



**Beyond, Every Day.**

Mail: PO Box 44638, YVR Domestic Terminal RPO  
*Richmond, BC V7B 1W2 CANADA*

**MINUTES OF REGULAR MEETING**

<b>Aeronautical Noise Management Committee ("ANMC")</b>
Thursday 27 June 2019 - 1:00PM Vancouver International Airport, Link Boardroom 1

**Those in attendance were:**

<b>Chairperson:</b>	Marion Town	Director Environment, YVRAA
<b>Secretariat:</b>	Rachel Min	Environmental Analyst, YVRAA
<b>Admin Support:</b>	Florencia Comesana	Administrative Assistant, YVRAA
<b>Participants:</b>	Gary Abrams Arvind Sharma Meg Brown Alena Straka Paula Kolisnek Gail Sparrow Don McLeay Greg Dansereau Jennifer Aldcroft Mark Cheng	City of Richmond (citizen representative) City of Richmond (citizen representative) City of Vancouver (citizen representative) City of Vancouver (staff) City of Delta (staff) Musqueam National Airlines Council of Canada NAV CANADA (Area Control Centre) Manager Environment, YVRAA Supervisor Noise Abatement & Air Quality, YVRAA
<b>Guests:</b>	Alison Espetveidt Marina Miller Tegan Gallilee-Lang	City of Surrey (staff) – attending for Philip Huynh Environment Co-op Student, YVRAA Environment Co-op Student, YVRAA

Next ANMC Meeting: 5 December 2019	
Rachel Min	17 July 2019
Secretariat Signature	Date

## 1.0 INTRODUCTIONS AND ADOPTION OF AGENDA

Marion Town welcomed members and guests and reviewed the meeting agenda.

The following new members and guests were introduced:

- Gail Sparrow – Musqueam – new member
- Jennifer Aldcroft – Manager Environment, YVRAA – new member
- Florencia Comesana – Administrative Assistant, YVRAA – admin support
- Alison Espetveidt – City of Surrey (staff) – guest, attending for Philip Huynh
- Tegan Gallilee-Lang and Marina Miller – Environment Co-op Students, YVRAA – guests

## 2.0 UPDATE – 2019 NOISE MANAGEMENT INITIATIVES

Updates on the following 2019 noise management initiatives were provided.

### Portable Noise Monitoring - Musqueam

Mark Cheng presented a summary of noise monitoring activities in Musqueam using the airport's portable noise monitoring terminal ("NMT").

The Airport Authority deployed the equipment at the Musqueam Community Centre (6735 Salish Drive, Vancouver BC) on September 15, 2018. The equipment has been actively collecting data since then, and residents can view data online using the YVR WebTrak tool (<https://webtrak.emsbk.com/yvr5>).

Mark advised that the purpose of noise monitoring is to provide objective data for information purposes and to help understand the noise exposure in the area. When reporting results, no subjective assessment of the data is provided, as noise is perceived and experienced differently by each person.

Mark further explained that "Noise Events" are captured by the noise monitoring equipment when the sound level exceeds a user defined threshold for a set duration of time. The event threshold is set based on the ambient background sound level observed at the site. At the Musqueam location, with the threshold set for 65 dBA for 6 seconds during the day-time (between 7:00am – 10:00pm) and for 55 dBA for 6 seconds during the night-time (10:00pm – 7:00am). These thresholds are typical for a residential area and are the same as other NMTs connected the airport's Aircraft Noise and Operations Monitoring System ("ANOMS").

Noise events can be caused from a variety of emitters, including aircraft and community sources such as cars, grass cutting, alarms, etc. Those noise events associated with aircraft can be determined using radar data provided by NAV CANADA. For reporting, this allows the data to be separated into aircraft and community events.

The following summary of data collected over a 200-day period was provided:

- During this period, an average of 55 noise events per day were captured at the site. Of these:
  - 33 events per day were associated with aircraft and 22 events were associated with community sources.
  - It was noted that there were an average of approximately 850 arrivals and departures per day at YVR during the same period.
  - Most of noise events associated with aircraft had a maximum sound level of between 60-65 dBA<sup>1</sup>.

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<sup>1</sup> A sound level of 65dBA compares to a normal face-to-face conversation or a busy business office environment.

Over the same timeframe, in comparison to another NMT located in a residential area directly underneath the south runway flight path (NMT #4), the number of events and the maximum sound levels at Musqueam were lower. At NMT 4, an average of 162 aircraft events per day were captured during the same 200-day period, with most of these events having a maximum sound level value of between 75-80 dBA.

