# DCA South of Airport (SoA) Project – FAQs Volume 2 - May 29, 2025

**Q1:** During the Alexandria session on May 22, you discussed aircraft turning immediately west at the end of the DCA runway when departing south and attributed it to missed approach/go around.

The attached video provides the flight track for a recurring situation when the aircraft are taking off (not going around) southbound during north flow operations. It appears that the controllers are slotting/"sneaking" in southbound departures during north flow operations.

This non-routine operation occurs with some regularity. 1) would it be possible to analyze the flight track data to identify aircraft that turn immediately west at the end of runway 19 with a starting altitude at ground level (take offs) vs. in the air (go around so it can be determined how many of the immediate west tracks are "take offs" vs. "go arounds?" 2) Will the study address this situation?

**A1:** This is an interesting case and also an example of a non-normal operation. Although I will not be able to tell you exactly why this happened in this specific instance, I can speculate on what happened.

In my experience, operations like this are usually requested by the pilot for some operational reason. This is known as an "opposite direction departure" and happens when the flow of an airport is in one direction, north in this case, and the pilot needs to depart in the "opposite direction," south in this case, for some operational or safety reason.

Air traffic controllers do not like these kinds of operations because they require a great deal of coordination between the Tower and the Approach Control and "opposite direction operations" require increased separation between the aircraft, in this case, departing runway 19 and the subsequent aircraft arriving runway 1.

As you can see in the video you provided, the flow was predominately north, landing and departing runway 1, before and after the two runway 19 departures. As you have noted, when runway 19 departures get airborne, they are immediately turned west and then northwest over Alexandria. This is required because in an opposite direction operation the aircraft cannot be allowed to follow the published Standard Instrument Departure (SID) because it would take the aircraft too far south and conflict with the aircraft that will subsequently be landing runway1.

There can be many reasons for this type of operation. Usually, it has something to do with aircraft weight and performance. I know in Atlanta (ATL) we used to have a flight to Honolulu that took off opposite direction because of the slope of the runway. When ATL was landing and departing to the west, this one flight needed to depart to the east because of the slope of the runway. Departing

east meant that the aircraft was rolling downhill on the departure roll and this was necessary due to the weight of the aircraft for this particular flight, existing wind conditions, and aircraft performance.

Standard Operating Procedure (SOP) is that aircraft land and depart in the same direction. However, from time to time, opposite direction departures are necessary.

For more specific information concerning why it was necessary in this particular instance, please contact MWAA and they can research this further. But know that this can happen from time to time and there are very specific circumstances and rules that must be applied to make this happen. It is a non-normal operation, and controllers do not do this on a whim. Only when it is operationally necessary.

To answer the second part of the question, no, this is not within the scope of this project.

**Q2:** The arrivals are the quieter flights. On takeoff, it's full throttle at 5:45 am southbound every three minutes. A 10% reduction is certainly appreciated, but what about the 43% - why do we have to settle for 10%?

**A2:** The 10% was an example. Approximately 43% of the westbound departures will be moved from over Fairfax communities to the river.

**Q3:** Curious how you are able to reduce the track miles, especially when the northbound will loop south over Ft Belvoir instead of over Hybla Valley/Hollin Hills.

**A3:** Overall, the project reduced track miles by approximately 18NM. Some procedures increased slightly, and others decreased resulting in an overall savings of approximately 18NM.

**Q4:** Love the green departure line. This is a question that you may not know the answer to, but perhaps Supervisor Stork or Congressman Beyer could answer - how is it that if you want to build a road or interstate in a jurisdiction that these projects require community input, environmental studies, etc. prior to construction - however, a federal agency (FAA) can change the system which arguably has more noise and pollution than any surface roadway? It is a superhighway over our heads. How is it that the airlines and airport have more sway than the constituents that live in these pathways?

**A4:** The FAA must comply with the National Environmental Policy Act (NEPA) when implementing new flight procedures. The NEPA regulations do require public input, but only in certain circumstances when there is determined to be "significant impact." The issue for residents is that the thresholds for what constitutes "significant impact" are generally thought to be too high. This is what the "Annoyance Survey" that the FAA put out a couple of years ago was attempting to address. The survey found that people were highly annoyed at a sound level much less than the 65DNL threshold that NEPA currently uses as their standard. Unfortunately, not much action has been taken to change that threshold since the survey.

**Q5:** What is a virtual noise monitor?

**A5:** For this project, Vianair is using noise modelling technology that calculates noise based on aircraft operations. This is referred to as "virtual noise monitoring." Flight data is collected from the Federal Aviation Administration. This data (primarily radar data) is processed by the Vianair software platform which computes the noise exposure along the flight path. Calculations incorporate aircraft type, altitude, airspeed, etc. The proprietary noise modelling and analysis technology used by Vianair is consistent with that used by the Federal Aviation Administration and aviation regulators worldwide. The Vianair software platform uses the same algorithms used by the FAA's Aviation Environmental Design Tool (AEDT) which is a global standard for aircraft noise modelling and analyses. A Virtual Noise Monitor (also called an observer) is simply a geographic point from which measurements are calculated by the software as described above.

**Q6:** Why can't planes come in further north like they used to?

Before the jet accident on the 11th Street Bridge planes used to come into the flight path to the airport further north.

**A6:** The Air Florida crash at Washington National Airport (now Ronald Reagan Washington National Airport, DCA) occurred on **January 13, 1982**.

This project is only addressing the flight path changes post Metroplex Project and changes since 2015.

As stated in the public briefing, the FAA is not interested in returning to flight paths and technology used before space-based navigation, commonly known as GPS, was implemented. Therefore, we must make the best decisions we can using the current Area Navigation (RNAV) system of routes to mitigate noise as best we can within the constraints of a safe and efficient operation at DCA.

**Q7:** Is there a plain language summary of findings/report on the information provided during the May/June 2025 community meetings?

**A7:** Yes, the final report will be posted on the project website at www.vianair.com/soa by the end of October 2025.

**Q8:** Does this study include a look at the health impacts of noise on people, in collaboration with environmental health experts trained in this field? How do the study results address human health?

**A8:** Health factors are outside of the scope of this project.

**Q9:** Since May 23rd, planes have started taking off every day at 5:15 am and waking me up. Previously it was 6:00am.

**A9:** Thank you for your comment. However, departure times are not within the scope of this project.