



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Cahokia Heights, Illinois	Accident Number:	CEN24LA005
Date & Time:	October 2, 2023, 15:57 Local	Registration:	N354MH
Aircraft:	HELICOPTERES GUIMBAL CABRI G2	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The operator reported that the student pilot had completed three solo touch and go landings and was returning to land on the ramp. While approaching the parking area, he was distracted by two aircraft on the ramp, and the helicopter began an uncontrolled yaw. The student pilot lowered the collective and arrested the yaw, but as the helicopter entered ground effect, he raised the collective, and the uncontrolled yaw resumed. The helicopter impacted the ground and sustained substantial damage to the fuselage, main rotor, and tail rotor.

The operator reported that there were no preaccident mechanical malfunctions or failures 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 student pilot's failure to maintain helicopter control which resulted in impact with the ground.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	(general) - Not attained/maintained

Factual Information

History of Flight

Maneuvering-hover	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Student	Age:	30, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 19, 2022
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	54 hours (Total, all aircraft), 54 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HELICOPTERES GUIMBAL	Registration:	N354MH
Model/Series:	CABRI G2	Aircraft Category:	Helicopter
Year of Manufacture:	2016	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1149
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	September 21, 2023 100 hour	Certified Max Gross Wt.:	1543 lbs
Time Since Last Inspection:	27.1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4467.1 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	O-360-J2A
Registered Owner:	MYSKY LLC	Rated Power:	145 Horsepower
Operator:	Ideal Aviation	Operating Certificate(s) Held:	Pilot school (141)
Operator Does Business As:	IDEAL AVIATION	Operator Designator Code:	3MYS

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCPS,405 ft msl	Distance from Accident Site:	0.5 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	134°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	31°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cahokia Heights, IL	Type of Flight Plan Filed:	None
Destination:	Cahokia Heights, IL	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	St. Louis Downtown Airport CPS	Runway Surface Type:	
Airport Elevation:	413 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:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.576285,-90.165069

Administrative Information

Investigator In Charge (IIC):	Brown, Zane
Additional Participating Persons:	Robert Pranger; FAA FSDO; IL
Original Publish Date:	May 3, 2024
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=193183

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](#).