

DCA SoA Committee Design Team Meeting #9

This meeting was held virtually and recorded by Otter.AI on 6/13/2024.

Summary

- **Airport operations and runway usage.**
 - Speakers discuss and approve minutes from Design Team Meeting #8.
 - Jim Allerdice provides data on runway usage and aircraft departures from different runways.
 - Jim Allerdice explains runway usage and flight patterns at DCA Airport.
 - Jim Allerdice identifies potential flight paths near the Potomac River.
 - Gary provides information on flight departures and runway use for May.
- **Airport noise levels and flight patterns.**
 - Jim Allerdice: notes that monthly operations, aircraft fleet mix, and noise levels above 55 decibels are fairly consistent with previous reports.
 - Jim Allerdice notes a decrease in NA-75 events this month with 103 occurring.
 - Jim Allerdice discusses DNL data with Speaker Bob, focusing on April data.
- **Noise contours and flight Updating noise contours for DCA airport.**
 - Bob Meier found noise contours from 1989 and 2004 for DCA but couldn't find anything more recent.
 - Jim Allerdice mentions customary practice of updating noise exposure maps every 5-7 years, and DCA's unusual lack of update.
 - Bob Meier suggests updating noise exposure maps for DCA, citing a 15-year gap since the last update.
 - Airports that have done a Part 150 update their noise contour maps every 4-5 years, as recommended in the Part 150 study.
 - Jim Allerdice advises clients to ask MWAA to do another contour map for the airport at the next CWG meeting to determine if the 65 DB line is still accurate.
 - Bill Parker agrees that going for a new noise contour map is a good idea.
 - Jim Allerdice suggests asking the airport to start the sound map process before proposing change.
 - Bob Meier suggests asking for a new noise contour to determine eligibility for sound insulation funding.
 - Speakers discuss using NA contour maps to visualize noise levels at the airport.
- **Noise contours and model differences between Vianair and Bob's model**
 - Bob Meier discusses how to reconcile empirical model with the Vianair model, citing technical differences.
 - Bob Meier appreciates Vianair and Jim's help in resolving a calculation issue, with Vianair's Giota (a software developer) as a resource.

- **Airplane route changes to balance runway usage.**
 - Speakers discuss waypoints for airplanes on the SOOKI SID. Jim provides details.
 - Speakers discuss airline route assignments and groupings, including CLTCH, JDUBB, HORTO, AMEEE, etc.
 - Jim Allerdice proposes an alternative solution to balance runway usage at DCA airport.
 - Jim Allerdice suggests optimizing departures by splitting aircraft between two SIDs for more efficient tower operations. Jim will explore the possibility of moving some departures to the AMEEE SID from JDUBB.
 - Corinne Bebek agrees to discuss further and obtain necessary data.
- **Airport departure paths and FAA regulations.**
 - Jim Allerdice explains how to shift flight paths to avoid industrial areas.
 - Jim Allerdice explains a new rule allowing for more efficient departures at Atlanta airport and how it applies to DCA airport.
- **Improving airport departure procedures for better noise distribution.**
 - Speakers cite that runway heading is important for safety, as aircraft many times turn right after takeoff.
 - Jim Allerdice states that aircraft turning right immediately after departure may be go-arounds.
 - Departures should be redesigned to put one track runway heading, thereby complying with current criteria.
 - Jim Allerdice says that redesigning departure routes to fly runway heading should reduce noise impact to Alexandria.
 - Jim Allerdice mentions that NADP-1 profile was not as standard as they had believed and caused longitudinal separation issues for north departures at DCA.
 - Jim Allerdice suggests that the FAA should further standardize NADP-1 profile through discussions at higher levels and working groups.
 - Jim Allerdice suggests trying to use NADP-1 on the south side, despite previous failed attempts.
- **Improving airport flight paths and noise reduction using AI.**
 - Discussion about monitoring noise levels and software capabilities using AI are raised.
 - Jim Allerdice said a qualified yes to using AI in the Vianair software for flight path design, but not fully implemented yet.
 - Speakers suggest that AI considers all routes, accounting for FAA rules and separation.
- **Flight paths and noise reduction at the airport.**
 - The team discusses implementing a fly quiet program at DCA to reduce noise impact on nearby communities.
 - Speakers recommend assigning aircraft to the National SID after 10 pm to minimize overflight of Old Town.

- **Air traffic control and flight paths near Dulles Airport.**
 - Jim Allerdice explains why aircraft fly over Dulles Airport: to deconflict traffic and avoid conflicting with arrivals/departures.
 - Jim Allerdice explains how trombone procedure on south side provides track variability.
 - Speakers discuss modifying air traffic routes to reduce noise impact.
 - Bill Parker wants to keep aircraft above 3000 feet to KATRN.
 - Jim Allerdice suggests modifying the star to disconnect KATRN and raise its altitude to 3000, which could help controllers organically go to 3000 altitudes.
 - Jim Allerdice suggests moving some aircraft further south to improve traffic flow over communities and reduce noise for aircraft approaching from the northwest.
 - Jim Allerdice proposes modifying flight plan to optimize profile.
 - Air traffic controllers may resist using a newly published altitude due to preferences for visual approaches and reluctance to change.
 - Jim Allerdice predicts improvement over time but hesitates to give a percentage.
 - Controllers will adapt to new procedures gradually, but not overnight.
- **Modifying CAPSS STAR to improve noise impacts.**
 - Jim Allerdice suggests modifying the CAPSS star to keep aircraft at 9000 feet as required by PCT.
 - Jim Allerdice proposes redesigning the star to allow for an initial approach fix, potentially joining the ILS from HOYAS.
 - Travis/Norman emphasizes the need to connect the whole thing.
 - Bill suggests a possible descent path for the aircraft to join the ILS, avoiding manual clearance below 9000 feet.
 - Jim explains the criteria and operational requirements preclude connecting the STAR to the ILS for RWY 1.
 - Bill Parker discusses a possible new fix to improve track variability on the south side of airfield.
- **Plans for community kickoff meetings and noise work in August.**
 - Jim briefs the team concerning planned community kick-off meetings and the process for Vianair noise analysis of the notional flight procedures.



Attendance

Name	Organization/County	Role
James Allerdice	Vianair	Consultant
Garry Hill	Vianair	Consultant
Bill Parker	Prince Georges County-Accokeek	SoA Committee
Travis Ludwig	Alexandria (Primary)	SoA Committee
Norman Leader	Alexandria (Alternate)	SoA Committee
Filipe Ip	Alexandria	Staff
Bob Meier	Fairfax County	SoA Committee
Corinne Bebek	Fairfax County	Staff
Jason Schwartz	Vianair	Consultant
Dawn Hawkins-Nixon	Prince George's County	Staff
Deborah Patrick	Prince George's County	Staff
Melissa Atwood	Alexandria	Staff