



Beyond, Every Day.

Mail: PO Box 23750, Airport Postal Outlet
Richmond, BC V7B 1Y7 CANADA

MINUTES OF REGULAR MEETING

Aeronautical Noise Management Committee (ANMC)
Thursday 3 March 2016 - 1:00PM Vancouver International Airport, Link Boardroom 1

Those in attendance were:

Chairperson:	Marion Town	Director Environment, YVRAA
Secretariat:	Catherine Alderson	Administrative Assistant, YVRAA
Participants:	Gary Abrams	City of Richmond (citizen representative)
	Victor Wei	City of Richmond (staff)
	Meg Brown	City of Vancouver (citizen representative)
	Jonathan Parker	City of Vancouver (citizen representative)
	Alena Straka	City of Vancouver (staff)
	Ron Sorensen	City of Surrey (citizen representative)
	Dave Harkness	City of Surrey (staff)
	Rick Hedley	Corporation of Delta (citizen representative)
	Paula Kolisnek	Corporation of Delta (staff)
	Scott Macpherson	Canadian Business Aviation Association
	Don McLeay	National Airlines Council of Canada (NACC)
	Terry Hiebert	Floatplane Operators Association
	Greg Dansereau	NAV CANADA – Vancouver Area Control Centre
	Brent Bell	NAV CANADA – Vancouver Tower
	Kirk Strachan	NAV CANADA – Vancouver Area Control Centre
	Dan Martens	Transport Canada
	Brett Patterson	Director Airside Operations, YVRAA
	Rachel Min	Noise Information Officer, YVRAA
	Mark Cheng	Supervisor, Noise Abatement & Air Quality, YVRAA

Next ANMC Meeting: 16 June 2016	
Catherine Alderson	23 March 2016
Secretariat Signature	Date

1.0 INTRODUCTIONS AND ADOPTION OF AGENDA

Marion Town welcomed members and reviewed the meeting agenda.

2.0 REVIEW OF PREVIOUS MEETING'S MINUTES

Marion advised that the minutes of the ANMC meeting on 26 November 2015 have been finalized and are posted on the YVR website (www.yvr.ca).

3.0 NOISE EXPOSURE FORECAST (NEF) CONTOUR - PROJECT UPDATE

Mark Cheng presented information on the project to review the long term planning NEF contour planned for this year.

As background, Transport Canada prescribes the NEF as the official metric for airport noise assessment. The NEF outlines high noise areas around airports to promote compatible land use planning. NEF contours are created using either forecasts or projections of future traffic. The current NEF contour for YVR, shown below, was created in 1994 with forecasted traffic projections for the year 2015.



The current contour needs to be reviewed and reassessed using more up-to-date forecasts, which are being developed as part of work on the YVR Master Plan. As part of work, a review of best practices for noise contouring and how to incorporate future airport developments and plans will be completed and the Airport Authority will consider creating maximum capacity contours to identify potential noise associated with future runways. The objective of this would be to provide information on future noise to Cities to incorporate into their planning decisions and policies.

The following tasks are planned for the upcoming months:

- Retain consultant to assist with work;
- Complete a review of best practices;
- Develop traffic projections and runway operational plans; and
- Create input files for the Transport Canada software.

The work is expected to be completed in Fall 2016.

The Transport Canada guidelines contained in *TP1247E: Land Use in Vicinity of Airports*, discourages residential development in areas exposed to NEF>30 and sound insulation is recommended for some residential development in areas of NEF 25-30.

Each province takes a different approach to the Transport Canada's land use guidelines. While some provinces provide regulations that protect airports from residential encroachment, the Province of British Columbia has delegated land use planning to municipalities.

In 2004, the City of Richmond adopted an Aircraft Noise Sensitive Development Policy to provide guidance on developments in areas exposed to aircraft noise using the 2015 NEF contour to define the planning area. This policy is not entirely consistent with the Transport Canada guidelines; however, it provides a framework for the City and the Airport Authority to work collaboratively on planning issues.

NEF contours are created using special software provided by Transport Canada. The following inputs are required:

- Airport layout with runways and flight paths;
- Aircraft types, time of operation, and destination airports for departure operations;
- Aircraft types, time, and origin airports for arrival operations; and,
- Runway use distribution and flight path allocations.

