



VANCOUVER AIRPORT AUTHORITY

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

MINUTES OF REGULAR MEETING

Aeronautical Noise Management Committee
Wednesday 12 December 2012 - 1:00 p.m. Vancouver International Airport, Link Boardroom 1

Those in attendance were:

Chairperson:	Anne Murray	VP Community & Environmental Affairs, YVRAA
Secretariat:	Jody Armstrong Catherine Alderson	Administrative Assistant, YVRAA Administrative Assistant, YVRAA
Participants:	Margot Spronk Joan Caravan Meg Brown Rick Hedley Ron Sorensen Philip Huynh Don McLeay Warren Lampitt Terry Hiebert Claudio Bulfone John Nehera Danielle Rehm Brett Patterson Kirthi Roberts Shaye Folk-Blagbrough Mark Cheng	Citizen Representative, Richmond City of Richmond (staff) Citizen Representative, Vancouver Citizen Representative, Corporation of Delta Citizen Representative, Surrey City of Surrey (staff) National Airlines Council of Canada Air Canada Floatplane Operators Association Transport Canada Transport Canada Transport Canada Director Airside Operations, YVRAA Director Environment, YVRAA Environmental Analyst, YVRAA Supervisor Noise Abatement & Air Quality, YVRAA

Date/Time/Place of next REGULAR Committee meeting: Wednesday 24 April 2013 – 1 p.m. Link Boardroom 1	
Jody Armstrong	12 February 2013
_____ Secretariat's Signature	_____ Date

1.0 INTRODUCTIONS AND ADOPTION OF AGENDA

Anne Murray welcomed Committee members and called the meeting to order at 1:00 pm.

2.0 REVIEW OF PREVIOUS MEETING'S MINUTES

The minutes from the 12 September 2012 Committee meeting were reviewed. The minutes were approved as drafted and will be posted on the YVR website.

Actions:

- *Post minutes on the YVR website.*

3.0 NOISE MONITORING TERMINAL STRATEGIC ASSESSMENT – RESPONSE TO L&B RECOMMENDATIONS

Shaye Folk-Blagbrough reviewed the Landrum & Brown (L&B) recommendations presented at the September 2012 Committee meeting with regards to their work on the Noise Monitoring Terminal (NMT) Strategic Assessment project.

L&B had two main recommendations: (1) consider relocating NMTs# 1, 7, 8, 9, 12, and 13 due to redundancy in data collected from other sites located in close proximity; (2) ensure proper height of microphones over surrounding rooftops.

Recommendation #1: Relocation of NMTs.

Response: the Airport Authority will not be relocating any NMTs at this time; however, we will review opportunities that may arise in the future.

Recommendation #2: Microphone heights.

Response: the Airport Authority will confirm the heights of all microphones during its annual calibration and preventative maintenance cycle. The accepted industry standard is for the microphone to be at least 6m above the ground or 3m above the rooftop. From their cursory evaluation, L&B noted that some of the microphones may be less than 3m above the rooftop. Shaye added that in cases where the height is less than 3m above the rooftop, the noise level would be over-estimated (higher than actual) due to reflections of the rooftop.

Ron Sorenson raised a question about background noise levels at some NMTs being as high as noise from aircraft over-flights. Shaye replied that the noise monitoring equipment is highly accurate, and explained that it is a challenge to measure aircraft noise at locations far from the airport. At these locations, the sound level from aircraft is very low compared to the ambient background sound level, which makes measuring aircraft sound extremely difficult.

4.0 NIGHT-TIME OPERATIONS STUDY – RESULTS & RECOMMENDATIONS

Mark Cheng provided the results of a study of night operations at YVR. This study was undertaken to complete an initiative in the 2009-2013 YVR Noise Management Plan and the objective was to determine if the current approval guideline for night-time jet operations is sufficient or if new guidelines/restrictions based on aircraft noise levels should be considered.

Background

Mark stated that YVR is open 24-hours a day, like all other international airports in Canada. The current procedures to manage noise at night were reviewed, and these included:

- Closing the North Runway nightly between 10:00PM – 7:00AM*
- Using two-directional flow and preferential runways to keep arrivals and departures over the Strait of Georgia as much as possible (weather permitting)
- Using special air traffic control procedures for particular operations to minimize over-flights of populated areas
- Having an approval requirement for jet operations between mid-night and 7:00AM.

** exemptions for emergencies and maintenance.*

Mark advised that when the Airport Authority receives a request for a jet operation at night, the economic benefits of the operation to the broader community will be reviewed. Under the current approval guidelines, operations that carry passenger or cargo to and from YVR are approved, whereas ferry (repositioning) flights and technical stops (refuelling) operations are denied. Mark explained that these guidelines are very similar to those used at other major airports in Canada.

