## Turbulence injury, Airbus A300B4-605R, January 7, 1997

**Micro-summary:** This Airbus A300B4-605R encountered turbulence, injuring several flight attendants and passengers.

Event Date: 1997-01-07 at 0834 EST

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).

2. Readers are advised that each report is a glimpse of events at specific points in time. While broad themes permeate the causal events leading up to crashes, and we can learn from those, the specific regulatory and technological environments can and do change. Your company's flight operations manual is the final authority as to the safe operation of your aircraft!

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National Transportation Safety Board	N	NTSB ID:	NYC97LA04	0	Aircraft Registration Number: N50051					
FACTUAL REPORT	C	Occurrence	e Date: 01/07	7/1997	Most Critical I	Most Critical Injury: Serious				
<b>AVIATION</b>	С	Occurrence	e Type: Accid	lent	Investigated By: NTSB					
Location/Time										
Nearest City/Place	State	Zip	Code	Local Time	Time Zone					
ATLANTIC OCEAN	AO			0834	EST					
Airport Proximity: Off Airport/Airstrip	Distance	e From La	nding Facility:		Direction Fro	om Airpor	t:			
Aircraft Information Summary										
Aircraft Manufacturer			Model/Series	5		Type of Aircraft				
Airbus Industrie			A-300B4-6	05R			Airplane			
Sightseeing Flight: No		Ai	r Medical Tr	ansport Flight: N	10					
Narrative										
<pre>Airlines as Flight 2009, encountered turbulence while operating over the Atlantic Ocean. One flight attendant received serious injuries, 3 flight attendants received minor injuries, and 2 passengers received minor injuries. The remaining 252 passengers, and 5 crewmembers were not injured. The airplane received minor damage. Visual meteorological conditions prevailed and the flight which was operated under 14 CFR Part 121, had departed Philadelphia, Pennsylvania at 0800, and was destined for San Juan, Puerto Rico.     Flight 2009 was cruising at FL330 (33,000 feet), about 30 miles south of Champs intersection, when it encountered the turbulence. The seatbelt sign was illuminated     The injured flight attendants were working in the forward and aft galleys, in preparation for cabin service. Both passengers were seated in the rear of the airplane and had their seatbelts unfastened at the time of the turbulence.     A cart in the aft galley was thrown into the air and contacted the overhead ceiling.     The captain was notified of the injuries and elected to divert to John F. Kennedy Airport, Jamaica, New York, where an uneventful landing was made. The airplane then taxied to the gate</pre>										
One passenger and th to local hospitals where they fractured ankle.		-			-	-				
There were no SIGMETS is	n effe	ct for	turbulenc	e.						
A readout of the fliwwhich were separated by 8 second +0.25 Gs, as measured on the ver	nds. H	Each pu	ulse had a	maximum valu	-		_			
	FA	CTUAL	REPORT - A	VIATION			Page 1			

National Transportation Safety Boar	d	NTSB ID: NYC97LA040									
FACTUAL REPORT		Occur	rence Date:								
AVIATION ETYBOR		Occur	rence Type	ence Type: Accident							
Landing Facility/Approach Inform	nation										
				rport ID: Airport Elevation Runway Used F					Runway Length Runway		
		Ft	. MSL	0							
Runway Surface Type:										•	
Runway Surface Condition:											
Type Instrument Approach: NONE											
VFR Approach/Landing: None											
Aircraft Information											
Aircraft Manufacturer Airbus Industrie				/Series 0B4-605R					Serial N 459	Number	
Airworthiness Certificate(s): Transport											
Landing Gear Type: Retractable - Tri	cycle										
Homebuilt Aircraft? No Nur									es: 2		
Engine Type: Turbo Fan	Engine Ma GE	ingine Manufacturer: Model/Series: CF6-80C2A5					Rated Power: 61500 LBS				
- Aircraft Inspection Information											
Type of Last Inspection								Fotal Time			
Continuous Airworthiness								Ho	ours		Hours
- Emergency Locator Transmitter (ELT)	Information										
ELT Installed? No	ELT Operate	ELT Aided in Locating Accident Site?									
Owner/Operator Information											
Registered Aircraft Owner			Street A	Address P.O. BO	X 6196	516					
AMERICAN AIRLINES			City							State	Zip Code
			Street A	DALLAS ddress						ТХ	75261
Operator of Aircraft					Reg'd	Aircra	aft Owner				
Same as Reg'd Aircraft Owner			City							State	Zip Code
Operator Does Business As:						0	perator Desig	nator Co	ode: AAI		
- Type of U.S. Certificate(s) Held:											
Air Carrier Operating Certificate(s): Flag	g Carrier/Dom	estic									
Operating Certificate:	Operating Certificate: Operator Certificate:										
Regulation Flight Conducted Under: Part 121: Air Carrier											
Type of Flight Operation Conducted: So	cheduled; Inter	rnation	al; Passen	ger/Cargo							
FACTUAL REPORT - AVIATION Page 2											

