FAA
Aircraft Certification Service

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-08-46
SUBJ: Powerplant Exhaust & Air Conditioning **Date:** September 9, 2008

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you of an airworthiness concern on Cirrus Design Corporation (CDC) Model SR22 airplanes where a temporary exceedance of the maximum carbon monoxide level allowed by 14 CFR 23.831(a) could occur under specific conditions (see Background section below).

Background

The FAA was notified on June 23, 2008, by CDC, of a carbon monoxide exceedance of the regulatory maximum of 50 PPM. The exceedance occurred during production flight test of a Model SR22 airplane under specific conditions: 1) the airplane had an air-conditioning system; 2) the air-conditioning was on and set to the Recirculation Mode; and 3) the airplane was in an extended climb (full power). After reaching level flight, the carbon monoxide level dropped below the 50 PPM requirement within 10 minutes. Cirrus has tested numerous Model SR22 airplanes under the conditions described above and found the worst case carbon monoxide level to be 78 PPM.

Cirrus evaluation of the problem revealed that engine exhaust was entering the airplane fuselage through a gap between the air conditioning condenser unit outlet duct and the hole in the fuselage belly to accommodate the duct. Cirrus has issued Service Bulletin SB 2X-21-03 to remove the possible gap.

This airworthiness action has been taken after consideration of the responses from CDC as well as airplane owners/ operators through relevant associations and type clubs, using the procedures found in the Small Airplane Directorate Airworthiness Directives Manual Supplement (Airworthiness Concern Process Guide).

At this time, this airworthiness concern is not considered an unsafe condition that would warrant an airworthiness directive action under Title 14 of the Code of Federal Regulations (14 CFR part 39).

Recommendations

We recommend that all CDC SR22 airplane owner/operators review Cirrus Service Bulletin SB 2X-21-03 and, if effective to their airplanes, complete the modifications found in Cirrus Service Bulletin SB 2X-21-03. Should there be any delay in the accomplishment of SB-2X-03, then we recommend you use the operating procedures found in Cirrus Service Advisory SA 08-13 to keep carbon monoxide levels below regulatory limits.

For Further Information Contact

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