



National Transportation Safety Board Aviation Accident Data Summary

Location:	Darby, MT	Accident Number:	WPR13LA178
Date & Time:	04/02/2013, 1100 MDT	Registration:	N369HW
Aircraft:	MD HELICOPTER 369A	Injuries:	1 Serious, 3 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that he purchased the turbine-powered helicopter about 5 weeks before the accident and departed from his private airstrip for a brief local personal flight. During the approach for landing, when the helicopter was about 200 to 300 ft above ground level (agl), he added some power, and the engine responded normally. Shortly thereafter, he conducted a height-velocity check with satisfactory results. The pilot then slowed the helicopter to a descending hover with the engine running at an unspecified speed above flight idle. The pilot stated that, when the helicopter was about 10 ft agl, he increased the throttle setting, but the engine did not respond. He added collective to slow the descent, but the helicopter landed hard.

Postaccident on-scene examination and system testing did not reveal evidence of any mechanical anomalies that would have resulted in a loss of engine power. The engine was tested in its as-removed condition and satisfactorily met all operational test and power calibration criteria with no anomalies or deficiencies noted. Review of the helicopter manufacturer's operating manual revealed that, during all phases of normal flight, the throttle should be in the full open (normal) position and should not be moved by the pilot. With the throttle in the full open position, a governor automatically increases and decreases engine power to maintain rotor rpm as the pilot raises and lowers the collective. According to the manufacturer, when the throttle is not in the full open position, the governor will not maintain rotor rpm, and full power will not be available. The pilot's statement that he increased the throttle setting about 10 feet agl indicates that he was manipulating the throttle contrary to the operating manual procedures, and this is likely the reason he was unsuccessful in stopping the helicopter's descent.

Flight Events

Landing-flare/touchdown - Abnormal runway contact

Landing-flare/touchdown - Hard landing

Landing-flare/touchdown - Landing gear collapse

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The pilot's failure to arrest the landing descent due to his incorrect use of the throttle, which resulted in a hard landing.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Descent rate-Incorrect use/operation - C

Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C

Personnel issues-Task performance-Use of equip/info-Use of equip/system-Pilot - C

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	67
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	MD HELICOPTER	Registration:	N369HW
Model/Series:	369A	Engines:	1 Turbo Shaft
Operator:	On file	Engine Manufacturer:	Allison Rolls Royce
Air Carrier Operating Certificate:	None	Engine Model/Series:	C250
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	K6S5, 3644 ft msl	Weather Information Source:	Unknown
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	
Condition of Light:	Day	Wind Speed/Gusts, Direction:	5 knots, 50°
Temperature:	10°C / 0°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Darby, MT (NONE)	Destination:	Darby, MT (NONE)

Airport Information

Airport:	Private Property (NONE)	Runway Surface Type:	Grass/turf
Runway Used:	N/A	Runway Surface Condition:	Unknown
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	3 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): Michael C Huhn

Adopted Date: 05/13/2015

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=86582>

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