



Aviation Investigation Final Report

| | | | |
|--------------------------------|--------------------------------------|-------------------------|------------|
| Location: | GARDINER, Washington | Accident Number: | SEA97LA079 |
| Date & Time: | March 30, 1997, 12:40 Local | Registration: | N89PR |
| Aircraft: | ROSE VP-1 | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 1 Fatal |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot-in-command took off against the advice of two acquaintances who warned him of the 'strong, gusty winds.' Numerous surface weather observations throughout the northwest Washington area indicated a strong southerly flow with gusty wind conditions, and a rapid pressure rise at a number of reporting stations. Witnesses reported observing the homebuilt single-place Volkswagen-powered wooden aircraft depart from runway 10 and shortly thereafter execute a descending left turn out of view. A witness reported hearing the engine up to the time of the impact. The wooden propeller's two blades were shattered outboard of the hub. The pilot's total flight time as of his last medical conducted December 28, 1995, was reported as 60 hours.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's failure to maintain control of the aircraft. Factors contributing to the accident were gusty and high winds.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF

Findings

1. (F) WEATHER CONDITION - GUSTS

2. (F) WEATHER CONDITION - HIGH WIND
3. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

HISTORY OF FLIGHT

On March 30, 1997, approximately 1240 Pacific standard time, a homebuilt Rose VP-1, N89PR, being flown by a private pilot, was destroyed during a collision with an unoccupied house following a loss of control during climbout. The aircraft crashed near Gardiner, Washington. The pilot was airlifted to Harborview Hospital in Seattle with serious injuries and subsequently expired. Visual, windy meteorological conditions existed at the time, and no flight plan had been filed. The flight, which was personal, was to have been operated under 14CFR91. The destination of the flight was believed to be Port Angeles, Washington.

Several witnesses who were interviewed by Clallam County Sheriff's Deputies, and who were located at the departure airport (Diamond Point) reported advising the pilot against attempting to takeoff in the strong, gusty winds. They observed the aircraft takeoff on runway 10, become airborne and then execute a descending left turn out of view to impact.

A witness near the ground impact site reported winds "gusting at approximately 35 to 40 miles per hour when I heard the sound of an aircraft taking off at the Diamond Point airport." He also reported that the aircraft was "in the air for less than a minute when I heard a loud crash" and "the airplane engine stopped at that point."

PERSONNEL INFORMATION

According to records maintained by the Federal Aviation Administration (FAA), the pilot-in-command had been issued a private pilot certificate on December 16, 1994. He possessed an airplane single-engine land rating and showed a total of 60 hours of flight experience on the date of his most recent FAA third class medical examination, conducted December 28, 1995. The pilot's total flight experience at the time of the accident, as well as his total time in the make/model of the accident aircraft, were not known. Additionally, it was not known whether or not the pilot had completed a bi-annual flight review and in what aircraft.

AIRCRAFT INFORMATION

No aircraft logs or records were recovered following the accident. The aircraft, a single-engine, Rose VP-1 "Volksplane" was initially registered to Patrick W. Rose on June 18, 1991, and subsequently re-registered to the pilot on July 18, 1996. The aircraft is a single-seat, fixed conventional-gear, wood frame, low-wing model and was equipped with a Volkswagen engine.

METEOROLOGICAL INFORMATION

Surface wind direction and speed, as well as barometric pressure were recorded at the following sites and times (refer to CHART I for the location of these sites with respect to the Diamond Point airport):

LOCATION & TIME: WINDS + PRESSURE:

| | | |
|---|------------------------------------|----------------------------------|
| Port Angeles: 1245 | wind from 160 degrees at 5 knots, | gusts to 10 knots, 29.48 in. |
| Hg. | REMARK: Pressure rising rapidly | |
| Arlington: 1254 | wind from 180 degrees at 12 knots, | gusts to 25 knots, 29.47 in. |
| Hg. | | |
| Boeing Field: 1245 | wind from 170 degrees at 15 knots, | gusts to 28 knots, 29.52 in. |
| Hg. | | |
| Bellingham: 1248 | wind from 160 degrees at 13 knots, | gusts to 21 knots, 29.41 in. |
| Hg. | | |
| Friday Harbor:1254 | wind from 100 degrees at 28 knots, | gusts to 35 knots, 29.38 in. |
| Hg. | | |
| Hoquiam: 1250 | wind from 130 degrees at 34 knots, | gusts to 47 knots, 29.55 in. |
| Hg. | | |
| Olympia: 1256 | wind from 160 degrees at 15 knots, | 29.57 in. Hg. |
| REMARK: Peak wind from 170 degrees at 37 at | 1213, wind-shift at 1142 | |
| Everett: 1245 | wind from 170 degrees at 13 knots, | 29.49 in. Hg. |
| Everett: 1345 | wind from 200 degrees at 23 knots, | gusts to 42 knots, 29.49 in. Hg. |
| REMARK: Pressure rising rapidly | | |
| Bremerton: 1254 | wind from 180 degrees at 19 knots, | gusts to 27 knots, 29.60 in. |
| Hg. | | |
| Renton: 1245 | wind from 180 degrees at 25 knots, | gusts to 41 knots, 29.50 in. Hg. |
| Seattle: 1256 | wind from 210 degrees at 24 knots, | gusts to 38 knots, 29.53 in. Hg. |
| REMARK: Pressure rising rapidly | | |
| McChord AFB: 1249 | wind from 180 degrees at 33 knots, | gusts to 41 knots, 29.60 in. |
| Hg. | REMARK: Pressure rising rapidly | |
| Tacoma: 1250 | wind from 200 degrees at 25 knots, | gusts to 35 knots, 29.59 in. |

