



# Aviation Investigation Preliminary Report

<b>Location:</b>	Pompano Beach, FL	<b>Accident Number:</b>	ERA23FA352
<b>Date &amp; Time:</b>	August 28, 2023, 08:44 Local	<b>Registration:</b>	N109BC
<b>Aircraft:</b>	Eurocopter EC135	<b>Injuries:</b>	2 Fatal, 1 Serious, 1 Minor
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Non-scheduled - Air Medical (Medical emergency)		

On August 28, 2023, about 0844 eastern daylight time, a Eurocopter Deutschland GMBH EC135T1, N109BC, was destroyed when it was involved in an accident near Pompano Beach, Florida. The commercial pilot sustained minor injuries. One paramedic onboard and a resident of an apartment building were fatally injured, while a second paramedic onboard was seriously injured. The helicopter was operated as a Title 14 *Code of Federal Regulations* Part 135 air medical flight.

During an interview, the pilot reported that the helicopter was dispatched to transport a patient from the scene of an automobile accident. During initial climb, west of Pompano Beach Airpark (PMP), Pompano Beach, Florida, about 300 to 400 ft above ground level, the pilot heard a “bang” from the rear of the helicopter and noticed that the turbine outlet temperature (TOT) was rising on the No. 1 engine. He set the No.1 engine throttle to idle, declared an emergency to air traffic control, and reversed direction to return to the airport. He scanned the cockpit instrument panel and noticed that the No.1 engine fire button had illuminated. He pressed the button to activate the fire suppression system; however, the TOT continued to rise on the No. 1 engine. The pilot subsequently heard a second “bang,” and was unable to control the helicopter. It spun and descended into an apartment building.

Review of witness video revealed an in-flight fire near the area of the engine exhaust and the tailboom attach point. The tailboom partially separated in-flight and the helicopter descended in a right spin.

The wreckage came to rest on its left side, facing south, through the roof of a one-story apartment building. A postcrash fire consumed a majority of the airframe. The tailboom was located about 30 ft south of the main wreckage and its fenestron (tailrotor) remained intact. All four main rotor blades separated near the blade root, consistent with impact damage. Both engines and their respective full authority digital engine control unit were retained for further

examination and data download. Additionally, hydraulic lines for the fenestron actuator, near the taiboom attach point, and the No. 1 engine fuel shutoff valve assembly were also retained for further examination.

The helicopter was manufactured in 1999 and powered by two Turbomeca Arrius 2B1, 670-turboshaft horsepower engines. It was maintained under a manufacturer’s approved inspection program. It’s most recent 100-hr inspection was completed on May 23, 2023. At that time, the airframe had accrued 5,557.1 total hours. The engines had accrued 5,327.2 hours since new (2,251.3 hours since overhaul in 2016). The helicopter was operated about 24 hours from the time of the most recent inspection, until the accident.

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Eurocopter	<b>Registration:</b>	N109BC
<b>Model/Series:</b>	EC135 T1	<b>Aircraft Category:</b>	Helicopter
<b>Amateur Built:</b>			
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	On-demand air taxi (135)
<b>Operator Designator Code:</b>			

### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	VMC	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PMP,15 ft msl	<b>Observation Time:</b>	08:53 Local
<b>Distance from Accident Site:</b>	1 Nautical Miles	<b>Temperature/Dew Point:</b>	31°C /24°C
<b>Lowest Cloud Condition:</b>	Few / 2400 ft AGL	<b>Wind Speed/Gusts, Direction:</b>	7 knots / , 190°
<b>Lowest Ceiling:</b>	Broken / 7000 ft AGL	<b>Visibility:</b>	10 miles
<b>Altimeter Setting:</b>	29.81 inches Hg	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Departure Point:</b>	Pompano Beach, FL	<b>Destination:</b>	Pompano Beach, FL

### Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal, 1 Serious, 1 Minor	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	In-flight
<b>Ground Injuries:</b>	1 Fatal	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Fatal, 1 Serious, 1 Minor	<b>Latitude, Longitude:</b>	26.240252,-80.122249

## Administrative Information

**Investigator In Charge (IIC):** Gretz, Robert

**Additional Participating Persons:** Ricardo Queiroz; FAA/FSDO; Miramar, FL  
Seth Buttner; Airbus Helicopters; Grand Prairie, TX  
Bryan Larimore; Safran Helicopter Engines; Grand Prairie, TX  
Paul-Etienne Jactat; Safran Helicopter Engines  
David Keenan; FAA AVP-100; Washington, DC  
Don Lambert; Metro Aviation; Shreveport, LA

**Note:**