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.ntsb.gov/Docket?ProjectID=193827