



# Aviation Investigation Final Report

<b>Location:</b>	Saratoga Springs, Utah	<b>Accident Number:</b>	GAA18CA576
<b>Date &amp; Time:</b>	September 29, 2018, 12:30 Local	<b>Registration:</b>	N1698K
<b>Aircraft:</b>	RAYMON A. KING SUPER CUB REPLICA	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Nose over/nose down	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot in the tailwheel-equipped airplane reported that he had performed several takeoffs and landings from the shoreline of a lake. He reported that, during the takeoff roll about 25 knots, a right crosswind gust pushed the airplane left and into the water. The left main landing gear entered the water, and the airplane spun 90° to the left, and the airplane nosed over.

The airplane sustained substantial damage to the right wing and rudder.

The pilot reported that there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The pilot reported that, during takeoff, the wind was from 180° at 20 knots, gusting to 45 knots. The METAR for an airport located 4 nautical miles from the accident site reported that, about the time of the accident, the wind was from 210° at 11 knots with no gusts. The pilot reported that he took off to the southeast.

## 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 directional control during the takeoff roll with crosswind conditions.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Crosswind - Effect on operation

## Factual Information

### History of Flight

Landing-landing roll	Other weather encounter
Landing-landing roll	Loss of control on ground
Landing-landing roll	Nose over/nose down (Defining event)

### Pilot Information

Certificate:	Private	Age:	45,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	December 20, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 1, 2018
Flight Time:	(Estimated) 2500 hours (Total, all aircraft), 1300 hours (Total, this make and model), 2450 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 0.5 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	RAYMON A. KING	Registration:	N1698K
Model/Series:	SUPER CUB REPLICA	Aircraft Category:	Airplane
Year of Manufacture:	1990	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	001
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 1, 2017 Condition	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1400 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-NEXP
Registered Owner:		Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KPVU, 4497 ft msl	<b>Distance from Accident Site:</b>	4 Nautical Miles
<b>Observation Time:</b>	18:56 Local	<b>Direction from Accident Site:</b>	111°
<b>Lowest Cloud Condition:</b>	Few / 8000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 21000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 6°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Salt Lake City, UT (U42 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Fayette, MO (MU77)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:00 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor	<b>Latitude, Longitude:</b>	40.244167,-111.80722(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Matthew Blad; FAA; Salt Lake City, UT
<b>Original Publish Date:</b>	September 26, 2019
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=98402">https://data.nts.gov/Docket?ProjectID=98402</a>

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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](#).