



# **Aviation Investigation Final Report**

Lakeland, Florida Accident Number: GAA19CA025

**Date & Time:** October 1, 2018, 10:15 Local **Registration:** N24752

Aircraft: Cessna 152 Aircraft Damage: Substantial

**Defining Event:** Hard landing **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

According to a Federal Aviation Administration inspector, the pilot reported that, during landing, the airplane landed hard on the nose landing gear (NLG) and then bounced. After the airplane touched down again, the NLG collapsed.

The airplane sustained substantial damage to the engine mounts.

The inspector 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 pilot's improper landing flare, which resulted in a hard, bounced landing and the nose gear collapsing.

#### **Findings**

Personnel issues Aircraft control - Pilot

Aircraft Landing flare - Not attained/maintained

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### **Factual Information**

### History of Flight

| Landing-flare/touchdown | Hard landing (Defining event) |
|-------------------------|-------------------------------|
| Landing-flare/touchdown | Landing gear collapse         |

#### **Pilot Information**

| Certificate:              | Private   | Age:                              | 23,Male      |
|---------------------------|---|-----------------------------------|--------------|
| Airplane Rating(s):       | Single-engine land  | Seat Occupied:                    | Unknown      |
| Other Aircraft Rating(s): | None  | Restraint Used:                   | Unknown      |
| Instrument Rating(s):     | None  | Second Pilot Present:             | No           |
| Instructor Rating(s):     | None  | Toxicology Performed:             | No           |
| Medical Certification:    | Class 1 Without waivers/limitations   | Last FAA Medical Exam:            | July 2, 2018 |
| Occupational Pilot:       | No  | Last Flight Review or Equivalent: |              |
| Flight Time:              | (Estimated) 53 hours (Total, all aircraft), 53 hours (Total, this make and model) |                                   |              |
|                           |   |                                   |              |

### **Aircraft and Owner/Operator Information**

| Aircraft Make:                | Cessna        | Registration:                     | N24752          |
|-------------------------------|---------------|-----------------------------------|-----------------|
| Model/Series:                 | 152 No Series | Aircraft Category:                | Airplane        |
| Year of Manufacture:          | 1977          | Amateur Built:                    |                 |
| Airworthiness Certificate:    | Utility       | Serial Number:                    | 15280355        |
| Landing Gear Type:            | Tricycle      | Seats:                            | 2               |
| Date/Type of Last Inspection: | Unknown       | Certified Max Gross Wt.:          | 1669 lbs        |
| Time Since Last Inspection:   |               | Engines:                          | 1 Reciprocating |
| Airframe Total Time:          |               | Engine Manufacturer:              | Lycoming        |
| ELT:                          |               | Engine Model/Series:              | 0-235           |
| Registered Owner:             |               | Rated Power:                      |                 |
| Operator:                     |               | Operating Certificate(s)<br>Held: | None            |

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### Meteorological Information and Flight Plan

| Conditions at Accident Site:     | Visual (VMC)                     | Condition of Light:                     | Day              |
|----------------------------------|----------------------------------|---|------------------|
| Observation Facility, Elevation: | KLAL,142 ft msl                  | Distance from Accident Site:            | 2 Nautical Miles |
| Observation Time:                | 14:20 Local                      | Direction from Accident Site:           | 292°             |
| <b>Lowest Cloud Condition:</b>   | Scattered / 1500 ft AGL          | Visibility                              | 10 miles         |
| Lowest Ceiling:                  |                                  | Visibility (RVR):                       |                  |
| Wind Speed/Gusts:                | 6 knots /                        | Turbulence Type Forecast/Actual:        | None / None      |
| Wind Direction:                  | 60°                              | Turbulence Severity<br>Forecast/Actual: | N/A / N/A        |
| Altimeter Setting:               | 30.14 inches Hg                  | Temperature/Dew Point:                  | 28°C / 24°C      |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |   |                  |
| Departure Point:                 | Lakeland, FL (LAL)               | Type of Flight Plan Filed:              | Unknown          |
| Destination:                     | Lakeland, FL (LAL)               | Type of Clearance:                      | Unknown          |
| Departure Time:                  |                                  | Type of Airspace:                       | Class D          |
|                                  |                                  |   |                  |

### **Airport Information**

| Airport:             | LAKELAND LINDER RGNL LAL | Runway Surface Type:      | Asphalt               |
|----------------------|--------------------------|---------------------------|-----------------------|
| Airport Elevation:   | 142 ft msl               | Runway Surface Condition: | Dry                   |
| Runway Used:         | 09                       | IFR Approach:             | None                  |
| Runway Length/Width: | 8499 ft / 150 ft         | VFR Approach/Landing:     | Full stop;Straight-in |

## Wreckage and Impact Information

| Crew Injuries:      | 1 None | Aircraft Damage:        | Substantial               |
|---------------------|--------|-------------------------|---------------------------|
| Passenger Injuries: |        | Aircraft Fire:          | None                      |
| Ground Injuries:    | N/A    | Aircraft Explosion:     | None                      |
| Total Injuries:     | 1 None | Latitude,<br>Longitude: | 27.988889,-82.018608(est) |

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#### **Administrative Information**

Investigator In Charge (IIC): Nepomuceno, Eleazar

Additional Participating Persons: David Fernandez; FSDO; Orlando, FL

Original Publish Date: March 20, 2020

Note: This accident report documents the factual circumstances of this accident as described to

the NTSB.

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=98493">https://data.ntsb.gov/Docket?ProjectID=98493</a>

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 <a href="here">here</a>.

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