



# Aviation Investigation Final Report

<b>Location:</b>	GLIDE, Oregon	<b>Accident Number:</b>	SEA97LA072
<b>Date &amp; Time:</b>	March 14, 1997, 09:00 Local	<b>Registration:</b>	N545HA
<b>Aircraft:</b>	Hiller UH-12E	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	<b>Injuries:</b> 1 Minor		
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

While maneuvering his helicopter to finish off the aerial application of chemicals on a field of coniferous trees, the pilot accidentally flew into a power transmission line that ran across the center of the field. According to the pilot, he knew the power line was there, but he had trouble seeing it because of the ambient lighting conditions caused by the overcast sky.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the pilot to maintain clearance from a power transmission line. Factors relating to the accident included ambient light conditions, which made the power line hard to see.

## Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING - AERIAL APPLICATION

### Findings

1. (F) LIGHT CONDITION - OTHER
2. (F) OBJECT - WIRE, TRANSMISSION
3. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

## Factual Information

On March 14, 1997, approximately 0900 Pacific standard time, a turbine-powered Hiller UH-12E helicopter, N545HA, impacted an electrical transmission wire during a 14 CFR Part 137 aerial application flight near Glide, Oregon. The airline transport pilot received minor injuries, and the aircraft, which was being operated by Western Helicopter Services, Inc., sustained substantial damage. At the time of the accident, the aircraft had been in the air about ten minutes, and visual meteorological conditions prevailed.

According to the pilot, who was spraying coniferous trees, he had finished most of the field of trees and was using up his remaining chemical by adding to areas that may not have received full coverage. He knew there was a power line running through the center of the field, but he had trouble seeing it in the light conditions caused by the overcast sky. While maneuvering around the field, he accidentally flew into the wire, resulting in the helicopter's main rotor mast and main rotor blades impacting the wire.

## Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	63, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 13, 1997
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	16600 hours (Total, all aircraft), 7000 hours (Total, this make and model), 16000 hours (Pilot In Command, all aircraft), 65 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Hiller	<b>Registration:</b>	N545HA
<b>Model/Series:</b>	UH-12E UH-12E	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>	<b>Amateur Built:</b>		
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	5045
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	February 3, 1997 Annual	<b>Certified Max Gross Wt.:</b>	2850 lbs
<b>Time Since Last Inspection:</b>	73 Hrs	<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>	7064 Hrs	<b>Engine Manufacturer:</b>	Allison
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	250-C20
<b>Registered Owner:</b>	WESTERN HELICOPTER SERVICE	<b>Rated Power:</b>	400 Horsepower
<b>Operator:</b>	<b>Operating Certificate(s) Held:</b>		
<b>Operator Does Business As:</b>	<b>Operator Designator Code:</b>		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>			<b>Visibility (RVR):</b>
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	<b>Temperature/Dew Point:</b> 10°C		
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	<b>Type of Flight Plan Filed:</b> None		
<b>Destination:</b>	<b>Type of Clearance:</b> None		
<b>Departure Time:</b>	08:50 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b> 0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude,</b> <b>Longitude:</b>	43.239723,-123.000183(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Anderson, Orrin
<b>Additional Participating Persons:</b>	JOHNNY MILLER; PORTLAND, OR
<b>Original Publish Date:</b>	May 30, 1997
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=42572">https://data.ntsb.gov/Docket?ProjectID=42572</a>

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