



# Aviation Investigation Final Report

<b>Location:</b>	Baxley, Georgia	<b>Accident Number:</b>	ERA10LA053
<b>Date &amp; Time:</b>	November 6, 2009, 11:30 Local	<b>Registration:</b>	N89ZC
<b>Aircraft:</b>	Hughes 369	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	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

<b>Aircraft</b>	Fuel - Fluid management
<b>Personnel issues</b>	Preflight inspection - Pilot

## Factual Information

### History of Flight

<b>Initial climb</b>	Loss of engine power (total) (Defining event)
<b>Autorotation</b>	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

<b>Certificate:</b>	Private	<b>Age:</b>	40, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	September 4, 2009
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	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

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

## Meteorological Information and Flight Plan

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

## Wreckage and Impact Information

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

## Administrative Information

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

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