

NATIONAL TRANSPORTATION SAFETY BOARD PILOT/OPERATOR AIRCRAFT ACCIDENT/INCIDENT REPORT

This form to be used for reporting civil and public aircraft accidents and incidents

BASIC INFORMATION

Accident/Incident Location

Nearest City/Place: Toledo Bend Reservoir State: Texas
 ZIP: 75948 Country: United States of America
 Latitude: 31.2293 N Longitude: 93.6345 W
(Enter in decimal degrees or degrees:minutes:seconds)

Accident/Incident Date/Time

Date: 08/22/2014 Local Time: 18:00
mm/dd/yyyy
 Time Zone: Central

Collision with Other Aircraft: ☐ Midair ☐ On-ground ☒ None

AIRCRAFT INFORMATION

Registration Number: N421YX
 Manufacturer: Embraer
 Model: 170-200LR
 Serial Number: 17000386
 Year of Manufacture: 2014
 Amateur-Built: ☐ Yes ☒ No If Yes: ☐ Kit/Plans ☐ Original Design Make: _____

☒ IFR-Equipped and Certified
☐ Commercial Space Flight
☐ Unmanned Aircraft

Maximum Gross Weight: 85,870 lbs
 Weight at Time of Accident/Incident: _____ lbs
 Number of Seats: 76 Flight Crew Seats: 2
 Cabin Crew Seats: 2 Passenger Seats: _____
 Number of Engines: 2

Category of Aircraft
☒ Airplane
☐ Balloon
☐ Blimp/Dirigible
☐ Glider
☐ Gyroplane
☐ Helicopter
☐ Powered Lift
☐ Rocket
☐ Ultralight
☐ Unknown

Type of Airworthiness Certificate
(Check all that apply)
Standard
☐ Normal
☐ Aerobatic
☐ Balloon
☐ Commuter
☒ Transport
☐ Utility
☐ Certificate of Authorization or Waiver (COA)
☐ None
Special
☐ Restricted
☐ Limited
☐ Provisional
☐ Special Flight
☐ Experimental
☐ Special Light-Sport
☐ Experimental Light-Sport
☐ Unknown

Landing Gear
(Check all that apply)
☒ Retractable
☒ Tricycle ☐ Tailwheel
☐ Amphibian ☐ High Skid
☐ Emergency Float ☐ Skid
☐ Float ☐ Ski
☐ Hull ☐ Ski/Wheel
☐ Other Launch/Recovery System
☐ None ☐ Unknown

Engine Type *(Select one)*
☐ Reciprocating ☐ Liquid Rocket
☐ Turbo Shaft ☐ Solid Rocket
☐ Turbo Prop ☐ Hybrid Rocket
☐ Turbo Jet ☐ None
☒ Turbo Fan ☐ Unknown
☐ Electric
Fuel System Type *(Reciprocating)*
☐ Carburetor ☐ Fuel-Injected

Engine	Engine Manufacturer	Engine Model/Series	Manufacturer's Serial Number	Date of Mfg. <i>mm/dd/yyyy</i>	Rated Power ☐ Horsepower or ☒ lbs of Thrust	Total Time (hours)	Time Since: Inspection (hours)	Overhaul (hours)
Eng. 1	General Electric	CF-34/8E5	193963	11/01/2013	14510	1581		
Eng. 2	General Electric	CF-34/8E5	193968	11/19/2013	14510	1581		
Eng. 3								
Eng. 4								

Last Inspection Type

☐ 100-Hour ☒ Continuous Airworthiness
☐ AAIP ☐ Conditional Inspection
☐ Annual ☐ Unknown

Date Last Inspection: 08/17/2014
mm/dd/yyyy

Airframe Total Time: 1581 hrs
 hours measured at *(Select one)*
☒ Last Inspection ☐ Time of Accident/Incident

Type of Maintenance Program *(Select one)*

☐ Annual
☐ Conditional (Amateur-built only)
☐ Manufacturer's Inspection Program
☐ Other Approved Inspection Program (AAIP)
☒ Continuous Airworthiness
☐ Other, specify: _____

Description of Fire Extinguishing System

☐ None
☒ Specify: Halon

Propeller 1

☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____
 Model: _____

Propeller 2

☐ Fixed Pitch
☐ Controllable Pitch
☐ Ground Adjustable

Manufacturer: _____
 Model: _____

ELT Installed: ☒ Yes ☐ No

If Yes:

