



Aviation Investigation Final Report

Location:	Lynchburg, Virginia	Accident Number:	GAA17CA540
Date & Time:	September 15, 2017, 20:00 Local	Registration:	N5396D
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 landing, the airplane approached with "extra speed" and ballooned in the landing flare. He added that, "instantly my training took over" and he applied power to go-around, but then also remembered he could not go around when landing in this direction, at this airport, due to terrain and obstacles. He further added that he then reduced power to idle and "stalled the airplane to the ground" and impacted the remaining runway hard. Subsequently, he taxied the airplane to the ramp without further incident.

The ailerons, wings, and firewall sustained substantial damage.

During a telephone conversation with the NTSB investigator-in-charge, the pilot reported that he had flown into this airport numerous times prior to the accident and knew that, "once you get to the powerlines you are committed to landing." The power lines were located about ¼ nautical miles from the runway threshold.

The pilot did not report that there were any preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The Federal Aviation Administration Chart Supplement for the airport stated in part: "Land Rwy [runway] 28 (west) tkf [takeoff] Rwy [runway] 10 (east)." The pilot reported that the landing was on runway 28.

Probable Cause and Findings

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

The pilot's unstabilized approach, which resulted in an aborted go-around, an aerodynamic stall, and a hard landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Descent/approach/glide path - Incorrect use/operation
Aircraft	Angle of attack - Capability exceeded
Aircraft	Airspeed - Incorrect use/operation
Environmental issues	Mountainous/hilly terrain - Contributed to outcome

Factual Information

History of Flight

Approach-VFR go-around	Aerodynamic stall/spin
Approach-VFR go-around	Loss of control in flight
Landing-flare/touchdown	Hard landing (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	24, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	June 13, 2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 20, 2017
Flight Time:	(Estimated) 351 hours (Total, all aircraft), 7 hours (Total, this make and model), 194 hours (Pilot In Command, all aircraft), 88 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5396D
Model/Series:	172 N	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17272562
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320 SERIES
Registered Owner:		Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KLYH, 938 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	23:54 Local	Direction from Accident Site:	220°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	22°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hanover, VA (OFP)	Type of Flight Plan Filed:	None
Destination:	Lynchburg, VA (W24)	Type of Clearance:	None
Departure Time:	19:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	FALWELL W24	Runway Surface Type:	Asphalt
Airport Elevation:	939 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	2932 ft / 50 ft	VFR Approach/Landing:	Full stop;Go around;Traffic pattern

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:	37.378055,-79.122222(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Stephen Harness; FAA/ FSDO; Richmond, VA
Original Publish Date:	September 10, 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=96033

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