National Transportation Safety Board
Aviation Accident Preliminary Report

Location:	Scio, OR	**Accident Number:**	WPR22FA312
Date & Time:	August 21, 2022, 14:03 Local	**Registration:**	N184DJ
Aircraft:	JACKSON DENNIS RV-8	**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

On August 21, 2022, at 1403 Pacific daylight time, an experimental homebuilt Vans RV-8 airplane, N184DJ, was substantially damaged when it was involved in an accident near Scio, Oregon. The pilot and passenger were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

Witnesses, including relatives of the pilot, told investigators the pilot would often conduct low altitude flights and perform aerobatic maneuvers over the relatives' home. The relatives stated the pilot conducted three passes over their home prior to the accident and the airplane was mostly wings level during the first two passes. During the third pass the airplane flew over about 100 ft above the ground from north to south. The airplane then rolled like a barrel roll and then descended out of sight behind trees and impacted the ground. One family member stated she thought the pilot started the maneuver lower than normal. The second family member said that something did not look right at the start of the maneuver, that the airplane was too low and that the maneuver was "really snappy looking," not smooth like he had seen before. He also said the airplane was not wings level as it exited the maneuver. Both family members described hearing the engine running steady and did not hear anything abnormal before the accident.

Two other witnesses were outside their home about .4 miles west of the accident site and stated that on one of the passes before the accident the airplane flew over their home from west to east. During the pass one witness thought he heard the airplane wheels hit the tops of the trees near his home. The airplane then descended to about 5 feet above the ground and then pulled up steeply as it approached a hedge row before making the accident pass. One of the witnesses videoed the final portion of the accident pass. In the video, the airplane can be seen in a nose up attitude through distant trees, then descending towards the ground at about a 45° nose low attitude. The airplane engine can be heard running before the sound of impact is heard.

The airplane impacted in a grass field about .2 miles south of the relative's home. The initial impact signatures were indicative of the airplane impacting in a nose low and right-wing low

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

attitude. The right flap was separated from the wing and located about 50 ft from the initial impact point. The canopy was separated from the fuselage and was located about 150 ft from the initial impact point. The main wreckage was inverted and located about 250 ft and bearing 200° from the initial impact point. The right wing was mostly separated from the fuselage and was resting under the fuselage.

Both ailerons, elevators, and the rudder were accounted for and remained attached to the airplane. Flight control continuity was verified to all flight control surfaces from the cockpit and continuity was continuous for all flight controls except the right aileron. The right aileron control tube was fractured near the wing root consistent with impact damage.

The propeller assembly had separated from the engine at the shaft and was located near the main wreckage. Both propeller blades exhibited leading edge gouges, chordwise scratches, and significant S-type bending and curling.

Aircraft and Owner/Operator Information

Aircraft Make:	JACKSON DENNIS	**Registration:**	N184DJ
Model/Series:	RV-8	**Aircraft Category:**	Airplane
Amateur Built:	Yes		
Operator:	On file	**Operating Certificate(s) Held:**	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	**Condition of Light:**	Day
Observation Facility, Elevation:	KSLE,201 ft msl	**Observation Time:**	13:56 Local
Distance from Accident Site:	16 Nautical Miles	**Temperature/Dew Point:**	29°C /14°C
Lowest Cloud Condition:	Clear	**Wind Speed/Gusts, Direction:**	/ ,
Lowest Ceiling:	None	**Visibility:**	10 miles
Altimeter Setting:	29.98 inches Hg	**Type of Flight Plan Filed:**	None
Departure Point:		**Destination:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	44.674389,-122.79653

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

Administrative Information

Investigator In Charge (IIC):	Baker, Daniel
Additional Participating Persons:	James Holden; FAA; Portland, OR
Note:	

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.