



# Aviation Investigation Final Report

<b>Location:</b>	Lewiston, Illinois	<b>Accident Number:</b>	GAA18CA397
<b>Date &amp; Time:</b>	July 4, 2018, 08:35 Local	<b>Registration:</b>	N11VW
<b>Aircraft:</b>	ROBERT MILES Smith Trike	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, during cruise flight into "wispy clouds," the biplane's engine started to "run rough" then lost all power. About 800 ft above ground level, he restarted the engine, but it quit again. He attempted to restart the engine multiple times but was unsuccessful, so he selected a gravel road for landing. During the landing, the airplane ground looped into a ditch. The biplane sustained substantial damage to the right wing.

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

The automated weather observation station located 25 nautical miles away from the accident site reported that, about the time of the accident, the wind was from 170° at 5 knots, visibility 7 statute miles, clouds broken at 4,800 ft above ground level, temperature 77°F, and dew point 75°F.

The pilot stated that he did not apply carburetor heat during the accident flight. The atmospheric conditions were conducive to serious icing at glide power settings. It is likely that the engine lost power due to carburetor icing and the pilot's failure to apply carburetor heat.

## Probable Cause and Findings

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

A total loss of engine power due to the pilot's failure to apply carburetor heat in conditions conducive to carburetor icing and his subsequent failure to maintain directional control during a forced landing.

## Findings

<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Personnel issues</b>	Lack of action - Pilot
<b>Aircraft</b>	Intake anti-ice, deice - Not used/operated
<b>Environmental issues</b>	Conducive to carburetor icing - Effect on operation

## Factual Information

### History of Flight

<b>Enroute</b>	Loss of engine power (total)
<b>Landing</b>	Attempted remediation/recovery
<b>Landing</b>	Off-field or emergency landing
<b>Landing-landing roll</b>	Loss of control on ground (Defining event)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	72,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Single
<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 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	December 1, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	April 20, 2018
<b>Flight Time:</b>	(Estimated) 770 hours (Total, all aircraft), 73 hours (Total, this make and model), 750 hours (Pilot In Command, all aircraft), 5.5 hours (Last 90 days, all aircraft), 4.5 hours (Last 30 days, all aircraft), 0.8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	ROBERT MILES	<b>Registration:</b>	N11VW
<b>Model/Series:</b>	Smith Trike	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1991	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Aerobatic; Experimental (Special)	<b>Serial Number:</b>	001RM
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	May 7, 2018 Condition	<b>Certified Max Gross Wt.:</b>	940 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	72.8 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	A&C65 SERIES
<b>Registered Owner:</b>		<b>Rated Power:</b>	80 Horsepower
<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>	KMQB, 707 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	13:35 Local	<b>Direction from Accident Site:</b>	295°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	Broken / 4800 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	170°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.22 inches Hg	<b>Temperature/Dew Point:</b>	25°C / 24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Springfield, IL (SPI )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Monmouth, IL (C66 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	06:15 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<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 Minor	<b>Latitude, Longitude:</b>	40.346111,-90.168052(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Nepomuceno, Eleazar
<b>Additional Participating Persons:</b>	Curt Lindauer; FAA; Springfield, IL Nicholas Loftus; FAA; Springfield, IL
<b>Original Publish Date:</b>	June 10, 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=97711">https://data.nts.gov/Docket?ProjectID=97711</a>

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