
Ground collision between a Boeing 767 and Boeing 737, Boston, April 9, 2001

Micro-summary: This Boeing 767 hit a Boeing 737 on the ground, in glare.


Event Date: 2001-04-09 at 0800 EDT


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

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

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		NTSB ID: NYC01LA094A		Aircraft Registration Number: N328AA	
		Occurrence Date: 04/09/2001		Most Critical Injury: None	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Boston		State MA	Zip Code 02101	Local Time 0800	Time Zone EDT
Airport Proximity: On Airport		Distance From Landing Facility: 0		Direction From Airport: 0	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 767-200ER		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 April 9, 2001, about 0800 eastern daylight time, a Boeing 767-200ER, N328AA, operated by American Airlines, Inc., as flight 1547, struck and substantially damaged a Boeing 737-832, N3731T, operated by Delta Airlines, Inc., as flight 1823, while taxiing for takeoff at General Edward Lawrence Logan International Airport (BOS), Boston, Massachusetts. The 2 flight crew members, 6 flight attendants, and 141 passengers on board flight 1547, destined for Orlando, Florida, and the 2 flight crew members, 4 flight attendants, and 116 passengers on board flight 1823, destined for Flushing, New York, were not injured. Instrument meteorological conditions prevailed, and an instrument flight rules flight plan had been filed for both flights, which were conducted under 14 CFR Part 121.</p> <p>According to information received from a Federal Aviation Administration inspector, Delta flight 1823 was instructed by air traffic control (ATC) to "hold short" of runway 27, on taxiway "D-1," while it awaited takeoff clearance, and American flight 1547 was instructed to taxi to runway 27, via taxiway "D." While taxiing, the right wing tip of American flight 1547 struck and substantially damaged the left elevator and horizontal stabilizer of Delta flight 1823. The right wing of American flight 1547 sustained minor damage. Both airplanes then taxied to their respective gates without further incident.</p> <p>The flight crew from Delta flight 1823 reported that the airplane had been holding short of the runway 27 hold line, with the parking brakes set, when they felt a "violent shudder." They then looked back and observed an American Airlines Boeing 767 taxiing past them on taxiway D.</p> <p>The flight crew from American flight 1547 reported that the sun was creating a glare on the airplane's windscreen, and that they observed the Delta 737 holding short of runway 27 as they taxied on taxiway D. In a written statement, the captain said:</p> <p>"...Although the aircraft was not all the way up to the hold short line, I felt there was more than adequate clearance to continue, and in fact moved slightly to the left of the taxiway centerline, away from the other aircraft, slowed down, and continued. A jolt/bump was felt by both of us...."</p> <p>The cockpit voice recorder (CVR) from both airplanes were forwarded to the Safety Board's Vehicle Recorders Division for readout.</p> <p>The CVR for flight 1547 contained non-pertinent audio information, which was recorded after the accident. The CVR for flight 1823 captured the accident approximately 1 hour, 40 minutes into the 2-hour recording. According to the CVR specialist's factual report, at 0801:13, BOS ATC cleared flight 1547 to taxi into position and hold on runway 27. At 0801:18, a rumbling sound lasting approximately 1.5 seconds was recorded by the cockpit area microphone, and was followed by exclamations from the cockpit crew and a flight attendant. The flight crew then notified BOS ATC, that an American Boeing 767 had dragged its wingtip through the tail of their airplane and</p>					
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	Occurrence Type: Accident


Narrative (Continued)


requested the "crash crew." At 0804:40, the captain was recorded asking how far the airplane was from the hold short line; about five, six, or seven feet? The first officer responded in the affirmative.

According to a BOS airport diagram, taxiway D was located on the north side of, and parallel to runway 27. Taxiway D-1 extended at an angle to the northwest, from runway 27, to taxiway D. According to a Massachusetts Port Authority representative, the perpendicular distance between the taxiway D centerline and the runway 27 hold short line was 220 feet.

