



Aviation Investigation Final Report

Location:	Naples, Florida	Accident Number:	GAA17CA180
Date & Time:	February 17, 2017, 11:50 Local	Registration:	N737RT
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot on the controls reported that, during landing while about 70 knots, the airplane buffeted and was pushed to the right of the runway centerline. The pilot recovered and realigned the airplane with the nose on the centerline. He reported that, when he entered the flare, the airplane encountered another wind gust, and the airplane ballooned. The airplane descended and pitched down and landed hard on the nose gear. The propeller struck the ground, and the pilot landed the airplane without further incident. The airplane sustained substantial damage to the firewall.

The METAR reported that the wind was variable at 05 knots about the time of the accident.

The pilot reported that there were no preaccident 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 failure to maintain pitch control, which resulted in a hard landing.

Findings

Aircraft	Pitch control - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing	Hard landing (Defining event)
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Pilot Information

Certificate:	Private	Age:	75,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
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 With waivers/limitations	Last FAA Medical Exam:	February 25, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 12, 2015
Flight Time:	(Estimated) 3500 hours (Total, all aircraft), 900 hours (Total, this make and model), 3450 hours (Pilot In Command, all aircraft)		

Co-pilot Information

Certificate:	Airline transport; Flight engineer	Age:	70,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None With waivers/limitations	Last FAA Medical Exam:	October 23, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 23, 2007
Flight Time:	(Estimated) 20836 hours (Total, all aircraft), 140 hours (Total, this make and model), 15705 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N737RT
Model/Series:	172 N	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17269622
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 9, 2016 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3835.7 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, not activated	Engine Model/Series:	O-320 H2AD
Registered Owner:		Rated Power:	160 Horsepower
Operator:	On file	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:	KAPF, 9 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	135°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 1200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.8 inches Hg	Temperature/Dew Point:	26°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Naples, FL (APF)	Type of Flight Plan Filed:	None
Destination:	Naples, FL (APF)	Type of Clearance:	VFR
Departure Time:	10:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	NAPLES MUNI APF	Runway Surface Type:	Asphalt
Airport Elevation:	8 ft msl	Runway Surface Condition:	Dry
Runway Used:	05	IFR Approach:	None
Runway Length/Width:	6600 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

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:	26.148332,-81.774719(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Juan C Garcia; FAA; Miramar, FL
Original Publish Date:	September 22, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94845

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](#).