



# Aviation Investigation Final Report

<b>Location:</b>	Rushville, Nebraska	<b>Accident Number:</b>	GAA19CA160
<b>Date &amp; Time:</b>	March 8, 2019, 11:45 Local	<b>Registration:</b>	N8566D
<b>Aircraft:</b>	Piper PA18	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel related	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, during flight, the engine lost partial power. He applied carburetor heat and adjusted the mixture, but the engine did not respond. The engine continued to lose power, and the pilot conducted a forced landing on rough terrain, during which the right wing struck the ground.

The airplane sustained substantial damage to the right wing spar.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The pilot reported that the temperature about the time of the accident was 30°F and that the dew point was 34°F. The atmospheric conditions at the time of the accident were conducive to the accumulation of serious carburetor icing at cruise or climb power settings. The pilot stated that the accident could have been prevented if he had "checked for carb ice sooner."

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The partial loss of engine power due to the accumulation of carburetor ice, which resulted in a forced landing on rough terrain.

## Findings

<b>Environmental issues</b>	Conducive to carburetor icing - Effect on equipment
<b>Environmental issues</b>	Rough terrain - Effect on operation

## Factual Information

### History of Flight

Enroute	Fuel related (Defining event)
Enroute	Loss of engine power (partial)
Enroute	Attempted remediation/recovery
Landing	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

### Pilot Information

Certificate:	Private	Age:	39,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 None	Last FAA Medical Exam:	April 25, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 29, 2017
Flight Time:	(Estimated) 598 hours (Total, all aircraft), 123 hours (Total, this make and model), 598 hours (Pilot In Command, all aircraft), 61 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>	Piper	<b>Registration:</b>	N8566D
<b>Model/Series:</b>	PA18 150	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1957	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18-6220
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	January 6, 2019 Annual	<b>Certified Max Gross Wt.:</b>	1750 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6645 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	O-320
<b>Registered Owner:</b>		<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	Stateline Auto Service	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KGRN,3562 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	35°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	-1°C / 1°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Rushville, NE (9V5 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Rushville, NE (9V5 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:45 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	42.459167,-102.501113(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Craig Brumley; FAA; Lincoln, NE
<b>Original Publish Date:</b>	November 6, 2019
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=99091">https://data.nts.gov/Docket?ProjectID=99091</a>

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