



Aviation Investigation Final Report

Location:	Houston, Texas	Accident Number:	CEN19LA207
Date & Time:	July 4, 2019, 20:00 Local	Registration:	N5277F
Aircraft:	Md Helicopter 369	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Public aircraft - local		

Analysis

The helicopter flew about 1.5 hours with no problems. On final approach to land the helicopter, about 5 to 10 ft above the ground, the pilot experienced a sudden uncontrollable yaw and bank. The left skid contacted the ground, and the helicopter rolled onto its right side. The pilot stated that there was no sudden gust of wind and that he did not have input on the controls that would have caused the yaw and bank. Detailed examination of the helicopter's flight controls did not reveal any anomalies. The reason for the yaw and bank could not be determined based on the available information.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The loss of control upon landing for undetermined reasons.

Findings

Not determined	(general) - Unknown/Not determined
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Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
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On July 4, 2019, about 2000 central daylight time, an MD 369-500E helicopter, N5277F, sustained substantial damage when it was involved in an accident at Houston Hobby Airport (HOU), Houston, Texas. The commercial pilot was not injured, and his flight officer sustained minor injuries. The flight was being conducted as a public operations flight.

After 1.5 hours of an uneventful flight, the pilot was positioning the helicopter to land on a helipad at its home base (HOU). The pilot reported that after checking the wind conditions, he made a normal approach to the helipad. About 5 to 10 ft above the ground, just before coming to a hover, the helicopter had a sudden uncontrollable yaw and bank to the right. The pilot felt the left skid impact the ground, and the helicopter rolled on its right side. Both the pilot and passenger exited the helicopter after it came to rest. The pilot reported that before the uncontrolled yaw and bank to the right, there was no sudden gust of wind, and he stated that he did not have input on the controls that would have caused the yaw and bank to the right.

Detailed examination of the helicopter's flight control systems did not reveal any mechanical anomalies.

Pilot Information

Certificate:	Commercial; Private	Age:	62, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 31, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3000 hours (Total, all aircraft), 2800 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Md Helicopter	Registration:	N5277F
Model/Series:	369 E	Aircraft Category:	Helicopter
Year of Manufacture:	2008	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	0587E
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	June 21, 2019 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	4306 Hrs at time of accident	Engine Manufacturer:	Rolls-Royce
ELT:		Engine Model/Series:	250-C20B
Registered Owner:	City Of Houston	Rated Power:	420 Horsepower
Operator:	Law Enforcement	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HOU, 46 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:00 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Few / 2700 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	29°C / 24°C
Precipitation and Obscuration:			
Departure Point:	Houston, TX	Type of Flight Plan Filed:	Company VFR
Destination:	Houston, TX	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

Airport Information

Airport:	Houston Hobby HOU	Runway Surface Type:	Asphalt
Airport Elevation:	46 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	29.645833,-95.276947(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Wilfred Perez; FAA FSDO; Houston, TX
Original Publish Date:	February 16, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99771

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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](#).