



Aviation Investigation Final Report

Location: Plymouth, Massachusetts Accident Number: NYC07CA093

Date & Time: February 1, 2007, 08:00 Local Registration: N2074K

Aircraft: Schweizer 269C Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The student pilot successfully performed three autorotations to a hover; however, during the fourth, he "landed hard with a yaw to the left." The flight instructor was not able to correct the yaw, and the helicopter impacted the ground, damaging the tail boom. The accident was not reported until the flight instructor was involved in a similar accident, in the same helicopter, about 30 days later. No mechanical deficiencies were reported by the flight instructor or the student pilot.

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 control of the helicopter during landing, and the flight instructor's delayed remedial action.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: LANDING

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - DUAL STUDENT

2. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

Occurrence #2: HARD LANDING

Phase of Operation: LANDING

Findings
3. TERRAIN CONDITION - GROUND

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Factual Information

According to the flight instructor of the Schweizer 269C helicopter, the student pilot successfully performed three autorotations to a hover; however, during the fourth, he "landed hard with a yaw to the left." The flight instructor was not able to correct the yaw, and the helicopter impacted the ground, damaging the tail boom. The accident was not reported until the flight instructor was involved in a similar accident, in the same helicopter, about 30 days later. No mechanical deficiencies were reported by the flight instructor or the student pilot.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	26,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	August 1, 2006
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 1, 2006
Flight Time:	250 hours (Total, all aircraft), 180 hours (Total, this make and model), 180 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N2074K
Model/Series:	269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	0136
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1111 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	HO-360
Registered Owner:	ExecJet Inc	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PYM,148 ft msl	Distance from Accident Site:	
Observation Time:	07:52 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:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	6°C / 9°C
Precipitation and Obscuration:			
Departure Point:	Plymouth, MA (PYM)	Type of Flight Plan Filed:	None
Destination:	Plymouth, MA (PYM)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

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Airport Information

Airport:	Plymouth Municipal Airport PYM	Runway Surface Type:	
Airport Elevation:	148 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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:	41.915,-70.728614

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Administrative Information

Investigator In Charge (IIC):	Andrews, Jill
Additional Participating Persons:	Peter O'Leary; FAA/FSDO; Boston, MA
Original Publish Date:	June 27, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65793

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.

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