



Aviation Investigation Final Report

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|--------------------------------|---|-------------------------|-------------|
| Location: | Salina, Kansas | Accident Number: | GAA19CA042 |
| Date & Time: | October 26, 2018, 14:30 Local | Registration: | N822KS |
| Aircraft: | Cessna 172 | Aircraft Damage: | Substantial |
| Defining Event: | Hard landing | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Instructional | | |

Analysis

The solo student pilot reported that, while performing a touch-and-go landing, upon touchdown, the airplane landed hard and bounced. He added full power to go around, determined that the airplane was flying normally, and continued in the traffic pattern. He landed the airplane a second time, and it bounced a little, and he then taxied the airplane to the ramp without further incident.

The airplane sustained substantial damage to the fuselage.

The student reported that there were no preaccident mechanical failures or malfunctions 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 improper landing flare, which resulted in a hard, bounced landing.

Findings

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| Aircraft | Landing flare - Not attained/maintained |
| Personnel issues | Aircraft control - Student/instructed pilot |

Factual Information

History of Flight

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| Landing | Hard landing (Defining event) |
| Landing | Attempted remediation/recovery |
| Landing | Miscellaneous/other |

Student pilot Information

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|---------------------------|--|-----------------------------------|---------------|
| Certificate: | Student | Age: | 18,Male |
| Airplane Rating(s): | None | 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 1 With waivers/limitations | Last FAA Medical Exam: | June 18, 2018 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | (Estimated) 21.5 hours (Total, all aircraft), 21.5 hours (Total, this make and model), 0.4 hours (Pilot In Command, all aircraft), 21.5 hours (Last 90 days, all aircraft), 9.6 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|-------------------------------|--------------------------------|--------------------------------|--------------------|
| Aircraft Make: | Cessna | Registration: | N822KS |
| Model/Series: | 172 R | Aircraft Category: | Airplane |
| Year of Manufacture: | 1998 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 17280545 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | August 24, 2018 Annual | Certified Max Gross Wt.: | 2450 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 7488 Hrs as of last inspection | Engine Manufacturer: | Lycoming |
| ELT: | C126 installed, not activated | Engine Model/Series: | IO-360-L2A |
| Registered Owner: | | Rated Power: | 180 Horsepower |
| Operator: | | Operating Certificate(s) Held: | Pilot school (141) |

Meteorological Information and Flight Plan

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| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | KSLN,1289 ft msl | Distance from Accident Site: | 1 Nautical Miles |
| Observation Time: | 19:53 Local | Direction from Accident Site: | 200° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 4 knots / | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | 320° | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 29.88 inches Hg | Temperature/Dew Point: | 17°C / 9°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Salina, KS (SLN) | Type of Flight Plan Filed: | None |
| Destination: | Salina, KS (SLN) | Type of Clearance: | VFR |
| Departure Time: | 14:00 Local | Type of Airspace: | Class D |

Airport Information

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|-----------------------------|-----------------|----------------------------------|--------------|
| Airport: | SALINA RGNL SLN | Runway Surface Type: | Asphalt |
| Airport Elevation: | 1288 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 36 | IFR Approach: | None |
| Runway Length/Width: | 4301 ft / 75 ft | VFR Approach/Landing: | Touch and go |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|---------------------------|
| 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: | 38.784999,-97.645835(est) |

Administrative Information

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| Investigator In Charge (IIC): | Benhoff, Kathryn |
| Additional Participating Persons: | Megan Sayre; FAA; Wichita, KS |
| Original Publish Date: | June 5, 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=98579 |

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](#).