



Aviation Investigation Final Report

Location:	Chino, California	Accident Number:	GAA17CA573
Date & Time:	September 22, 2017, 10:00 Local	Registration:	N520KS
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Birdstrike	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that, while the student pilot was flying on downwind, he noticed a bird approaching the airplane. He added that he took the flight controls from the student and banked left, but the airplane struck the bird. The airplane landed without further incident.

The airplane sustained substantial damage to the left wing.

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

The Federal Aviation Administration Airport Facility Diagram page for the airport stated, in part: "Birds and wildlife on and in vicinity of [in vicinity of] arpt."

Probable Cause and Findings

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

An in-flight collision with a bird while on downwind.

Findings

Environmental issues	Animal(s)/bird(s) - Ability to respond/compensate
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Factual Information

History of Flight

Approach-VFR pattern downwind	Birdstrike (Defining event)
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Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	30, 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; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	May 12, 2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 13, 2017
Flight Time:	(Estimated) 530 hours (Total, all aircraft), 450 hours (Total, this make and model), 457 hours (Pilot In Command, all aircraft), 230 hours (Last 90 days, all aircraft), 98 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	28, 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:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	April 5, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 10 hours (Total, all aircraft), 10 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N520KS
Model/Series:	172 S	Aircraft Category:	Airplane
Year of Manufacture:	2004	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	172S9734
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	September 20, 2017 100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	8073.3 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCNO, 650 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	290°
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	19°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Chino, CA (CNO)	Type of Flight Plan Filed:	None
Destination:	Chino, CA (CNO)	Type of Clearance:	VFR
Departure Time:	09:20 Local	Type of Airspace:	Class D

Airport Information

Airport:	CHINO CNO	Runway Surface Type:	Asphalt
Airport Elevation:	650 ft msl	Runway Surface Condition:	Dry
Runway Used:	26L	IFR Approach:	None
Runway Length/Width:	7000 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	33.970001,-117.61972(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Maria LeBlanc; FAA; Riverside, CA
Original Publish Date:	December 15, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96190

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](#).