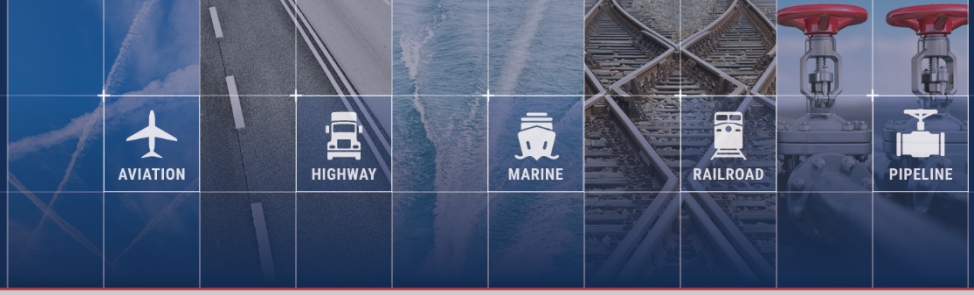

Aviation Investigation Final Report

Location:	Ronkonkoma, New York	**Accident Number:**	ERA24LA028
Date & Time:	October 28, 2023, 09:46 Local	**Registration:**	N964SH
Aircraft:	ROBINSON HELICOPTER R22 BETA	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor was teaching the student pilot to hover the helicopter about 5 ft above a grass area. The student pilot was having difficulty with over-controlling the helicopter and had been applying abrupt control inputs. The flight instructor was demonstrating the behavior of the helicopter with the application of collective control when the student pilot raised the collective control too hard, which resulted in the helicopter tilting right. The flight instructor attempted to correct, but the student pilot was holding the controls tightly and the helicopter's right skid contacted the ground, resulting in a dynamic rollover. The flight instructor reported that there were no preimpact mechanical malfunctions or failures of 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 student pilot's abrupt control input and the flight instructor's inadequate remedial action, which resulted in a dynamic rollover.

Findings

Aircraft	Lateral/bank control - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot
Personnel issues	(general) - Instructor/check pilot

Factual Information

History of Flight

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

Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	**Age:**	52,
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	Helicopter	**Toxicology Performed:**	
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	May 23, 2023
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	August 16, 2023
Flight Time:	3800 hours (Total, all aircraft), 1300 hours (Total, this make and model), 3650 hours (Pilot In Command, all aircraft), 290 hours (Last 90 days, all aircraft), 90 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	None	**Age:**	55,Male
Airplane Rating(s):	None	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	5 hours (Total, all aircraft), 5 hours (Total, this make and model), 5 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER	**Registration:**	N964SH
Model/Series:	R22 BETA	**Aircraft Category:**	Helicopter
Year of Manufacture:	2005	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	3941
Landing Gear Type:	Skid	**Seats:**	2
Date/Type of Last Inspection:	July 14, 2023 100 hour	**Certified Max Gross Wt.:**	1350 lbs
Time Since Last Inspection:	85 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	6015 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Not installed	**Engine Model/Series:**	O-360-J2A
Registered Owner:	I1 AVIATION LLC	**Rated Power:**	145 Horsepower
Operator:	Flying Helicopters Made Easy	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	ISP,98 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	09:39 Local	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	280°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	24°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ronkonkoma, NY	**Type of Flight Plan Filed:**	None
Destination:	Ronkonkoma, NY	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class C

Airport Information

Airport:	Long Island Mac Arthur Airport ISP	**Runway Surface Type:**	
Airport Elevation:	98 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	40.796136,-73.100665

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	Mark Burnett; FAA/FSDO; Farmingdale, NY
Original Publish Date:	December 13, 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=193332