

PORTSTORONTO

BILLY BISHOP TORONTO CITY AIRPORT

NOISE MANAGEMENT SUB-COMMITTEE MEETING #14

MEETING MINUTES

October 6, 2021 7:00 PM to 9:00 PM Zoom Online Meeting Toronto, Ontario

Minutes prepared by:





These meeting minutes were prepared by LURA Consulting. LURA provides neutral third-party consultation services for the PortsToronto Noise Management Sub-Committee. These minutes are not intended to provide verbatim accounts of committee discussions. Rather, they summarize and document the key points made during the discussions, as well as the outcomes and actions arising from the committee meetings. If you have any questions or comments regarding the Meeting Minutes, please contact either:

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Summary of Action Items from Meeting #14

| Action Item | Action Item Task | Who is Responsible for Action Item |
|----------------|---|--|
| M#14-A1 | Review the stationary source noise data for the ferry to share with the subcommittee. | PortsToronto (Mike David) |
| M#14-A2 | Michael MacWilliam to reconnect with Dr. Novak regarding a suitable location for the permanent noise monitor on Windward Co-Op. | PortsToronto (Michael MacWilliam) |
| M#14-A3 | Alexander Furneaux to follow-up with Bryan Bowen regarding city planning presentation on noise in relation to Redpath Sugar's operations. | LURA (Alexander Furneaux) |
| M#14-A4 | Alexander Furneaux will recirculate the NMSC Meeting #7 minutes with subcommittee members. | LURA (Alexander Furneaux) |
| M#14-A5 | Michael MacWilliam to contact Lesley Monette when a date is selected for the permanent noise monitor test. | PortsToronto (Michael MacWilliam) |
| M#14-A6 | Alexander Furneaux will recirculate the Ground Noise Study project scope of work with subcommittee members. | LURA (Alexander Furneaux) |
| M#14-A7 | PortsToronto will seek clarification from Brüel & Kjær on how to generate reports that provide noise monitor data in DBZ decibels. | PortsToronto (Michael MacWilliam) |



List of Attendees

| Name | Organization (if any) | Attendance | | |
|-------------------------------|--|------------|--|--|
| COMMITTEE MEMBERS | | | | |
| Hal Beck – Co-Chair | York Quay Neighbourhood Association | Present | | |
| Vacant position | York Quay Neighbourhood Association | N/A | | |
| Max Moore | Bathurst Quay Neighbourhood Association | Present | | |
| Lesley Monette | Bathurst Quay Neighbourhood Association | Present | | |
| Bryan Bowen | City of Toronto – Waterfront Secretariat | Regrets | | |
| PORTS TORONTO REPRESENTATIVES | | | | |
| Angela Homewood – Co-Chair | PortsToronto | Present | | |
| Michael David | PortsToronto | Present | | |
| Michael MacWilliam | PortsToronto | Present | | |
| Gary Colwell | PortsToronto | Present | | |
| FACILITATION | | | | |
| Alexander Furneaux – Lead | LURA Consulting | Present | | |
| Facilitator | | | | |
| Sayan Sivanesan - Notetaker | LURA Consulting | Present | | |

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Appendix A: Meeting Agenda

Appendix B: Restart of Commercial Operations Presentation

Appendix C: ICAO Noise Standards – Background Information (Prepared by Max

Moore, May 10, 2021)



1. Agenda Review and General Updates

Alexander Furneaux (LURA Consulting) welcomed the members of the Noise Management Subcommittee (NMSC) to their 14th meeting held virtually via Zoom. Mr. Furneaux provided an overview of the agenda and asked the committee for any additional items or updates to be added to the list of agenda items. The meeting agenda is included in **Appendix A**.

The subcommittee welcomed Gary Colwell (PortsToronto) back from his leave and welcomed Sayan Sivanesan (LURA) as the new meeting notetaker.

2. Restart of Commercial Service

Michael MacWilliam (PortsToronto) updated the Noise Management Subcommittee on the restart of commercial service at Billy Bishop Airport (BBTCA), reviewing the same presentation delivered at the 43rd Community Liaison Committee (CLC) meeting on September 22. The presentation on the Commercial Service Restart is included in **Appendix B**.

