



Aviation Investigation Final Report

Location:	Miami, Florida	Accident Number:	ERA24LA118
Date & Time:	February 1, 2024, 18:34 Local	Registration:	N521LS
Aircraft:	ROBINSON HELICOPTER COMPANY R44 II	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

During an air tour flight at night, the pilot of the helicopter noted that the oil pressure and temperature gauges were displaying indications that were in the “red area,” so he decided to perform a precautionary landing to a closed helipad. During the precautionary landing, while maneuvering the helicopter just prior to touchdown, the tail rotor contacted a plastic pipe that protruded up about 2 ft from the ground. The pilot further described that it was very dark and that he was unable to see the pipe. Following the tail rotor strike, the helicopter landed hard, deforming the landing skids. The helicopter sustained substantial damage to the vertical stabilizer during the accident.

Probable Cause and Findings

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

Tail rotor contact with an unseen object while performing a precautionary landing to a closed helipad at night.

Findings

Environmental issues	Hidden/submerged object - Effect on equipment
Environmental issues	Dark - Effect on operation

Factual Information

History of Flight

Maneuvering-hover	Collision with terr/obj (non-CFIT) (Defining event)
Landing	Hard landing

Pilot Information

Certificate:	Commercial	Age:	54, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
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:	March 1, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 5, 2023
Flight Time:	520 hours (Total, all aircraft), 300 hours (Total, this make and model), 400 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 33 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER COMPANY	Registration:	N521LS
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2015	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	13907
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	October 8, 2023 100 hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1
Airframe Total Time:	2159.8 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	GLOBAL AERIALS INC	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KMIA	Distance from Accident Site:	8 Nautical Miles
Observation Time:	19:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered	Visibility	10 miles
Lowest Ceiling:	Broken / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	20°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pembroke Pines, FL (HWO)	Type of Flight Plan Filed:	None
Destination:	Pembroke Pines, FL (HWO)	Type of Clearance:	None
Departure Time:	18:35 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	25.784129,-80.173595(est)

Administrative Information

Investigator In Charge (IIC):	Boggs, Daniel
Additional Participating Persons:	Ivan Redford; FAA/FSDO; Miramar, FL
Original Publish Date:	April 12, 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=193827

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](#).