



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Dillon, Montana | Accident Number: | WPR21LA067 |
| Date & Time: | December 8, 2020, 08:50 Local | Registration: | N46017 |
| Aircraft: | Cessna 172 | Aircraft Damage: | Substantial |
| Defining Event: | Aerodynamic stall/spin | Injuries: | 1 Serious |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The solo student pilot reported that, while on final approach to land, he decided to initiate a go-around. He applied full power and pitched up the airplane, which then stalled and turned left about 90°. The pilot was able to recover from the stall, but the airplane was close to the ground. Subsequently he landed the airplane in an open field. The student saw an irrigation ditch ahead and attempted to become airborne again, but the airplane did not gain sufficient lift and subsequently impacted the ditch. The airplane sustained substantial damage to the fuselage. The student reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

Probable Cause and Findings

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

The student pilot's exceedance of the airplane's critical angle attack during an attempted go-around, which resulted in an aerodynamic stall.

Findings

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|-----------------------------|--|
| Aircraft | Angle of attack - Not attained/maintained |
| Personnel issues | Use of equip/system - Student/instructed pilot |
| Environmental issues | Sloped/uneven terrain - Contributed to outcome |

Factual Information

History of Flight

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|------------------------|---|
| Approach-VFR go-around | Aerodynamic stall/spin (Defining event) |
| Approach-VFR go-around | Collision with terr/obj (non-CFIT) |

Pilot Information

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|---------------------------|--|-----------------------------------|-------------------|
| Certificate: | Student | Age: | 23, Male |
| Airplane Rating(s): | None | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | |
| Medical Certification: | Class 1 Without waivers/limitations | Last FAA Medical Exam: | September 9, 2020 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 49.2 hours (Total, all aircraft), 48.1 hours (Total, this make and model), 6.7 hours (Pilot In Command, all aircraft), 39.6 hours (Last 90 days, all aircraft), 13.8 hours (Last 30 days, all aircraft), 1.4 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|---|---------------------------------------|--------------------|
| Aircraft Make: | Cessna | Registration: | N46017 |
| Model/Series: | 172 I | Aircraft Category: | Airplane |
| Year of Manufacture: | 1968 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 17256990 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | November 15, 2020 Annual | Certified Max Gross Wt.: | 2300 lbs |
| Time Since Last Inspection: | 62.6 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 5377.2 Hrs at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | C126 installed, activated, did not aid in locating accident | Engine Model/Series: | 0-320-E2D |
| Registered Owner: | Martineau Aircraft | Rated Power: | 150 |
| Operator: | Ridgeview Aviation | Operating Certificate(s) Held: | Pilot school (141) |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|----------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | KDLN, 5222 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 09:53 Local | Direction from Accident Site: | 194° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 18 knots / None | Turbulence Type Forecast/Actual: | Unknown / Unknown |
| Wind Direction: | 220° | Turbulence Severity Forecast/Actual: | Unknown / Unknown |
| Altimeter Setting: | 30.34 inches Hg | Temperature/Dew Point: | 3°C / -11°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Bozeman, MT (BZN) | Type of Flight Plan Filed: | |
| Destination: | Dillon, MT (DLN) | Type of Clearance: | VFR flight following |
| Departure Time: | 07:41 Local | Type of Airspace: | Class E |

Airport Information

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|-----------------------------|--------------------|----------------------------------|---------------------|
| Airport: | Dillon Airport DLN | Runway Surface Type: | Asphalt |
| Airport Elevation: | 5244 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 17 | IFR Approach: | None |
| Runway Length/Width: | 6501 ft / 75 ft | VFR Approach/Landing: | Full stop;Go around |

Wreckage and Impact Information

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|----------------------------|-----------|-----------------------------|---------------------------|
| Crew Injuries: | 1 Serious | Aircraft Damage: | Substantial |
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | 45.264859,-112.55151(est) |

Administrative Information

Investigator In Charge (IIC): Cawthra, Joshua

Additional Participating Persons: Troy McClanahan; Federal Aviation Administration; Helana, MT

Original Publish Date: August 20, 2021

Last Revision Date:

Investigation Class: [Class 4](#)

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

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=102387>

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.

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