- Mr. Beck inquired whether there are any key comments related to noise.
- Mr. MacWilliam replied that there has not been an increase in noise complaints associated with the restart. He noted that there are only four arrivals and four departures per hour, so flight activity is not at the level it was pre-pandemic. Mr. MacWilliam added that some complaints that they have heard in the past have resurfaced, but no new concerns are being raised.
- Mr. Beck asked for confirmation that the number of flights is four arrivals and four departures per hour.
- Mr. MacWilliam confirmed that based on the current requirements, that is the schedule being targeted from a planning perspective, but the exact number may not always pan out on the hour. He also clarified that this number only applies to commercial flights and not for any other operations.
- Mr. Beck mentioned that he made a complaint about some recent ferry operations causing noise resulting in him being woken up between four o'clock and six o'clock in the morning over several days. Mr. Beck noted that the ferry operations have improved since the complaint was made but is unsure if this is coincidental.
- Mr. MacWilliam responded that he has been dealing with the ferry staff for many years and acknowledged that they are very aware of their impact on the community. He also noted that the ferry had operated on a reduced schedule throughout the pandemic, starting at 6:00 AM and ending at 11:00 PM. Since October 1, the ferry has returned to its full schedule, starting at 5:00 AM and ending at midnight.
- Mr. Moore shared with the subcommittee that he had written a letter to the ferry
 captain at the beginning of the summer, asking to tone down the volume of the
 horns. The letter stated that it isn't necessary to blow the ferry horn at full
 volume, i.e. at a volume which can be heard 2 blocks away, when it is being
 blown to catch the attention of a boat which is only a few hundred feet away. A
 more moderate horn blast would be appreciated in the summer when



neighboring residential windows are open. Mr. Moore reported that the letter had the desired effect of calming down noise this past summer, and thanked the ferry captains for cooperating.

- Mr. MacWilliam noted that although the ferry staff are aware of community sensitivity to noise (specifically the horn), he cannot tell the ferry staff not to use their horn. Transport Canada sets regulations on maritime movement for the safety of vessels, including the use of the horn when departing. Additionally, the western gap can be very busy at times requiring use of the horn to alert other vessels that they must give way. In these cases, staff need to be loud with the horn to get the other boat's attention.
- Mr. Beck inquired about the schedule for electrification of the ferry, specifically reimplementing the ferry.
- Mr. MacWilliam responded that the electrified ferry will return to BBTCA in mid-November, after which there will be a couple of weeks of sea trials, and then it will be put back into service.
- Mr. Beck asked if this means the ferry will be in service by early December.
- Mr. MacWilliam responded that the latest update indicated that the electrified ferry should be back in service by the end of November.
- Mr. Beck noted that at the last CLC meeting, it was mentioned that Mr. David collected noise data from existing ferry operations. Mr. Beck inquired if this data could be shared with the subcommittee.
- Mr. David confirmed that ferry operations source noise data were measured as one of approximately 200 source measurements for the Ground Noise Study. Mr. David noted that the findings will be included in a report, but he will have to check how best to share this in the interim because there is a lot of raw data.
- Mr. Beck responded that he would like to look at the data to see how it compares with his measurements over the years.
- Mr. David replied that he thinks these noise measurements will be a lot higher because they are taken as close as possible to the source without causing distortions to the microphone. He confirmed that he will check what the raw data looks like and how it can be scrubbed into a digestible format.

M#14-A1 Review the stationary source noise data for the ferry to share with the subcommittee.

3. Permanent Noise Monitor Terminal Update

Michael MacWilliam (PortsToronto) provided a short update on the Permanent Noise Monitor Terminal installations. Mr. Colwell is currently working to restart discussions on the installation of a noise monitor at Ontario Place – work to install this terminal was put on pause since the start of the pandemic. Regarding the terminal installation at Windward Co-Op (Mr. Beck's building), Mr. MacWilliam indicated that the preferred option is to install the noise monitor on the roof of the building, which would be consistent with the other installations around the airport.

