
Turbulence injury, Boeing 747-400, February 12, 1994

Micro-summary: This Boeing 747-400 experienced clear air turbulence in cruise, injuring a flight attendant.


Event Date: 1994-02-12 at 1345 GMT


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


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

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		NTSB ID: LAX94LA141		Aircraft Registration Number: N186UA	
		Occurrence Date: 02/12/1994		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place PACIFIC OCEAN		State PO	Zip Code	Local Time 1345	Time Zone GMT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer BOEING		Model/Series 747-400		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 February 12, 1994, about 1345 coordinated universal time, a Boeing 747-400, N186UA, encountered clear air turbulence at flight level FL350 while in cruise over the Pacific Ocean at a position W 157.00 by S 010.03.4. During the encounter, one of the flight attendants fell, sustaining a fractured right clavicle. The aircraft was operated by United Airlines, Inc., as flight 841, a scheduled international passenger flight from Los Angeles, California, to Auckland, New Zealand, under the provisions of 14 CFR Part 121 of the Federal Aviation Regulations. The aircraft was not damaged. One flight attendant sustained serious injuries; however, the remaining 408 passengers and crewmembers were not injured. The flight originated at Los Angeles, California, on the day of the mishap at 0626 Pacific standard time as a nonstop flight to New Zealand.</p> <p>According to United Airlines, the aircraft was on an authorized off-course deviation, approaching MEGOG intersection, to circumvent some convective activity which had been identified on radar. As a precaution, the "fasten seatbelt" light was illuminated and the captain told the chief purser to advise the other flight attendants of possible turbulence and to be seated. Approximately ten minutes later at MEGOG intersection, the aircraft encountered three to five seconds of what the captain described as moderate-to-severe turbulence. The weather radar was on at the time of the actual encounter; however, there were no weather returns showing on the scope. During the turbulence, one flight attendant who did not get the prewarning was answering a passenger call, and was not seated. Passenger reports indicate that, at the onset the flight, attendant left the floor of the aircraft and came back down hard on her shoulder and side. It was later determined that the flight attendant suffered a hairline fracture of the right clavicle.</p>					
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		NTSB ID: LAX94LA141			
		Occurrence Date: 02/12/1994			
		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 747-400		Serial Number 26875	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 442	Certified Max Gross Wt.	870000 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 11/1993	Time Since Last Inspection 1265 Hours	Airframe Total Time 5917 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? No	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner UNITED AIRLINES		Street Address P.O. BOX 66100			
		City CHICAGO	State IL	Zip Code 60666	
Operator of Aircraft UNITED AIRLINES		Street Address P.O. BOX 66100			
		City CHICAGO	State IL	Zip Code 60666	
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: LAX94LA141
	Occurrence Date: 02/12/1994
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 54
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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; Single-engine Sea

Rotorcraft/Glider/LTA: None

Instrument Rating(s): None

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: 11/1993
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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	15397	1110								
Pilot In Command(PIC)		1110								
Instructor										
Last 90 Days		114								
Last 30 Days		16								
Last 24 Hours		7								

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 0626	Time Zone PST
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Destination AUCKLAND	State NZ	Airport Identifier PAKL	
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Type of Clearance: IFR

Type of Airspace: Class A

Weather Information

Source of Briefing: Commercial Weather Service

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
	0000		0 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Unknown			0 Ft. AGL	Condition of Light: Night/Dark	
Lowest Ceiling: Unknown			0 Ft. AGL	Visibility: 0 SM	Altimeter: "Hg
Temperature: °C	Dew Point: °C	Wind Direction:		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:					
Type of Precipitation:					

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				3	3
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants		1		16	17
Other Crew					
Passengers				388	388
- TOTAL ABOARD -		1		408	409
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	0	408	409

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX94LA141

Occurrence Date: 02/12/1994

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

ROBERT R. CRISPIN,

Additional Persons Participating in This Accident/Incident Investigation: