



Aviation Investigation Final Report

Location:	Greenfield, California	Accident Number:	WPR14CA115
Date & Time:	February 18, 2014, 08:30 Local	Registration:	N715BH
Aircraft:	Bell 47G 5A	Aircraft Damage:	Substantial
Defining Event:	Loss of visual reference	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

During the 2 hours leading up to the accident, the pilot of the agriculture and pest control category helicopter had sprayed about 40 acres of crops, having refueled once. He stated that during the last pass of his current field he misjudged the distance between the main rotor blades and a power pole. The main rotor blades struck the pole, and the pilot performed a forced landing into the field. During the landing, the helicopter rolled over, sustaining substantial damage to the firewall, tailboom, and cabin structure. The pilot reported no preimpact mechanical malfunctions or failures with the airframe or engine that would have precluded normal operation, and further stated that the accident could have been avoided if he had flown over the pole rather than attempting to fly around it.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance from a power pole during low-altitude maneuvering flight.

Findings

Environmental issues	Pole - Response/compensation
Personnel issues	Task monitoring/vigilance - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Loss of visual reference (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Maneuvering-low-alt flying	Off-field or emergency landing

Pilot Information

Certificate:	Commercial; Private	Age:	29
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	February 3, 2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 1, 2013
Flight Time:	768 hours (Total, all aircraft), 411 hours (Total, this make and model), 685 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N715BH
Model/Series:	47G 5A 5A	Aircraft Category:	Helicopter
Year of Manufacture:	1973	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	25105
Landing Gear Type:	N/A; Skid	Seats:	1
Date/Type of Last Inspection:	October 15, 2013 100 hour	Certified Max Gross Wt.:	2851 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	9400 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-B1A
Registered Owner:	WILBUR-ELLIS CO	Rated Power:	265 Horsepower
Operator:	WILBUR-ELLIS CO	Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SNS,843 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	320°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	8°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KING CITY, CA (KIC)	Type of Flight Plan Filed:	None
Destination:	Greenfield, CA	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	KING CITY KIC	Runway Surface Type:	
Airport Elevation:	374 ft msl	Runway Surface Condition:	Dry
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:	36.280834,-121.166946(est)

Administrative Information

Investigator In Charge (IIC):	Simpson, Elliott
Additional Participating Persons:	Wilbert J Robinson ; Federal Aviation Administration; San Jose, CA
Original Publish Date:	April 23, 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=88809

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