



# Aviation Investigation Final Report

<b>Location:</b>	Sedalia, Missouri	<b>Accident Number:</b>	CEN18LA220
<b>Date &amp; Time:</b>	June 7, 2018, 16:45 Local	<b>Registration:</b>	N8775M
<b>Aircraft:</b>	Beech A23	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot was conducting touch-and-go landings and had landed uneventfully four times. The fifth touchdown was soft; however, the airplane suddenly turned about 90° to the left. The pilot applied right rudder and reduced the throttle to idle. The airplane departed the runway surface, during which the right horizontal stabilizer struck a light post and sustained substantial damage. The pilot reported that the left brake had locked while braking on rollout. A functional check of the braking system and flight controls did not reveal any mechanical malfunctions or failures that would have precluded normal operation; both left and right wheel brake mechanisms functioned properly.

Reported wind conditions about the time of the accident were wind from 230° at 7 knots. However, the pilot indicated that he had checked the local weather about 20 minutes before landing, which reported wind from 100° at 3 knots. Therefore, the crosswind component would have been about 130° opposite, and 4 knots increased, from what the pilot had previously received. The pilot likely lost directional control of the airplane during the landing due to the unexpected wind shift.

## 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 due to the unexpected wind shift, which resulted in a runway excursion.

## Findings

<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Sudden wind shift - Contributed to outcome
<b>Environmental issues</b>	Runway/taxi/approach light - Contributed to outcome

# Factual Information

## History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion

On June 7, 2018, about 1645 central daylight time, a Beech A23 airplane, N8775M, sustained substantial damage following a runway excursion during landing rollout at the Sedalia Municipal Airport (DMO), Sedalia, Missouri. The private pilot and one passenger were not injured. Visual meteorological conditions prevailed and a flight plan was not filed. The airplane was registered to and operated by a private individual. The personal flight was conducted under the provisions of Title 14 *Federal Code of Regulations* Part 91. The flight originated about 1600 from the Cape Girardeau Regional Airport (CGI), Cape Girardeau, Missouri.

The pilot reported that after 4 normal touch and go landings, he set up for another landing on runway 18. The pilot landed the airplane and the touchdown was soft. Suddenly, the airplane turned about 90-degrees to the left. The pilot applied right rudder and reduced the throttle to idle power. The airplane departed the runway surface, struck a runway light with the right horizontal stabilizer, and came to a stop. The pilot was able to taxi the airplane back onto the runway surface and return to the ramp. A postaccident examination revealed that the right horizontal stabilizer sustained substantial damage.

The pilot reported to the responding Federal Aviation Administration (FAA) inspector that the left brake had locked while braking on rollout. A post-accident functional check of the brake system did not reveal any anomalies. Both left and right wheel brake mechanisms functioned properly when visually examined by the FAA inspector. Flight controls were also examined with no anomalies found.

The pilot stated that the AWOS had reported wind from 100° at 3 knots about 20 minutes prior to the landing. A post accident weather review revealed that the reported wind conditions at DMO at 1640 were 230 degrees at 7 knots.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	43,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	BasicMed Without waivers/limitations	<b>Last FAA Medical Exam:</b>	April 3, 2018
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 2, 2018
<b>Flight Time:</b>	(Estimated) 234.6 hours (Total, all aircraft), 114 hours (Total, this make and model), 15.5 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N8775M
<b>Model/Series:</b>	A23 A23	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1964	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	M-591
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 1, 2018 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>	20 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3580.3 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-346-A
<b>Registered Owner:</b>		<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	DMO,909 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	16:40 Local	<b>Direction from Accident Site:</b>	0°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	230°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.96 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 19°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Cape Girardeau, MO (CGI )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Sedalia, MO (DMO )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:00 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	Sedalia Minicipal DMO	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	909 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5500 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	38.7075,-93.175834(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lemishko, Alexander
<b>Additional Participating Persons:</b>	David E Wood; FAA FSDO; Kansas City, MO
<b>Original Publish Date:</b>	June 3, 2020
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97442">https://data.nts.gov/Docket?ProjectID=97442</a>

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