



National Transportation Safety Board Aviation Accident Data Summary

Location:	Rawlins, WY	Accident Number:	WPR11CA365
Date & Time:	08/01/2011, 1545 MDT	Registration:	N7024V
Aircraft:	CESSNA 162	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that prior to takeoff, he noted an approaching storm but estimated that the wind was light and variable for the takeoff roll. The airplane was slow to accelerate and reached the 50 knot rotation speed halfway down the runway. The pilot stated that the airplane lifted off and maintained an altitude a few feet above the runway, but lost altitude at the end. The airplane struck the ground and subsequently nosed over, coming to rest inverted. A few minutes after the accident, the pilot reported that it began to rain. The airport density altitude at the time of the accident was calculated to be approximately 9,000 feet, which is 1,000 feet above the manufacturer's recommended maximum takeoff altitude as outlined in the Pilot's Operating Handbook. The weather observation facility located on the field reported that 3 minutes before the accident the wind was a left quartering tailwind at 5 knots, while shortly after the accident the wind was a left quartering tailwind at 22 knots, gusting to 32 knots with respect to the airplane's takeoff runway direction. The pilot reported that there were no preimpact mechanical malfunctions or failures with the airframe or engine that would have precluded normal flight.

Flight Events

Prior to flight - Preflight or dispatch event
Takeoff - Windshear or thunderstorm
Takeoff - Loss of control in flight
Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to attempt a takeoff at a density altitude that was outside the performance envelope of the airplane. Also causal was the flight's likely encounter with a sudden tailwind gust.

Findings

Aircraft-Aircraft oper/perf/capability-Aircraft capability-(general)-Capability exceeded - C
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - C
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C
Personnel issues-Task performance-Use of equip/info-Use of manual-Pilot - C
Environmental issues-Conditions/weather/phenomena-Wind-Tailwind-Effect on operation
Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-High density altitude-Effect on operation

Pilot Information

Certificate:	Sport Pilot	Age:	77
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	5994 hours (Total, all aircraft), 76 hours (Total, this make and model), 80 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N7024V
Model/Series:	162	Engines:	1 Reciprocating
Operator:	The Jerome L. Quint Living Trust	Engine Manufacturer:	Continental
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-200D
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KRWL, 6813 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Overcast / 8000 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	22 knots/ 32 knots, 250°
Temperature:	22° C / 14° C	Visibility	9 Miles
Precipitation and Obscuration:	Light - Thunderstorms - Rain; No Obscuration		
Departure Point:	Rawlins, WY (KRWL)	Destination:	Burns Field, WY (KEVW)

Airport Information

Airport:	Rawlins Muni/Harvey Field (KRWL)	Runway Surface Type:	Asphalt
Runway Used:	10L	Runway Surface Condition:	Dry
Runway Length/Width:	4118 ft / 60 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Jefferey R Rich	Adopted Date:	10/17/2011
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=81372		

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