

# **Aviation Investigation Preliminary Report**

Location: Sterling City, TX Accident Number: CEN24FA049

Date & Time: November 29, 2023, 14:30 Local Registration: N745MB

Aircraft: MD HELICOPTERS INC 600 Injuries: 2 Fatal

Flight Conducted Under: Part 133: Rotorcraft ext. load

On November 29, 2023, about 1430 central standard time, a MD Helicopters Inc. MD600N helicopter, N745MB, sustained substantial damage when it was involved in an accident near Sterling City, Texas. The commercial pilot and the aerial lineman sustained fatal injuries. The helicopter was operated as a Title 14 *Code of Federal Regulations* Part 133 rotorcraft external load flight.

The helicopter was operated by Brim Aviation, Ashland, Oregon. The pilot was employed by the operator while the lineman was employed by Source Utility Services, Georgetown, Texas. The pilot was stationed in the front left seat and the lineman was stationed outside of the cabin on the left side. The purpose of the flight was to perform aerial power line system work. There were no known witnesses to the accident sequence.

A review of Automatic Dependent Surveillance-Broadcast (ADS-B) data showed that the helicopter approached the target power line pole (a steel mono pole that is about 133 ft tall) from the west. As the helicopter passed just to the south of the pole, the helicopter turned 180° to the south and then approached the pole from the southwest. As the helicopter got closer to the pole, it then approached the pole from the south. The ADS-B data terminated at the pole.

Various impact marks were observed on a static arm, about 12 ft long, at the top of the pole. The static arm supported optical ground wire (commonly known as OPGW). The impact marks were located about 4 ft from the base of the static arm. The pole and attached wires were all found intact.

The helicopter came to rest on its left side, about 103 ft away from the pole on a flat grass field. The remote field, used for cattle grazing, was located on private property, and was surrounded by wind turbines. The fuselage sustained extensive crushing damage. The NOTAR (no tail rotor) system was found separated, about 30 ft away from the fuselage. All major structural items from the fuselage and empennage were observed at the accident site. All six

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main rotor blades, from the fully articulated main rotor assembly, were present with extensive impact damage.

The helicopter sustained substantial damage to the main rotor system, the fuselage, and the empennage. The helicopter was recovered from the accident site to a secure location for future examination work.

The helicopter was equipped with a wire strike kit and a radar altimeter. The helicopter was also equipped with a Rolls-Royce 250-C47M turboshaft engine. The Goodrich Electronic Control Unit was found intact, and the data was extracted.

The pilot utilized a four-point restraint system, and the lineman was secured to the cabin with a harness. The pilot and the lineman both utilized a flight helmet.

Multiple avionics devices were removed from the helicopter and were shipped to the National Transportation Safety Board (NTSB) Vehicle Recorders Laboratory. The cockpit light panel was removed, and it was shipped to the NTSB Materials Laboratory.

The estimated density altitude for the closest meteorological reporting station was 3,328 ft.

#### Aircraft and Owner/Operator Information

Aircraft Make:	MD HELICOPTERS INC	Registration:	N745MB
Model/Series:	600 N	Aircraft Category:	Helicopter
Amateur Built:			
Operator:	Brim Equipment Leasing, LLC	Operating Certificate(s) Held:	Rotorcraft external load (133), On-demand air taxi (135), Agricultural aircraft (137)
Operator Designator Code:	BV0L		

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KBPG,2573 ft msl	Observation Time:	14:15 Local
Distance from Accident Site:	33 Nautical Miles	Temperature/Dew Point:	16°C /6°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	15 knots / , 170°
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	30.01 inches Hg	Type of Flight Plan Filed:	Company VFR
Departure Point:	Sterling City, TX	Destination:	Sterling City, TX

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## Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	31.923796,-100.96924 (est)

### **Administrative Information**

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Robert Smith; FAA Lubbock FSDO; Lubbock, TX Lawrence Johnson; MD Helicopters; Mesa, AZ Jon-Adam Michael; Rolls-Royce; Indianapolis, IN Eugene Hill; Brim Aviation; Ashland, OR
Investigation Class:	Class 3
Note:	

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