

# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

**SAIB:** NE-11-54

**Date:** September 8, 2011

**SUBJ:** Propeller System

This is information only. Recommendations aren't mandatory.

## Introduction

This Special Airworthiness Information Bulletin (SAIB) advises owners, aircraft operators, repair facilities, Flight Standards District Offices (FSDOs), and Foreign Civil Aviation authorities of recommended actions after a propeller strike or engine hydraulic lock incident on all Continental Motors, Inc. (CM) (formerly Teledyne Continental Motors) direct drive and geared reciprocating engines.

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**

FAA Safety Recommendation 10.288 was issued as the result of an incident investigation involving the failure and separation of a propeller shaft on a Cessna 421 airplane in September 2010. Laboratory analysis of the propeller shaft fracture (crack initiation) surface revealed fatigue/overload. FAA Safety Recommendation 10.288 identified safety concerns related to both direct and geared CM reciprocating engines.

A search of the FAA databases revealed the Cessna 421 airplane was involved in an accident in November 1991. The National Transportation Safety Board Factual Report documented damage to the propellers and sudden engine stoppage. Review of engine maintenance records revealed the potential that the engine was returned to service without performing the suitable disassembly and inspection of engine rotating components.

#### Recommendations

Following a propeller strike or hydraulic lock incident on both direct and geared CM reciprocating engines, you should perform the inspections specified in CM Service Bulletin SB96-11B and the appropriate overhaul manual before returning the engine to service.

## **For Further Information Contact**

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