



# **Aviation Investigation Final Report**

Location: Van Nuys, California Accident Number: WPR23LA170

Date & Time: April 28, 2023, 15:26 Local Registration: N549TS

Aircraft: ROBINSON HELICOPTER COMPANY R44 II Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot reported that while picking up to reposition, the helicopter initiated a roll to the left. While attempting to recover, the helicopter impacted the ground and the left skid collapsed, which resulted in substantial damage to the tail rotor. The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter 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 maintain lateral control of the helicopter, which resulted in a hard landing.

#### **Findings**

Aircraft Lateral/bank control - Not attained/maintained

Aircraft Landing flare - Not attained/maintained

Personnel issues Aircraft control - Pilot

## **Factual Information**

#### **History of Flight**

Maneuvering-hover Loss of control in flight (Defining event)

LandingAbnormal runway contactLanding-flare/touchdownLanding gear collapse

#### **Pilot Information**

Certificate:	Private	Age:	73,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 31, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	600 hours (Total, all aircraft), 600 hours (Total, this make and model)		

#### **Flight instructor Information**

Certificate:	Commercial; Flight instructor	Age:	59,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 31, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 10, 2023
Flight Time:	2112 hours (Total, all aircraft), 269 hours (Total, this make and model), 2065 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 312 hours (Last 30 days, all aircraft)		

Page 2 of 5 WPR23LA170

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

Aircraft Make:	ROBINSON HELICOPTER COMPANY	Registration:	N549TS
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	11075
Landing Gear Type:	None; Skid	Seats:	4
Date/Type of Last Inspection:	May 18, 2023 100 hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	33 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1478.7 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	AGGREGATE MATERIAL SERVICES LLC	Rated Power:	245 Horsepower
Operator:	On file	Operating Certificate(s) Held:	Commercial air tour (136)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KVNY,785 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:51 Local	Direction from Accident Site:	339°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	28°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Van Nuys, CA (KVNY)	Type of Flight Plan Filed:	
Destination:	Van Nuys, CA	Type of Clearance:	Unknown
Departure Time:		Type of Airspace:	Class D

Page 3 of 5 WPR23LA170

## **Airport Information**

Airport:	Van Nuys Airport KVNY	Runway Surface Type:	
Airport Elevation:	802 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:		IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Unknown

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	34.209806,-118.48997

Page 4 of 5 WPR23LA170

#### **Administrative Information**

Investigator In Charge (IIC):	Johnson, Scott
Additional Participating Persons:	Bryan Andrus; Federal Aviation Administration; Van Nuys, CA
Original Publish Date:	November 15, 2023
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=107165

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.

Page 5 of 5 WPR23LA170