



Aviation Investigation Final Report

Location:	Talkeetna, Alaska	Accident Number:	GAA18CA324
Date & Time:	June 4, 2018, 12:00 Local	Registration:	N7257D
Aircraft:	Piper PA 22	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that, during approach at a low level, due to "wind shear," the tailwheel-equipped airplane suddenly lost altitude. The instructor increased the engine power to full, but the airplane touched down "harder than normal." The airplane impacted the airstrip with a side load, and the left wing and left landing gear separated from the airplane, which then slid to a stop and came to rest upright.

The airplane sustained substantial damage to the left wing.

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

The instructor reported that the wind was from 180° and light and variable at 7 to 10 knots.

Probable Cause and Findings

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

The flight instructor's improper landing flare and failure to maintain a proper descent rate during approach, which resulted in a hard landing.

Findings

Personnel issues	Aircraft control - Instructor/check pilot
Aircraft	Descent rate - Not attained/maintained
Aircraft	Landing flare - Not attained/maintained

Factual Information

History of Flight

Approach	Other weather encounter
Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Abnormal runway contact

Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	Age:	37,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-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):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	June 17, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 22, 2018
Flight Time:	(Estimated) 1040 hours (Total, all aircraft), 86 hours (Total, this make and model), 900 hours (Pilot In Command, all aircraft), 231 hours (Last 90 days, all aircraft), 86 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	60,Female
Airplane Rating(s):	None	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:	Class 3 With waivers/limitations	Last FAA Medical Exam:	November 1, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7257D
Model/Series:	PA 22 150	Aircraft Category:	Airplane
Year of Manufacture:	1957	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-5084
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 17, 2017	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-320 SERIES
Registered Owner:		Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PATK,356 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	300°
Lowest Cloud Condition:	Few / 11000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.79 inches Hg	Temperature/Dew Point:	16°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TALKEETNA, AK (TKA)	Type of Flight Plan Filed:	None
Destination:	TALKEETNA, AK (TKA)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	62.43,-150.240005(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Scott D Smith; FAA; Anchorage, 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=97409

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