







Aviation Investigation Final Report

Location: Louise, Texas Accident Number: CEN23LA245

Date & Time: June 18, 2023, 12:35 Local Registration: N932SH

Aircraft: ROBINSON HELICOPTER R22
BETA Aircraft Damage: Substantial

Defining Event: Loss of control in flight **Injuries:** 1 Minor

Flight Conducted Under: Part 137: Agricultural

Analysis

According to the pilot, it was a windy day and also his first day performing aerial spray operations. While attempting to turn the helicopter from a west to east heading at about 10 feet off the ground, the pilot reported he lost directional control and the helicopter started to spin clockwise. His efforts to maintain control were not successful. He stated that the wind was beating him up, and most of his flight training did not include windy/gusty conditions. The helicopter impacted a rice field, which resulted in damage to the tail boom and rotor blades. The pilot reported there were no mechanical malfunctions or failures 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 directional control in gusting wind conditions.

Findings

Personnel issues Aircraft control - Pilot

Aircraft Directional control - Not attained/maintained

Environmental issues Gusts - Effect on operation

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Factual Information

History of Flight

Maneuvering-hover	Other weather encounter
Maneuvering-hover	Loss of control in flight (Defining event)
Maneuvering-hover	Attempted remediation/recovery

Pilot Information

Certificate:	Commercial	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 18, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 11, 2022
Flight Time:	506 hours (Total, all aircraft), 254 hours (Total, this make and model), 191 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft) hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER	Registration:	N932SH
Model/Series:	R22 BETA	Aircraft Category:	Helicopter
Year of Manufacture:	2005	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3899
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	0-360-J2A
Registered Owner:	On file	Rated Power:	145 Horsepower
Operator:	On file	Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KARM,100 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	12:35 Local	Direction from Accident Site:	71°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	34°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Louise, TX	Type of Flight Plan Filed:	None
Destination:	Louise, TX	Type of Clearance:	None
Departure Time:	10:09 Local	Type of Airspace:	Class G

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Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	29.14,-96.43

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Administrative Information

Investigator In Charge (IIC):	Abraham, Laura
Additional Participating Persons:	Jonathan Petijean; FAA; Houston, TX
Original Publish Date:	September 28, 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=192398

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.

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