ELT Manufacturer: ELTA
 Model or Part No.: Artex
 TSO No.: ☐ C91 (121.5 MHz) ☐ C91a (121.5 MHz)
☐ C126 (406 MHz)

Was ELT still mounted in aircraft? ☒ Yes ☐ No

Was ELT still connected to antenna? ☒ Yes ☐ No

Did ELT Activate? ☐ Yes ☒ No

If activated:

Did ELT Aid in Locating Aircraft: ☐ Yes ☒ No

If not activated:

Indicate Reason: ☐ Impact Damage
☐ Fire Damage
☐ Battery Expired/Damaged
☐ Unknown

Additional Equipment *(Check all that apply)*

☐ ADS-B
☐ Airframe Parachute
☒ Angle of Attack Indicator
☒ Autopilot
☒ Data Recorder
☐ Electronic Flight Bag or Handheld Device
☒ Electronic Multifunction Display
☒ Electronic Primary Flight Display
☐ Handheld GPS
☐ Heads Up Display
☐ Onboard Weather
☐ Satellite Tracking Device
☒ Stall Warning System
☐ Video Recording Device
☐ Other, Specify: _____

OWNER/OPERATOR INFORMATION**Registered Aircraft Owner**Name: Republic AirlineFractional Ownership Aircraft: ☐ Yes ☒ NoCity: IndianapolisState: Indiana ZIP: 46268Country: United States of America**Operator of Aircraft**☒ Same As Registered Owner☒ Same Address as Registered OwnerName: Republic AirlineDoing Business As: American Eagle

Air Carrier/Operator Designator (4 Character Code): _____

City: IndianapolisState: Indiana ZIP: 46268Country: United States of America**Operating Certificates Held**

(Check all that apply)

- ☐ None
☒ Flag Carrier Operating Certificate (FAR 121)
☐ Supplemental
☐ Air Cargo
☐ Foreign Air Carriers (FAR 129)
☐ Rotorcraft External Load (FAR 133)
☐ Commuter Air Carrier (FAR 135)
☐ On-Demand Air Taxi (FAR 135)
☐ Commercial Air Tour (FAR 136)
☐ Agricultural Aircraft (FAR 137)
☐ Pilot School (FAR 141)
☐ Certificate of Authorization or Waiver (COA)
☐ Commercial Space Transportation
Experimental Permit
☐ Commercial Space Transportation License
☐ Other Operator of Large Aircraft

Regulation Flight Conducted Under

- ☐ FAR 91 ☐ FAR 129 ☐ FAR 415
☐ FAR 103 ☐ FAR 133 ☐ FAR 431
☒ FAR 121 ☐ FAR 135 ☐ FAR 435
☐ FAR 125 ☐ FAR 137 ☐ FAR 437
- ☐ FAR 91 Special Flight
☐ Non-US, Commercial
☐ Non-US, Non-commercial

☐ Public Aircraft (Select one)

- ☐ Armed Forces
☐ Federal
☐ State
☐ Local
☐ Unknown

Revenue Operation for FAR 121, 125, 129, 135

(Select one for each group)

- ☒ Scheduled or Commuter ☒ Domestic
☐ Non-Scheduled or Air Taxi ☐ International
- ☒ Passenger
☐ Cargo
☐ Mail Contract Only

Purpose of Flight for FAR 91, 103, 133, 137

(Select one)

- ☐ Aerial Application ☐ Firefighting ☐ Unknown
☐ Aerial Observation ☐ Flight Test
☐ Air Drop ☐ Glider Tow
☐ Air Race/Show ☐ Instructional
☐ Banner Tow ☐ Other Work Use
☐ Business ☐ Personal
☐ Executive/Corporate ☐ Positioning
☐ External Load ☐ Skydiving
☐ Ferry

Revenue Sightseeing Flight☐ Yes ☒ No**Air Medical Flight**☐ Yes ☒ No**AIRPORT INFORMATION** (Fill in if accident/incident occurred on approach, landing, takeoff, departure, or within 3 miles of an airport)

Airport Name: _____

Airport Identifier: _____

Proximity to Airport: ☐ Off Airport/Airstrip ☐ On Airport/Airstrip ☐ N/A

Distance From Airport Center: _____ sm

Direction From Airport: _____ degrees true

Airport Elevation: _____ ft. msl

Runway Information

Runway ID: _____ (L/R/C) Length: _____ ft Width: _____ ft

Runway/Landing Surface (Check all that apply)

