



National Transportation Safety Board Aviation Accident Data Summary

Location:	Tahoma, CA	Accident Number:	WPR14FA324
Date & Time:	08/01/2014, 1300 PDT	Registration:	N3597T
Aircraft:	S.N.I.A.S. AS350B	Injuries:	2 Serious, 2 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

The helicopter was being used to transport passengers and equipment for an off-road automobile event in a remote mountainous area. The airline transport pilot picked up two passengers, and the subsequent 3-minute-long inbound flight and landing into the wind at the helispot were uneventful. The pilot reported that, after a third passenger boarded, he initiated a vertical climb to clear trees. He reported that he expected and felt a "bump" as the helicopter encountered a headwind above the trees, and he then began to initiate a left turn for a downwind departure. As the turn progressed, the helicopter rapidly descended back to the ground, and, unable to maintain altitude, the pilot attempted to ditch the helicopter into trees and down-sloping terrain. The helicopter struck a rock slab and rolled onto its side, during which time both the pilot and a passenger sustained serious injuries. Postaccident examination did not reveal any anomalies with the airframe or engine that would have precluded normal operation, and both the pilot and operator reported that there were no mechanical malfunctions or failures.

The pilot attributed the loss of lift to a wind gust; however, the closest weather reporting station, about 14 miles away, reported light wind. Further, a weather simulation was performed to estimate wind and turbulence conditions in the area of the accident. The results revealed a low potential for turbulence with wind, which closely matched the conditions reported by the weather station, at the time and location of the accident.

The fuel load could not be definitely established; however, given the helicopter's estimated gross weight, it was likely operating very close to or slightly above its hovering ceiling. Therefore, it is likely that the pilot attempted to hover the helicopter out of ground effect at an altitude above its hovering ceiling, which resulted in it settling with power.

Flight Events

Takeoff - Settling with power/vortex ring state
Takeoff - Loss of control in flight
Uncontrolled descent - 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's loss of helicopter control due to settling with power while maneuvering for takeoff.

Findings

Aircraft-Aircraft oper/perf/capability-Aircraft capability-Climb capability-Capability exceeded
 Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
 Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-High density
 altitude-Effect on equipment

Pilot Information

Certificate:	Airline Transport; Commercial; Military	Age:	55
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane; Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	8000 hours (Total, all aircraft), 3000 hours (Total, this make and model), 7500 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	S.N.I.A.S.	Registration:	N3597T
Model/Series:	AS350B	Engines:	1 Turbo Shaft
Operator:	HELI-FLITE INC	Engine Manufacturer:	Turbomeca
Air Carrier Operating Certificate:	Rotorcraft External Load (133); On-demand Air Taxi (135)	Engine Model/Series:	Arriel 1B
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KTVL, 6314 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Broken / 8500 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	6 knots, 30°
Temperature:	28°C / 7°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Tahoma, CA (N/A)	Destination:	Tahoma, CA (N/A)

Airport Information

Airport:	Lakeshore (NONE)	Runway Surface Type:	
Runway Used:	N/A	Runway Surface Condition:	Dry
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Eliott Simpson	Adopted Date:	08/10/2016
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89783		

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