
Turbulence injuries, Boeing 737-222, May 5, 1999

Micro-summary: This Boeing 737-222 encountered turbulence on descent. Two people were injured, one seriously.


Event Date: 1999-05-05 at 2220 CDT

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

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

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		NTSB ID: CHI99LA145		Aircraft Registration Number: N208AU	
		Occurrence Date: 05/05/1999		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place CHICAGO		State IL	Zip Code 60638	Local Time 2220	Time Zone CDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 737-222		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 May 5, 1999, at 2220 central daylight time (cdt), a Boeing 737-222, N208AU, operated by Vanguard Airlines as Flight 432, encountered turbulence during descent into the Chicago Midway Airport. One flight attendant was seriously injured. The captain, first officer, 2 other flight attendants, and 43 passengers were not injured. The airplane was not damaged. The 14 CFR Part 121 scheduled passenger flight was operating on an IFR flight plan. The flight departed from Minneapolis, Minnesota, at 2108 cdt.</p> <p>The captain reported they encountered about 30 seconds of moderate turbulence while deviating around weather cells during a descent from 17,000 feet mean sea level (msl). He reported the seatbelt sign was on. The captain reported he informed the flight attendants to clean up the cabin and prepare to sit down approximately 10 minutes prior to the encounter. He continued to report that about 5 minutes prior to the encounter the flight attendants were informed to be seated immediately. Upon reaching an altitude of about 10,000 feet msl the cockpit was informed that two of the flight attendants had not been seated and they were injured during the turbulence encounter. The cockpit crew declared an emergency with air traffic control and the flight continued to the Chicago Midway Airport where it was met by medical personnel.</p> <p>The "A" flight attendant who was in the front of the airplane reported that approximately 30 minutes into the flight the captain notified her that they may encounter turbulence and that the flight attendants should secure their galleys. She stated she informed the "B" and "C" flight attendants of the situation. She reported that they secured the galleys and she made a PA announcement that they would be picking up service items. The "A" flight attendant stated that about 15 minutes later she received another call from the cockpit stating that they should secure the cabin and take their seats. She stated she made the final prelanding PA announcement and they secured the cabin for landing. She stated that she was in the forward galley and flight attendants "B" and "C" were in the aft galley when they encountered the turbulence at which time she immediately got into her jumpseat. She stated that after about one minute the turbulence subsided and she made her way to the back of the airplane where she found the "C" flight attendant laying in the aisle and the "B" flight attendant sitting in passenger seat 21C. The "C" flight attendant told her that she had hurt her hip and she wasn't sure she could walk. The "A" flight attendant helped her off the floor and into seat 21D. She then noticed that the "B" flight attendant was bleeding from a cut on her knee. She stated that she then went to the cockpit to inform the flight crew of what had happened.</p> <p>The "B" and "C" flight attendants stated they were informed that turbulence was expected. About five minutes later, as they were securing the aft galley, they were informed to take their seats. They reported the turbulence was encountered as they were going to get in their jumpseats. The "B" flight attendant reported that she grabbed the seatback in front of her and tried to get into a seat in row 21. She stated the airplane dropped and she was thrown to the ceiling where she hit her head. She then came down and landed on the back of seat 20C. The "C" flight attendant was</p>					
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National Transportation Safety Board

FACTUAL REPORT

AVIATION

SAFETY BOARD

NTSB ID: CHI99LA145


Occurrence Date: 05/05/1999


Occurrence Type: Accident

Narrative (Continued)

coming out of the aft galley to assist her when the airplane dropped again. The "C" flight attendant was thrown to the ceiling and came back down into the aisle where she landed on her right side, hitting her back against a seat. They stated the "C" flight attendant layed on the floor for about 10 minutes until the "A" flight attendant came from the front of the airplane and helped her into a seat.

The "B" flight attendant suffered a cut on her knee and bruises. The "C" flight attendant suffered a fractured pelvis.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: CHI99LA145			
		Occurrence Date: 05/05/1999			
		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:					
Aircraft Information					
Aircraft Manufacturer Boeing		Model/Series 737-222		Serial Number 19547	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Tricycle					
Homebuilt Aircraft? No	Number of Seats: 123	Certified Max Gross Wt.	109000 LBS	Number of Engines: 2	
Engine Type: Turbo Jet	Engine Manufacturer: P&W	Model/Series: JT8D-9A	Rated Power: 14000 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 FIRST SECURITY BANK		Street Address 79 S. MAIN ST.			
		City SALT LAKE CITY	State UT	Zip Code 84111	
Operator of Aircraft VANGUARD AIRLINES		Street Address 533 MEXICO CITY AVE			
		City KANSAS CITY	State MO	Zip Code 64153	
Operator Does Business As:			Operator Designator Code: P2EA		
- 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: CHI99LA145
	Occurrence Date: 05/05/1999
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 44
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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 Instructor; Flight Engineer

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

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): Airplane Single-engine

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: 01/1999
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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	7658	1240	808	6850	1110	700	735			
Pilot In Command(PIC)	2477	83	720	1757	360					
Instructor										
Last 90 Days	189	189		189	50	24	24			
Last 30 Days	58	58		58	20	10				
Last 24 Hours	7	7		7	2	1				

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 MINNEAPOLIS	State MN	Airport Identifier MSP	Departure Time 2108	Time Zone CDT
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Destination Same as Accident/Incident Location	State	Airport Identifier MDW	
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Type of Clearance: IFR

Type of Airspace: Class E

Weather Information

Source of Briefing:
Company

Method of Briefing:

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: CHI99LA145
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Weather Information

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
	0000		0 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Unknown			0 Ft. AGL	Condition of Light: Night/Dark	
Lowest Ceiling: Overcast		4000 Ft. AGL		Visibility: 10 SM	Altimeter: "Hg
Temperature: 10 °C	Dew Point: °C	Wind Direction: 190		Density Altitude: Ft.	
Wind Speed: 15	Gusts: 20	Weather Conditions at Accident Site: Instrument 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
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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		2	3
Other Crew					
Passengers				43	43
- TOTAL ABOARD -		1		47	48
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	0	47	48

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: CHI99LA145

Occurrence Date: 05/05/1999

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

PAMELA S. SULLIVAN

Additional Persons Participating in This Accident/Incident Investigation:

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