



Beyond, Every Day.

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

MINUTES OF REGULAR MEETING

Aeronautical Noise Management Committee (ANMC)
Wednesday 1 April 2015 - 1:30PM Vancouver International Airport, Link Boardroom 1

Those in attendance were:

Chairperson:	Marion Town	Director Environment, YVRAA
Secretariat:	Rachel Min	Noise Information Officer, YVRAA
Participants:	Gary Abrams	City of Richmond (citizen representative)
	Victor Wei	City of Richmond (staff)
	Meg Brown	City of Vancouver (citizen representative)
	June Christy	City of Vancouver (staff)
	Rick Hedley	Corporation of Delta (citizen representative)
	Ron Sorensen	City of Surrey (citizen representative)
	Craig MacFarlane	City of Surrey (staff)
	Don McLeay	National Airlines Council of Canada (NACC)
	Scott Macpherson	Canadian Business Aviation Association (CBAA)
	Brent Bell	NAV CANADA
	Brett Patterson	Director Airside Operations, YVRAA
	Mark Cheng	Supervisor Noise Abatement & Air Quality, YVRAA
	Brandon Hunsicker	NAV CANADA – Vancouver Area Control Centre
Guests:	Capt. David Deere	WestJet
	Mike Brown	Senior Planner, YVRAA
	Meg Comiskey	Manager, Policy & Research
	Jody Armstrong	Executive Assistant, YVRAA
	Amanda Chow	Environmental Analyst, YVRAA

Next ANMC Meeting: TBD	
Rachel Min	16 April 2015
Secretariat Signature	Date

1.0 INTRODUCTIONS AND ADOPTION OF AGENDA

Marion Town welcomed ANMC members and reviewed the meeting agenda.

Mark Cheng introduced the following guests:

- Capt. David Deere, who would be providing a presentation on performance based navigation technology.
- Mike Brown, Meg Comiskey, and Jody Armstrong who would be providing a presentation on the YVR Master Plan project.
- Amanda Chow, a new employee in the YVR Environment Department who was attending as an observer.

2.0 REVIEW OF PREVIOUS MEETING'S MINUTES

Mark advised that no comments were received on the minutes for the ANMC meeting on 14 January 2015, and the minutes are now posted on the YVR website (www.yvr.ca).

3.0 OVERVIEW OF PERFORMANCE BASED NAVIGATION (PBN)

Mark introduced Capt. David Deere, who was invited to provide the ANMC an overview of PBN technology and implementation. The objective of the presentation was to introduce and build a technical understanding among ANMC members.

Capt. Deere's background includes 17 years with the Canadian Air Force, and 15 years with WestJet, including 8 years in the role of technical standards and maintenance test pilot. Capt. Deere is currently the manager of communications, navigation and surveillance in flight operations and represents the National Airlines Council of Canada (NACC) on many operational matters and works with NAV CANADA and Transport Canada on all airspace related matters.

PBN is becoming the new way to navigate. Whereas traditional navigational infrastructure is primarily based on the ground based system, PBN uses GPS and sophisticated avionics to allow aircraft to fly point to point very accurately, both vertically and laterally.

PBN is the highest air navigation priority of the International Civil Aviation Organization (ICAO), and has a number of benefits. These include:

- flexible route structures which allow for more efficient flight paths and result in reduced fuel burn and emissions
- access to airspace and runways that are limited or not achievable by conventional navigation technology
- improved safety through more straight-in instrument approaches with vertical guidance
- increased airspace capacity
- reduced infrastructure costs, and,
- reduced environmental impact

Canada has put together a state plan to address PBN implementation in accordance with requirements from ICAO, and its implementation is seen as a critical component to meeting the aviation industries emission targets contained in Canada's Action Plan to Reduce Greenhouse Gas Emission from Aviation.

PBN is a global set of area navigation standards, based on performance requirements for aircraft navigating on departure, arrival, approach or en route segments of flight. Under PBN, there are two types of specifications: area navigation (RNAV); and required navigation performance (RNP).

RNAV is a navigation specification based on area navigation that does not include the requirement for on-board performance monitoring and alerting.

RNP is a navigation specification based on area navigation that includes the requirement for on-board performance monitoring and alerting; aircraft equipage; and pilot training and qualifications.

Between the two, RNP is more capable and is recognized worldwide as the navigation standard that should be adopted to support improvements in safety, efficiency and environment.

RNP requires certified aircraft, certified approach designs and flight crews who have completed specific training. Capt. Deere stated that WestJet has been flying RNP approaches for 10 years, and there are currently 80 RNP approach procedures at 20 airports in Canada. Implementation of these procedures at an airport is a collaborative effort among different parties such as regulators, airspace designers, air traffic control, airports, manufacturers, communities and noise committees.

In designing new PBN routes, there may be opportunities to reduce noise by having flights track placed over less populated areas compared to the use of traditional procedures. However, given urban development around major international airports, over-flights of some populated areas will be inevitable.

The 2014-2018 YVR Noise Management plan includes an initiative that supports the implementation of PBN. Mark added that more information on potential PBN approaches for YVR will be presented at future ANMC meetings, and implementation will fit closely with the draft Airspace Change Communication & Consultation Protocol discussed at the last ANMC meeting.

4.0 YVR MASTER PLAN UPDATE

Mark introduced Mike Brown, Senior Planner, who provided a presentation outlining a high level overview of the upcoming the process to update the YVR Master Plan. The objective of the presentation was to provide the ANMC with the update on current progress, introduce themes, and discuss planning concepts.

