



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Danville, Kentucky                   | <b>Accident Number:</b> | ERA24LA352  |
| <b>Date &amp; Time:</b>        | July 19, 2024, 16:00 Local           | <b>Registration:</b>    | N9991E      |
| <b>Aircraft:</b>               | Cessna 172                           | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Hard landing                         | <b>Injuries:</b>        | 3 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

The private pilot (who was the pilot-in-command for the flight) was flying with two passengers, one of whom was seated in the right front pilot seat, held a commercial pilot certificate, and had more flight experience than the private pilot. The pilot-rated passenger in the right front seat reported that during the approach, she had commented to the pilot twice about the airplane's airspeed, and that she had nudged the yoke forward with one finger as an indication to the pilot to lower the nose; however, the pilot pulled back on the yoke and added power to cushion the landing, which resulted in several bounces on the runway before the airplane traveled off the left side. She further described that the landing flare occurred while the airplane too high above the runway and at too slow a speed, about 15 ft above the runway and at an airspeed decreasing to less than 50 knots.

The pilot reported that during the landing attempt, after the pilot-rated passenger pushed the yoke forward, he pulled back because he did not want the nose of the airplane to strike the runway first, which resulted in a hard landing and subsequent bounce. As the pilot was attempting to regain control of the airplane, the pilot-rated passenger increased the engine power to full in attempt to abort the landing, but the airplane then veered to the left and departed the runway surface. The airplane came to rest upright in a grass area next to the runway. The fuselage was substantially damaged during the accident sequence. The pilot reported that there were no preimpact mechanical malfunctions or failures of the airplane that would have precluded normal operation. He also stated that, "...we will need to improve the communication between me as the PIC and [any pilot-rated passengers] such as informing me of their concern rather than touching the control, especially during landing."

# 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 control of the airplane while landing and his inadequate communication to the pilot-rated passenger of her role during the flight.

## Findings

|                  |                                               |
|------------------|-----------------------------------------------|
| Personnel issues | Aircraft control - Pilot                      |
| Aircraft         | Landing flare - Not attained/maintained       |
| Aircraft         | Directional control - Not attained/maintained |
| Personnel issues | Lack of communication - Pilot                 |

## Factual Information

### History of Flight

|         |                                    |
|---------|------------------------------------|
| Landing | Hard landing (Defining event)      |
| Landing | Loss of control on ground          |
| Landing | Runway excursion                   |
| Landing | Collision with terr/obj (non-CFIT) |

### Pilot Information

|                           |                                                                                                                                                                                                                                      |                                   |                  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------|
| Certificate:              | Private                                                                                                                                                                                                                              | Age:                              | 30,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:             | Yes              |
| Instructor Rating(s):     | None                                                                                                                                                                                                                                 | Toxicology Performed:             |                  |
| Medical Certification:    | Class 1 With waivers/limitations                                                                                                                                                                                                     | Last FAA Medical Exam:            | February 2, 2024 |
| Occupational Pilot:       | No                                                                                                                                                                                                                                   | Last Flight Review or Equivalent: | August 14, 2023  |
| Flight Time:              | 148 hours (Total, all aircraft), 26 hours (Total, this make and model), 93 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft) |                                   |                  |

### Pilot-rated passenger Information

|                           |                                       |                                   |                 |
|---------------------------|---------------------------------------|-----------------------------------|-----------------|
| Certificate:              | Commercial                            | Age:                              | Female          |
| Airplane Rating(s):       | Single-engine land; Multi-engine land | Seat Occupied:                    | Right           |
| Other Aircraft Rating(s): | None                                  | Restraint Used:                   | 3-point         |
| Instrument Rating(s):     | None                                  | Second Pilot Present:             | Yes             |
| Instructor Rating(s):     | None                                  | Toxicology Performed:             |                 |
| Medical Certification:    | Class 2 With waivers/limitations      | Last FAA Medical Exam:            | January 2, 2021 |
| Occupational Pilot:       | No                                    | Last Flight Review or Equivalent: |                 |
| Flight Time:              |                                       |                                   |                 |

