



Aviation Investigation Final Report

Location:	Rockingham, North Carolina	Accident Number:	ERA21LA113
Date & Time:	January 23, 2021, 15:45 Local	Registration:	N42714
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that after a local flight, during the second landing, the airplane began to porpoise after the first touchdown. When the airplane touched down for a third time, the impact was hard, and the nose wheel separated from its strut. The airplane subsequently departed the runway and nosed over, which resulted in substantial damage to the fuselage, empennage, and wings. The pilot reported that there were no mechanical malfunctions or failures 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 recovery from a bounced landing, which resulted in a subsequent hard landing and a runway excursion.

Findings

Personnel issues	Decision making/judgment - Pilot
Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Incorrect use/operation

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Landing gear collapse
Landing-landing roll	Runway excursion
Landing-landing roll	Nose over/nose down

Pilot Information

Certificate:	Private	Age:	63, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	July 1, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 16, 2020
Flight Time:	130 hours (Total, all aircraft), 11 hours (Total, this make and model), 69 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N42714
Model/Series:	182 L	Aircraft Category:	Airplane
Year of Manufacture:	1968	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18259157
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	May 12, 2020 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5249 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-470-R
Registered Owner:	On file	Rated Power:	230 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KRCZ, 358 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:35 Local	Direction from Accident Site:	242°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.19 inches Hg	Temperature/Dew Point:	10°C / -13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rockingham, NC (RCZ)	Type of Flight Plan Filed:	None
Destination:	Rockingham, NC (RCZ)	Type of Clearance:	None
Departure Time:	14:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	RICHMOND COUNTY AIRPORT RCZ	Runway Surface Type:	Asphalt
Airport Elevation:	357 ft msl	Runway Surface Condition:	Dry
Runway Used:	14/32	IFR Approach:	None
Runway Length/Width:	5001 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.891796,-79.757152(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Robert W. Reynolds Jr.; FAA/ FSDO; Charlotte, NC
Original Publish Date:	August 20, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=102557

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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](#).