Turbulence injury, Boeing 737-522, November 25, 1995

Micro-summary: A flight attendant was seriously injured in turbulence on this Boeing 737-522 as the airplane was descending.

Event Date: 1995-11-25 at 1523 PST

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

Investigative Body's Web Site: http://www.ntsb.gov/

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National Transportation Safety Board	NTSB	ID: SEA96LA02	6	Aircraft Registration Number: N953UA				
FACTUAL REPORT	ence Date: 11/25	5/1995	Most Critical In	Most Critical Injury: Serious				
AYIATION	Occurr	ence Type: Accid	lent	Investigated By	Investigated By: NTSB			
Location/Time								
Nearest City/Place	State	Zip Code	Local Time	Time Zone				
PORTLAND	OR	97124	1523	PST				
Airport Proximity: Off Airport/Airstrip	Distance Fron	n Landing Facility:	•	Direction Fror	Direction From Airport:			
Aircraft Information Summary								
Aircraft Manufacturer	Model/Series	S			Type of Aircraft			
Boeing	737-522			Airplane				
Sightseeing Flight: No	Air Medical Tr	ir Medical Transport Flight: No						

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On November 25, 1995, at 1523 hours Pacific standard time, N953UA, a Boeing 737-522, operated as United Airlines Flight 2026, encountered turbulence while descending for landing at the Portland International Airport, Portland, Oregon. A cabin crew member was seriously injured during the encounter. The other four crew members and 107 passengers were not injured. The airplane was not damaged. Instrument meteorological conditions prevailed and an instrument flight rules flight plan had been filed. The flight departed San Francisco, California, at 1409 and was en route to Portland. The flight was operated under 14 CFR 121.

In a written statement, the captain reported that at the beginning of the descent from 28,000 feet above mean sea level (msl), he turned on the seatbelt sign and informed the cabin crew "... that there might be some chop in [descent] and to put things away early." The captain reported that the airplane then encountered "moderate turbulence lasting approximately 15 [seconds]." The captain immediately informed the flight attendants to be seated.

While securing the cabin at the time of the turbulent encounter, one of the flight attendants fell backwards onto a stove in the galley and fractured his scapula. Another flight attendant, who was in the aisle, reported that she grabbed the back of a passenger seat and immediately sat down on the aisle. Nearby passengers held onto the flight attendant so that she would not be thrown around.

The captain further stated that "no [turbulence was] reported other than [light] chop" prior to the accident. No evidence was found from either the captain's statement or flight attendants' statements to indicate that the captain urged the flight attendants to immediately take their seats prior to the turbulent encounter.

According to documentation provided by United Airlines personnel, other aircraft reported, via the Aircraft Communication Addressing and Reporting System (ACARS), that during the climb and descent phase, there was significant wind shears between 20,000 feet msl to 28,000 feet msl near the time of the accident. The National Weather Service high level significant weather chart forecasted moderate turbulence between 30,000 feet msl to 37,000 feet msl over Oregon.

National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: SEA96LA026

Occurrence Date: 11/25/1995

AVIATION		Occurrence Type: Accident											
Landing Facility/Approach In	formation	•											
Airport Name			Airport ID:	Airport Elev	ation	Run	Runway Used Ru		Runway Length		unway Width		
				F	t. MSL	. 0							
Runway Surface Type:						<u> </u>							
Runway Surface Condition:													
Type Instrument Approach: NONE													
VFR Approach/Landing:													
Aircraft Information													
Aircraft Manufacturer				el/Series						Number			
Boeing			737	-522					2670	0			
Airworthiness Certificate(s): Trans	port												
Landing Gear Type: Retractable	- Tricycle												
Homebuilt Aircraft? No	Number of Seats:	149	Certif	ied Max Gross	122500 LBS Numbe			er of Engines: 2					
			Engine N	Engine Manufacturer: Model/Series: CFM56-36-1							ated Power: 20000 LBS		
- Aircraft Inspection Information													
Type of Last Inspection			Date of Last Inspection Time S				nce Last Insp	ection	Airframe	Airframe Total Time			
Continuous Airworthiness			11/1995	11/1995 149					Hours 7220 Ho				
- Emergency Locator Transmitter (ELT) Information												
ELT Installed?	ELT Operat	ted?		ELT Aided in Locating Accident Site?									
Owner/Operator Information													
Registered Aircraft Owner			Street Address 1100 NORTH MARKET ST.										
WILMINGTON TRUST CO.			City	110011	State	Zip Code							
			WILMINGTON								19890		
Operator of Aircraft			Street Address P.O. BOX 66100										
UNITED AIRLINES, INC.			City								Zip Code		
UNITED AIRLINES, INC.				CHICAGO							60666		
Operator Does Business As: UNIT		Operator Designator Code: UALA											
- Type of U.S. Certificate(s) Held:													
Air Carrier Operating Certificate(s):	Flag Carrier/Don	nestic											
Operating Certificate:				Operator Certificate:									
Regulation Flight Conducted Under		arrier											
Type of Flight Operation Conducted	: Scheduled; Do	mestic;	Passeng	er Only									
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National Transportation Safety Board