Analysis Results - Operations

The following figure was presented and illustrates the historical trend of night operations (those occurring between the hours of midnight and 6:00AM) for the years 1989-2011. As illustrated, YVR operated as a 24-hour airport before the Airport Authority assumed management of the airport in 1992, and the peak number of night operations occurred in the year 2000. The number of night operations in 2011 is well below the peak year of 2000 (down approximately 16% from this year).



Over the past few years, there has been an average of 21 operations per night. Approximately 64% of these are arrivals, which tend to be quieter than departures. A breakdown by aircraft type is:

Aircraft Type	Percentage
Wide Body Jets	40%
Narrow Body Jets	32%
Prop	21%
Business Jets	8%

Analysis Results – Operations (by Noise Certification and ACI Noise Rating Index)

Mark added that analysis was also done to categorize each aircraft according to their ICAO noise certification (either Chapter 3 or 4) and their ACI Noise Rating Index (“A” through to “F”). For each operation, the engine make and certified operating weight need to be determined in order to find the noise certification. For this analysis, the dataset for 2011 night operations by jet aircraft greater than 34,000kg was used.

In 2011, there were approximately 5,356 operations at night by jet aircraft over 34,000kg. This represents 70% of all night operations that year.

Narrow Body:

- Approximately 2,440 operations were with narrow body aircraft. Of these:
 - 2,189 (or 90%) were arrivals
 - 23% of these were with Chapter 4 aircraft
 - 251 (or 10%) were departures
 - 42% of these were with Chapter 4 aircraft
- the total Chapter 4 percentage = 25%
- the ACI Noise Rating Index category breakdown is:

2011 Night-time Narrow Body Operations - ACI Noise Rating Index (jets over 34,000kg)	
ACI Noise Index	Percentage
A	0%
B	19%
C	41%
D	<1%
E	12%
F	28%

Wide Body:

- Approximately 2,916 operations were with narrow body aircraft. Of these:
 - 1,257 (or 43%) were arrivals
 - 73% of these were with Chapter 4 aircraft
 - 1,659 (or 57%) were departures
 - 84% of these were with Chapter 4 aircraft
- the total Chapter 4 percentage = 80%
- the ACI Noise Rating Index category breakdown is:

2011 Night-time Wide Body Operations - ACI Noise Rating Index (jets over 34,000kg)	
ACI Noise Index	Percentage
A	18%
B	51%
C	14%
D	11%
E	6%
F	1%

Analysis Results – Noise Complaints

Between January 2010 and October 2012 (two-years and eleven months), approximately 530 complaints have been received about night operations. This constitutes 19% of the total complaints received during that time period. While the majority of complaints are received from the City of Richmond, City of Surrey, Delta, and Vancouver, the Cities of Richmond and Vancouver are exposed to more noise than the other communities due to their close proximity to the airport. While it is often difficult to associate a particular operation to a complaint, due to the lack of information provided by the complainant, it is estimated that the majority of complaints are associated with wide body departures.

Analysis Results – Future Growth and Economic Impact

Night operations to Asia-Pacific will likely continue to increase in the future due to growing demand and desire for stronger economic and business ties. The exact number of future night flights to Asia-Pacific as well as when they would materialize, is difficult to predict due to the large number of variables affecting demand and air routes between city pairs. However, it is anticipated that the likely aircraft to operate these flights are the B777 and the new B787, both of which meet Chapter 4 requirements.

The economic impact of a new international flight to the provincial economy is substantial. A new daily international flight creates between 150-200 jobs at YVR to service the flight, which translates to approximately \$8.8M in wages, \$5.0M in taxes, and \$16.7M in GDP. The flight also supports another 125-150 jobs in hotels, restaurants, tour companies, etc. which generates a further \$4.7M in wages, \$2.6M in taxes and \$6.4M in GDP.

Summary

The Airport Authority will maintain the current night approval guidelines and will not be proposing additional night access restrictions based on noise certification due to:

1. The high percentage of Chapter 4 aircraft and ACI “A” - “C” rated wide body aircraft demonstrates that airlines are using the most modern and quietest technology available for operations that are most concern to the community.
2. Flights to Asia are of high value and important flights for the community and the economy of BC. As the demand for these flights continue to grow, YVR must be able to accommodate and respond to the demand.

Follow-up Work

Mark advised that the Airport Authority is proposing to amend wording of Night Restrictions – Part II in the YVR Noise Abatement Procedures (NAP) to ensure greater clarity on which operations are to be covered under the approval requirement.

