Aviation Investigation Final Report

Location:	Boston, Massachusetts	**Incident Number:**	DCA23LA192
Date & Time:	February 27, 2023, 18:54 Local	**Registration:**	N280LJ (A1); N179JB (A2)
Aircraft:	LEARJET INC 60 (A1); Embraer ERJ 190-100 IGW (A2)	**Aircraft Damage:**	None (A1); None (A2)
Defining Event:	Runway incursion veh/AC/person	**Injuries:**	N/A (A1); N/A (A2)
Flight Conducted Under:	Part 91: General aviation - Positioning (A1); Part 121: Air carrier - Scheduled (A2)		

Analysis

JetBlue's flight 206 (JBU206) flight crew initiated a go-around while over runway 04R due to Hop-a-Jet flight 280 (HPJ280) taking off without a takeoff clearance from runway 09 at Boston Logan International Airport (BOS).

Runways 04R and 09 at BOS are intersecting runways. The BOS tower controller had instructed the pilot of HPJ280 to line up and wait (LUAW) on runway 09 while JBU206 had been cleared to land on runway 04R. HPJ280's flight crew read back the controller's instructions to LUAW, however they began the takeoff-roll instead. The airport surface detection equipment, model X (ASDE-X) alerted, and the controller issued go-around instructions to JBU206.

JBU206's flight crew initiated a go-around while over runway 04R, prior to reaching the intersection with runway 09. The closest proximity between both airplanes occurred when JBU206 was about 30ft AGL during the landing flare, close to the point where both runways intersected, see figure 1. A video file taken by the occupant of the flight deck observer seat was provided to the NTSB and a screen capture from the video is shown in figure 2.

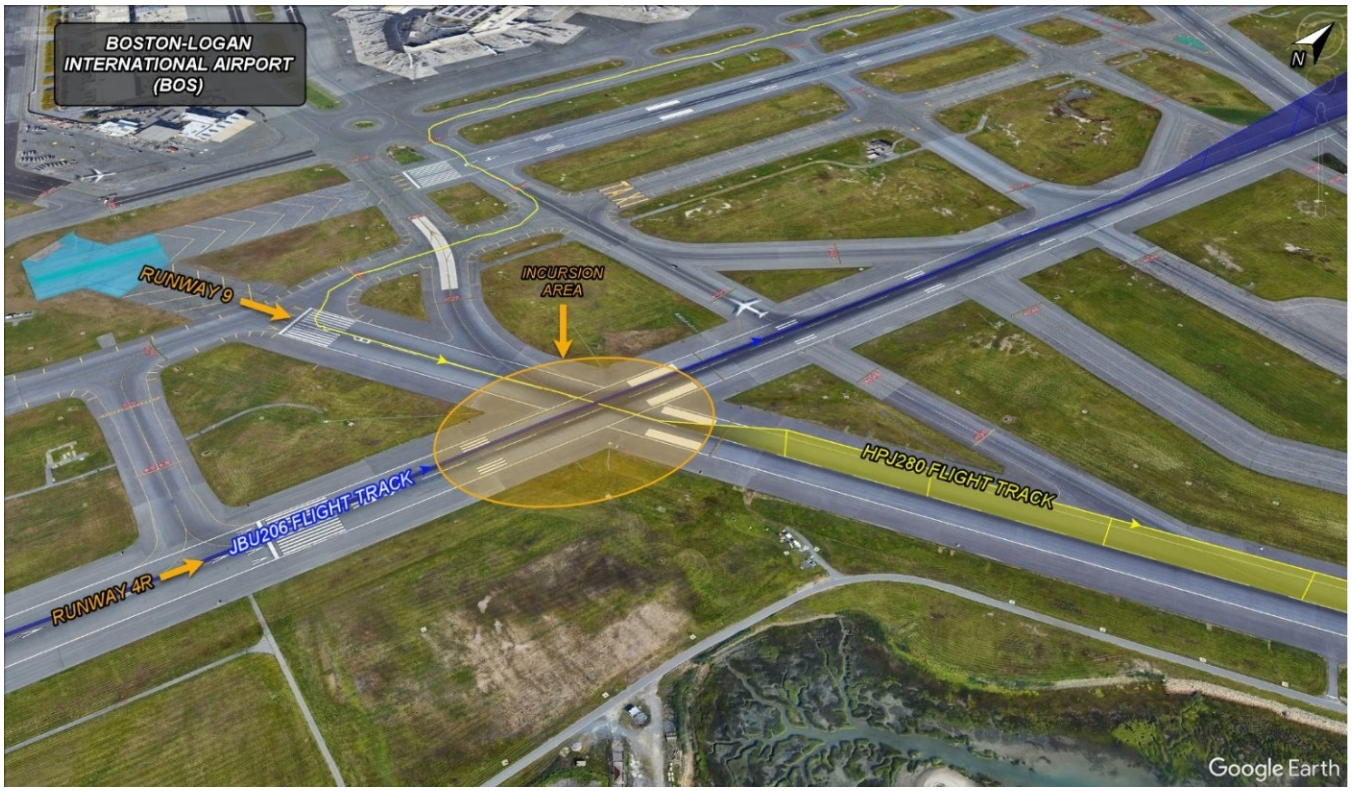

Figure 1. Flight tracks of both JetBlue (JBU206) and Hop-a-Jet (HPJ280) with yellow circle indicating incursion area.

Figure 2:Screen capture from jump-seat occupant's video recording showing Lear 60 crossing runway centerline.

