FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-13-43R1

SUBJ: Aircraft Fuel Distribution System and Ice/Rain Protection System **Date:** September 30, 2013

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you of an airworthiness concern regarding 1) possible corrosion of the fuel return lines that pass through the Tecalemit Kilfrost-Sheepbridge-Stokes (TKS) deicing fluid tank/s; and 2) softening of the sealant used in the TKS tank/s in the following **Cirrus Design Corporation (CDC)** airplanes:

- **Model SR22 airplanes, serial numbers 2334, 2420, and 2438 through 3691, equipped with ice protection.**
- **Model SR22T airplanes, serial numbers 0001 through 0556, equipped with ice protection.**

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).

This SAIB has been revised to correct an error that reduced the Model SR22 effectively by 270 airplanes.

Background

This SAIB results from two field notifications of blue fuel staining on the underside of the wing near the TKS fluid tank vent. In both cases it was determined that a fuel return line passing through the TKS tank had pin holes due to corrosion. The pin holes allowed fuel (under low pressure) into the TKS tank, which then floated on top of the TKS fluid. Once the tank was full of fluid, the additional fuel was effectively vented overboard through the TKS vent.

During compliance to the original release of the service bulletin, it was found that, not only was the fuel return line corroding due to interaction with the TKS fluid, but the TKS tank sealant itself was becoming soft after long term exposure to the TKS fluid. Revision R2 of the service bulletin calls for replacement and sealing of the return fuel line. This revision (R2) also replaces the TKS tank sealant with one that will not soften after long term exposure to TKS fluid.

Recommendations

We recommend that all CDC model airplanes, specified in the introduction above, complete Cirrus service bulletin number SB 2X-28-11 R2, revised August 2, 2013.

In addition, we request feedback from owners and operators as to the condition of the fuel line and the TKS tank sealant discovered during the accomplishment of the service bulletin. This feedback should be provided to the point of contact listed below.

Under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection through an SAIB. The OMB Control Number is 2120-0731.

For Further Information Contact

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For Related Service Information Contact

To obtain copies of Cirrus Design Service Bulletin SB 2X-28-11 R2, contact Cirrus Design Corporation, 4515 Taylor Circle, Duluth, MN 55811; or visit the website http://www.cirrusaircraft.com, click on “Customer Support” then click on “Technical Publications”. Click on the dropdown menu under Categories and select “Service Bulletin”; then scroll down to and click on service bulletin number SB 2X-28-11 R2.