



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	Ennis, MT	<b>Accident Number:</b>	GAA19CA432
<b>Date &amp; Time:</b>	07/17/2019, 0828 MDT	<b>Registration:</b>	N137C
<b>Aircraft:</b>	Aviat A1	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>	Aerodynamic stall/spin	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

---

## Analysis

The pilot reported that he was conducting an aerial survey to spot bears. After spotting bears, he flew multiple low-altitude passes to maintain sight of the bears. While maneuvering uphill at a low altitude, his attention was drawn to the bears and away from terrain. When he regained focus, he decided to turn the airplane right, away from rising terrain, but about 90° into the turn, the airplane descended and impacted terrain, and a postcrash fire ensued. The airplane sustained substantial damage to the wings and fuselage. The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation. The pilot added that he should have let the observer observe the bears during the low passes.

## Probable Cause and Findings

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

The pilot's exceedance of the airplane's critical angle of attack while turning at low altitude, which resulted in an aerodynamic stall. Contributing to the accident was the pilot's distraction due to looking at wildlife.

## Findings

---

<b>Aircraft</b>	Angle of attack - Capability exceeded (Cause)
<b>Personnel issues</b>	Aircraft control - Pilot (Cause) Attention - Pilot (Factor)

## Factual Information

### History of Flight

<b>Maneuvering-low-alt flying</b>	Aerodynamic stall/spin (Defining event) Collision with terr/obj (non-CFIT)
-----------------------------------	---

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor; Commercial	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	Glider; Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane Single-engine; Glider; Helicopter; Instrument Airplane; Instrument Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With Waivers/Limitations	<b>Last FAA Medical Exam:</b>	06/24/2019
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	04/04/2019
<b>Flight Time:</b>	(Estimated) 18000 hours (Total, all aircraft), 500 hours (Total, this make and model), 17500 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Aviat	<b>Registration:</b>	N137C
<b>Model/Series:</b>	A1 A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1999	<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1453
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	06/20/2019, 100 Hour	<b>Certified Max Gross Wt.:</b>	1890 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3525 Hours at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C126 installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	O-360-AIP
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	180 hp
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)
<b>Operator Does Business As:</b>	Northern Wings Aviation LLC	<b>Operator Designator Code:</b>	5NWA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KRXE, 4862 ft msl	Distance from Accident Site:	37 Nautical Miles
Observation Time:	1353 UTC	Direction from Accident Site:	199°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:		Temperature/Dew Point:	21° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bozeman, MT (BZN)	Type of Flight Plan Filed:	Company VFR
Destination:	Bozeman, MT (BZN)	Type of Clearance:	None
Departure Time:	0600 MDT	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Minor	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	44.421667, -111.528611 (est)

## Administrative Information

Investigator In Charge (IIC):	Eleazar Nepomuceno	Report Date:	04/13/2020
Additional Participating Persons:	Bobby Radtke; FAA; Helena, MT		
Publish Date:	04/13/2020		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	<a href="http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=99879">http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=99879</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](#).