



Memorandum for Record

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National Transportation Safety Board
Investigator in Charge

NTSB Accident Number: WPR19LA097
Aircraft Registration & Make/Model: N119T / MD Helicopters Inc. 369HS
Accident Location: Newberg, Oregon
Accident Date: March 17, 2019

Figure 1 is an excerpt from the Federal Aviation Administration (FAA) approved rotorcraft flight manual, for the MD500 Models including the 369HS, page 1-14, which revealed the capacity of jet A fuel in the self-sealing tanks is 62 gallons, and the amount of usable Jet A fuel for a self-sealing tank is 59.9 U.S. gallons.

Figure 2 is an excerpt from the FAA supplemental type certificate data sheet number H3WE, page 2 revealed the total tank capacity of 383 pounds (58.9 gallons), with .56 pound trapped and 3.10 pounds unusable. Combined the trapped and unusable fuel weighed 3.66 pounds, or .56 gallon, based on the weight of JP-4 fuel of 6.5 pounds per gallon.

1-13. CAPACITIES – FUEL SYSTEM

JET A:

Standard non self-sealing tanks:

Capacity is 64.0 U.S. gallons (242 liters), 435.0 pounds.

Usable fuel is 63.4 U.S. gallons (240 liters), 431.1 pounds.

Optional self-sealing tanks:

Capacity is 62.0 US gallons (234 liters), 421.6 pounds.

Usable fuel is 59.9 U.S. gallons (226.8 liters), 407.5 pounds.

JET B:

Standard non self-sealing tanks:

Capacity is 64.0 U.S. gallons (242 liters), 416.0 pounds.

Usable fuel is 63.4 U.S. gallons (240 liters), 412.1 pounds.

Optional self-sealing tanks:

Capacity is 62.0 US gallons (234 liters), 402.0 pounds.

Usable fuel is 59.9 U.S. gallons (232 liters), 389.5 pounds.

CAPACITIES – OIL

Engine oil – 3.0 US quarts (2.84 L)

Main transmission – 12.0 US pints (5.67 liters)

Tail rotor transmission – 0.5 US pint (0.23 liter)

Fuel Capacity

Fuel System	Total Tank Capacity (lbs.)	Trapped Fuel * (lbs.)	Total Unusable Fuel ** (lbs.)	Usable Fuel Capacity (lbs.)	Tank Sump Location (Sta.)
369-8100	383	0.56	3.10	380	98.2

* Fuel which cannot be drained from the tanks, through the drain provided, with the helicopter in the normal ground attitude.

** Fuel which cannot be used safely in all flight attitudes, and which must be included in the empty weight. This includes trapped fuel

Note: Fuel capacities are total tank capacities over and above unusable fuel. Fuel weights are based on JP-4 fuel.

Figure 2. Excerpt from the FAA type certificate data sheet number H3WE.