



# Aviation Investigation Final Report

<b>Location:</b>	Estacada, Oregon	<b>Accident Number:</b>	SEA05CA104
<b>Date &amp; Time:</b>	May 23, 2005, 10:30 Local	<b>Registration:</b>	N3030H
<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

The helicopter was parked on a trailer heading into the wind about half an hour prior to its repositioning to a mixing truck. As the pilot lifted the helicopter off the trailer he noticed the wind had switched about 40 to 50 degrees to the left, gusting from 10 to 20 knots. The helicopter subsequently weathervaned to the left, but before the pilot could correct for the left yaw its forward skid became caught under the trailer's left lip, resulting in a dynamic rollover of the helicopter onto its left side. The pilot did not report any anomalies with the helicopter that would have contributed to the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot to maintain landing skid clearance during hover taxi, which resulted in a dynamic rollover. A factor was the gusty wind condition.

## Findings

Occurrence #1: ROLL OVER  
Phase of Operation: TAXI - AERIAL

#### Findings

1. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
2. LANDING GEAR,SKID ASSEMBLY - SNAGGED
3. DYNAMIC ROLLOVER - ENCOUNTERED
4. (F) WEATHER CONDITION - GUSTS

## Factual Information

On May 23, 2005, approximately 1030 Pacific daylight time, Hiller UH-12E single-engine helicopter, N3030H, was substantially damaged following a loss of control and subsequent rollover during takeoff near Estacada, Oregon. The aircraft was registered to Whites Helicopter Service of Colton, Oregon. The certificated commercial pilot, the sole occupant of the helicopter was not injured. Visual meteorological conditions prevailed for the aerial application flight, which was being operated in accordance with 14 CFR Part 137 regulations, and a flight plan was not filed. The flight was originating at the time of the accident.

In a telephone interview and in a written statement provided to the NTSB investigator-in-charge, the pilot reported that in preparation to beginning aerial application operations, he had to reposition the helicopter from a trailer to a mixing truck. The pilot stated that the helicopter was sitting backwards on the trailer pointing into the wind, which was from the northeast. Approximately a half hour later he noticed the wind had shifted about 40 to 50 degrees to the left, and was now coming out of the north gusting from 10 to 20 knots. The pilot reported, "I initially parked the helicopter facing NE (northeast). At about 1030 I started the helicopter to being work. As I was lifting the helicopter off of the trailer I felt a strong gust of wind and the helicopter weathervaned to the left. The right skid got hooked under the left rear lip of the trailer before I could correct [for] the yaw. The helicopter dynamically rolled over on its left side, still caught under the trailer taking it with me." The pilot reported that the helicopter was destroyed and that there was no postcrash fire. The pilot had 2,719 hours of total flight experience, 2,072 hours in helicopters, and 1,191 hours in the accident helicopter make and model. The pilot stated that there were no anomalies with the helicopter prior to beginning the repositioning of the helicopter, which would have prevented normal operations.

### Pilot Information

<b>Certificate:</b>	Commercial; Private	<b>Age:</b>	35, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2	<b>Last FAA Medical Exam:</b>	May 1, 2005
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2719 hours (Total, all aircraft), 1191 hours (Total, this make and model), 296 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Hiller	<b>Registration:</b>	N3030H
<b>Model/Series:</b>	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>	970
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	O-540
<b>Registered Owner:</b>	Matthew L. White	<b>Rated Power:</b>	
<b>Operator:</b>	WHITES FLYING SERVICE	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	W3FA

## 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>		<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Estacada, OR	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Estacada, OR	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</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>	
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	45.289443,-122.423057

## Administrative Information

**Investigator In Charge (IIC):** Little, Thomas

**Additional Participating Persons:**

**Original Publish Date:** September 13, 2005

**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=61540>

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