



Aviation Investigation Final Report

Location: Rialto, California Accident Number: WPR13CA160

Date & Time: March 25, 2013, 10:15 Local Registration: N90570

Aircraft: Hughes 269C Aircraft Damage: Substantial

Defining Event: Loss of control in flight **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

According to the student pilot, while in a hover before departure, he attempted a 360-degree right pedal turn. About 180 degrees into the turn, the rotation speed started to increase. The pilot thought his reaction to the increased rotation speed was not as decisive as it should have been, and the helicopter departing controlled flight. The pilot stated that he did not press on the left pedal; instead, he released pressure on the right pedal. The helicopter came to rest upright after impacting the ground, which resulted in substantial damage to the tail rotor drive shaft and boom. The pilot reported no 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 while maneuvering in a hover.

Findings

Personnel issues Aircraft control - Student/instructed pilot

Factual Information

History of Flight

Maneuvering-hover	Loss of control in flight (Defining event)	
Uncontrolled descent	Collision with terr/obj (non-CFIT)	

Pilot Information

Certificate:	Airline transport; Commercial	Age:	65,Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	February 1, 2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3300 hours (Total, all aircraft), 20 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N90570
Model/Series:	269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1180736
Landing Gear Type:	Skid	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	HIO-360-D1A
Registered Owner:	Western Helicopters Inc.	Rated Power:	190 Horsepower
Operator:	Western Helicopters Inc.	Operating Certificate(s) Held:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Rialto, CA (L67)	Type of Flight Plan Filed:	None
Destination:	Rialto, CA (L67)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Rialto Municipal Airport L67	Runway Surface Type:	
Airport Elevation:	1455 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:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.129165,-117.40139(est)

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Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	Michael R Baudoux; Federal Aviation Administration; Riverside, CA
Original Publish Date:	July 23, 2013
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=86500

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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