

Aviation Investigation Final Report

Location:	Bonanza, Oregon	Accident Number:	SEA03LA069
Date & Time:	April 23, 2003, 12:30 Local	Registration:	N8159T
Aircraft:	Cessna 175B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that while in cruise flight the engine made a loud sound followed by a partial loss of engine power. Shortly thereafter, smoke started coming in the cockpit and the engine lost complete power. The pilot initiated a forced landing to a county road. During the landing roll, the left wing collided with a power pole. The airplane spun around, the nose gear collapsed and the airplane subsequently nosed over. During the engine inspection, a large hole was found in the crankcase between the number 1 and 2 cylinders. The number 1 connecting rod bearing journal was deeply scored, blue in color and dry. Portions of the number 1 main bearing insert could be observed between the number 1 crank cheek and the number 1 main bearing saddle. The numbers 1 and 2 crank cheeks were blue in color and dry. The number 1 connecting rod was in pieces. The connecting rod cap had a portion of one bolt still present in the cap. The fracture area of the bolt was necked down in diameter and the bolt was blue in color. A matching portion of a bolt with the nut attached was recovered and noted that the fracture area was also necked down in diameter. The pilot reported that the maintenance logbooks had been destroyed in a hangar fire. The pilot also reported that the aircraft had not been maintained in accordance with an annual inspection for some time, as he had not been flying the aircraft since about 1997, when the engine was top overhauled.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Separation of the connecting rod cap. Annual maintenance inspections which were disregarded by the owner/pilot was a factor.

Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: CRUISE

Findings 1. (C) ENGINE ASSEMBLY, CONNECTING ROD CAP - SEPARATION 2. (F) MAINTENANCE, ANNUAL INSPECTION - DISREGARDED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings 3. (F) OBJECT - POLE

Factual Information

On April 23, 2003, at 1230 Pacific daylight time, a Cessna 175B, N8159T, registered to and operated by the pilot as a 14 CFR Part 91 personal flight, experienced a loss of engine power followed by a forced landing on a county road located 10 miles southeast of Bonanza, Oregon. During the landing roll, the aircraft collided with a pole. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft was substantially damaged. The commercial pilot was not injured, however, the passenger received minor injuries. The flight originated from a private airstrip in Wellington, Nevada, about three hours prior to the accident.

During a telephone interview, and subsequent written statement, the pilot reported that while in cruise flight at 10,500 feet, the engine made a loud sound, followed by a partial loss of engine power. Shortly thereafter, smoke started coming in the cockpit and the engine lost complete power. The pilot initiated a forced landing to a county road. During the landing roll, the left wing collided with a power pole. The airplane spun around, the nose gear collapsed and the airplane subsequently nosed over.

Inspection of the engine revealed a large hole in the crankcase between the numbers 1 and 2 cylinders. Portions of the numbers 1 and 2 connecting rods were recovered. Visual examination of pistons 1 and 2 found that the pistons were intact, however, several areas of the skirts had been broken off. The upper portions of both the 1 and 2 connecting rods were still attached to their respective piston pins. The crankshaft and counterweights were intact. The number 1 connecting rod bearing journal was deeply scored, blue in color and dry. The number 2 connecting rod bearing journal was bright, shiny and wet with oil. Portions of the number 1 main bearing insert could be observed between the number 1 crank cheek and the number 1 main bearing saddle. The numbers 1 and 2 crank cheeks were blue in color and dry.

Portions of the number 1 connecting rod were blue in color and dry. Portions of the number 2 connecting rod were bright and shiny and wet with oil.

The number 1 connecting rod cap had a portion of one bolt still present in the cap. The fracture area of the bolt was necked down in diameter and the bolt was blue in color. A matching portion of a bolt with the nut attached was recovered and noted that the fracture area was also necked down in diameter.

The pilot was unable to locate the maintenance logbooks and assumed that they were destroyed in a fire that was on the pilot's property in February 2002. The pilot reported that the aircraft had not been maintained in accordance with an annual inspection for some time, as he had not been flying the aircraft since about 1997, when the engine was top overhauled. The pilot estimated approximately 80 to 90 hours had been accumulated on the engine since the top overhaul. The pilot estimated approximately 830 hours since the engine underwent a

major overhaul.

Pilot Information

Certificate:	Commercial	Age:	76,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Expired	Last FAA Medical Exam:	December 26, 2000
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	400 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8159T
Model/Series:	175B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17556859
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2187 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	GO-300-D
Registered Owner:	Samuel H. Dupuis	Rated Power:	175 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LMT,4092 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	263°
Lowest Cloud Condition:	Few / 2000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	10°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wellington, NV	Type of Flight Plan Filed:	None
Destination:	Klamath Falls, OR (LMT)	Type of Clearance:	None
Departure Time:	09:40 Local	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	42.083332,-121.221946

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra	
Additional Participating Persons:	Steven Albert; FAA-FSDO; Hillsboro, OR Mike Grimes; Teledyne Continental Motors; Lancaster, CA	
Original Publish Date:	November 25, 2003	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56878	

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