Hg. REMARK: Pressure rising rapidly

Quillayute: 1223 wind from 120 degrees at 12 knots, gusts to 24 knots, 29.40 in.
Hg. REMARK: Peak wind from 180 degrees at 27 knots at 1154

Quillayute: 1253 wind from 140 degrees at 20 knots, gusts to 32 knots, 29.41 in.
Hg. REMARK: Peak wind from 140 degrees at 34 knots at 1243

Winds at Port Angeles, Washington, 23 nautical miles west, were reported at 160 degrees magnetic, 5 knots gusting to 10 knots, and station pressure was reported as "rising rapidly." One witness reported the winds gusting 35 to 40 miles per hour at the time of the accident.

WRECKAGE AND IMPACT INFORMATION

On-site examination of the wreckage was conducted by a Federal Aviation Administration inspector, who reported that the aircraft came to rest partially inside the first floor of a two story residence. He also indicated that a small fruit tree southeast of the aircraft's final resting place had been uprooted and reported evidence that the left wing tip had contacted this tree.

Additionally, he reported evidence that the right wing leading edge impacted the side of the house at a slightly more than 90 degree attitude (refer to photograph 1 and 2). He reported that the engine, fuel tank (including evidence of fuel), and the pilot were all located within the ground floor of the residence (refer to photograph 3). The engine was observed separated from the airframe and both wooden propeller blades were observed to be shattered just outboard of the hub assembly, which remained attached to the engine crankshaft just aft of the spinner (refer to photograph 4).

MEDICAL AND PATHOLOGICAL INFORMATION

Post mortem examination of the pilot was conducted at 0700 local time on April 1, 1997, by Richard C. Harruff, M.D., Ph. D., Associate Medical Examiner at the facilities of the King County Medical Examiner, Seattle, Washington. The examination report number was KCME 97-0368. Toxicological evaluation of samples taken from the pilot subsequent to his admission to Harborview Medical Center revealed only morphine in blood and kidney fluid, and Lidocaine in blood and lung fluid (refer to attached Toxicology report).

Pilot Information

| | | | |
|----------------------------------|--|--|-------------------|
| Certificate: | Private | Age: | 38, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Front |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | Yes |
| Medical Certification: | Class 3 Valid Medical--w/ waivers/lim | Last FAA Medical Exam: | December 28, 1995 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 60 hours (Total, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|--------------------------------------|------------------------|---|-----------------|
| Aircraft Make: | ROSE | Registration: | N89PR |
| Model/Series: | VP-1 VP-1 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | V2241 |
| Landing Gear Type: | Tailwheel | Seats: | 1 |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | 685 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Volkswagen |
| ELT: | Not installed | Engine Model/Series: | |
| Registered Owner: | | Rated Power: | |
| Operator: | | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

| | | | |
|---|-------------------------|---|-------------------|
| 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: | 12:45 Local | Direction from Accident Site: | 256° |
| Lowest Cloud Condition: | Unknown | Visibility | 25 miles |
| Lowest Ceiling: | Broken / 4000 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 5 knots / 10 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 160° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 12°C / 4°C |
| Precipitation and Obscuration: | Light - None - Rain | | |
| Departure Point: | (2WA1) | Type of Flight Plan Filed: | None |
| Destination: | PORT ANGELES , WA (CLM) | Type of Clearance: | None |
| Departure Time: | 12:39 Local | Type of Airspace: | Class G |

Airport Information

| | | | |
|-----------------------------|-----------------|----------------------------------|---------|
| Airport: | | Runway Surface Type: | Asphalt |
| Airport Elevation: | 262 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 10 | IFR Approach: | |
| Runway Length/Width: | 2335 ft / 20 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

| | | | |
|----------------------------|---------|-----------------------------|-----------|
| Crew Injuries: | 1 Fatal | Aircraft Damage: | Destroyed |
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Fatal | Latitude, Longitude: | |

Administrative Information

Investigator In Charge (IIC): Mccreary, Steven

Additional Participating Persons: JOHN T PRYDE; RENTON , WA

Original Publish Date: April 24, 1998

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=42577>

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 [here](#).