



Aviation Investigation Final Report

Location:	Middletown, Ohio	Accident Number:	CEN19LA013
Date & Time:	October 24, 2018, 10:15 Local	Registration:	N8053Q
Aircraft:	Sorrell SORRELL SNS 7	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot was receiving instruction in the experimental, tailwheel-equipped airplane. The flight instructor indicated they flew in the traffic pattern and then landed "normally." The pilot stated that, during the landing rollout, he applied the wheel brakes and the left brake "locked up." He attempted to keep the airplane straight, but it kept veering left. The flight instructor was unable to regain directional control after using corrective rudder control input; the airplane was not equipped with landing gear brakes at the flight instructor's seat position. The right main landing gear broke off when it hit a small hole, and the right wing struck the ground. A postaccident examination of the airplane was not performed; thus, it could not be determined whether there was a mechanical malfunction of the brake system.

Probable Cause and Findings

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

The pilot's loss of directional control during the landing rollout for reasons that could not be determined based on the available evidence, which resulted in the right wing striking the ground.

Findings

Not determined	(general) - Unknown/Not determined
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Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Attempted remediation/recovery
Landing-landing roll	Collision with terr/obj (non-CFIT)

On October 24, 2018, at 1015 eastern daylight time, an experimental Sorrell SNS-7, N8053Q, veered off runway 26 at Middletown Regional Airport (MWO), Middletown, Ohio, and impacted terrain during landing rollout. The private pilot and a flight instructor were uninjured and the airplane sustained substantial damage. The airplane was registered to and operated by the pilot under Title 14 *Code of Federal Regulations* Part 91 as an instructional flight that was not operating on a flight plan. Day visual meteorological conditions prevailed at the time of the accident. The local flight originated from MWO at 1000.

The pilot, who was the airplane owner and performed maintenance on the airplane, stated the during landing rollout of the tailwheel equipped airplane on runway 26 (3,040 feet x 297 feet, turf), he applied the wheel brakes and the left brake "locked up." He attempted to keep the airplane going straight but the airplane kept going left. The right main landing gear hit a hole breaking off the right main landing gear. The airplane came to a sudden stop and the right wing struck the ground. The propeller struck the ground, and the engine kept running.

The flight instructor stated they made a brief flight in the traffic pattern and then landed "normally." During landing rollout, the airplane traveled straight for most of the deceleration. The pilot applied brakes to further slow the airplane, and the airplane began a turn to the left. The instructor attempted corrective input using right rudder, but it was insufficient to correct the rollout path. The flight instructor could not correct using brakes because his rudder pedals were not equipped with brakes. Just prior to stopping, the right main landing gear wheel encountered a small hole, which caused the right main gear to fail.

The National Transportation Safety Board Investigator-in-Charge requested that the Federal Aviation Administration inspector from the Cincinnati Flight Standards District Office perform a post-accident examination of the airplane, but an examination was not performed to determine if there was a mechanical malfunction with the airplane.

Pilot Information

Certificate:	Private	Age:	72,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	August 16, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 20, 2018
Flight Time:	1000 hours (Total, all aircraft), 60 hours (Total, this make and model), 800 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft)		

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	44,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Glider	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 3, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 16, 2018
Flight Time:	14500 hours (Total, all aircraft), 25 hours (Total, this make and model), 12500 hours (Pilot In Command, all aircraft), 183 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Sorrell	Registration:	N8053Q
Model/Series:	SORRELL SNS 7 No Series	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	239
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Condition	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	47.1 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	IO-360
Registered Owner:		Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MWO, 650 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.42 inches Hg	Temperature/Dew Point:	4°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Middletown, OH (MWO)	Type of Flight Plan Filed:	None
Destination:	Middletown, OH (MWO)	Type of Clearance:	None
Departure Time:	10:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	Middletown Regional Airport MWO	Runway Surface Type:	Grass/turf
Airport Elevation:	651 ft msl	Runway Surface Condition:	Soft
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	3040 ft / 297 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.531944,-84.396385(est)

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Neal Spanier; Federal Aviation Administration; Cincinnati FSDO; Cincinnati, OH
Original Publish Date:	June 29, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98543

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](#).