



# Aviation Investigation Final Report

<b>Location:</b>	St. Anthony, North Dakota	<b>Accident Number:</b>	CEN23LA210
<b>Date &amp; Time:</b>	May 30, 2023, 07:44 Local	<b>Registration:</b>	N7343L
<b>Aircraft:</b>	Piper PA-18-150	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Public aircraft		

## Analysis

The pilot reported that while conducting wildlife damage management activities under contract with the U.S. Department of Agriculture, he entered a right 180-degree turn in order to reverse direction and position the airplane.

The airplane heading prior to the turn was into a slight right quartering headwind and required a climb due to up-sloping terrain. About 160 degrees into the right turn, the right quartering headwind became a left quartering tailwind. The airplane descended and contacted the ground. On contact, the nose of the airplane pitched forward and struck the ground. The airplane then bounced, cartwheeled, and came to rest approximately 105 ft from the initial ground contact, resulting in substantial damage to the fuselage, both wings, and the empennage.

The pilot reported that there were no preaccident mechanical failures or malfunctions 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 pilot's failure to maintain clearance from terrain while maneuvering at low attitude.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Tailwind - Contributed to outcome
<b>Aircraft</b>	Altitude - Not attained/maintained

## Factual Information

### History of Flight

<b>Maneuvering-low-alt flying</b>	Collision with terr/obj (non-CFIT) (Defining event)
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### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	30,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	December 1, 2022
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	January 21, 2023
<b>Flight Time:</b>	3939 hours (Total, all aircraft), 815 hours (Total, this make and model), 3834 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N7343L
<b>Model/Series:</b>	PA-18-150	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1975	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18-7509049
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	March 25, 2023 Annual	<b>Certified Max Gross Wt.:</b>	1750 lbs
<b>Time Since Last Inspection:</b>	96.7 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	13075.5 Hrs at time of accident	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	O-320-B2B
<b>Registered Owner:</b>	AIR DAKOTA FLITE INC	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	AIR DAKOTA FLITE INC	<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>	KBIS, 1660 ft msl	<b>Distance from Accident Site:</b>	13 Nautical Miles
<b>Observation Time:</b>	07:52 Local	<b>Direction from Accident Site:</b>	36°
<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>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.8 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Mandan, ND (Y19)	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	05:44 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	46.5983,-100.9408

## Administrative Information

Investigator In Charge (IIC):	Brown, Zane
Additional Participating Persons:	Perry Ochsner; FAA Fargo FSDO; Fargo, ND
Original Publish Date:	October 17, 2023
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=192271">https://data.nts.gov/Docket?ProjectID=192271</a>

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