AGENDA NAC Working Group Meeting Monday, February 13, 2023 5:00-6:30pm

Location: Portland International Jetport Conference Room or Via Zoom:

https://portlandmainegov.zoom.us/j/87697440874?pwd=bEFIUXhZR0FwcINsZ2ZqSEZaMkJOZz09 Passcode: 911015

- 1) Roll Call
- 2) Finalize Design Philosophy
- 3) Adjourn

- Primary Objective: Maximize overflight of "compatible" areas such as non-residential areas, commercial/industrial areas, and over water (Fore River & Casco Bay)
 - Secondary Considerations:
 - Design procedures that limit the exposure to any one community so that no single area is disproportionately burdened.
 - Design procedures that minimize exposure to the most impacted areas. (This was removed, but then added back)
 - Design procedures to avoid heavily populated residential areas regardless of geography, including seasonal populations, and especially during noise sensitive hours (10:00pm -7:00am).
 - · Consider historical flight patterns and conditions prior to recent airspace changes

Design Principles

Primary Objective

Maximize overflight of "compatible" areas such as non-residential areas, commercial/industrial areas, and the Fore River and waters of Casco Bay.

Where it is not possible to avoid residential neighborhood areas, strive to share the noise burden equitably according to the following hierarchical considerations:

Consideration #1

WG - Design procedures that limit the exposure to any one community so that no single area is disproportionally burdened.

Anne - Add to the end "by a combination of overflights/volume, as measured and reported to the NAC quarterly". (NOTE – Request for reporting is being included in new section at the bottom called "TRACKING".)

POSSIBLE WORDING - Design procedures that limit the exposure to any one community so that no single area is disproportionally burdened **by the volume of overflights.**

Consideration #2

WG - Design procedures that minimize exposure to the most impacted areas.

VIANAIR - Define "most impacted". Is it the areas with highest concentration/volume of overflights or areas with the highest cumulative noise exposure?

Julie- Design procedures to minimize noise exposure to the communities that will be most impacted by the new flight procedure design.

Anne - Add to the end "by a combination of overflights/volume, as measured and reported to the NAC quarterly".

POSSIBLE WORDING - Design procedures that **minimize/reduce** exposure to the most impacted areas **based on highest concentration/volume of overflights** (**or** areas with the highest cumulative noise exposure if preferred by the WG).

Consideration #3a

WG - Design procedures to avoid heavily-populated residential areas regardless of geography, including seasonal populations, and especially during noise sensitive hours (10:00pm – 7:00am). **VIANAIR** – Does this mean favoring overflights of low(er) density residential versus high-density residential when the latter cannot be avoided?

Julie - Add "within 4-5 miles of the airport" after "residential areas" and add "residential" between "seasonal populations".

Anne - Add "within 4 miles of the airport" after "residential areas" and change "especially noise sensitive hours" to "including noise sensitive hours".

Vicki - Change "especially noise sensitive hours..." to "during both daytime (7am-10pm) and nighttime (10pm-7am) hours.

POSSIBLE WORDING - Design procedures to avoid higher-density heavily-populated residential areas within 5 nautical miles of the airport, including seasonal residential populations, during both daytime (7am-10pm) and nighttime (10pm-7am) hours, and when this cannot be achieved, favor overflights of the residential areas with lower-density.

Consideration #3b

Anne - Design procedures that take into account altitude and impact of operations (i.e, arrivals vs. departures).

POSSIBLE WORDING – Where possible, design procedures to avoid residential areas that will have a noticeable increase in noise exposure from the arrival/departure of the aircraft due to altitude and operation.

Consideration #4

WG - Consider historical flight patterns and conditions prior to recent airspace changes. **VIANAIR** – Should this include recent history, covering the more recent changes implemented by the FAA that have resulted in controversy, or a longer term?

Julie - Design procedures that will accomplish goals set forth in the 2006 NCP Approvals while minimizing the burden on additional residential communities as much as possible.

Natalie - Consider historical flight patterns, modifications implementing NCP Approved April 17, 2006, and conditions prior to recent airspace changes.

Anne - Consider historical flight patterns and conditions, evaluate whether the 2006 airspace changes are demonstrated as necessary, and design modified procedures to address ongoing concerns.

POSSIBLE WORDING – Consider historical flight patterns around the more recent modifications made by the FAA to address the NCP Approved April 17, 2006.