The size and shape of the NEF contours are sensitive to types of aircraft operating at the airport and the time of operations. Operations occurring between the hours of 10pm and 7am are weighted higher than day operations by assigning an additional 12 dBA to account for community sensitivity over noise occurring at night.

4.0 2015 RUN-UP STUDY REVIEW

Rachel Min provided a wrap up of the project completed in 2015 to review engine run-up procedures. This review was completed by Harris Miller Miller & Hansen (HMMH), who provided their preliminary results via webinar at the ANMC meeting in November 2015.

The objective of the review was to assess procedures used for run-ups performed at locations outside the Ground Run-up Enclosure (GRE) and to identify additional procedural control measures to further mitigate noise where applicable. The locations that were included in the review were: (1) Jazz Hangar; (2) Apron III; (3) Apron II; and, (4) Air Canada South Hangar.

The review concluded that the current procedures used by the Airport Authority for run-ups at these locations provide the best possible noise reduction. While HMMH did include three recommendations for consideration, they also stated that these recommendations were not warranted at this time based on current operations and potential drawbacks.

The recommendations were further analyzed and evaluated by Airport Authority staff. The following table summarizes the recommendations and the Airport Authority's findings and responses.

HMMH Recommendation	Airport Authority Findings and Response
1. Move all Apron III run-ups to Apron II at night	<ul style="list-style-type: none"> • There are a very low number of run-ups performed on Apron III at night (approximately one run-up every other night). • These run-ups are short-duration and at low (idle) power settings. • Moving these run-ups to another location would result in increased maintenance time, fuel, and labor costs, and would likely result in higher community noise levels as the aircraft is taxied to the run-up location. <p>Given these reasons, this recommendation will not be implemented at this time. However, the Airport Authority will continue to monitor operations on Apron III and will re-evaluate should the nature of operations and trends change.</p>
2. Move all Jazz Hangar run-ups to Air Canada South Hangar at night	<ul style="list-style-type: none"> • There are approximately two run-ups / night at the Jazz Hangar. • There are a low number of complaints associated with run-ups at this location. • Moving these run-ups to the Air Canada south hangar would result in increased maintenance time, fuel, and labor cost. <p>Given these reasons, this recommendation will not be implemented at this time. However, the Airport Authority will continue to monitor operations at the Jazz Hangar and will re-evaluate should the nature of operations and trends change.</p>
3. Extend the start of the night-time hours from 10pm to 8pm to limit the number of run-up locations available.	<ul style="list-style-type: none"> • There is approximately one run-up / day between the hours of 8pm and 10pm. • Run-ups performed during this time period do not correlate with many complaints (4 complaints in total over a two year period). • Safety is a significant consideration as the airport is very busy during these hours and taxiing aircraft from one location to another introduces unnecessary risks. <p>Given these reasons, this recommendation will not be implemented at this time. However, the Airport Authority will continue to monitor complaints received between the hours of 8pm and 10pm and will re-evaluate should the nature of operations and trends change.</p>

5.0 NORTH RUNWAY OPERATIONS – SUMMER 2016

Brett Patterson provided information on the planned use of the north runway for departures during the day to reduce delay in summer 2016.

As background, when the federal Minister of Transport approved the construction of the north runway in 1992, he imposed several operating commitments on the runway. One of these commitments stated that the north runway would be used primarily for landings, but it could be used for departures when traffic demand approaches capacity limits, such as during peak times.

In compliance with these commitments, the Airport Authority currently operates the north runway as the primary arrival runway and the south runway as the primary departure runway between the hours of 7am and 10pm. However, as traffic demand continues to reach capacity during peak hours at YVR, the use of the north runway for departures is required to reduce delay and streamline operations.

Capacity is defined as the number of aircraft operations during a specified time corresponding to a tolerable level of average delay. For departing aircraft, the tolerable average delay is defined to be four-minutes which is a standard industry metric used to determine airfield capacity. The Airport Authority completed a comprehensive airside capacity study that determined that the four-minutes of average delay correspond to the following aircraft traffic levels:

- When total operations (arrivals + departures) reaches 60-70 operations in a given 60-minute period; **OR**
- When arrivals reach 35-40 operations in a given 60-minute period; **OR**
- When departures reach 35-40 operations in a given 60-minute period.

The traffic demand projected for summer 2016 will see these values exceeded consistently throughout the day. As such, the Airport Authority has authorized the strategic use of the north runway for departures between the following hours:

- 7am to 8pm Monday to Friday; and,
- 7am to 7pm Saturday and Sundays.

