



Aviation Investigation Preliminary Report

Location:	Arlington, VA	Incident Number:	OPS24FA031
Date & Time:	May 29, 2024, 10:21 Local	Registration:	N812AW (A1); N250AA (A2)
Aircraft:	AIRBUS INDUSTRIE A319-132 (A1); HAWKER BEECHCRAFT CORP B300C (A2)	Injuries:	N/A (A1); N/A (A2)
Flight Conducted Under:	Part 121: Air carrier - Scheduled (A1); Part 91: General aviation - Unknown (A2)		

On May 29, 2024, at about 1021 eastern daylight time (EDT), American Airlines (AAL) flight 2134 (AAL2134), an Airbus Industries A319-132, and N250AA a Hawker Beechcraft Corporation B300C were involved in a runway incursion that resulted in a loss of separation at the Ronald Reagan Washington National Airport (DCA), Arlington, Virginia. There were no injuries reported on either airplane. AAL flight 2134 was a regularly scheduled passenger flight operating under the provisions of 14 *Code of Federal Regulations* Part 121 from DCA to General Edward Lawrence Logan Boston International Airport (BOS), Boston, Massachusetts. N250AA was a general aviation flight operating under the provisions of 14 CFR Part 91 from Newport News / Williamsburg International Airport (PHF), Newport News, Virginia to DCA.

The Ronald Reagan Washington National Airport Traffic Control Tower (DCA ATCT) Air Traffic Manager (ATM) stated that at the time of the incident, there was a moderate traffic volume with routine complexity. The weather at the time of the incident was visual flight rules (VFR) with the following conditions being reported: Wind from 360 at 8 knots, visibility 10 miles with few clouds at 4,000 feet. A Traffic Management Initiative for BOS was in effect. AAL2134 had a release time at 1021 EDT.

A review of Federal Aviation Administration (FAA) air traffic control (ATC) audio recordings indicated that about 1418:19 EDT, the crew of N250AA established communication with the local controller and reported inbound on a 6-mile final for a visual approach to runway 33. The controller provided the crew of N250AA a traffic advisory regarding an aircraft that was in line-up and wait (LUAW) on runway 33 and advised the aircraft would depart prior to their arrival, followed by a landing clearance to runway 33. The crew acknowledged the clearance with a correct readback.

Seven seconds later at 1418:42, the local controller queried the crew of AAL2134, asking if they were on frequency. The crew of AAL2134 acknowledge that they had “just made the switch.” At 1418:46, in order to meet their release time, the local controller instructed the crew of AAL2134 to proceed ahead of an uninvolved aircraft and to hold short of runway 1.

At 1420:04, N250AA was on a 2-mile final for runway 33 when AAL2134 was instructed to LUAW on runway 1 while they awaited a previous arrival to exit the runway. The local controller advised the crew of AAL2134 of additional traffic on a 6-mile final to runway 1. The crew acknowledged with a correct readback.

At 1420:40, N250AA was on an approximate 0.9 mile final to runway 33 when AAL was cleared for takeoff. A traffic advisory was issued to the pilots of AAL2134 for traffic on a 4 mile final to runway 1.

At 1421:09, the Airport Surface Detection Equipment – Model X (ASDE-X) alarmed, which brought the tower teams attention to the conflict. ASDE-X is a system that provides controllers with visual and aural alerts to runway conflicts through predictive system logic. At 1421:13, the local controller cancelled the takeoff clearance for AAL2134 and also instructed the crew of N250AA to go around.

At 1421:19 the crew of AAL2134 reported rejecting the takeoff and at 1421:29 the crew of N250AA responded unable to go around due to having already landed. Both aircraft exited their perspective runways without further incident.

Figure 1 is a Google Earth screenshot which is overlaid with the ground tracks of N250AA (indicated by yellow track) and AAL2134 (indicated by teal track). The illustration depicts runway 1 and runway 33 and shows the direction of travel for each airplane.

