



Aviation Investigation Final Report

Location:	Baxley, Georgia	Accident Number:	ERA10LA053
Date & Time:	November 6, 2009, 11:30 Local	Registration:	N89ZC
Aircraft:	Hughes 369	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, the helicopter lost engine power less than a minute after takeoff and rolled over onto its left side during the subsequent autorotation. The pilot stated that the cause of the loss of engine power was because the “main fuel valve was pulled causing fuel starvation to the engine.” He also stated that there was no mechanical malfunction with the helicopter.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel starvation resulting from the pilot’s inadequate preflight inspection of the main fuel valve position.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Preflight inspection - Pilot

Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Autorotation	Controlled flight into terr/obj (CFIT)

On November 6, 2009, about 1130 eastern standard time, a Hughes 369D helicopter, N89ZC, registered to Extreme Helicopters Inc, crashed into a field while conducting an autorotation following a loss of engine power, in Baxley, Georgia. The certificated private pilot was not injured, and the helicopter sustained substantial damage. The flight was operated as a personal flight under the provisions of Title 14 Code of Federal Regulations (CFR) Part 91, and no flight plan was filed. Visual meteorological conditions prevailed at the time of the accident. The flight was originating from a private residence in Baxley, Georgia.

According to the pilot, the helicopter lost power less than a minute after takeoff. The helicopter rolled over onto its left side during the subsequent autorotation, substantially damaging the main rotor blades and airframe. The pilot further stated that the cause of the loss of engine power was that the "main fuel valve was pulled causing fuel starvation to the engine."

Examination of the helicopter by a Federal Aviation Administration inspector found the helicopter on its left side, with damage to the main rotor blades and tail rotor.

Pilot Information

Certificate:	Private	Age:	40, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	September 4, 2009
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	540 hours (Total, all aircraft), 322 hours (Total, this make and model), 480 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N89ZC
Model/Series:	369 D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	1098D
Landing Gear Type:	High skid; Skid	Seats:	5
Date/Type of Last Inspection:	October 6, 2009 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	7948 Hrs at time of accident	Engine Manufacturer:	ALLISON
ELT:	Installed, not activated	Engine Model/Series:	250
Registered Owner:	On file	Rated Power:	420 Lbs thrust
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AMG,201 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.31 inches Hg	Temperature/Dew Point:	21°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Baxley, GA (PVT)	Type of Flight Plan Filed:	None
Destination:	Baxley, GA (PVT)	Type of Clearance:	None
Departure Time:	12:10 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	31.741388,-82.362777(est)

Administrative Information

Investigator In Charge (IIC):	Wilson, Ralph
Additional Participating Persons:	Chuck Thompson; Federal Aviation Administration; Atlanta, GA
Original Publish Date:	December 20, 2010
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=75025

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](#).