- ☐ Asphalt ☐ Grass/Turf ☐ Macadam ☐ Water
☐ Concrete ☐ Gravel ☐ Metal/Wood ☐ Unknown
☐ Dirt ☐ Ice ☐ Snow

Condition of Runway/Landing Surface (Check all that apply)

- ☐ Dry ☐ Snow-Compacted ☐ Water-Calm
☐ Holes ☐ Snow-Crusted ☐ Water-Choppy
☐ Ice Covered ☐ Snow-Dry ☐ Water-Glassy
☐ Rough ☐ Snow-Wet ☐ Wet
☐ Rubber Deposits ☐ Soft
☐ Slush-Covered ☐ Vegetation ☐ Unknown

Approach/Departure Segment (Select one)

- ☐ Taxi ☐ VFR Departure ☐ On Instrument Approach ☐ Downwind ☐ Low Approach
☐ Takeoff ☐ IFR Departure Procedure/Clearance ☐ Landing ☐ Base ☐ Go Around
☐ Initial Climb ☐ Final ☐ Aborted Landing (after touchdown)
☐ Crosswind ☐ Unknown

IFR Approach (Check all that apply)

- ☐ None
☐ ADF/NDB ☐ PAR ☐ MLS ☐ Practice
☐ SDF ☐ Sidestep ☐ LDA ☐ GPS
☐ VOR/TVOR ☐ ILS ☐ ASR ☐ Visual
☐ VOR/DME ☐ Localizer Only ☐ Contact
☐ TACAN ☐ LOC-back course ☐ Circling
☐ RNAV ☐ Unknown

VFR Approach (Check all that apply)

- ☐ None
☐ Traffic Pattern ☐ Stop and Go
☐ Straight-In ☐ Touch and Go
☐ Valley/Terrain Following ☐ Simulated Forced Landing
☐ Go Around ☐ Forced Landing
☐ Full Stop ☐ Precautionary Landing
☐ Unknown

"FLIGHT CREWMEMBER 1" INFORMATION

"Flight Crewmember 1" Responsibilities at the Time of Accident/Incident

☒ Pilot ☐ Co-Pilot ☐ Student Pilot ☐ Flight Instructor ☐ Check Pilot ☐ Flight Engineer ☐ Other Flight Crew

"Flight Crewmember 1" was pilot flying ☐ Yes ☒ No

"Flight Crewmember 1" Identification

First Name: Lyndsey City of Residence: Lanesville
Middle Initial: _____ State: Indiana ZIP: 47136
Last Name: Weiland Country: United States of America
Age at time of Accident/Incident: 43 Date of Birth: 1971 mm/dd/yyyy
Certificate Number: _____

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☒ Left ☐ Front ☐ Unknown ☐ Right ☐ Rear ☐ Center ☐ Single	Restraint Type Available ☐ None ☐ Lap only ☐ 3-point ☐ 4-point ☒ 5-point ☐ Unknown Used ☐ None ☐ Lap only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☒ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer			

Principal Occupation ☒ Pilot ☐ Other ☐ Unknown	Medical Certificate ☐ None ☐ Class 3 ☒ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown	Medical Certificate Validity ☒ Without limitations/waivers ☐ Unknown ☐ With limitations/waivers ☐ N/A ☐ Special Issuance	Date of Last Medical <u>04/17/2014</u> mm/dd/yyyy
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Medical Certificate Limitations

None

Medical Certificate Special Issuance

N/A

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks:

07/24/2014
mm/dd/yyyy

Flight Review Aircraft

Make: Embraer

Model: 170

Airplane Rating(s) (Choose all that apply) ☐ None ☐ Single-Engine Land ☐ Single-Engine Sea ☒ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) (Choose all that apply) ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) (Choose all that apply) ☐ None ☒ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) (Choose all that apply) ☐ None ☐ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☐ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
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Type Ratings

EMB-145
ERJ-170/190

Student Endorsements (Include dates)

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time		68								
Pilot in Command (PIC)										
Time as Instructor										
This Make/Model										
Last 90 Days	86	68	0	86						
Last 30 Days	68	68	0	68						
Last 24 Hours	3	3	0	3						

“FLIGHT CREWMEMBER 2” INFORMATION

“Flight Crewmember 2” Responsibilities at the Time of Accident/Incident

☒ Pilot
 ☐ Co-Pilot
 ☐ Student Pilot
 ☐ Flight Instructor
 ☐ Check Pilot
 ☐ Flight Engineer
 ☐ Other Flight Crew

