



# Aviation Investigation Final Report

<b>Location:</b>	Hartford, Illinois	<b>Accident Number:</b>	CEN25LA163
<b>Date &amp; Time:</b>	April 24, 2025, 20:51 Local	<b>Registration:</b>	N880SL
<b>Aircraft:</b>	MESSERSCHMITT-BOLKOW-BLOHM BK 117	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision during takeoff/land	<b>Injuries:</b>	3 Serious
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Non-scheduled - Air Medical (Unspecified)		

## Analysis

The purpose of the public relations flight with the air medical helicopter was to perform landing zone training with a fire department. Prior to the flight, the pilot discussed the confined area landing zone characteristics with another company pilot, and he studied satellite imagery of the confined area landing zone. The flight manifest and the flight risk assessment tool were completed and submitted to the operational control center, which then issued a flight release after approval. Prior to initiating the approach, the pilot performed a high reconnaissance to identify the confined area landing zone and the obstacles which consisted of a tree and power lines. The pilot then performed a low reconnaissance while simultaneously performing a steep approach. The helicopter landed in the vacant lot, consisting of a flat grass field, across the street from the fire department.

Several hours later after the training was completed, the pilot performed a ground reconnaissance, noting the tree and the power lines. Ground personnel illuminated the power lines near the confined area landing zone for the night takeoff. The pilot, who was utilizing night vision goggles with the helicopter’s searchlight activated, brought the helicopter to an in ground effect hover, and he balanced the torque indications for the two turboshaft engines. The pilot decided to use the power lines in front of the helicopter as a visual reference for the initial climb. During the initial climb, the helicopter inadvertently drifted rearward, and the tail rotor system impacted the tree. The helicopter rotated to the right, descended, and it came to rest partially upright. Shortly after impacting the ground, a postimpact fire initiated, and partially consumed the helicopter.

The front right seat pilot and the rear left seat (aft facing) flight nurse were able to egress on their own from the helicopter. The front left seat flight nurse required assistance from ground

personnel to egress from the helicopter. The fire department was able to immediately perform fire suppression efforts on the helicopter. The helicopter sustained substantial damage to the fuselage, the main rotor system, the empennage, and the tail rotor system. The helicopter was not equipped with a crash resistant fuel system, nor was it required by regulation.

## 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 directional control during the initial climb at night from a confined area landing zone, that resulted in an impact with a tree, a loss of control, and a subsequent impact with terrain.

### Findings

<b>Personnel issues</b>	Incorrect action sequence - Pilot
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Personnel issues</b>	Task monitoring/vigilance - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained

## Factual Information

### History of Flight

<b>Initial climb</b>	Collision during takeoff/land (Defining event)
<b>Post-impact</b>	Evacuation
<b>Post-impact</b>	Fire/smoke (post-impact)

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	47, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	September 9, 2024
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	July 8, 2024
<b>Flight Time:</b>	7404 hours (Total, all aircraft), 1277 hours (Total, this make and model), 7338 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	MESSERSCHMITT-BOLKOW-BLOHM	<b>Registration:</b>	N880SL
<b>Model/Series:</b>	BK 117 B-2	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	1988	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	7130
<b>Landing Gear Type:</b>	None; Skid	<b>Seats:</b>	7
<b>Date/Type of Last Inspection:</b>	April 22, 2025 AAIP	<b>Certified Max Gross Wt.:</b>	7385 lbs
<b>Time Since Last Inspection:</b>	4 Hrs	<b>Engines:</b>	2 Turbo shaft
<b>Airframe Total Time:</b>	17354.5 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	LTS-101B1
<b>Registered Owner:</b>	AIR METHODS LLC	<b>Rated Power:</b>	593 Horsepower
<b>Operator:</b>	AIR METHODS LLC	<b>Operating Certificate(s) Held:</b>	Rotorcraft external load (133), On-demand air taxi (135)
<b>Operator Does Business As:</b>	AIR METHODS LLC	<b>Operator Designator Code:</b>	QMLA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	KALN,543 ft msl	<b>Distance from Accident Site:</b>	3 Nautical Miles
<b>Observation Time:</b>	20:50 Local	<b>Direction from Accident Site:</b>	38°
<b>Lowest Cloud Condition:</b>	Scattered / 4800 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots / None	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	140°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.01 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Hartford, IL (None)	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>	Granite City, IL (None)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	20:51 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	3 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	On-ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 Serious	<b>Latitude, Longitude:</b>	38.837712,-90.09583(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hodges, Michael
<b>Additional Participating Persons:</b>	Dennis Mueller; FAA St. Louis FSDO; St. Ann, MO
<b>Original Publish Date:</b>	June 20, 2025
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</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=200063">https://data.nts.gov/Docket?ProjectID=200063</a>

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