



# Aviation Investigation Final Report

<b>Location:</b>	Frederick, Maryland	<b>Accident Number:</b>	GAA18CA578
<b>Date &amp; Time:</b>	September 19, 2018, 16:30 Local	<b>Registration:</b>	N56PE
<b>Aircraft:</b>	Cirrus SR22	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, after completing an instructional flight, he dropped off the flight instructor and flew back to his home airport. During landing, the airplane porpoised, and the nose landing gear collapsed.

The airplane sustained substantial damage to the lower fuselage.

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

## Probable Cause and Findings

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

The pilot's improper landing flare, which resulted in the airplane porpoising.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Landing flare - Not attained/maintained

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Abnormal runway contact (Defining event)
<b>Landing-flare/touchdown</b>	Landing gear collapse

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	62,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<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>	June 16, 2018
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 10, 2018
<b>Flight Time:</b>	(Estimated) 381 hours (Total, all aircraft), 53 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cirrus	<b>Registration:</b>	N56PE
<b>Model/Series:</b>	SR22	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2010	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3634
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	March 6, 2018 Annual	<b>Certified Max Gross Wt.:</b>	3400 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	574.4 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	IO-550N
<b>Registered Owner:</b>		<b>Rated Power:</b>	310 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>	KFDK,303 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	20:24 Local	<b>Direction from Accident Site:</b>	266°
<b>Lowest Cloud Condition:</b>	Few / 3600 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.96 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Leesburg, VA (JYO )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Leesburg, VA (JYO )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:10 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	Frederick Muni FDK	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	306 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	05	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5219 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Straight-in

## 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>	39.417499,-77.374443(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	James Logie; FAA; Glen Burnie, MD Erskin Geer; FAA; Glen Burnie, MD
<b>Original Publish Date:</b>	September 26, 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=98330">https://data.nts.gov/Docket?ProjectID=98330</a>

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