

# **SPECIAL AIRWORTHINESS INFORMATION BULLETIN**

**Aircraft Certification Service  
Washington, DC  
U.S. Department of Transportation  
Federal Aviation Administration**

**CE-02-05 R1**

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This is information only. Recommendations aren't mandatory.

## **Introduction**

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of both rotary and fixed-wing aircraft, of the cracking and corrosion problems currently being experienced with terminals made from SAE AISI 303 Se stainless steel.

## **Background**

The National Transportation Safety Board (NTSB) issued recommendations A-01-06 through A-01-08, advising the FAA to notify manufacturers of all categories of certified rotary and fixedwing aircraft of the cracking and corrosion problems stated above. NTSB recommended recurrent visual inspections at calendar-based intervals.

The FAA sought evidence of corrosion pits or cracking on flight control cable terminals that were or may have been constructed from SAE AISI 303 Se stainless steel from aircraft manufacturers and type clubs, especially for aircraft that are older than 15 years. Factors such as water, exhaust gases, dissimilar metals, battery off-gasses, etc. may contribute to corrosion problems. They found no evidence of corrosion or pitting in the aircraft fleet, but in isolated, specific airframe applications, especially in models where the battery is located very close to the area in which control cables enter the bottom of the fuselage. The Piper PA-12, -14, -18, -28 and -28R have batteries installed in the tail cone and have reported 18 cases of corrosion in a fleet of 14,564 aircraft. Cessna 172 has reported 11 cases of broken/frayed cables in a fleet of 24,925 aircraft. These problems were reported on Piper and Cessna aircraft, but the same problems may occur or exist on any aircraft of other manufacturers.

## **Recommendation**

In order to reduce the possibility of in-flight failure of a control cable attach fitting, we recommend that owners or operators of rotary and fixed-wing aircraft inspect the flight control cables at 100 flight hour intervals or at each annual inspection. We also recommend that you use a 5X to 10X magnifying glass during the control cable fitting inspection. If you find corrosion or pitting, you should replace the control cable attach fittings even if the manufacturer's maintenance manual does not recommend replacement of corroded fittings. We also remind you that Appendix D of Part 43 mandates that all systems, parts, components, etc. be inspected for improper installation or operation during annual and 100-hour inspections.

## **For Further Information Contact**

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