
Turbulence injuries, Boeing 757, August 4, 1995

Micro-summary: This Boeing 757 encountered sudden moderate turbulence at FL270 in cruise. One passenger was seriously injured.


Event Date: 1995-08-04 at 2248 EDT


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


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

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		NTSB ID: CHI95LA271		Aircraft Registration Number: N509US	
		Occurrence Date: 08/04/1995		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place DETROIT		State MI	Zip Code 48242	Local Time 2248	Time Zone EDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer BOEING		Model/Series 757		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 August 4, 1995, at 2248 eastern daylight time (edt), a Boeing 757, N509US, operated as Flight 52 by Northwest Airlines, Incorporated, of Minneapolis, Minnesota, and piloted by airline transport rated crew, encountered sudden, moderate, turbulence at flight level 270. The 14 CFR Part 121 flight was operating on an IFR flight plan. One passenger received serious injuries as she was exiting the lavatory when the airplane encountered the turbulence. The seven person flight crew and 120 passengers reported no injuries. The flight departed San Francisco, California, at 1852 edt.</p> <p>According to the pilot's written statement, the airplane had descended from flight level 410 and had just leveled off at flight level 270, about 25 nautical miles east of Grand Rapids, Michigan, when it encountered the sudden, moderate turbulence. He said the airplane's weather radar was on the 80 mile scan and showed no weather. He said the seat belt sign had been put on and an announcement was made advising the passengers to expect "bumps" on the approach into the Detroit Metropolitan Wayne County Airport, Detroit, Michigan. The company's Director of Flight Safety said the seat belt sign was "...turned on at the top of [the] descent which would have been about 5 minutes... prior to the encounter with the turbulence."</p> <p>The director said the flight attendants reports concerning the incident did not "...indicate that anyone saw the lady enter the lavatory." He said it is presumed that the passenger was in the lavatory when the seat belt sign was turned on. The airplane's lavatories are equipped with a public address speaker, flight attendant call button, and a sign that reads: "Return To Seat" when the seat belt sign is illuminated in the passenger cabin.</p> <p>The first officer said the flight was initially cleared to flight level 230. However, according to her statement, the FAA controller changed the clearance to flight level 270 because the flight would have "...the best ride..." at that altitude.</p> <p>According to the airline's dispatch/meteorology department weather data, the area around Flight 52 had been experiencing 3/10's coverage of level three and four thunderstorms.</p>					
FACTUAL REPORT - AVIATION					

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: CHI95LA271			
		Occurrence Date: 08/04/1995			
		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 757		Serial Number 23198	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 195	Certified Max Gross Wt.	227500 LBS	Number of Engines: 2	
Engine Type: Turbo Jet	Engine Manufacturer: P&W	Model/Series: PW2037	Rated Power: 37000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection Unknown	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 1ST NAT'L BANK BOSTON, TRUSTEE		Street Address 150 ROYALL ST.			
		City CANTON	State MA	Zip Code 02021	
Operator of Aircraft NORTHWEST AIRLINES, INC.		Street Address 5101 NORTHWEST DR			
		City ST. PAUL	State MN	Zip Code 55111	
Operator Does Business As:			Operator Designator Code: NWAA		
- 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/Cargo					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: CHI95LA271
	Occurrence Date: 08/04/1995
	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

Airplane Rating(s): Multi-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--no waivers/lim.	Date of Last Medical Exam: 03/1995
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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	9691									
Pilot In Command(PIC)		1364								
Instructor										
Last 90 Days		140								
Last 30 Days										
Last 24 Hours		8								

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 SAN FRANCISCO	State CA	Airport Identifier SFO	Departure Time 1510	Time Zone PDT
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Destination Same as Accident/Incident Location	State	Airport Identifier DTW	
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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: CHI95LA271
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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
DTW	1056	EDT	636 Ft. MSL	60 NM	110 Deg. Mag.
Sky/Lowest Cloud Condition: Clear			0 Ft. AGL	Condition of Light: Night/Dark	
Lowest Ceiling: None		0 Ft. AGL		Visibility: 7 SM	Altimeter: 30.00 "Hg
Temperature: 22 °C	Dew Point: 21 °C	Wind Direction:		Density Altitude: Ft.	
Wind Speed: Calm	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					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants				5	5
Other Crew					
Passengers		1		120	121
- TOTAL ABOARD -		1		126	127
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	0	126	127

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: CHI95LA271

Occurrence Date: 08/04/1995

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

FRANK S. GATTOLIN

Additional Persons Participating in This Accident/Incident Investigation:

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