



Aviation Investigation Final Report

Location:	Delaware, Ohio	Accident Number:	CEN20CA039
Date & Time:	December 20, 2019, 15:40 Local	Registration:	N91WW
Aircraft:	Flight Design CTSW	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The solo student pilot was flying in the traffic pattern and was intending to perform a touch-and-go landing. During the takeoff, the airplane "veered heavily to the left." The student attempted to correct the veer without success. The student then chose to land the airplane on grassy terrain. During the landing, the airplane bounced twice and nosed over, which resulted in substantial damage to the right wing and the rudder. The student reported that there were no preaccident 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 failure to maintain yaw control during takeoff, which resulted in an aborted takeoff and subsequent landing on grassy terrain, during which the airplane bounced and then nosed over.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Yaw control - Not attained/maintained
Environmental issues	Soft surface - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of control in flight (Defining event)
Takeoff	Attempted remediation/recovery
Takeoff-rejected takeoff	Abnormal runway contact
Takeoff-rejected takeoff	Nose over/nose down

Pilot Information

Certificate:	Student	Age:	42, Male
Airplane Rating(s):	None	Seat Occupied:	Left
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:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	September 20, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	40 hours (Total, all aircraft), 25 hours (Total, this make and model), 27 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Flight Design	Registration:	N91WW
Model/Series:	CTSW	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Special light-sport (Special)	Serial Number:	5-646-942
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	November 1, 2019 Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	802 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	ULS2
Registered Owner:	Sunrae Aviation Llc	Rated Power:	100 Horsepower
Operator:	new Flyers Association	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
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:	170°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.5 inches Hg	Temperature/Dew Point:	2°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Delaware, OH (DLZ)	Type of Flight Plan Filed:	None
Destination:	Delaware, OH (DLZ)	Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Delaware Municipal Airport DLZ	Runway Surface Type:	Asphalt
Airport Elevation:	945 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	5800 ft / 100 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.279724,-83.114723(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Steven Ronshausen@faa.gov; Federal Aviation Administration; Columbus, OH
Original Publish Date:	June 16, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=100720

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