



# Aviation Investigation Final Report

---

<b>Location:</b>	Carrollton, Ohio	<b>Accident Number:</b>	CEN21LA205
<b>Date &amp; Time:</b>	April 24, 2021, 15:30 Local	<b>Registration:</b>	N310VD
<b>Aircraft:</b>	Cessna 310N	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing gear not configured	<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

---

## Analysis

The airline transport pilot reported that, while on downwind in the traffic pattern, he lowered the landing gear handle and verbally announced “gear down.” He looked at the cockpit indications to verify the landing gear was down and locked; however, he then shifted his attention outside of the cockpit to visually scan for three aircraft approaching and entering the traffic pattern. He reported that he did not confirm the landing gear was down and locked, as he was distracted with scanning for the other traffic. During landing, the bottom of the fuselage sustained substantial damage. A postaccident functional test of the landing gear revealed no mechanical anomalies with the landing gear system. The pilot reported there were no preimpact mechanical malfunctions or failures with the airframe and engines 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 failure to confirm the landing gear was down before landing due to distraction during the Before Landing checks, which resulted in a gear-up landing.

## Findings

---

<b>Personnel issues</b>	Lack of action - Pilot
<b>Personnel issues</b>	Use of equip/system - Pilot
<b>Personnel issues</b>	Monitoring equip/instruments - Pilot
<b>Aircraft</b>	Main landing gear - Not used/operated

## Factual Information

### History of Flight

<b>Landing</b>	Miscellaneous/other
<b>Landing</b>	Landing gear not configured (Defining event)
<b>Landing-flare/touchdown</b>	Abnormal runway contact

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight instructor	<b>Age:</b>	62, Male
<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>	Lap only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 31, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	December 8, 2020
<b>Flight Time:</b>	14500 hours (Total, all aircraft), 150 hours (Total, this make and model), 12500 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N310VD
<b>Model/Series:</b>	310N	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1968	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	310N-0123
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	April 23, 2020 100 hour	<b>Certified Max Gross Wt.:</b>	5200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3515 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	C91A installed, not activated	<b>Engine Model/Series:</b>	I0-470 SERIES
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	On file	<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>	KPHD,895 ft msl	<b>Distance from Accident Site:</b>	17 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	251°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 7500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	140°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	29.9 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 1.7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	New Castle, PA (UCP)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Carrollton, OH	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	CARROLL COUNTY-TOLSON TSO	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1163 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	07/25	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4300 ft / 75 ft	<b>VFR Approach/Landing:</b>	Full stop

## 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>	40.561576,-81.078333

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hodges, Michael
<b>Additional Participating Persons:</b>	David Osborne; FAA Cleveland FSDO; North Olmsted, OH
<b>Original Publish Date:</b>	July 16, 2021
<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.ntsb.gov/Docket?ProjectID=103001">https://data.ntsb.gov/Docket?ProjectID=103001</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](#).