
Turbulence injury, December 22, 1996

Micro-summary: This McDonnell Douglas MD-83 encountered severe turbulence during descent, injuring two flight attendants.


Event Date: 1996-12-22 at 1212 PST


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


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

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		NTSB ID: LAX97LA072		Aircraft Registration Number: N590AA	
		Occurrence Date: 12/22/1996		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place SAN JOSE		State CA	Zip Code 95050	Local Time 1212	Time Zone PST
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer McDonnell Douglas		Model/Series MD-83		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 December 22, 1996, about 1212 hours Pacific standard time, two cabin attendants on American Airlines Flight 407 sustained injuries during a severe turbulence encounter about 75 miles east of San Jose, California, as the aircraft descended through 17,500 feet. The aircraft, a McDonnell Douglas MD-83, N590AA, was owned and operated by American Airlines, Inc., under 14 CFR Part 121 as a non-stop regularly scheduled domestic passenger flight from Chicago to San Jose. The aircraft was not damaged. One cabin attendant sustained serious injuries and another sustained minor injuries. The remaining two pilots, two cabin attendants, and 115 passengers were not injured. The flight originated at Chicago on the day of the accident at 0932 central standard time.</p> <p>According to statements from the flight and cabin crews, and, transcripts of the air-to-ground communications between the flight and ATC, the flight had been in moderate chop for some time during the initial descent. The cabin seat belt sign had been illuminated for about 20 minutes and all passengers were secure in their seats. The cabin crew had just completed a beverage service and were stowing galley equipment at the time. As the aircraft was descending through 17,500 feet inbound to San Jose, one severe turbulence jolt was experienced. The injured cabin crew members were standing in the aft galley; one was able to grab a hand hold while the other one was thrown against the ceiling and back to the floor. The cabin attendant who was thrown to the ceiling sustained a compound fracture of one ankle, which required surgery to repair. The second cabin attendant was treated at the hospital for soft tissue injuries and released.</p> <p>Review of the weather reports disclosed that SIGMET Papa 13 was issued at 221656 and forecast moderate to occasional severe turbulence in the southern portions of California below 18,000 feet. Center weather advisories 01 and 02 were in effect for the time and location of the encounter and predicted moderate to occasional severe turbulence below 22,000 feet.</p> <p>The dispatch weather package provided to the flight crew at Chicago was reviewed. The date/time group for the package preparation was noted to be 221501, prior to the issuance of SIGMET Papa 13 and both center weather advisories. No SIGMETS were noted for the terminal portions of the flight.</p>					
FACTUAL REPORT - AVIATION					
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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: LAX97LA072			
		Occurrence Date: 12/22/1996			
		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:					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer McDonnell Douglas		Model/Series MD-83		Serial Number 53253	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 145	Certified Max Gross Wt.	149000 LBS	Number of Engines: 2	
Engine Type: Turbo Jet	Engine Manufacturer: P&W	Model/Series: JT8D-217	Rated Power: 21000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection Continuous Airworthiness	Date of Last Inspection	Time Since Last Inspection Hours	Airframe Total Time Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? No	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner AMERICAN AIRLINES, INC.		Street Address 4333 AMON CARTER BLVD.			
		City FT. WORTH	State TX	Zip Code 76155	
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:			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: LAX97LA072
	Occurrence Date: 12/22/1996
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 55
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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; Commercial; 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--w/ waivers/lim.	Date of Last Medical Exam: 10/1996
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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	3372	3372								
Pilot In Command(PIC)										
Instructor										
Last 90 Days		160								
Last 30 Days		74								
Last 24 Hours		9								

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 CHICAGO	State IL	Airport Identifier ORD	Departure Time 0932	Time Zone CST
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Destination Same as Accident/Incident Location	State	Airport Identifier SJC	
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Type of Clearance: IFR

Type of Airspace: Class E

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
MCE	1145	PST	153 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			3500 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		10000 Ft. AGL		Visibility: 20 SM	Altimeter: 29.00 "Hg
Temperature: 11 °C	Dew Point: 9 °C	Wind Direction: 160		Density Altitude: Ft.	
Wind Speed: 10	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility: None					
Type of Precipitation: None					

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	4
Other Crew					
Passengers				115	115
- TOTAL ABOARD -		1	1	119	121
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	1	119	121

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX97LA072

Occurrence Date: 12/22/1996

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

JEFF RICH

Additional Persons Participating in This Accident/Incident Investigation:

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WP-SJC-FSDO
SAN JOSE, CA 95110