Tracking

Anne - Recommend a process to review and evaluate flights deviations from approved procedures, with quarterly reports to the NAC, and design procedures to address ongoing concerns.

Proposal for the working group meeting on February 13th:

Rather than immediately focus on wordsmithing the design considerations, I would like to propose that we first spend some time talking about what each community is experiencing and what their goals are for the work being done by Vianair. What is the primary objective for each community and if that can't be achieved, what would be the secondary objective?

Some specific questions that I think would be helpful to think about **before the meeting** are the following:

- 1) This process is to improve flight procedures for flights departing to the east and arriving from the east. It does not impact the procedures to and from the west which are the preferred procedures and account for the majority of PWM flights. Additionally, it has no impact on the preference to use the primary runway 11/29 over the crosswind runway 18/36. Given this, for procedures east of PWM what is working well and what are the problems?
- 2) Where problems exist, which flights are most problematic for your community and would you like to give them a higher priority?
 - a. Nighttime flights
 - b. Arrivals
 - c. Departures
- 3) How do you think this problem can be solved? Do you have a possible solution that you would like Vianair to consider?
- 4) If that ends up not being a viable solution, what else do you think could be done to improve the situation?
- 5) Do you feel that number of people affected by a flight should be a consideration?
- 6) Are there any questions you would like Vianair to answer to help us move forward?

February 11, 2023, Information for February 13, 2023, WG Meeting, Presented by Vicki Flanagan

PWM Working Group WG Members:

The following may not reflect Peaks Island NAC Representative Jennifer Laventure's opinions. As a representative for Peaks Island, I feel it is important to present it to the WG. It is a collaborative effort among residents of Peaks Island who feel that the WG should be aware of additional guidance when making decisions for Vianair's 'design philosophy,' and further impacts to areas surrounding PWM.

The Island hopes that there are solutions that would greatly reduce or eliminate aircraft noise for everyone. However, it appears after Vianair's first presented solution to the area's noise problem, eliminating noise for some would only compound it for others, and more troubling introduces it to new areas around Casco Bay. We were disappointed that a viable solution wasn't possible for a public RNP arrival route as an overlay to the HVA. And that the next best over-water flying solution was one that impacted area's far and wide. We are hopeful that another over water flying solution is possible that would be less impactful.

• Peaks Island would like both Long Island and Great Chebeague to have a seat at the WG table as Little Chebeague Island is in both of their jurisdictions. And they will be impacted by that noise if that path goes forward. The WG is an evolving entity that should be able to adjust as needed.

However, the island questions why we're even having a WG when the solution in their opinion is already available:

• The area around the ILS has an RNAV arrival route already in play, not to mention the ILS which remains the safest most environmentally friendly idle decent path into the Jetport. It has been the mindset of current residents around the ILS that we need to share the noise.

With the noise abatement procedures currently utilizing runways 11 and 29 to and from the east there are no residential buildings 'east' of the Jetport in 'non compatible land,' which is defined by the FAA as being in a 65dB or above. This includes along the Fore River and under the ILS. According to the 'noise contour map' (below) there was no residential housing 'east' of the Jetport in a 65dB when the data was collected in 2002. Since then the aircraft are on average 50% quieter and there're approximately 50% fewer of them.

The premise of the Noise Compatibility Program NCP Noise Abatement NA measures NA-1– NA-5 are to reduce non-compatible land use around PWM. According to FAA criteria the RNAV departure process went forward based on moving 678 people out of the DNL 55-60dB, which is not consistent with FAA criteria on non-compatible land use.

https://portlandjetport.org/sites/default/files/files/NoiseStudy-RecordofApproval.pdf

• Peaks Island **does support** the RNAV departure process and the use of runways 11 and 29 as it has removed noise from the most vulnerable and impacted areas around PWM.

There's been a significant redistribution of noise away from the area under and around the ILS which now impacts the 'Islands,' the 'Peninsula,' the 'West End,' 'Ferry Village,' 'Falmouth,' and possibly a few other areas, including west of the Jetport. Most notable is the reduction in departure and arrival noise around the ILS and the increase in noise on the islands, (Peaks and the Diamonds), from both arrivals (Special Visual arrival in 2020) and the (RNAV departure in 2012).

