



City of Richmond

Report to Committee

To: General Purposes Committee
From: Victor Wei, P. Eng.
Director, Transportation
Date: October 1, 2013
File: 01-0153-04-01/2013-
Vol 01
Re: **Annual Report from City Citizen Representatives to the Vancouver
International Airport Aeronautical Noise Management Committee (YVR ANMC)**

Staff Recommendation

1. That staff be directed to explore the recommendations of the City's citizen representatives to the YVR ANMC as outlined in Attachment 1 and provide a status update as part of the annual reporting process in 2014.
2. That the reporting to General Purposes Committee of the City's citizen representatives to the YVR ANMC be revised from semi-annually to annually in light of the reduced YVR ANMC meeting frequency.

Victor Wei, P. Eng.
Director, Transportation
(604-276-4131)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Policy Planning	<input checked="" type="checkbox"/>	
REVIEWED BY DIRECTORS	INITIALS: DW	APPROVED BY CAO

Staff Report

Origin

Since Council's endorsement of the final recommendations from the Richmond Airport Noise Citizens Advisory Task Force in June 2010, the City's two citizen appointees to the YVR ANMC have been providing updates directly to the General Purposes Committee on agenda items discussed at the YVR ANMC meetings. Following the last update in July 2012, this report provides the latest update through:

- an overview of the agenda items discussed at the four YVR ANMC meetings held between September 2012 and September 2013; and
- a memorandum prepared by the City's appointees to the YVR ANMC (see **Attachment 1**).

Analysis

1. Agenda Items Discussed at YVR ANMC Meetings

The YVR ANMC continues to achieve good participation from all cities and agencies with the opportunity for insightful discussions on a wide range of aeronautical noise-related topics as well as continued educational tours to enhance members' understanding of airport operations. A summary of key agenda items discussed at Committee meetings held between September 2012 and September 2013 is provided below.

1.1 Night-time Operations Study

A study of night-time (defined as the period between midnight and 6:00 am) operations was completed 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. Current airport procedures to manage noise at night include:

- closing the north runway nightly between 10:00 pm and 7:00 am, except for emergencies and maintenance;
- 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; and
- having an approval requirement for jet operations between midnight and 7:00 am.

In 2011, there were approximately 7,490 night operations (down approximately 16 per cent from the peak in 2000), which translates to around 20 operations per night. Approximately 64 per cent of the total night operations are landings, which tend to be quieter than departures. Between January 2010 and October 2012, approximately 530 complaints from across the region were received regarding night operations (19 per cent of the total complaints).

Night operations to Asia-Pacific are forecast to continue to increase in the future due to growing demand and a desire for stronger economic and business ties with the area. The likely aircraft to operate these flights are the B777 and the new B787, both of which meet Chapter 4 requirements

(i.e., the quietest planes available). The VAA is not proposing additional night access restrictions due to the economic benefits generated in terms of jobs, wages, taxes, and GDP.

The VAA is proposing the following amendments to *Night Restrictions – Part II* in the YVR Noise Abatement Procedures (NAP) to ensure greater clarity and consistency:

- Eliminate Approval Requirement for Arrivals: would provide consistency between NAP and approval guidelines as all night-time arrival operations, which are quieter than departures, are currently permitted.
- Reduce Night-time Period for Approvals: the definition of night-time would be amended from between midnight and 7:00 am to between midnight and 6:00 am in order to provide consistency between NAP and approval guidelines as all operations (arrivals and departures) between 6:00 am and 7:00 am are currently permitted.
- Prior Approval Requirement: to be applicable only to jet aircraft over 34,000 kg. The current wording states that jet aircraft cargo, air carrier scheduled and charter flights require prior approval but not private flights. The proposed amendment would make operating weight the criterion for applicability. The weight was chosen to exclude the vast majority of business jets from the approval process as these operations are currently approved, have very few night-time operations and are not a noise issue for the community. Given the separate amendment to eliminate the approval requirement for arrivals, the effect of this amendment is that prior approval is required only for departures.

As directed by Transport Canada, the approval process for the proposed amendments requires consultation, economic analysis, cost-benefit analysis, alternative evaluation, etc. VAA will consult with operators and pilots and intends to submit the proposed wording amendments to Transport Canada in 2013.

