



Aviation Investigation Final Report

Location:	Englewood, Colorado	Accident Number:	CEN23LA394
Date & Time:	September 2, 2023, 05:54 Local	Registration:	N20818
Aircraft:	TEXTRON AVIATION INC 172S	Aircraft Damage:	Substantial
Defining Event:	Birdstrike	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor and his student were conducting an instructional flight in the airport traffic pattern when the airplane collided with multiple geese during initial climb. Due to the collision, the engine experienced a loss of engine power, so the flight instructor continued straight ahead. He conducted a forced landing on a golf course and the airplane nosed over. The airplane sustained substantial damage to the fuselage, empennage, and both wings.

Probable Cause and Findings

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

An in-flight collision with multiple geese during initial climb.

Findings

Environmental issues	Animal(s)/bird(s) - Effect on equipment
Environmental issues	Animal(s)/bird(s) - Ability to respond/compensate

Factual Information

History of Flight

Initial climb	Birdstrike (Defining event)
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Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	25, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	July 8, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 14, 2023
Flight Time:	325.1 hours (Total, all aircraft), 299.7 hours (Total, this make and model), 233.2 hours (Pilot In Command, all aircraft), 92.6 hours (Last 90 days, all aircraft), 59.7 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	41, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	February 10, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	12 hours (Total, all aircraft), 12 hours (Total, this make and model), 12 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	TEXTRON AVIATION INC	Registration:	N20818
Model/Series:	172S	Aircraft Category:	Airplane
Year of Manufacture:	2020	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S12579
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	August 10, 2023 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1880 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	IO-360-L2A
Registered Owner:	On file	Rated Power:	180 Horsepower
Operator:	ATP USA	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dawn
Observation Facility, Elevation:	KAPA, 5870 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	06:53 Local	Direction from Accident Site:	7°
Lowest Cloud Condition:	Few / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	18°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Englewood, CO (APA)	Type of Flight Plan Filed:	VFR
Destination:	Englewood, CO (APA)	Type of Clearance:	VFR
Departure Time:	05:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	CENTENNIAL APA	Runway Surface Type:	Asphalt
Airport Elevation:	5884 ft msl	Runway Surface Condition:	Unknown
Runway Used:	17L	IFR Approach:	None
Runway Length/Width:	10001 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	39.539747,-104.85135

Administrative Information

Investigator In Charge (IIC):	Lindberg, Joshua
Additional Participating Persons:	Josh Friederichs; Federal Aviation Administration; Denver, CO
Original Publish Date:	October 17, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=192995

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).