



National Transportation Safety Board

Aviation Accident Data Summary

Location:	Elverta, CA	Accident Number:	WPR11LA122
Date & Time:	02/04/2011, 1422 PST	Registration:	N416WC
Aircraft:	McDonnell Douglas Helicopters 369E (MD500E)	Injuries:	2 Minor
Flight Conducted Under:	Part 133: Rotorcraft Ext. Load		

Analysis

A lineman was on the skid of the helicopter installing high-power electrical lines on a power line structure. The pilot positioned the helicopter about 30 to 50 feet from the structure. The main rotor blades made contact with an installation rope, which then wrapped around the mast as the blades pulled it in. The pilot lost control of the helicopter, and it began an uncontrolled descent to the ground. A postaccident examination of the airframe and engine revealed no mechanical anomalies that would have precluded normal operation. It is likely that the pilot misjudged the distance between the rotor blades and the installation rope.

Flight Events

Maneuvering-hover - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot did not maintain rotor blade clearance from an installation rope while maneuvering to install power lines.

Findings

Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C

Personnel issues-Psychological-Attention/monitoring-Monitoring environment-Pilot - C

Environmental issues-Physical environment-Object/animal/substance-Wire-Response/compensation - C

Environmental issues-Physical environment-Object/animal/substance-Wire-Effect on equipment - C

Pilot Information

Certificate:	Commercial	Age:	57
Airplane Rating(s):	None	Instrument Rating(s):	Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	22500 hours (Total, all aircraft), 17600 hours (Total, this make and model), 22500 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	McDonnell Douglas Helicopters	Registration:	N416WC
Model/Series:	369E (MD500E)	Engines:	1 Turbo Shaft
Operator:	Wilson Construction Company	Engine Manufacturer:	Rolls-Royce Allison
Air Carrier Operating Certificate:		Engine Model/Series:	250-C20B
Flight Conducted Under:	Part 133: Rotorcraft Ext. Load		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KSMF, 27 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Dawn	Wind Speed/Gusts, Direction:	Calm
Temperature:	15°C / 6°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Elverta, CA	Destination:	Elverta, CA

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Howard D Plagens	Adopted Date:	03/28/2012
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78282		

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