“Flight Crewmember 2” was pilot flying ☐ Yes ☐ No

“Flight Crewmember 2” Identification

First Name: Charles City of Residence: Indianapolis
 Middle Initial: M State: Indiana ZIP: 46250
 Last Name: Pynch Country: United States of America
 Age at time of Accident/Incident: 31 Date of Birth: 1983 mm/dd/yyyy
 Certificate Number:

Degree of Injury ☒ None ☐ Fatal ☐ Minor ☐ Unknown ☐ Serious	Seat Occupied ☐ Left ☐ Front ☐ Unknown ☒ Right ☐ Rear ☐ Center ☐ Single	Restraint Type <table> <tr> <th>Available</th> <th>Used</th> </tr> <tr> <td>☐ None</td> <td>☐ None</td> </tr> <tr> <td>☐ Lap only</td> <td>☐ Lap only</td> </tr> <tr> <td>☐ 3-point</td> <td>☒ 3-point</td> </tr> <tr> <td>☐ 4-point</td> <td>☐ 4-point</td> </tr> <tr> <td>☒ 5-point</td> <td>☐ 5-point</td> </tr> <tr> <td>☐ Unknown</td> <td>☐ Unknown</td> </tr> </table>	Available	Used	☐ None	☐ None	☐ Lap only	☐ Lap only	☐ 3-point	☒ 3-point	☐ 4-point	☐ 4-point	☒ 5-point	☐ 5-point	☐ Unknown	☐ Unknown	Inflatable Restraints ☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown
Available	Used																
☐ None	☐ None																
☐ Lap only	☐ Lap only																
☐ 3-point	☒ 3-point																
☐ 4-point	☐ 4-point																
☒ 5-point	☐ 5-point																
☐ Unknown	☐ Unknown																
Pilot Certificate(s) (Check all that apply) ☐ None ☒ Flight Instructor ☐ Commercial ☐ US Military ☐ Private ☐ Recreational ☒ Airline Transport ☐ Foreign ☐ Student ☐ Sport ☐ Flight Engineer																	
Principal Occupation ☒ Pilot ☐ Other ☐ Unknown	Medical Certificate ☐ None ☐ Class 3 ☒ Class 1 ☐ Driver's License (Sport Pilot only) ☐ Class 2 ☐ Unknown	Medical Certificate Validity ☐ Without limitations/waivers ☐ Unknown ☒ With limitations/waivers ☐ N/A ☐ Special Issuance	Date of Last Medical <u>12/13/2013</u> mm/dd/yyyy														

Medical Certificate Limitations

Must wear corrective lenses

Medical Certificate Special Issuance

N/A

Date of Last Flight Review or Equivalent, Including FAR 121/135 Checks: 01/19/2014
 mm/dd/yyyy

Flight Review Aircraft

Make: Embraer
 Model: 170

Airplane Rating(s) (Check all that apply) ☐ None ☐ Single-Engine Land ☐ Single-Engine Sea ☒ Multiengine Land ☐ Multiengine Sea	Other Aircraft Rating(s) (Check all that apply) ☐ None ☐ Airship ☐ Balloon ☐ Glider ☐ Gyroplane ☐ Helicopter ☐ Powered Lift	Instrument Rating(s) (Check all that apply) ☐ None ☒ Airplane ☐ Helicopter ☐ Powered Lift	Instructor Rating(s) (Check all that apply) ☐ None ☒ Airplane Single-Engine ☐ Airplane Multi-Engine ☐ Gyroplane ☐ Powered Lift ☒ Instrument Airplane ☐ Instrument Helicopter ☐ Helicopter ☐ Glider ☐ Sport
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Type Ratings

ERJ-170/190

Student Endorsements (Include dates)

Flight Time (Enter appropriate number of hours in each box)	All Aircraft	This Make & Model	Airplane Single Engine	Airplane Multiengine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	5,030	4,002	830	4,200						
Pilot in Command (PIC)	798	0	746	51						
Time as Instructor	291	0	291	0						
This Make/Model										
Last 90 Days	224	223	1	223						
Last 30 Days	75	75	0	75						
Last 24 Hours	3	3	0	3						

