



# Aviation Investigation Final Report

<b>Location:</b>	New York, New York	<b>Accident Number:</b>	DCA23LA114
<b>Date &amp; Time:</b>	January 2, 2023, 16:35 Local	<b>Registration:</b>	N928XJ (A1); EI-EJM (A2)
<b>Aircraft:</b>	BOMBARDIER INC CL-600-2D24 (A1); Airbus A330 (A2)	<b>Aircraft Damage:</b>	Substantial (A1); Minor (A2)
<b>Defining Event:</b>	Ground collision	<b>Injuries:</b>	80 None (A1); 259 None (A2)
<b>Flight Conducted Under:</b>	Part 121: Air carrier - Scheduled (A1); Part 129: Foreign (A2)		

## Analysis

ITA Airways flight 610, an Airbus A330-202, EI-EJM, collided with Endeavor Air flight 4994 (d.b.a. Delta Air Lines), a Bombardier CRJ-900LR, N928XJ, while taxiing after landing at John F. Kennedy International Airport (JFK), Queens, New York. There were no injuries to the passengers and crew onboard either airplane, and the Endeavor Air airplane received substantial damage. Endeavor Air flight 4994 was operating under 14 *Code of Federal Regulations* Part 121 as a regularly scheduled passenger flight, and ITA Airways flight 610 was operating under 14 *Code of Federal Regulations* Part 129 as a scheduled international passenger flight.

### Endeavor Air flight 4994

Endeavor Air flight 4994 landed on runway 22L at JFK and proceeded on taxiway juliet, then to taxiway alpha, and then initiated a turn onto taxiway KF into the ramp area. The Endeavor Air flight crew reported being cleared to enter the Terminal 4 ramp and taxi to gate B44. Ramp control advised the flight crew to give way to traffic parking at gate B42 before parking at their assigned gate. The Endeavor Air flight crew moved forward onto taxiway KF, and the flight crew stated they pulled as far forward as they could into the ramp area but could not pull any further forward due to an airplane awaiting to park at another gate. The flight crew remained stationary and continued to monitor ground and ramp frequencies while waiting to park at their assigned gate.

## ITA Airways flight 610

ITA Airways flight 610 landed on runway 22L and taxied to the ramp area using taxiway alpha. The flight crew reported they saw the Endeavor Air airplane turning onto taxiway KF and recalled the Endeavor Air airplane stopping as soon as it entered the taxiway. As ITA Airways proceeded on taxiway alpha, the captain, who was the pilot monitoring, noticed the tail of the Endeavor Air airplane was close to taxiway alpha and reduced ground speed. The ITA Airways flight crew stated they presumed they were clear of the Endeavor Air airplane since their airplane was taxiing on the centerline of taxiway alpha.

The Endeavor Air flight crew reported feeling a severe shaking which prompted them to look out of the left side of the airplane where they observed that the ITA Airways airplane was missing its right winglet. This prompted the Endeavor Air flight crew to conclude their airplane may have been struck by ITA Airways airplane and they instructed air traffic control (ATC) that their airplane needed to remain stationary until the damages were confirmed and an exterior check could be performed.

ITA Airways flight 610 proceeded to their gate. Post accident inspection revealed substantial damage to the right elevator and horizontal stabilizer structure of Endeavor Air's airplane, and minor damage to the right winglet of ITA Airways' airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

ITA Airways flight crew's incorrect evaluation of the clearance between their airplane and another airplane stopped on an adjoining taxiway.

### Findings

<b>Environmental issues (A1)</b>	Positioning/available space - Compliance w/ procedure
<b>Environmental issues (A2)</b>	Dark - Awareness of condition
<b>Personnel issues (A2)</b>	Decision making/judgment - Flight crew

## Factual Information

### History of Flight

Taxi-from runway (A1)	Ground collision (Defining event)
Taxi-from runway (A2)	Ground collision

### Pilot Information (A1)

Certificate:	Airline transport; Commercial; Flight instructor	Age:	30,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	June 30, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 5, 2022
Flight Time:	3391 hours (Total, all aircraft), 1302 hours (Total, this make and model), 2140 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### Co-pilot Information (A1)

