



**SAIB:** CE-12-28

**Date:** April 17, 2012

**SUBJ:** Battery/Charger System

*This is information only. Recommendations aren't mandatory.*

## **Introduction**

This Special Airworthiness Information Bulletin (SAIB) informs registered owners/operators of all **Eclipse Aerospace, Inc. EA500** model series aircraft (under Type Certificate Data Sheet **A00002AC**) of an airworthiness concern. Specifically, this SAIB provides notification of the hazards of having an unapproved battery charging system installed.

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

## **Background**

The Federal Aviation Administration (FAA) was notified that unapproved battery charging devices were being installed in certain Eclipse Aerospace, Inc. EA500 airplanes. These battery charging systems include a temperature compensating sensor and are intended to maintain a proper charge while the aircraft is on the ground for extended periods. These devices feature automotive trailer-type connectors and household style extension cords, which are not produced to an aviation standard. A typical installation has ring terminals attached to the aircraft battery with cabling routed along and secured to oxygen lines in the forward equipment bay. Access to the connectors is through the oxygen servicing port door.

Eclipse Aerospace, Inc. reports that their service centers regularly find these unapproved modifications and remove them. They also advise that these systems have never been properly evaluated for impact to the aircraft electrical system. Further, FAA Notice 8900.163 states "The EA500 electrical system design is highly integrated with the airplane avionics, making previous distinctions concerning electrical and avionics inappropriate." Finally, Eclipse Aerospace, Inc. has expressed concern to the FAA that these poorly designed and executed modifications pose a danger to the safe operation of Eclipse aircraft.

## **Recommendations**

The FAA recommends that all owners and operators of Eclipse Aerospace, Inc. EA500 airplanes discontinue the use of unapproved battery charging systems and immediately remove the system from the airplane.

## **For Further Information Contact**

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