



# Aviation Investigation Final Report

<b>Location:</b>	Jackson, Wyoming	<b>Accident Number:</b>	CEN18LA178
<b>Date &amp; Time:</b>	May 16, 2018, 14:00 Local	<b>Registration:</b>	N44CP
<b>Aircraft:</b>	PEET CHARLES ZENITH CH 701	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that had just finished rebuilding the airplane and was conducting a local, personal flight, which was the airplane's first flight since an accident 5 years earlier. While returning to land on a grass strip and shortly after switching from the right to the left tank, the engine began to run roughly and "sputter." The pilot added that the airplane was "high and fast" on the approach but that he chose to continue the landing due to the engine problem. Upon landing, the airplane bounced, the nosewheel hit the ground hard and collapsed, and the airplane then nosed over and came to rest inverted.

Postaccident engine examination revealed no evidence off mechanical malfunctions or failures that would have precluded normal operation. The pilot reported that the airplane had an adequate amount of fuel onboard when the engine lost power. He added that the quick fuel disconnect on the left wing fuel tank was loose before the flight, so he reconnected the fitting and speculated that air might have entered the lines when he reconnected the fitting and led to the engine sputtering when he switched tanks. The reason for the loss of engine power could not be determined based on the available information.

## Probable Cause and Findings

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

A total loss of engine power for undetermined reasons, and the pilot's failure to maintain proper control of the airplane, which led to a hard, bounced landing.

## Findings

<b>Aircraft</b>	(general) - Unknown/Not determined
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	(general) - Not attained/maintained

# Factual Information

## History of Flight

<b>Approach-VFR pattern downwind</b>	Powerplant sys/comp malf/fail
<b>Landing-flare/touchdown</b>	Abnormal runway contact (Defining event)
<b>Landing-flare/touchdown</b>	Nose over/nose down

On May 16, 2018, about 1400 mountain daylight time, a Zenith 701 airplane, N44CP, was substantially damaged when it was involved in an accident near Jackson, Wyoming. The pilot sustained minor injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that he had just finished rebuilding the airplane and that the accident flight was the first flight since an accident about 5 years earlier. While returning to land on a grass strip and shortly after switching from the right to the left fuel tank, the engine began to run roughly and “sputter.” The pilot reported that he did not attempt to switch back to the right tank because the airplane to too low and he was “just trying to get to the runway.” He added that the airplane was “high and fast” on the approach but that he chose to continue the landing due to the engine problem. Upon landing, the airplane bounced, the nosewheel hit the ground hard and collapsed, and the airplane then nosed over and came to rest inverted.

Postaccident engine examination revealed no evidence of any preaccident mechanical malfunctions or failures that would have precluded normal operation. The pilot reported that the airplane had an adequate amount of fuel onboard at the time of the accident. He added that a fuel quick disconnect from the left wing fuel tank was loose before the flight, so he reconnected the fitting and speculated that air might have entered the fuel lines when he reconnected it or that the fuel may have been “bad” because the airplane had been sitting for 5 years.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	85,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	February 15, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	November 1, 2018
<b>Flight Time:</b>	944.7 hours (Total, all aircraft), 59.7 hours (Total, this make and model), 826.1 hours (Pilot In Command, all aircraft), 0.3 hours (Last 90 days, all aircraft), 0.3 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PEET CHARLES	<b>Registration:</b>	N44CP
<b>Model/Series:</b>	ZENITH CH 701 NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2011	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	7-7365
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	July 17, 2013 Condition	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>	0.05 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	59.7 Hrs at time of accident	<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	912ULS
<b>Registered Owner:</b>		<b>Rated Power:</b>	100 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	JAC,6419 ft msl	<b>Distance from Accident Site:</b>	22 Nautical Miles
<b>Observation Time:</b>	09:56 Local	<b>Direction from Accident Site:</b>	349°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Temperature/Dew Point:</b>	11°C / 4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Jackson, WY	<b>Type of Flight Plan Filed:</b>	
<b>Destination:</b>	Jackson, WY	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	N/A Priv	<b>Runway Surface Type:</b>	Dirt;Grass/turf
<b>Airport Elevation:</b>	5876 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	N/A	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	1500 ft / 50 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	43.288887,-110.65305(est)

## Administrative Information

**Investigator In Charge (IIC):** Liedler, Courtney

**Additional Participating Persons:** Bruce Hanson; FAA; Casper

**Original Publish Date:** May 25, 2021

**Investigation Class:** 3

**Note:** The NTSB did not travel to the scene of this accident.

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=97272>

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