



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Puyallup, WA	<b>Accident Number:</b>	WPR09LA223
<b>Date &amp; Time:</b>	05/01/2009, 1518 PDT	<b>Registration:</b>	N382CH
<b>Aircraft:</b>	CESSNA 182Q	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The pilot reported that the accident flight was the first flight following maintenance that replaced the fuel sending units, which required draining the fuel tanks. The pilot stated that maintenance personnel added 20 gallons of fuel to each main tank following the work. He did not physically check the fuel level in the tanks, but noted that both fuel gages indicated the same amount of fuel prior to flight. He reported that the engine lost power about 500 feet above ground level on takeoff, and he made an off airport landing that damaged the wings, airframe, and rudder. A Federal Aviation Administration (FAA) inspector examined the airplane the night of the accident, and noted that no fuel was in the left main tank, but maintenance personnel drained about 20 gallons from the right tank. On a follow-up exam, investigators added 5 gallons of fuel to the left wing tank. The engine started immediately without hesitation. It accelerated smoothly to 1,800 rpm, and a magneto check revealed no anomalies. The engine was decelerated to idle rpm; the engine ran smoothly, and shutdown was unremarkable. The airplane had a recording engine data management unit installed. Data indicated that fuel flow dropped to 0 gallons per hour 6 seconds prior to a loss of rpm.

## Flight Events

Takeoff - Fuel starvation

Takeoff - Loss of engine power (total)

Landing - Off-field or emergency landing

Landing-flare/touchdown - Collision with terr/obj (non-CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel starvation as a result of the pilot's failure to verify the fuel levels in the tanks, and, his failure to select the proper fuel tank.

## Findings

Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid level - C

Aircraft-Aircraft systems-Fuel system-Fuel selector/shutoff valve-Incorrect use/operation - C

Personnel issues-Task performance-Use of equip/info-Use of equip/system-Pilot - C

Environmental issues-Physical environment-Object/animal/substance-Residence/building-Not specified

## Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial; Flight Engineer	<b>Age:</b>	67
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	20000 hours (Total, all aircraft), 100 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	CESSNA	<b>Registration:</b>	N382CH
<b>Model/Series:</b>	182Q	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	CLIFFORD G HOWELL	<b>Engine Manufacturer:</b>	Teledyne Continental Motors
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	IO-550D
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	KPLU, 538 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	4 knots, 260°
<b>Temperature:</b>	22° C / 0° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Puyallup, WA (PLU)	<b>Destination:</b>	Bremerton, WA (PWT)

## Airport Information

<b>Airport:</b>	Pierce County (PLU)	<b>Runway Surface Type:</b>	
<b>Runway Used:</b>	N/A	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>			

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

Investigator In Charge (IIC): Howard D Plagens

Adopted Date: 05/11/2010

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](mailto: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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