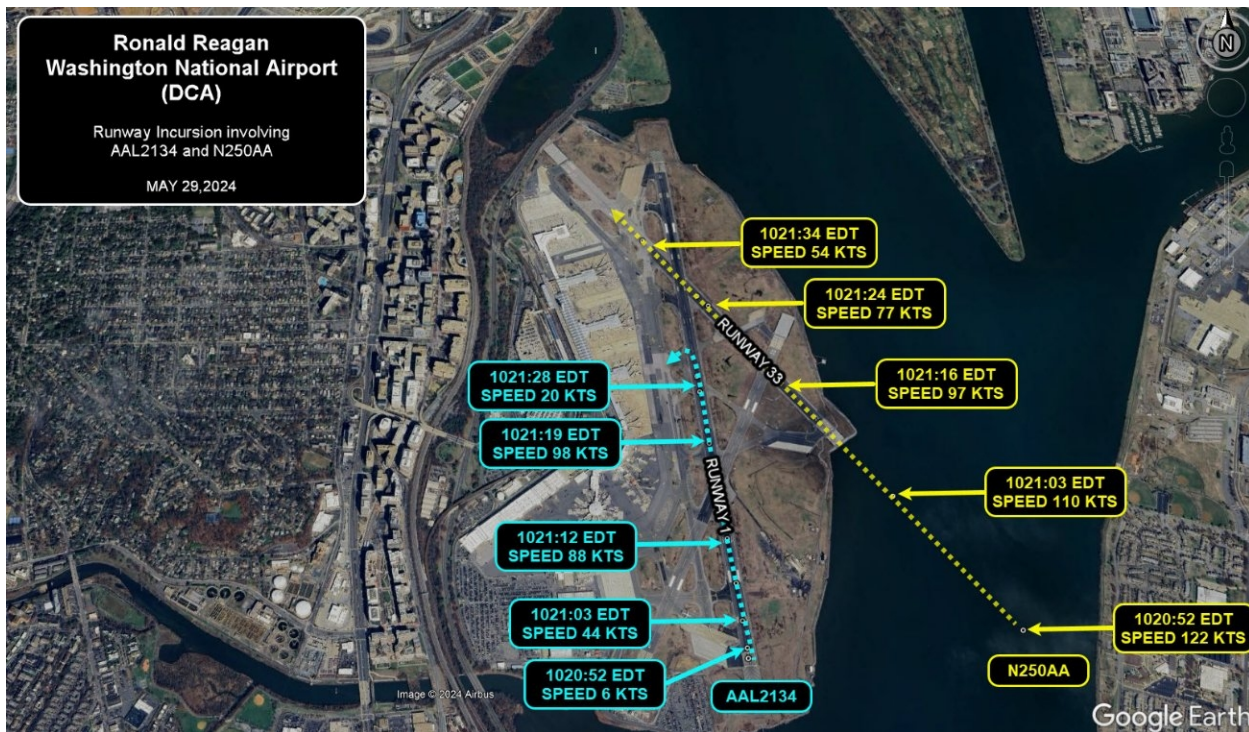


Figure 1. Ground and flight tracks for AAL2134 operating from runway 1 and N250AA operating to runway 33 respectively.

Upon notification, an Air Traffic Control NTSB investigative group was formed. Parties to the investigation include the Federal Aviation Administration (FAA), and the National Air Traffic Controllers Association (NATCA).

Certified Automatic Dependent Surveillance – Broadcast (ADS-B) data and audio recordings were provided to the NTSB by the Federal Aviation Administration (FAA). ADS-B is a surveillance system in which an aircraft or vehicle to be detected is fitted with cooperative equipment in the form of a data link transmitter, which then broadcasts that information that can be received by ground transceivers to be processed and displayed at an ATC facility. The NTSB is currently analyzing this data.

During the week of June 9th, 2024, the ATC group convened at DCA ATCT, the facility that was providing services to both airplanes at the time of the incident and conducted interviews with the Local Control Controller, Assist Local Control Controller, Ground Control Controller, Helicopter Control Controller, Cab Supervisor, and the Operations Manager who were all working at the time of the incident, as well as the NATCA Facility Representative and Air Traffic Manager.

While onsite the ATC group recognized safety concerns that required follow up expertise in the field of human performance. It was determined on June 13, 2024, that the ATC group would return to DCA with an NTSB Human Performance investigator to conduct supplemental interviews to document the human performance aspects of the incident.

Aircraft and Owner/Operator Information (A1)

Aircraft Make:	AIRBUS INDUSTRIE	Registration:	N812AW
Model/Series:	A319-132	Aircraft Category:	Airplane
Amateur Built:			
Operator:	AMERICAN AIRLINES INC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Designator Code:			

Aircraft and Owner/Operator Information (A2)

Aircraft Make:	HAWKER BEECHCRAFT CORP	Registration:	N250AA
Model/Series:	B300C	Aircraft Category:	Airplane
Amateur Built:			
Operator:	On file	Operating Certificate(s) Held:	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KDCA,13 ft msl	Observation Time:	09:52 Local
Distance from Accident Site:	1 Nautical Miles	Temperature/Dew Point:	23°C /13°C
Lowest Cloud Condition:	Few / 40 ft AGL	Wind Speed/Gusts, Direction:	8 knots / None, 360°
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	29.96 inches Hg	Type of Flight Plan Filed:	IFR (A1); IFR (A2)
Departure Point:	Arlington, VA (A1); Newport News, Virginia, VA (PHF) (A2)	Destination:	Boston , MA (BOS) (A1); Arlington, VA (A2)

Wreckage and Impact Information (A1)

Crew Injuries:	N/A	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	N/A	Latitude, Longitude:	38.855569,-77.038067 (est)

Wreckage and Impact Information (A2)

Crew Injuries:	N/A	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	N/A	Latitude, Longitude:	38.855569,-77.038067 (est)

Administrative Information

Investigator In Charge (IIC):	Lewis, Sarah
Additional Participating Persons:	Allison Mattioli (PC); NATCA; Charlotte, NC Brandon Johnson (ASI); NATCA; Salt Lake City, NV Mark Libby (SME); FAA; Charlotte, NC
Investigation Class:	Class 3
Note:	