As a next step, a summary report will be finalized, and key results will be shared with Musqueam. Gail Sparrow suggested using various channels, such as social media, to share results and information about aircraft and airport operations with the Musqueam Community.

#### **Noise Monitoring Terminal System**

Mark advised that budget proposals are being submitted to support hardware upgrades of existing NMTs and the purchase of new units over the next five-year period. If budget is approved, the plan is to locate one of the new NMTs in Musqueam to allow for long term trend analysis of the community sound levels. Other new NMTs would be installed in Delta and other parts of the region.

A project to identify possible locations for new NMTs will be completed this year. A scope of work for this project has been prepared and sent to a local acoustical consulting firms for their review and consideration.

#### **Noise Management Videos**

Rachel Min advised that work is underway to convert information on the airport's website that is currently in PDF format into video formatting to help improve user-friendliness.

An introductory video providing background information on the YVR Noise Management Program has been created and is available on the website (<http://www.yvr.ca/en/about-yvr/noise-management/>). The video is meant to serve as an introduction of other topics that will be expanded upon in future videos.

The second video is currently in production and will cover the topic of general aircraft flight routings associated with each active runway. Once completed, it will be posted on the website and the link will be shared with ANMC members.

Rachel encouraged ANMC members to provide suggestions and input on topics to be prioritized as efforts to convert PDF materials to video continues over the next few years.

#### **Customized Community Reports**

Rachel noted that the Airport Authority will work with the ANMC community representatives to develop customized reports for their respective municipality. The objective of these reports is to provide community specific information on issues of concern and assist staff and citizen representatives in their role to better support their communities.

In addition to the offer made in the meeting, over the coming months the Airport Authority will reach out to ANMC representatives from each community to solicit input on the content and frequency of these reports. The citizen and staff representatives were encouraged to view information provided in the current reports and think about what information they would like to see presented for their community. Sample reports will then be developed in the Fall and distributed for review and feedback.

### 3.0 UPDATE – NACC’S ACTION PLAN PERFORMANCE

Don McLeay provided an update on National Airline Council of Canada (“NACC”)’s 2018 results against the targets contained in Canada’s Action Plan to Reduce Greenhouse Gas Emissions from Aviation (“Action Plan”). NACC carriers include Air Canada, WestJet, Air Transat, and Jazz.

As background, the Action Plan was created in 2012 by the aviation industry and Transport Canada and set a goal to achieve an average annual improvement in fuel efficiency of at least 2% per year until 2020 from a 2005 baseline. A review of the Action Plan in 2015 determined that this level of improvement would be difficult to achieve and resulted in the aviation industry and Transport Canada agreeing to evaluate progress against an improvement target in alignment with that established by the International aviation community, to see improvements in fuel efficiency by 1.5% per year until 2020 from a 2008 baseline. The industry will continue to strive towards achieving and will benchmark against the 2% aspirational goal.

In 2018, NACC carriers achieved a total efficiency improvement of 3.44% compared to 2017. The cargo sector in the transborder and international markets continues to be the key contributor in efficiency improvement as newer aircraft can carry much more cargo than older aircraft.

Compared to the 2005 baseline, NACC carriers achieved a cumulative efficiency improvement of 21.54% or a 1.7% average annual improvement. Compared to the 2008 baseline, NACC carriers were able to achieve a cumulative efficiency improvement of 19.64% or a 2.0% average annual improvement and meet their target.

NACC carriers continue to invest billions on upgrading their aircraft fleet, resulting in further reductions in emissions and noise.

### 4.0 VANCOUVER AIRSPACE MODERNIZATION PROJECT

Representing NAV CANADA, Greg Dansereau provided a presentation on the upcoming Vancouver Airspace Modernization Project.

The airspace around Vancouver and the South-West BC region is unique and complex with a diverse mix of aircraft and broad range of utilization by both Instrument Flight Rule (“IFR”) and Visual Flight Rule (“VFR”) operations. Over the past five years, the total flights operating in the Vancouver airspace has increased by 16%, and further growth is anticipated. To accommodate growth and to provide a continued high level of safety and efficiency, NAV CANADA is undertaking the Vancouver Airspace Modernization Project.

