the engine inflight with the existing procedures available in the POH.

AD 2001-06-17 requires:

- 1.** Installation of required changes to the POH to provide revised preflight inspection procedures and emergency procedures. Use of the revised procedures improves the potential to detect and correct improper engine idle operation as well as procedures to improve the engines ability to be effectively restarted in flight if the suspect conditions are encountered during certain phases of flight.
- 2.** A one time inspection of the engine idle speed and idle fuel mixture settings that were established in accordance with the procedures previously published in the Cessna Maintenance Manuals for these airplanes.
- 3.** As a result of comments received in response to the issuance of AD 2001-06-17, the FAA has approved expansion of the engine idle speed, revolutions per minute (RPM) and fuel mixture ranges to accommodate those operators that may be having difficulty in maintaining the narrow speed and mixture range. Therefore, as an AMOC for AD 2001-06-17, paragraph (d)(1)(ii), an alternate initial inspection method may be utilized by establishing the engine idle speed range of 600 RPM to 725 RPM and or using a engine mixture range of a minimum of 10 RPM to a maximum of 50 RPM rise when leaning the engine at idle speed. Adjustments to the engine idle speed and/or mixture settings may be made by a person holding a currently effective mechanic certificate with a Powerplant or Airframe and Powerplant (A&P) rating or by an individual authorized to represent an FAA Approved Repair Station or, for non U.S. registered airplanes, the state of registry's equivalent facility in accordance with their applicable procedures and requirements.

Recommendation

1. The FAA recommends that, where practical, engine idle speed and fuel mixture inspections be accomplished in accordance with the limits originally published in AD 2001-06-17.

2.a. The AMOC engine idle speed and fuel mixture inspection provisions are recommended for operators of airplanes that may be in an operational environment suitable for these expanded limits.

2.b. The AMOC initial inspection provisions are not recommended for aircraft with a history of problems associated with engine idle operations.

3. The FAA requests that any evidence of adverse service history related to engine idle, be reported to the FAA via the Service Difficulty Reporting System. Service Difficulty Reports may be reported on FAA Form 8010-4, Malfunction or Defect Report, or electronically by contacting the FAA Aviation Data Systems Branch, AFS-620, Attention: Thomas Marcotte, phone: (405) 954-6500; e-mail: Thomas.M.Marcotte@faa.gov

For Further Information Contact

FAA, Wichita Aircraft Certification Office, Attention: Mr. Paul O Pendleton 1801 Airport Road, Room 100 Wichita Kansas 67209, phone: (316) 946-4143, or FAA, Small Airplane Directorate, Attention: Mr. Michael J. Kiesov 1201 Walnut, Suite 900, Kansas City, MO 64106, phone: (816) 329-4144; fax: (816) 329-4090.