



Aviation Investigation Final Report

Location:	Myrtle Beach, South Carolina	Accident Number:	ERA23LA287
Date & Time:	July 4, 2023, 19:30 Local	Registration:	N7507X
Aircraft:	ROBINSON HELICOPTER R44	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	3 Minor
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

The pilot was taxiing the helicopter about 3 ft above the ground in preparation to takeoff when his door popped open. The pilot said he instinctively removed his left hand from the collective to shut the door; however, before he could even reach the door, the collective lowered and there was reduction in power. The helicopter then rolled over on to its right side, which resulted in substantial damage to the fuselage and main rotor system. The pilot reported there were no preimpact mechanical malfunctions that contributed to the accident.

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 control of the helicopter during a hover taxi, which resulted in a rollover.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Prop/rotor parameters - Not attained/maintained

Factual Information

History of Flight

Taxi	Loss of control in flight (Defining event)
Taxi	Roll over

Pilot Information

Certificate:	Commercial	Age:	26, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 2, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 12, 2023
Flight Time:	335 hours (Total, all aircraft), 281 hours (Total, this make and model), 255 hours (Pilot In Command, all aircraft), 172 hours (Last 90 days, all aircraft), 145 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER	Registration:	N7507X
Model/Series:	R44	Aircraft Category:	Helicopter
Year of Manufacture:	2002	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1218
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	June 29, 2023 100 hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4228.7 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-540-F1B5
Registered Owner:	GHGK LLC	Rated Power:	260 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:	MYR,25 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	19:00 Local	Direction from Accident Site:	36°
Lowest Cloud Condition:	Clear	Visibility	5 miles
Lowest Ceiling:	Broken / 2000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:		Temperature/Dew Point:	31.7°C / 26.7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Myrtle Beach, SC	Type of Flight Plan Filed:	Company VFR
Destination:	Myrtle Beach, SC	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	MYRTLE BEACH INTL MYR	Runway Surface Type:	
Airport Elevation:	25 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 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	33.679741,-78.928321

Administrative Information

Investigator In Charge (IIC): Read, Leah

Additional Participating Persons: Jason Arthur; FAA/FSDO; Columbia, SC

Original Publish Date: August 31, 2023

Last Revision Date:

Investigation Class: [Class 4](#)

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=192520>

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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](#).