



SAIB: CE-11-50

Date: August 26, 2011

SUBJ: Flight Controls, Flaps

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) is being issued to alert owners and installers to an airworthiness concern regarding a possible partial asymmetric flap and flap actuator over-extension condition on **Cirrus Design Corporation (CDC) Models SR20, SR22, and SR22T** airplanes.

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

Background

A condition exists on CDC airplanes that if the 0-percent proximity sensor fails, then the actuator may extend past the 0-percent point. This condition could cause the actuator rod end to bend. In the event of deploying the flaps to 100 percent with a bent rod end, the flaps could over-deploy and allow the flap actuator linkage to over-center. If the bent rod end was to fail while in this position, a partial asymmetric flap condition could result. One such occurrence has been reported to the FAA on a Model SR22 airplane. On approach after flap deployment, the partial asymmetry condition sent the aircraft into an aggressive bank. The pilot was able to safely land the airplane with higher than normal workload. During a preflight inspection a bent rod end would be indicated by flap trailing edge misalignment with the wing trailing edge on the flap panels. CDC addressed the asymmetry problem with the issuance of Service Bulletin SB 2X-27-16.

Subsequent to the initial service bulletin, CDC found a slight flap actuator over-extension could result if the 0-percent proximity sensor is not properly adjusted. This could result in loosening of the end fitting's jam nut and a possible disconnection between the flap actuator and flap torque tube assembly. This condition was found during production rigging of the flaps at CDC.

CDC has revised the original Service Bulletin, SB 2X-27-16 R1 revised May 06, 2011, to prevent either condition from occurring. The bulletin installs a collar on the flap actuator and replaces the actuator end fitting and rod end with a new design.

Recommendations

The FAA has investigated and evaluated these safety issues using appropriate methods for these types of products. The FAA recommends that owners, operators, and maintenance technicians perform the actions of CDC Service Bulletin, SB 2X-27-16 R1, at the next scheduled maintenance, annual inspection, or within the next 12 months, whichever occurs first.

To obtain copies of Cirrus Service Bulletin SB 2X-27-16 R1, contact Cirrus Design Corporation, 4515 Taylor Circle Duluth, MN 5581-1548 or visit their website at www.cirruslink.com/mycirrus/servicepubs.aspx.

For Further Information Contact

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