ADDITIONAL FLIGHT CREWMEMBERS (Exclusive of cabin crew, complete the following information)							
Crew Name and Address				Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____				☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer				Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
Crew Name and Address				Seat Occupied		Injury	
First Name: _____ City of Residence: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____				☐ Left ☐ Front ☐ Center ☐ Rear ☐ Right ☐ Single ☐ Unknown		☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	
Pilot Certificate(s) (Check all that apply) ☐ None ☐ Flight Instructor ☐ Private ☐ Recreational ☐ Student ☐ Sport ☐ Commercial ☐ US Military ☐ Airline Transport ☐ Foreign ☐ Flight Engineer				Restraint Type: Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown		Inflatable Restraints ☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	
Type Rating/Endorsement for Accident/Incident Aircraft? ☐ Yes ☐ No		Total Flight Time at the Time of this Accident/Incident: _____ hrs					
PASSENGER(S) / OTHER PERSONNEL (Include cabin crew; continue on separate sheet if necessary)							
Name and Address		Seat	Injury	Restraint Type		Inflatable Restraints	Age
First Name: <u>Jeremy</u> City: <u>Michigantown</u> Middle Initial: <u>D</u> State: <u>IN</u> ZIP: <u>46057</u> Last Name: <u>Smith</u> Country: <u>United States of A</u> ☒ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☒ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown	Used ☒ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: <u>Liliana</u> City: <u>Hebron</u> Middle Initial: _____ State: <u>KY</u> ZIP: <u>41048</u> Last Name: <u>Calliman</u> Country: <u>United States of A</u> ☒ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☒ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☒ 4-point ☐ 5-point ☐ Unknown	Used ☒ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☒ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown
First Name: _____ City: _____ Middle Initial: _____ State: _____ ZIP: _____ Last Name: _____ Country: _____ ☐ Crew ☐ Passenger ☐ Other		☐ Left ☐ Center ☐ Right ☐ Unknown Row: _____	☐ None ☐ Minor ☐ Serious ☐ Fatal ☐ Unknown	Available ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	Used ☐ None ☐ Lap Only ☐ 3-point ☐ 4-point ☐ 5-point ☐ Unknown	☐ Not Installed ☐ Installed ☐ Not Deployed ☐ Deployed ☐ Unknown	☐ Under 5 years If Under 5, ☐ Child Restraint ☐ Lap-Held ☐ Unknown

FLIGHT ITINERARY INFORMATION

Last Departure Point Airport ID: <u>KORD</u> City: <u>Chicago</u> State: <u>Illinois</u> Country: <u>United States of America</u>	Time of Departure Time: <u>15:49</u> Time Zone: <u>Central</u>	Destination Airport ID: <u>KIAH</u> City: <u>Houston</u> State: <u>Texas</u> Country: <u>United States of America</u>	Type Flight Plan Filed ☐ None ☐ VFR/IFR ☐ Company VFR ☒ IFR ☐ Military VFR ☐ Unknown ☐ VFR Activated? ☒ Yes ☐ No ☐ Unknown
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Type of ATC Clearance/Service (Check all that apply) ☐ None ☐ Special VFR ☐ Special IFR ☐ VFR Flight Following ☐ Cruise ☐ VFR ☒ IFR ☐ VFR On Top ☐ Traffic Advisory ☐ Unknown / NA			
Airspace where the accident/incident occurred (Check all that apply) ☒ Class A ☐ Class G ☐ Military Operations Area (MOA) ☐ Special ☐ Class B ☐ Demo Area ☐ Airport Advisory Area ☐ Air Traffic Control Area ☐ Class C ☐ Warning Area ☐ Jet Training Area ☐ Unknown ☐ Class D ☐ Prohibited Area ☐ TRSA ☐ Class E ☐ Restricted Area ☐ FAR 93			Altitude of In-Flight Occurrence: _____ ft msl