1.2 Float Plane Operations

In 2012, a number of operational best practices were identified in consultation with the float plane operators using the Middle Arm of the Fraser River. As a result of this work, the following wording was approved by Transport Canada and published in the 2013 editions of the Canada Flight Supplement and the Water Aerodrome Supplement (WAS):

Consistent with safe aircraft operations, the following are recommended operational procedures:

1. *Take-offs Westbound and landings Eastbound are preferred when wind and water conditions permit.*
2. *Use low RPM reduced noise take-off when able.*
3. *Avoid departure routes that fly over the City of Richmond, whenever possible.*
4. *Avoid using "reverse thrust" after landing to slow the aircraft.*
5. *Maintain 500 feet ASL when flying the Westminster Hwy downwind route.*
6. *Join the downwind circuit for the Westbound landing after passing the TERRA NOVA waypoint unless directed by ATC.*

VAA is now preparing an informational brochure outlining the best practices for distribution to operators in Spring 2014. The two-sided brochure will include:

- maps identifying the landing/take-off area of the river and the preferred routes for approaches and take-offs; and

- the WAS wording regarding operational practices as well as background information on float plane operations within the context of YVR's noise management program.

In addition, the altitude of transit routes over Richmond and YVR used by float planes travelling between Vancouver Harbour and Victoria Harbour was raised by NAV CANADA in early 2012 to avoid conflict with the missed approach altitude for the north runway. While this change was made to enhance aviation safety, it generated a community benefit as float planes now operate at a higher altitude while transiting over the city.

Table 1: Noise Complaints to VAA for 2012

Municipality/Area	#	%
South Delta	320	35
Richmond	172	19
Surrey	165	18
Vancouver	137	15
North Delta	62	7
Burnaby	17	2
Other/Unknown	30	3
Total	903	100

1.3 2012 Aeronautical Noise Management Report

The number of noise concerns received by the VAA in 2012 was up slightly from 2011 but still lower than the recent peak in 2009. A total of 903 noise concerns were logged in 2012, which is a 15 per cent increase from 2011 and a 58 per cent decrease from 2009. Consistent with past years, most concerns are associated with over-flights (79 per cent) and departures (11 per cent). As shown in Table 1, complaints from Richmond residents accounted for 19 per cent of the total received, which is similar to past years.

Of those complaints received from Richmond residents, the operational concerns identified include take-offs (22 per cent), run-ups (20 per cent) and approach/landing (11 per cent). Over one-quarter (26 per cent) of complaints did not identify a particular operational concern. For each type of operational concern, the most common complaints were loud or excessive noise (30 per cent), sleep disturbance (21 per cent) and low flying aircraft (15 per cent).

The VAA also provided testimony as part of legal proceedings in November 2012 arising from a claim filed by a Richmond resident seeking monetary compensation due to lost potential income as a result of being disturbed by night-time engine run-up noise. The Small Claims Court ruled in favour of the VAA.

1.4 Member Survey re Committee Functionality

A survey was distributed to Committee members in October 2012 seeking feedback on meeting venue, meeting frequency, meeting format, minutes and agenda, and quarterly reporting and communication. Table 2 summarizes the changes to the Committee structure and operations based on the feedback received. Given that the Committee now meets only three times each year, staff propose that the City's citizen representatives to the YVR ANMC will henceforth report annually to General Purposes Committee, rather than semi-annually.

Table 2: Summary of Changes to YVR ANMC Structure

Topic	Outcome
Venue	<ul style="list-style-type: none"> Remain at YVR
Frequency	<ul style="list-style-type: none"> Reduced to 3 (from 4) meetings per year with one annual educational tour
Format	<ul style="list-style-type: none"> Remain closed to public but provide time for interested residents to present issues Allow time for citizen representatives to raise issues
Agenda & Minutes	<ul style="list-style-type: none"> Structure topics to allow more discussion Decrease time required for distribution of minutes and meeting materials
Quarterly Reports & Communications	<ul style="list-style-type: none"> Ensure consistency across reports Institute email notification to members of irregular operations

1.5 Update of 5-Year Noise Management Plan (2014-2018)

As VAA's current 5-Year Noise Management Plan (NMP) is now in its fifth and final year, a new 5-year plan is being developed during 2013 for delivery for approval to Transport Canada by December 1, 2013. Table 3 identifies the tasks, major work elements and anticipated timelines.

