FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-11-01
SUBJ: Stabilizers -Horizontal Stabilator – Turnbuckle **Date:** October 4, 2010
This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, or operators of Piper Aircraft Inc. (Piper) airplane models (see Table 1), of a potential airworthiness concern regarding failure of the turnbuckle/control cable assembly for the horizontal stabilator. This failure is due to stress corrosion cracking at the turnbuckle/control cable assembly leading to loss of pitch control.

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

Table 1

Model	Serial Numbers
PA-28-140, PA-28-150, PA-28-160, PA-28-180	All
PA-28S-160, PA-28S-180, PA-28-235, PA-28-236	All
PA-28-151, PA-28-161, PA-28-181, PA-28-201T	All
PA-28R-180, PA-28R-200, PA-28R-201	All
PA-28R-201T, PA-28RT-201, PA-28RT-201T	All
PA-32-260, PA-32-300, PA-32R-300, PA-32RT-300	All
PA-32RT-300T, PA-32R-301(SP), PA-32R-301(HP)	All
PA-32R-301T, PA-32-301, PA-32-301T	All
PA-32-301FT, PA-32-301XTC	All
PA-34-200, PA-34-200T, PA-34-220T	All
PA-44-180, PA-44-180T	All

Background

This SAIB is a result of two field reports of failure of the turnbuckle in the horizontal stabilator which occurred on Piper Model PA-44-180 and PA-28-151 airplanes causing a loss of horizontal stabilator control. Post-incident investigations revealed that in both cases the horizontal stabilator control cable failed at the turnbuckle, which resulted in loss of pitch control.

The first report was an incident that occurred on March 28, 2008, concerning the failed turnbuckle/cable assembly on a Piper Model PA-44-180 airplane (Total Hours: Unknown, Manufacturing Date: Unknown). During a take off roll, near rotation speed the pilots noticed a problem with the horizontal stabilator and aborted take off. The maintenance personal found the stabilator control cable failed at the turnbuckle, P/N 62701-153.

The second report was an incident that occurred on December 8, 2008, regarding the loss of horizontal stabilator control on a Piper Model PA-28-151 airplane (Total Hours: 2650, Manufacturing Date: Unknown). The pilot landed safely using elevator trim and engine power. The landing was

hard but no damage to the aircraft. The investigation revealed that the failure was due to a stabilator control cable failed at the turnbuckle, P/N 489-910.

Recommendations

The purpose of this SAIB is to provide information to reduce the possibility of failure of the horizontal stabilator turnbuckle/control cable assembly. We recommend that you incorporate Piper Service Letter No. 1069, dated March 31, 2003, which includes procedures to inspect the flight control cables and fittings at 100 flight hour intervals or at each annual inspection. In addition, we recommend that you visually inspect the entire surface of each cable terminal, turnbuckle, or other cable fitting for corrosion or cracking. Any evidence of corrosion or cracking is cause for replacement.

For Further Information Contact

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