



# Aviation Investigation Final Report

<b>Location:</b>	Batavia, New York	<b>Accident Number:</b>	ERA22LA007
<b>Date &amp; Time:</b>	October 6, 2021, 21:16 Local	<b>Registration:</b>	N505TJ
<b>Aircraft:</b>	BELL HELICOPTER TEXTRON CANADA 429	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Controlled flight into terr/obj (CFIT)	<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Positioning		

## Analysis

The pilot reported that he decided to perform a practice approach to the runway using night vision goggles. He set up the approach and activated the autopilot. About 200 ft above the ground, the helicopter inadvertently entered a fog bank and the pilot lost visual reference to the runway. He attempted to perform a climbing right turn but forgot to deactivate the autopilot. The autopilot initiated a descent into the fog, the pilot maintained a level attitude, and shortly thereafter the helicopter impacted the ground and bounced. The pilot attempted to initiate a climb; however, the helicopter impacted the ground a second time, which resulted in substantial damage to the fuselage. The pilot reported no preimpact mechanical malfunctions or failures with the helicopter that would have precluded normal operation.

## Probable Cause and Findings

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

The pilot’s failure to disengage the autopilot prior to climbing out of a fog bank.

## Findings

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<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Aircraft</b>	Autopilot system - Incorrect use/operation
<b>Personnel issues</b>	Use of equip/system - Pilot
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Fog - Contributed to outcome

## Factual Information

### History of Flight

<b>Approach</b>	Controlled flight into terr/obj (CFIT) (Defining event)
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### Pilot Information

<b>Certificate:</b>	Commercial; Flight engineer; Private	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Helicopter	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	February 19, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	April 23, 2021
<b>Flight Time:</b>	3583 hours (Total, all aircraft), 621 hours (Total, this make and model), 3583 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Passenger Information

<b>Certificate:</b>		<b>Age:</b>	
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Female
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BELL HELICOPTER TEXTRON CANADA	<b>Registration:</b>	N505TJ
<b>Model/Series:</b>	429	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	2010	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	57029
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	9
<b>Date/Type of Last Inspection:</b>	September 28, 2021 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	7000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo shaft
<b>Airframe Total Time:</b>	2860 Hrs at time of accident	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	C126 installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	PW207D1
<b>Registered Owner:</b>	MERCY FLIGHT INC	<b>Rated Power:</b>	550 Horsepower
<b>Operator:</b>	MERCY FLIGHT INC	<b>Operating Certificate(s) Held:</b>	On-demand air taxi (135)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	GVQ,913 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	20:54 Local	<b>Direction from Accident Site:</b>	21°
<b>Lowest Cloud Condition:</b>	Few / 1400 ft AGL	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	10°C / 9°C
<b>Precipitation and Obscuration:</b>	In the vicinity - None - Fog		
<b>Departure Point:</b>	Rochester, NY (ROC)	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>	Batavia, NY	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	21:00 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	GENESEE COUNTY GVQ	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	913 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	10/28	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5499 ft / 100 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	43.034158,-78.167864(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Kemner, Heidi
<b>Additional Participating Persons:</b>	Robert Cunningham; FAA/FSDO; Rochester, NY
<b>Original Publish Date:</b>	April 29, 2022
<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=104073">https://data.nts.gov/Docket?ProjectID=104073</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](#).