Aviation Investigation Final Report

Location:	Carey, Idaho	**Accident Number:**	WPR15FA206
Date & Time:	July 2, 2015,	**Registration:**	N8195C
Aircraft:	Piper PA 22-135	**Aircraft Damage:**	Destroyed
Defining Event:	Unknown or undetermined	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The commercial pilot stopped at an intermediate airport during a cross-country personal flight, and added 22 gallons of fuel to the airplane. The family reported the airplane overdue, and the Federal Aviation Administration (FAA) issued an alert notice (ALNOT). The wreckage was located the following day.

On site examination by FAA inspectors indicated that the airplane was intact when it hit the ground in a nose low attitude with a rotational component.

The toxicology report contained findings for ethanol detected in the lung, heart, and blood. N-propanol was detected in heart, lung, and blood. The report noted putrefaction. The NTSB's medical officer noted that ethanol is the type of alcohol present in beer, wine, and liquor, and can cause impairment at low doses. Generally, the rapid distribution of ethanol throughout the body after ingestion leads to similar levels in different tissues. A small amount of ethanol can be produced in tissues by microbial action post mortem, often in conjunction with other alcohols such as N-propanol, acetone, and methanol. With the information available, it was not possible to determine how much, if any, of the identified ethanol was from ingestion.

Examination of the wreckage revealed no anomalies that would have precluded normal operation of the airframe or engine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Undetermined because examination of the airplane wreckage did not reveal any anomalies that would have precluded normal operation.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Enroute	Unknown or undetermined (Defining event)
Enroute	Collision with terr/obj (non-CFIT)

On July 2, 2015, at an undetermined time, a Piper PA22-135 airplane, N8195C, collided with terrain near Carey, Idaho. The commercial pilot sustained fatal injuries, and the airplane was destroyed. The pilot/owner was operating the airplane as a 14 Code of Federal Regulations Part 91 personal flight. The flight departed Malad City Airport (MLD), Malad City, Idaho, about 1105 mountain daylight time with a planned destination of Stanley, Idaho. Visual meteorological conditions prevailed, and no flight plan had been filed.

The pilot originated the flight from the Canyonlands Field Airport (CNY), Moab, Utah; he then stopped at MLD, and added 22 gallons of fuel to the airplane.

A SPOT device, which is a handheld GPS tracking device that uses a satellite network enabling text messaging and GPS tracking services, was present on the airplane. Records from the satellite messaging provider contained four data points on July 2, including a test point at 0814:57 MDT was near CNY; a test point at 0959:11 about 23 nautical miles (nm) east of Ogden, Utah; a test point at 1046:14 was in the ramp area of MLD; and a final test point at 1214:36 about 13 nm southwest of the wreckage location.

An iPhone 5c that was found in the wreckage was examined. The pilot sent a text message at 1122:07 indicating his estimated time of arrival at Stanley would be 2 hours later. When the pilot did not arrive in Stanley when he was expected, the family reported the airplane overdue, and the Federal Aviation Administration (FAA) issued an alert notice at 1907. The Civil Air Patrol located the wreckage at 1018 on July 3.

Pilot Information

Certificate:	Commercial	**Age:**	21,Male
Airplane Rating(s):	Single-engine land; Multi-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:**	Yes
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	May 29, 2015
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	April 9, 2015
Flight Time:	(Estimated) 924 hours (Total, all aircraft), 26 hours (Total, this make and model), 771 hours (Pilot In Command, all aircraft), 104 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N8195C
Model/Series:	PA 22-135	**Aircraft Category:**	Airplane
Year of Manufacture:	1954	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22-2300
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	November 20, 2014 Annual	**Certified Max Gross Wt.:**	2000 lbs
Time Since Last Inspection:	49 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2731 Hrs at time of accident	**Engine Manufacturer:**	LYCOMING
ELT:	C91A installed, activated, aided in locating accident	**Engine Model/Series:**	O-290-D2
Registered Owner:	On file	**Rated Power:**	135 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Dusk
Observation Facility, Elevation:	KSUN,5320 ft msl	**Distance from Accident Site:**	35 Nautical Miles
Observation Time:	11:47 Local	**Direction from Accident Site:**	270°
Lowest Cloud Condition:	Few / 14000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	120°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.18 inches Hg	**Temperature/Dew Point:**	29°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Malad City, ID (MLD)	**Type of Flight Plan Filed:**	None
Destination:	Stanley, ID (2U7)	**Type of Clearance:**	None
Departure Time:	11:05 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	43.230278,-113.597221

The first identified point of contact was a principal impact crater (PIC) that was several feet in diameter with narrow ground scars extending in opposite directions from the center. The propeller was separated from the engine, and was partially buried in the PIC. A lens cap cover and red lens fragments were found at the end of the narrow ground scar farthest from the main wreckage. The main wreckage was upright, about 50 ft away from the PIC, and oriented perpendicular to the narrow ground scars with the nose pointing toward the PIC. Due to the condition of the wreckage, FAA inspectors were unable to establish flight control continuity.

There was a black liquid stain that led to the oil cooler.

The engine was under the cabin area, which was severely crushed and deformed.

The right wing remained in its position, but had sustained heavy aft crush damage.

The left wing had rotated about 70° clockwise from its position.

The airframe had buckled 90° down immediately forward of the leading edge of the vertical stabilizer, and twisted 90° counterclockwise. The trailing edges of the left elevator and rudder were on the ground; the outboard half of the right elevator and horizontal stabilizer were above the right wing. The examination of the airframe and engine revealed no anomalies that would have precluded normal operation.

Medical and Pathological Information

The Blaine County Coroner conducted an autopsy of the pilot, and the cause of death was reported as blunt force trauma.

Toxicology testing of the specimens from the pilot by the FAA's Bioaeronautical Science's Research Laboratory were negative for carbon monoxide and tested drugs.

The testing detected 64 (mg/dL, mg/hg) ethanol in lung, 62 (mg/dL, mg/hg) ethanol in heart, and 61 (mg/dL, mg/hg) ethanol in blood. N-propanol was detected in heart, lung, and blood. The report noted that putrefaction of the specimens had occurred.

Ethanol is the type of alcohol present in beer, wine, and liquor, and can cause impairment at low doses. Generally, the rapid distribution of ethanol throughout the body after ingestion leads to similar levels in different tissues. A small amount of ethanol can be produced in tissues by postmortem microbial action, often in conjunction with other alcohols such as N-propanol, acetone, and methanol.

Administrative Information

Investigator In Charge (IIC):	Plagens, Howard
Additional Participating Persons:	Keith Rittenberry; FAA-FSDO; Boise, ID Charles Little; Piper Aircraft Corporation; Lakeland, FL Mark Platt; Lycoming Engines; Williamsport, PA
Original Publish Date:	August 9, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91487