



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Mesquite, Texas                      | <b>Accident Number:</b> | CEN23LA249  |
| <b>Date &amp; Time:</b>        | June 21, 2023, 14:47 UTC             | <b>Registration:</b>    | N9354B      |
| <b>Aircraft:</b>               | Cessna 175                           | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Sys/Comp malf/fail (non-power)       | <b>Injuries:</b>        | 2 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

According to the pilot, after touchdown on the runway the airplane veered to the left, exited the runway, and impacted a precision approach path indicator light. The right wing and fuselage sustained substantial damage. After the accident, a runway inspection revealed a continuous black tire mark from near the runway centerline, consistent with the position of the left main gear when landing. The tire mark terminated at the runway edge, where a tire impression began and continued to the wreckage location.

A postaccident examination of the left wheel brake revealed corroded caliper pins, which prevented the brake caliper from free floating as designed. This corrosion likely prevented the tire from rotating and resulted in the uncorrectable veer off the runway.

## Probable Cause and Findings

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

The pilot's inability to maintain directional control during the landing roll due to corroded brake caliper pins.

## Findings

### Aircraft

Landing gear brakes system - Fatigue/wear/corrosion

## Factual Information

### History of Flight

|                             |   |
|-----------------------------|---|
| <b>Landing</b>              | Sys/Comp malf/fail (non-power) (Defining event) |
| <b>Landing-landing roll</b> | Loss of control on ground                       |

On June 21, 2023, about 1447 central daylight time, a Cessna 175, N9354B, was substantially damaged when it was involved in an accident near Mesquite, Texas. The pilot and passenger were uninjured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to the pilot, after touchdown on the runway the airplane veered to the left, exited the runway, and impacted a precision approach path indicator light. The right wing and fuselage sustained substantial damage. After the accident, a runway inspection revealed a continuous black tire mark from near the runway centerline, consistent with the position of the left main gear when landing. The tire mark terminated at the runway edge, where a tire impression began and continued to the wreckage location.

During a postaccident examination, the left wheel brake caliper was wedged and unable to free float with corrosion present on the caliper pins. The pilot stated that following the last annual inspection, he took the airplane to Alaska to conduct back-country flying. This was the only time the airplane was stored outside. Normally, the airplane remained in a hangar in Texas and out of the elements.

### Pilot Information

|                                  |                                       |  |              |
|----------------------------------|---------------------------------------|--|--------------|
| <b>Certificate:</b>              | Airline transport                     | <b>Age:</b>                              | 61           |
| <b>Airplane Rating(s):</b>       | Single-engine land; Multi-engine land | <b>Seat Occupied:</b>                    | Left         |
| <b>Other Aircraft Rating(s):</b> | None                                  | <b>Restraint Used:</b>                   |              |
| <b>Instrument Rating(s):</b>     | Airplane                              | <b>Second Pilot Present:</b>             | Yes          |
| <b>Instructor Rating(s):</b>     | None                                  | <b>Toxicology Performed:</b>             |              |
| <b>Medical Certification:</b>    | Class 1 With waivers/limitations      | <b>Last FAA Medical Exam:</b>            | May 24, 2023 |
| <b>Occupational Pilot:</b>       | Yes                                   | <b>Last Flight Review or Equivalent:</b> |              |
| <b>Flight Time:</b>              | (Estimated)                           |  |              |

## Aircraft and Owner/Operator Information

|                                      |                       |                                       |                 |
|--------------------------------------|-----------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Cessna                | <b>Registration:</b>                  | N9354B          |
| <b>Model/Series:</b>                 | 175                   | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          | 1958                  | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                | <b>Serial Number:</b>                 | 55154           |
| <b>Landing Gear Type:</b>            | Tricycle              | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> | August 5, 2022 Annual | <b>Certified Max Gross Wt.:</b>       |                 |
| <b>Time Since Last Inspection:</b>   |                       | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          |                       | <b>Engine Manufacturer:</b>           | Lycoming        |
| <b>ELT:</b>                          |                       | <b>Engine Model/Series:</b>           | O-360-A1D       |
| <b>Registered Owner:</b>             | On file               | <b>Rated Power:</b>                   |                 |
| <b>Operator:</b>                     | On file               | <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> | KHQZ, 447 ft msl       | <b>Distance from Accident Site:</b>         | 0 Nautical Miles |
| <b>Observation Time:</b>                | 13:50 Local            | <b>Direction from Accident Site:</b>        | 336°             |
| <b>Lowest Cloud Condition:</b>          |                        | <b>Visibility</b>                           | 5 miles          |
| <b>Lowest Ceiling:</b>                  | Broken / 2300 ft AGL   | <b>Visibility (RVR):</b>                    |                  |
| <b>Wind Speed/Gusts:</b>                | 7 knots /              | <b>Turbulence Type Forecast/Actual:</b>     | /                |
| <b>Wind Direction:</b>                  | 90°                    | <b>Turbulence Severity Forecast/Actual:</b> | /                |
| <b>Altimeter Setting:</b>               | 29.8 inches Hg         | <b>Temperature/Dew Point:</b>               | 34°C / 26°C      |
| <b>Precipitation and Obscuration:</b>   | Moderate - None - Haze |   |                  |
| <b>Departure Point:</b>                 | Mesquite, TX           | <b>Type of Flight Plan Filed:</b>           |                  |
| <b>Destination:</b>                     | Mesquite, TX           | <b>Type of Clearance:</b>                   | None             |
| <b>Departure Time:</b>                  |                        | <b>Type of Airspace:</b>                    | Class G          |

## Airport Information

|                             |                    |                                  |           |
|-----------------------------|--------------------|----------------------------------|-----------|
| <b>Airport:</b>             | MESQUITE METRO HQZ | <b>Runway Surface Type:</b>      | Concrete  |
| <b>Airport Elevation:</b>   | 446 ft msl         | <b>Runway Surface Condition:</b> | Dry       |
| <b>Runway Used:</b>         | 18                 | <b>IFR Approach:</b>             | None      |
| <b>Runway Length/Width:</b> | 6000 ft / 100 ft   | <b>VFR Approach/Landing:</b>     | Full stop |

## Wreckage and Impact Information

|                            |        |                             |                     |
|----------------------------|--------|-----------------------------|---------------------|
| <b>Crew Injuries:</b>      | 2 None | <b>Aircraft Damage:</b>     | Substantial         |
| <b>Passenger Injuries:</b> |        | <b>Aircraft Fire:</b>       | None                |
| <b>Ground Injuries:</b>    |        | <b>Aircraft Explosion:</b>  | None                |
| <b>Total Injuries:</b>     | 2 None | <b>Latitude, Longitude:</b> | 32.745221,-96.53004 |

## Administrative Information

**Investigator In Charge (IIC):** Williams, David

**Additional Participating Persons:** Robert Bennett; FAA FSDO

**Original Publish Date:** May 14, 2024

**Last Revision Date:**

**Investigation Class:** [Class 3](#)

**Note:** The NTSB did not travel to the scene of this accident.

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=192415>

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