



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Prineville, Oregon	<b>Accident Number:</b>	WPR19LA130
<b>Date &amp; Time:</b>	April 21, 2019, 18:45 Local	<b>Registration:</b>	N4567C
<b>Aircraft:</b>	Cessna 170	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that after a normal preflight, he proceeded to the runway and started the takeoff roll. Once the airplane's tail lifted off the ground, the airplane pulled toward the left and continued to do so despite the pilot adding right rudder. He reduced the power to idle and attempted to stop the airplane; however, it exited the runway surface and impacted a tree substantially damaging the wings. The pilot had about 82 hours in make and model but only about 5 to 10 hours in the accident airplane, which had a more powerful engine than his previous airplane. Postaccident examination revealed there were no anomalies with the airplane that would have precluded normal operation.

Wind reports shortly before and after the accident indicate a crosswind in relation to the takeoff runway. In addition, the accident airplane's more powerful engine may have responded differently on takeoff than what the pilot was accustomed to. Despite these potential factors, the pilot ultimately did not maintain directional control during takeoff.

## 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 takeoff with a crosswind.

## Findings

<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Personnel issues</b>	Recent experience w/ equipment - Pilot
<b>Environmental issues</b>	Crosswind - Effect on operation

# Factual Information

## History of Flight

Takeoff	Loss of control on ground (Defining event)
Takeoff	Runway excursion
Takeoff	Collision with terr/obj (non-CFIT)

On April 21, 2019, about 1845 Pacific daylight time, a Cessna 170B, N4567C, was substantially damaged when it was involved in an accident at Dry Creek Airpark (OG21), Prineville, Oregon. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that after a normal preflight, he proceeded to runway 25 and started the takeoff roll. Once the airplane’s tail lifted off the ground, the airplane pulled toward the left. The pilot added right rudder, but the airplane continued to pull toward the left. He reduced the power to idle and attempted to stop the airplane; however, it exited the runway surface and impacted a tree substantially damaging the wings. The pilot also stated he had about 82 hours in make and model but only about 5 to 10 hours in the accident airplane since he recently purchased it. The pilot also said that the accident airplane had a more powerful 180 horsepower engine than his previous airplane (145 horsepower).

During an examination of the airplane by a mechanic, the flight controls remained secured, were configured properly, and did not exhibit abnormal wear. In addition, the wheels rotated freely, and the brakes exhibited normal operating wear signatures. No anomalies were noted during the examination.

The nearest weather reporting station was located about 6 miles to the north-northwest of the accident airport. About 10 minutes before the accident, the wind was reported from 010° at 8 knots; and about 10 minutes after the accident wind was reported from 360° at 8 knots gusting to 13 knots.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	20,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>	Lap only
<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 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	November 15, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 5, 2018
<b>Flight Time:</b>	225 hours (Total, all aircraft), 82 hours (Total, this make and model), 160 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N4567C
<b>Model/Series:</b>	170 B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1953	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	25511
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 19, 2018 Annual	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>	60 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3294 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O&VO-360 SER
<b>Registered Owner:</b>		<b>Rated Power:</b>	180
<b>Operator:</b>	On file	<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>	S39,3251 ft msl	<b>Distance from Accident Site:</b>	7 Nautical Miles
<b>Observation Time:</b>	18:55 Local	<b>Direction from Accident Site:</b>	328°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots / 13 knots	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.19 inches Hg	<b>Temperature/Dew Point:</b>	15°C / -2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Prineville, OR (OG21)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Sisters, OR (6K5 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:15 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Dry Creek Airpark OG21	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	3625 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	25	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3000 ft / 35 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>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	44.190277,-120.820556(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Link, Samantha		
<b>Additional Participating Persons:</b>	Dee Rice; Federal Aviation Administration; Hillsboro, OR		
<b>Original Publish Date:</b>	January 20, 2022	<b>Investigation Class:</b>	3
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=99363">https://data.nts.gov/Docket?ProjectID=99363</a>		

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](#).