 Mr. Beck noted that Mr. MacWilliam had not met Header Merza (Senior Noise Engineer – Ministry of Environment, Conservation and Parks (MECP)), who



participated in Meeting #7 of the Noise Management Subcommittee¹ and presented on NPC-300 and provincial requirements. Mr. Beck stated that Mr. Merza had indicated that putting noise terminals on roofs is an outdated practice.

- Comment from PortsToronto: The meeting minutes from Noise
 Management Subcommittee Meeting #7 reflecting the discussion between subcommittee members and Mr. Merza do not support this assertion.
- Mr. MacWilliam responded that he cannot speak to something he was not present for.
- Mr. Beck explained that when a noise monitor is installed on a roof, the background sound level will be higher because it will receive noise from the city side. Mr. Beck stated that to get the most accurate data, the noise monitor should be installed on the side of the wall directed at the airport.
- Mr. MacWilliam replied that he is working with Dr. Colin Novak who is the technical subject matter expert in this field, which PortsToronto has hired for noise monitor installations and noted that Dr. Novak identified the rooftop installation as a suitable location.
- Mr. Beck replied that Dr. Novak had also agreed with him during an onsite walk with Gary. Mr. Beck added that he understands why Dr. Novak would support the rooftop installation, since it would be easier and cheaper for PortsToronto to install and maintain.
- Ms. Homewood replied to Mr. Beck that she does not recall Mr. Merza stating that best management practices have changed. She recalls him saying that noise monitors need to be placed in secure areas and in locations which are not going to be influenced by factors on the ground.
- Mr. Beck responded that he agreed with what Ms. Homewood had said.
- Ms. Homewood asked if Ms. Monette can confirm where the noise monitor at her building is located.
- Ms. Monette responded that the noise monitor at her building is on the balcony of the exercise area on the sixth floor. She noted that the noise monitor faces out of the balcony and that the building has 12 floors in total.
- Mr. MacWilliam added that he thinks the noise monitor is on a pole that is underneath the edge of the balcony.
- Ms. Monette confirmed that this is correct.
- Mr. MacWilliam explained that they were unable to put the pole on the actual floor of the balcony, so it comes off from underneath the balcony overhang.
- Ms. Monette added that the noise monitor sticks out from the balcony overhang so that it is in an open area with nothing over the top or in front of it.
- Mr. Beck elaborated further that the water-facing side of a building is shielded from noise generated by the city (such as the Gardiner Expressway), so there is a difference between the waterside and the city side of a building, which will result in more background noise if the monitor is placed on the rooftop. Mr. Beck

¹ Information from Noise Management Subcommittee meeting #7, including the <u>meeting minutes</u> and <u>appendices</u>, is available online on <u>PortsToronto's Community Engagement page</u>.



added that such a measurement would not show the actual noise impacts of the airport operation.

- Mr. Moore then inquired if the overhang over the front entrance to a building would be a good place to mount a permanent noise monitor.
- Mr. MacWilliam responded that this would be too close to street level, which is an
 issue because there would be trees and other buildings in the way of the airport.
 Mr. MacWilliam affirmed that he agrees that the permanent noise monitor should
 be as high as possible.
- Mr. Beck also noted that his building's situation is unique because a noise barrier was installed on the airport side a few years ago shielding units up to the fifth floor, however this leaves the remaining three floors of his building exposed to the airport. He also noted that he believes placing the permanent noise monitor on the eighth floor (top floor) would cause city background noise interference. So, the most desirable height will be between the fifth and seventh floor. He indicated the ideal location would be in the middle section of the building that sticks out, as this would capture noise from the ferry area as well as the airport. However, the material in this section is stucco, which Dr. Novak had indicated he would rather not work with as it poses issues with the acoustic properties and stability of the installation. Mr. Beck acknowledged that he understands these constraints. Mr. Beck then explained the second option had been reviewed by Dr. Novak, Gary, and himself during a site walk in June 2020. This option would entail mounting the noise monitor on a brick surface outside a unit's window. Mr. Beck noted that if he could get some pictures of a similar installation somewhere else, then he could easily go present it to his building's board to get their approval. Mr. Beck also noted that the board is eager to get this noise installation underway.
- Mr. MacWilliam confirmed that he is supportive of Mr. Beck's desire to get this
 permanent noise monitor installed and that it has been delayed much longer than
 he would have liked. Mr. MacWilliam indicated that they agree that the stucco
 option is not the way to go, leaving only the brick and roof options he will have to
 go back and discuss with Dr. Novak.

