



Aviation Investigation Final Report

Location:	San Luis Obispo, California	Accident Number:	GAA18CA396
Date & Time:	July 8, 2018, 11:26 Local	Registration:	N411BP
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, he made a straight-in approach about 80 knots and full flaps on final. He initiated the landing flare and "felt a slight sink in lift," which resulted in a hard landing. He reported that the airplane bounced four times with each bounce increasing in height and magnitude. Subsequently, he taxied the airplane to the nearest intersection but was unable to continue because the airplane was "taxiing rough", and he believed that the nose landing gear tire was damaged.

The airplane sustained substantial damage to the left and right fuselage stringers.

Additionally, the pilot asserted that proper trim application could have helped to prevent this accident and that he should have aborted the landing after the first hard bounce.

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 a hard landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Incorrect use/operation

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing
Landing-flare/touchdown	Abnormal runway contact (Defining event)

Pilot Information

Certificate:	Private	Age:	22,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 None	Last FAA Medical Exam:	November 30, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 7, 2017
Flight Time:	(Estimated) 84.6 hours (Total, all aircraft), 5 hours (Total, this make and model), 40.2 hours (Pilot In Command, all aircraft), 7.8 hours (Last 90 days, all aircraft), 1.1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N411BP
Model/Series:	182 Q	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18266177
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	July 3, 2018 100 hour	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5663.6 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	O-470-U
Registered Owner:		Rated Power:	230 Horsepower
Operator:		Operating Certificate(s) Held:	Commuter air carrier (135), Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSBP,200 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	18:56 Local	Direction from Accident Site:	100°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	33°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Santa Barbara, CA (SBA)	Type of Flight Plan Filed:	None
Destination:	San Luis Obispo, CA (SBP)	Type of Clearance:	None
Departure Time:	10:50 Local	Type of Airspace:	Class D

Airport Information

Airport:	SAN LUIS COUNTY RGNL SBP	Runway Surface Type:	Asphalt
Airport Elevation:	212 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	6101 ft / 150 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	35.23722,-120.642501(est)

Administrative Information

Investigator In Charge (IIC): Hicks, Michael

Additional Participating Persons:

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=97710>

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](#).