



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Cascade, Idaho                       | <b>Accident Number:</b> | SEA02LA148  |
| <b>Date &amp; Time:</b>        | August 2, 2002, 13:30 Local          | <b>Registration:</b>    | N2486C      |
| <b>Aircraft:</b>               | Cessna 180                           | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 3 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

During the takeoff ground run, the aircraft encountered a strong gust of wind from the right side. To keep the aircraft straight, the pilot maintained full power. The aircraft then collided with a small sapling on the left side of the runway substantially damaging the aircraft. The aircraft's takeoff roll was ended in a clearing off the left side of the runway. The pilot reported no mechanical failures or malfunctions with the aircraft at the time of the accident.

## 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 directional control during the takeoff ground run. Wind gusts and a tree were a factor.

## Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: TAKEOFF - ROLL/RUN

### Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (F) OBJECT - TREE(S)

## Factual Information

On August 2, 2002, approximately 1330 mountain daylight time, a Cessna 180, N2486C, registered to and operated by the pilot as a 14 CFR Part 91 personal flight, collided with a tree during its takeoff roll at Sulphur Creek Ranch Airport, Cascade, Idaho. Visual meteorological conditions prevailed and no flight plan was filed. The aircraft was substantially damaged and the private pilot and his two passengers were not injured.

During a telephone interview and subsequent written statement, the pilot reported that the takeoff began with a light tailwind on runway 28. During the takeoff roll the aircraft encountered a strong gust of wind from the right side. The pilot reported that with full power, the rudder was not effective. To keep the aircraft straight, the pilot maintained full power. The aircraft's left lift strut then collided with a small sapling growing near the edge of the runway. The wind gust subsided and the takeoff roll was ended in a clearing off the left side of the runway. The pilot reported no mechanical failures or malfunctions with the aircraft at the time of the accident.

The Sulphur Creek Ranch airstrip is 3,300 feet in length and 40 feet wide, with a gravel/turf surface. The airport elevation is 5,835 feet. Operational restrictions indicate that aircraft are to land to the west and takeoff to the east. Trees are listed as obstructions.

### Pilot Information

|                                  |   |  |                  |
|----------------------------------|---|--|------------------|
| <b>Certificate:</b>              | Private   | <b>Age:</b>                              | 57, Male         |
| <b>Airplane Rating(s):</b>       | Single-engine land  | <b>Seat Occupied:</b>                    | Left             |
| <b>Other Aircraft Rating(s):</b> | None  | <b>Restraint Used:</b>                   |                  |
| <b>Instrument Rating(s):</b>     | None  | <b>Second Pilot Present:</b>             | No               |
| <b>Instructor Rating(s):</b>     | None  | <b>Toxicology Performed:</b>             | No               |
| <b>Medical Certification:</b>    | Class 3 Valid Medical--w/<br>waivers/lim                                  | <b>Last FAA Medical Exam:</b>            | November 6, 2001 |
| <b>Occupational Pilot:</b>       | UNK   | <b>Last Flight Review or Equivalent:</b> | July 15, 2002    |
| <b>Flight Time:</b>              | 2134 hours (Total, all aircraft), 1454 hours (Total, this make and model) |  |                  |

## Aircraft and Owner/Operator Information

|                                      |                              |                                       |                 |
|--------------------------------------|------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Cessna                       | <b>Registration:</b>                  | N2486C          |
| <b>Model/Series:</b>                 | 180                          | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                              | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                       | <b>Serial Number:</b>                 | 30786           |
| <b>Landing Gear Type:</b>            | Tailwheel                    | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> | November 27, 2001 Annual     | <b>Certified Max Gross Wt.:</b>       | 2550 lbs        |
| <b>Time Since Last Inspection:</b>   | 5 Hrs                        | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 2761 Hrs at time of accident | <b>Engine Manufacturer:</b>           | Continental     |
| <b>ELT:</b>                          | Installed, not activated     | <b>Engine Model/Series:</b>           | O-470-K1        |
| <b>Registered Owner:</b>             | Patrick Armstrong            | <b>Rated Power:</b>                   | 230 Horsepower  |
| <b>Operator:</b>                     |                              | <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> |                                  | <b>Distance from Accident Site:</b>         |          |
| <b>Observation Time:</b>                |                                  | <b>Direction from Accident Site:</b>        |          |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 25 miles |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |          |
| <b>Wind Speed/Gusts:</b>                | / 15 knots                       | <b>Turbulence Type Forecast/Actual:</b>     | /        |
| <b>Wind Direction:</b>                  |                                  | <b>Turbulence Severity Forecast/Actual:</b> | /        |
| <b>Altimeter Setting:</b>               |                                  | <b>Temperature/Dew Point:</b>               | 24°C     |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |          |
| <b>Departure Point:</b>                 | Cascade, ID (ID74)               | <b>Type of Flight Plan Filed:</b>           | None     |
| <b>Destination:</b>                     | McCall Airport, ID (MYL )        | <b>Type of Clearance:</b>                   | None     |
| <b>Departure Time:</b>                  |                                  | <b>Type of Airspace:</b>                    | Class G  |

## Airport Information

|                             |                                  |                                  |                   |
|-----------------------------|----------------------------------|----------------------------------|-------------------|
| <b>Airport:</b>             | Sulphur Creek Ranch Airport ID74 | <b>Runway Surface Type:</b>      | Grass/turf;Gravel |
| <b>Airport Elevation:</b>   | 5835 ft msl                      | <b>Runway Surface Condition:</b> | Dry               |
| <b>Runway Used:</b>         | 28                               | <b>IFR Approach:</b>             | None              |
| <b>Runway Length/Width:</b> | 3300 ft / 40 ft                  | <b>VFR Approach/Landing:</b>     | None              |

## Wreckage and Impact Information

|                            |        |                             |                      |
|----------------------------|--------|-----------------------------|----------------------|
| <b>Crew Injuries:</b>      | 1 None | <b>Aircraft Damage:</b>     | Substantial          |
| <b>Passenger Injuries:</b> | 2 None | <b>Aircraft Fire:</b>       | None                 |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                 |
| <b>Total Injuries:</b>     | 3 None | <b>Latitude, Longitude:</b> | 44.536388,-115.35083 |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Eckrote, Debra  |
| <b>Additional Participating Persons:</b> | Lewis H Sanders; FAA-FSDO; Boise, ID  |
| <b>Original Publish Date:</b>            | January 16, 2003  |
| <b>Last Revision Date:</b>               |   |
| <b>Investigation Class:</b>              | <a href="#">Class</a>   |
| <b>Note:</b>                             |   |
| <b>Investigation Docket:</b>             | <a href="https://data.ntsb.gov/Docket?ProjectID=55420">https://data.ntsb.gov/Docket?ProjectID=55420</a> |

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