



Aviation Investigation Final Report

Location:	East Troy, Wisconsin	Accident Number:	CEN10CA371
Date & Time:	July 4, 2010, 17:45 Local	Registration:	N9011R
Aircraft:	Brantly B-2B	Aircraft Damage:	Substantial
Defining Event:	Roll over	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The helicopter pilot performed a straight-in autorotation to runway 18 for a rotor rpm check. The engine rpm began to rapidly increase and the pilot rolled the throttle completely off and lowered collective. He reported that the left skid was coming off the ground and he applied full left cyclic and full down collective. The aircraft teetered and continued to roll right. The pilot stated that the helicopter had an articulated landing gear system. He said that the struts travel approximately seven to eight inches and "if only one side retracts it causes a 'rolling moment'." About 22 minutes before the accident, the recorded winds about seven nautical miles and 155 degrees from the accident site were 200 degrees at 14 knots with gusts to 32 knots. An examination of the accident helicopter's controls and landing gear revealed no preexisting anomalies.

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 control during landing.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Gusts - Not specified
Environmental issues	Crosswind - Not specified

Factual Information

History of Flight

Landing	Roll over (Defining event)
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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	28, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	February 10, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 10, 2010
Flight Time:	2603 hours (Total, all aircraft), 70 hours (Total, this make and model), 2575 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 85 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Brantly	Registration:	N9011R
Model/Series:	B-2B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2013
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	July 4, 2010 Annual	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	602 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	IVO-360
Registered Owner:	On file	Rated Power:	180 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:	BUU,779 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	17:34 Local	Direction from Accident Site:	155°
Lowest Cloud Condition:	Scattered / 3500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 32 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	26°C / 21°C
Precipitation and Obscuration:	Light - None - Rain		
Departure Point:	East Troy, WI (57C)	Type of Flight Plan Filed:	None
Destination:	East Troy, WI (57C)	Type of Clearance:	None
Departure Time:	17:35 Local	Type of Airspace:	

Airport Information

Airport:	East Troy Municipal Airport 57C	Runway Surface Type:	Grass/turf
Airport Elevation:	860 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Simulated forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.797222,-88.372497(est)

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Wesley J Hakari; Federal Aviation Administration; Milwaukee, WI
Original Publish Date:	December 20, 2010
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=76534

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