

# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

**SAIB:** CE-14-11

**Date:** February 25, 2014

**SUBJ:** Landing Gear; Nose Landing Gear Trunnions *This is information only. Recommendations aren't mandatory.* 

#### Introduction

This Special Airworthiness Information Bulletin (SAIB) is to alert owners, operators, and maintenance technicians of **Cessna 300 and 400 Models and Series** airplanes of an airworthiness concern, specifically the recommendation to inspect the nose landing gear (NLG) trunnion to ensure that cracks are not present. If cracks are present, the trunnion should be replaced because a failure during landing may cause significant damage to the airplane and may cause injury to the occupants. Airplanes affected are all series of Cessna Models 310/335/340/401/402/404/411/414/421/ 425/441 and Reims 406.

At this time, the 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.

### **Background**

In April 2013, a Cessna Model 414 airplane veered off the runway while landing and sustained significant damage. The subsequent investigation determined that the nose landing gear had separated from its mount at the trunnion and that a trunnion lug had sheared from the assembly. Laboratory evaluation determined a pre-existing crack was the cause of the failure.

The FAA conducted an in-depth review of nose gear failures as a result of this accident. Our investigation found that there are approximately 4,700 airplanes in the Cessna Model 300 and 400 series ranging in age from 25 to 45 years. We found 66 service difficulty reports (SDRs) noting similar cracks or failures, but many of these were detected during inspections utilizing the criteria in Cessna Bulletin MEB 88-5 and CQB00-3. The result of our investigation and risk analysis shows that infrequent failure of the nose wheel landing gear trunnion on these model airplanes could result in damage to the airplane. The SDRs reflect that adequate service information is available and being used by owners and operators to properly maintain their airplanes. However, we feel issuance of this SAIB will serve as notice to those owners, operators, and maintenance technicians who may not be aware of the Cessna service information.

#### Recommendations

We recommend that owners, operators and maintenance personnel of:

<u>Cessna Models 310/335/340/ 401/402/404/411/414/421 and Reims 406 airplanes, comply with Cessna Service Bulletin MEB88-5, Revision 2, "Nose Gear Trunnion Inspection/ Replacement", dated October 2, 2000; or latest revision.</u>

<u>Cessna Models 425 and 441 airplanes</u>, comply with Cessna Service Bulletin CQB00-3, "Nose Gear Trunnion Inspection/Replacement", dated October 2, 2000; or latest revision.

## **For Further Information Contact**

Gary D. Park, Aerospace Engineer, ACE-118W phone: (316) 946-4123; fax: (316) 946-4107; e-mail: gary.park@faa.gov.

## **For Related Service Information Contact**

Cessna Aircraft Company, Customer Support Service, P.O. Box 7706, Wichita, Kansas; telephone: (316) 517-5800; fax: (316) 517-7271.