



# Aviation Investigation Final Report

<b>Location:</b>	BONNERS FERRY, Idaho	<b>Accident Number:</b>	SEA95LA063
<b>Date &amp; Time:</b>	March 7, 1995, 14:30 Local	<b>Registration:</b>	N222TE
<b>Aircraft:</b>	HILLER UH-12C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE PILOT REPORTED THAT DURING A STUDENT SOLO INSTRUCTIONAL FLIGHT, HE PERFORMED AN APPROACH TO A PINNACLE AND HELD A HOVER APPROXIMATELY THREE FEET ABOVE THE GROUND. THE PILOT THEN TRANSITIONED TO FORWARD FLIGHT AND STATED THAT THE ROTOR RPM BEGAN TO DECREASE. SUITABLE TERRAIN WAS NOT AVAILABLE, THEREFORE THE PILOT INITIATED A RIGHT 180 DEGREE TURN. DURING THE TURN, THE ROTOR RPM CONTINUED TO DECAY UNTIL TAIL ROTOR AUTHORITY WAS LOST. THE PILOT THEN SIDE SLIPPED THE HELICOPTER TO THE RIVER BANK, WHERE THE HELICOPTER LANDED HARD AND ROLLED ONTO ITS RIGHT SIDE. THE PILOT REPORTED THAT THERE WERE NO MECHANICAL FAILURES OR MALFUNCTIONS WITH THE HELICOPTER AT THE TIME OF THE ACCIDENT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: ROTOR RPM WAS NOT MAINTAINED. FACTORS TO THE ACCIDENT WERE: INADEQUATE IN FLIGHT PLANNING/DECISION AND SUITABLE TERRAIN WAS NOT AVAILABLE.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

1. (F) TERRAIN CONDITION - NONE SUITABLE
2. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND
3. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: HARD LANDING

Phase of Operation: LANDING

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Occurrence #3: ROLL OVER

Phase of Operation: LANDING

## Factual Information

On March 7, 1995, at 1430 Pacific standard time, N222TE, a Hiller UH-12C helicopter, operated by Wilderness Helicopter, Inc., Billings, Montana, impacted terrain while maneuvering near Bonners Ferry, Idaho, and was substantially damaged. The student pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed and a flight plan was not filed. The local instructional flight was conducted under 14 CFR 91.

In a written statement, the pilot reported that he performed an approach to a pinnacle which was approximately 25 feet higher than the surrounding terrain. The pilot maintained the hover approximately three feet above the ground for 15 to 20 seconds, then transitioned to forward flight. During the transition, the rotor rpm began to decay. The pilot stated that he did not feel that he would make his planned departure and began a right 180 degree turn and lowered the collective before flying over the edge of the river. Approximately 90 degrees into the turn, the rotor rpm decayed enough that tail rotor authority was lost. The pilot stated that he attempted to side slip the helicopter to a landing spot, however, the helicopter "stalled" just as it reached the edge of a gravel bar. The helicopter landed hard, breaking the right skid and rolling onto its right side.

The pilot reported that there were no mechanical failures or malfunctions with the helicopter at the time of the accident.

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	26, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	February 16, 1995
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	143 hours (Total, all aircraft), 132 hours (Total, this make and model), 100 hours (Pilot In Command, all aircraft), 111 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	HILLER	<b>Registration:</b>	N222TE
<b>Model/Series:</b>	UH-12C UH-12C	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	802
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 20, 1995 100 hour	<b>Certified Max Gross Wt.:</b>	2500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	FRANKLIN
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	6V-335-D
<b>Registered Owner:</b>	WILDERNESS HELICOPTER, INC.	<b>Rated Power:</b>	210 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	45°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	, ID (65S )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:50 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	48.750236,-116.510444(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Guzzetti, Jeffrey
<b>Additional Participating Persons:</b>	ARTHUR JONES; SPOKANE , WA
<b>Original Publish Date:</b>	September 24, 1995
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=42120">https://data.ntsb.gov/Docket?ProjectID=42120</a>

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