



Aviation Investigation Final Report

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|--------------------------------|---|-------------------------|-------------|
| Location: | Pella, Iowa | Accident Number: | GAA19CA193 |
| Date & Time: | March 26, 2019, 14:50 Local | Registration: | N7127G |
| Aircraft: | Cessna 172 | Aircraft Damage: | Substantial |
| Defining Event: | Nose over/nose down | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Instructional | | |

Analysis

The flight instructor reported that, during the landing with the student pilot on the flight controls, about 5 to 10 ft above the ground, a wind gust caused the airplane to drift right. The instructor assumed control of the airplane, attempted to correct, applied full power, and initiated a go-around. The instructor stated that the airplane was "low and slow," and the left main landing gear contacted the runway, and the airplane drifted left. Concerned the airplane would not gain significant altitude to clear the buildings in the flightpath, the instructor chose to land in the grass left of the runway. Subsequently, the airplane encountered soft terrain and nosed over.

The airplane sustained substantial damage to the aft fuselage and rudder.

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

About the time of the accident, the airport's automated weather observation station reported that the wind was from 170° at 5 knots. The student was landing the airplane on runway 16.

Probable Cause and Findings

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

The student pilot's failure to maintain the runway heading and the flight instructor's delayed remedial action during landing, which resulted in the instructor landing the airplane in grass left of the runway and a subsequent nose-over.

Findings

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| Aircraft | Heading/course - Not attained/maintained |
| Personnel issues | Aircraft control - Student/instructed pilot |
| Personnel issues | Delayed action - Instructor/check pilot |
| Environmental issues | Soft surface - Effect on operation |

Factual Information

History of Flight

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| Landing | Loss of control in flight |
| Landing | Attempted remediation/recovery |
| Landing-aborted after touchdown | Abnormal runway contact |
| Landing | Nose over/nose down (Defining event) |

Flight instructor Information

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|----------------------------------|--|--|------------------|
| Certificate: | Commercial; Flight instructor | Age: | 41,Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Right |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 2 Without waivers/limitations | Last FAA Medical Exam: | October 22, 2018 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | October 16, 2018 |
| Flight Time: | (Estimated) 562.2 hours (Total, all aircraft), 314.5 hours (Total, this make and model), 494.8 hours (Pilot In Command, all aircraft), 61.5 hours (Last 90 days, all aircraft), 14.8 hours (Last 30 days, all aircraft), 2.2 hours (Last 24 hours, all aircraft) | | |

Student pilot Information

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|----------------------------------|--|--|--------------------|
| Certificate: | Student | Age: | 17,Female |
| Airplane Rating(s): | None | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | None | Second Pilot Present: | Yes |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Without waivers/limitations | Last FAA Medical Exam: | September 28, 2017 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | (Estimated) 51 hours (Total, all aircraft), 42.4 hours (Total, this make and model), 3 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 3.9 hours (Last 30 days, all aircraft), 2.2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|---------------------------------|---------------------------------------|-----------------|
| Aircraft Make: | Cessna | Registration: | N7127G |
| Model/Series: | 172 K | Aircraft Category: | Airplane |
| Year of Manufacture: | 1969 | Amateur Built: | |
| Airworthiness Certificate: | Normal; Utility | Serial Number: | 17258827 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | January 17, 2019 Annual | Certified Max Gross Wt.: | 2300 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 10600 Hrs as of last inspection | Engine Manufacturer: | Lycoming |
| ELT: | C126 installed, not activated | Engine Model/Series: | O-320-E2D |
| Registered Owner: | | Rated Power: | 150 Horsepower |
| Operator: | | 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: | KPEA, 885 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 21:55 Local | Direction from Accident Site: | 186° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 5 knots / | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | 170° | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 30.31 inches Hg | Temperature/Dew Point: | 14°C / -2°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Pella, IA (PEA) | Type of Flight Plan Filed: | Unknown |
| Destination: | Pella, IA (PEA) | Type of Clearance: | Unknown |
| Departure Time: | | Type of Airspace: | Class G |

Airport Information

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| Airport: | Pella Muni PEA | Runway Surface Type: | Concrete |
| Airport Elevation: | 884 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 16 | IFR Approach: | None |
| Runway Length/Width: | 5403 ft / 75 ft | VFR Approach/Landing: | Full stop;Go around;Traffic pattern |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|---------------------------|
| 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: | 41.401111,-92.945831(est) |

Administrative Information

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| Investigator In Charge (IIC): | Gutierrez, Eric |
| Additional Participating Persons: | Kendall D Arkema; FAA; Des Moines , IA |
| Original Publish Date: | November 6, 2019 |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=99213 |

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](#).