FACTUAL REPORT

AVIATION

NTSB ID: SEA96LA026

Occurrence Date: 11/25/1995

AVIATION Occurrence Type: Acci					cident								
First Pilot Information													
Name					City					State	e Da	ate of Birth	Age
On File					On Fil	ïle				On F	ile C	n File	47
Sex: M Seat Occupied: Left Principal Profession: Civilian Pilot									Cer	tificate	Number	: On File	
Certificate(s): Airline Transport; Commercial; Flight Engineer													
Airplane Rating(s): Multi-engine Land; Single-engine Sea													
Rotorcraft/Glider/LTA: Glid	er; Helicopte	er											
Instrument Rating(s): Airp	lane												
Instructor Rating(s): None													
Type Rating/Endorsement for Accident/Incident Aircraft? Yes Current Bio								Biennial	Flight R	eview?	?		
Medical Cert.: Class 1 Medical Cert. Status: Valid Medicalw/ waivers/								D	ate of La	st Med	dical Exa	m: 11/1995	
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Nigł	Night Actu		Instrument simulated		Ro	otorcraft	Glider	Lighter Than Air
Total Time	5430	527											
Pilot In Command(PIC)		527			<u> </u>			_		_		<u> </u>	
Instructor					-			-+		-			
Last 90 Days Last 30 Days		67			-			-+					
Last 24 Hours		07						$\overline{}$					
Seatbelt Used? Yes	Shou	ılder Harness	Used? Yes			Toxico	ology Pe	erforme	d? No		Seco	ond Pilot? Ye	s
	1 01100											10	0
Flight Plan/Itinerary													
Type of Flight Plan Filed: IF	R												
Departure Point						State Airport Identi		Identifie	ntifier Departur		re Time	Time Zone	
SAN FRANCISCO						CA	SFO			1409			PST
Destination						State Airport Id			Identifie	r			
Same as Accident/Incident Location							PDX						
Type of Clearance: IFR													
Type of Airspace: Class	A												
Weather Information													
Source of Briefing: Comp	any												
Method of Briefing:													
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National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: SEA96LA026

Occurrence Date: 11/25/1995

Occurrence Type: Accident

ETYBOR				Occurrence Type: Accident										
Weather Information														
WOF ID	Observation Time	Time Zone	WOF	Elevatio	n	WOF Di	WOF Distance From Accider		ident Site		Direction From Accident Site		ite	
	0000			0 Ft.	MCI				0 NM	NIN4		0 Deg. Mag.		
				U I t.	IVIOL					T INIVI			g. Mag.	
Sky/Lowes	st Cloud Condition: Sca	tered				2	2000 Ft. AGL			Condition of Light: Day				
Lowest Ce	iling: Broken		45	00 Ft. A	AGL	Visibi	lity:	10	SM	Alti	meter:	29.00	"Hg	
Temperatu	ure: 10 °C	Dew Point:		8 °C	Wind	Direction:	110			Density Altitude: Ft.				
Wind Spee	ed: 4	Gusts:		Weather Condtions at Accident Site: Visual Conditi							itions			
Visibility (R	RVR): 0 Ft.	Visibility	y (RVV)	0	SM	Intensity	of Precipitat	tion: U	Inknown					
Restriction	s to Visibility: None													
Type of Pre	ecipitation: None													
				_	_									
Accident	Information													
Aircraft Dar	mage: None		Airc	raft Fire	: None	!			Aircraft Exp	losio	n None			
Classificati	on: U.S. Registered/L	J.S. Soil												
- Injury Sur	mmary Matrix	Fatal	Serious	Minor		None	TOTAL							
First Pi	lot					1	1							
Second	d Pilot					1	1							
Studen	t Pilot													
Flight I	nstructor													
Check	Pilot													
Flight E	Engineer													
Cabin /	Attendants		1			2	3							
Other C	Crew													
Passen	ngers					107	107							
- TOTAL A	ABOARD -		1			111	112							
Other G		0	0		0		0							
- GRAND	O TOTAL -	0	1		0	111	112							

National Transportation Safety Board

FACTUAL REPORT AVIATION

NTSB ID: SEA96LA026

Occurrence Date: 11/25/1995

Occurrence Type: Accident

	Information	

Investigator-In-Charge (IIC)

JEFFREY B. GUZZETTI

Additional Persons Participating in This Accident/Incident Investigation:

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