



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Elberon, Virginia	Accident Number:	ERA23LA326
Date & Time:	August 5, 2023, 12:33 Local	Registration:	N353AH
Aircraft:	Hughes 369	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	2 Serious
Flight Conducted Under:	Part 133: Rotorcraft ext. load		

Analysis

The purpose of the rotorcraft external load flight was to spray water from the helicopter and wash some outside insulators that were suspended from power line structure arms. During the wash, the crew heard a bang, and the helicopter descended into trees. A Federal Aviation Administration inspector examined the wreckage after the accident and observed substantial damage to the fuselage and rotor blades. The inspector also observed damage to the power line structure arm that was consistent with main rotor blade contact. The inspector did not find evidence of any preimpact mechanical malfunctions or failures of the helicopter, nor did the operator report any. Based on this information, it is likely that the helicopter's main rotor struck the power line structure while the pilot was maneuvering in close proximity to it.

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 clearance from a power line structure arm, which resulted in main rotor blade contact.

Findings

Personnel issues	Task monitoring/vigilance - Pilot
Aircraft	Main rotor blade system - Not specified

Factual Information

History of Flight

Maneuvering	Low altitude operation/event (Defining event)
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Pilot Information

Certificate:	Commercial; Flight instructor; Private	Age:	55,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	April 3, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 19, 2022
Flight Time:	7375 hours (Total, all aircraft), 3924 hours (Total, this make and model), 7130 hours (Pilot In Command, all aircraft), 146 hours (Last 90 days, all aircraft), 74 hours (Last 30 days, all aircraft)		

Other flight crew Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied: None
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present: No
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N353AH
Model/Series:	369 D	Aircraft Category:	Helicopter
Year of Manufacture:	1981	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	811079D
Landing Gear Type:	High skid	Seats:	3
Date/Type of Last Inspection:	April 18, 2023 Continuous airworthiness	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	20507 Hrs at time of accident	Engine Manufacturer:	Rolls-Royce
ELT:	Not installed	Engine Model/Series:	250-C20B
Registered Owner:	TVPX AIRCRAFT SOLUTIONS INC TRUSTEE	Rated Power:	420 Horsepower
Operator:	HAVERFIELD INTERNATIONAL INC	Operating Certificate(s) Held:	Rotorcraft external load (133)
Operator Does Business As:		Operator Designator Code:	HXFL

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AKQ,105 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	12:54 Local	Direction from Accident Site:	253°
Lowest Cloud Condition:	Few / 2500 ft AGL	Visibility	10 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:	29.98 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wakefield, VA (AKQ)	Type of Flight Plan Filed:	None
Destination:	Wakefield, VA (AKQ)	Type of Clearance:	None
Departure Time:	12:09 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	2 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	37.031619,-76.808425

Administrative Information

Investigator In Charge (IIC): Gretz, Robert

Additional Participating Persons: Nikolas Kubli; FAA/FSDO; Richmond, VA
Nick Shepler; Rolls-Royce; Indianapolis, IN

Original Publish Date: October 5, 2023

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=192811>

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](#).