

# **Aviation Investigation Final Report**

Location: Yellow Pine, Idaho Accident Number: WPR18LA176

Date & Time: June 21, 2018, 12:00 Local Registration: N1979P

Aircraft: Piper PA 18-150 Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The private pilot was conducting a personal, cross-country flight as part of a flight of three. One of the pilots reported that, as the flight of three approached the one-way-in, 700-ft-long remote mountain airstrip, the lead pilot surveyed the area, and he reported that no other airplanes were in the area. Subsequently, he and the lead pilot landed at the airstrip uneventfully. After landing, he parked his airplane at the top of the airstrip facing directly down the runway, which allowed him to easily see the approach path to the airstrip. As he was waiting for the accident airplane to come into view, he asked the accident pilot "...you've been in here before, right"? The accident pilot replied that he had not, and the other pilot then reminded the accident pilot to fly "low over the creek." He added that, when the accident airplane came into view, it was higher than the lead airplane had been on its approach. When the accident airplane had almost reached the extended runway centerline, the accident pilot added power, after which, the airplane pitched up steeply. The airplane then continued upstream of a nearby creek for about 1/2 mile with the nose up and "not climbing well, if at all." The airplane then entered a left turn, followed by the left-wing dipping and the airplane entering a left spin. The pilot stated that he saw the airplane make 1 1/4 rotations before it descended out of his sight and impacted terrain and that the engine sounded like it was developing full power from the time of the initial go-around until impact.

The pilot's brother and one of the pilots who witnessed the accident reported that there were no preaccident mechanical malfunctions or failures with the airplane or engine that would have precluded normal operation. The pilot does not recall the events leading to the accident. Therefore, based on the available information, it is likely that the pilot failed to maintain adequate airspeed and exceeded the airplane's critical angle of attack during the go-around, which resulted in an aerodynamic stall/spin at too low of an altitude to recover.

The accident flight was the accident pilot's first attempt to land at the airstrip, which is confined by mountainous terrain and requires pilots to land one way and depart the other with virtually no go-around options during the approach. A plan view of the airstrip recommended that it "be used only by mountain proficient pilots who have had a checkout specific to the airstrip." In an Aircraft Owners and Pilots

Association video made after the accident pilot recovered from his injuries, he stated that he was negligent in planning for the flight, which included not having obtained a briefing on the airstrip. The pilot also mentioned his lack of proficiency at the time of the accident. Therefore, contributing to the accident were the pilot's failure to obtain a briefing on the airstrip, lack of planning for the flight, and unfamiliarity with the airstrip.

## **Probable Cause and Findings**

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

The pilot's failure to maintain adequate airspeed while conducting a go-around and his exceedance of the airplane's critical angle of attack, which resulted in an aerodynamic stall/spin at too low of an altitude to recover. Contributing to the accident were the pilot's lack of preflight planning, including his failure to obtain a briefing on the challenging, one-way airstrip, and his unfamiliarity with operating into and out of the airstrip, which was surrounded by mountainous terrain.

#### **Findings**

Tillulings		
Personnel issues	Flight planning/navigation - Pilot	
Personnel issues	Knowledge of procedures - Pilot	
Personnel issues	Decision making/judgment - Pilot	
Aircraft	Airspeed - Not attained/maintained	
Personnel issues	Aircraft control - Pilot	
Environmental issues	Mountainous/hilly terrain - Decision related to condition	

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#### **Factual Information**

#### **History of Flight**

 Maneuvering-low-alt flying
 Loss of control in flight (Defining event)

 Uncontrolled descent
 Collision with terr/obj (non-CFIT)

On June 21, 2018, about 1200 mountain daylight time, a Piper PA-18-150 airplane, N1979P, was substantially damaged when it was involved in an accident near Yellow Pine, Idaho. The pilot was seriously injured. The airplane was being operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The accident airplane was a part of a flight of three, which had departed Cabin Creek US Forest Service Airport (I08), Big Creek Ranger Station, Idaho, for Dewey Moore Airstrip, Cascade, Idaho, which is a remote, mountainous, backcountry airstrip.

One of the pilots in the flight of three reported that, as they approached the Dewey Moore Airstrip, the lead airplane pilot surveyed the area, and he reported that there was no other traffic. Subsequently, he and the lead pilot landed uneventfully, and he noted that "the conditions were excellent, with calm air, and the runway in good condition"; he had landed there the previous day. He then parked his airplane at the top of the airstrip facing directly down the runway, which allowed him to easily see the approach to the airstrip. As he was waiting for the accident airplane to come into view, he asked him, "...you've been in here before, right"? The accident pilot replied that he had not. He then reminded the accident pilot to fly "low over the creek" and added that, when the accident airplane came into view, it was higher than the lead airplane had been on its approach. When the accident airplane had almost reached the extended runway centerline, the accident pilot added power, after which, the airplane pitched up steeply. It then continued flying upstream of a nearby creek for about 1/2 mile with the nose up and "not climbing well, if at all." The airplane then entered a left turn away from his position and directly over the creek. Subsequently, the left wing dipped, and the airplane entered a left spin. The pilot stated that he then saw the airplane make 1 1/4 left rotations before it descended out of his sight and impacted terrain. He added that the engine sounded like it was developing full power from the time of the initial goaround until impact. The wreckage came to rest on sloping terrain. The airframe and wings were substantially damaged.

The pilot's brother and one of the pilots who witnessed the accident reported that there were no preaccident mechanical malfunctions or failures with the airplane or engine that would have precluded normal operation. The pilot does not recall the events leading to the accident.

Dewey Moore Airstrip is located at 4,494 ft mean sea level. The single gravel runway, 28/10, is a one-way in, one-way out airstrip: airplanes landed on runway 28 and departed from runway 10. The remarks section of the plan view of the airstrip recommended that it be used "only by mountain proficient pilots who have had a checkout specific to the airstrip."

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In an Aircraft Owners and Pilots Association video made after the pilot had recovered from his injuries, the pilot stated that he was negligent in planning for the flight, which included not obtaining a briefing on the airstrip. The pilot also mentioned his lack of proficiency at the time of the accident.

#### **Pilot Information**

Certificate:	Private	Age:	49,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 8, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2101 hours (Total, all aircraft), 600 hours (Total, this make and model), 55 hours (Last 90 days, all aircraft)		

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

Aircraft Make:	Piper	Registration:	N1979P
Model/Series:	PA 18-150 150	Aircraft Category:	Airplane
Year of Manufacture:	1955	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18-4214
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 12, 2018 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5114 Hrs	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	O-360-C4P
Registered Owner:		Rated Power:	150 Horsepower
Operator:		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:	MYL,5024 ft msl	Distance from Accident Site:	46 Nautical Miles
Observation Time:	11:51 Local	Direction from Accident Site:	252°
<b>Lowest Cloud Condition:</b>	Few / 5500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	18°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cascade, ID (na)	Type of Flight Plan Filed:	None
Destination:	Yellow Pine, ID (na )	Type of Clearance:	None
Departure Time:	11:45 Local	Type of Airspace:	Unknown

# **Airport Information**

Airport:	Dewey Moore Airstrip na	Runway Surface Type:	Gravel
Airport Elevation:	4494 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	700 ft / 30 ft	VFR Approach/Landing:	Straight-in;Valley/terrain following

# Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	45.1492,-115.0773

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#### **Administrative Information**

Investigator In Charge (IIC): Little, Thomas

Additional Participating Persons: Craig Karel; Federal Aviation Administration; Boise, ID

Original Publish Date: May 27, 2021 Investigation Class: 3

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

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=97550

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available <a href="here">here</a>.

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