



Aviation Investigation Final Report

Location:	East Wenatchee, Washington	Accident Number:	WPR12LA259
Date & Time:	June 12, 2012, 15:20 Local	Registration:	N282MC
Aircraft:	ROBINSON HELICOPTER COMPANY R44 II	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	1 Fatal, 1 Serious
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

The pilot was maneuvering the helicopter at low altitude to conduct a cherry-drying operation. A witness in the local area reported that the helicopter was flying near power lines when it made a steep left turn. The main rotor subsequently impacted the power lines, and the helicopter descended into a tree. The pilot sustained serious injuries and did not recall the accident sequence. He did recall that the helicopter had no mechanical issues before liftoff or during transition to forward flight. A postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures 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 monitor the environment and maintain clearance from the power lines while maneuvering at low altitude.

Findings

Personnel issues	Monitoring environment - Pilot
Aircraft	Altitude - Not attained/maintained
Environmental issues	Wire - Effect on equipment
Personnel issues	Incorrect action performance - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Maneuvering-low-alt flying	Low altitude operation/event (Defining event)

On June 12, 2012, at 1520 Pacific daylight time, a Robinson Helicopter Company R44 II, N282MC, collided with a power line in East Wenatchee, Washington. The helicopter was owned by Reed Helicopters, and operated by Dragonfly Aviation, LLC, through a contract with JR Helicopters, LLC, under the provisions of Title 14 Code of Federal Regulations Part 91. The helicopter sustained substantial damage. The commercial pilot sustained serious injuries and the pilot rated passenger was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed.

According to the operator, the helicopter was on a 30-day contract to dry cherries and the contract had been arranged through JR Helicopters. The operator reported that the helicopter was not equipped with dual controls.

During a telephone interview, the pilot stated that the pilot rated passenger was a newer employee and had come out to watch the flying pilot work the orchard. The passenger asked if he could go up on a flight. The flying pilot stated that it wasn't typical, but there was nothing prohibiting it, so he took the passenger with him on the accident flight to show him the ropes. The flying pilot stated that he did not recall the accident, but that there was nothing wrong with the helicopter prior to lift off, and transition to forward flight.

A witness, who lived next to the orchard, watched the helicopter as it flew. She reported that the helicopter was flying in a southerly direction. As the helicopter made a steep left turn, the main rotor impacted a power line and the helicopter descended into a tree.

A postaccident airframe and engine examination revealed that rotation signatures were identified on the fanwheel and clutch assemblies. The engine spark plugs were removed and normal wear signatures were noted. Engine cylinder compression was established by covering the lower spark plug holes with a finger. Flight control continuity was established. The flight control servos were removed and visually appeared normal. The two hydraulic servo's (actuators) were subsequently disassembled and the hydraulic fluid remaining was captured. At the conclusion of the examination, no mechanical malfunctions or failures were revealed that would have precluded normal operation.

Pilot Information

Certificate:	Commercial	Age:	31
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	374 hours (Total, this make and model)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER COMPANY	Registration:	N282MC
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	10694
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	February 11, 2012 100 hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1261 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	REED HELICOPTERS LLC	Rated Power:	300 Horsepower
Operator:	DRAGONFLY AVIATION, LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	EAT, 1249 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	14:55 Local	Direction from Accident Site:	80°
Lowest Cloud Condition:	Few / 5500 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 7000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	20°C / 11°C
Precipitation and Obscuration:	Light - None - Rain		
Departure Point:	Wenatchee, WA	Type of Flight Plan Filed:	None
Destination:	Wenatchee, WA	Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Serious	Latitude, Longitude:	47.409168,-120.249725(est)

Administrative Information

Investigator In Charge (IIC): Cornejo, Tealeye

Additional Participating Persons: Christopher Cowgill; Federal Aviation Administration; Spokane, WA
Ken Martin; Robinson Helicopter Company; Torrance, CA

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Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=83942>

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