
Ground collision, Boeing 767-323, June 29, 1999

Micro-summary: This Boeing 767-323 collided with a Boeing 767-223 while taxiing.


Event Date: 1999-06-29 at 1717 CDT

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

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

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		NTSB ID: CHI99IA204		Aircraft Registration Number: N384AA	
		Occurrence Date: 06/29/1999		Most Critical Injury: None	
		Occurrence Type: Incident		Investigated By: NTSB	
Location/Time					
Nearest City/Place CHICAGO		State IL	Zip Code 60666	Local Time 1717	Time Zone CDT
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Boeing		Model/Series 767-323		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
<p>On June 29, 1999, at 1717 central daylight time, a Boeing 767- 323, N384AA, operated by American Airlines as Flight 80 collided with an American Airlines B-767-223, N328AA, which was stopped on the International Ramp at the O'Hare International Airport, Chicago, Illinois. There were no injuries to the 3 cockpit crew, 10 cabin crew, and 173 passengers on board Flight 80. In addition, there were no injuries to the two mechanics on board N328AA. N384AA received minor damage to its right wingtip and N328AA received minor damage to its left wing. The 14 CFR Part 121 flight was operating in visual meteorological conditions. Flight 80 was preparing to depart the O'Hare International Airport, for Stockholm, Sweden, when the incident occurred.</p>					
<p>N328AA was being repositioned by two mechanics from gate M-3 at the International Terminal to the gate K-15 on the domestic side of the airport. They received their push back clearance from the O'Hare Inbound Ground Controller and were instructed to "...push it back facing north." American Airlines ramp personnel pushed N328AA back from the gate and positioned the airplane on the ramp facing north. The mechanics reported they were going to taxi north on taxiway Bravo, cross over on Alpha 20, and taxi south on taxiway Alpha to the gate area. They reported that once positioned on the ramp they set the parking brake and were waiting for traffic to clear the "alley" and taxiway Alpha when their left wing was struck by Flight 80.</p>					
<p>Flight 80 had been parked at gate K-19 and was given clearance by the Ground Metering Controller to taxi to Runway 32R via the Bravo Taxiway. Flight 80 turned left out of the terminal area onto the Bravo Taxiway. As flight 80 was taxiing north on Bravo, its right wing contacted the left wing of N328AA. The flight crew reported that they saw the 767 (N328AA) parked on the International Ramp; however, they did not think it was a factor. The left main gear on N328AA was jacked up and the right main gear tires on Flight 80 were deflated in order to dislodge the airplanes from each other.</p>					
<p>A review of photographs taken by American Airlines revealed the left wing of N328AA and the right wing of Flight 80 were both over hanging a green painted "grass" area on the ramp when the collision occurred. N328AA was positioned facing north on the International Ramp just southwest of the M-3 gate. The fuselage of the airplane was on the movement side of the "nonmovement area" and its left main gear was on the taxiway centerline. Flight 80 was facing north on the Bravo Taxiway with its nose gear approximately 3-feet left of the taxiway centerline.</p>					
<p>Damage on N384AA consisted of the right wing tip. Damage on N328AA consisted of the left wing tip and minor damage to the left aileron.</p>					
<p>A letter from CICA, the contracting ramp control company, dated October 13, 1993, entitled T-5 [International Terminal] Ramp Control Guidelines addresses procedures for pushing back from the International Terminal. This document states, "Due to the close proximity of the International gate positions M1-M3 to the Outer Taxiway [Bravo], only O'Hare ATCT [Air Traffic Control Tower] will issue clearance to and from these gate positions. Aircraft in gate position M4 will be</p>					
FACTUAL REPORT - AVIATION					

National Transportation Safety Board

FACTUAL REPORT

AVIATION

NTSB ID: CHI99IA204

Occurrence Date: 06/29/1999

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Narrative (Continued)


directed by International Gate Coordinator and must be pushed back to the south in a nose north configuration." O'Hare ATCT personnel were interviewed and were questioned regarding the above procedure. They reported that when an airplane is pushed back from gates M-1 and M-2, the airplane cannot remain clear of taxiway Bravo due to the amount of ramp space. In this case they stop additional traffic from using Bravo until the airplane is moved. They reported that even though they are giving pushback clearances from gate M-3, they do not prevent other traffic from using taxiway Bravo when a pushback is in progress. They reported that it is the responsibility of the ramp personnel and cockpit crew to maintain clearance from taxiway Bravo when pushed back from gate M-3.