Table 3: Noise Management Plan (2014-2018) Process

Task	Major Work Elements	2013 Timeline
Issues Identification	<ul style="list-style-type: none"> Administer on-line survey Analyse noise concerns Discussion with Committee 	Q1-Q2
Initiative Development	<ul style="list-style-type: none"> Noise management best practices report Discussion with Committee Results of on-line survey 	Q2-Q3
Plan Development	<ul style="list-style-type: none"> Prepare draft Plan Circulate to Committee for review and comment 	Q3
Plan Approval	<ul style="list-style-type: none"> Submit final draft Plan to Transport Canada 	Q4

VAA staff have prepared a draft NMP that distils the input received to date (as described below in Sections 1.5.1 and 1.5.2) into a number of focus

areas, each with specific actions and initiatives. This first draft of the plan was distributed to the Committee for review on September 10, 2013 and it is currently under review by staff. The draft report along with staff comments will be presented in a separate report in November 2013.

1.5.1 Issues Identification

Interview and on-line surveys regarding environmental concerns related to YVR including noise were conducted during March-April 2013 for both the general public (305 respondents) and stakeholders (88 respondents) including the YVR ANMC.¹ Respondents were asked to rank and rate the importance of 11 various environmental topics, one of which was "minimizing aircraft noise in the community." The noise-related results include:

- the general public did not rank aircraft noise among the top five most important topics whereas stakeholders did;
- 65 and 76 per cent of the general public and stakeholders respectively rate minimizing aircraft noise as very important or important;
- 32 per cent of respondents from Richmond reported being annoyed by aircraft noise at home in 2012;
- 36 per cent of stakeholders rated the VAA's performance on addressing aircraft noise as poor and 39 per cent of the general public indicated that they did not know; and
- stakeholders mainly provided suggestions to help reduce aircraft noise including control and/or reduce flights over residential areas, eliminate late night flights and implement stricter regulations.

1.5.2 Initiative Development

A noise management best practices report was commissioned by VAA to help identify potential initiatives for the new NMP through:

¹ The "general public" comprise a representative sample of residents in the Lower Mainland aged 18+ who were interviewed while "stakeholders" are those respondents who completed the on-line survey posted on the YVR website. The geographical distribution of the general public respondents was representative of the overall population of the Lower Mainland (e.g., nine percent of respondents were from Richmond). The stakeholders comprise the general public who chose to complete the survey after seeing a notice on the YVR website as well as individuals targeted by the VAA (e.g., members of YVR ANMC and YVR EAC).

- a review of industry best practices related to aeronautical noise management across the areas of policy, aircraft/engine technology, airport case studies, and community consultation and communication; and
- a summary of practices for consideration at YVR along with the associated implementation issues, potential effectiveness and costs to all stakeholders.

The report identified a number of best practices (see **Attachment 2**) deemed most likely to be applicable to YVR that could practically enhance the noise environment around the airport and/or build stronger ties with the community through open dialogue about noise exposure. These practices will be reviewed by staff as part of the separate report on the NMP to be presented in November 2013. Some suggested practices require greater clarification and justification with respect to the benefits to the City.

2. Memorandum from City's Appointees to the YVR ANMC

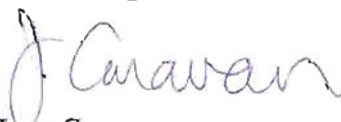
The City's citizen representatives to the YVR ANMC continue to uphold Richmond's profile at the Committee and both contribute positively to discussions. Staff support the two recommendations identified in the memorandum (i.e., that the City partner with the VAA on the *Fly Quiet Awards* such as the Mayor presenting the awards, and publicize and provide training for residents in the use of WebTrak to register airport noise complaints) and recommend that their feasibility be explored. Staff would provide an update on the status of the two initiatives as part of the annual report back in 2014:

Financial Impact

None.

