



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Homer, Alaska | Accident Number: | ANC15CA051 |
| Date & Time: | July 14, 2015, 11:00 Local | Registration: | N72784 |
| Aircraft: | Cessna 140 | Aircraft Damage: | Substantial |
| Defining Event: | Turbulence encounter | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot reported that while on a cross-country flight over an area of mountainous terrain, he noticed a bear that was near the entrance to a mountain pass. He said that while orbiting over the bear, a strong downdraft emanating from the pass entrance caused the airplane to descend toward the saddle of the mountain pass. The pilot said that he applied full engine power in an attempt to arrest the descent, but the airplane's main landing gear wheels ultimately touched down in an area of grass-covered terrain. The airplane's left main wheel subsequently struck a large rock, and the left wing struck the ground, resulting in substantial damage to the left wing and fuselage. The pilot said that just after the accident, he estimated the surface wind to be from 090 to 140 degrees at 10 knots, with gusts from 15 to 20 knots. The pilot reported no mechanical anomalies that would have precluded normal operations.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to fly at a low altitude in mountainous terrain and weather conditions conducive to downdrafts.

Findings

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| Environmental issues | Downdraft - Contributed to outcome |
| Environmental issues | Terrain induced turbulence - Contributed to outcome |
| Aircraft | Climb capability - Capability exceeded |
| Personnel issues | Decision making/judgment - Pilot |

Factual Information

History of Flight

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|-----------------------------------|---------------------------------------|
| Maneuvering-low-alt flying | Turbulence encounter (Defining event) |
| Uncontrolled descent | Collision with terr/obj (non-CFIT) |

Pilot Information

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|----------------------------------|--|--|---------------|
| Certificate: | Private | Age: | 24 |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 4-point |
| Instrument Rating(s): | None | Second Pilot Present: | |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Without waivers/limitations | Last FAA Medical Exam: | May 3, 2012 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | June 22, 2015 |
| Flight Time: | 336 hours (Total, all aircraft), 206 hours (Total, this make and model), 312 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--|---------------------------------------|-----------------|
| Aircraft Make: | Cessna | Registration: | N72784 |
| Model/Series: | 140 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 9967 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | May 5, 2015 Annual | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Lycoming |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | O-290 |
| Registered Owner: | Joshua M. Mastre | Rated Power: | 130 Horsepower |
| Operator: | Joshua M. Mastre | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|----------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | Overcast | Visibility (RVR): | |
| Wind Speed/Gusts: | 15 knots / 20 knots | Turbulence Type Forecast/Actual: | / None |
| Wind Direction: | 140° | Turbulence Severity Forecast/Actual: | / N/A |
| Altimeter Setting: | | Temperature/Dew Point: | |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Homer, AK | Type of Flight Plan Filed: | None |
| Destination: | Soldotna , AK (PASX) | Type of Clearance: | None |
| Departure Time: | | Type of Airspace: | |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|----------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 62.179973,-159.840789(est) |

Administrative Information

Investigator In Charge (IIC): Johnson, Clinton

Additional Participating Persons:

Original Publish Date: September 11, 2015

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=91598>

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