



Aviation Investigation Final Report

Location:	The Dalles, Oregon	Accident Number:	WPR24LA021
Date & Time:	October 19, 2023, 20:42 Local	Registration:	N6308Q
Aircraft:	Cessna 152	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot reported that the airplane encountered “extreme” turbulence while on the approach to an intermediate stopover airport during a night cross-country flight. The pilot extended the downwind leg of the traffic pattern to stabilize the airplane, and during the base leg turn, the airplane struck a wire and subsequently impacted terrain. The airplane sustained substantial damage to both wings and fuselage.

The airport is located at an elevation of 246 ft mean sea level (msl) in a major river gorge. The northern ridge line above the airport is about 2,900 ft msl, and the southern ridge line is about 1,300 ft msl. The accident location is located about 2 miles south of the airport at an estimated elevation of about 650 ft msl. High tension powerlines are positioned south of the airport along the southern ridge.

According to the United States Navy Observatory, the official sunset was at 17:12 Pacific daylight time (PDT), the official end of civil twilight was at 17:42 PDT and the official moon set was at 20:02 PDT.

The night cross-country training flight was part of the pilot’s training curriculum for her commercial, airplane single engine land certificate.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane 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 pilot’s encounter with severe turbulence at night which resulted in an extended downwind and collision with wires during the base turn.

Findings

Environmental issues	Wire - Effect on equipment
Environmental issues	Terrain induced turbulence - Effect on equipment
Aircraft	(general) - Attain/maintain not possible

Factual Information

History of Flight

Approach-VFR pattern base	Collision with terr/obj (non-CFIT) (Defining event)
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Pilot Information

Certificate:	Private	Age:	23,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	March 3, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 3, 2023
Flight Time:	126 hours (Total, all aircraft), 71 hours (Total, this make and model), 70 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N6308Q
Model/Series:	152	Aircraft Category:	Airplane
Year of Manufacture:	1981	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	15285227
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	October 3, 2023 Unknown	Certified Max Gross Wt.:	1675 lbs
Time Since Last Inspection:	50.9 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1840.6 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	O-235-L2C
Registered Owner:	HILLSBORO AERO ACADEMY LLC	Rated Power:	110 Horsepower
Operator:	HILLSBORO AERO ACADEMY LLC	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KDLS, 234 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	344°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 19 knots	Turbulence Type Forecast/Actual:	None / Terrain-Induced
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	N/A / Moderate
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	19°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Redmond, OR (KRDM)	Type of Flight Plan Filed:	VFR
Destination:	The Dalles, OR (KDLS)	Type of Clearance:	VFR
Departure Time:	19:41 Local	Type of Airspace:	Class G

Airport Information

Airport:	COLUMBIA GORGE RGNL/THE DALLES MUNI DLS	Runway Surface Type:	Asphalt
Airport Elevation:	246 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	5097 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	45.58,-121.15(est)

Administrative Information

Investigator In Charge (IIC):	Gutierrez, Eric
Additional Participating Persons:	Jon Ellingson; Federal Aviation Administration; Portland, OR
Original Publish Date:	January 25, 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=193298

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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](#).