



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	TULLAHOMA, Tennessee	<b>Accident Number:</b>	ERA19TA110
<b>Date &amp; Time:</b>	February 28, 2019, 15:00 Local	<b>Registration:</b>	N260MW
<b>Aircraft:</b>	Sikorsky HH-60L	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Other weather encounter	<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Ferry		

## Analysis

The flight crew was on a visual flight rules (VFR) ferry flight to reposition the helicopter for maintenance and inspection. Prior to departure, they had expected VFR conditions along the entire route of flight. During an intermediate stop for fuel about 42 miles from the destination, they noted the weather conditions appeared to be clear, but they did not obtain an updated weather briefing. After departure, about 10 miles away from their destination, they encountered heavy rain, moderate turbulence, and deteriorating visibility (a nearby airport reported a visibility of 2.5 statute miles in mist and an overcast cloud ceiling at 300 feet). They descended to about 100 feet above ground level to maintain visual contact with the ground. When VFR flight conditions “were no longer possible,” they performed a turn and attempted a precautionary landing in a field. During the landing, the helicopter struck trees and impacted terrain.

## Probable Cause and Findings

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

The flight crew’s improper decision to continue the VFR flight into deteriorating weather conditions, which resulted in a collision with trees during a subsequent precautionary landing attempt.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Flight crew
<b>Environmental issues</b>	Low ceiling - Decision related to condition
<b>Environmental issues</b>	Low visibility - Decision related to condition

# Factual Information

## History of Flight

Enroute-cruise	Other weather encounter (Defining event)
Landing	Collision during takeoff/land

On February 28, 2019, about 1500 central standard time, a Sikorsky HH-60L, N260MW, was substantially damaged when it was involved in an accident near Tullahoma, Tennessee. The two pilots received serious injuries. The helicopter was operated as a 14 *Code of Federal Regulations* Part 91 repositioning flight.

The purpose of the flight was to reposition the helicopter for maintenance and inspection. The special airworthiness certificate and ferry flight permit were issued for the flight from Enterprise Municipal Airport (EDN), Enterprise, Alabama, to THA, which included a restriction for visual flight rules (VFR) operation.

According to the pilot-in-command, the crew departed EDN earlier that morning, destined for THA. It was a route they had “flown many times and were familiar with” and “VFR conditions were expected along the entire route of flight from point departure to destination.” They had stopped at Scottsboro Municipal Airport, Alabama (4A6), which was about 42 miles from the destination, for fuel and lunch. He recalled that the weather at that time appeared to be clear. He did not report receiving an updated weather briefing while at 4A6. They departed from 4A6 at 1400 with no issues. While enroute to THA, the pilot recalled that they had “encountered severe heavy rain, moderate turbulence, along with rapidly deteriorating visibility. We descended to approximately 100 ft AGL to maintain visual contact with the ground. When VFR flight conditions were no longer possible, we executed a turn and attempted to land the helicopter in an open field.” He said there were no problems or issues with the helicopter and did not recall any further details about the accident sequence.

A witness located about 1/2 nautical mile from the accident site was outside her home when she heard the sound of a helicopter nearby. She could not see the helicopter due to the clouds, and she noted that it was raining lightly at the time. She said the helicopter sounded “really loud and low, as if it were trying to land behind her house.” She heard the helicopter for about 30 seconds before hearing a loud “whump whump” sound followed by a loud boom.

Examination of the wreckage by a Federal Aviation Administration (FAA) inspector revealed that all major components of the helicopter were present at the accident site. The fuselage came to rest on its left side and nearly inverted, at the edge of a wooded area. The majority of the tailboom was in an adjacent tree about 30 ft above the ground. The main rotor blades were all separated from the hub, fragmented, and strewn across an area about 100 yards in diameter.

The 1455 weather conditions reported at the THA, located about 2.5 nautical miles northeast of the accident site at an elevation of 1,084 ft mean sea level (msl), included an overcast cloud ceiling at 300 ft above ground level (agl), visibility 2.5 statute miles in mist, temperature 13° C, dew point 12° C. The visibility had reduced to 1 mile at the next recorded observation at 1515. A review of the graphical aviation forecast issued by the National Weather Service at 1302 revealed that overcast skies were expected in the area around the time of the accident with cloud bases at 1,100 ft msl and tops at 9,000 ft msl. Two airmen's meteorological information advisories were issued at 1200 and 1500, warning of instrument meteorological conditions expected in the area of the accident.

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	70, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Helicopter; Instrument helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	August 1, 2018
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6800 hours (Total, all aircraft), 2500 hours (Total, this make and model), 5506 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Co-pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	5-point
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 13, 2018
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6800 hours (Total, all aircraft), 2500 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Sikorsky	<b>Registration:</b>	N260MW
<b>Model/Series:</b>	HH-60L	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	1986	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special); Special flight (Special)	<b>Serial Number:</b>	86-24560
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	February 25, 2019 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	23500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo shaft
<b>Airframe Total Time:</b>	3889 Hrs as of last inspection	<b>Engine Manufacturer:</b>	General Electric
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	GE-T700-701C
<b>Registered Owner:</b>	Aircraft Investment Holdings Llc	<b>Rated Power:</b>	1890 Horsepower
<b>Operator:</b>	Aircraft Investment Holdings Llc	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	Arista Aviation	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	THA,1083 ft msl	<b>Distance from Accident Site:</b>	3 Nautical Miles
<b>Observation Time:</b>	14:55 Local	<b>Direction from Accident Site:</b>	24°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	2.5 miles
<b>Lowest Ceiling:</b>	Overcast / 300 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.93 inches Hg	<b>Temperature/Dew Point:</b>	13°C / 12°C
<b>Precipitation and Obscuration:</b>	Moderate - None - Mist		
<b>Departure Point:</b>	Scottsboro, AL (4A6 )	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>	Tullahoma, TN (THA )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Tullahoma Rgnl Arpt/Wm Norther THA	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	1084 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Serious	<b>Latitude, Longitude:</b>	35.345832,-86.270278(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Brazy, Douglass
<b>Additional Participating Persons:</b>	Bill Keeney; FAA/FSDO ; Nashville, TN
<b>Original Publish Date:</b>	March 23, 2022
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 3</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=99037">https://data.nts.gov/Docket?ProjectID=99037</a>

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](#).