



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Pine Bluffs, WY	<b>Accident Number:</b>	WPR11LA253
<b>Date &amp; Time:</b>	06/02/2011, 0855 MDT	<b>Registration:</b>	N9496G
<b>Aircraft:</b>	CESSNA A188B	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

The newly hired commercial pilot intended to conduct a solo practice flight in the piston-engine, agricultural-agent-dispensing airplane. It was the first flight of the day for the pilot and airplane, and his first flight in this particular airplane. Because the airport elevation was about 5,100 feet above mean sea level, the pilot leaned the fuel-air mixture, then conducted an engine run-up. The pilot reported that the run-up was normal and that he set flaps at 5 degrees. The target climb speed was 80 mph. The initial portion of the takeoff roll was normal but then seemed to continue for an “abnormal length of runway.” The pilot did not abort the takeoff because, by the time he recognized that the airplane was not performing adequately, he believed that there was insufficient runway remaining to stop. The airplane lifted off, but then the engine seemed to experience a partial loss of power, and the pilot was unable to fly the airplane out of ground effect after it crossed the departure end of the runway. The pilot jettisoned the payload and conducted a precautionary landing in a field off the end of the runway to avoid a collision with power lines. Review of maintenance records found that the engine exceeded the recommended time between overhaul by 470 hours. However, examination of the airplane and engine did not reveal evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation. The appearance of the engine spark plugs was consistent with the engine being regularly operated with a fuel-air mixture that was leaner than normal, and the possibility that the pilot improperly leaned the engine for the takeoff could not be ruled out. The takeoff performance data in the airplane manufacturer's operating manual was insufficient to determine the expected performance for the airplane's reported configuration and ambient conditions. The available performance data suggested that the airplane should have been able to climb out of ground effect and that the target climb speed used by the pilot might have been too high; however, the available information was inconclusive with regard to both these issues.

## Flight Events

Initial climb - Loss of engine power (partial)  
Initial climb - Off-field or emergency landing

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A partial loss of engine power during takeoff for reasons that could not be determined because postaccident examination did not reveal any mechanical malfunctions or failures that would have precluded normal operation.

## Findings

Aircraft-Aircraft handling/service-Maintenance/inspections-Scheduled maint checks-Not serviced/maintained  
Aircraft-Aircraft power plant-Engine controls-Mixture control-Incorrect use/operation

Personnel issues-Task performance-Use of equip/info-Use of equip/system-Not specified  
Not determined-Not determined-(general)-(general)-Unknown/Not determined - C

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	52
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	972 hours (Total, all aircraft), 4 hours (Total, this make and model), 932 hours (Pilot In Command, all aircraft), 43 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	CESSNA	<b>Registration:</b>	N9496G
<b>Model/Series:</b>	A188B	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	Circle-S Aviation	<b>Engine Manufacturer:</b>	Continental
<b>Air Carrier Operating Certificate:</b>		<b>Engine Model/Series:</b>	IO-520
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	82V, 5152 ft msl	<b>Weather Information Source:</b>	Pilot
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	11 knots/ 15 knots, 190°
<b>Temperature:</b>	19°C / 0°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Pine Bluff, WY (82V)	<b>Destination:</b>	Pine Bluff, WY (82V)

## Airport Information

<b>Airport:</b>	Pine Bluffs Municipal (82V)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	26	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	5336 ft / 75 ft		

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC): Michael C Huhn

Adopted Date: 07/18/2013

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=79328>

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