Mike added that the Airport Authority is required to submit a Master Plan every 10-years under the lease agreement with the Federal Government. The current YVR Master Plan covers the period 2007-2027, and the new Plan will span the time period 2017-2037.

An approximate timeline and key work items for the preparation of the 2017-2037 YVR Master Plan includes:

- Starting in Spring 2015 – work on possible future events and forecasts
- Starting in Fall 2015 - development of options and evaluation of criteria
- Starting in Winter 2016 - evaluation of options, recommendations and draft plan

Mike advised that the Plan will be based on the Mission, Vision and Values of the Airport Authority and will support the objectives in the YVR Strategic Plan. Themes and concepts for the Plan were also discussed.

Mike stated that the joint meeting with the ANMC and the YVR Environmental Advisory Committee would be arranged sometime between May and mid-June to present information on possible futures and traffic forecasts. Meg Comiskey added that the official public launch of the YVR Master Plan update process would commence at the Airport Authority's Annual Public Meeting, scheduled for 14 May 2015.

5.0 ENGINE RUN-UP PROJECT

An update on the project to review run-ups at locations outside the Ground Run-up Enclosure (GRE) was provided.

As background, Mark advised that the GRE was opened in 2012, and is used primarily for high power run-ups of propeller aircraft maintained on the south side of the airport property. Other locations on the airfield are used depending on where the maintenance base is located, and the power setting and duration requested. The objective of this project was to assess run-ups at these other locations to identify opportunities to reduce noise.

2013-2014 RUN-UP SUMMARY

Rachel Min advised that an analysis of existing run-up events was completed to identify commonly used areas used for run-ups, and who were performing run-ups at these locations. This review included looking at all run-up events performed during the two-year period of 2013-2014.

There were over 10,000 run-up events during this time period, of which idle run-ups were the most common. Summarizing the analysis, Rachel outlined the following key findings:

- 55% of run-ups were performed by operators located on the south side of the airport (note: the south runway was used as the demarcation line between north and south).
- The GRE accommodated:
 - 39% of total run-ups on the south side
 - 88% of full power run-ups on the south side
- The top three locations outside the GRE include the Jazz Hangar (Apron V), Apron III, and Apron II.

NEXT STEPS – CONSULTING SERVICES

Mark advised that work will focus on looking at the three primary non-GRE run-ups location identified, and will include retaining the services of a consulting firm to assist with identifying additional noise mitigation opportunities.

A draft scope of work is currently being prepared and will be distributed to ANMC members for review and comment. The plan is to award the work in June and have a draft report available for review at the end of October.

6.0 SUMMER RUNWAY OPERATIONS

Mark provided the following updates on summer runway operations:

RUNWAY END SAFETY AREA (RESA) PROJECT

Year one of a multi-year project to construct RESAs on south airfield will commence in the summer. In 2015, the south runway will be closed on a nightly basis between the dates of 19 May and 31 August to accommodate work.

Between 19 May and 30 June, work is planned to occur 7 nights a week. Between 1 July and 31 August, work is planned for 5 nights a week with no work planned for Thursdays and Saturdays. However, while no work is planned on these two days, the north runway will have to remain open at night for landings as the south runway will not have approach lights due to construction.

Mark advised that the Airport Authority will initiate project communication closer to the start of the work, and is currently wrapping up consultations with stakeholder groups.

FRASER SIX DEPARTURE PROCEDURE

Mark advised that NAV CANADA will begin use of FRASER SIX Standard Instrument Departure (SID) procedure on 1 May. This procedure has some aircraft departing from the south runway initiate a 15° degree turn to the south when reaching an altitude of 1,000 feet. This procedure together with other techniques, increases capacity and will help reduce delays during spring and summer period.

Mark stated that the use of the FRASER SIX SID has occurred for the past few years, and NAV CANADA is currently assessing options to continue its strategic use during the fall and winter.

7.0 Q1 REPORT AND 2014 YEAR END NOISE COMPLAINT REVIEW

Rachel presented a high level summary of noise complaints from 2014 and the first quarter of 2015. Both the 2014 annual results and the 2015 Q1 period showed a high number of concerns registered by a few individuals.

A general discussion on how to best handle repeat complaints in the data analysis occurred, and some recommendations from ANMC members included:

- Count repeat complaints as one complaint if the nature of the concern is the same
- Track year-by-year noise level measurements at NMT locations and compare them to the number of complaints from different communities

Mark and Rachel will review and present a proposal on how to best account for repeat complainants at the ANMC meeting in December for consideration.

8.0 OTHER BUSINESS

ANNUAL PUBLIC MEETING

Mark advised that the Airport Authority's Annual Public Meeting will be held on 14 May 2015 in the afternoon. ANMC members will receive an invitation to the event.

MULTILINGUAL NOISE MANAGEMENT MATERIALS

Mark discussed work to identify key noise management materials on the airport website for translation into multiple languages. ANMC members were requested to review materials on the website and assist with identifying key materials that they think should be translated.

UPDATE - CITY OF RICHMOND COUNCIL

Victor Wei provided an update on the annual noise management presentation to the City of Richmond's General Purposes Committee in January 2015. City staff and ANMC citizen representatives presented highlights and summarized discussions that occurred in 2014. Two recommendations made by the citizen representatives to the General Purposes Committee were related to YVR WebTrak: promoting the use of YVR WebTrak to the public; and having multilingual options available.

Mark advised that while there might be limitations for the WebTrak software to accommodate multiple languages, there may be options to have supporting information in multiple languages on the airport website.

MEETING ADJOURNMENT

Marion thanked ANMC members for attending and adjourned the meeting at 4:20 PM.