Conclusion

The YVR ANMC remains a valuable forum for addressing aeronautical noise impacts on Richmond. The process underway to develop VAA's new *2014-2018 Noise Management Plan* presents an opportunity for the City and the City's representatives to the YVR ANMC to suggest and ensure that any new initiatives of the YVR ANMC are consistent with the overall goal of minimizing aeronautical noise impacts to the community and enhancing residents' quality of life.



Joan Caravan
Transportation Planner
(604-276-4035)

To: City of Richmond General Purposes Committee

September 11, 2013

From: Haydn Acheson, Past City of Richmond Citizen YVR ANMC Representative
Margot Spronk, Current City of Richmond Citizen YVR ANMC Representative
Donald Flintoff, Current City of Richmond Citizen YVR ANMC Representative

2013 Status Report: YVR Aeronautical Noise Management Committee (YVR ANMC)

City Appointees

Haydn Acheson was first appointed to the YVR ANMC in January 2009 and re-appointed in 2011/2012 for a second and final term. Haydn's experience as an airline pilot and senior airline executive, and current role as President and General Manager at the Coast Mountain Bus Company, brought valuable insight and expertise to his representation of Richmond citizen interests to the Committee.

The 2013-2014 term is the third YVR ANMC appointment for Margot Spronk. Margot was previously NAV CANADA's General Manager for the Vancouver Flight Information Region, and worked as an air traffic controller at the Vancouver Area Control Centre. Margot lives in Steveston.

Donald Flintoff was appointed to the YVR ANMC in January 2013 for a two-year term. Donald brings his experience as a consulting engineer to the table. Currently Donald is the Senior Electrical Engineer for the British Columbia Utilities Commission, has lived in Richmond since 1975, and currently lives in the Thompson area since 1988.

Past Year at the Vancouver Aeronautical Noise Management Committee

Since our last report, the YVR ANMC met four times: September 12, 2012; December 12, 2012; April 24, 2013; and September 10, 2013. In 2012, YVR decided to eliminate the second quarter meeting and offer an airside tour to familiarize YVR ANMC members with airport operations. This year's tour took place on June 12, 2013 and included a presentation on wildlife management.