Greg Dansereau advised that during runway 08 operations, aircraft assigned to the north runway would typically be those with destinations to the east and north. During runway 26 operations, aircraft assigned to the north runway would be those with destinations to the west and to the north. There would be no change to the current procedures and flight paths used by aircraft departing on the south runway.

The following questions by ANMC members were raised during the discussions:

Q: When the demand drops below capacity during the day, will you stop using the north runway for departures?

A: We cannot safely shift between having the north runway available and not available due to the nature of air traffic control operations. However, all efforts will be undertaken to minimize use to those occasions when an operational benefit will be realized.

Q: Why doesn't the Airport Authority consider slot control to spread out traffic over the day to remove queues?

A: Slot control is only allowed for airports whose demand exceeds capacity – an example airport would be London Heathrow Airport. According to definitions of the International Air Transport Association (IATA), YVR is defined as a level 3 coordinated airport due to gate and check-in counter constraints; however, demand on runway system remains below its capacity.

Q: How will NAV CANADA determine departure order?

A: It is generally determined on a first come first serve basis. Air traffic controllers will sort and sequence aircraft on their way to the runway to achieve the best possible departure rate.

Q: Will there be public communication regarding use of the north runway?

A: Yes, materials will be developed to communicate north runway departures and other relevant activities occurring during the summer.

6.0 MASTER PLAN CONSULTATION UPDATE

Marion provided an update on YVR Master Plan consultations.

In 2015, a joint meeting with the ANMC and YVR Environmental Advisory Committee was hosted to solicit early input on the YVR Master Plan. Another joint meeting will be hosted later this year to discuss topics such as peak day flow, planning for 2037, and challenges. A meeting date will be selected and communicated in advance to maximize attendance.

Marion advised that YVR will ensure that the workshop will be well facilitated to better engage members from both committees in discussions.

7.0 Q1 – 2016 REVIEW

Rachel reviewed the Q1 2016 report and provided an overview of noise complaints received in January and February 2016. During this time period, the Airport Authority received 340 complaints from 48 individuals. 80% (n=273) of these complaints were registered by two individuals.

Mark also provided an update on discussions at the Transport Canada Aircraft Noise & Emission Committee (ANEC) meeting on 25 January. ANEC is a multi-agency committee chaired by Transport Canada. A number of industry associations, including the Canadian Airports Council, are invited to participate in meetings. Vancouver Airport Authority staff has recently started to participate in these meetings via teleconference.

While most of the discussions at the ANEC meeting related to emissions, noise topics included changes to the aircraft noise certification process due to new atmospheric absorption calculations, helicopter noise standards, and supersonic aircraft.

This ANEC meeting was of particular interest as Transport Canada was preparing to attend the ICAO Committee on Aviation Environmental Protection (CAEP) meeting held in Montreal between 1-12 February 2016. CAEP is responsible for developing noise and emissions standards for aircraft and meets every three years.

8.0 OTHER BUSINESS

RESA 2016

Mark advised that work on the second year of the south airfield RESA project is scheduled from 8 May to 2 September 2016. Work will occur six nights a week (Sunday-Friday), and no work is planned on Saturday nights and stat holidays. Work will require the closure of the south runway between the hours of 10pm and 7am.

In addition, the 08R ILS and the glide path for 26L will not be available during the duration of the project. As a result, the north runway will be available for arrivals on nights when no work is planned for aircraft requiring an ILS approach.

CANADIAN AIRPORT NOISE AND COMMUNICATIONS WORKING GROUP

Mark advised that discussions with other airports in Canada are ongoing to establish a Canadian Airport Noise & Communications Working Group. The next steps are to finalize a terms of reference, appoint a Chair and Co-Chair. The Canadian Airports Council (CAC) is supportive of the formation of this working group.

UPDATE ON PORTABLE NOISE MONITORING TERMINAL

Rachel advised that the portable noise monitoring terminal will be deployed at the Vancouver Museum on 4 March 2016. The objective of the deployment is to collect baseline noise data to compare against noise levels associated with the use of the 08L Requirement Navigation Performance (RNP) approach procedure. Information on the RNP 08L arrival procedure can be found in the ANMC meeting minutes from 22 July 2015.

MEETING ADJOURNMENT

Marion thanked ANMC members for attending and adjourned the meeting at 3:00 PM.