



**SUBJ:** Electrical Power

*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) Models SR20 and SR22 airplanes where possible failure of a transient voltage suppressor (TVS) may result in an increase in workload for the pilot.

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 (AD) action under Title 14 of the Code of Federal Regulations (14 CFR part 39).

## **Background**

CDC notified the Federal Aviation Administration of the failure of a TVS on a CDC Model SR22 airplane, which resulted in loss of NAV/COM1 functionality and some smoke and fumes within the cockpit. Since that time, 14 other TVS's have failed on CDC airplanes in the field.

Other airplanes equipped with TVSs from the same manufacturer have recently experienced failures. Our findings thus far, show that the electronic component itself is the primary suspect for a cause of the failures. To date, no specific reason has been positively identified for the failures although several companies are working on the problem.

As previously mentioned, no other functionality other than the NAV/COMM 1 has been lost on a CDC airplane. All CDC airplanes have redundancy with a NAV/COMM 2 available. Also, in all known occurrences of TVS failures, the smoke and fumes have been noted to be of short duration and not sufficient to impede the pilots visibility, or toxic such that the pilot's ability to operate the airplane is impaired.

## **Recommendations**

We recommend that all CDC airplane owner/operators thoroughly read Cirrus service advisory SA 07-17, dated September 11, 2007. The service advisory provides good information on what to expect should a TVS failure occur and what actions should be taken by the pilot.

## **For Further Information Contact**

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