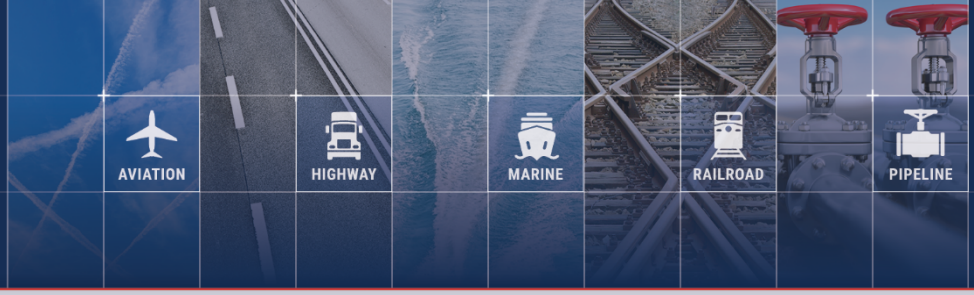

Aviation Investigation Final Report

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:**	HIO-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.ntsb.gov/Docket?ProjectID=87040