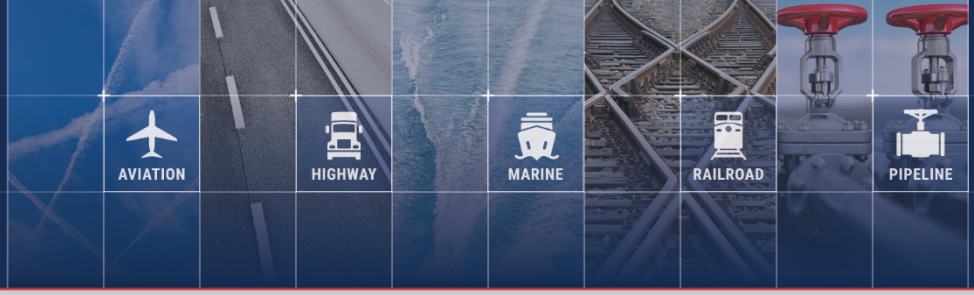

Aviation Investigation Final Report

Location:	Summerville, Oregon	**Accident Number:**	WPR19FA159
Date & Time:	June 4, 2019, 19:43 Local	**Registration:**	N4362V
Aircraft:	Titan TITAN II	**Aircraft Damage:**	Destroyed
Defining Event:	Low altitude operation/event	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The non-certificated pilot was seen by witnesses flying at low altitude, which they described as near treetop and powerline level. One witness reported that the airplane entered a “straight up” climb about 300 ft, then dove to the ground and leveled the airplane about 50 ft above ground; the pilot did this three times before the accident occurred during the fourth maneuver. Another witness reported that, during the last maneuver, at the top of the climb, the airplane aerodynamically stalled, spun to the left, and impacted the ground.

Postaccident examination of the airframe and engine revealed no mechanical anomalies that would have precluded normal operation. Given the available evidence, it is likely that the pilot exceeded the airplane’s critical angle of attack, and the airplane entered an aerodynamic stall and spin.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The noncertificated pilot’s exceedance of the airplane’s critical angle of attack while maneuvering at low altitude, which resulted in an aerodynamic stall/spin and impact with terrain.

Findings

Aircraft	Angle of attack - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Aircraft	Altitude - Not specified

Factual Information

History of Flight

Maneuvering-low-alt flying	Low altitude operation/event (Defining event)
Maneuvering-low-alt flying	Aerodynamic stall/spin

On June 4, 2019, about 1943 Pacific daylight time, an experimental Titan II airplane, N4362V, was substantially damaged when it was involved in an accident near Summerville, Oregon. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

Family members reported that the pilot recently purchased the airplane and completed its assembly three days before the accident. They stated that the accident flight was the pilot's third flight since assembly.

Witnesses in the area of the accident site reported seeing the airplane flying at treetop or power line level. One witness reported that he watched the airplane climb "straight up" about 300 ft, then dive to the ground and level out about 50 ft above ground level three times before the accident maneuver. Another witness reported observing similar maneuvers with the pilot "gunning the engine hard, then backing off." This witness reported that, during the last maneuver, at the top of the climb to 300 ft, the airplane aerodynamically stalled, spun to the left, and impacted the ground.

Pilot Information

Certificate:	None	**Age:**	29,Male
Airplane Rating(s):	None	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	None None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated)		

The pilot did not hold a Federal Aviation Administration pilot or medical certificate. The pilot's family reported that the pilot did not keep track of any flight hours.

Aircraft and Owner/Operator Information

Aircraft Make:	Titan	**Registration:**	N4362V
Model/Series:	TITAN II Undesignat	**Aircraft Category:**	Airplane
Year of Manufacture:	2010	**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	D969112COHK0203
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Rotax
ELT:	Not installed	**Engine Model/Series:**	912UL
Registered Owner:	On file	**Rated Power:**	
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KLGD,2717 ft msl	**Distance from Accident Site:**	12 Nautical Miles
Observation Time:	02:56 Local	**Direction from Accident Site:**	178°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	290°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.04 inches Hg	**Temperature/Dew Point:**	22°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	La Grande, OR (LGD)	**Type of Flight Plan Filed:**	None
Destination:	La Grande, OR (LGD)	**Type of Clearance:**	None
Departure Time:	19:12 Local	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	45.490833,-118.00888(est)

The wreckage was located in a flat, open field. All major structural components were located with the main wreckage. Flight control continuity was established for the elevator, ailerons, and rudder.

Examination of the engine revealed that all four spark plugs exhibited signatures consistent with normal wear. The crankshaft was manually rotated by hand at the propeller. Rotational continuity was established throughout the engine valve train. Thumb compression was obtained on all four cylinders. No anomalies were revealed with the engine driven fuel pump, or the carburetors. The fuel filter appeared free of debris.

Medical and Pathological Information

The FAA Forensic Sciences Laboratory performed toxicological testing on the pilot’s tissue, with negative findings for all tested-for drugs.

Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	James Clay; FAA; Boise, ID
Original Publish Date:	May 27, 2021
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99550