



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Pollock Pines, CA	<b>Accident Number:</b>	LAX03LA019
<b>Date &amp; Time:</b>	11/02/2002, 0910 PST	<b>Registration:</b>	N2616B
<b>Aircraft:</b>	Bell 47G-2	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor, 2 None

**Flight Conducted Under:** Part 91: General Aviation - Other Work Use

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## Analysis

During initial climb from a 3,500-foot mean sea level plateau, the helicopter's skid collided with a 3-foot-high bush. The helicopter yawed and impacted the ground. The pilot reported that the collision occurred after he had increased the helicopter's collective pitch and accelerated to about 20 knots, thereby starting to acquire effective translational lift.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate obstruction clearance during initial climb, which resulted in a collision with vegetation.

## Findings

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Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF

### Findings

1. TERRAIN CONDITION - HIGH VEGETATION
  2. (C) ALTITUDE/CLEARANCE - INADEQUATE - PILOT IN COMMAND
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Occurrence #2: ROLL OVER  
Phase of Operation: TAKEOFF

## Factual Information

On November 2, 2002, about 0910 Pacific standard time, a Bell 47G-2, N2616B, collided with a bush and terrain during an attempted takeoff from a plateau near Pollock Pines, California. The helicopter was substantially damaged. The commercial pilot and one passenger were not injured. The second passenger received a minor injury. Visual meteorological conditions prevailed, and no flight plan was filed. The helicopter was operated for hire on a photography flight under the provisions of 14 CFR Part 91, by D. C. Rotor & Wing, Rancho Murieta, California. The flight originated from Rancho Murieta about 0810.

The pilot reported to the National Transportation Safety Board investigator that he flew to the plateau and landed. The two passengers exited the helicopter to take pictures. The helicopter's engine was kept running. Thereafter, the passengers reboarded the helicopter to continue their flight. The pilot stated that because of the ambient conditions, including the 3,500-foot mean sea level elevation and estimated 40-degree Fahrenheit temperature, the helicopter did not have adequate power to make a normal departure from a hover. However, the pilot indicated that he believed there was sufficient clear area over the rocky terrain to perform a running takeoff.

According to the pilot, during the accident sequence he increased the helicopter's collective pitch and accelerated to about 20 knots thereby starting to acquire effective translational lift. During this initial climb a skid collided with a 3-foot-tall bush. The helicopter suddenly yawed and impacted the ground.

In the pilot's completed "Aircraft Accident Report" he stated that "...the purpose of the flight was to encourage [one of the passengers] to resume her flight training with D.C. Rotor."

## Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	07/22/2002
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	02/23/2002
<b>Flight Time:</b>	313 hours (Total, all aircraft), 90 hours (Total, this make and model), 217 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Bell	<b>Registration:</b>	N2616B
<b>Model/Series:</b>	47G-2	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	2475
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	09/17/2002, 100 Hour	<b>Certified Max Gross Wt.:</b>	2450 lbs
<b>Time Since Last Inspection:</b>	30 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	7232 Hours at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	VO-435-A1F
<b>Registered Owner:</b>	Gregory J. Desy	<b>Rated Power:</b>	260 hp
<b>Operator:</b>	D. C. Rotor & Wing	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	AUN, 1531 ft msl	<b>Distance from Accident Site:</b>	28 Nautical Miles
<b>Observation Time:</b>	0850 PST	<b>Direction from Accident Site:</b>	280°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 Miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	110°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.1 inches Hg	<b>Temperature/Dew Point:</b>	13° C / -8° C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Pollock Pines, CA	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Rancho Murieta, CA (RIU)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	0910 PST	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor, 1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor, 2 None	<b>Latitude, Longitude:</b>	38.722778, -120.601667

## Administrative Information

**Investigator In Charge (IIC):** WAYNE POLLACK **Report Date:** 10/28/2004

**Additional Participating Persons:** Greg Michael; Federal Aviation Administration; Sacramento, CA

**Publish Date:**

**Investigation Docket:** NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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