



Aviation Investigation Final Report

Location:	Mosby, Missouri	Accident Number:	CEN23LA383
Date & Time:	August 27, 2023, 18:00 Local	Registration:	N8178H
Aircraft:	Hiller UH-12A	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that during a hover taxi, he inadvertently allowed the engine rpm to decrease. He increased the throttle, but the helicopter landed hard on its skids in the grass and the tail rotor impacted the ground. The ground strike resulted in substantial damage to the tail rotor blades and tailboom assembly. The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter that would have precluded normal operation.

The pilot noted that a better scan of the engine instruments could have prevented 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 adequate rotor rpm which resulted in a loss of control and impact with terrain.

Findings

Aircraft	Powerplant parameters - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Personnel issues	Delayed action - Pilot

Factual Information

History of Flight

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

Pilot Information

Certificate:	Private	Age:	69,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	BasicMed With waivers/limitations	Last FAA Medical Exam:	July 11, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 5, 2023
Flight Time:	509 hours (Total, all aircraft), 21.8 hours (Total, this make and model), 242.8 hours (Pilot In Command, all aircraft), 23.5 hours (Last 90 days, all aircraft), 0.7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hiller	Registration:	N8178H
Model/Series:	UH-12A	Aircraft Category:	Helicopter
Year of Manufacture:	1950	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	178
Landing Gear Type:	None; Skid	Seats:	3
Date/Type of Last Inspection:	October 20, 2022 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2850 Hrs as of last inspection	Engine Manufacturer:	FRANKLIN
ELT:	Not installed	Engine Model/Series:	6V-335 SERIES
Registered Owner:	ROTOR WING NUTS LLC	Rated Power:	200 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None
Operator Does Business As:	Pleasure	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KGPH, 778 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	18:15 Local	Direction from Accident Site:	208°
Lowest Cloud Condition:	Scattered / 4700 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 2100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	25°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mosby, MO	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Midwest National Air Center Airport GPH	Runway Surface Type:	Asphalt
Airport Elevation:	777 ft msl	Runway Surface Condition:	Dry
Runway Used:	18/36	IFR Approach:	None
Runway Length/Width:	5502 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.332508,-94.309648(est)

Administrative Information

Investigator In Charge (IIC):	Galbraith, Damian
Additional Participating Persons:	John Knox; FAA; Kansas City, MO
Original Publish Date:	March 21, 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=192949

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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](#).