



National Transportation Safety Board Aviation Accident Final Report

Location:	Harrisburg, PA	Accident Number:	DCA14CA147
Date & Time:	08/10/2014, 0605 EDT	Registration:	N815EX
Aircraft:	DEHAVILLAND DHC 8 102	Aircraft Damage:	Substantial
Defining Event:	Birdstrike	Injuries:	20 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

On August 10, 2014 at about 0605 eastern daylight time, a deHavilland DHC-8-100, N815EX, operated by Piedmont Airlines d.b.a. USAirways Express flight 4206, struck a flock of geese during the takeoff roll from Middletown Harrisburg International Airport (KMDT), Harrisburg, Pennsylvania. There were no injuries to the passengers or crew and the airplane sustained damage. The flight was operating under the provisions of 14 Code of Federal Regulations Part 121 as a regularly scheduled passenger flight between KMDT and Philadelphia International Airport (KPHL), Philadelphia, Pennsylvania.

The captain was the pilot flying and the first officer was the pilot monitoring. According to the flight crew, about 15 seconds into the takeoff roll and prior to V₁, the captain observed a large group of geese flying from right to left in front of the airplane. He immediately initiated a rejected takeoff as the airplane impacted multiple geese on the front windshield and the right engine propeller, which caused a severe vibration. The flight crew shut down the right engine as the airplane slowed and returned to the gate.

Examination of the airplane indicated damage to the right propeller, a broken passenger window, and damage to the fuselage skin and stringers near the broken window.

Probable Cause and Findings

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

the airplanes collision with geese during the takeoff roll.

Findings

Environmental issues

Animal(s)/bird(s) - Effect on equipment (Cause)

Factual Information

History of Flight

Takeoff-rejected takeoff	Birdstrike (Defining event)
--------------------------	-----------------------------

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	64, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Instrument Airplane	Toxicology Performed:	
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	08/08/2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	36000 hours (Total, all aircraft), 18000 hours (Total, this make and model), 205 hours (Last 90 days, all aircraft), 67 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport	Age:	30, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	01/14/2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4022 hours (Total, all aircraft), 3662 hours (Total, this make and model), 223 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N815EX
Model/Series:	DHC 8 102 103	Aircraft Category:	Airplane
Year of Manufacture:	1992	Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	321
Landing Gear Type:	Retractable - Tricycle	Seats:	41
Date/Type of Last Inspection:	08/09/2014, Continuous Airworthiness	Certified Max Gross Wt.:	34500 lbs
Time Since Last Inspection:	53834 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	at time of accident	Engine Manufacturer:	Pratt and Whitney
ELT:	Installed, not activated	Engine Model/Series:	PW120A
Registered Owner:	PIEDMONT AIRLINES INC	Rated Power:	2000 hp
Operator:	PIEDMONT AIRLINES INC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:	US Airways Express	Operator Designator Code:	HNAA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dawn
Observation Facility, Elevation:	KMDT	Distance from Accident Site:	
Observation Time:	0556 EDT	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	9 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	17°C / 15°C
Precipitation and Obscuration:			
Departure Point:	Harrisburg, PA (MDT)	Type of Flight Plan Filed:	IFR
Destination:	Philadelphia, PA (PHL)	Type of Clearance:	IFR
Departure Time:	EDT	Type of Airspace:	Class D

Airport Information

Airport:	HARRISBURG INTL (MDT)	Runway Surface Type:	Asphalt
Airport Elevation:	309 ft	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	10002 ft / 200 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:	17 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	20 None	Latitude, Longitude:	40.193333, -76.762778 (est)

Administrative Information

Investigator In Charge (IIC):	Daniel R Bower	Report Date:	03/09/2018
Additional Participating Persons:			
Publish Date:	03/09/2018		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=89887		

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](#).