Dimensional data provided by the manufacturer revealed that the overall wingspan of a Boeing 767-200, and the overall length of a Boeing 737-800, was approximately 156 feet, 1 inch, and 124 feet, 9 inches, respectively.

The weather reported at BOS, at 0730, included a visibility of 2.5 statute miles in mist, and a broken ceiling of 600 feet.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: NYC01LA094A				
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		Occurrence Type: Accident				
Landing Facility/Approach Information						
Airport Name GENERAL EDWARD LAWRENCE LOGAN		Airport ID: BOS	Airport Elevation 19 Ft. MSL	Runway Used	Runway Length	Runway Width
Runway Surface Type: Unknown						
Runway Surface Condition: Unknown						
Type Instrument Approach: Unknown						
VFR Approach/Landing: Unknown						
Aircraft Information						
Aircraft Manufacturer Boeing		Model/Series 767-200ER		Serial Number 223		
Airworthiness Certificate(s): Transport						
Landing Gear Type: Retractable - Tricycle						
Homebuilt Aircraft? No		Number of Seats: 172	Certified Max Gross Wt. 351000 LBS		Number of Engines: 2	
Engine Type: Turbo Fan		Engine Manufacturer: GE		Model/Series: CF6-80A	Rated Power: 48000 LBS	
- Aircraft Inspection Information						
Type of Last Inspection Continuous Airworthiness		Date of Last Inspection	Time Since Last Inspection Hours		Airframe Total Time Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? No		ELT Operated? No		ELT Aided in Locating Accident Site? No		
Owner/Operator Information						
Registered Aircraft Owner State Street Bank and Trust Co.		Street Address 225 Asylum Street				
		City Hartford		State CT	Zip Code 06106	
Operator of Aircraft AMERICAN AIRLINES INC		Street Address 4333 Amon Carter Blvd.				
		City Dallas		State TX	Zip Code 75261	
Operator Does Business As: American Airlines Inc.				Operator Designator Code: AALA		
- 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; Domestic; Passenger/Cargo						
FACTUAL REPORT - AVIATION						

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First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 42
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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

Airplane Rating(s): Multi-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review? 03/2001
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Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--no waivers/lim.	Date of Last Medical Exam: 11/2000
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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	11600	3240								
Pilot In Command(PIC)	2450	50								
Instructor	1200									
Last 90 Days	75	75								
Last 30 Days	54	54								
Last 24 Hours	1	1								

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 Same as Accident/Incident Location	State	Airport Identifier BOS	Departure Time	Time Zone EDT
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Destination ORLANDO	State FL	Airport Identifier MCO	
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Type of Clearance: IFR

Type of Airspace: Class B

Weather Information

Source of Briefing: Company

Method of Briefing: Teletype

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Weather Information

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
BOS	0730	EDT	19 Ft. MSL	0 NM	0 Deg. Mag.

Sky/Lowest Cloud Condition: _____ Ft. AGL Condition of Light: _____

Lowest Ceiling: **Broken** 600 Ft. AGL Visibility: 2.5 SM Altimeter: 29.82 "Hg

Temperature: 6 °C Dew Point: 6 °C Wind Direction: 230 Density Altitude: _____ Ft.

Wind Speed: 7 Gusts: _____ Weather Conditions at Accident Site: **Instrument Conditions**

Visibility (RVR): _____ Ft. Visibility (RVV) _____ SM Intensity of Precipitation: _____

Restrictions to Visibility: _____

Type of Precipitation: _____

Accident Information

Aircraft Damage: **Minor** Aircraft Fire: **None** Aircraft Explosion: **None**

Classification: **U.S. Registered/U.S. Soil**

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants				6	6
Other Crew					
Passengers				141	141
- TOTAL ABOARD -				149	149
Other Ground					
- GRAND TOTAL -				149	149

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: NYC01LA094A

Occurrence Date: 04/09/2001

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Luke Schiada

Additional Persons Participating in This Accident/Incident Investigation:

Dave Hall
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Boston, MA

Sean Mulholland
American Airlines
Fort Worth, TX

Ralph E Hicks
Delta Air Lines
Atlanta, GA