



Aviation Investigation Final Report

Location:	Boise, Idaho	Accident Number:	DCA20CA010
Date & Time:	October 29, 2019, 14:33 Local	Registration:	N402QX
Aircraft:	De Havilland DHC8	Aircraft Damage:	Substantial
Defining Event:	Birdstrike	Injuries:	2 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

On October 29, 2019 at 1433 mountain daylight time, Horizon Air as flight 2337, a Bombardier De Havilland DHC8, N402QX, struck a bird during climb out from Boise Airport (KBOI), Boise, Idaho. After the collision, the flight crew saw visual evidence of the bird remains on the left wing, determined there were no indications of control problems, and decided to continue to Seattle/Tacoma International Airport (KSEA), Seattle, Washington, where the flight landed with no further incident. Postflight inspection of the airplane revealed that the the bird impact had partially severed the left wing leading edge composite structure and cracked the front spar web. The flight was operating was operating under 14 CFR Part 121 and there were no injuries to the 80 passengers and crew onboard.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a bird strike during climb out.

Findings

Environmental issues	Animal(s)/bird(s) - Effect on equipment
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Factual Information

History of Flight

Initial climb	Birdstrike (Defining event)
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Pilot Information

Certificate:	Airline transport; Commercial	Age:	41
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	May 16, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 12, 2019
Flight Time:	9628 hours (Total, all aircraft), 994 hours (Total, this make and model), 4474 hours (Pilot In Command, all aircraft), 57 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Airline transport; Commercial	Age:	28
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	November 12, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 25, 2019
Flight Time:	1813 hours (Total, all aircraft), 575 hours (Total, this make and model), 441 hours (Pilot In Command, all aircraft), 134 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	De Havilland	Registration:	N402QX
Model/Series:	DHC8 402	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	
Airworthiness Certificate:	Normal; Transport	Serial Number:	4032
Landing Gear Type:	Retractable - Tricycle	Seats:	82
Date/Type of Last Inspection:	June 12, 2019	Certified Max Gross Wt.:	65400 lbs
Time Since Last Inspection:		Engines:	2
Airframe Total Time:	43991.63 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney Canada
ELT:	C126 installed, not activated	Engine Model/Series:	PW150A
Registered Owner:	Bcc Equipment Leasing Corp	Rated Power:	
Operator:	Horizon Air Industries Inc.	Operating Certificate(s) Held:	Flag carrier (121), Supplemental

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KBOI	Distance from Accident Site:	
Observation Time:	19:53 Local	Direction from Accident Site:	260°
Lowest Cloud Condition:	Scattered / 4100 ft AGL	Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.34 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Boise, ID (KBOI)	Type of Flight Plan Filed:	IFR
Destination:	Seattle, WA (KSEA)	Type of Clearance:	IFR
Departure Time:	13:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	Boise Airport KBOI	Runway Surface Type:	Asphalt
Airport Elevation:	2871 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.5,-116.300003(est)

Administrative Information

Investigator In Charge (IIC): English, William

Additional Participating Persons:

Original Publish Date: April 22, 2020

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=100507>

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