



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-10-30

Date: May 4, 2010

SUBJ: Landing Gear – Nose Gear Drag Link Bolt

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 a failure of the nose gear drag link bolt causing the landing gear to collapse. This failure is due fatigue cracking at the midpoint of the bolt shank, initiating at multiple sites along the bolt circumference. This action causes the collapse of the nose gear.

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

Table 1

Model	Serial Numbers
PA-28R-180, PA-28R-200	All
PA-28R-201, PA-28R-201T	All
PA-28RT-201, PA-28RT-201T	All
PA-44-180, PA-44-180T	All

Background

This SAIB is a result of an accident on a Piper Model PA-44-180 airplane where the nose gear collapsed during landing. Post-accident investigation revealed that the nose gear drag link bolt fractured and dislodged from the drag link assembly, which resulted in gear collapse. The drag link bolt had been installed 441 hours time in service (TIS) prior to the failure.

The aircraft maintenance records indicated that the airplane was in compliance with AD 94-14-14, paragraph (a) which incorporated Nose Landing Gear Modification Kit, Piper part number 764-378.

In addition, the airplane logbooks indicated that Piper Service Bulletin No. 1156 had been accomplished on this airplane on June 9, 2007. This airplane flew for 441 hours TIS of pilot training when the nose landing gear drag link bolt failed. Piper Service Bulletin No. 1156 calls out repetitive inspection/replacement every 500 hours TIS.

The purpose of this SAIB is to provide information to reduce the possibility of failure to the nose gear. The accident airplane is used in a 14 CFR part 141 flight school operations where higher than normal gear cycles are common.

Recommendations

We recommend that you incorporate Piper Service Bulletin No. 1156, dated April 7, 2005, which recommends periodic replacement of nose gear drag link bolt.

In addition, we also recommend that owners/operators with airplanes experiencing greater than normal gear cycles per flight hour or multiple gear cycles reduce the compliance time of the initial and repetitive inspections/replacements to 400 hours TIS.

For Further Information Contact

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