



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Lebanon, Kentucky | Accident Number: | GAA19CA367 |
| Date & Time: | June 15, 2019, 10:00 Local | Registration: | N75903 |
| Aircraft: | Cessna 172 | Aircraft Damage: | Substantial |
| Defining Event: | Loss of control on ground | Injuries: | 2 Minor |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot reported that, during the landing roll, the airplane encountered a "big gust of wind," and the airplane veered left. The airplane exited the runway, impacted a ditch, and nosed over.

The airplane sustained substantial damage to the fuselage, vertical stabilizer, and both wings.

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

The airport's automated weather observation station reported that, about 10 minutes after the accident, the wind was from 190° at 10 knots, gusting to 18 knots. The pilot landed the airplane on runway 11. The calculated crosswind component was about 14 knots.

The manufacturer's Pilot's Operating Handbook stated, "The maximum allowable crosswind velocity is dependent upon pilot capability as well as aircraft limitations. With average pilot technique, direct crosswinds of 15 knots can be handled with safety."

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 directional control during landing in gusting crosswind conditions, which resulted in a runway excursion, impact with a ditch, and subsequent nose-over.

Findings

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| Aircraft | Directional control - Not attained/maintained |
| Personnel issues | Aircraft control - Pilot |
| Environmental issues | Gusts - Effect on operation |
| Environmental issues | Crosswind - Effect on operation |

Factual Information

History of Flight

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| Landing | Other weather encounter |
| Landing | Loss of control on ground (Defining event) |
| Landing | Runway excursion |
| Landing | Collision with terr/obj (non-CFIT) |
| Landing | Nose over/nose down |

Pilot Information

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|---------------------------|--|-----------------------------------|------------------|
| Certificate: | Private | Age: | 58,Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | Lap only |
| 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: | August 3, 2018 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | January 20, 2018 |
| Flight Time: | (Estimated) 292 hours (Total, all aircraft), 292 hours (Total, this make and model), 203 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--|---------------------------------------|-----------------|
| Aircraft Make: | Cessna | Registration: | N75903 |
| Model/Series: | 172 N | Aircraft Category: | Airplane |
| Year of Manufacture: | 1976 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 17268027 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | April 11, 2019 100 hour | Certified Max Gross Wt.: | 2300 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 5956.8 Hrs at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | O-320-H2AD |
| Registered Owner: | Lexington Flying Club | Rated Power: | 160 Horsepower |
| Operator: | Lexington Flying Club | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | 612,871 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 14:10 Local | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / 18 knots | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | 190° | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 30.04 inches Hg | Temperature/Dew Point: | 23°C / 14°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Georgetown, KY (27K) | Type of Flight Plan Filed: | None |
| Destination: | Lebanon, KY (6I2) | Type of Clearance: | VFR flight following |
| Departure Time: | 09:00 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|---------------------------------------|----------------------------------|---------------------------|
| Airport: | LEBANON SPRINGFIELD-GEORGE HOE 6I2 | Runway Surface Type: | Asphalt |
| Airport Elevation: | 871 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 11 | IFR Approach: | None |
| Runway Length/Width: | 5001 ft / 75 ft | VFR Approach/Landing: | Full stop;Traffic pattern |

Wreckage and Impact Information

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|----------------------------|---------|-----------------------------|---------------------------|
| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Minor | Latitude, Longitude: | 37.633609,-85.241943(est) |

Administrative Information

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| Investigator In Charge (IIC): | Gutierrez, Eric |
| Additional Participating Persons: | Ronald Killingsworth; FAA; Louisville , KY |
| Original Publish Date: | November 6, 2019 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=99696 |

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