



# Aviation Investigation Final Report

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<b>Location:</b>	Brasstown, North Carolina	<b>Accident Number:</b>	ERA21LA272
<b>Date &amp; Time:</b>	June 28, 2021, 13:20 Local	<b>Registration:</b>	N147AH
<b>Aircraft:</b>	Bell 47G-2A-1	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The non-helicopter rated pilot reported that he had departed from a stationary trailer and hover taxied in ground effect. Upon reaching a taxiway that was parallel to the runway, he lost control of the helicopter and it impacted the ground multiple times before coming to rest on its side. A post-crash fire ensued and the helicopter was destroyed. The pilot stated that he believed he lost control of the helicopter and it had been “running fine” before the accident.

Witnesses stated they observed the helicopter lift off from the transport trailer and that once the helicopter cleared the trailer, “it got real wobbly.” The main rotor blades struck the ground two or three times and while continuing forward, the right landing gear skid tube “hit the ground pretty hard”. They said, “the helicopter then bounced back into the air, spun to the right (clockwise) and landed on its left side.”

## Probable Cause and Findings

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

The pilot’s inflight loss of control while conducting a hovering maneuver.

## Findings

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<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Lateral/bank control - Not attained/maintained
<b>Personnel issues</b>	Total instruct/training recvd - Pilot

## Factual Information

### History of Flight

<b>Maneuvering-hover</b>	Loss of control in flight (Defining event)
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### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor; Private	<b>Age:</b>	68, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	February 4, 2021
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	January 26, 2021
<b>Flight Time:</b>	1810.4 hours (Total, all aircraft), 14.3 hours (Total, this make and model), 1930 hours (Pilot In Command, all aircraft), 35.1 hours (Last 90 days, all aircraft), 17.1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Bell	<b>Registration:</b>	N147AH
<b>Model/Series:</b>	47G-2A-1 NO SERIES	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	1968	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3774
<b>Landing Gear Type:</b>	None; Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	March 26, 2021 Annual	<b>Certified Max Gross Wt.:</b>	2643 lbs
<b>Time Since Last Inspection:</b>	10 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4286 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	VO-435
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	230 Horsepower
<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>	PVT,1617 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	13:20 Local	<b>Direction from Accident Site:</b>	0°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	20 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.1 inches Hg	<b>Temperature/Dew Point:</b>	26.1°C / 20°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Brasstown, NC	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Brasstown, NC	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Brasstown Field PVT	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	1613 ft msl	<b>Runway Surface Condition:</b>	Dry;Vegetation
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	On-ground
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	35.05125,-83.949722(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Alleyne, Eric
<b>Additional Participating Persons:</b>	Derek Jackson; FAA/FSDO; Charlotte, NC
<b>Original Publish Date:</b>	May 17, 2022
<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=103367">https://data.ntsb.gov/Docket?ProjectID=103367</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](#).