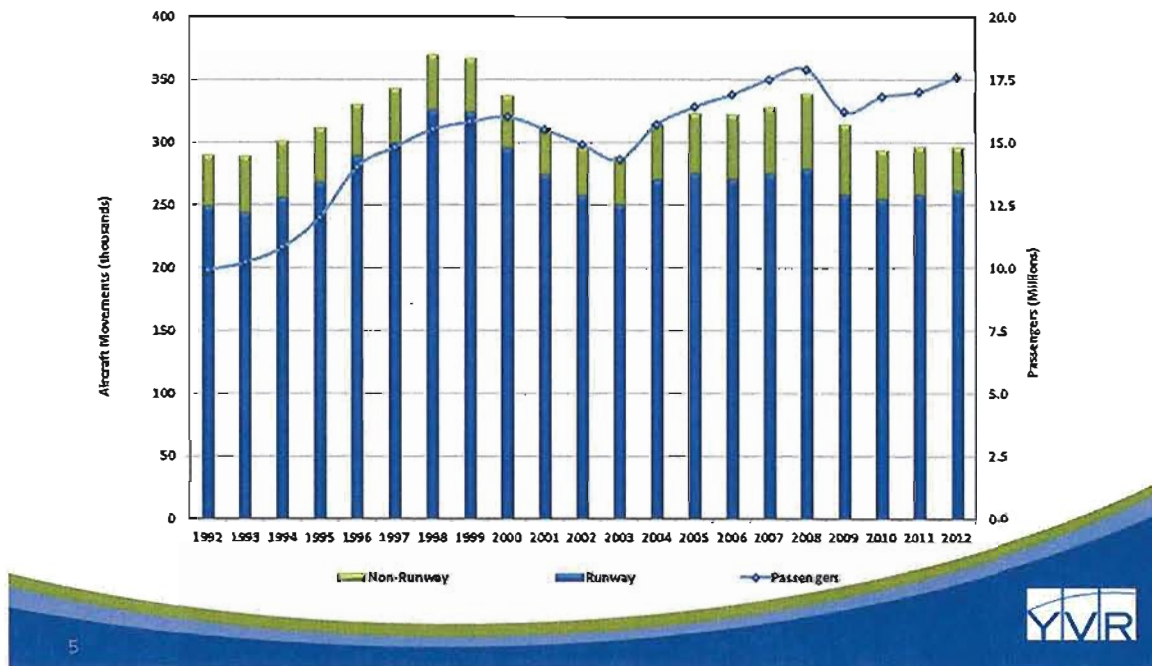
Highlights

- Retirement of Haydn Acheson in December 2012 and appointment of new citizen representative Don Flintoff.
- Review and revision of night time operations guidelines. As background, in 2011 there were 7,490 night-time operations—approximately 20 operations per night. Of these, 66% are arrivals, 22% propeller-driven, 6% business jet, 33% narrow-body jet and 39% wide-body jet. Night time traffic over the past 5 years remains static at around 3% of daily operations. The revised guidelines will reduce the night-time period when prior approval is required from the current midnight to 7 a.m., to midnight to 6 a.m. Furthermore, arriving aircraft will not require approval, nor will aircraft under 34,000 kg. It is not expected that this change will negatively affect the impact of night time operations on Richmond residents, as the new rules reflect the current approval practice. However, your citizen representatives will continue to monitor reports on this sensitive issue for Richmond residents.
- This year is the final year of the 2009-2013 YVR Noise Management Plan. The 2014-2018 Noise Management Plan was issued in draft form to Committee members at the September 10, 2013 YVR ANMC Meeting. This draft is based on input from adjacent communities (including Richmond) through a survey, input from Committee members and a study and analysis of industry best practices. Once approved in principle by the YVR Board, it will be brought to Richmond staff and council in October for review before it is sent to Transport Canada for approval at the end of the year. Your citizen representatives have put forward a number of initiatives that have been included in the draft report re: floatplane traffic, use of advance Performance Based Navigation to reduce aircraft noise, and community and industry awareness.

Vancouver Airport Statistical Trends

Vancouver International Airport was named best airport in North America for the fourth year in a row by Skytrax. Runway operations were up 0.5% in 2012, exceeding 300,000 for the first time since the 2008/2009 recession. Passenger numbers were up over 3%, showing a shift towards larger aircraft and higher load factors. Larger newer aircraft with higher load factors have a beneficial effect on the overall noise profile of the airport.

Annual Aircraft Movements & Passengers (1992-2012)



Richmond-Specific Noise Trends

- 10 Noise Monitoring Terminals (NMTs) are located throughout Richmond.
- As of the end of the third quarter of 2013, 351 noise complaints were made by 78 Richmond residents, a significant increase over the same period in 2012. 225 concerns were registered by one Richmond resident, primarily regarding floatplane operations.
- 198 of the 351 complaints concerned floatplane operations
- To compare, at the end of the first quarter of 2013, Richmond complaints were down 22% over the same period the previous year, and the major concern was propeller departures.

NMT	Name	Location
1	Unidentified	Privacy Issues
2	Airside Burkeville	Templeton St.
3	Lynas Lane Park	Lynas Lane & Walton Rd.
4	Tomsett Elementary	Odlin Rd. and No. 4 Rd.
5	Bath Slough	Bath Rd. & Bath Slough
6	Outer Marker	Westminster Hwy & No. 7 Rd.
11	Bridgeport	No. 4 Rd. & Finlayson Dr.
12	West Sea Island	Airside YVR
13	North Sea Island	Ferguson Rd.
17	Maple Lane Elementary	Alouette Dr. & Tweedsmuir Ave.

2013 YVR ANMC Survey Questionnaire

For the creation of the 2014-2018 YVR Noise Management Plan, YVR used a questionnaire format to identify current community issues through the on-line community survey and analysis of historical noise

complaints, and the completion of a "best management practices" report. Common issues cited in the community survey and historical complaints received by the Airport Authority include:

- Night Operations*
- Run-up operations*
- Aircraft on approach*
- Departing Aircraft*
- Floatplane Operations*
- Marginally compliant Chapter 3 Aircraft*
- North Runway use at night
- Frequency of flights*
- Low Flying aircraft*
- Aircraft routings*
- ILS Checks

Issues marked with an asterisk (*) were of particular concern to survey respondents from Richmond.

