
Turbulence injuries, Boeing 747-422, October 17, 1995

Micro-summary: This Boeing 747-422 experienced severe turbulence in cruise, injuring several people.


Event Date: 1995-10-17 at 0944 GMT


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


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

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1. Accident reports can be and sometimes are revised. Be sure to consult the investigative agency for the latest version before basing anything significant on content (e.g., thesis, research, etc).
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		NTSB ID: LAX96LA013		Aircraft Registration Number: N191UA	
		Occurrence Date: 10/17/1995		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place PACIFIC OCEAN		State PO	Zip Code	Local Time 0944	Time Zone GMT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 747-422		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 October 17, 1995, at 0944 UTC (1944 local meridian time), six passengers were injured onboard United Airlines Flight 806, during a severe turbulence encounter over the Pacific Ocean. The aircraft, a Boeing 747-422, N191UA, was operated by United Airlines, Inc., as a regularly scheduled non-stop international passenger flight from Hong Kong to San Francisco. The accident occurred in international waters near latitude 40 degrees north, longitude 152 degrees east, while the aircraft was in cruise at flight level FL330. The aircraft was not damaged. One passenger sustained serious injuries and five additional passengers incurred minor injuries. The remainder of the 309 passengers, 18 cabin attendants, and flight deck crew of four were not injured. The flight originated from Hong Kong at 0516 UTC.</p> <p>Copies of the original dispatch package given to the flight crew prior to departure was obtained and examined. Weather data and forecasts given to the crew were included as part of the package. Examination of the forecasts and pilot reports disclosed that an area of light to moderate turbulence was forecast along the aircraft's planned track from 151 to 162 degrees east longitude. Pilot reports available at the time of departure consistently reported smooth conditions in the area of the forecast turbulence.</p> <p>According to flight and cabin crew statements, the aircraft was in level cruise flight at FL330 in clear air above a cirrus cloud deck. The crew saw no convective activity ahead either visually or on radar. In the process of preparing for a position report to air traffic control, the flight crew overheard a Delta Airlines flight, which was ahead of them on their assigned track at FL350, reporting an encounter with moderate to severe turbulence. The captain decided to secure the cabin as a precaution. The purser was notified of the decision and the captain was in the process of reaching for the seat belt sign when the turbulence was encountered.</p> <p>The crew described the encounter as "one sudden heavy jolt," accompanied by airspeed and altitude excursions of plus and minus 20 knots and 200 feet from the respective cruise target values. Moderate turbulence then continued for about 20 minutes thereafter.</p> <p>All of the injured passengers were located aft of row 50, with the majority aft of row 58. None of the injured were secured by seat belts. The 62-year-old female passenger who was seriously injured was in the 5R lavatory at the rear of the aircraft at the time of the encounter. Her injuries consisted of compression fractures of several lumbar vertebrae. A table is appended to this report which denotes the exact location and activities of the injured passengers at the time of the encounter.</p>					
FACTUAL REPORT - AVIATION					
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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: LAX96LA013			
		Occurrence Date: 10/17/1995			
		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: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer Boeing		Model/Series 747-422		Serial Number 26880	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 441	Certified Max Gross Wt.	875000 LBS	Number of Engines: 4	
Engine Type: Turbo Fan	Engine Manufacturer: P&W	Model/Series: PW4056	Rated Power: 56000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection Continuous Airworthiness	Date of Last Inspection 09/1994	Time Since Last Inspection 5596 Hours	Airframe Total Time 11793 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner UNITED AIRLINES, INC.		Street Address P.O. BOX 66100			
		City CHICAGO	State IL	Zip Code 60666	
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: UALA		
- 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; International; Passenger Only					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: LAX96LA013
	Occurrence Date: 10/17/1995
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 58
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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 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--no waivers/lim.	Date of Last Medical Exam: 06/1995
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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	7857	66								
Pilot In Command(PIC)										
Instructor										
Last 90 Days	66	66								
Last 30 Days	66	66								
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 HONG KONG	State OF	Airport Identifier VHHH	Departure Time 0516	Time Zone GMT
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Destination SAN FRANCISCO	State CA	Airport Identifier KSFO	
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Type of Clearance: IFR

Type of Airspace: Class A

Weather Information

Source of Briefing: Company

Method of Briefing:

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: LAX96LA013	
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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: Clear			0 Ft. AGL	Condition of Light: Night/Dark	
Lowest Ceiling: None			0 Ft. AGL	Visibility: 100 SM	Altimeter: 29.00 "Hg
Temperature: -44 °C	Dew Point:	°C	Wind Direction: 260		Density Altitude: Ft.
Wind Speed:	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				3	3
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants				18	18
Other Crew					
Passengers		1	5	309	315
- TOTAL ABOARD -		1	5	331	337
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	5	331	337

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX96LA013

Occurrence Date: 10/17/1995

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

JEFF RICH

Additional Persons Participating in This Accident/Incident Investigation:

RALPH UTTERBACK
FAA WP-CMO
SAN FRANCISCO, CA 94010