



National Transportation Safety Board Aviation Accident Data Summary

Location:	Malden, MO	Accident Number:	GAA18CA446
Date & Time:	07/20/2018, 1700 CDT	Registration:	N46CH
Aircraft:	Cessna 310	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, while landing, the airplane "hit some turbulence," and it "felt like the bottom dropped out." Subsequently, the airplane landed hard.

The airplane sustained substantial damage to the right wing front spar.

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

The pilot reported that the wind was light and variable. The automated weather observation system about 19 nautical miles from the accident site reported that, about the time of the accident, the wind was from 220° at 7 knots, gusting to 15 knots. The pilot landed the airplane on runway 18.

Flight Events

Landing - Other weather encounter
Landing - Hard landing

Probable Cause

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

The pilot's improper landing flare in gusting wind conditions, which resulted in a hard landing.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Landing flare-Not attained/maintained - C
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
Environmental issues-Conditions/weather/phenomena-Wind-Gusts-Effect on operation

Pilot Information

Certificate:	Private	Age:	70
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	(Estimated) 2500 hours (Total, all aircraft), 2500 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N46CH
Model/Series:	310 P	Engines:	2 Reciprocating
Operator:	On file	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	None	Engine Model/Series:	IO-470-V
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KPOF, 327 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:		Wind Speed/Gusts, Direction:	7 knots / 15 knots, 220°
Temperature:	34° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Birmingham, AL (BHM)	Destination:	Sioux City, IA (SUX)

Airport Information

Airport:	Malden Rgnl (MAW)	Runway Surface Type:	Asphalt
Runway Used:	18	Runway Surface Condition:	Dry
Runway Length/Width:	5011 ft / 100 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	36.600556, -89.992222 (est)		

Administrative Information

Investigator In Charge (IIC):	Eric A Swenson	Adopted Date:	03/18/2019
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=97904		

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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.

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