



# Aviation Investigation Final Report

<b>Location:</b>	Mount Pleasant, Michigan	<b>Accident Number:</b>	GAA18CA155
<b>Date &amp; Time:</b>	March 10, 2018, 18:45 Local	<b>Registration:</b>	N500MP
<b>Aircraft:</b>	LEARJET INC 31	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Wildlife encounter (non-bird)	<b>Injuries:</b>	9 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

The pilot reported that during the landing roll, the airplane collided with two deer.

The airplane sustained substantial damage to the leading edge of the left wing.

According to the Federal Aviation Administration, Airport/Facility Directory for the accident airport, deer may be located on, and in vicinity of the airport.

The pilot reported that there were no 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 airplane's collision with deer during the landing roll.

## Findings

<b>Environmental issues</b>	Animal(s)/bird(s) - Effect on equipment
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## Factual Information

### History of Flight

Landing-landing roll	Wildlife encounter (non-bird) (Defining event)
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### Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	57,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 17, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 1, 2017
Flight Time:	(Estimated) 9100 hours (Total, all aircraft), 3000 hours (Total, this make and model), 6500 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft)		

### Co-pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	55,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	October 5, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 6, 2017
Flight Time:	(Estimated) 12000 hours (Total, all aircraft), 300 hours (Total, this make and model), 75 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	LEARJET INC	<b>Registration:</b>	N500MP
<b>Model/Series:</b>	31 A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2000	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	198
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	10
<b>Date/Type of Last Inspection:</b>	Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	15500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo jet
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Honeywell
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TFE731
<b>Registered Owner:</b>		<b>Rated Power:</b>	3500 Horsepower
<b>Operator:</b>		<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>	KMOP, 755 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	01:35 Local	<b>Direction from Accident Site:</b>	26°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 5500 ft AGL	<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>	30.13 inches Hg	<b>Temperature/Dew Point:</b>	-2°C / -7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ULYSSES, KS (ULS )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Mt. Pleasant, MI (MOP )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	18:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	MOUNT PLEASANT MUNI MOP	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	754 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	RNAV
<b>Runway Length/Width:</b>	5000 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	7 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	9 None	<b>Latitude, Longitude:</b>	43.621665,-84.73722(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Michael Matthews; FAA; Grand Rapids, MI
<b>Original Publish Date:</b>	August 27, 2018
<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=96853">https://data.nts.gov/Docket?ProjectID=96853</a>

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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](#).