Tailstrike on landing, Boeing 757-200, June 5, 2001

Micro-summary: This Boeing 757 encountered a tail strike on landing.

Event Date: 2001-06-05 at 0805 EDT

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: ATL01IA064 Aircraft Registration Number: N750AT FACTUAL REPORT Occurrence Date: 06/05/2001 Most Critical Injury: None Occurrence Type: Incident Investigated By: NTSB ETYBO Location/Time Nearest City/Place State Zip Code Local Time Time Zone 0805 GΑ 30337 **EDT** Atlanta Distance From Landing Facility: 0 Direction From Airport: 0 Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Boeing 757 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 5, 2001, at approximately 0805 eastern daylight time, Delta flight 274, a Boeing 757, N750AT, experienced a tail strike while landing at Hartsfield Atlanta International Airport in Atlanta, Georgia. Flight 274 was operating under the provisions of 14 CFR Part 121 while on an instrument flight plan. Visual meteorological conditions prevailed at the time of the flight, and there were no injuries. The flight departed at 1210 and operated as a scheduled domestic passenger flight from Jorge Chavez International Airport in Lima, Peru.

According to the flight crew, there were two pilots, five flight attendants, and 82 revenue passengers on board flight 274. This leg of the flight was flown by the First Officer. The First Officer said, "When I made my walk around in Lima, I noticed a large number of crates that were prepared for loading onto the aircraft. This seemed unusual, especially in view of the fact we carried virtually no cargo on the trip from Atlanta. Since we were flying a B-757, rather than a B-767, which is more normally flown in our category, the Captain and I discussed the different flying characteristics of the B-757 and the need to take the B-757's tendency to pitch down somewhat abruptly following touchdown into account upon landing."

Upon arriving in Atlanta, the Captain recalled that the final approach and flare appeared normal. The Captain also noted, "At some point during the flare, the tail of the aircraft apparently contacted the runway, although it was not evident to us in the cockpit." While on the landing flare on runway 27R into Hartsfield Atlanta International Airport, the tail of the airplane collided with the ground.

Examination of the airplane revealed belly skin damage on the tail section aft of the drain mast. The aft pressure bulkhead showed buckles between S-29 left and S-29 right stringers. Buckles were also noted in the lower web of the aft pressure bulkhead.

Data recovered from the Flight Data Recorder revealed the airplane touchdown at 0805:35 at 110.25 knots and a pitch attitude of 10.37 degrees. Touchdown is based on the air/ground switch state change. The vertical acceleration spike (1.265 g's) at 0805:36.64 indicates the time of the tail strike. The max pitch angle (11.25 degrees) was recorded at 0805:37.05. The VREF airspeed for the airplane is 128 knots.

Both pilots were given additional flight training and returned to normal duty. .

National Transportation Safety Board

FACTUAL REPORT

ANTATION

NTSB ID: ATL01IA064

Occurrence Date: 06/05/2001

AVIATION		Occurrence Type: Incident											
Landing Facility/Approach In	formation												
Airport Name Air			Airport ID:	. A	Airport Elevati	on	Run	way Used	Runway Length		h F	Runw	vay Width
THE WILLIAM B HARTSFIELD ATLAN			ATL		1026 Ft.	MSL	. 27R 118		11889	1889		150	
Runway Surface Type: Asphalt													
Runway Surface Condition: Dry													
Type Instrument Approach: ILS-co	omplete												
VFR Approach/Landing: None													
Aircraft Information													
Aircraft Manufacturer			1	el/Se	ries					Serial Number			
Boeing			757	,						2222	3		
Airworthiness Certificate(s): Transport													
Landing Gear Type: Retractable - Tricycle													
Homebuilt Aircraft? No	Number of Seats:	186 Certified Max Gross Wt. 232000 LBS Number						er of Engines: 2		: 2			
			Engine N P&W	Engine Manufacturer: Model/Series: pw2037									d Power: 00 LBS
- Aircraft Inspection Information													
Type of Last Inspection Date			Date of Last Inspection Time Sin			nce Last Inspection			Airfram	e Tot	tal Time		
Continuous Airworthiness				05/2001			Hours			45646.7 Hours			
- Emergency Locator Transmitter (ELT) Information												
ELT Installed? Yes ELT Operated? No ELT Aided in Locating Accident Site? No													
Owner/Operator Information													
Registered Aircraft Owner			Stree	t Add	lress 1020 Delt	a Bl	vd.						
DELTA AIR LINES INC	DELTA AIR LINES INC City State Zip Code												
Atlanta GA 30320										30320			
Operator of Aircraft Street Address Same as Reg'd Aircraft Owner													
Same as Reg'd Aircraft Owner	City							State		Zip Code			
Operator Does Business As: Delta Airlines Inc. Operator Designator Code: DALA													
- Type of U.S. Certificate(s) Held:													
Air Carrier Operating Certificate(s)	Flag Carrier/Dom	nestic											
Operating Certificate:					Operator Ce	ertific	cate:						
Regulation Flight Conducted Unde	r: Part 121: Air Ca	ırrier											
Type of Flight Operation Conducted	d: Scheduled; Dor	nestic;	Passeng	jer O	nly								
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National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: ATL01IA064

