



# National Transportation Safety Board Aviation Accident Data Summary

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<b>Location:</b>	Birmingham, AL	<b>Accident Number:</b>	ERA11LA175
<b>Date &amp; Time:</b>	03/02/2011, 1756 CST	<b>Registration:</b>	N154MW
<b>Aircraft:</b>	BELL 206-L4	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Flight Test		

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## Analysis

The helicopter pilot reported that, following a maintenance test flight to verify that a newly installed power turbine governor was accurately set, he flew over the anticipated landing area and entered the downwind leg of the traffic pattern. While turning to the base leg of the traffic pattern, about 500 feet above ground level and at 40 to 50 knots, he reported that he heard a loud bang and that the airframe "lurched." He entered an autorotation and located a vacant parking garage deck within gliding range. The engine-out audio warning sounded and segment lights illuminated. The pilot landed the helicopter and it skidded about 15 feet. A test run determined that the engine operated below the normal specifications for new engines. The pneumatic line from the power turbine governor was found to be leaking and was removed and sent to the NTSB's Materials Laboratory for further examination. That examination revealed superficial longitudinal tool marks that did not extend to the interior surfaces of the flared ends. The interior surface of the flared ends exhibited some localized fretting damage on one side, consistent with damage that could have been caused by inadequate torque at the connection; however, no other anomalies were noted. According to the engine manufacturer, the leak would not have caused the engine to operate below the normal specification. The postaccident examination revealed no preimpact mechanical malfunctions or failures with the helicopter or engine that would have precluded normal operation.

## Flight Events

Approach-VFR pattern base - Loss of engine power (total)  
Emergency descent - Off-field or emergency landing  
Autorotation - Hard landing

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
A total loss of engine power for undetermined reasons.

## Findings

Not determined-Not determined-(general)-(general)-Unknown/Not determined - C

## Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor; Commercial	<b>Age:</b>	43
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane; Helicopter
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Instructor Rating(s):</b>	Helicopter; Instrument Helicopter
<b>Flight Time:</b>	10599 hours (Total, all aircraft), 1884 hours (Total, this make and model), 10484 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	BELL	<b>Registration:</b>	N154MW
<b>Model/Series:</b>	206-L4	<b>Engines:</b>	1 Turbo Shaft
<b>Operator:</b>	OMNIFLIGHT HELICOPTERS INC	<b>Engine Manufacturer:</b>	ALLISON
<b>Air Carrier Operating Certificate:</b>	On-demand Air Taxi (135)	<b>Engine Model/Series:</b>	250-C30-P
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Flight Test		

## Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	BHM, 650 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	Calm
<b>Temperature:</b>	19°C / 4°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Birmingham, AL (AL49)	<b>Destination:</b>	Birmingham, AL (AL49)

## Airport Information

<b>Airport:</b>	Carraway Medical Ctr Heliport (AL49)	<b>Runway Surface Type:</b>	
<b>Runway Used:</b>	N/A	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>			

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Shawn Etcher	<b>Adopted Date:</b>	02/23/2012
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78486">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78486</a>		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government

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agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.