
Turbulence injury, McDonnell Douglas MD-88, January 6, 1995

Micro-summary: This McDonnell Douglas MD-88 encountered turbulence during climb, injuring a flight attendant.


Event Date: 1995-01-06 at 0920 CST


Investigative Body: National Transportation Safety Board (NTSB), USA


Investigative Body's Web Site: <http://www.nts.gov/>

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		NTSB ID: MIA95LA055		Aircraft Registration Number: N981DL	
		Occurrence Date: 01/06/1995		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place MONROE		State LA	Zip Code 71203	Local Time 0920	Time Zone CST
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer McDonnell Douglas		Model/Series MD-88		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On January 6, 1995, about 0920 central standard time, a McDonnell Douglas MD-88, N981DL, registered to Wilmington Trust Company, operated by Delta Air Lines Inc., as a 14 CFR Part 121 scheduled, domestic, passenger flight, encountered turbulence on climbout about 30 miles east of Monroe, Louisiana. Instrument meteorological conditions prevailed and an IFR flight plan was filed. The airplane was not damaged. The airline transport pilot-in-command, airline transport first officer, 2 flight attendants, and 66 passengers were not injured. One flight attendant sustained a serious injury. The flight originated from Monroe, Louisiana, about 4 minutes before the accident, and diverted to Jackson, Mississippi.</p> <p>The pilot-in-command stated the airplane encountered light to moderate turbulence on climb-out. The cabin seatbelt signs were illuminated and the flight attendants were briefed to remain seated. The airplane weather avoidance radar was on and no significant weather was present on the radar screen. An overhead compartment had opened up in the cabin area, and a flight attendant got up to secure the overhead compartment. The airplane encountered a couple of seconds of intense moderate turbulence, and the flight attendant collided with the cabin overhead panels.</p> <p>The digital flight data recorder (DFDR) was removed from the airplane by Delta Airlines personnel for retrieval and analysis. Examination of the DFDR revealed the airplane was climbing through 9,187 feet when the airplane was subjected to intense vertical acceleration (or "g") activity for about 2 1/2 seconds. The DFDR revealed a peak "g" value of 1.771 to a minimum value of -0.276 for a total of 1.9 "g" excursion.</p>					
FACTUAL REPORT - AVIATION					
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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: MIA95LA055			
		Occurrence Date: 01/06/1995			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer McDonnell Douglas		Model/Series MD-88		Serial Number 53268	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 144	Certified Max Gross Wt.	140000 LBS	Number of Engines: 2	
Engine Type: Turbo Fan	Engine Manufacturer: P&W	Model/Series: JT8D-219	Rated Power: 21000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection AAIP	Date of Last Inspection 01/1995	Time Since Last Inspection 1 Hours	Airframe Total Time 10507 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner WILMINGTON TRUST COMPANY		Street Address RODNEY SQUARE NORTH			
		City WILMINGTON	State DE	Zip Code 19890	
Operator of Aircraft DELTA AIRLINES		Street Address HARTSFIELD ATL INT AIRPORT			
		City ATLANTA	State GA	Zip Code 30320	
Operator Does Business As:			Operator Designator Code: DALA		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): Flag Carrier/Domestic					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 121: Air Carrier					
Type of Flight Operation Conducted: Scheduled; Domestic; Passenger/Cargo					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: MIA95LA055
	Occurrence Date: 01/06/1995
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 50
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Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport; Flight Engineer

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
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Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--no waivers/lim.	Date of Last Medical Exam: 10/1994
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	11336	2769								
Pilot In Command(PIC)										
Instructor										
Last 90 Days		123								
Last 30 Days		45								
Last 24 Hours		4								

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed?	Second Pilot? Yes
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Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point MONROE	State LA	Airport Identifier MLU	Departure Time 0916	Time Zone CST
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Destination PENSACOLA	State FL	Airport Identifier PNS	
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Type of Clearance: IFR

Type of Airspace: Class E

Weather Information

Source of Briefing: Commercial Weather Service

Method of Briefing:

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
MLU	0950	CST	870 Ft. MSL	12 NM	270 Deg. Mag.
Sky/Lowest Cloud Condition: Unknown			0 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Overcast		700 Ft. AGL		Visibility: 1 SM	Altimeter: 29.00 "Hg
Temperature: 14 °C	Dew Point: 14 °C	Wind Direction: 310		Density Altitude: Ft.	
Wind Speed: 6	Gusts:	Weather Conditions at Accident Site: Instrument Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility:					
Type of Precipitation:					

Accident Information		
Aircraft Damage: None	Aircraft Fire: None	Aircraft Explosion: None

Classification: U.S. Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants		1		1	2
Other Crew					
Passengers				66	66
- TOTAL ABOARD -		1		69	70
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	0	69	70

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: MIA95LA055

Occurrence Date: 01/06/1995

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

CARROL A. SMITH

Additional Persons Participating in This Accident/Incident Investigation: