



# NTSB MEMORANDUM FOR RECORD

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**Date: 4/28/2020**  
**Person Contacted: See Below**  
**NTSB Accident Number: ERA20LA160**

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Representatives Todd Tuttle (Director of Safety, Haverfield Aviation), Jim Prosser (Director of Operations, Haverfield Aviation), and Steven O'Rourke (FAA Coordinator) joined a teleconference where the details of the accident and specifics to the operation being performed were discussed. The following content represents a summary of what was reported by the representatives from Haverfield Aviation. Photographs provided by the FAA and Haverfield Aviation have been added to this memorandum.

## **Narrative:**

The purpose of the Part 133 operation was to move a conductor powerline from the top tier area to the middle area. Figure 1 shows the middle beam the conductor powerline was being moved to and is circled in red.



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Figure 1: View of the conductor powerline that was moved by the helicopter

The purpose of the crane, which is visible in Figure 1, was to support the weight of the wire. The helicopter's job was to move the wire laterally, toward the helicopter. Referencing Figure 1, the helicopter would have been located near the crane during its hover and maneuvering. During the moving of the powerline, a loss of engine power occurred at an estimated height of 140 ft.

It was discussed, what was required of the pilot, to release the long line so that a successful autorotation would be possible. It was reported that two actions were required to be performed by the pilot. The belly band release handle and the emergency hook release handle would both need to be pulled to release the long line.

Figure 2 shows the helicopter at the accident site, with the belly band and long line in view. The belly band is the blue strap on the bottom of the fuselage. The belly band serves as a secondary safety measure, to catch the long line, should it become inadvertently released. This is critical during Human External Cargo (HEC) operations,



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where a human is attached to the end of the long line. During the accident flight, HEC operations were not being performed, however, immediately prior to the accident, HEC operations were being performed.

The long line, which has orange markings on its line, is still attached to the power line and the bottom of the fuselage and the main hook.



Figure 2: View of the helicopter with the belly band and the long line in view

To release the belly band, the pilot would need to pull an estimated 8 to 12 inches. The handle is located near the pilots left hand, and the pilot would need to remove their left hand from the collective to pull the handle the 8-12 inches. The handle from the accident airplane had been pulled under the fuselage during the impact sequence and was not photographed at the accident site. Figure 3 is an image of the belly band from the accident airplane.



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Figure 3: View of the belly band release handle from the accident airplane



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Figure 4: Exemplar belly band release handle from another Haverfield Aviation MD369D Helicopter

The long line also had an emergency release handle on the cyclic. Figure 5 shows the handle that was required to be pulled with the pilot's right hand (the handle is outlined in red). In addition, within Figure 5, a red button is visible and circled. This button is an emergency release for the long line and serves the same function as the release handle located on the cyclic handle. This electrically driven button, however, was deactivated due to the circuit breaker being pulled by the pilot prior to the accident. It was explained that pulling this circuit breaker is common when HEC operations are being performed.



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Figure 5: View of the two emergency release mechanisms for the long line main hook



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Figure 6: View of the pulled circuit breaker that controls the hook release button located on the cyclic



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Figure 7: Additional view of the cyclic and the emergency release handle and red button