The current wording states that between mid-night and 0700 local, jet aircraft cargo, air carrier scheduled, and charter flights require the prior approval of YVRAA Operations. An issue with this wording is that private flights may not be captured. The Airport Authority is proposing to amend the wording to make operating weight the criteria for applicability, and will work with the operators in early 2013 to determine a suitable weight to use.

Actions:

- *Report at next meeting on NAP wording amendment.*
- *Distribute presentation materials.*

5.0 COMMITTEE SURVEY – RESULTS AND RECOMMENDATIONS

Shaye summarized the results of a survey administered to Committee members to review the functions of the Committee to ensure that it remains relevant and time is used effectively. The survey consisted of six sections: meeting venue; meeting frequency; meeting format; minutes & agenda; quarterly reporting & communication; and, stakeholder representation.

The survey was sent to Committee members on 2 October 2012, and 13 responses were received - 6 from industry representatives, 5 from citizen representatives, and 2 from city staff representatives. Shaye thanked Committee members who participated in the survey.

The table below summarizes the main theme of comments provided by survey respondents and the Airport Authority responses.

SUMMARY OF YVR NOISE COMMITTEE SURVEY		
Survey Item	Committee Comments	Airport Authority Responses
<i>Meeting venue</i>	Positive comments received on the meeting venue.	N/A
<i>Meeting frequency</i>	Variable responses received regarding meeting frequency. Some members liked meeting four times per year, while others suggested meeting only twice per year. Majority of respondents liked the idea of having an annual educational tour to learn about various aspects of airport operations.	Meeting frequency will be reduced from four to three meetings per year. Additional meetings will be scheduled as required. In addition, Committee members are always welcome to contact Shaye or Mark to set up time to discuss their particular issue. An educational tour will also be hosted for Committee members, likely in place of the June Committee meetings.
<i>Meeting Format</i>	Some respondents expressed sentiment that the meetings should be open to the public.	Meetings will remain closed; however, we will continue to provide time at the beginning of each meeting for interested residents to present their issues.
<i>Minutes and Agenda</i>	Respondents indicated that improvements could be made in having minutes distributed in a timely manner after meetings, and ensuring an easy process to propose agenda items. Respondents also requested that all presentation materials are distributed electronically to each member either prior to or immediately after each meeting. Respondents also commented that the minutes tend to omit information that arises in 'Other Business' and omits questions arising from presentations.	Work to structure agenda and topics to allow for more dialogue and discussion. Work to decrease time required for distribution of meeting minutes and materials. Minutes and materials distribution timelines would be discussed and presented at the March 2013 Committee meeting. Meeting minutes are not meant to be verbatim or to document all discussion. They are meant to summarize discussions. If members feel their points are missing from the minutes, they should provide comments when reviewing the draft minutes.
<i>Quarterly Reports and Communications</i>	Work on our website to provide better information to the community. Email Committee members with alerts and information regarding irregular operations & special events.	Ensure there is consistency in how quarterly reports are prepared and how data is analyzed. Email notification of irregular operations (e.g. ILS checks, maintenance work) will be sent to Committee members.

SUMMARY OF YVR NOISE COMMITTEE SURVEY (continued)		
Survey Item	Committee Comments	Airport Authority Responses
<i>Stakeholder Representation</i>	Need to engage more pilots Committee's length of term should align with that of the majority of stakeholders.	Continue to review membership on a regular basis and invite new organizations/groups as required. In addition, small technical working groups would be set-up as required, and would include representation from all relevant parties (including pilots).
<i>Additional Comments</i>	Overall theme seems to be that the committee is functional and effective Structure is good.	N/A

Actions:

- *Distribute presentation materials.*

6.0 UPDATING THE YVR NOISE MANAGEMENT PLAN

Mark advised that the current YVR Noise Management Plan will expire at the end of 2013. The Plan is required under our ground lease with Transport Canada and must be approved by the federal Minister of Transportation. The Plan documents the elements of the YVR Aeronautical Noise Management Program, and also includes a list of initiatives or areas of work to focus on over the next five-years.

Work to create a new Plan, for the years 2014-2019, will be the focus of work next year. The four main tasks associated with creating the new Plan and their associated timelines are presented in the table below.

UPDTAING THE YVR NOISE MANAGEMENT PLAN		
Task	Major Work Elements	Timeline
Issues identification	<ul style="list-style-type: none"> - Administer an online survey. - Analysis of noise concerns - Discussion with YVR Noise Committee members. 	Q1 – Q2 2013
Initiative development	<ul style="list-style-type: none"> - Noise management best practices report - Discussion with YVR Noise Committee members. - Results of online survey. 	Q2 – Q3 2013
Plan development	<ul style="list-style-type: none"> - Prepare draft Plan - Circulate to YVR Noise Committee members for review and comment. 	Q3 2013
Plan approval	<ul style="list-style-type: none"> - Submit final draft of Plan to Transport Canada. 	End of Q4 2013

Committee members will be provided an opportunity to review the proposed survey questions and scope of work for the best practices report.

