



Aviation Investigation Final Report

Location:	Hamilton, Montana	Accident Number:	WPR13CA253
Date & Time:	May 1, 2013, 08:30 Local	Registration:	N322MH
Aircraft:	Schweizer 300C	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that during an instructional flight, the helicopter was 500 feet above ground level when he rolled the throttle off with the intent for the student to respond by initiating a straight-in autorotation. The student pilot did not respond properly, so the instructor took the controls to initiate a power recovery. The helicopter subsequently landed hard, deforming both skids and substantially damaging the airframe. The pilot did not report any preimpact mechanical malfunctions or failures with the helicopter 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 student pilot’s failure to maintain helicopter control during a practice autorotation and the flight instructor's delayed remedial action.

Findings

Personnel issues	Delayed action - Instructor/check pilot
Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Descent rate - Not attained/maintained

Factual Information

History of Flight

Maneuvering	Simulated/training event
Autorotation	Attempted remediation/recovery
Landing-flare/touchdown	Hard landing (Defining event)

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	45, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	February 15, 2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 6, 2012
Flight Time:	9517 hours (Total, all aircraft), 181 hours (Total, this make and model), 9336 hours (Pilot In Command, all aircraft), 245 hours (Last 90 days, all aircraft), 93 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	46
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	March 29, 2013
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	29 hours (Total, all aircraft), 29 hours (Total, this make and model), 19 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N322MH
Model/Series:	300C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	S1786
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	April 12, 2013 Annual	Certified Max Gross Wt.:	2050 lbs
Time Since Last Inspection:	12 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2800 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	H10-360-01A
Registered Owner:	Choice Aviation, LLC	Rated Power:	190 Horsepower
Operator:	Choice Aviation, LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	6S5	Distance from Accident Site:	0 Nautical Miles
Observation Time:	07:15 Local	Direction from Accident Site:	
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:		Temperature/Dew Point:	-2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hamilton, MT (6S5)	Type of Flight Plan Filed:	None
Destination:	Hamilton, MT (6S5)	Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	

Airport Information

Airport:	Ravalli County Airport 6S5	Runway Surface Type:	Asphalt
Airport Elevation:	3600 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	Visual
Runway Length/Width:	4200 ft / 75 ft	VFR Approach/Landing:	Go around; Simulated forced landing

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	46.251388,-114.125556(est)

Administrative Information

Investigator In Charge (IIC):	DeLisi, John
Additional Participating Persons:	FAA; Helena, MT
Original Publish Date:	July 29, 2013
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=87040

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