
Turbulence injury, Boeing 777, April 25, 2006

Micro-summary: This Boeing 777 encountered turbulence on descent. One flight attendant was seriously injured.


Event Date: 2006-04-25 at 1730 CDT


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


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

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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: DFW06LA115		Aircraft Registration Number: N789AN	
		Occurrence Date: 04/25/2006		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place DFW Int'l Apt		State TX	Zip Code 75261	Local Time 1730	Time Zone CDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 75		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 777-233ER		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 April 25, 2006, approximately 1730 central daylight time (CDT), a twin-engine Boeing 777 transport category airplane, N789AN, operated by American Airlines, Inc., as flight 945, encountered moderate turbulence during descent into the Dallas/Fort Worth International Airport (DFW), near Dallas, Texas. There was no damage to the airplane. Visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the scheduled domestic flight conducted under 14 Code of Federal Regulations Part 121. One flight attendant sustained serious injuries. The remaining 2 flight crewmembers, 7 flight attendants, and 244 passengers were not injured. The flight originated from the Miami International Airport (MIA) at 1619 eastern daylight time (EDT), with DFW as its intended destination.</p> <p>The captain stated that he informed the cabin crew he was going to turn on the seat belt sign early because of the possibility of turbulence. Soon after initial descent from 36,000 feet, the seat belt sign was turned on. He added that about 25 minutes from DFW while at approximately 25,000 feet, he made a passenger announcement (PA) and told the flight attendants to prepare for landing. Shortly after the announcement, the airplane experienced "what I would classify as moderate turbulence at most." About 20 minutes before landing, the captain called to make sure the flight attendants were in their seats, but was informed that one of the flight attendants had suffered a broken ankle. The first officer then called to have paramedics meet the airplane at the gate. The flight landed without further incidence.</p> <p>The flight attendant reported that the last 45 minutes of the flight was turbulent, and the flight attendants were in their assigned jump seats most of the time. The flight attendant stated that she was closing a closet after passing out coats to first class customers when the accident occurred. She said, "I turned and fell into the closet due to the airplane dropping due to turbulence." She immediately informed another flight attendant that she thought she had just broken her ankle. According to safety personnel from American Airlines, the flight attendant sustained a dislocation and double fracture of her left ankle.</p> <p>The company issued weather forecast for flight 945 showed that marginal visual flight rules (MVFR) conditions would continue until the next morning over the eastern half of Texas, with scattered to broken showers continuing during the afternoon. There was no significant meteorological information (SIGMET) issued for DFW for thunderstorm activity (TSTM) or clear air turbulence (CAT). At 1753, the automated surface observing system at DFW reported wind from 350 degrees at 14 knots, visibility 10 statute miles, overcast skies at 3,700 feet, temperature 17 degrees Centigrade, dew point 8 degree Centigrade, and barometric pressure at 29.94 inches of Mercury.</p>					
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		Occurrence Date: 04/25/2006			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
Dallas/Fort Worth Int'l	DFW	607 Ft. MSL	NA		
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer		Model/Series		Serial Number	
Boeing		777-233ER		30252	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 245	Certified Max Gross Wt.	650000 LBS	Number of Engines: 2	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Fan	Rolls-Royce	RB211	92450 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Continuous Airworthiness	02/2006	Hours	22155 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? No	ELT Aided in Locating Accident Site? No			
Owner/Operator Information					
Registered Aircraft Owner		Street Address			
American Airlines		4333 Amon Carter Blvd MD 5569			
		City	State	Zip Code	
		Fort Worth	TX	76155	
Operator of Aircraft		Street Address			
Same as Reg'd Aircraft Owner		Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As: American Airlines			Operator Designator Code: AALA		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): Flag Carrier/Domestic; Supplemental					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 121: Air Carrier					
Type of Flight Operation Conducted: Scheduled; Domestic; Passenger Only					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: DFW06LA115
	Occurrence Date: 04/25/2006
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 57
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Sex: M	Seat Occupied: Left	Principal Profession: Occupational Pilot	Certificate Number: On File
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Certificate(s): Airline Transport; Flight Instructor; Commercial

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

Rotorcraft/Glider/LTA: Glider

Instrument Rating(s): Airplane

Instructor Rating(s): Airplane Multi-engine; Airplane Single-engine; Instrument Airplane

Type Rating/Endorsement for Accident/Incident Aircraft?	Current Biennial Flight Review? 12/2005
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Medical Cert.: Class 1	Medical Cert. Status: None	Date of Last Medical Exam: 11/2005
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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	19600	9700	1700	17900	4900	1500	400		15	
Pilot In Command(PIC)	14000	9700	1400	12600	3500	1100	300		5	
Instructor	750		650	100	100	75				
Last 90 Days	120	120		120	30	12				
Last 30 Days	30	30		30	7	3				
Last 24 Hours										

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? Yes
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Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point Miami	State FL	Airport Identifier MIA	Departure Time 1619	Time Zone EDT
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Destination Dallas	State TX	Airport Identifier DFW	
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Type of Clearance: IFR

Type of Airspace:

Weather Information

Source of Briefing: National Weather Service


Method of Briefing:

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: DFW06LA115
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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
DFW	1753	CDT	607 Ft. MSL	75 NM	90 Deg. Mag.
Sky/Lowest Cloud Condition: Clear			Ft. AGL	Condition of Light: Dusk	
Lowest Ceiling: Broken		3700 Ft. AGL		Visibility: 10 SM	Altimeter: 29.94 "Hg
Temperature: 17 °C	Dew Point: 8 °C	Wind Direction: 350		Density Altitude: Ft.	
Wind Speed: 14	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): Ft.	Visibility (RVV) SM	Intensity of Precipitation:			
Restrictions to Visibility: No Obscuration; No Precipitation					
Type of Precipitation:					

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

Classification:					
- 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		7	8
Other Crew					
Passengers				244	244
- TOTAL ABOARD -		1		253	254
Other Ground					
- GRAND TOTAL -		1		253	254

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Administrative Information

Investigator-In-Charge (IIC)

Frank McGill

Additional Persons Participating in This Accident/Incident Investigation:

Dallas/Fort Worth FSDO
Fort Worth, TX