



# **Aviation Investigation Final Report**

Location: Lewiston, Idaho Accident Number: WPR13CA337

Date & Time: July 23, 2013, 11:34 Local Registration: N9484F

Aircraft: Hughes 269B Aircraft Damage: Substantial

**Defining Event:** Hard landing **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot stated that he was conducting a full down practice autorotation which involved landing the helicopter as the final step. During the landing, the helicopter bounced which resulted in the main rotor striking the tail boom, severing the tail rotor drive shaft. The pilot stated that the accident could have been prevented if he had applied more forward cyclic after the helicopter had contacted the ground. The pilot reported no preimpact mechanical malfunctions or failures that would have precluded normal operation.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's incorrect application of the cyclic control during the landing.

#### **Findings**

Personnel issues	Incorrect action performance - Pilot
Personnel issues	Aircraft control - Pilot

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### **Factual Information**

### **History of Flight**

Autorotation	Attempted remediation/recovery
Autorotation	Hard landing (Defining event)

#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	33,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	July 20, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 19, 2012
Flight Time:	241 hours (Total, all aircraft), 73 hours (Total, this make and model), 11 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	Hughes	Registration:	N9484F
Model/Series:	269B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1160291
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	March 11, 2013 Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3883 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	10360 SER
Registered Owner:	SIMMONS KENT B	Rated Power:	180 Horsepower
Operator:	Odonata LLC	Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLWS,1442 ft msl	Distance from Accident Site:	
Observation Time:	11:56 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	32°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lewiston, ID (KLWS)	Type of Flight Plan Filed:	None
Destination:	Lewiston, ID (KLWS)	Type of Clearance:	None
Departure Time:	10:55 Local	Type of Airspace:	

### **Airport Information**

Airport:	Lewiston-Nez Perce County Airp KLWS	Runway Surface Type:	Asphalt
Airport Elevation:	1442 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Simulated forced landing

### **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:	46.374443,-117.015274(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	McKenny, Van
Additional Participating Persons:	James Black; Federal Aviation Administration; Spokane, WA
Original Publish Date:	October 21, 2013
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=87552

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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.

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