



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Louise, Texas	<b>Accident Number:</b>	CEN23LA245
<b>Date &amp; Time:</b>	June 18, 2023, 12:35 Local	<b>Registration:</b>	N932SH
<b>Aircraft:</b>	ROBINSON HELICOPTER R22 BETA	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	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

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Gusts - Effect on operation

## Factual Information

### History of Flight

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

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	59,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	May 18, 2023
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	March 11, 2022
<b>Flight Time:</b>	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), 0 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

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

## Meteorological Information and Flight Plan

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

## Wreckage and Impact Information

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

## 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:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=192398">https://data.nts.gov/Docket?ProjectID=192398</a>

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