



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Charlotte, North Carolina	Accident Number:	DCA17CA064
Date & Time:	February 15, 2017, 11:42 Local	Registration:	N709PS
Aircraft:	BOMBARDIER INC CL 600 2C10	Aircraft Damage:	Substantial
Defining Event:	Wildlife encounter (non-bird)	Injuries:	48 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

On February 15, 2017, at about 1142 eastern standard time, a PSA Airlines flight 5320, a Bombardier CRJ700, N709PS, struck a deer during takeoff from runway 36C at Charlotte Douglas International Airport (CLT), Charlotte, North Carolina. The airplane sustained substantial damage. There were no injuries to the 48 passengers and crew onboard. The flight was operating under 14 CFR Part 121 as a regularly scheduled passenger flight from CLT to Gulfport-Biloxi International Airport (GPT), Gulfport, Mississippi.

According to the operator, the airplane struck a deer with its right wing during the takeoff roll. The crew continued the takeoff and declared an emergency. Before returning to land, the flight crew conducted a low pass down runway 36R, for the airport rescue and firefighting (ARFF) to inspect the damage. ARFF observed damage to the right wing and reported vapor coming from it. After landing on runway 36R, the flight crew elected to stop on the taxiway due to the fuel leak, where passengers were evacuated and bused them to the terminal. Post flight examination of the wing found damage substantial damage to the leading edge slats, slat tracks, flaps, and front spar of the right wing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: collision with a deer during takeoff.

Findings

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

History of Flight

Takeoff	Wildlife encounter (non-bird) (Defining event)
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Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	31,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Unknown	Last FAA Medical Exam:	February 10, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 20, 2016
Flight Time:	152 hours (Last 90 days, all aircraft), 61 hours (Last 30 days, all aircraft)		

Co-pilot Information

Certificate:	Airline transport	Age:	45,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):		Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Unknown	Last FAA Medical Exam:	January 5, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 25, 2016
Flight Time:	204 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BOMBARDIER INC	Registration:	N709PS
Model/Series:	CL 600 2C10 700C	Aircraft Category:	Airplane
Year of Manufacture:	2004	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	10165
Landing Gear Type:	Tricycle	Seats:	71
Date/Type of Last Inspection:		Certified Max Gross Wt.:	75720 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:		Engine Manufacturer:	General Electric
ELT:		Engine Model/Series:	GE CF34-8C5B1
Registered Owner:		Rated Power:	13790 Lbs thrust
Operator:		Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:	American Eagle	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCLT	Distance from Accident Site:	
Observation Time:	15:52 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 700 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 2000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.57 inches Hg	Temperature/Dew Point:	9°C / 7°C
Precipitation and Obscuration:			
Departure Point:	Charlotte, NC (CLT)	Type of Flight Plan Filed:	
Destination:	Gulfport, MS (GPT)	Type of Clearance:	IFR
Departure Time:	00:32 Local	Type of Airspace:	Class B

Airport Information

Airport:	Charlotte/Douglas Intl CLT	Runway Surface Type:	Concrete
Airport Elevation:	747 ft msl	Runway Surface Condition:	Dry
Runway Used:	36C	IFR Approach:	None
Runway Length/Width:	10000 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	Substantial
Passenger Injuries:	44 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	48 None	Latitude, Longitude:	35.21389,-80.951942

Administrative Information

Investigator In Charge (IIC):	Bower, Daniel
Additional Participating Persons:	
Original Publish Date:	July 8, 2020
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94720

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](#).