Aviation Investigation Final Report

Location:	Othello, Washington	**Accident Number:**	WPR14LA298
Date & Time:	July 17, 2014, 15:15 Local	**Registration:**	N7981Y
Aircraft:	Piper PA 30	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot of the twin-engine airplane was preparing to take off for a cross-country flight. He reported that during the power up for takeoff, the left engine was at 2,200 rpm while the right engine was at 2,600 rpm. He leaned the mixture on the left engine to bring the rpm up to 2,600 and proceeded with the takeoff. After the takeoff roll, he started to climb the airplane and noted that the exhaust gas temperature on the left engine was much higher than on the right engine. The left engine rpm suddenly dropped to 2,000, and the airplane yawed to the left and started to descend. The pilot could not stop the yaw and descent, and the airplane impacted the ground, which resulted in substantial damage.

The pilot reported that he should not have leaned the left engine for takeoff.

A review of the left engine's logbook revealed a logbook entry about 4 months before the accident noting that the fuel flow divider, fuel servo, and turbo charger had been removed, repaired, and reinstalled. The entry also noted that a flow test was performed and that the engine was tested, checked for leaks, and returned to service.

The airplane and engines were sold for salvage and were not available for examination; therefore, the reason for the partial loss of engine power could not be determined.

Probable Cause and Findings

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

The partial loss of engine power for reasons that could not be determined based on the available information.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Initial climb	Loss of engine power (partial) (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On July 17, about 1515 Pacific daylight time, a Piper PA-30 twin-engine airplane, N7981Y, was substantially damaged following a partial loss of power on the left engine, and a collision with terrain during takeoff/initial climb at the Othello Municipal Airport, Othello, Washington. The private pilot and the three passengers were not injured. The airplane was registered to Warden Air, LLC and operated by the pilot as a Title 14 *Code of Federal Regulations* Part 91 personal flight. An instrument flight rules (IFR) flight plan was filed for the cross-country flight. The airplane was departing at the time and was destined for Klamath Falls, Oregon.

The pilot reported that during the power up for takeoff, the left engine revolutions per minute (RPM) was 2,200 while the right engine was 2,600 RPM. He leaned the mixture on the left engine to bring the RPM up to 2,600 and proceeded with the takeoff. After the takeoff roll he initiated a climb and noted that the exhaust gas temperature (EGT) on the left engine was much higher than the EGT of the right engine. The left engine RPM suddenly dropped to 2,000 RPM and the airplane yawed to the left and started to descend. The pilot was unable to overcome the yaw and descent, and the airplane impacted the ground.

The pilot reported that he should not have leaned the left engine for takeoff.

A review of the left engine's logbook revealed a logbook entry dated March 21, 2014 indicating that the fuel flow divider had been removed, repaired, and reinstalled. The fuel servo and turbo charger had also been removed, repaired, and reinstalled. The entry also noted that a flow test was performed, the engine was run tested and checked for leaks, and returned to service. The pilot did not provide the time the airplane had flown since the maintenance work was completed.

The NTSB did not respond to the accident site and the wreckage was retained by the insurance company. Prior to examination, the wreckage and engines were sold for salvage and no longer available for examination.

Pilot Information

Certificate:	Private	**Age:**	45
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:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 26, 2013
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	February 15, 2013
Flight Time:	756 hours (Total, all aircraft), 82 hours (Total, this make and model), 681 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N7981Y
Model/Series:	PA 30 NO SERIES	**Aircraft Category:**	Airplane
Year of Manufacture:	1966	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	30-1082
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	2381 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-320 SERIES
Registered Owner:	On file	**Rated Power:**	160 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KMWH,1188 ft msl	**Distance from Accident Site:**	27 Nautical Miles
Observation Time:		**Direction from Accident Site:**	322°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.79 inches Hg	**Temperature/Dew Point:**	34°C
Precipitation and Obscuration:			
Departure Point:	Othello, WA (S70)	**Type of Flight Plan Filed:**	IFR
Destination:	Klamath Falls, OR (KLMT)	**Type of Clearance:**	None
Departure Time:	15:25 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Othello Municipal S70	**Runway Surface Type:**	Asphalt
Airport Elevation:	1149 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	25	**IFR Approach:**	None
Runway Length/Width:	4000 ft / 75 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 None	**Latitude, Longitude:**	47.316665,-119.133331

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Monty Coordes; FAA FSDO; Spokane, WA Colby Baron; FAA FSDO; Spokane, WA
Original Publish Date:	April 13, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=89691