



Aviation Investigation Final Report

Location: Nashville, Tennessee Accident Number: DCA19CA130

Date & Time: March 27, 2019, 19:25 Local Registration: N249WN

Aircraft: Boeing 737 Aircraft Damage: Substantial

Defining Event: Birdstrike **Injuries:** N/A

Flight Conducted Under: Part 121: Air carrier - Scheduled

Analysis

On March 27, 2019 at 7:25pm central daylight time (EDT), a Boeing 737-700, N249WN, operated by Southwest Airlines as flight 975 struck a bird with the left horizontal stabilizer while descending through 2,500 feet on approach to the Berry-Nashville International Airport (KBNA), Nashville, Tennessee. The airplane landed at KBNA with no further incident. There were no injuries and the airplane was substantial damaged. The regularly scheduled passenger flight was operating under the provisions of 14 CFR Part 121 from the Pittsburgh International Airport (KPIT), Pittsburgh, Pennsylvania, to KBNA.

Damage to the airplane included a 12 inch crack in the forward spar, requiring replacement of the horizontal stabilizer. Bird residue was sent to the Smithsonian Museum of Natural History laboratory, and identified as a Great Blue Heron.

Probable Cause and Findings

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

Findings

Environmental issues

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

Factual Information

History of Flight

Approach Birdstrike (Defining event)

Pilot Information

Certificate:	Airline transport; Flight engineer	Age:	56
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:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	January 13, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 16, 2018
Flight Time:	23718 hours (Total, all aircraft), 15630 hours (Total, this make and model), 14771 hours (Pilot In Command, all aircraft), 154 hours (Last 90 days, all aircraft), 62 hours (Last 30 days, all aircraft), 2.5 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Airline transport; Commercial; Flight instructor	Age:	33
Single-engine land; Multi-engine land	Seat Occupied:	Right
	Restraint Used:	5-point
Airplane	Second Pilot Present:	Yes
Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Class 1 Without waivers/limitations	Last FAA Medical Exam:	February 12, 2019
Yes	Last Flight Review or Equivalent:	February 18, 2019
4988 hours (Total, all aircraft), 1317 hours (Total, this make and model), 1128 hours (Pilot In Command, all aircraft), 161 hours (Last 90 days, all aircraft), 61 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		
	Flight instructor Single-engine land; Multi-engine land Airplane Airplane single-engine; Instrument airplane Class 1 Without waivers/limitations Yes 4988 hours (Total, all aircraft), 1317 h Command, all aircraft), 161 hours (La	Single-engine land; Multi-engine land Restraint Used: Airplane Second Pilot Present: Airplane single-engine; Instrument airplane Class 1 Without waivers/limitations Yes Last FAA Medical Exam: Last Flight Review or Equivalent: 4988 hours (Total, all aircraft), 1317 hours (Total, this make and model), 1130 Command, all aircraft), 161 hours (Last 90 days, all aircraft), 61 hours (Last

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Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N249WN
Model/Series:	737 7H4	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	34951
Landing Gear Type:	Retractable - Tricycle	Seats:	151
Date/Type of Last Inspection:	February 19, 2019	Certified Max Gross Wt.:	154500 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	44455 Hrs at time of accident	Engine Manufacturer:	Cfm Intl
ELT:	Installed	Engine Model/Series:	CFM56-7B24
Registered Owner:		Rated Power:	10142 Horsepower
Operator:		Operating Certificate(s) Held:	Flag carrier (121)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KBNA	Distance from Accident Site:	10 Nautical Miles
Observation Time:	23:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.25 inches Hg	Temperature/Dew Point:	16°C / 2°C
Precipitation and Obscuration:			
Departure Point:	Pittsburgh, PA (KPIT)	Type of Flight Plan Filed:	IFR
Destination:	Nashville, TN (KBNA)	Type of Clearance:	IFR
Departure Time:	19:25 Local	Type of Airspace:	Class C

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Airport Information

Airport: Nashville International Airpor KBNA Runway Surface Type:

Airport Elevation:599 ft mslRunway Surface Condition:UnknownRunway Used:IFR Approach:Visual

Runway Length/Width: VFR Approach/Landing:

Wreckage and Impact Information

Crew Injuries:		Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	N/A	Latitude, Longitude:	36.124443,-86.678054

Administrative Information

Investigator In Charge (IIC):	English, William
Additional Participating Persons:	
Original Publish Date:	August 23, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99199

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.

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