

Aviation Investigation Final Report

Location:	Patterson, Louisiana	Accident Number:	CEN21LA456
Date & Time:	September 25, 2021, 06:55 Local	Registration:	N662RL
Aircraft:	Bell 407	Aircraft Damage:	Substantial
Defining Event:	Ground collision	Injuries:	3 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

While hovering from the helicopter pad to reposition for takeoff, the pilot backed up the helicopter. During a pedal turn, the tail rotor contacted another helicopter's main rotor blades, which was parked and located behind on another pad. The pilot reported she felt a strong jolt to the left, and the helicopter began to spin. The pilot lowered the collective, reduced throttle, and the helicopter came to rest upright adjacent to the helicopter pad.

The helicopter sustained substantial damage to the tail boom. 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 pilot's failure to maintain adequate clearance from a parked helicopter while hovering to reposition for takeoff.

Findings

Personnel issues

Environmental issues

Monitoring environment - Pilot Aircraft - Awareness of condition

Factual Information

History of Flight

Taxi-into takeoff position

Ground collision (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	25,Female
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 8, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 1, 2021
Flight Time:	1479 hours (Total, all aircraft), 255 hours (Total, this make and model), 1479 hours (Pilot In Command, all aircraft), 142 hours (Last 90 days, all aircraft), 36 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N662RL
Model/Series:	407	Aircraft Category:	Helicopter
Year of Manufacture:	1997	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	53203
Landing Gear Type:	None; Skid	Seats:	7
Date/Type of Last Inspection:	September 24, 2021 AAIP	Certified Max Gross Wt.:	5250 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	25222 Hrs as of last inspection	Engine Manufacturer:	Rolls Royce
ELT:	C126 installed, not activated	Engine Model/Series:	250-C30
Registered Owner:	Rotorcraft Leasing Company, LLC	Rated Power:	650 Horsepower
Operator:	Rotorcraft Leasing Company, LLC	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:	RLC, LLC	Operator Designator Code:	YTRA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPTN,9 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	07:01 Local	Direction from Accident Site:	18°
Lowest Cloud Condition:	Few / 200 ft AGL	Visibility	0.25 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	14°C / 14°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Patterson, LA	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	HARRY P WILLIAMS MEML PTN	Runway Surface Type:	
Airport Elevation:	8 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:	2 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	29.709043,-91.335891(est)

Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	Michael Wilson; FAA; Baton Rouge, LA
Original Publish Date:	November 16, 2021
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=103974

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 <u>here</u>.