Certificate:	Airline transport; Commercial; Military	Age:	31,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	September 20, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 15, 2022
Flight Time:	1111 hours (Total, all aircraft), 160 hours (Total, this make and model), 17 hours (Pilot In Command, all aircraft), 169 hours (Last 90 days, all aircraft), 67 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Pilot Information (A2)

<b>Certificate:</b>	Airline transport	<b>Age:</b>	62,Male
<b>Airplane Rating(s):</b>	Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	July 23, 2022
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	January 21, 2022
<b>Flight Time:</b>	20400 hours (Total, all aircraft), 8500 hours (Total, this make and model), 14900 hours (Pilot In Command, all aircraft), 230 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

## Co-pilot Information (A2)

<b>Certificate:</b>	Airline transport	<b>Age:</b>	44,Male
<b>Airplane Rating(s):</b>	Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	August 2, 2022
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	November 29, 2022
<b>Flight Time:</b>	8700 hours (Total, all aircraft), 66 hours (Total, this make and model), 105 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

## Other flight crew Information (A2)

<b>Certificate:</b>	Airline transport	<b>Age:</b>	
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	13480 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information (A1)

<b>Aircraft Make:</b>	BOMBARDIER INC	<b>Registration:</b>	N928XJ
<b>Model/Series:</b>	CL-600-2D24 CRJ-900LR	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2008	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Transport	<b>Serial Number:</b>	15190
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	95
<b>Date/Type of Last Inspection:</b>	January 2, 2023 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	84500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo fan
<b>Airframe Total Time:</b>	33167 Hrs at time of accident	<b>Engine Manufacturer:</b>	GE
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	CF34-8C5
<b>Registered Owner:</b>	DELTA AIR LINES INC	<b>Rated Power:</b>	14510 Lbs thrust
<b>Operator:</b>	Endeavor Airlines	<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>	Delta Connection	<b>Operator Designator Code:</b>	REXA

### Aircraft and Owner/Operator Information (A2)

<b>Aircraft Make:</b>	Airbus	<b>Registration:</b>	EI-EJM
<b>Model/Series:</b>	A330 202	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1308
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	271
<b>Date/Type of Last Inspection:</b>	Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	507063 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo fan
<b>Airframe Total Time:</b>	40423 Hrs at time of accident	<b>Engine Manufacturer:</b>	general electric
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	CF6-80E
<b>Registered Owner:</b>	MDCA 10 Ltd	<b>Rated Power:</b>	
<b>Operator:</b>	Italia Trasporto Aereo Spa	<b>Operating Certificate(s) Held:</b>	Foreign air carrier (129)
<b>Operator Does Business As:</b>	ITA Airways	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	KJFK	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	17:51 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 3700 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	180°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Temperature/Dew Point:</b>	9°C / 7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Romulus, MI (KDTW) (A1); Fiumicino, OF (LIRF) (A2)	<b>Type of Flight Plan Filed:</b>	IFR (A1); IFR (A2)
<b>Destination:</b>	New York, NY (A1); New York, NY (KJFK) (A2)	<b>Type of Clearance:</b>	IFR (A1); IFR (A2)
<b>Departure Time:</b>	16:35 Local (A1)	<b>Type of Airspace:</b>	Class B (A1)

## Airport Information

<b>Airport:</b>	John F. Kennedy International Airport KJFK	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	13 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	22L	<b>IFR Approach:</b>	Unknown
<b>Runway Length/Width:</b>	8400 ft / 200 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information (A1)

<b>Crew Injuries:</b>	4 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	76 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	80 None	<b>Latitude, Longitude:</b>	40.635494,-73.782786(est)

## Wreckage and Impact Information (A2)

<b>Crew Injuries:</b>	11 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	248 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	259 None	<b>Latitude, Longitude:</b>	40.635494,-73.782786(est)

## Administrative Information

**Investigator In Charge (IIC):** Bower, Daniel

**Additional Participating Persons:** FAA; FAA

**Original Publish Date:** July 17, 2024

**Last Revision Date:**

**Investigation Class:** [Class 4](#)

**Note:** The NTSB did not travel to the scene of this accident.

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=106534>

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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](#).