



Aviation Investigation Final Report

Location:	Santa Maria, California	Accident Number:	WPR13LA429
Date & Time:	September 29, 2013, 09:30 Local	Registration:	N38113
Aircraft:	TEXAS HELICOPTER CORP OH-13E/M74	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that before he began his first aerial application run, he flew overhead to scout the designated field for hazards and noted a power line near the field. He stated that he had a "momentary lapse" during his first application pass and flew through the wires, which shattered the cabin's main Plexiglass bubble and struck the main rotor mast. Both push-pull flight control tubes were compromised just above the swashplate. The helicopter fell to the ground and came to rest upright on its landing skids. 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 inadequate monitoring of the environment and failure to maintain clearance from transmission wires during a low-altitude maneuver.

Findings

Personnel issues	Monitoring environment - Pilot
Environmental issues	Wire - Response/compensation

Factual Information

History of Flight

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

On September 29, 2013, about 0930 Pacific daylight time, a Texas Helicopter Corp OH-13/M74, N38113, was substantially damaged when it struck power transmission wires and impacted the ground near Santa Maria, California. The commercial pilot, the sole occupant, received minor injuries. R & S Crop Dusters, Inc., was operating the helicopter under the provisions of 14 Code of Federal Regulations Part 137. Visual meteorological conditions prevailed for the local aerial application flight, which had originated from a nearby staging area approximately 10 minutes before the accident. A flight plan had not been filed.

The pilot reported that before he began his first application run, he flew overhead scouting the designated field for hazards and noted the power line. On his first pass, he had a "momentary lapse" and flew through the wires. The biggest wire shattered the cabin's main Plexiglass bubble and struck the main rotor mast. Both push-pull flight control tubes were compromised just above the swashplate. The helicopter fell to the ground and came to rest upright on its landing skids.

The pilot reported no preimpact mechanical malfunctions or failures with the helicopter that would have precluded normal operation.

Pilot Information

Certificate:	Commercial; Private	Age:	58
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 18, 2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 5000 hours (Total, all aircraft), 2500 hours (Total, this make and model), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	TEXAS HELICOPTER CORP	Registration:	N38113
Model/Series:	OH-13E/M74	Aircraft Category:	Helicopter
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	77-012
Landing Gear Type:	N/A; Skid	Seats:	1
Date/Type of Last Inspection:	October 17, 2012 100 hour	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6315 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435 SERIES
Registered Owner:	R&S CROP DUSTERS INC	Rated Power:	260 Horsepower
Operator:	R&S CROP DUSTERS INC	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:	SMX,250 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	08:51 Local	Direction from Accident Site:	135°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	22°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	34.967224,-120.544441(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	Joseph J Large; FAA; Van Nuys, CA
Original Publish Date:	February 3, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=88153

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