The captain of HPJ280 said that they had received clearance to cross runway 4L on taxiway E, and then take taxiway Mike, to Runway 9. On taxiway M he said, “they had heard a clearance that seems to be Line Up and Wait." He further stated that “he probably responded to the clearance, but in his mind, they were cleared for takeoff.” He said they performed the takeoff at 18:55 local time, and during cruise they received a message from ATC providing them with a phone number to call upon landing. After landing at FXE, BOS tower told them that they had taken off without authorization and caused an airplane that had been cleared to land on runway 04 to execute a go-around, passing about 400' above them.

The first officer of JBU206 was the pilot flying, and they were on the ILS runway 04R approach. The captain of JBU206 said they had been cleared to land and had completed the landing checklist. On the tower frequency, they heard that an aircraft had been given LUAW instructions. As they entered the flare after crossing the threshold of runway 04R, about 30 feet above the ground, he saw an airplane cross 04R on runway 09 from his left and going to the right but could not estimate how far away the airplane was.

Probable Cause and Findings

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

The Hop-a-Jet flight crew taking off without a takeoff clearance which resulted in a conflict with a JetBlue flight that had been cleared to land on an intersecting runway.

Findings

Personnel issues (A1)	Understanding/comprehension - Flight crew
Environmental issues (A2)	Aircraft - Effect on operation

Factual Information

History of Flight

Takeoff (A1)	Runway incursion veh/AC/person (Defining event)

Pilot Information (A1)

Certificate:	Airline transport	**Age:**	63,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	February 14, 2023
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	January 11, 2023
Flight Time:	22544 hours (Total, all aircraft), 2317 hours (Total, this make and model), 16971 hours (Pilot In Command, all aircraft), 126 hours (Last 90 days, all aircraft), 51 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Co-pilot Information (A1)

Certificate:	Airline transport	**Age:**	23,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	October 25, 2022
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	June 30, 2022
Flight Time:	2027 hours (Total, all aircraft), 388 hours (Total, this make and model), 1649 hours (Pilot In Command, all aircraft), 160 hours (Last 90 days, all aircraft), 55 hours (Last 30 days, all aircraft)		

Pilot Information (A2)

Certificate:	Airline transport	**Age:**	36,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	5-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	August 31, 2022
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	May 31, 2021
Flight Time:	7505 hours (Total, all aircraft), 1673 hours (Total, this make and model), 2817 hours (Pilot In Command, all aircraft), 71 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Co-pilot Information (A2)

Certificate:	Airline transport	**Age:**	25,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**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:**	November 30, 2022
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	December 28, 2022
Flight Time:	2280 hours (Total, all aircraft), 75 hours (Total, this make and model), 985 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information (A1)

Aircraft Make:	LEARJET INC	**Registration:**	N280LJ
Model/Series:	60	**Aircraft Category:**	Airplane
Year of Manufacture:	2004	**Amateur Built:**	
Airworthiness Certificate:	Transport	**Serial Number:**	60-280
Landing Gear Type:	Retractable - Tricycle	**Seats:**	11
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	2 Turbo fan
Airframe Total Time:		**Engine Manufacturer:**	P&W CANADA
ELT:		**Engine Model/Series:**	PW305A
Registered Owner:	EAST SHORE AVIATION LLC	**Rated Power:**	4679 Lbs thrust
Operator:	Hop A Jet	**Operating Certificate(s) Held:**	On-demand air taxi (135)

Aircraft and Owner/Operator Information (A2)

Aircraft Make:	Embraer	**Registration:**	N179JB
Model/Series:	ERJ 190-100 IGW	**Aircraft Category:**	Airplane
Year of Manufacture:	2005	**Amateur Built:**	
Airworthiness Certificate:	Transport	**Serial Number:**	19000006
Landing Gear Type:	Retractable - Tricycle	**Seats:**	20
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	2
Airframe Total Time:		**Engine Manufacturer:**	AMA/EXPR
ELT:		**Engine Model/Series:**	UNKNOWN ENG
Registered Owner:	BANK OF UTAH TRUSTEE	**Rated Power:**	
Operator:	JetBlue Airways	**Operating Certificate(s) Held:**	Flag carrier (121)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	BOS,19 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	15:54 Local	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Few / 4600 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 6000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	330°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.83 inches Hg	**Temperature/Dew Point:**	2°C / -7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Boston, MA (A1); Nashville, TN (KBNA) (A2)	**Type of Flight Plan Filed:**	IFR (A1); IFR (A2)
Destination:	Fort Lauderdale, FL (KFXE) (A1); Boston, MA (A2)	**Type of Clearance:**	None (A1); IFR (A2)
Departure Time:	16:05 Local (A2)	**Type of Airspace:**	

Airport Information

Airport:	Boston-Logan Innternational Airport KBOS	**Runway Surface Type:**	Asphalt
Airport Elevation:	19 ft msl	**Runway Surface Condition:**	
Runway Used:	04L	**IFR Approach:**	Unknown
Runway Length/Width:	7864 ft / 150 ft	**VFR Approach/Landing:**	

Wreckage and Impact Information (A1)

Crew Injuries:	N/A	**Aircraft Damage:**	None
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	N/A	**Latitude, Longitude:**	42.366978,-71.022362

Wreckage and Impact Information (A2)

Crew Injuries:	N/A	**Aircraft Damage:**	None
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	N/A	**Latitude, Longitude:**	42.366978,-71.022362

Administrative Information

Investigator In Charge (IIC):	Lovell, John
Additional Participating Persons:	Marco Devarez; JetBlue Doug Spanier; Hop A Jet
Original Publish Date:	August 3, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this incident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=106806