



National Transportation Safety Board Aviation Accident Data Summary

Location:	Rio Linda, CA	Accident Number:	LAX08LA128
Date & Time:	05/02/2008, 1215 PDT	Registration:	N7059E
Aircraft:	CESSNA 175A	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot and owner of the airplane reported that during cruise flight, the engine partially lost power followed by several backfires. The pilot was unable to maintain altitude at the reduced power setting, and initiated a forced landing to a gravel road. During the landing roll on the gravel road, the left and right wings struck trees located on the edge of the road, resulting in structural damage to both wings. The owner of the airplane reported that during disassembly of the engine, the number four cylinder exhibited "signs of detonation." The number four piston head was "eaten away" to the top ring land. No additional anomalies were noted with the engine. The underlying reason for the detonation was undetermined.

Flight Events

Enroute-cruise - Powerplant sys/comp malf/fail
Enroute-cruise - Loss of engine power (partial)
Emergency descent - Off-field or emergency landing
Landing-landing roll - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The partial loss of engine power due to detonation. Contributing to the accident was trees in the landing area.

Findings

Aircraft-Aircraft power plant-Engine (reciprocating)-Recip eng cyl section-Damaged/degraded - C
Environmental issues-Physical environment-Object/animal/substance-Tree(s)-Contributed to outcome

Pilot Information

Certificate:	Private	Age:	33
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	147 hours (Total, all aircraft), 1 hours (Total, this make and model), 83 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N7059E
Model/Series:	175A	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	Continental
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-300
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KSMF, 27 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	8 knots, 170°
Temperature:	21°C / 7°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rio Linda, CA (L36)	Destination:	Willows, CA (WLW)

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Howard D Plagens	Adopted Date:	12/24/2008
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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