

National Transportation Safety Board Aviation Accident Data Summary

Location: Clarence Center, NY Accident Number: DCA09MA027

Date & Time: 02/12/2009, 2017 EST Registration: N200WQ

Aircraft: BOMBARDIER INC DHC-8-402 Injuries: 50 Fatal

Flight Conducted Under: Part 121: Air Carrier - Scheduled

Analysis

The Safety Board's full report is available at http://www.ntsb.gov/publictn/A_Acc1.htm. The Aircraft Accident Report number is NTSB/AAR-10/01.

On February 12, 2009, about 2217 eastern standard time, a Colgan Air, Inc., Bombardier DHC-8-400, N200WQ, operating as Continental Connection flight 3407, was on an instrument approach to Buffalo-Niagara International Airport, Buffalo, New York, when it crashed into a residence in Clarence Center, New York, about 5 nautical miles northeast of the airport. The 2 pilots, 2 flight attendants, and 45 passengers aboard the airplane were killed, one person on the ground was killed, and the airplane was destroyed by impact forces and a postcrash fire. The flight was operating under the provisions of 14 Code of Federal Regulations Part 121. Night visual meteorological conditions prevailed at the time of the accident.

Flight Events

Approach-IFR initial approach - Stall warn/stick-shaker/pusher

Approach-IFR initial approach - Aerodynamic stall/spin

Approach-IFR initial approach - Attempted remediation/recovery

Approach-IFR initial approach - Loss of control in flight

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The captain's inappropriate response to the activation of the stick shaker, which led to an aerodynamic stall from which the airplane did not recover. Contributing to the accident were (1) the flight crew's failure to monitor airspeed in relation to the rising position of the low-speed cue, (2) the flight crew failure to adhere to sterile cockpit procedures, (3) the captain's failure to effectively manage the flight, and (4) Colgan Air's inadequate procedures for airspeed selection and management during approaches in icing conditions.

Findings

Aircraft-Aircraft systems-Navigation system-Stall warning system-Incorrect use/operation - C Personnel issues-Action/decision-Action-Incorrect action selection-Pilot - C

Personnel issues-Psychological-Attention/monitoring-Monitoring equip/instruments-Flight crew - F Personnel issues-Task performance-Communication (personnel)-CRM/MRM techniques-Flight crew

Personnel issues-Task performance-Workload management-(general)-Pilot - F

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Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to structural icing-Not specified

Organizational issues-Management-Policy/procedure-Adequacy of policy/proc-Operator - F

Pilot Information

Certificate:	Airline Transport	Age:	47
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	3263 hours (Total, all aircraft), 110 hours (Total, this make and model), 1205 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 51 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Commercial	Age:	24
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine
Flight Time:	2238 hours (Total, all aircraft), 768 hours (Total, this make and model), 1350 hours (Pilot In Command, all aircraft), 174 hours (Last 90 days, all aircraft), 51 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BOMBARDIER INC	Registration:	N200WQ
Model/Series:	DHC-8-402	Engines:	2 Turbo Prop
Operator:	COLGAN AIR INC	Engine Manufacturer:	P&W CANADA
Operating Certificate(s) Held:	Flag carrier (121)	Engine Model/Series:	PW150A
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night
Observation Facility, Elevation:	BUF	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 2100 ft agl	Wind Speed/Gusts, Direction:	15 knots / , 250 $^{\circ}$
Temperature:		Visibility	3 Miles
Precipitation and Obscuration:			
Departure Point:	Newark, NJ (EWR)	Destination: Buffalo, NY (BUF)	

Airport Information

Airport:	Buffalo-Niagara International (BUF)	Runway Surface Type:
Runway Used:		Runway Surface Condition:
Runway Length/Width:		

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Wreckage and Impact Information

Crew Injuries:	4 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	45 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	1 Fatal	Aircraft Explosion:	On-Ground
Latitude, Longitude:	43.011111, -78.634722 (est)		

Administrative Information

Investigator In Charge (IIC): Effie Lorenda Ward Adopted Date: 03/28/2010

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations.

Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division

at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at

http://dms.ntsb.gov/pubdms/.

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