



Location: Cascade, Idaho Accident Number: WPR19LA190

Date & Time: July 14, 2019, 06:30 Local Registration: N131DV

Aircraft: Cessna P206 Aircraft Damage: Substantial

**Defining Event:** Loss of engine power (total) **Injuries:** 3 None

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

After a normal preflight and engine run-up, the airplane departed. About 75 ft above ground level (agl), the engine rpm smoothly deteriorated to a total loss of power. The pilot configured the airplane in a nose-low pitch attitude in an attempt to avoid stalling and made an off-airstrip landing. The pilot could not recall his next actions but thought he may have unintentionally turned the fuel selector to the OFF position after the loss of power, thinking he was switching to the other (fuller) wing tank. The airplane collided with the thick brush off the end of the runway and nosed over, coming to rest inverted.

During a postaccident examination, investigators found the fuel selector in the OFF position. The engine successfully started and ran during a test run. The postaccident examination revealed no evidence of a malfunction or failure with the engine or airframe that would have precluded normal operation.

The pilot did not know the reason for the loss of engine power but opined that he possibly leaned the engine too aggressively for the density altitude.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A loss of engine power due to the pilot's improper leaning of the engine.

### **Findings**

Personnel issues	Incorrect action selection - Pilot
Aircraft	Fuel controlling system - Incorrect use/operation

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#### **Factual Information**

### **History of Flight**

Takeoff

Loss of engine power (total) (Defining event)

On July 14, 2019, about 0630 mountain daylight time, a Cessna P206, N131DV, sustained substantial damage when it was involved in an accident near Sulphur Creek Ranch Airport, Cascade, Idaho. The pilot and two passengers were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations (CFR)* Part 91 personal flight.

The pilot's family owned the remote ranch, which was only accessible by hike or flying to the private-use landing strip near the property. The purpose of the accident flight was for the pilot to transport two family members from the ranch back to their home in Wyoming. The pilot stated that he had intended to first land in Driggs to obtain more fuel before continuing to Gillette, Wyoming.

The pilot stated that after a normal preflight and engine run-up, he taxied for a departure to the east (totaling a 7 to 8 minutes of engine operating time). After the airplane departed and reached about 75 feet above ground level (agl), the engine rpm smoothly deteriorated to a total loss of power. The pilot relieved the control column back pressure and configured the airplane in a nose-low pitch attitude in an attempt to avoid stalling and to make an off-airstrip landing. The pilot could not recall his next actions but thought he may have unintentionally turned the fuel selector to the OFF position after the loss of power thinking he was switching to the other (fuller) wing tank. The airplane collided with the thick brush off the end of the runway and nosed over, coming to rest inverted.

The pilot estimated that there were about 30 gallons of fuel in each tank. He did not know the reason for the loss of engine power but opined that he possibly leaned the engine too aggressively for the density altitude.

Investigators performed a postaccident examination on the engine and airframe. Control continuity was established from the cockpit's engine controls to the engine. The fuel selector was in the OFF position. The Continental Motors IO-550-F20BR engine, installed under a supplemental type certificate (STC) in July 2010, was intact and remained secure to the airframe.

A test run of the engine was performed at the recovery facility. A fuel source was attached to the right inlet fuel line prior to entering the fuel selector. The engine was successfully started and run for over 5 minutes at various power settings from idle to about 1,500 to 1,600 rpm. A magneto check was conducted on the left and right magnetos with a minimal rpm drop on each magneto noted. The engine was shut down using the mixture control lever.

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During the engine run, when the auxiliary fuel pump was turned on HIGH, the engine ran rough and began to lose rpm until the mixture was leaned.

The postaccident examination revealed no evidence of a malfunction or failure with the engine or airframe that would have precluded normal operation.

#### **Pilot Information**

Certificate:	Commercial	Age:	74,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	BasicMed None	Last FAA Medical Exam:	August 29, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 27, 2017
Flight Time:	10560 hours (Total, all aircraft), 35 hours (Total, this make and model), 10442 hours (Pilot In Command, all aircraft), 44 hours (Last 90 days, all aircraft), 41 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N131DV
Model/Series:	P206	Aircraft Category:	Airplane
Year of Manufacture:	1965	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	P2060131
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 2, 2019 Annual	Certified Max Gross Wt.:	3296 lbs
Time Since Last Inspection:	16 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3030 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-550-F20B
Registered Owner:	On file	Rated Power:	300 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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# **Meteorological Information and Flight Plan**

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLLJ,5835 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	06:30 Local	Direction from Accident Site:	0°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Cascade, ID (ID74)	Type of Flight Plan Filed:	None
Destination:	Driggs, ID (DIJ )	Type of Clearance:	None
Departure Time:	06:30 Local	Type of Airspace:	

# **Airport Information**

Airport:	Sulphur Creek Ranch ID74	Runway Surface Type:	Grass/turf;Gravel
Airport Elevation:	5835 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough;Vegetation
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	3300 ft / 40 ft	VFR Approach/Landing:	Forced landing

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	44.537917,-115.3579(est)

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#### **Administrative Information**

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Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Kenneth Hawkins; Federal Aviation Administration; Boise, ID
Original Publish Date:	May 19, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99862

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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