WEATHER INFORMATION AT THE ACCIDENT/INCIDENT SITE

Source of Pilot Weather Information (Check all that apply) ☒ National Weather Service ☒ Company ☐ Flight Service Station ☐ Military ☐ TV/Radio ☐ Internet ☐ Automated Report ☐ None ☐ Commercial Weather Service (DUATS) ☐ Unknown ☐ On-Board Weather	Weather Observation Facility Facility ID: _____ Observation Time: _____ Time Zone: _____ Distance from Accident Site: _____ nm Direction from Accident Site: _____ degrees true
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Basic Conditions ☒ VMC ☐ IMC ☐ Unknown	Light Condition ☐ Dawn ☐ Dusk ☐ Dark Night ☐ Unknown ☒ Day ☐ Night ☐ Bright Night
Sky/Lowest Cloud Condition ☒ Clear ☐ Thin Broken ☐ Few ☐ Thin Overcast ☐ Partial Obscuration ☐ Unknown ☐ Scattered Lowest Cloud Condition Height _____ ft agl	Ceiling ☒ None (Clear) ☐ Obscured ☐ Broken ☐ Indefinite ☐ Overcast ☐ Unknown Ceiling Height _____ ft agl
Temperature: _____ (C) or _____ (F) Dew Point: _____ (C) or _____ (F) Altimeter Setting: _____ in. Hg or _____ MB	

Wind Direction ☐ Variable -OR- Direction: _____ degrees true	Wind Speed ☐ Calm ☐ Light and Variable -OR- Speed: _____ kts	Wind Gusts ☐ Not Gusting -OR- Speed: _____ kts	Visibility _____ miles RVR: _____ feet RVV: _____ miles Density Altitude: _____ ft
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Intensity of Precipitation ☐ Light ☐ Moderate ☐ Heavy ☐ N/A ☐ Unknown	Type of Precipitation (Check all that apply) ☐ None ☐ Drizzle ☐ Freezing Rain ☐ Rain ☐ Ice Pellets ☐ Snow Shower ☐ Snow ☐ Snow Pellets ☐ Ice Pellets Shower ☐ Hail ☐ Snow Grains ☐ Freezing Drizzle ☐ Rain Showers ☐ Ice Crystals	Restriction to Visibility (Check all that apply) ☐ None ☐ Fog ☐ Blowing Dust ☐ Ground Fog ☐ Blowing Sand ☐ Haze ☐ Blowing Snow ☐ Ice Fog ☐ Blowing Spray ☐ Smoke ☐ Dust ☐ Unknown
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Icing Forecast Amount Type ☐ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown	Icing Actual Amount Type ☐ None ☐ N/A ☐ Trace ☐ Rime ☐ Light ☐ Clear ☐ Moderate ☐ Mixed ☐ Severe ☐ Unknown ☐ Unknown	Turbulence Type (Check all that apply) Severity ☐ None ☐ Light ☐ Clear Air ☐ Moderate ☐ Terrain-Induced ☐ Severe ☐ Convective Turbulence ☐ Extreme
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NOTAMs (D and FDC), AIRMETs, SIGMETs, PIREPs in effect at the time of the accident/incident:

Weather, Fuel Plan and release attached to this report

DAMAGE TO AIRCRAFT AND OTHER PROPERTY**Aircraft Damage**

- ☒ None ☐ Substantial
☐ Minor ☐ Destroyed
 ☐ Unknown

Aircraft Fire

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Fire at Unknown Time
☐ On-Ground ☐ Unknown

Aircraft Explosion

- ☒ None ☐ Both Ground and In-Flight
☐ In-Flight ☐ Explosion at Unknown Time
☐ On-Ground ☐ Unknown

Description of Damage to Aircraft and Other Property *(Use additional sheet if necessary)*

No damage to aircraft.

NARRATIVE HISTORY OF FLIGHT *(Please type or print in ink)*

Describe what occurred in chronological order, including circumstances leading to and nature of accident/incident. Describe terrain and include wreckage distribution sketch if pertinent. Attach extra sheets if needed. State departure time and and location, services obtained, and intended destination. Provide as much detail as possible.

The aircraft encountered wake turbulence at cruise altitude (34,000) before descending on the arrival to IAH. The crew was in smooth air with the seat belt sign off. The wake was encountered for less than 5 seconds. Then the air was smooth again. The aircraft banked to the right sharply but smoothly about 15 -20 degrees. The FA's were both standing in the rear galley.

The wake was from what the crew believes was a British Airways B-777. (Speed Bird 119). The crew saw an aircraft that appeared to be more than 4000 ft above around 20 minutes before the wake encounter. It was over taking the crew. We did not see it after a few minutes because of the distance and loss of contrails produced by the Boeing. It is the crew's belief that Houston Center descended the 777 in front of the aircraft's altitude. After the encounter the crew heard ATC talking to Speed Bird 119 and they concluded that the wake must have came from them because they were a few thousand feet below the aircraft's altitude, on the same arrival. It should be noted this conclusion is an assumption and the crew is not positive that the wake was from 777.