M#14-A2 Michael MacWilliam to reconnect with Dr. Novak regarding a suitable location for the permanent noise monitor on Windward Co-Op.

- Mr. MacWilliam added that in his previous discussions with Dr. Novak, the
 potential issue with the brick option was finding suitable ways of mounting the
 terminal vertically along the face of a building.
- Mr. Beck responded that Brüel & Kjær (B&K) referenced in their presentation to the <u>Community Liaison Committee at Meeting #13</u> (March 27, 2014) precedents for various mounting configurations. Mr. Beck added that the advantage of having it outside the window is that it is easy to maintain, and the calibration of the meter can be checked. He noted the building could put up its own meter right beside the PortsToronto installation to confirm measurements. Mr. Beck also expressed that he did have concerns about wind vortexes at the building corner that might drive up the background noise.



- Mr. MacWilliam responded that the microphone covers are designed to muffle
 any wind noise and that the microphones are calibrated using a test tone
 calibrator to make sure that they are functioning properly. Mr. MacWilliam then
 confirmed that he would check with Dr. Novak again, though he still believes the
 rooftop is the best option.
- Mr. Beck then asked if the noise monitor at Ontario Place could be as close as possible to the 'X' shown on the official noise map for the Tripartite Agreement.
- Mr. Colwell confirmed that they were looking at that location and that the location worked well because it is easily serviceable for B&K without a ladder. Mr. Colwell noted that Ontario Place does not allow any work from a ladder, so the thinking was to install the noise monitor about arm's length height above the ground. Mr. Colwell also noted that once he restarts discussions with Ontario Place, PortsToronto may need to go through the full process of getting approvals for the site from the beginning. Still, he does not anticipate there being any issues.
- Mr. Beck inquired if any trees were planted along the site's shoreline when Mr.
 Colwell did the walkthrough there.
- Mr. Colwell replied that he does not recall any trees being there during his
 walkthrough and that there was not anything in the way between the site and the
 airport, but he is not sure if trees have been planted since then.
- Mr. MacWilliam confirmed to Mr. Beck that they would revisit the site to revalidate it because the original approval for the site happened so long ago.
- Mr. Beck noted that there are trees along the shoreline now as part of new landscaping improvements. He also suggested that the noise monitor be installed on the roof of the new gazebo there.
- Mr. Colwell added that another reason the location was chosen is that there is already hydro power there. They can plug the monitor into a receptacle behind the shrub without needing to run any power lines. Mr. Colwell noted that he will have to check with Ontario Place when he reaches out that they are still willing to have the noise monitor on their property.
- Mr. Beck responded that he believes under Federal requirements a noise monitor should have already been installed at Ontario Place by the year 2001, so Ontario Place will need to install one anyway. Mr. Beck asked Mr. Colwell to have a good look to evaluate trees at the site because leaf noise will contaminate the measurements.
 - Comment from PortsToronto: There is no requirement at the Federal, Provincial, or Municipal order of government for a noise monitor at any location unless there is an issue with non-compliance of the provincial Environmental Protection Act. If this is the case, then a provincial Certificate of Approval now called an Environmental Compliance Approval would be issued to the business/operation that is out of compliance for discharges related to air or noise.
- Mr. Colwell confirmed that he would do that and noted that Dr. Novak would want to revisit the site to ensure the new landscaping would not adversely affect the monitor.