## Aircraft and Owner/Operator Information

|                                      |                              |                                       |                 |
|--------------------------------------|------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Cessna                       | <b>Registration:</b>                  | N9991E          |
| <b>Model/Series:</b>                 | 172 N                        | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                              | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                       | <b>Serial Number:</b>                 | 17272308        |
| <b>Landing Gear Type:</b>            | Tricycle                     | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> |                              | <b>Certified Max Gross Wt.:</b>       | 2300 lbs        |
| <b>Time Since Last Inspection:</b>   |                              | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          |                              | <b>Engine Manufacturer:</b>           | Lycoming        |
| <b>ELT:</b>                          | Installed, not activated     | <b>Engine Model/Series:</b>           | O-320           |
| <b>Registered Owner:</b>             | WINGS FLIGHT ENTERPRISES INC | <b>Rated Power:</b>                   | 160 Horsepower  |
| <b>Operator:</b>                     | WINGS FLIGHT ENTERPRISES INC | <b>Operating Certificate(s) Held:</b> | None            |

## Meteorological Information and Flight Plan

|                                         |                     |                                             |                  |
|-----------------------------------------|---------------------|---------------------------------------------|------------------|
| <b>Conditions at Accident Site:</b>     | Visual (VMC)        | <b>Condition of Light:</b>                  | Day              |
| <b>Observation Facility, Elevation:</b> | DVK,1022 ft msl     | <b>Distance from Accident Site:</b>         | 0 Nautical Miles |
| <b>Observation Time:</b>                | 15:50 Local         | <b>Direction from Accident Site:</b>        | 0°               |
| <b>Lowest Cloud Condition:</b>          | Clear               | <b>Visibility</b>                           | 10 miles         |
| <b>Lowest Ceiling:</b>                  | None                | <b>Visibility (RVR):</b>                    |                  |
| <b>Wind Speed/Gusts:</b>                | 3 knots / None      | <b>Turbulence Type Forecast/Actual:</b>     | None / None      |
| <b>Wind Direction:</b>                  | 220°                | <b>Turbulence Severity Forecast/Actual:</b> | N/A / N/A        |
| <b>Altimeter Setting:</b>               | 30.09 inches Hg     | <b>Temperature/Dew Point:</b>               | 29°C / 13°C      |
| <b>Precipitation and Obscuration:</b>   |                     |                                             |                  |
| <b>Departure Point:</b>                 | Knoxville, TN (DKK) | <b>Type of Flight Plan Filed:</b>           | None             |
| <b>Destination:</b>                     | Danville, KY        | <b>Type of Clearance:</b>                   | None             |
| <b>Departure Time:</b>                  | 14:45 Local         | <b>Type of Airspace:</b>                    | Class G          |

## Airport Information

|                             |                   |                                  |                           |
|-----------------------------|-------------------|----------------------------------|---------------------------|
| <b>Airport:</b>             | Stuart Powell DVK | <b>Runway Surface Type:</b>      | Asphalt                   |
| <b>Airport Elevation:</b>   | 1022 ft msl       | <b>Runway Surface Condition:</b> | Dry                       |
| <b>Runway Used:</b>         | 13                | <b>IFR Approach:</b>             | None                      |
| <b>Runway Length/Width:</b> | 5000 ft / 75 ft   | <b>VFR Approach/Landing:</b>     | Full stop;Traffic pattern |

## Wreckage and Impact Information

|                            |        |                             |                      |
|----------------------------|--------|-----------------------------|----------------------|
| <b>Crew Injuries:</b>      | 1 None | <b>Aircraft Damage:</b>     | Substantial          |
| <b>Passenger Injuries:</b> | 2 None | <b>Aircraft Fire:</b>       | None                 |
| <b>Ground Injuries:</b>    |        | <b>Aircraft Explosion:</b>  | None                 |
| <b>Total Injuries:</b>     | 3 None | <b>Latitude, Longitude:</b> | 37.577575,-84.769498 |

## Administrative Information

|                                          |                                                                                                         |
|------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Investigator In Charge (IIC):</b>     | Gretz, Robert                                                                                           |
| <b>Additional Participating Persons:</b> | Mark McLeroy; FAA/FSDO; Louisville, KY                                                                  |
| <b>Original Publish Date:</b>            | November 19, 2024                                                                                       |
| <b>Last Revision Date:</b>               |                                                                                                         |
| <b>Investigation Class:</b>              | <a href="#">Class 4</a>                                                                                 |
| <b>Note:</b>                             | The NTSB did not travel to the scene of this accident.                                                  |
| <b>Investigation Docket:</b>             | <a href="https://data.nts.gov/Docket?ProjectID=194966">https://data.nts.gov/Docket?ProjectID=194966</a> |

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).