RECOMMENDATION (How could this accident/incident have been prevented?)

Operator/Owner Safety Recommendation

Had the flight attendants been secured in their seats, the wake turbulence would not have caused them to fall. Had ATC not descended a 777 in front of the aircraft, it is possible the aircraft would not have hit the wake turbulence.

MECHANICAL MALFUNCTION/FAILURE (If more space is needed, continue on separate sheet)Was there Mechanical Malfunction/Failure? ☐ Yes ☒ No*(If yes, list the name of the part, manufacturer, part no., serial no., and describe the failure.)*Total Time/Cycles
On Part

_____ Hours

_____ Cycles

Time Since This Part
Inspected/Overhauled

_____ Hours

FUEL & SERVICES INFORMATION

Fuel on Board at Last Takeoff

(Convert from pounds, as necessary)

1970 _____ Gallons

Fuel Type

☐ 80/87☐ 115/145☐ Jet B☐ Other, specify _____☐ 100 Low Lead☒ Jet A☐ JP8☐ 100/130☐ Jet A-1☐ Automotive

Other Services, if Any, Prior to Departure

EVACUATION OF AIRCRAFTWas an emergency evacuation of the aircraft performed? ☐ Yes ☒ No

Method of Exit – Describe how the occupants exited and how many occupants evacuated each location

OTHER AIRCRAFT – COLLISION (If air or ground collision occurred, complete this section for other aircraft)

Aircraft Registration Number

Manufacturer: _____

Model: _____

Damage to Other Aircraft

☐ Destroyed☐ Minor☐ Substantial☐ None

Registered Owner of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

Pilot of Other Aircraft

Name: _____

City: _____

State: _____ ZIP: _____

Country: _____

ADDITIONAL INFORMATION (Please type or print in ink)

Use this space if additional space is needed for any answers.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Date of this Report

09/04/2014
mm/dd/yyyy

Name of Pilot/Operator: _____

Signature: _____

-- or --

☐ Check here to electronically sign this document

If a Person Other than Pilot/Operator is Filing Report

Name: Lee Hayes

Title: Director of Safety

Signature: _____

-- or --

☒ Check here to electronically sign this document

FOR NTSB USE ONLY

NTSB Accident/Incident No.
CEN14CA455

Reviewed by NTSB Regional Office
NTSB Central Region

Name of Investigator
Thomas J Latson, Jr.

Date Report Received
9-4-2014

49 CFR 830.5 (a) or (b) – In order to “Immediately Notify” the NTSB please fill-in-the-blanks on the questions below and use one of the three options below to contact the NTSB ROC in Washington, DC which operates 24/7:

1. Immediately e-mail to the NTSB Response Operations Center at: [REDACTED] _
2. or, immediately fax to the NTSB ROC at: [REDACTED] -Fax
3. or, immediately make a voice call to the NTSB ROC at: [REDACTED] -Voice

Please include your Contact info: (phone, cell phone, and e-mail address)

49 CFR 830.6 Information to be given in notification.

The notification required in §830.5 shall contain the following information, if available:

(a) Type, nationality, and registration marks of the aircraft;

Embraer-170-200LR, US, N421YX

(b) Name of owner, and operator of the aircraft;

Republic Airlines and Republic Airlines

(c) Name of the pilot-in-command;

Captain Lyndsey Weiland

(d) Date and time of the accident;

August 22, approximately 23:00 Z

(e) Last point of departure and point of intended landing of the aircraft;

Chicago O’Hare International Airport (KORD) to Houston Bush International Airport (KIAH)

(f) Position of the aircraft with reference to some easily defined geographical point;

Before descent into IAH at FL340, possibly over Louisiana.

(g) Number of persons aboard, number killed, and number seriously injured;

54 persons on board, 0 killed, 1 crewmember seriously injured

(h) Nature of the accident, the weather and the extent of damage to the aircraft, so far as is known; and

Aircraft seemed to encounter wake turbulence at cruise altitude (34,000) before descending on the arrival to IAH. The crew stated they were in smooth air with the seat belt sign off. The wake was encountered for less than 5 seconds. Then the air was smooth again. In those 5 seconds the aircraft banked to the right sharply but smoothly about 15 -20 degrees. The FA's were both standing in the rear galley. The weather was not reported in the initial reports and there was no damage to the aircraft.

(i) A description of any explosives, radioactive materials, or other dangerous articles carried.

None