While NAV CANADA continues to maintain a high level of aviation safety, a safety risk assessment was recently completed to identify priority areas and areas of opportunities prior to launching the airspace modernization project. The project will review flight paths and procedures of both IFR and VFR operations in the Greater Vancouver Region and the Southern Vancouver Island areas and will look to achieve the following:

- Reduce risk
- Modernize airspace system
- Manage long-term growth
- Balance the needs of various stakeholder groups
- Manage the impact to the environment

The project will follow three phases, and NAV CANADA is committed to engaging and consulting with key stakeholder groups and communities throughout the process. Community consultation will likely begin in spring/summer 2020. While the project is in the very early stages, regular updates will be provided to the ANMC as a key stakeholder group as the project unfolds.

Greg and Mark referred to the “community design principles” which had been prepared by YVR with input received from the ANMC a few years ago. Airspace procedures are created in accordance with national and international standards to ensure the highest level of safety; as a result, there is often very little flexibility when developing new procedures. However, whenever flexibility exists the community design principles were meant to assist airspace designers incorporate community considerations to minimize disturbance on communities without compromising safety.

For reference, a document outlining the community design principles is posted on the YVR website at the following link - <http://www.yvr.ca/en/about-yvr/noise-management/airspace>. Intended to be continuously improved with new information, YVR will seek input into this work.

Paula Kolisnek mentioned that City of Delta staff prepared a report for Council with background information on the project. This report was presented to Council on June 24, 2019.

Mark complemented Paula on the report and her proactive efforts to provide updates to Council and for providing context for the work to come. Mark offered his assistance to other municipal or agency staff who may wish to create reports for their Councils.

## 5.0 Q2 – 2019 REPORT

Rachel reviewed the Q2 report, covering the period between January 1 and June 15, 2019. During this period, the Airport Authority received a total of 556 concerns from 114 individuals. This represents a 101% increase in the number of complaints but a 15% decrease in the number of individuals compared to the same period in 2018.

Of the 556 concerns, 50% (n=277) were received from three residents of the City of Richmond regarding jet departure routing and frequency during Runway 08 operations. The Airport Authority has offered to put these residents in touch with one of the City of Richmond citizen representatives to discuss their concerns further; however, the residents have not responded to this offer and continue to lodge concerns.

Rachel also acknowledged the winners of 2018 YVR Fly Quiet Award: Jazz Aviation (prop); Air Canada (narrow-body); and All Nippon Airways (wide-body). The awards were presented at the YVR Chief Pilots Meeting in May 2019.

## 6.0 OTHER BUSINESS

### a. Environmental Management Plan

As previously reported, Marion advised that the Airport Authority has continued to undertake work to develop the next five-year Environmental Management Plan (2020-2024) as the current Plan ends at the end of 2019. The draft Plan will be completed by the fall, and the final approval of the Plan is anticipated in December 2019.

### b. Airshow – Boundary Bay Airport and Abbotsford Airport

The Committee was informed that Boundary Bay Airport Airshow is scheduled for July 20, 2019. Canadian Forces Snowbirds and CF-18s are scheduled to perform. To accommodate the performances, some aircraft on approach to YVR may follow unusual flight paths to avoid the airspace set aside for the air show on July 19 (to allow for practice) and July 20 (for the airshow). Information will be posted on the YVR website.

On another note, the Abbotsford Airshow is scheduled for August 9-11, 2019. There is no anticipated impact to YVR aircraft operations due to this airshow.

**c. House of Commons Standing Committee – Noise Report**

Mark provided an update on the study by the House of Common Standing Committee on Transport, Infrastructure, and Communities (TRAN) on aircraft noise near major Canadian airports. Background on this study was provided to the ANMC at the meeting on December 6, 2018.

The TRAN Committee released their report in March 2019, which included 16 broad ranging recommendations. The Government of Canada issued their responses to the recommendations on June 20, 2019. The TRAN report and the Government of Canada's responses to the recommendations can be found on the TRAN Committee website - <https://www.ourcommons.ca/Committees/en/TRAN/>.

**d. Supersonic Transport**

Mark provided an update on recent discussions at various working groups of the International Civil Aviation Organization ("ICAO"). One of the topics of interest is the demand for supersonic transport, mostly coming from business jet community and manufacturers, and the noise issues related to these aircraft.

During these discussions, airports have stressed that these aircraft should meet appropriate existing ICAO noise certification standards when operating subsonic around airports. Greg added that there are very few areas in the Canadian airspace where supersonic flight is permitted.

**MEETING ADJOURNMENT**

Marion thanked members for their attendance and contributions. The meeting was adjourned at 3:45 PM.