- Mr. Beck indicated that he would be willing to join a site walkthrough with Dr. Novak and asked to be informed when this is planned.
- Mr. Beck then inquired about the level of input that the other Tripartite Agreement signatories have regarding approving the location of the permanent monitors.
- Ms. Homewood responded that she is not involved in any of the approval
 processes that are required, but her understanding is that there are no regulatory
 or Tripartite Agreement requirements to install the permanent noise monitors.
 Rather it is an operational decision by the airport as part of its efforts to be a
 good neighbour and monitor the impacts on the community.
- Mr. Beck clarified that he is certainly not objecting to this location but would expect all three Tripartite Agreement signatories to make sure good spots are being selected to monitor the impact.
- Mr. MacWilliam responded that the other signatories expect that PortsToronto monitors noise. Mr. MacWilliam recounted that when he left Pearson Airport 10 years ago, they had 21 noise monitors. The locations were picked mainly based on runway orientation to monitor the takeoff and approach noise. He noted that there was no approval process in selecting the locations.
- Mr. Beck explained that he thought the other signatories would be more involved in picking spots so that there would be no disputes regarding the measurements in the future.
- Mr. MacWilliam replied that nothing is ever permanent, noting that a noise monitor will be redeployed to be installed at Mr. Beck's building.
- Mr. Beck replied that he thinks the word "permanent" is used because the installation is for months or years, as opposed to only one week.
- Ms. Homewood, following up on an earlier point, noted that the meeting minutes for NMSC Meeting #7 where Mr. Merza had joined, will be shared with Michael MacWilliam and Dr. Novak so that they can read what Mr. Beck is referencing.
- Mr. Beck noted that he identified that there is a loophole in the provincial noise standards that allows for a steady creep of the background threshold. This allows new development to generate the equivalent level of noise as the existing background noise. The issue here is whenever you add two decibels that have the same value, this results in the addition of three decibels to the overall background noise. Mr. Beck noted that this is of grave concern when setting meaningful noise standards. During Noise Management Subcommittee Meeting #7 when Mr. Merza attended, he recognized that background noise creep was raised multiple times when NPC-300 was written. At the time of this meeting Mr. Beck noted that sound creep represents a pressing issue for the City of Toronto to address as it continues to grow otherwise background noise will continue to rise.
- Ms. Homewood noted that the subcommittee should follow-up with Bryan Bowen about having a presentation on noise items relating to Redpath Sugar's approvals for site work.
- **M#14-A3** Alexander Furneaux to follow-up with Bryan Bowen regarding city planning presentation on noise in relation to Redpath Sugar's operations.



• Mr. Furneaux confirmed that he will recirculate the meeting minutes from Noise Management Subcommittee Meeting #7.

M#14-A4 Alexander Furneaux will recirculate Noise Management Subcommittee Meeting #7 minutes with subcommittee members.

- Ms. Monette inquired whether there is a yearly check on the microphones to ensure that they are working properly, noting concerns about impacts from birds that might peck at them.
- Mr. MacWilliam responded that Dr. Novak had planned to do checks on noise monitors on October 4, but when they called Ms. Monette's building that day, the Property Manager indicated that the building would need more notice.
- Ms. Monette replied that the building is very concerned about COVID-19. She
 asked to be informed when they want to do a check so that she can make
 arrangements with her property manager.
- Mr. MacWilliam confirmed that he would contact Ms. Monette once Dr. Novak determined another date.

M#14-A5 Michael MacWilliam to contact Lesley Monette when a date is selected for the permanent noise monitor test.

4. Ground Noise Study Update

Michael David (PortsToronto) provided an update on the Ground Noise Study, which included a review of the project scope. He explained that the four components of the study – fieldwork, modelling work, scenario analysis, and mitigation design - will progress mostly in sequence. He noted that the fieldwork component, which involves collecting source measurements of noise and background noise measurement, is about 85% complete. The biggest item that remains in the fieldwork is installing temporary noise monitors to measure the city's background noise. They are waiting for city activity to return closer to normal before taking the background noise measurements.

- Mr. Beck noted some financial sector businesses do not intend to have staff back in downtown offices until next summer.
- Mr. David mentioned that some businesses are also using this as an opportunity to exit their downtown leases. He indicated that due to a mix of approaches around returning to office work, he is trying to determine when would be 'normal enough' to collect background noise for the study.
- Ms. Monette indicated that she has seen more cars and trucks on the road than she has ever seen, due to people not wanting to use public transit. She noted that this means there is more transportation noise than before.
- Mr. Beck asked if Ms. Monette noticed this traffic increase during the day or whether this traffic is related to businesses restocking overnight.
- Ms. Monette clarified that she is observing the trucks nonstop, including during rush hour.



