



National Transportation Safety Board Aviation Accident Data Summary

Location:	Phoenix, AZ	Accident Number:	WPR10LA044
Date & Time:	11/02/2009, 0850 MST	Registration:	N909DA
Aircraft:	MCDONNELL DOUGLAS MD-90-30	Injuries:	70 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

The flight crew reported that during climb to cruise they heard a loud bang, followed by a "pop" in the pressurization and loud noise within the cockpit. The first officer stated that prior to the loud bang he observed "several black dots" directly in front of him. The flight crew declared an emergency and diverted to their departure airport, where they landed uneventfully. Examination of the airplane by a Federal Aviation Administration inspector revealed an approximately 18 inch by 21 inch tear in fuselage skin located aft of the right side flight deck eyebrow window and structural damage to the upper portion of the fuselage. Bird residue and feathers were observed near the torn area of fuselage skin. The Smithsonian National Museum of Natural History Feather Identification Laboratory performed DNA analysis, microscopic examination, and whole feather comparisons with museum study skins on the recovered residue and feathers. The analysis identified the residue and feathers as the remains of a Western Grebe (*Aechmophorus occidentalis*). The weight range for the species complex is recorded from 906 to 1,429 grams, with an average weight of 3.3 pounds.

Flight Events

Enroute-climb to cruise - Birdstrike

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
An in-flight collision with birds.

Findings

Environmental issues-Physical environment-Object/animal/substance-Animal(s)/bird(s)-Effect on operation - C

Pilot Information

Certificate:	Airline Transport; Flight Engineer	Age:	50
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	11178 hours (Total, all aircraft), 2870 hours (Total, this make and model), 149 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport; Commercial	Age:	41
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	2182 hours (Total, all aircraft), 1952 hours (Total, this make and model), 113 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	MCDONNELL DOUGLAS	Registration:	N909DA
Model/Series:	MD-90-30	Engines:	2 Turbo Jet
Operator:	DELTA AIR LINES INC	Engine Manufacturer:	IAE
Air Carrier Operating Certificate:	Flag carrier (121)	Engine Model/Series:	V2500SERIES
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	PHX, 1135 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	3 knots, 90°
Temperature:	19°C / -1°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Phoenix, AZ (PHX)	Destination:	Salt Lake City, UT (SLC)

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Passenger Injuries:	65 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Joshua Cawthra	Adopted Date:	05/06/2010
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=74997		

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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