



# **Aviation Investigation Final Report**

Location: Burlington, North Carolina Accident Number: GAA17CA140

**Date & Time:** February 16, 2017, 09:55 Local **Registration:** N381MG

Aircraft: Cessna 172 Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot reported that, during landing in a gusting crosswind, following the main wheels touching down and as the nosewheel was about to touch down, the airplane "abruptly lifted into the air." He immediately added full power to go-around, but the airplane drifted to the left off the runway surface and impacted an embankment.

The left wing sustained substantial damage.

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

The automated weather observing station at the accident airport, about the time of the accident, recorded wind from 270° at 16 knots, gusting to 31 knots. A peak wind of 260° at 31 knots was recorded about 5 minutes before the accident. The airplane landed on runway 24.

#### **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 the runway heading during an attempted go-around in gusting crosswind conditions, which resulted in a runway excursion.

### **Findings**

Personnel issues Aircraft control - Pilot

Aircraft Heading/course - Not attained/maintained

Aircraft Climb rate - Not attained/maintained

Environmental issues Crosswind - Effect on operation

**Environmental issues** Gusts - Effect on operation

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# **Factual Information**

# **History of Flight**

Landing-flare/touchdown	Other weather encounter
Approach-VFR go-around	Other weather encounter
Approach-VFR go-around	Loss of control in flight (Defining event)
Approach-VFR go-around	Collision with terr/obj (non-CFIT)

### **Pilot Information**

Certificate:	Private	Age:	39,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 2 With waivers/limitations	Last FAA Medical Exam:	November 16, 2013
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 12, 2017
Flight Time:	(Estimated) 159.6 hours (Total, all aircraft), 68.3 hours (Total, this make and model), 121.8 hours (Pilot In Command, all aircraft), 27.8 hours (Last 90 days, all aircraft), 23.6 hours (Last 30 days, all aircraft), 0.6 hours (Last 24 hours, all aircraft)		

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### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N381MG
Model/Series:	172 M	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17265873
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 24, 2016 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3955.4 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, not activated	Engine Model/Series:	0-320-E2D
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:	KBUY,616 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:54 Local	Direction from Accident Site:	0°
<b>Lowest Cloud Condition:</b>	Few / 7000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	16 knots / 31 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.87 inches Hg	Temperature/Dew Point:	6°C / -11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Burlington, NC (BUY)	Type of Flight Plan Filed:	None
Destination:	Burlington, NC (BUY)	Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	Class G

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#### **Airport Information**

Airport:	BURLINGTON-ALAMANCE RGNL BUY	Runway Surface Type:	Asphalt
Airport Elevation:	616 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	6405 ft / 100 ft	VFR Approach/Landing:	Go around;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:	36.04972,-79.473052(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Robert Doriski; FAA/ FSDO; Greensboro, NC
Original Publish Date:	May 15, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=94726

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.

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