



# Aviation Investigation Final Report

|                                |   |                         |             |
|--------------------------------|---|-------------------------|-------------|
| <b>Location:</b>               | DeKalb, Illinois                          | <b>Accident Number:</b> | CEN23LA193  |
| <b>Date &amp; Time:</b>        | May 19, 2023, 16:45 Local                 | <b>Registration:</b>    | N442TM      |
| <b>Aircraft:</b>               | Piper PA32RT                              | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Loss of control in flight                 | <b>Injuries:</b>        | 3 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Instructional |                         |             |

## Analysis

The flight instructor reported that the pilot was receiving landing training in his airplane. As the airplane touched down on the runway, a gust of wind caused it to balloon. The flight instructor ordered the pilot to go around, and the airplane accelerated to 85 kts in a slight climb. About 25 feet above the ground the airplane abruptly and rapidly pitched over to about 20° nose low. The flight instructor immediately came on the control yoke and pulled but received no response to his pull. The airplane impacted the runway about 10° nose low and slid off the left side into the grass where it came to a stop. The pilot, flight instructor, and a passenger egressed the airplane without incident. The airplane sustained substantial damage to both wings. The flight instructor reported there were no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

At the time of the accident the airplane was landing on runway 27 with wind 290° at 14 kts gusting to 19 kts.

The pilot reported that the nose dropped dramatically and that neither he nor the flight instructor had time to react with additional back pressure on the control yoke. The pilot said during the pitch over that his hands never left the control yoke.

The flight instructor further reported that light clear air turbulence was present at the time and “windshear caused our demise.”

## 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 aircraft control during a go-around in gusting winds. Contributing was the presence of windshear.

## Findings

|                             |   |
|-----------------------------|---|
| <b>Environmental issues</b> | Windshear - Effect on equipment           |
| <b>Personnel issues</b>     | Aircraft control - Instructor/check pilot |
| <b>Aircraft</b>             | Altitude - Not attained/maintained        |

## Factual Information

### History of Flight

|                            |  |
|----------------------------|--|
| Approach-VFR pattern final | Simulated/training event                   |
| Approach-VFR pattern final | Other weather encounter                    |
| Approach-VFR go-around     | Windshear or thunderstorm                  |
| Approach-VFR go-around     | Attempted remediation/recovery             |
| Approach-VFR go-around     | Loss of control in flight (Defining event) |
| Approach-VFR go-around     | Collision with terr/obj (non-CFIT)         |
| Landing-flare/touchdown    | Runway excursion                           |

### Flight instructor Information

|                           |   |                                   |                 |
|---------------------------|---|-----------------------------------|-----------------|
| Certificate:              | Airline transport; Flight engineer; Flight instructor   | Age:                              | 76,Male         |
| Airplane Rating(s):       | Single-engine land; Multi-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 multi-engine; Airplane single-engine; Instrument airplane  | Toxicology Performed:             |                 |
| Medical Certification:    | BasicMed None   | Last FAA Medical Exam:            | August 29, 2022 |
| Occupational Pilot:       | No  | Last Flight Review or Equivalent: | May 22, 2023    |
| Flight Time:              | (Estimated) 24250 hours (Total, all aircraft), 30 hours (Total, this make and model), 16755 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft) |                                   |                 |

### Pilot Information

|                           |   |                                   |               |
|---------------------------|---|-----------------------------------|---------------|
| Certificate:              | Private   | Age:                              | 60,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:    | BasicMed None   | Last FAA Medical Exam:            | May 1, 2023   |
| Occupational Pilot:       | No  | Last Flight Review or Equivalent: | March 1, 2023 |
| Flight Time:              | (Estimated) 231 hours (Total, all aircraft), 1 hours (Last 90 days, all aircraft) |                                   |               |

