



Aviation Investigation Final Report

Location:	Brownsville, Oregon	Accident Number:	WPR18TA238
Date & Time:	August 20, 2018, 16:40 Local	Registration:	N140JL
Aircraft:	Rans S14	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The sport pilot was circling about 600 ft above ground level and taking photographs of a concert venue. He stated that he slowed the airplane to about 60 mph before entering a steep left turn. During the turn, the airplane stalled and subsequently impacted the ground. The pilot reported that there were no pre-impact mechanical anomalies 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 pilot's exceedance of the airplane's critical angle of attack while maneuvering at low altitude, which resulted in an aerodynamic stall, loss of control, and impact with terrain.

Findings

Aircraft	Angle of attack - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Personnel issues	Monitoring equip/instruments - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Aerodynamic stall/spin (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)

On August 20, 2018, about 1640 Pacific daylight time, a Rans S14 airplane, N140JL, was substantially damaged when it was involved in an accident near Brownsville, Oregon. The sport pilot received serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot stated he had planned to overfly and photograph the location of a recent concert venue. As he arrived over the venue, he descended to about 600 ft above ground level (agl) and decelerated to about 60 miles per hour (mph) before entering a steep left turn. During the turn, he felt the airplane stall, and he attempted to recover as the airplane impacted the ground and struck a fence. The pilot reported there were no mechanical anomalies that would have precluded normal flight.

Pilot Information

Certificate:	Sport Pilot	Age:	69,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	410 hours (Total, all aircraft), 384.3 hours (Total, this make and model), 410 hours (Pilot In Command, all aircraft), 4.5 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rans	Registration:	N140JL
Model/Series:	S14	Aircraft Category:	Airplane
Year of Manufacture:	1992	Amateur Built:	
Airworthiness Certificate:	Experimental light sport (Special)	Serial Number:	0392019
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	May 26, 2018 Continuous airworthiness	Certified Max Gross Wt.:	500 lbs
Time Since Last Inspection:	626 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	627.9 Hrs as of last inspection	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	503
Registered Owner:		Rated Power:	52
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	KEUG,374 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	23:54 Local	Direction from Accident Site:	20°
Lowest Cloud Condition:	Few	Visibility	4 miles
Lowest Ceiling:	None / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	28°C / 13°C
Precipitation and Obscuration:	Moderate - None - Smoke		
Departure Point:	Harrisburg, OR	Type of Flight Plan Filed:	None
Destination:	Harrisburg, OR	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	44.357776,-122.917778(est)

Administrative Information

Investigator In Charge (IIC):	Salazar, Fabian		
Additional Participating Persons:	Christopher Mazurkiewicz; Portland FSDO; Hillsboro, OR		
Original Publish Date:	June 24, 2021	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98142		

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](#).