



Aviation Investigation Final Report

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|--------------------------------|---|-------------------------|-------------|
| Location: | Bremen, Indiana | Accident Number: | CEN24LA103 |
| Date & Time: | December 8, 2023, 17:05 Local | Registration: | N330RH |
| Aircraft: | Vans RV6 | Aircraft Damage: | Substantial |
| Defining Event: | Landing gear collapse | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Positioning | | |

Analysis

The pilot was landing on a grass runway when the nose landing gear encountered soft terrain and collapsed during the landing roll. The airplane came to rest in a nose down attitude with substantial damage to the engine mount. The pilot reported that the grass runway was softer than he anticipated, and that the airplane had no preimpact mechanical malfunctions or failures 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 collapse of the nose landing gear after it contacted soft terrain during the landing roll.

Findings

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| Aircraft | Nose/tail gear strut/axle - Capability exceeded |
| Environmental issues | Soft surface - Awareness of condition |
| Environmental issues | Soft surface - Effect on equipment |

Factual Information

History of Flight

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| Landing-landing roll | Miscellaneous/other |
| Landing-landing roll | Landing gear collapse (Defining event) |
| Landing-landing roll | Nose over/nose down |

Pilot Information

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|---------------------------|--|-----------------------------------|------------------|
| Certificate: | Airline transport; Flight instructor | Age: | 78,Male |
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | 3-point |
| Instrument Rating(s): | Airplane; Helicopter | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane | Toxicology Performed: | |
| Medical Certification: | BasicMed | Last FAA Medical Exam: | December 5, 2023 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 14853 hours (Total, all aircraft), 12 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|----------------------------|---------------------------------------|-----------------|
| Aircraft Make: | Vans | Registration: | N330RH |
| Model/Series: | RV6 A | Aircraft Category: | Airplane |
| Year of Manufacture: | 2022 | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | 20376 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | August 20, 2023 Condition | Certified Max Gross Wt.: | 1650 lbs |
| Time Since Last Inspection: | 23 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 23 Hrs at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Not installed | Engine Model/Series: | IO-360-A3B6D |
| Registered Owner: | On file | Rated Power: | 200 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|------------------------|---|------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Dusk |
| Observation Facility, Elevation: | C65,800 ft msl | Distance from Accident Site: | 8 Nautical Miles |
| Observation Time: | 16:55 Local | Direction from Accident Site: | 217° |
| Lowest Cloud Condition: | | Visibility | 10 miles |
| Lowest Ceiling: | Overcast / 2700 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 6 knots / 13 knots | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 29.76 inches Hg | Temperature/Dew Point: | 12°C / 5°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | Plymouth, IN (C65) | Type of Flight Plan Filed: | None |
| Destination: | Bremen, IN (PVT) | Type of Clearance: | None |
| Departure Time: | 16:45 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|----------------------|----------------------------------|---------------------------|
| Airport: | Private Airstrip PVT | Runway Surface Type: | Grass/turf |
| Airport Elevation: | 820 ft msl | Runway Surface Condition: | Dry;Soft |
| Runway Used: | 27 | IFR Approach: | None |
| Runway Length/Width: | 1350 ft / 50 ft | VFR Approach/Landing: | Full stop;Traffic pattern |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|---------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 41.473284,-86.194006(est) |

Administrative Information

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| Investigator In Charge (IIC): | Miller, Bradley |
| Additional Participating Persons: | John Shaver; FAA; Chicago, IL |
| Original Publish Date: | July 2, 2024 |
| 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=193727 |

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.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).