- Mr. Beck inquired whether the noise from traffic on Lake Shore Boulevard and the Gardiner Expressway make up the largest component of the background hum along the waterfront.
- Mr. David affirmed that it makes up a significant component of the background noise. He indicated he accessed data from the Ministry of Transportation website on the level of vehicle traffic in Toronto's primary arterial routes. He noted that he was not sure if this data set included Lake Shore, though he was sure it included the Gardiner and the Don Valley Parkway.
- Mr. Beck indicated that the Gardiner traffic was important to consider, noting that
 the streetcar tracks crossing the Bathurst and Lake Shore intersection result in a
 lot of extra traffic noise when vehicles drive over them. Mr. Beck noted that this
 would nominally impact background noise readings on top of the ferry terminal.
- Mr. David agreed with this and explained that for the purpose of the background study, the background microphones would be placed in representative balconytype locations that have a field of view of the airport but would be able to hear traffic on the Gardiner and Lake Shore.
- Mr. Beck inquired whether the subcommittee could receive a copy of the scope of work provided to the consultant.
- Mr. David replied that he thinks this was shared in the past and agreed this could be shared again.

M#14-A6 Alexander Furneaux will recirculate the Ground Noise Study project scope of work with subcommittee members.

- Mr. Moore inquired whether the standard peak times for noise that he had identified (7 AM – 9 AM, 11 AM – 2 PM, 4 PM – 7 PM, and 9 PM – 11 PM), were the same periods being considered in the study.
- Mr. David confirmed that the times Mr. Moore mentioned are, generally speaking, the peak times at the airport for aircraft movements. He noted that the study will be interested in both the peak and trough periods of noise because there may be operational differences during the troughs that the study could learn from, and this could inform what mitigations are designed.
- Mr. Beck noted that the Noise Barrier Study that was completed in the past, might be worth sharing with the consultants to inform their consideration of mitigations. Mr. Beck indicated that the Noise Barrier Study had concluded that no barriers were possible due to the horizontal clearance requirements for aircraft landing at the airport.
- Mr. David confirmed that the expectation is that the mitigations proposed by the
 consultants must be buildable. He elaborated that once the proposed mitigation
 is confirmed as viable, the consultants will reproduce models of the airport with
 the mitigations installed and determine the impact on peak noise levels at
 different locations.
- Ms. Monette noted that before planes takeoff, they sometimes rev their engines
 to check them and that the planes turn so that the engines are facing the land,
 resulting in the nearby buildings being exposed to the exhaust and the noise from
 the engines. Ms. Monette suggested that a possible mitigation to air and noise



pollution can be to adjust how planes move on the tarmac so that the engines are not facing the land during this revving.

- Mr. David replied that he cannot speak to why the planes might do this, but he agreed that this would be a good example of a possible operational mitigation.
- Mr. Beck noted that historically 7 AM during the week is more sensitive than 9
 AM in terms of noise impact, as there is usually a sequence of flights in a row
 that are not gradually spaced out.
- Mr. David agreed that noise sensitivity changes throughout the day, depending on what activities a person is doing and their background noise level. He elaborated that the ground noise study aims to quantify noise impact and qualify the impact based on an area's sensitivity and background noise.
- Mr. Moore asked if the study could possibly recommend a mitigation measure that restricted flights to between 8 AM and 10 PM.
- Mr. David responded that he cannot see the study recommending mitigation that cannot be enforced due to how the slots are managed.

5. Max Moore's ICAO Summary (May 10, 2021)

Mr. Furneaux gave the floor to Mr. Moore to provide an overview of the 2-page summary on ICAO Noise Standards that Mr. Moore prepared following the last Noise Management Subcommittee. The summary can be found in **Appendix C** and is intended for discussion purposes only.

