



Aviation Investigation Final Report

Location:	Lewiston, Maine	Accident Number:	ERA10CA010
Date & Time:	October 8, 2009, 09:00 Local	Registration:	N1835E
Aircraft:	Schweizer 269C-1	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of a helicopter was conducting a non-revenue sightseeing flight for one passenger. After lifting off, the pilot stated that he was hovering eastbound with the winds out of the west. A METAR taken on the airport approximately 5 minutes before the accident indicated the wind was from 340 degrees at 11 knots with gusts to 16 knots. The pilot further stated that the helicopter's nose made a sudden yaw to the right, which could not be corrected with reduction of throttle and full left pedal application. The helicopter touched down after a 270 degree turn, came to rest upright, with substantial damage to the main rotor blades, skids and tailboom. According to a Federal Aviation Administration Advisory Circular (AC) 90-95 titled "Unanticipated Right Yaw in Helicopters", operation of a helicopter with a tailwind as reported by the pilot or with a left quartering tailwind as determined by the METAR and the pilot's statement can result in unanticipated right yaw or loss of tail rotor effectiveness (LTE).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of tail rotor effectiveness (LTE) resulting from hovering the helicopter in a tailwind.

Findings

Aircraft	Yaw control - Attain/maintain not possible
Environmental issues	Tailwind - Effect on operation

Factual Information

History of Flight

Maneuvering-hover	Loss of control in flight (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	62, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	March 17, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 5, 2009
Flight Time:	(Estimated) 2200 hours (Total, all aircraft), 41 hours (Total, this make and model), 1500 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N1835E
Model/Series:	269C-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	0255
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	July 8, 2009 100 hour	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1750 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HIO-360-G1A
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLEW,288 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	08:55 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 3700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 16 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.86 inches Hg	Temperature/Dew Point:	11°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lewiston, ME (KLEW)	Type of Flight Plan Filed:	None
Destination:	Lewiston, ME (KLEW)	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	

Airport Information

Airport:	Auburn/Lewiston Municipal Airp KLEW	Runway Surface Type:	
Airport Elevation:	288 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	44.080554,-70.472503(est)

Administrative Information

Investigator In Charge (IIC):	Monville, Timothy
Additional Participating Persons:	David Wilke; FAA FSDO; Portland, ME
Original Publish Date:	April 19, 2010
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=74872

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