



SUBJ: Landing Gear Manual Extension System Inspection

SAIB: CE-08-50

Date: September 17, 2008

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, and operators of The Piper Aircraft, Inc. (Piper) airplane models (see **Table 1**) of a potential failure of the landing gear to remain in the down and locked position during landing roll-out. This failure is due to excessive wear on parts or components that exceed the published tolerances, which may cause a circuit breaker to trip. The pilot may get the landing gear down using the emergency landing gear extension procedures, which allows the airplane to land, and during the roll-out the landing gear may collapse.

Table 1

Model	Serial Numbers
PA-24, PA-24-250	All
PA-24-260	All
PA-24-400	All
PA-30	All
PA-39	All

Background

This SAIB is a result of FAA Safety Recommendations (SR) 07.211 and 07.212. These SRs reported an incident on a Piper Model PA-30 airplane where failure of the normal (electrical) landing gear system occurred and caused the gear to extend about 1/3 of the way down and stop. The pilot was able to get the landing gear down using the emergency landing gear extension procedures. The pilot noticed that the landing gear motor circuit breaker had been tripped. During the roll-out, the right hand main landing gear collapsed.

The investigation revealed that the failure of the normal gear extension was due to parts or components that exceeded the published tolerances as indicate by Piper Service Letter (SL) 782B, "Landing Gear Manual Extension System Inspection and Nose Gear Down Lock Spring Installation."

This incident illustrates the importance of regular/preventive maintenance, along with replacing worn out parts to prevent the landing gear motor from tripping the circuit breaker or during the landing roll-out to prevent collapse of the landing gear.

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.

Recommendations

The purpose of this SAIB is to provide information to reduce the possibility of failure to the landing gear. Airframes that perform numerous retraction cycles are especially vulnerable. Adherence to Piper service instructions, including proper lubrication of parts, is very important. In some cases, chronic landing gear circuit breaker tripping preceded actual failure (collapse). The operator should take this as an indication that system maintenance is needed.

We suggest that you have a heightened awareness of possible worn out parts. At the first sign of circuit breaker tripping, consider incorporating Piper SL 782B, dated December 1, 1977. We recommend you inspect as indicated on page 3 to replace parts or components that exceed the published tolerances.

For Further Information Contact

Hector Hernandez, Aerospace Engineer, FAA, Central Region, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, GA 30349; phone (770) 703-6069; fax (770) 703-6097; email: Hector.Hernandez@faa.gov.