



# National Transportation Safety Board Aviation Incident Final Report

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<b>Location:</b>	Chicago, IL	<b>Incident Number:</b>	OPS11IA819B
<b>Date &amp; Time:</b>	08/08/2011, 1100 CDT	<b>Registration:</b>	
<b>Aircraft:</b>	EMBRAER EMB-145LR	<b>Aircraft Damage:</b>	None
<b>Defining Event:</b>	Air traffic event	<b>Injuries:</b>	45 None
<b>Flight Conducted Under:</b>			

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## Analysis

A near-midair collision occurred when an Embraer ERJ-145 regional jet departing from runway 32L passed within close proximity to an Embraer ERJ-135 regional jet on approach to runway 9R. The local controller had cleared the ERJ-145 for takeoff without ensuring that adequate spacing existed between the ERJ-145 and the approaching ERJ-135. The ERJ-135 was instructed to go around, but the two airplanes passed within 125 feet vertically and 350 feet horizontally of each other above runway 32L.

When interviewed, the local controller stated that he had overlooked the arriving airplane during his scan, possibly because he was distracted by coordination requirements affecting two other airplanes.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: The improper air traffic control takeoff clearance issued by the local controller because of his lack of monitoring and lack of awareness of the conflicting arrival airplane.

## Findings

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<b>Personnel issues</b>	Incorrect action selection - ATC personnel (Cause) Understanding/comprehension - ATC personnel (Cause)
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## Factual Information

On Monday, August 8, at approximately 1100 central daylight time, a near mid air collision (NMAC) occurred at Chicago O'Hare International Airport (ORD) when Chautauqua Airlines flight 5021 (CHQ5021), an ERJ-135 regional jet en route from La Crosse, Wisconsin to ORD, passed in close proximity to Trans State Airlines (LOF3367), an Embraer 145 departing ORD for Moline, IL. Both aircraft were on regularly scheduled 14 Code of Federal Regulations Part 121 passenger flights and under control of ORD airport traffic control tower (ATCT) at the time of the incident. There was no damage reported to either aircraft, or any injuries to passengers or crew.

At approximately 1058, CHQ5021 contacted the ORD north local controller (NLC) and was provided the current wind, given clearance to land on runway 9R, and advised that traffic would be departing runway 9R prior to his arrival.

At 1059:32, the NLC instructed CHQ5021 "... go around, climb and maintain 2500, fly runway heading." The NLC then instructed CHQ5021 to "...turn left heading 040 and remain with me." CHQ5021 then returned and landed on runway 9R without further incident.

At 1058:07, the ORD Third Local Controller (3LC) issued LOF3367 the current wind and a takeoff clearance for runway 32L. At 1059:27, the 3LC instructed LOF3367 "...traffic alert, left to right, it's an American Eagle stay as low as you can." The pilot immediately responded, "Yeah, we're doing that." At approximately 1100, the 3LC controller instructed LOF3367 to "...fly heading 330 and contact departure." LOF3367 acknowledged the frequency change, and the 3LC responded, "sorry about that." Radar data indicated that CHQ5021 passed about 125 feet above and 350 feet in front of LOF3367. LOF3367 then changed to departure frequency and continued the remainder of the flight without further incident.

The Chicago O'Hare International Airport weather for August 8, 2011 was obtained from the KORD Automatic Surface Observation System (ASOS).

KORD weather at 1051 was wind calm, visibility 10 statute miles, scattered clouds at 25,000 feet, temperature 26 degrees Celsius, dew point 18 degrees Celsius, and altimeter setting 29.79 inches of mercury.

For further information, see the Air Traffic Control Group Chairman's Report in the docket for this case.

## History of Flight

Takeoff	Air traffic event (Defining event)
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## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	EMBRAER	Registration:	
Model/Series:	EMB-145LR	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	14500842
Landing Gear Type:	Tricycle	Seats:	55
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Turbo Fan
Airframe Total Time:		Engine Manufacturer:	ROLLS-ROYCE
ELT:	Installed, not activated	Engine Model/Series:	AE3007 SER
Registered Owner:		Rated Power:	7200 hp
Operator:		Operating Certificate(s) Held:	Flag carrier (121)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ORD	Observation Time:	1051 CDT
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3200 ft agl	Temperature/Dew Point:	25° C / 19° C
Lowest Ceiling:	Broken / 18000 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 90°	Visibility (RVR):	
Altimeter Setting:	29.77 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Chicago, IL (ORD)	Type of Flight Plan Filed:	IFR
Destination:	Moline, IL (MLI)	Type of Clearance:	IFR
Departure Time:	CDT	Type of Airspace:	Air Traffic Control; Class B

## Airport Information

Airport:	Chicago O'Hare International (ORD)	Runway Surface Type:	Asphalt; Concrete
Airport Elevation:	672 ft	Runway Surface Condition:	Dry
Runway Used:	32L	IFR Approach:	
Runway Length/Width:	9685 ft / 200 ft	VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	None
Passenger Injuries:	42 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	45 None	Latitude, Longitude:	(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Betty Koschig	<b>Adopted Date:</b>	11/07/2012
<b>Additional Participating Persons:</b>	Todd Luepker; Federal Aviation Administration; Washington, DC Michelle Wroblewski; National Air Traffic Controllers Association; Green Bay, WI Brian Soper; National Transportation Safety Board; Washington, DC		
<b>Publish Date:</b>	11/07/2012		
<b>Investigation Docket:</b>	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=81436">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=81436</a>		

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