- Mr. Beck indicated that in past meetings, it was agreed that the noise measurements would be recorded in both DBA and DBZ.
- Mr. David confirmed that the microphones will be recording in both DBA and DBZ and will present measurements in both.
- Mr. Beck noted that the noise monitor specs document indicates that the monitors can record in A, B, C, and Z, as well as record in half second increments and in one-third octave bands.
- Mr. David clarified that the monitors can only record in two decibel weightings at the same time, so when they are programmed at a site, the two weightings need to be decided.
- Mr. Moore explained that his understanding is that the microphones record in DBZ and then statistically adjust down to look like DBA decibels.
 - PortsToronto comment: Dr. Novak explained during his presentation and Q&A at Noise Management Subcommittee Meeting #12 (January 28, 2021) that the microphones can record two decibel weightings in real-time.
- Mr. Beck noted that the noise monitor specification document mentions different reports that the system can generate. He suggested that the subcommittee members look at some example reports to inform their understanding of what data is being collected and how it can be presented.
- Mr. David noted that the system-generated reports might work for the permanent noise monitor terminals, but for the ground noise study, there is a fair amount of data scrubbing that is necessary to remove airport noise so that the background hum of the city is not falsely raised.



- Mr. Beck suggested the subcommittee review some example reports to discuss what type of presentation of the data would be needed. He also noted Bryan's suggestion of creating vignettes of what noise impacts would be in different scenarios.
- Mr. David agreed with this suggestion and indicated he liked the term vignettes.
 Mr. David continued, noting that the consultant team has moved on to other projects because pandemic related delays resulted in not having enough work for Mr. David to give them. He indicated that he does not want to pull them back to this project for a limited capacity just to create and present the example reports. He added that he will call them back soon, but he does not know when.
- Mr. Beck suggested that at the next meeting he could provide an overview of the noise monitor specs document. He noted that there are some standard reports that they could review that can be generated by the software alone.
- Mr. MacWilliam indicated that he checked the software he has downloaded and noticed that the report outputs are limited even though the monitors can record in more units.
- Mr. Moore replied that what is important is for there to be a column that expresses the data in DBZ decibels.
- Mr. MacWilliam confirmed that he will email B&K to ask how he can generate a report with DBZ.

M#14-A7 PortsToronto will seek clarification from Brüel & Kjær on how to generate reports that provide noise monitor data in DBZ decibels.

6. Business Arising

Alexander Furneaux (LURA) inquired whether there were any additional items to address prior to adjourning.

- Mr. Beck noted ideas for discussion topics for future meetings. This included the noise criteria in Environmental Assessment (EA) studies, TP 1247, Noise Exposure Forecast (NEF) modeling and interpreting values, and ICAO documentation and publications related to noise.
- Ms. Homewood responded that unless there is a project that requires an EA either federally or provincially, that discussion topic may need to be put on hold.
 Ms. Homewood indicated that the ICAO suggestion is a good one, and that she and Mr. MacWilliam have been considering potential speakers that could provide a presentation on that topic.
- Ms. Homewood indicated that the subcommittee should focus discussion on topics that will be most helpful to progressing the ground noise study and other immediate subcommittee priorities.
- Ms. Monette indicated that a topic she would like to discuss at a future meeting is mitigations and new technologies used in other airports in the world to reduce noise.
- Mr. David agreed that looking at what other airports are doing with respect to
 noise would be a very valuable exercise for the subcommittee. He noted that this
 would help the subcommittee prepare for the process of reviewing mitigation
 ideas proposed by the consultant team.



- Mr. Beck inquired whether this discussion would have to wait until the project is in the mitigation stage of the study and what the next steps should be.
- Mr. David replied that he thinks it would be good for the subcommittee to increase its knowledge on the topic in advance of the mitigation stage. He indicated that they would have to identify someone who can walk the subcommittee through this review, and that it would ideally be someone who works on airport ground noise globally.
- Mr. Furneaux then sought feedback on the date for the Noise Management Subcommittee to meet. He inquired about a date for the next subcommittee meeting, to which the subcommittee agreed to meet next on Wednesday, January 26, 2021, at 7:00 PM.

The meeting adjourned at 9:15 PM.