



Aviation Investigation Final Report

Location:	Nulato, Alaska	Accident Number:	GAA18CA320
Date & Time:	June 1, 2018, 23:30 Local	Registration:	N3937M
Aircraft:	Piper PA 12	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, while landing off airport on an upsloping ridge, the tailwheel-equipped airplane "touched down harder than preferred." He applied full throttle, initiated a go-around, and attempted to turn toward the down-sloping side of the hill. The airplane briefly became airborne, but it then aerodynamically stalled and nosed down into the tundra.

The airplane sustained substantial damage to the engine mount.

The pilot reported that there were no preaccident mechanical failures or malfunctions 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 a hard landing on upsloping terrain, and his subsequent failure to maintain adequate airspeed and his exceedance of the airplane's critical angle of attack during an attempted go-around, which resulted in an aerodynamic stall.

Findings

Aircraft	Angle of attack - Capability exceeded
Aircraft	Airspeed - Not attained/maintained
Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Sloped/uneven terrain - Contributed to outcome

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-aborted after touchdown	Attempted remediation/recovery
Landing-aborted after touchdown	Nose over/nose down

Pilot Information

Certificate:	Private	Age:	53,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 19, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 24, 2018
Flight Time:	(Estimated) 315.3 hours (Total, all aircraft), 211.1 hours (Total, this make and model), 252.5 hours (Pilot In Command, all aircraft), 20.6 hours (Last 90 days, all aircraft), 16.2 hours (Last 30 days, all aircraft), 2.5 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3937M
Model/Series:	PA 12 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1947	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	12-2825
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	June 12, 2018 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:		Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	PAKV, 181 ft msl	Distance from Accident Site:	44 Nautical Miles
Observation Time:	07:53 Local	Direction from Accident Site:	156°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	13°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Galena, AK (GAL)	Type of Flight Plan Filed:	None
Destination:	Nulato, AK (NUL)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	65,-159.416671(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Andrew Noble; FAA; Fairbanks, AK
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97390

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](#).