- We're all sharing. (If any of the above statements are inaccurate or amiss, please provide data to support your stance.)
 https://portlandjetport.org/sites/default/files/files/Noise Contour Map.pdf
 - It's worth noting that there seems to be perceived uninformed concepts concerning shifting noise from one area to another amongst some members of the WG. Having a concise WG conversation with an FAA specialist would be very helpful in clearing up misconceptions.
 - We believe that the WG should be following FAA guidance where available and not making it up as we go along and acting like aircraft noise police. The 'design philosophy' should reflect actual FAA guidance so that the path is clear and concise in its intent. *

The following from the FAA guidance on community noise:

• "To account for a higher sensitivity to noise exposure at night (occurring between 10 p.m. and 7 a.m.), DNL calculations add a ten times weighting for each nighttime flight, equivalent to each nighttime event being

measured as if ten daytime events had occurred: because of the logarithmic scale, this is equivalent to each nighttime event receiving a 10 dBA "penalty."

 "FAA has adopted DNL 65 dBA as the threshold of significant noise exposure, below which residential land uses are compatible, but often also shows contours for DNL 65, 70 and 75 dBA noise levels on maps for reference."

https://www.faa.gov/regulations_policies/policy_guidance/noise/community

With the before mentioned data in mind;

- Peaks Island formally requests that Jetport management engage the FAA to assess if Peaks Island is qualified to be a 'noise sensitive area' NSA.
- To go forward with the WG process without having a long overdue assessment for qualifying of an NSA for Peaks Island would be both irresponsible and problematic for the process and the island.
- The process between Vianair and the WG should be paused until the NSA assessment for Peaks Island is completed. Continuing the process before it can be rectified would be viewed as skewed by inaccurate and unfair data. We are not in a rush as everything with the FAA works slowly, most of the time. It's important that we do our due diligence.

Although it is worth noting that an NSA doesn't exclude a geographical location from the impact of aircraft noise or does it give that area rights over other individuals in other non-NSA locations. Although among some members of the WG it seems to be an important qualifying factor as does 'noise sensitive hours' NSH which only gives that area the consideration of reduced noise during the FAA hours of 10 p.m. - 7 a.m..**

*Shifting noise to less populated areas; The following from the Federal Aviation Administration FAA Fact Sheet - FAA Airport Noise Program, "When the program identifies the compatible land uses such as industrial or commercial areas, large highways or water, the FAA can develop air traffic arrival or departure procedures that help reduce noise by routing flights over those less-populated, less noise sensitive areas." https://www.faa.gov/news/fact_sheets/news_story.cfm?newsld=18114

It is not acceptable by FAA standards to shift noise to other populated residential areas regardless of population centroids. Also, regardless of altitude and/or dB. Unfortunately, this hasn't stopped the shifting of noise around the Jetport.

According to the FAA, homeowners are responsible for where they purchase their homes: FAA Airport Compliance Manual-5190-6B, Chapter 13. Airport Noise and Access Restrictions, (6); Residents and prospective residents in areas surrounding airports should seek to understand the noise problem and what steps can be taken to minimize its effect on people. Individual and community responses to aircraft noise differ substantially and, for some individuals, a reduced level of noise may not eliminate the annoyance or irritation.

Prospective residents of areas impacted by aircraft noise, thus, should be aware of the potential effect of noise on their quality of life and act accordingly.

https://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/media/5190_6b_cha p13.pdf

2005 PWM, Part 150, page 100; (12) "Despite the general lack of interest in land use measures, it remains an important obligation of any airport to be involved with local land use decisions that can encroach on its operation or in other ways affect its development. Thus, this Update recommends that Jetport Management coordinate efforts with the City of Portland, the City of South Portland, and the communities of Westbrook, Scarborough, and Stroudwater to reduce incompatible land use development through measures such as encouraging noise notifications on subdivision plans, encouraging building code revisions, and other similar low-level efforts to help assure that Portland International Jetport minimizes its future impacts on its neighbors."

The above 'land use measures' recommended by the 2006 FAA approved part 150, include making sure that prospective residents to the area are aware of the noise from the Jetport before they purchase their homes. https://portlandjetport.org/sites/default/files/files/Final_text_newgraphics4_0.pdf

**A more comprehensive look at incompatible land use and NSA's: https://www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/apl/11-noise.pdf