



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Harrisonville, Missouri	<b>Accident Number:</b>	GAA17CA532
<b>Date &amp; Time:</b>	September 11, 2017, 20:03 Local	<b>Registration:</b>	N34413
<b>Aircraft:</b>	Cessna 177	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Wildlife encounter (non-bird)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, during takeoff, he heard a "bang," and "it felt as though the airplane hit a brick wall." He added that, during the climb, he examined the engine instruments, which appeared normal. About 800 ft above ground level, he looked out the left pilot window and observed that the fixed left main landing gear was "oddly positioned up next to [the] seat/door." The pilot reported that he contacted air traffic control, declared an emergency, and performed a "gear up" landing at the destination airport.

The airplane sustained substantial damage to the left stabilizer.

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

After the accident, the following was added to the Airport Facility Directory: "Deer and other wildlife on and in vicinity of airport." It is likely the airplane hit a deer on the runway.

## Probable Cause and Findings

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

A collision with a deer on the runway during the takeoff roll.

## Findings

Environmental issues	Animal(s)/bird(s) - Ability to respond/compensate
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## Factual Information

### History of Flight

Takeoff	Wildlife encounter (non-bird) (Defining event)
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### Pilot Information

Certificate:	Private	Age:	58,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	November 23, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 24, 2017
Flight Time:	(Estimated) 1318.4 hours (Total, all aircraft), 189 hours (Total, this make and model), 954.5 hours (Pilot In Command, all aircraft), 36.7 hours (Last 90 days, all aircraft), 11.3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N34413
Model/Series:	177 B	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17701791
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	April 20, 2017 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4371.51 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91A installed, not activated	Engine Model/Series:	O-360-A1F6D
Registered Owner:		Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	KLRY,915 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	12:55 Local	<b>Direction from Accident Site:</b>	82°
<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>	/	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.23 inches Hg	<b>Temperature/Dew Point:</b>	13°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Harrisonville, MO (LRY )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	LEE'S SUMMIT, MO (LXT )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	20:03 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	LAWRENCE SMITH MEMORIAL LRY	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	915 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	35	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4000 ft / 75 ft	<b>VFR Approach/Landing:</b>	None

## 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>	38.610832,-94.343612(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Benhoff, Kathryn
<b>Additional Participating Persons:</b>	David S Johnson; FAA; Kansas City, MO
<b>Original Publish Date:</b>	December 15, 2017
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=95996">https://data.nts.gov/Docket?ProjectID=95996</a>

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](#).