
Turbulence injury, McDonnell Douglas MD-82, June 12, 2003

Micro-summary: This McDonnell Douglas MD-82 experienced severe turbulence in cruise, seriously injuring two flight attendants.


Event Date: 2003-06-12 at 0447 CDT


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


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

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		NTSB ID: LAX03LA193		Aircraft Registration Number: N451AA	
		Occurrence Date: 06/12/2003		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Fort Worth		State TX	Zip Code 76035	Local Time 0447	Time Zone CDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 31.5		Direction From Airport: 97	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series MD-82		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 June 12, 2003, at 0447 central daylight time, two cabin attendants sustained serious injuries when American Airlines Flight 2490, a Boeing MD-82, N491AA, encountered severe turbulence passing through 15,000 feet during descent into Dallas/Fort Worth International Airport (DFW), Texas. American Airlines, Inc., was operating the airplane as a scheduled domestic passenger flight under the provisions of 14 CFR Part 121. The airline transport pilot licensed captain, first officer, 1 cabin attendant, and 129 passengers were not injured. The flight departed Los Angeles, California, at 0052 Pacific daylight time as a nonstop to DFW. Visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan had been filed.</p> <p>According to American's flight safety department, the pilot had illuminated the seatbelt sign and had made an announcement for the cabin crew to take their seats because of expected turbulence. The aft cabin attendants went to the rear of the airplane to stow an auxiliary table, and were headed to their seats when the turbulence hit. One cabin attendant sustained a fractured right ankle, and the other sustained a fractured tibia.</p> <p>An aviation routine weather report (METAR) was issued at 0456 local time for Dallas/Fort Worth. It reported thunderstorm and rain activity with an overcast of cumulonimbus clouds at 11,000 feet mean sea level (msl). The remarks section of the observation included frequent lightning occurring inside the clouds, between the clouds and ground, and reaching from one cloud to another.</p>					
FACTUAL REPORT - AVIATION					
Page 1					

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: LAX03LA193				
		Occurrence Date: 06/12/2003				
		Occurrence Type: Accident				
Landing Facility/Approach Information						
Airport Name		Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
Dallas/Fort Worth Internationa		DFW	607 Ft. MSL	NA		
Runway Surface Type: Unknown						
Runway Surface Condition: Unknown						
Type Instrument Approach: Unknown						
VFR Approach/Landing: Unknown						
Aircraft Information						
Aircraft Manufacturer		Model/Series		Serial Number		
Boeing		MD-82		49477		
Airworthiness Certificate(s): Transport						
Landing Gear Type: Retractable - Tricycle						
Homebuilt Aircraft? No		Number of Seats: 135	Certified Max Gross Wt. 150500 LBS		Number of Engines: 2	
Engine Type:		Engine Manufacturer:		Model/Series:	Rated Power:	
Turbo Jet		Pratt & Whitney		JT8D	20000 LBS	
- Aircraft Inspection Information						
Type of Last Inspection		Date of Last Inspection	Time Since Last Inspection		Airframe Total Time	
Continuous Airworthiness			Hours		Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? No		ELT Operated? No		ELT Aided in Locating Accident Site? No		
Owner/Operator Information						
Registered Aircraft Owner		Street Address				
		RODNEY SQUARE NORTH				
WILMINGTON TRUST CO		City		State	Zip Code	
		WILMINGTON		DE	19890	
Operator of Aircraft		Street Address				
		4333 Amon Carter				
American Airlines, Inc.		City		State	Zip Code	
		Fort Worth		TX	76155	
Operator Does Business As: American Airlines, Inc.				Operator Designator Code: AALA		
- 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: LAX03LA193
	Occurrence Date: 06/12/2003
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 45
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Sex: M	Seat Occupied: Right	Principal Profession: Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport

Airplane Rating(s): Multi-engine Land

Rotorcraft/Glider/LTA:

Instrument Rating(s): Airplane

Instructor Rating(s):

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: 05/2003
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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	9871	9845								
Pilot In Command(PIC)	2461	2461								
Instructor										
Last 90 Days	180	180								
Last 30 Days	57	57								
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 Los Angeles	State CA	Airport Identifier LAX	Departure Time 0052	Time Zone PDT
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Destination Dallas/Ft Worth	State TX	Airport Identifier DFW	
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Type of Clearance: IFR

Type of Airspace: Class E

Weather Information

Source of Briefing: Company

Method of Briefing: Telephone

 National Transportation Safety Board FACTUAL REPORT AVIATION	NTSB ID: LAX03LA193
	Occurrence Date: 06/12/2003
	Occurrence Type: Accident

Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
DFW	0520	CDT	603 Ft. MSL	35 NM	97 Deg. Mag.
Sky/Lowest Cloud Condition: Few			6000 Ft. AGL	Condition of Light: Night/Dark	
Lowest Ceiling: Broken		11000 Ft. AGL		Visibility: 6 SM	Altimeter: 29.80 "Hg
Temperature: 22 °C	Dew Point: 18 °C	Wind Direction: 320		Density Altitude: Ft.	
Wind Speed: 13	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): Ft.	Visibility (RVV) SM	Intensity of Precipitation: Light			
Restrictions to Visibility: None					
Type of Precipitation: Rain					

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		2		1	3
Other Crew					
Passengers				129	129
- TOTAL ABOARD -		2		132	134
Other Ground					
- GRAND TOTAL -		2		132	134

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National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX03LA193

Occurrence Date: 06/12/2003

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

HOWARD D. PLAGENS

Additional Persons Participating in This Accident/Incident Investigation:

GREG LANDER
Air Operations Inspector
Federal Aviation Administration
Dallas, TX