



# Aviation Investigation Final Report

<b>Location:</b>	Everett, Washington	<b>Accident Number:</b>	GAA18CA519
<b>Date &amp; Time:</b>	July 21, 2018, 18:55 Local	<b>Registration:</b>	N45586
<b>Aircraft:</b>	Cessna 150	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, during final approach, the engine sputtered and then lost all power. The airplane landed short of the runway on the threshold, and the nose landing gear collapsed.

The airplane sustained substantial damage to the engine truss and mount.

Postaccident examination by a Federal Aviation Administration inspector revealed no evidence of preaccident mechanical malfunctions or failures that would have precluded normal operation. A photograph provided by the inspector showed no damage to the propeller, which is consistent with the engine not producing power at the time of impact. The inspector reported that fuel was present in the tanks, that the gascolator screen was found clear of debris, and that he suspected carburetor ice was responsible for the loss of engine power.

The airport's automated weather observation station reported that, about the time of the accident, the wind was from 310° at 7 knots, the temperature was 72°F, and the dew point was 48°F. The atmospheric conditions were favorable for serious carburetor icing at descent power setting.

## 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 carburetor icing during final approach, which resulted in a hard landing short of the runway and the nose landing gear collapsing.

## Findings

### Environmental issues

Conducive to carburetor icing - Effect on operation

## Factual Information

### History of Flight

Approach-VFR pattern final	Loss of engine power (total) (Defining event)
Landing	Landing gear collapse

### Pilot Information

Certificate:	Private	Age:	26, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 1, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 27, 2017
Flight Time:	(Estimated) 255 hours (Total, all aircraft), 151 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N45586
Model/Series:	150 M	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	15076982
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1601 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	O-200 SERIES
Registered Owner:		Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	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>	KPAE,606 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	01:53 Local	<b>Direction from Accident Site:</b>	47°
<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>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.18 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Everett, WA (PAE )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Everett, WA (PAE )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:00 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	SNOHOMISH COUNTY (PAINE FLD) PAE	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	607 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	34R	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3004 ft / 75 ft	<b>VFR Approach/Landing:</b>	Forced landing

## 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>	47.906944,-122.281669(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Nepomuceno, Eleazar
<b>Additional Participating Persons:</b>	Curtis Johnson; FAA; Des Moines, WA
<b>Original Publish Date:</b>	March 20, 2020
<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=98193">https://data.nts.gov/Docket?ProjectID=98193</a>

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