



Aviation Investigation Final Report

Location:	Willows, California	Accident Number:	WPR14CA363
Date & Time:	September 2, 2014, 13:00 Local	Registration:	N516PJ
Aircraft:	Hughes 369D	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation		

Analysis

While in cruise flight an unsecured jacket departed the helicopter through an open window. The tail rotor drive shaft sheared as a result of the jacket's contact with the tail rotors. The pilot subsequently initiated a forced landing to an orchard where during landing, the main rotors struck and separated the tailboom. 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 pilot's failure to adequately secure cargo (a jacket), which resulted in the jacket exiting the cabin compartment and colliding with the tail rotor during cruise flight.

Findings

Aircraft	(general) - Incorrect use/operation
Personnel issues	Incomplete action - Pilot
Environmental issues	Tree(s) - Contributed to outcome
Environmental issues	Debris/dirt/foreign object - Effect on equipment

Factual Information

History of Flight

Enroute	Miscellaneous/other (Defining event)
Enroute	Loss of control in flight

Pilot Information

Certificate:	Commercial	Age:	67
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 1, 2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	22100 hours (Total, all aircraft), 6495 hours (Total, this make and model), 19005 hours (Pilot In Command, all aircraft), 140 hours (Last 90 days, all aircraft), 46 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N516PJ
Model/Series:	369D	Aircraft Category:	Helicopter
Year of Manufacture:	1982	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1188D
Landing Gear Type:	High skid	Seats:	
Date/Type of Last Inspection:	August 22, 2014 100 hour	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	9258 Hrs at time of accident	Engine Manufacturer:	Rolls Royce/Allison
ELT:	C91A installed, not activated	Engine Model/Series:	250-C20B
Registered Owner:	PJ HELICOPTERS INC	Rated Power:	420 Horsepower
Operator:	PJ HELICOPTERS INC	Operating Certificate(s) Held:	Rotorcraft external load (133), On-demand air taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCIC,238 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	19:55 Local	Direction from Accident Site:	48°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.76 inches Hg	Temperature/Dew Point:	33°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WILLOWS, CA (WLW)	Type of Flight Plan Filed:	Company VFR
Destination:	WILLOWS, CA (WLW)	Type of Clearance:	None
Departure Time:	12:55 Local	Type of Airspace:	

Airport Information

Airport:	WILLOWS-GLENN COUNTY WLW	Runway Surface Type:	
Airport Elevation:	141 ft msl	Runway Surface Condition:	Vegetation
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	39.524166,-122.249168(est)

Administrative Information

Investigator In Charge (IIC):	Jones, Patrick
Additional Participating Persons:	Brian L Allen; Federal Aviation Administration; Sacramento, CA
Original Publish Date:	October 27, 2014
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=90007

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