



# Aviation Investigation Final Report

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<b>Location:</b>	Rigby, Idaho	<b>Accident Number:</b>	WPR14CA352
<b>Date &amp; Time:</b>	August 22, 2014, 11:30 Local	<b>Registration:</b>	N171CT
<b>Aircraft:</b>	RANS AIRCRAFT S 6S	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

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## Analysis

The light sport flight instructor was providing flight instruction to the owner of the experimental, amateur-built, tailwheel-equipped light sport airplane. The airplane was equipped with side-by-side seating; the owner sat in the left seat and was the flying pilot, and the instructor sat in the right seat. They departed the home, non-towered airport and flew uneventfully to an airport with an operating air traffic control tower, where they practiced landings and takeoffs. They then returned to the home airport for additional landings and takeoffs. All portions of the flight through that point were uneventful. After returning to, and making at least one landing back at the home airport, the pilot was attempting a takeoff from runway 19. Either at or shortly after liftoff, the airplane was struck by an "unexpected wind gust," which resulted in a loss of directional control. The student pilot was unable to regain control, and the flight instructor did not physically intervene, before the airplane struck a hangar located about 270 feet from the runway centerline. The right wing sustained substantial damage when it struck the hangar. The airplane then passed between that hangar and an adjacent one. The flight instructor did not offer any explanation as to why he did not intervene. The measured wind at an airport located about 10 miles southwest of the accident airport was reported as 320 degrees at 8 knots about 37 minutes prior to the accident, and as 090 degrees at 3 knots about 23 minutes after the accident.

The pilot reported no preimpact mechanical malfunctions or failures with the airplane 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 student pilot's loss of directional control during takeoff in gusting wind conditions. Contributing to the accident was the flight instructor's failure to intervene and apply corrective flight control inputs.

## Findings

<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Personnel issues</b>	Lack of action - Instructor/check pilot
<b>Environmental issues</b>	Gusts - Effect on operation
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Residence/building - Contributed to outcome

## Factual Information

### History of Flight

<b>Takeoff</b>	Loss of control in flight (Defining event)
<b>Takeoff</b>	Runway excursion
<b>Takeoff</b>	Attempted remediation/recovery
<b>Takeoff</b>	Collision with terr/obj (non-CFIT)

### Flight instructor Information

<b>Certificate:</b>	Flight instructor; Private	<b>Age:</b>	58
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Sport pilot	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	August 23, 2013
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	May 1, 2013
<b>Flight Time:</b>	1587 hours (Total, all aircraft), 87 hours (Total, this make and model), 1400 hours (Pilot In Command, all aircraft), 57 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft)		

### Student pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	66
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Sport pilot	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	21 hours (Total, all aircraft), 21 hours (Total, this make and model), 5 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	RANS AIRCRAFT	<b>Registration:</b>	N171CT
<b>Model/Series:</b>	S 6S SUPERSIX	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2005	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Experimental light sport (Special)	<b>Serial Number:</b>	11021467
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	May 10, 2014 Annual	<b>Certified Max Gross Wt.:</b>	1200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	468 Hrs as of last inspection	<b>Engine Manufacturer:</b>	ROTAX
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	912S
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	100 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	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>	KIDA,4744 ft msl	<b>Distance from Accident Site:</b>	10 Nautical Miles
<b>Observation Time:</b>	10:53 Local	<b>Direction from Accident Site:</b>	225°
<b>Lowest Cloud Condition:</b>	Thin Overcast / 10000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 10000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ Unknown
<b>Wind Direction:</b>	320°	<b>Turbulence Severity Forecast/Actual:</b>	/ Unknown
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Temperature/Dew Point:</b>	14°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Idaho Falls, ID (KIDA)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Rigby, ID (U56 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	11:15 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Rigby U56	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	4845 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	19	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3500 ft / 50 ft	<b>VFR Approach/Landing:</b>	Touch and go;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 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>	2 Minor	<b>Latitude, Longitude:</b>	43.642501,-111.929443(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Huhn, Michael
<b>Additional Participating Persons:</b>	Gregory Pire; FAA; Salt Lake City, UT
<b>Original Publish Date:</b>	November 13, 2014
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<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=89933">https://data.nts.gov/Docket?ProjectID=89933</a>

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