
Turbulence injury, Boeing 757-223, June 5, 2005

Micro-summary: This Boeing 757-223 experienced turbulence while descending, breaking the ankle of a flight attendant.


Event Date: 2005-06-05 at 1300 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: CHI05LA135		Aircraft Registration Number: N602AN	
		Occurrence Date: 06/05/2005		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place New Chicago		State IN	Zip Code 46342	Local Time 1300	Time Zone CDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 757-223		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>On June 5, 2005, around 1300 central daylight time (cdt), a Boeing 757-223, N602AN, operated by American Airlines as Flight 1399, encountered moderate turbulence while descending through 13,000 feet mean sea level (msl) near BEARZ intersection, New Chicago, Indiana. Instrument meteorological conditions prevailed at altitude. The commercial flight was operating under the provisions of 14 Code of Federal Regulations (CFR) Part 121. One flight attendant was seriously injured and another flight attendant sustained minor injuries. The captain, first officer, 2 remaining flight attendants, and 156 passengers were not injured. The flight departed Miami International Airport (MIA) at 1124 eastern daylight time (edt) and arrived at Chicago O'Hare International Airport (ORD) at 1320 cdt.</p>					
<p>The captain reported that as the airplane approached the BEARZ intersection he noticed a developing line of clouds with cloud tops ranging between 15,000 and 18,000 feet msl. The captain stated that he believed that the remainder of the flight "might be bumpy, but not excessively so, because of a lack of bad ride reports from other aircraft passing through the same area and the low altitude of the clouds." The captain reported that five to eight minutes before encountering the turbulence he made a public announcement and told the flight attendants to prepare for landing. The captain stated that the airplane encountered "moderate turbulence" while descending in the clouds. The captain reported that after clearing the clouds the "ride smoothed out" and he called the flight attendants and was told that two flight attendants were injured and were being treated by physicians. The captain requested that paramedics meet the airplane after landing.</p>					
<p>The flight attendant who was seriously injured was located in the aft galley preparing for landing when the airplane encountered the turbulence. The flight attendant stated that she heard the captain say "prepare for landing" and "all of [a] sudden I got lifted off the ground and slammed into the 4R door." This flight attendant suffered a fractured ankle.</p>					
<p>The flight attendant who sustained minor injuries was located near the aft lavatories preparing for landing when the airplane encountered the turbulence. The flight attendant stated that the airplane "hit some type of severe turbulence without warning" and that she was "thrown to the floor." This flight attendant suffered minor injuries to her shoulder, hip, foot, and lower back. She elected to complete the remainder of her scheduled flights.</p>					
<p>Data from the airplane's Digital Flight Data Recorder (DFDR) was extracted and indicated that the airplane experienced vertical accelerations that were consistent with a convectively induced turbulence (CIT) event. The CIT encounter was recorded at 1259:42 (hhmm:ss) and lasted about 4 seconds. During the CIT encounter, the maximum and minimum vertical accelerations were about 1.9g and 0.5g, respectively.</p>					
FACTUAL REPORT - AVIATION					

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: CHI05LA135			
		Occurrence Date: 06/05/2005			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used NA	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach:					
VFR Approach/Landing:					
Aircraft Information					
Aircraft Manufacturer Boeing		Model/Series 757-223		Serial Number 27053	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 162	Certified Max Gross Wt.	240000 LBS	Number of Engines: 2	
Engine Type: Turbo Fan	Engine Manufacturer: Rolls-Royce	Model/Series: RB211-63	Rated Power:		
- Aircraft Inspection Information					
Type of Last Inspection AAIP	Date of Last Inspection 06/2005	Time Since Last Inspection Hours	Airframe Total Time 33715 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? No	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner American Airlines, Inc.		Street Address PO Box 619616 MD 5662			
		City Fort Worth	State TX	Zip Code 75261	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner			
		City	State	Zip Code	
Operator Does Business As: American Airlines, Inc.			Operator Designator Code: AALR		
- 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 Only					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: CHI05LA135
	Occurrence Date: 06/05/2005
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 51
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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

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

Rotorcraft/Glider/LTA: None

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? 02/2005
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Medical Cert.: Class 1	Medical Cert. Status: With Waivers/Limitations	Date of Last Medical Exam: 03/2005
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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	16000	5500	1600	14500						
Pilot In Command(PIC)	4800	3000								
Instructor										
Last 90 Days		250								
Last 30 Days		85								
Last 24 Hours		6								

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 1124	Time Zone EDT
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Destination Chicago	State IL	Airport Identifier ORD	
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Type of Clearance: IFR

Type of Airspace:

Weather Information

Source of Briefing: Company

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
GYG	1250	CDT	592 Ft. MSL	NM	Deg. Mag.

Sky/Lowest Cloud Condition: Scattered 4400 Ft. AGL Condition of Light: Day

Lowest Ceiling: Broken 25000 Ft. AGL Visibility: 10 SM Altimeter: 29.76 "Hg

Temperature: 33 °C Dew Point: 22 °C Wind Direction: 170 Density Altitude: Ft.

Wind Speed: 8 Gusts: 20 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	1	2	4
Other Crew					
Passengers				156	156
- TOTAL ABOARD -		1	1	160	162
Other Ground					
- GRAND TOTAL -		1	1	160	162

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: CHI05LA135

Occurrence Date: 06/05/2005

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Andrew T. Fox

Additional Persons Participating in This Accident/Incident Investigation:

Michael Whitehouse
American Airlines, Inc.
Fort Worth, TX