



Aviation Investigation Final Report

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|--------------------------------|---------------------------|-------------------------|-------------|
| Location: | WALLA WALLA, Washington | Accident Number: | SEA96LA100 |
| Date & Time: | May 26, 1996, 17:29 Local | Registration: | N174HA |
| Aircraft: | Hiller UH-12 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation | | |

Analysis

The pilot reported that he exhausted his fuel supply while attempting to land at the destination airport for refueling. He had previously attempted to refuel at a remote landing zone equipped with a fuel truck, but the fuel truck was unable to pump fuel at that time. The pilot and the owner of the operation boarded the helicopter and decided to fly to the airport with what they thought was about 14 gallons of fuel on board. The pilot intended on landing the helicopter (en route), if the fuel gauge reached the 'yellow' range during the flight. About 2.5 nautical miles from the airport, when the fuel gauge needle was slightly outside of the yellow range, the engine 'quit.' The pilot executed an immediate autorotation. One of the helicopter's skids impacted soft terrain during the landing and a main rotor blade struck the ground. The helicopter rolled over and was substantially damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate preflight/planning, and his failure to refuel the helicopter with sufficient fuel before flight, which resulted in fuel exhaustion and a subsequent forced landing. A factor relating to the accident was: an inaccurate fuel quantity gauge, which displayed a false indication of fuel.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
3. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
4. (C) FLUID,FUEL - EXHAUSTION
5. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

6. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

7. (F) TERRAIN CONDITION - SOFT

Factual Information

On May 26, 1996, at 1729 Pacific daylight time, N174HA, a Hiller UH-12 helicopter, operated by Blue Mountain Aviation, Inc., collided with terrain and was substantially damaged during an emergency landing near Walla Walla, Washington. The emergency landing was precipitated by a total loss of engine power during cruise. The commercial pilot and his passenger were not injured. Visual meteorological conditions prevailed and no flight plan had been filed. The business flight was conducted under 14 CFR 91.

The pilot reported that he exhausted his fuel supply while attempting to land at the Walla Walla Regional Airport for refueling. The pilot had previously attempted to refuel at a remote landing zone equipped with a fuel truck, but the fuel truck was unable to pump fuel at that time. The pilot and the owner of the operation boarded the helicopter and decided to fly to the airport with the low fuel levels that was contained in the helicopter. They stated that they had about 14 gallons of fuel on board. The pilot intended on landing the helicopter if the fuel gauge reached the "yellow" range during the flight.

About 2.5 nautical miles from the airport, when the fuel gauge needle was slightly outside of the yellow range, the engine "quit." The pilot executed an immediate autorotation. One of the helicopter's skids impacted soft terrain during the landing and a main rotor blade struck the ground. The helicopter rolled over and was substantially damaged.

Pilot Information

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|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------|
| Certificate: | Commercial; Flight instructor | Age: | 54, Male |
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Center |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 2 Unknown | Last FAA Medical Exam: | |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 14000 hours (Total, all aircraft), 90 hours (Total, this make and model), 13500 hours (Pilot In Command, all aircraft), 185 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------|---------------------------------------|-----------------|
| Aircraft Make: | Hiller | Registration: | N174HA |
| Model/Series: | UH-12 UH-12 | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 3074HA |
| Landing Gear Type: | Skid | Seats: | 2 |
| Date/Type of Last Inspection: | February 10, 1996 Annual | Certified Max Gross Wt.: | 3100 lbs |
| Time Since Last Inspection: | 187 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 5953 Hrs | Engine Manufacturer: | Lycoming |
| ELT: | Not installed | Engine Model/Series: | VO-540-C2A |
| Registered Owner: | BMA, INC. | Rated Power: | 305 Horsepower |
| Operator: | | Operating Certificate(s) Held: | |
| Operator Does Business As: | BLUE MOUNTAIN AVIATION | Operator Designator Code: | GMMG |

Meteorological Information and Flight Plan

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|-----------------------------------------|----------------------------------|---------------------------------------------|------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | ALW ,1205 ft msl | Distance from Accident Site: | 2 Nautical Miles |
| Observation Time: | 17:39 Local | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 15 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 180° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 24°C / 8°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | , WA | Type of Flight Plan Filed: | None |
| Destination: | (ALW) | Type of Clearance: | None |
| Departure Time: | 17:20 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|---|----------------------------------|----------------|
| Airport: | | Runway Surface Type: | |
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced landing |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|---------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 46.110912,-118.29972(est) |

Administrative Information

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| Investigator In Charge (IIC): | Guzzetti, Jeffrey |
| Additional Participating Persons: | LARRY RICHARDS; SPOKANE , WA |
| Original Publish Date: | February 28, 1997 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=42372 |

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](#).