## Aircraft and Owner/Operator Information

|                                      |                                   |                                       |                  |
|--------------------------------------|-----------------------------------|---------------------------------------|------------------|
| <b>Aircraft Make:</b>                | Piper                             | <b>Registration:</b>                  | N442TM           |
| <b>Model/Series:</b>                 | PA32RT 300T                       | <b>Aircraft Category:</b>             | Airplane         |
| <b>Year of Manufacture:</b>          | 1978                              | <b>Amateur Built:</b>                 |                  |
| <b>Airworthiness Certificate:</b>    | Normal                            | <b>Serial Number:</b>                 | 32R-7887225      |
| <b>Landing Gear Type:</b>            | Retractable - Tricycle            | <b>Seats:</b>                         | 6                |
| <b>Date/Type of Last Inspection:</b> | April 2, 2023 Annual              | <b>Certified Max Gross Wt.:</b>       | 3600 lbs         |
| <b>Time Since Last Inspection:</b>   |                                   | <b>Engines:</b>                       | 1 Reciprocating  |
| <b>Airframe Total Time:</b>          | 3180.48 Hrs as of last inspection | <b>Engine Manufacturer:</b>           | Lycoming Engines |
| <b>ELT:</b>                          | Installed, not activated          | <b>Engine Model/Series:</b>           | TIO-540-S1AD     |
| <b>Registered Owner:</b>             | Rice Heritage Equipment, LLC      | <b>Rated Power:</b>                   | 300 Horsepower   |
| <b>Operator:</b>                     | On file                           | <b>Operating Certificate(s) Held:</b> | None             |
| <b>Operator Does Business As:</b>    | None                              | <b>Operator Designator Code:</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> | KDKB, 915 ft msl                 | <b>Distance from Accident Site:</b>         | 0 Nautical Miles |
| <b>Observation Time:</b>                | 16:35 Local                      | <b>Direction from Accident Site:</b>        | 315°             |
| <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>                | 16 knots / 20 knots              | <b>Turbulence Type Forecast/Actual:</b>     | None / Clear air |
| <b>Wind Direction:</b>                  | 290°                             | <b>Turbulence Severity Forecast/Actual:</b> | N/A / Light      |
| <b>Altimeter Setting:</b>               | 30.01 inches Hg                  | <b>Temperature/Dew Point:</b>               | 19°C / 9°C       |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                  |
| <b>Departure Point:</b>                 | DeKalb, IL                       | <b>Type of Flight Plan Filed:</b>           | None             |
| <b>Destination:</b>                     | DeKalb, IL                       | <b>Type of Clearance:</b>                   | None             |
| <b>Departure Time:</b>                  |                                  | <b>Type of Airspace:</b>                    | Class E          |

## Airport Information

|                             |                         |                                  |                           |
|-----------------------------|-------------------------|----------------------------------|---------------------------|
| <b>Airport:</b>             | DE KALB TAYLOR MUNI DKB | <b>Runway Surface Type:</b>      | Concrete                  |
| <b>Airport Elevation:</b>   | 912 ft msl              | <b>Runway Surface Condition:</b> | Dry                       |
| <b>Runway Used:</b>         | 27                      | <b>IFR Approach:</b>             | None                      |
| <b>Runway Length/Width:</b> | 4201 ft / 75 ft         | <b>VFR Approach/Landing:</b>     | Go around;Traffic pattern |

## Wreckage and Impact Information

|                            |        |                             |                           |
|----------------------------|--------|-----------------------------|---------------------------|
| <b>Crew Injuries:</b>      | 2 None | <b>Aircraft Damage:</b>     | Substantial               |
| <b>Passenger Injuries:</b> | 1 None | <b>Aircraft Fire:</b>       | None                      |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                      |
| <b>Total Injuries:</b>     | 3 None | <b>Latitude, Longitude:</b> | 41.929042,-88.704057(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Hodges, Michael   |
| <b>Additional Participating Persons:</b> | Douglas Lewis; FAA Greater Chicago FSDO; Des Plaines, IL  |
| <b>Original Publish Date:</b>            | July 7, 2023  |
| <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=192212">https://data.nts.gov/Docket?ProjectID=192212</a> |

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