



Aviation Investigation Final Report

Location:	Las Vegas, Nevada	Accident Number:	WPR25LA110
Date & Time:	March 9, 2025, 21:07 Local	Registration:	N44KY
Aircraft:	ROBINSON HELICOPTER COMPANY R44 II	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	2 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

Just after takeoff on an air tour flight, the pilot's door opened abruptly as the helicopter accelerated through effective translational lift. The sudden wind startled the pilot, who released the collective with his left hand and reached across his body to close the door, inadvertently applying right cyclic. The helicopter descended, the right skid contacted the ground, and the helicopter entered a dynamic rollover, resulting in substantial damage. The pilot was uninjured, and the two passengers sustained minor injuries.

The pilot thought the door was latched before departure, and postaccident photographs showed the latch handle in the fully aft, down, and locked position. However, fresh paint scratches and dents around the latch receptacles were consistent with the horizontal and vertical latch pins being extended but not captured in their respective holes in the door frame. It is, therefore, possible that the pilot engaged the door latches before the door had fully closed, allowing it to open under aerodynamic loads as airspeed increased.

The circumstances of this event would have resulted in a strong startle response. Such an unexpected and forceful sensory event can momentarily override trained responses, leading to instinctive action. In this case, the pilot reacted reflexively to the perceived immediate threat by attempting to close the door, which resulted in loss of aircraft control.

A safety notice issued by the helicopter manufacturer cautions that cockpit distractions, including an open door, can lead to a loss of aircraft control and advises pilots to land rather than attempt to close a door in flight.

Probable Cause and Findings

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

The pilot’s loss of helicopter control after the door opened during takeoff. Contributing to the accident was the pilot’s failure to confirm that the door was properly closed before departure.

Findings	
Aircraft	Passenger/crew doors - Incorrect use/operation
Personnel issues	Forgotten action/omission - Pilot
Aircraft	Directional control - Not attained/maintained
Personnel issues	Perception - Pilot
Personnel issues	Confusion - Pilot

Factual Information

History of Flight

Takeoff	Miscellaneous/other (Defining event)
Takeoff	Loss of control in flight
Takeoff	Abrupt maneuver
Takeoff	Dynamic rollover

On March 9, 2025, about 2107 Pacific daylight time, a Robinson Helicopter Company R44 II, N44KY, was substantially damaged when it was involved in an accident in North Las Vegas, Nevada. The pilot was not injured, and the two passengers sustained minor injuries. The helicopter was operated as a Title 14 *Code of Federal Regulations* Part 91 air tour flight.

The operator was performing tours of the Las Vegas Strip from its home base of North Las Vegas Airport (VGT) in accordance with a 91.147 letter of authorization from the FAA for passenger-carrying flights for compensation or hire.

The pilot had performed six tours in the accident helicopter since coming on duty at 1830 on the night of the accident; the accident flight was his seventh. He was sitting in the right front seat.

With the passengers loaded, and the weight and performance calculations complete, the pilot closed his door and readied the helicopter for departure. He maneuvered the helicopter into a hover and pushed the cyclic control forward. The helicopter began to move forward, and as it reached effective translational lift at about 25 knots, the pilot’s door opened. The pilot described the opening as abrupt and accompanied by a strong blast of wind. He was concerned that the door hinges would break off, the force was so great.

The pilot reported that he instinctively reacted by releasing the collective control from his left hand and reaching across his body to close the door. He stated that the movement resulted in him applying a right cyclic input with his right hand as he reached across. This movement, accompanied by his releasing the collective control, resulted in the helicopter sinking. The right skid contacted the ground, the helicopter entered a dynamic rollover, and the main rotor blades struck the ground. The helicopter spun around and came to rest on its right side. The pilot shut off the fuel control, released his seatbelt, and helped the passengers egress. Postaccident examination of the helicopter revealed that the fuselage was substantially damaged, with both main rotor blades destroyed.

Company procedures call for passenger safety briefings and weight and balance calculations to be performed by a separate crew member (loader) before departure. The weight and

balance is calculated using an iPad application, which is handed to the pilot when the loader arrives with the passengers. With the helicopter running, the loader then confirms the passengers are secured in their seatbelts, and that their headsets are on and the doors are closed. The loader then walks around to the pilot and takes back the iPad for the next flight.

Typically, the pilot or the loader closes the pilot's side door. The pilot stated that either for the accident flight, or the previous flight, there was a moment of confusion when both he and the loader shut the door at the same time. At that time, he sensed the door seating or "clicking down," but had no other recollection of whether he confirmed it was locked. For the accident flight, he confirmed visually that the door latch was engaged.

The helicopter was manufactured in 2006. The pilot's door used a two-stage latch system. A horizontal sliding rod with an interior loop handle is first moved fully aft to engage a hole in the door frame. Then, by rotating the handle downward, a secondary vertical rod slides upward and engages a hole in the upper door frame. Both actions are required to fully secure the door. There is no door status system indicator. All R44 helicopters manufactured in 2014 and later have a third rod that engages a hole in the lower forward door frame.

Photos taken immediately after the accident revealed that the pilot's door latch loop on the inside was in the aft, down, and locked position, and both the vertical and horizontal rods had extended out of the door frame. The door sustained impact damage and was open. The hole in the upper airframe that received the vertical rod was intact, and there were two fresh scratches in the paint around the hole and a dent in the frame that appeared to correspond with the end of the rod. Similarly, a scratch in the paint adjacent to the horizontal rod hole was visible.

Robinson Helicopter Company Safety Notice 41, issued in May 2013, and included in the Pilot Operating Handbook, discusses cabin distractions that can lead to a loss of aircraft control. One of the distractions included the pilot neglecting to latch the door before takeoff. In that case, the recommended action was to land rather than attempt to close the door in flight.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	40,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	September 30, 2024
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 1, 2025
Flight Time:	507 hours (Total, all aircraft), 336 hours (Total, this make and model), 423 hours (Pilot In Command, all aircraft), 97 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER COMPANY	Registration:	N44KY
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	11307
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	February 22, 2025 100 hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3274.6 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	HELICOPTER LEASING LLC	Rated Power:	245 Horsepower
Operator:	West Air Helicopters	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KVGT, 2190 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:53 Local	Direction from Accident Site:	92°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	15°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Las Vegas, NV	Type of Flight Plan Filed:	Company VFR
Destination:	Las Vegas, NV	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	NORTH LAS VEGAS VGT	Runway Surface Type:	
Airport Elevation:	2205 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	36.212331,-115.20569

Administrative Information

Investigator In Charge (IIC):	Simpson, Elliott
Additional Participating Persons:	Michael W Stone; FAA FSDO; Las Vegas, NV
Original Publish Date:	October 21, 2026
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=199826

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](#).