



Aviation Investigation Final Report

Location:	Bakersfield, California	Accident Number:	WPR14CA196
Date & Time:	May 18, 2014, 16:48 Local	Registration:	N16414
Aircraft:	Bell 47G	Aircraft Damage:	Substantial
Defining Event:	Dynamic rollover	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The pilot reported that the purpose of the flight was to move the helicopter off of a trailer onto the ground. As the helicopter began to lift off from the trailer platform, a steel bolt on the landing gear skid caught on the aluminum trailer skirting. The helicopter experienced a dynamic rollover and came to rest on its right side. Shortly thereafter, a fire erupted and the cabin area was consumed.

The pilot stated that there were no preimpact mechanical malfunctions or failures with the helicopter that would have precluded normal operation.

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 aircraft control after the helicopter's skid catching on the side of a trailer during takeoff, which resulted in a dynamic rollover.

Findings

Aircraft	Aux gear (tail/rotorcraft skid) - Not specified
Personnel issues	Aircraft control - Pilot
Aircraft	Lateral/bank control - Not attained/maintained

Factual Information

History of Flight

Maneuvering-hover	Dynamic rollover (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	67
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	April 1, 2014
Occupational Pilot:		Last Flight Review or Equivalent:	September 19, 2012
Flight Time:	30000 hours (Total, all aircraft), 30000 hours (Total, this make and model), 50 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N16414
Model/Series:	47G	Aircraft Category:	Helicopter
Year of Manufacture:	1967	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1013
Landing Gear Type:	N/A; Skid	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	VO-435 SERIES
Registered Owner:	On file	Rated Power:	260 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:	23:54 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	29°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bakersfield, CA (BFL)	Type of Flight Plan Filed:	None
Destination:	Bakersfield, CA (BFL)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Meadows Field Airport BFL	Runway Surface Type:	
Airport Elevation:	510 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.434165,-119.057777(est)

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Bjorn Beijens; Federal Aviation Administration; Fresno, CA
Original Publish Date:	September 30, 2014
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=89224

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).