



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Sidney, Montana	<b>Accident Number:</b>	GAA16CA492
<b>Date &amp; Time:</b>	September 10, 2016, 13:00 Local	<b>Registration:</b>	N8335A
<b>Aircraft:</b>	Cessna 170	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing gear collapse	<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The flight instructor reported that, during the instructional flight in a tailwheel-equipped airplane, the student pilot bounced the landing. The airplane bounced off the grass airstrip, and the flight instructor took the flight controls, but the airplane drifted to the left and into a drainage ditch. The flight instructor reported that he corrected with right rudder application to ease the airplane out of the ditch, but the left landing gear tire deflated, and the left wing and the tail struck the ground. The airplane yawed to the left, the instructor corrected the yaw, and the airplane rolled onto the runway and stopped. The left wing, left aileron, and the elevator sustained substantial damage.

The flight instructor reported that there were no preaccident mechanical malfunctions or anomalies with the airplane that would have prevented normal operation.

## Probable Cause and Findings

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

The student pilot's improper landing flare, which resulted in a bounced landing, and the flight instructor's inability to recover the airplane, which resulted in a runway excursion.

## Findings

<b>Personnel issues</b>	Aircraft control - Student/instructed pilot
<b>Personnel issues</b>	Aircraft control - Instructor/check pilot
<b>Aircraft</b>	Landing flare - Not attained/maintained
<b>Aircraft</b>	Directional control - Not attained/maintained

## Factual Information

### History of Flight

<b>Landing-flare/touchdown</b>	Runway excursion
<b>Landing-landing roll</b>	Landing gear collapse (Defining event)
<b>Landing-landing roll</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	52,Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	October 15, 2014
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	November 8, 2014
<b>Flight Time:</b>	(Estimated) 15000 hours (Total, all aircraft), 50 hours (Total, this make and model), 13000 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

### Student pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	44,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>	Lap only
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	February 16, 2016
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 60 hours (Total, all aircraft), 6 hours (Total, this make and model), 18 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

## Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N8335A
<b>Model/Series:</b>	170 B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1952	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	25187
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 26, 2016 Annual	<b>Certified Max Gross Wt.:</b>	2200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3089 Hrs as of last inspection	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	C-145-2
<b>Registered Owner:</b>		<b>Rated Power:</b>	145 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>	KSDY,1980 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	18:56 Local	<b>Direction from Accident Site:</b>	32°
<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>	14 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	190°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Poplar, MT (PO1 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Sidney, MT (SDY )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	12:10 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	SIDNEY-RICHLAND MUNICIPAL AIRP SDY	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	1985 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough
<b>Runway Used:</b>	29	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4024 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>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	47.706943,-104.192497(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Michael
<b>Additional Participating Persons:</b>	Troy Meskimen; FAA; Helena, MT
<b>Original Publish Date:</b>	April 4, 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=94031">https://data.nts.gov/Docket?ProjectID=94031</a>

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