



Aviation Investigation Final Report

Location:	Springfield, Illinois	Accident Number:	GAA19CA149
Date & Time:	February 24, 2019, 14:00 Local	Registration:	N8436S
Aircraft:	Zenair ZENITH STOL CH 701	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The pilot reported that, after landing, while taxiing in gusting wind conditions, the airplane flipped over and came to rest inverted. He added that, a few minutes after the airplane was righted, it flipped over again.

The airplane sustained substantial damage to the empennage and fuselage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The airport's automated weather observation system reported that, about the time of the accident, the wind was from 270° at 27 knots, gusting to 41 knots.

Probable Cause and Findings

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

The pilot's improper crosswind correction during taxi operations in gusting crosswind conditions.

Findings

Aircraft	Crosswind correction - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Crosswind - Effect on operation
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Taxi-from runway	Other weather encounter
Taxi-from runway	Loss of control on ground (Defining event)
Taxi-from runway	Roll over

Pilot Information

Certificate:	Flight instructor; Private	Age:	38,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Sport pilot	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	December 21, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 27, 2019
Flight Time:	(Estimated) 606 hours (Total, all aircraft), 36 hours (Total, this make and model), 523 hours (Pilot In Command, all aircraft), 47 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Zenair	Registration:	N8436S
Model/Series:	ZENITH STOL CH 701 No Series	Aircraft Category:	Airplane
Year of Manufacture:	2018	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	7-10826
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	37 Hrs at time of accident	Engine Manufacturer:	ULPower Aero Engines
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	UL260
Registered Owner:		Rated Power:	97 Horsepower
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:	KSPI, 613 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:52 Local	Direction from Accident Site:	296°
Lowest Cloud Condition:		Visibility	9 miles
Lowest Ceiling:	Overcast / 2400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	27 knots / 41 knots	Turbulence Type Forecast/Actual:	None / Terrain-Induced
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	N/A / Light
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	-1°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Springfield, IL (SPI)	Type of Flight Plan Filed:	None
Destination:	Springfield, IL (SPI)	Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	ABRAHAM LINCOLN CAPITAL SPI	Runway Surface Type:	Asphalt
Airport Elevation:	597 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	7400 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.841667,-89.675003(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Michael P Veselka; FAA; Springfield, IL
Original Publish Date:	November 6, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99021

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](#).