National Transportation	Safety Board	1	NTSB ID: NYC97LA040									
FACTUAL RI			Occurrer	nce Date: 01	1/07/19	97						
ΑΥΙΑΤΙ	> 2			ice Type: Ad				-				
	R		Coounci	100 Type: 74	bolderit							
First Pilot Information					City					State	Date of Birth	Ago
				City								Age
On File					On Fi	le				On File	On File	39
Sex: M Seat Occupied	Sex: M Seat Occupied: Left Principal Profession: Civilian Pilot Certificate Number: On File											
Certificate(s): Airline Transport; Flight Engineer												
Airplane Rating(s): Multi-engine Land; Single-engine Land												
Rotorcraft/Glider/LTA: Non	e		-									
Instrument Rating(s): Airp	lane											
Instructor Rating(s): Airpl	ane Single-	engine; Ins	trument Air	plane								
Type Rating/Endorsement for	or Accident/Ir	ncident Aircra	aft? Yes			C	Current B	iennial Flig	ght Re	eview?		
Medical Cert.: Class 1	Medica	al Cert. Statu	s: Unknowi	n				Date	of Las	st Medical	Exam: 11/1996	
	•											
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Ni	ght	Actual	Instrument Simu	ulated	Rotorcraft	Glider	Lighter Than Air
Total Time	10900	80										
Pilot In Command(PIC)	2500											
Instructor												
Last 90 Days		71										
Last 30 Days										_		
Last 24 Hours		l 		Used? Toxicology Perfo								
Seatbelt Used? Yes	Shou	Ider Harness	s Used?			IOXICO	ology Pe	rformed?	NO		Second Pilot?	
Flight Plan/Itinerary				_								
Type of Flight Plan Filed: IF	R					1						
Departure Point						State	9	Airport Ide	ntifier	Dep	arture Time	Time Zone
PHILADELPHIA						PA		PHL		080	0	EST
Destination						State	;	Airport Ide	ntifier			•
SAN JUAN						PR		SJU				
Type of Clearance: IFR												
Type of Airspace: Class	E											
Weather Information												
Source of Briefing: Compa	any											
Method of Briefing:												
			FACTUA	L REPORT	- AVI	ΑΤΙΟΙ	N					Page 3

Nationa	TRANSP al Transportation Safety	Board	NTSB ID:	NTSB ID: NYC97LA040							
	ACTUAL REPOI		Occurren	ce Date:	01/07/1	997		1			
	AVIATION ETYBOR		Occurren					1			
Weather	Information			71-		-					
WOF ID	Observation Time	Time Zone	WOF Elevat	ion	WOF D	stance From	Accir	lent Site	ent Site Direction From Accider		
							710010			Direction	
	0000		0 Ft	. MSL				0 NM			0 Deg. Mag.
Sky/Lowes	Sky/Lowest Cloud Condition: Clear     0 Ft. AGL     Condition of Light: Day										
Lowest Ce	iling: None		0 Ft.	AGL	Visib	ility:	20	SM	Alti	meter:	"Hg
Temperatu	ure: °C	Dew Point:	°C	Wind	Direction:				Dei	nsity Altitude:	Ft.
Wind Spee	ed:	Gusts:		Weat	ner Condt	ions at Accid	ent Si	ite: Visual C	Cond	itions	
Visibility (F	RVR): 0 F1	. Visibility (	RVV) 0	SM	Intensit	y of Precipita	tion: I	Jnknown			
Restriction	s to Visibility: None					-					
	,										
Type of Pro	ecipitation: None										
Accident	Information										
	mage: Minor		Aircraft Fir	e: None	•			Aircraft Exp	olosio	n None	
	ion: U.S. Registered/	LS Soil									
	mmary Matrix		Serious Mine	or	None	TOTAL					
- Injury Sul			Serious Min		1	101AL					
Second					1	1					
Studen					I	'					
Flight li	nstructor										
Check	Pilot										
Flight E	Engineer										
Cabin A	Attendants		1	3	3	7					
Other C	Crew										
Passer	ngers			2	254	256					
- TOTAL A	ABOARD -		1	5	259	265					
Other C	Ground	0	0	0		0					
- GRANE	D TOTAL -	0	1	5	259	265					
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National Transportation Safety Board	NTSB ID: NYC97LA040	
FACTUAL REPORT	Occurrence Date: 01/07/1997	
AVIATION ETYBON	Occurrence Type: Accident	
Administrative Information		
nvestigator-In-Charge (IIC)		
ROBERT L. HANCOCK		
Additional Persons Participating in This Accident	/Incident Investigation:	
LOUIS ALVAREZ FAA FSDO GARDEN CITY, NY		
EDUARDO JURANOVIC AMERICAN AIRLINES FORT WORTH, TX		