



Operational Safety Notice OSN2015-002

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FUEL STARVATION DUE TO UNPORTING OF FUEL SUPPLY PICK-UP

Helicopters are used on occasion to conduct operations with a “long line” attached to pull or tow objects on the ground. When pulling loads with a “long line”, a significant side load can be placed on the helicopter, which can create high fuselage pitch and roll angles and uncoordinated flight. When operating in such flight profiles, a significant increase in the amount of unusable fuel can occur.

During a recent external load operation, for example, a pilot began dragging winch lines across terrain when the helicopter he was flying, an MDHI 369E, lost power. He jettisoned the load and impacted the ground, causing serious injury to himself and substantial damage to the aircraft. About 117 pounds (17.2 gallons) of fuel were onboard at the time of the accident. Fuel starvation may have occurred when the helicopter was subjected to high nose-up and roll-right attitudes during uncoordinated flight. This condition may have caused unporting of the fuel supply pick-up with a corresponding disruption of the fuel supply to the engine resulting in a loss of power.

The conditions and limitations under which MDHI helicopters received type certification meets or exceeds the airworthiness requirements of the Civil Air Regulations and, where specified, the Federal Aviation Regulations. MDHI helicopters are not specifically certified for operations with the potential for sustained high fuselage pitch and roll angles in uncoordinated flight, such as powerline stringing operations. To help mitigate the possibility of fuel starvation and the potential safety risk, consider modifying fuel management procedures for such operations. **Instead of allowing such operations with minimum fuel safety margins associated with normal flight attitudes during coordinated flight, consider increasing minimum fuel level requirements when operations will involve high deck angles in pitch and roll during uncoordinated flight.**

Fly safe!

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