



Aviation Investigation Final Report

Location:	Chicago, Illinois	Incident Number:	OPS111A819
Date & Time:	August 8, 2011, 11:00 Local	Registration:	N377SK
Aircraft:	Embraer EMB-135KL	Aircraft Damage:	None
Defining Event:	Air traffic event	Injuries:	39 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

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

Personnel issues	Incorrect action selection - ATC personnel
Personnel issues	Understanding/comprehension - ATC personnel

Factual Information

History of Flight

Approach-IFR missed approach

Air traffic event (Defining event)

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.

Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Embraer	Registration:	N377SK
Model/Series:	EMB-135KL	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	145579
Landing Gear Type:	Tricycle	Seats:	37
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Turbo jet
Airframe Total Time:		Engine Manufacturer:	ROLLS-ROYC
ELT:	Installed, not activated	Engine Model/Series:	AE 3007A1P
Registered Owner:	CHAUTAUQUA AIRLINES INC	Rated Power:	8338 Lbs thrust
Operator:	CHAUTAUQUA AIRLINES INC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:	CHAUTAUQUA AIRLINES	Operator Designator Code:	CHQA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ORD	Distance from Accident Site:	
Observation Time:	10:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3200 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 18000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.77 inches Hg	Temperature/Dew Point:	25°C / 19°C
Precipitation and Obscuration:			
Departure Point:	La Crosse, WI (LSE)	Type of Flight Plan Filed:	IFR
Destination:	Chicago, IL (ORD)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Air traffic control;Class B

Airport Information

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

Wreckage and Impact Information

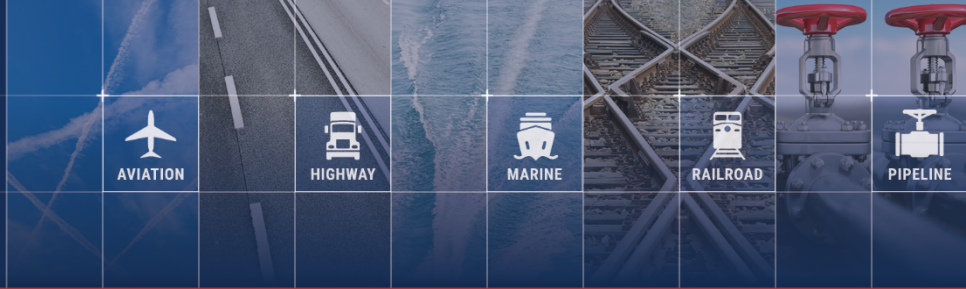
Crew Injuries:	3 None	Aircraft Damage:	None
Passenger Injuries:	36 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	39 None	Latitude, Longitude:	41.889591,-87.62088(est)

Administrative Information

Investigator In Charge (IIC):	Koschig, Betty
Additional Participating Persons:	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
Original Publish Date:	November 7, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=81436

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).



Aviation Investigation Final Report

Location:	Chicago, Illinois	Incident Number:	OPS111A819
Date & Time:	August 8, 2011, 11:00 Local	Registration:	N845HK
Aircraft:	Embraer EMB-145LR	Aircraft Damage:	None
Defining Event:	Air traffic event	Injuries:	45 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

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Findings

Personnel issues	Incorrect action selection - ATC personnel
Personnel issues	Understanding/comprehension - ATC personnel

Factual Information

History of Flight

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

Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Embraer	Registration:	N845HK
Model/Series:	EMB-145LR	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
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-ROYC
ELT:	Installed, not activated	Engine Model/Series:	AE3007 SER
Registered Owner:	TRANS STATES AIRLINES LLC	Rated Power:	7200 Horsepower
Operator:	TRANS STATES AIRLINES LLC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:	TRANS STATES AIRLINES	Operator Designator Code:	RAIA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ORD	Distance from Accident Site:	
Observation Time:	10:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3200 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 18000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.77 inches Hg	Temperature/Dew Point:	25°C / 19°C
Precipitation and Obscuration:			
Departure Point:	Chicago, IL (ORD)	Type of Flight Plan Filed:	IFR
Destination:	Moline, IL (MLI)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Air traffic control;Class B

Airport Information

Airport:	Chicago O'Hare International ORD	Runway Surface Type:	
Airport Elevation:	672 ft msl	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:	41.889591,-87.62088(est)

Administrative Information

Investigator In Charge (IIC):	Koschig, Betty
Additional Participating Persons:	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
Original Publish Date:	November 7, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=81436

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