



# Aviation Investigation Final Report

<b>Location:</b>	Laramie, Wyoming	<b>Accident Number:</b>	GAA19CA044
<b>Date &amp; Time:</b>	October 26, 2018, 18:40 Local	<b>Registration:</b>	N505YR
<b>Aircraft:</b>	Stoddard Hamilton Glasair II	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot-rated owner reported that, after purchasing the airplane and receiving initial training the day before and the morning of the accident, he and a pilot-rated friend departed for a cross-country flight to their home airport. He added that, after nearly 9 hours of flying, the pilot-rated friend, who was manipulating the flight controls, offered to land at the destination airport because he had landed there before. The horizon was becoming dark, and they attempted to adjust the panel lights for the instruments but realized that the lights were not functioning, so the owner used a flashlight to illuminate the instruments for the landing.

During the landing, the nose landing gear contacted the ground first, and the airplane porpoised. The second bounce was more severe, so the pilot initiated a go-around to no avail. The owner added that, during the third bounce, the airplane exited the runway to the left and then came to rest nose down.

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

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

The airport's automated weather observation system reported that, about the time of the accident, the wind was from 270° at 11 knots. The pilot landed the airplane on runway 30.

## Probable Cause and Findings

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

The pilot's failure to maintain a proper pitch attitude during landing at night, which resulted in a porpoised landing.

## Findings

<b>Aircraft</b>	Pitch control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Personnel issues</b>	Total experience w/ equipment - Pilot
<b>Aircraft</b>	Flight compartment lighting - Inoperative
<b>Environmental issues</b>	Dark - Effect on personnel

## Factual Information

### History of Flight

Landing	Abnormal runway contact (Defining event)
Landing	Loss of control on ground
Landing	Attempted remediation/recovery
Landing	Runway excursion
Landing	Nose over/nose down

### Pilot Information

Certificate:	Private	Age:	62,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	BasicMed Without waivers/limitations	Last FAA Medical Exam:	September 9, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 19, 2016
Flight Time:	(Estimated) 128.3 hours (Total, all aircraft), 9.8 hours (Total, this make and model), 74 hours (Pilot In Command, all aircraft), 14.1 hours (Last 90 days, all aircraft), 10.8 hours (Last 30 days, all aircraft), 8.8 hours (Last 24 hours, all aircraft)		

### Pilot-rated passenger Information

Certificate:	Private	Age:	71,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	BasicMed Without waivers/limitations	Last FAA Medical Exam:	July 25, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 29, 2018
Flight Time:	(Estimated) 1604 hours (Total, all aircraft), 7.9 hours (Total, this make and model), 1530 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 17.5 hours (Last 30 days, all aircraft), 7.9 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Stoddard Hamilton	<b>Registration:</b>	N505YR
<b>Model/Series:</b>	Glasair II FT	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1995	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	2040
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	August 2, 2018 Annual	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	794.3 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-D1A
<b>Registered Owner:</b>		<b>Rated Power:</b>	160 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>	KLAR, 7272 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	00:53 Local	<b>Direction from Accident Site:</b>	251°
<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>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	270°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Temperature/Dew Point:</b>	6°C / -2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Hereford, TX (HRX )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Laramie, WY (LAR )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:10 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	LARAMIE RGNL LAR	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	7283 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	30	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6300 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	41.320278,-105.67028(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Swenson, Eric
<b>Additional Participating Persons:</b>	Josh Pritchard; FAA; Denver, CO
<b>Original Publish Date:</b>	June 5, 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=98582">https://data.nts.gov/Docket?ProjectID=98582</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).