Turbulence injury, Boeing 737-291A, June 11, 1997

Micro-summary: This Boeing 737-291A encountered clear air turbulence in which a flight attendant was seriously injured.

Event Date: 1997-06-11 at 1135 MDT

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

Investigative Body's Web Site: http://www.ntsb.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: FTW97LA215

Aircraft Registration Number: N980UA

Occurrence Date: 06/11/1997

Most Critical Injury: Serious

Occurrence Type: Accident

Investigated By: NTSB

Location/Time

Nearest City/Place	State	Zip Code	Local Time	Time Zone	
ALBUQUERQUE	NM	87106	1135	MDT	
Airport Proximity: Off Airport/Airstrip	Distance From	n Landing Facility:		Direction Fro	m Airport:

Aircraft Information Summary

Aircraft Manufacturer	Model/Series	Type of Aircraft
Boeing	737-291A	Airplane

Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

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

On June 11, 1997, approximately 1135 mountain daylight time, a Boeing 737-291A, N980UA, operated by United Air Lines, Inc., as flight 441, sustained no damage when it encountered clear air turbulence while on descent to Albuquerque, New Mexico. One flight attendant was seriously injured, but there were no injuries to the airline transport rated captain and first officer, two other flight attendants, and 103 passengers. Visual meteorological conditions prevailed, and an IFR flight plan had been filed for the scheduled domestic passenger flight operated under Title 14 CFR Part 121. The flight originated at Denver, Colorado, approximately 1035.

The following is based on information provided by a United Air Lines safety department spokesman. The airplane was descending through FL180 when the crew was advised of light to moderate turbulence. The captain instructed passengers and flight attendants to return to their seats and fasten their seatbelts. Shortly thereafter, the airplane encountered turbulence. Prior to getting into her seat and restraining herself, a flight attendant was injured when she struck her back against a seat armrest. Paramedics who examined her at the airport said she had sustained a contusion. The flight attendant continued in her duties on the return flight to Denver. She was later examined by her personal physician, and X-rays indicated she had fractured a bone in her shoulder.

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Occurrence Date: 06/11/1997

AVIATION		Occurrence Type: Accident												
Landing Facility/Approach Information														
Airport Name			Airport	t ID:	Airport Eleva	tion	Run	way Used	Runwa	y Lengt	h	Runw	ay Width	
					Ft.	MSL	0							
Runway Surface Type:									•					
Runway Surface Condition:														
Type Instrument Approach: Visua	I													
VFR Approach/Landing: Full Stop														
Aircraft Information										•				
Aircraft Manufacturer				Model/S							Number -			
Boeing				737-2	91A 					2154				
Airworthiness Certificate(s): Transport														
Landing Gear Type: Retractable	- Tricycle													
Homebuilt Aircraft? No	Number of Seats:	116	- -		Max Gross W	t.					er of Engines: 2		2	
Engine Type: Turbo Fan					Engine Manufacturer: Model/Series: JT8D-9A						Rated Power: 14500 LBS			
- Aircraft Inspection Information														
Type of Last Inspection			Date o	Date of Last Inspection Time Si			Time Si	Since Last Inspection				ne Tot	tal Time	
Continuous Airworthiness			04/1	04/1997					229 Hours				49886 Hours	
- Emergency Locator Transmitter (ELT) Information													
ELT Installed? No	ELT Operat	ed?				ELT	Aided i	n Locating Ac	cident S	ite?				
Owner/Operator Information														
Registered Aircraft Owner			St	treet A	ddress P.O. BO	X 661	100							
UNITED AIR LINES			Cit	ity	1 101 20						State	е	Zip Code	
							60666							
Operator of Aircraft Same as Reg'd Aircraft Owner														
· · ·				City						State	е	Zip Code		
Operator Does Business As: 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: Part 121: Air Carrier														
Type of Flight Operation Conducted	d: Scheduled; Do	mestic	; Passe	enger	Only									
		FACT	UAL R	REPOI	RT - AVIATI	ON							Page 2	

