



Aviation Investigation Final Report

Location:	Winchester, Virginia	Accident Number:	GAA16CA460
Date & Time:	August 30, 2016, 12:30 Local	Registration:	N2462E
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 the airplane ballooned during the landing flare and touched down beyond the planned touchdown point. He further reported that the airplane porpoised and on the third bounce he felt a vibration. Subsequently, the airplane departed the runway to the left and stopped in grass next to the runway.

The firewall sustained substantial damage.

The student pilot reported 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 student pilot's incorrect pitch control during the landing flare, which resulted in a porpoise, a loss of directional control, and a runway excursion.

Findings

Aircraft	Pitch control - Incorrect use/operation
Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Directional control - Not attained/maintained

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing-landing roll	Loss of control on ground
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

Student pilot Information

Certificate:	Student	Age:	42,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	January 20, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 66 hours (Total, all aircraft), 49 hours (Total, this make and model), 3 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2462E
Model/Series:	172 N	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17271291
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 24, 2016 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	9923.2 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	O-320-H2AD
Registered Owner:		Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KOKV, 726 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:35 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.15 inches Hg	Temperature/Dew Point:	28°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MARTINSBURG, WV (MRB)	Type of Flight Plan Filed:	None
Destination:	Winchester, VA (OKV)	Type of Clearance:	VFR
Departure Time:	12:10 Local	Type of Airspace:	Class G

Airport Information

Airport:	WINCHESTER RGNL OKV	Runway Surface Type:	Asphalt
Airport Elevation:	726 ft msl	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	5498 ft / 100 ft	VFR Approach/Landing:	Stop and go;Traffic pattern

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:	39.143611,-78.144447(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	John Teehan; FAA; Dulles, VA
Original Publish Date:	December 5, 2016
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93935

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