The International Terminal gate/ramp area was inspected by the NTSB, the Federal Aviation Administration Airport and Air Traffic Control Personnel, O'Hare International Operations Personnel, and American Airlines Personnel. The ramp area used when an airplane is pushed back from gate M-3 consists of a space bordered by two vehicle traffic lanes, a cross taxiway (Alpha 20), and the nonmovement area line. Several ramp personnel, including those who pushed back N328AA, were interviewed during the course of this investigation. All of them said that it would be very difficult if not impossible to push back an airplane from gate M-3, keep it on the nonmovement side of the ramp, and not block a vehicle traffic lane or cross taxiway. Therefore, they try and position the airplane in an area to keep the traffic lanes and cross taxiways clear; however, this puts the airplane on the movement side of the ramp. In addition, they reported that the turn radius is too sharp for them to position an airplane on the nonmovement side of the ramp. They reported that it was routine for a portion of the airplane to extend over the nonmovement line. A pushback was observed by the NTSB and what the ramp personnel said was found to be true.

A Letter of Agreement between the O'Hare ATCT and the City of Chicago effective April 6, 1993 addresses Designated Airport Movement Areas. The diagram attached to the agreement depicts the taxiways and runways as movement areas on the airport. The agreement also states, "The Southwest Cargo ramp, Signature/General Aviation ramp, International ramp taxi lane, and the terminal gate areas are all nonmovement areas once the aircraft clears the adjacent taxiway and has entered the ramp area."

Taxiway Bravo is 75 feet wide. The nonmovement line is 160 feet from the center of taxiway Bravo placing it 122.5 feet into the International ramp area near gate M-3. The placement of the nonmovement line is contradictory to the letter of agreement regarding Designated Airport Movement Areas which shows all ramp areas as nonmovement areas.

According to Boeing Aircraft the wingspan of a 767-200 is 156 feet 1 inch. Given the width of the taxiway, a Boeing 767-200 taxiing on the centerline of Bravo would have 41 feet of its wing extending over each side of the taxiway.

		NTSB ID: CHI99IA204			
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		Occurrence Type: Incident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
O'HARE INTERNATIONAL	ORD	667 Ft. MSL	0		
Runway Surface Type:					
Runway Surface Condition:					
Type Instrument Approach:					
VFR Approach/Landing:					
Aircraft Information					
Aircraft Manufacturer		Model/Series		Serial Number	
Boeing		767-323		26996	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats:	Certified Max Gross Wt. LBS		Number of Engines: 2	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Fan	GE	CF6-80C2	61500 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Continuous Airworthiness		Hours	Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? No	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner		Street Address			
AMERICAN AIRLINES, INC.		4333 AMON CARTER BLVD			
		City	State	Zip Code	
		FT. WORTH	TX	76155	
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: AMERICAN AIRLINES			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; International; Passenger Only					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: CHI99IA204
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	Occurrence Type: Incident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 49
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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):

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
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Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--no waivers/lim.	Date of Last Medical Exam: 04/1999
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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		1203								
Pilot In Command(PIC)										
Instructor										
Last 90 Days		222								
Last 30 Days		56								
Last 24 Hours										

Seatbelt Used? Yes	Shoulder Harness Used?	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 ORD	Departure Time 0000	Time Zone
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Destination STOCKHOLM	State OF	Airport Identifier STP	
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Type of Clearance:

Type of Airspace: Class B

Weather Information

Source of Briefing:
Company


Method of Briefing:

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
ORD	1656	CDT	667 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			6000 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		25000 Ft. AGL		Visibility: 10 SM	Altimeter: 29.00 "Hg
Temperature: 22 °C	Dew Point: 9 °C	Wind Direction: 110		Density Altitude: Ft.	
Wind Speed: 6	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility: None					
Type of Precipitation: None					

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				10	10
Other Crew				1	1
Passengers				173	173
- TOTAL ABOARD -				186	186
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	186	186

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Administrative Information

Investigator-In-Charge (IIC)
PAMELA S. SULLIVAN

Additional Persons Participating in This Accident/Incident Investigation:

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