



National Transportation Safety Board Aviation Accident Final Report

Location:	Chicago, IL	Accident Number:	GAA19CA558
Date & Time:	08/09/2019, 1530 CDT	Registration:	N9837L
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, during the landing flare, he was startled by the airplane impacting the runway early and then bouncing. Subsequently, the airplane touched down hard and porpoised. He increased power to abort the landing and retracted the flaps, but the airplane was unable to take off. He reduced engine power, and the airplane rolled to a stop on the runway. The airplane sustained substantial damage to the lower fuselage bulkhead. 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, porpoised landing.

Findings

Aircraft	Landing flare - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
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Pilot Information

Certificate:	Private	Age:	29, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	07/22/2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	09/21/2018
Flight Time:	(Estimated) 236 hours (Total, all aircraft), 87 hours (Total, this make and model), 201 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 39 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9837L
Model/Series:	172 P	Aircraft Category:	Airplane
Year of Manufacture:	1986	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17276629
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	06/07/2019, Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	10140 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-320-D2J
Registered Owner:	Daviation Inc.	Rated Power:	160 hp
Operator:	T&G Flying Club	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KMDW, 618 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1953 UTC	Direction from Accident Site:	66°
Lowest Cloud Condition:	Few / 7000 ft agl	Visibility	10 Miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	28° C / 11° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	South Bend, IN (SBN)	Type of Flight Plan Filed:	None
Destination:	Chicago, IL (MDW)	Type of Clearance:	VFR Flight Following
Departure Time:	1545 EDT	Type of Airspace:	Class C

Airport Information

Airport:	Chicago Midway Intl (MDW)	Runway Surface Type:	Asphalt
Airport Elevation:	619 ft	Runway Surface Condition:	Dry
Runway Used:	04L	IFR Approach:	None
Runway Length/Width:	5507 ft / 150 ft	VFR Approach/Landing:	Full Stop

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:	41.785833, -87.752500 (est)

Administrative Information

Investigator In Charge (IIC):	Michael A Hicks	Report Date:	04/13/2020
Additional Participating Persons:	Glenn Anthony; FAA; Chicago, IL		
Publish Date:	04/13/2020		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100300		

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](#).