Occurrence Date: 06/05/2001

AVIATION				Occurrence Type: Incident									
First Pilot	Information			•				,					
Name City											ate	Date of Birth	Age
On File On Fil							le				File	On File	59
Sex: M	Seat Occupied	n Pilot			С	ertifica	te Numl	ber: On File	•				
Certificate(s): Airlir	ne Transpor	t										
Airplane Ra	ating(s): Multi	i-engine Lar	nd										
Rotorcraft/0	Glider/LTA: None	<u> </u>											
Instrument	Rating(s): Airpl	lane											
Instructor R	Rating(s): None	е											
Type Rating/Endorsement for Accident/Incident Aircraft? Yes Current Biennial Flight Review? 01/2001													
Medical Ce	rt.: Class 1	Medica	al Cert. Statu	s: None					Date of	Last M	edical E	Exam: 03/2001	
- Flight Tim	Flight Time Matrix All A/C This Make and Model Single Engine				Airplane Mult-Engine	Night		Inst Actual	Instrument Simulated		Rotorcraft	Glider	Lighter Than Air
Total Time	Total Time 7238 1681												
Pilot In Con	nmand(PIC)												
Instructor							_			\perp			
Last 90 Day	/S	216	216							\perp			
Last 30 Day		_				1	\rightarrow			_			
Last 24 Hou		7	7			<u> </u>					l.		
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? Yes													
Flight Pla	n/Itinerary												
	ht Plan Filed: IF	R											
Departure F	Point						State	Air	ort Identif	ier	Depa	rture Time	Time Zone
Lima								LIM		1210			UTC
Destination							State	Air	port Identii	ier			
Atlanta							GA ATL		101				
Type of Cle	arance: IFR							-					
Type of Airs	space: Class	В											
Weather	Information												
Source of I	Briefing: Compa	any											
Method of	Briefing: Telety	ре											
				FACTUAL	REPORT	- AVIAT	TION						Page 3

National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: ATL01IA064

Occurrence Date: 06/05/2001

AVIATION			0	Occurrence Type: Incident										
Weather	Information													
WOF ID	Observation Time	servation Time Time Zone			WOF Elevation WOF Distance From Acc			n Accid	cident Site Direction			r From Accident Site		
					1								!	
ATL	0805	EDT		1026 Ft.	MSL				0 NM			0 Deg.	Mag.	
Sky/Lowes	st Cloud Condition: Clea	ar					Ft. AG	SL	Condition of					
Lowest Ceiling: None				Ft. AGL Visibility: 10				10	SM Altimeter: 30.14			30.14	"Hg	
Temperatu	ure: 20 °C	e: 20 °C Dew Point:			Wind	Direction:				Dei	nsity Altitude:	1658	Ft.	
Wind Spee	ed:	Gusts:			Weath	ner Condti	ons at Acci	dent S	ite: Visual C	Cond	itions			
Visibility (F	oility (RVR): Ft. Visibility (RVV) SM Intensity of Precipitati						ation:							
Restriction	ns to Visibility:													
Type of Pre	ecipitation:													
Accident	Information													
Aircraft Dar	Ai	ircraft Fire	e: None	!			Aircraft Exp	losio	n None					
Classificati	ion: U.S. Registered/l	J.S. Soil												
- Injury Su	mmary Matrix	Fatal	Serious	Mino	ır	None	TOTAL							
First Pi	llot	T				1	1							
Second	d Pilot					1	1							
Studen	nt Pilot]						
Flight I	nstructor		<u> </u>					1						
Check	Pilot			1				1						
Flight E	Engineer							1						
Cabin /	Attendants					5	5	1						
Other C	Crew							1						
Passen	ngers			1		82	82	1						
- TOTAL /	ABOARD -			1		89	89	1						
Other C		† †						1						
- GRANE	O TOTAL -	† †				89	89	1						

National Transportation Safety Board

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Occurrence Date: 06/05/2001

Occurrence Type: Incident

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Investigator-In-Charge (IIC)

Phillip Powell

Additional Persons Participating in This Accident/Incident Investigation:

Al Watts FAA certification FAA