



Aviation Investigation Final Report

Location:	Lakeland, Florida	Accident Number:	GAA18CA151
Date & Time:	March 7, 2018, 09:30 Local	Registration:	N2221R
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot reported that, during the approach, the "winds got very powerful," He added that the winds were "too strong and out of [his] capacity and personal minimums." During the landing, the airplane landed flat and bounced twice. He then taxied to park without further incident.

The airplane sustained substantial damage to the fuselage.

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

The automated weather observation system about 2 nautical miles from the accident site reported that, about the time of the accident, the wind was from 340° at 9 knots, gusting to 15 knots. The student pilot landed on runway 27.

Probable Cause and Findings

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

The student pilot's improper landing flare in gusting crosswind conditions, which resulted in a bounced landing.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot
Environmental issues	Crosswind - Effect on operation
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Approach-VFR pattern final	Other weather encounter
Landing	Abnormal runway contact (Defining event)

Student pilot Information

Certificate:	Student	Age:	18,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	September 14, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 69.5 hours (Total, all aircraft), 69.5 hours (Total, this make and model), 7.5 hours (Pilot In Command, all aircraft), 43.9 hours (Last 90 days, all aircraft), 37.2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2221R
Model/Series:	172 R	Aircraft Category:	Airplane
Year of Manufacture:	1998	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	17280681
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 5, 2018 100 hour	Certified Max Gross Wt.:	2457 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	8326.2 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLAL,142 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	14:49 Local	Direction from Accident Site:	294°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 8000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	19°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lakeland, FL (LAL)	Type of Flight Plan Filed:	None
Destination:	Lakeland, FL (LAL)	Type of Clearance:	VFR
Departure Time:	08:50 Local	Type of Airspace:	Class D

Airport Information

Airport:	LAKELAND LINDER RGNL LAL	Runway Surface Type:	Asphalt
Airport Elevation:	142 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	8499 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	27.988056,-82.019721(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Donald R Andrews; FAA; Orlando, FL
Original Publish Date:	June 14, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96842

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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](#).