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Occurrence Date: 06/11/1997

AVIATION Occurrence Type: Accident													
First Pilot Information													
Name					City					Stat	te	Date of Birth	Age
On File On F						ile On File On File					On File	43	
Sex: M Seat Occupied	n Pilot				Cer	tificat	e Numb	per: On File					
Certificate(s): Airline Transport; Flight Instructor; Commercial; Flight Engineer													
Airplane Rating(s): Mult	i-engine Lar	nd; Single-e	ngine Land										
Rotorcraft/Glider/LTA: None													
Instrument Rating(s): Airplane													
Instructor Rating(s): Airplane Multi-engine; Airplane Single-engine; Instrument Airplane													
Type Rating/Endorsement for Accident/Incident Aircraft? Yes Current Biennial Flight Review?													
Medical Cert.: Class 1	Medica	al Cert. Status	s: Valid Me	dicalno wa	aivers/li	im.		Da	ate of La	ast Me	edical E	xam: 03/1997	
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night Inst			Instrument			Rotorcraft	Glider	Lighter Than Air
Total Time	12000	80											
Pilot In Command(PIC)	10000	65								4			
Instructor								_		+			
Last 90 Days	78	78			-			_		\perp			
Last 30 Days Last 24 Hours	35 1	35 1						+		+			
Seatbelt Used? Yes			Used? Yes	l	<u> </u>	Toxico	logy Pe	rforme	d? No		Se	L econd Pilot? Υ∈	l :S
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? Yes										-			
Flight Plan/Itinerary													
Type of Flight Plan Filed: IF	R												
Departure Point						State		Airport Identifier Departu			Depa	rture Time	Time Zone
DENVER								DEN			0000		
Destination State Airport Identifier													
Same as Accident/Incident Location ABQ													
Type of Clearance: IFR													
Type of Airspace: Class	D												
Weather Information													
Source of Briefing: Compa	any												
Method of Briefing:			<u> </u>		_								
			FACTUAI	REPORT	- AVIA	TION	٧						Page 3

NTSB ID: FTW97LA215

Occurrence Date: 06/11/1997

Occurrence Type: Accident

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Weather	Information												
WOF ID	Observation Time	Time Zone	WOF	Elevation	V	WOF Distance From Accident Site Direction Fr					Direction Fron	n Accident Site	Э
ABQ	1200	MDT	53	352 Ft. MS	SL _				5 NM		260 Deg. Mag.		
Sky/Lowes	st Cloud Condition: Clea	r					0 Ft. AGI	L	Condition o	of Ligh	nt: Day		
Lowest Ce	iling: None			0 Ft. AG	SL SL	Visibil	ity:	10	SM	Altimeter:		30.00	"Hg
Temperatu	ure: 26 °C	Dew Point:		1 °C V	Nind Di	rection:	280			Dei	nsity Altitude:	7495	Ft.
Wind Spee	ed: 6	Gusts: Weather Condtions at Accident Site: Visual Conditions											
Visibility (R	RVR): 0 Ft.	Visibility	(RVV)	0 S	SM I	Intensity	of Precipita	tion: I	Unknown				
Restriction	ns to Visibility: None				•								
Type of Pre	ecipitation: None												
Accident	Information												
Aircraft Dar	mage: None		Aircr	raft Fire: N	None				Aircraft Exp	losio	n None		
Classificati	ion: U.S. Registered/U	.S. Soil											
- Injury Su	mmary Matrix	Fatal	Serious	Minor	No	one	TOTAL						
First Pi	ilot					1	1						
Second	d Pilot					1	1						
Studen	nt Pilot				\top	İ							
Flight I	nstructor					İ							
Check	Pilot												
Flight E	Engineer												
Cabin /	Attendants		1			2	3						
Other C	Crew												
Passen	ngers					103	103						
- TOTAL A	ABOARD -		1			107	108						
Other G	Ground	0	0		0		0						
- GRAND	O TOTAL -	0	1		0	107	108						

National Transportation Safety Board

FACTUAL REPORT AVIATION NTSB ID: FTW97LA215

Occurrence Date: 06/11/1997

Occurrence Type: Accident

Administrative	

Investigator-In-Charge (IIC)

ARNOLD W. SCOTT

Additional Persons Participating in This Accident/Incident Investigation:

KERRY D RAY FAA FSDO ALBUQUERQUE, NM 87106