Meetings with the individual Committee stakeholder groups will be organized for early 2013. The focus of these meetings will be to discuss the 2013 noise management work plan and more in depth discussion on the process to update the Noise Management Plan. In advance of these meetings, Cities were requested to review their internal review process as this is critical to having the Plan completed on time.

Anne mentioned that the Airport Authority will also be updating its Environmental Management Plan in 2013, and will look for synergistic opportunities for the development of the two plans;

furthermore, we will explore the potential for a broader sustainability strategy relating to these plans. The process is still being worked out, and we are open to opinions/suggestions from Committee members.

Actions:

- *Setup meetings with Committee stakeholder groups in early 2013.*
- *Provide Committee members with proposed online survey questions.*
- *Provide Committee members with the draft scope of work for the noise management best practices report.*

7.0 YVR MAINTENANCE SCHEDULE

Brett Patterson reviewed the YVR maintenance activities, including the monthly south runway closure program, and the 2013 summer south runway closure.

Monthly Closures

The Airport Authority recently began a program of closing the south runway for one night on the first Wednesday of each month for maintenance. This program started in November 2012, the first night of work was 7 November 2012, and is planned to run through 2013.

These closures are required to complete routine maintenance on the runway inset lights to ensure they are set correctly and reduce incidents of outages. The results of this program will be monitored carefully, and the number of closures may be reduced in the future if the program is successful.

During these closures, aircraft are diverted to the north runway to allow maintenance crews unrestricted access to the south runway. However, the Airport Authority is working closely with the operators to have the south runway available with 45-minute notice for heavy aircraft that need the longer south runway for take-off.

Summer 2013 Maintenance Program

The south runway will be closed at night for maintenance between 7 July and 1 September 2013 (approximately 8 weeks). Regular maintenance work that will be undertaken during this time will include rubber removal, line marking, lighting maintenance, and edge erosion maintenance. In addition to this work, other major projects will include paving the shoulders of major taxiways that access the south runway.

The current plan is to work six-day work week, with no work and the south runway remaining open on Saturday nights. The schedule will be closely tracked throughout the project. If there are project delays due to weather or other reasons, the work schedule may increase to 7-days a week to complete all work on time.

8.0 Q4 REPORT

Shaye reviewed the fourth quarter noise report. Some highlights include:

- 2012 Year-to-date complaints = 828 (from 216 individuals)
- This is a 23% increase in complaints and 14% in complainants compared to the same period in 2011.
- Majority of complaints were received from South Delta / Tsawwassen (32%); Richmond (21%); Surrey (18%); and, Vancouver (16%).
- Approximately 57% (n=470) of the complaints received in 2012 come from 10 individuals.
 - 244 concerns from 2 individuals in South Delta/ Tsawwassen.
 - 112 concerns from 4 individuals in Surrey.
 - 53 concerns from 2 individuals in Richmond.
 - 41 concerns from 1 individual in North Delta.
 - 20 concerns from 1 individual in Vancouver.
- 27% (n=226) of all registered concerns were from one individual in Tsawwassen

NOTE: 483 concerns were also received from one North Surrey resident. These are not included in the above analysis.

9.0 OTHER BUSINESS

Small Claims Court

The Airport Authority was recently involved in Small Claims Court as a result of a claim by a resident of Richmond over two incidents in August 2012 during which he was disturbed by run-up noise that he claimed resulted in loss of business the next day due to being fatigued and not well rested.

The case was held at the Richmond Court House on 2 November 2012, and Mark appeared as a witness for the Airport Authority to present evidence and information on how noise and run-ups are managed at YVR. The Airport Authority won the case as the resident was not able to prove causation. The Airport Authority declined the option of being reimbursed for costs.

2013 Meeting Schedule

- Wednesday, 24 April 2013
- Wednesday, 12 June 2013 (TOUR)
- Wednesday, 4 September 2013
- Wednesday, 4 December 2013

YVR Noise Management Program – annual 2013 work plan

Meetings will be setup with each Committee stakeholder group to discuss the 2013 work plan for the YVR Noise Management Program, as well as to discuss the process to create the new YVR Noise Management Plan in greater detail.

City of Richmond – Citizen Representative (Haydn Acheson)

Joan Caravan advised that Hayden Acheson did not seek reappoint as a citizen representative and would be replaced with a new member in 2013. In Haydn's absence, Anne and all Committee members thanked and recognized him for his contributions.

MEETING ADJOURNMENT

Anne thanked Committee members for attending and adjourned the meeting at 3:11 pm.