



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|--------------------|
| Location: | GARDINER, Washington | Accident Number: | SEA96LA124 |
| Date & Time: | June 16, 1996, 16:10 Local | Registration: | N1159C |
| Aircraft: | Cessna 177B | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 Serious, 3 Minor |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

While on final approach to land on runway 28, the pilot encountered a downdraft, and the aircraft's right wing struck a fir tree approximately 400 feet short of the threshold. The aircraft then descended to the ground, where it impacted and came to rest against a mobile home.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for wind conditions and failure to maintain the proper altitude/clearance from obstruction(s), while on final approach. Factors relating to the accident were: the downdraft, and the obstruction (tree).

Findings

Occurrence #1: UNDERSHOOT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) WEATHER CONDITION - DOWNDRAFT
 2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

3. (F) OBJECT - TREE(S)

4. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: OTHER

Findings

5. OBJECT - RESIDENCE

Factual Information

On June 16, 1996, approximately 1610 hours Pacific daylight time, a Cessna 177B, N1159C, registered to and being flown by a private pilot, was substantially damaged when the aircraft collided with a tree after undershooting the final approach to runway 28 at the Diamond Point airstrip, Gardiner, Washington. The pilot and two of the three passengers sustained minor injuries. A third passenger was seriously injured. Visual meteorological conditions existed and no flight plan had been filed. The flight, which was personal, was to have been operated under 14CFR91, and originated from Eastsound, Washington, approximately 1530.

The pilot reported that on final approach to runway 28 he encountered a downdraft and collided with a fir tree more than 400 feet short of the threshold. The aircraft then descended impacting and coming to rest against a mobile home a little over 300 feet short of the threshold and on the runway extended centerline.

The 1555 local surface winds reported at Port Angeles, located 23 nautical west southwest of the accident site, were 250 degrees magnetic at 10 knots gusting to 15 knots.

Pilot Information

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| Certificate: | Private | Age: | 78, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medical-w/ waivers/lim | Last FAA Medical Exam: | June 27, 1995 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 895 hours (Total, all aircraft), 97 hours (Total, this make and model), 845 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--|---------------------------------------|-----------------|
| Aircraft Make: | Cessna | Registration: | N1159C |
| Model/Series: | 177B 177B | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal; Utility | Serial Number: | 17702677 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | June 16, 1995 Annual | Certified Max Gross Wt.: | 2500 lbs |
| Time Since Last Inspection: | 44 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1313 Hrs | Engine Manufacturer: | Lycoming |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | O-360-A1F6D |
| Registered Owner: | | Rated Power: | 180 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|-------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | CLM ,288 ft msl | Distance from Accident Site: | 23 Nautical Miles |
| Observation Time: | 15:55 Local | Direction from Accident Site: | 254° |
| Lowest Cloud Condition: | Unknown | Visibility | 35 miles |
| Lowest Ceiling: | Overcast / 20000 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / 15 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 250° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 14°C / 8°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | EASTSOUND , WA (ORS) | Type of Flight Plan Filed: | None |
| Destination: | (2WA1) | Type of Clearance: | None |
| Departure Time: | 15:30 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|-----------------------------|----------------------------------|-----------|
| Airport: | DIAMOND POINT AIRSTRIP 2WA1 | Runway Surface Type: | Asphalt |
| Airport Elevation: | 262 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 28 | IFR Approach: | None |
| Runway Length/Width: | 2335 ft / 20 ft | VFR Approach/Landing: | Full stop |

Wreckage and Impact Information

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|----------------------------|--------------------|---------------------------------|-------------|
| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 Serious, 2 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious, 3 Minor | Latitude, Longitude: | |

Administrative Information

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| Investigator In Charge (IIC): | Mccreary, Steven |
| Additional Participating Persons: | |
| Original Publish Date: | February 28, 1997 |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=42395 |

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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 [here](#).