



Aviation Investigation Final Report

Location:	New York, New York	Accident Number:	DCA15FA085
Date & Time:	March 5, 2015,	Registration:	N909DL
Aircraft:	MCDONNELL DOUGLAS AIRCRAFT CO MD 88	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	132 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

NTSB investigators traveled in support of this investigation and used data obtained from various sources to prepare this aircraft accident report.

The Safety Board's full report is available at <http://www.nts.gov/investigations/AccidentReports/Pages/AccidentReports.aspx>. The Aircraft Accident Report number is NTSB/AAR-16/02.

On March 5, 2015, at 1102 eastern standard time, Delta Air Lines flight 1086, a Boeing MD-88, N909DL, was landing on runway 13 at LaGuardia Airport, New York, New York, when it departed the left side of the runway, contacted the airport perimeter fence, and came to rest with the airplane's nose on an embankment next to Flushing Bay. The 2 pilots, 3 flight attendants, and 98 of the 127 passengers were not injured; the other 29 passengers received minor injuries. The airplane was substantially damaged. Flight 1086 was a regularly scheduled passenger flight from Hartsfield-Jackson Atlanta International Airport, Atlanta, Georgia, operating under the provisions of 14 *Code of Federal Regulations* Part 121. An instrument flight rules flight plan had been filed. Instrument meteorological conditions prevailed at the time of the accident.

Probable Cause and Findings

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

the captain's inability to maintain directional control of the airplane due to his application of excessive reverse thrust, which degraded the effectiveness of the rudder in controlling the airplane's heading. Contributing to the accident were the captain's (1) situational stress resulting from his concerns about stopping performance and (2) attentional limitations due to the high workload during the landing, which prevented him from immediately recognizing the use of excessive reverse thrust.

Findings

Aircraft	Powerplant parameters - Incorrect use/operation
Aircraft	(general) - Capability exceeded
Personnel issues	Perception - Pilot
Personnel issues	Task overload - Pilot
Organizational issues	(general) - Operator
Organizational issues	(general) - Manufacturer
Personnel issues	(general) - Cabin crew
Environmental issues	Snow/slush/ice covered surface - Availability of related info

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

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Pilot Information

Certificate:	Airline transport	Age:	56
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Unknown	Last FAA Medical Exam:	January 5, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 19, 2014
Flight Time:	15203 hours (Total, all aircraft), 11687 hours (Total, this make and model), 150 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Airline transport	Age:	46
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Unknown	Last FAA Medical Exam:	July 26, 2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 11, 2015
Flight Time:	4708 hours (Total, all aircraft), 2937 hours (Total, this make and model), 185 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MCDONNELL DOUGLAS AIRCRAFT CO	Registration:	N909DL
Model/Series:	MD 88 88	Aircraft Category:	Airplane
Year of Manufacture:	1987	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	49540
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	March 3, 2015 Continuous airworthiness	Certified Max Gross Wt.:	161000 lbs
Time Since Last Inspection:		Engines:	Turbo fan
Airframe Total Time:	71195 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed	Engine Model/Series:	JT8D-219
Registered Owner:	WILMINGTON TRUST COMPANY TRUSTEE	Rated Power:	21000 Lbs thrust
Operator:	Delta Air Lines	Operating Certificate(s) Held:	Flag carrier (121)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLGA	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:51 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:		Visibility	0.25 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	-3°C / -5°C
Precipitation and Obscuration:			
Departure Point:	Atlanta, GA (ATL)	Type of Flight Plan Filed:	IFR
Destination:	New York, NY (LGA)	Type of Clearance:	IFR
Departure Time:	09:05 Local	Type of Airspace:	Class B

Airport Information

Airport:	LA GUARDIA LGA	Runway Surface Type:	Asphalt;Concrete
Airport Elevation:	21 ft msl	Runway Surface Condition:	Snow;Wet
Runway Used:	13	IFR Approach:	ILS
Runway Length/Width:	7003 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Substantial
Passenger Injuries:	127 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	132 None	Latitude, Longitude:	40.778331,-73.86972(est)

Administrative Information

Investigator In Charge (IIC): Bower, Daniel

Additional Participating Persons:

Original Publish Date: March 3, 2017

Last Revision Date:

Investigation Class: [Class 1](#)

Note: The NTSB traveled to the scene of this accident.

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=90822>

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).