



Aviation Investigation Final Report

Location:	Wooster, Ohio	Accident Number:	CEN20LA264
Date & Time:	July 4, 2020, 13:57 Local	Registration:	N263MH
Aircraft:	Mbb BK117	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	4 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled - Air Medical (Medical emergency)		

Analysis

During departure from a portable dolly, the helicopter crew flew over an area where silt construction fencing was installed. While the helicopter flew about 10 ft above ground level and over the fence, the fence became unsecured and blew up and into the main rotor system. The crew then performed a forced landing, which resulted in substantial damage to the fuselage, tailboom, and tail rotor blades.

Although the crew was aware of the fence, they did not believe it would be a factor during the departure because they had previously flown over it with no issues.

Probable Cause and Findings

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

The entanglement of construction fencing into the main rotor system, which necessitated a forced landing that resulted in substantial damage to the helicopter.

Findings

Environmental issues	Fence/fence post - Effect on equipment
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Factual Information

History of Flight

Taxi-to runway	Miscellaneous/other (Defining event)
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On July 4, 2020, about 1357 eastern daylight time (EDT), an Airbus Helicopter BK117, N263MH, was substantially damaged when it was involved in an accident at Wayne County Airport (KBJJ), Wooster, Ohio. The two commercial pilots sustained no injuries. The helicopter was operated as a Title 14 *Code of Federal Regulations* (CFR) Part 135 helicopter air ambulance flight.

Surveillance video showed that after lifting off a portable dolly, the helicopter turned right and briefly hovered. As the helicopter began to take off following the hover, it traversed a grassy area adjacent to the ramp about 10 ft above ground level, where a silt construction fence was obscured by tall grass. As the helicopter overflew, the fence became unsecured and blew up and into the main and tail rotor system. The crew then performed a forced landing, which resulted in substantial damage to the fuselage, tailboom, and tail rotor blades.

At the time of the accident, there were no notices to air missions for the construction fence, and the presence of the fence was not contained within any publications or notices available to pilots.

According to the pilots, the construction in the area of the fencing had started about 2 months prior to the accident and that coincided with the installation of the fence. One of the pilots stated that he had inspected the fence himself and remembered the bottom being buried in the ground about 4 to 6 inches and attached to wooden stakes with staples and nails. He said, regarding the silt fence, that he “never imagined it would come out at that altitude.” The second pilot stated that he had flown over it so many times, he did not take notice of it as a factor.

Pilot Information

Certificate:	Commercial	Age:	56, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	5-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	October 8, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 25, 2020
Flight Time:	5844 hours (Total, all aircraft), 1827 hours (Total, this make and model), 2419 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Commercial	Age:	41, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	5-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	November 22, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 7, 2020
Flight Time:	2970 hours (Total, all aircraft), 750 hours (Total, this make and model), 2250 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mbb	Registration:	N263MH
Model/Series:	BK117 C2	Aircraft Category:	Helicopter
Year of Manufacture:	2009	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	9311
Landing Gear Type:	None; Skid	Seats:	6
Date/Type of Last Inspection:	June 23, 2020 AAIP	Certified Max Gross Wt.:	7903 lbs
Time Since Last Inspection:		Engines:	2 Turbo shaft
Airframe Total Time:	4988.9 Hrs as of last inspection	Engine Manufacturer:	Safran
ELT:	C126 installed, not activated	Engine Model/Series:	Arriel 1E2
Registered Owner:	Metrohealth System	Rated Power:	739 Horsepower
Operator:	Metrohealth System	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	HDNA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KBJJ, 1147 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	30°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wooster, OH	Type of Flight Plan Filed:	Company VFR
Destination:	Oberlin, OH	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class C

Airport Information

Airport:	Wayne County BJJ	Runway Surface Type:	
Airport Elevation:	1135 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	40.873611,-81.883888(est)

Administrative Information

Investigator In Charge (IIC):	Williams, David
Additional Participating Persons:	Arnold Wolfe; FAA; Cleveland, OH
Original Publish Date:	March 18, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101540

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](#).