



National Transportation Safety Board Aviation Accident Final Report

Location:	Council Bluff, IA	Accident Number:	GAA19CA428
Date & Time:	07/16/2019, 1750 CDT	Registration:	N124LA
Aircraft:	Robinson R44	Aircraft Damage:	Substantial
Defining Event:	Roll over	Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that, while lifting off from a landing deck on top of an industrial truck, the helicopter's right rear skid hooked into an opening on the deck. The helicopter dynamically rolled right and impacted the ground. The helicopter sustained substantial damage to the main and tail rotor systems, fuselage, and empennage. The pilot reported that there were no preaccident mechanical failures or malfunctions 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 improper cyclic input during liftoff from a landing deck, which resulted in the right skid hooking onto an opening on the landing deck and a subsequent dynamic rollover.

Findings

Aircraft	Lateral/bank control - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause) Use of equip/system - Pilot (Cause)

Factual Information

History of Flight

Takeoff	Roll over (Defining event) Collision with terr/obj (non-CFIT)
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Pilot Information

Certificate:	Commercial	Age:	63, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last FAA Medical Exam:	09/22/2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	05/01/2019
Flight Time:	(Estimated) 26000 hours (Total, all aircraft), 1700 hours (Total, this make and model), 25500 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 125 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N124LA
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:	2008	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	12199
Landing Gear Type:	Skid;	Seats:	4
Date/Type of Last Inspection:	02/01/2019, 100 Hour	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	Rotors Llc	Rated Power:	245 hp
Operator:	Rotors Llc	Operating Certificate(s) Held:	Agricultural Aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KCBF, 1253 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	2235 UTC	Direction from Accident Site:	337°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.86 inches Hg	Temperature/Dew Point:	31 °C / 22 °C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Council Bluff, IA	Type of Flight Plan Filed:	None
Destination:	Council Bluff, IA	Type of Clearance:	None
Departure Time:	1800 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.234444, -95.746389 (est)

Administrative Information

Investigator In Charge (IIC):	Eleazar Nepomuceno	Report Date:	04/13/2020
Additional Participating Persons:	Dan Michaelson; FAA; Des Moines, IA		
Publish Date:	04/13/2020		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=99869		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).