Community Engagement using WebTrak

To aid the community in furthering their understanding of flight operations and noise levels in their area, the Vancouver Airport Authority provides YVR Webtrak, a web-based tool that allows residents to view 'real-time' and historical flight and noise data collected by YVR's Aircraft Noise Monitoring & Flight Tracking System. WebTrak also allows concerned citizens to register complaints about particular aircraft or general concerns about aviation in their community.

Areas of Focus in 2013-2014

We will continue to monitor and contribute to the following initiatives:

- Review and comment on the draft 2014-2018 Noise Management Plan
- Development of a training module for flying training schools to raise awareness of noise within the pilot community.
- Continue to monitor progress on Noise Task Force Recommendations.
- Provide input to Vancouver Airport Authority and City on aircraft noise mitigation and land use planning, including those areas that are subject to the City's Aircraft Noise Sensitive Development bylaw requirements.

Recommendations to the General Purposes Committee

1. That the City consider partnering with the Vancouver Airport Authority on the **Fly Quiet Awards**, to show the City's appreciation of the aviation community's commitment to being good neighbours. These awards are presented at the annual YVR Chief Pilot's Meeting to the airlines that are not in violation of noise abatement procedures, have the lowest average noise level and fly regularly at YVR.
2. The City should publicize and provide training for its residents in the use of WebTrak to register airport noise complaints. Also, as WebTrak is an English only program, the City, concerning the demographics of its residents, should provide help menus in the other prominent languages spoken in Richmond. Although this may initially increase the complaints, the accuracy of the data should also increase.

We are appreciative of the opportunity to work with the City and the Vancouver Airport Authority on the environmental noise portfolio, and look forward to helping make a difference in how airport noise is felt and perceived in Richmond as we complete our 2013/2014 term.

Sincerely,

Margot Spronk
Donald Flintoff

Summary of Best Practices Likely Applicable to YVR

Best Practice	Description	Implementation Considerations	Potential Effectiveness	Cost to Stakeholders
Marginally Compliant Chapter 3 Restrictions	Implement operational restrictions on Chapter 3 aircraft originally certified as Chapter 2 (hush-kitted)	<ul style="list-style-type: none"> Requires economic analysis and consultation with industry Likely to face significant opposition from airlines Need to ensure compliance with federal rules 	<ul style="list-style-type: none"> Reduction in noisier aircraft movements Airline may relocate operations rather than replace aircraft 	<ul style="list-style-type: none"> Could be significant for airlines Change in fleet offset by lower fuel and maintenance costs
Balanced Approach to Required Navigation Performance (RNP) Operations	Use of RNP technology to concentrate aircraft movements over certain areas or define low noise impact corridors over the community	<ul style="list-style-type: none"> Almost 50% of operations are propeller aircraft and many of those are not capable of using RNP National policy needed on how RNP procedures are to be evaluated during development Consultation with airlines and NAV Canada required 	<ul style="list-style-type: none"> Can reduce noise on arrivals and departures but need to balance with: <ul style="list-style-type: none"> concentration of noise under flight paths creation of new flight paths additional fuel and emissions from flying extra flight track miles 	<ul style="list-style-type: none"> NAV Canada primarily responsible for review process associated with airspace redesign VAA may need to dedicate additional resources
Noise-Based Landing Charges	Surcharge to landing fees for noisier aircraft	<ul style="list-style-type: none"> Must be fair and part of a cost-recovery program to alleviate/mitigate noise rather than raise revenues Should be evaluated against business objectives of VAA 	<ul style="list-style-type: none"> Dependant on balanced approach between costs recovered and benefits to the community 	<ul style="list-style-type: none"> Targeted to noisier aircraft operators Limited to cost recovery with fees directed to noise mitigation or alleviation strategies
Community Trust Fund	Develop fund to augment current VAA sponsorships in the community and/or to transparently manage funds collected from noisier operators	<ul style="list-style-type: none"> Need to develop clear scope and terms of reference Selection of trustees to provide oversight of funds and selected initiatives 	<ul style="list-style-type: none"> Valuable means of managing funds specifically to compensate communities impacted by aircraft noise 	<ul style="list-style-type: none"> Funds sourced from a noise-based landing charges system
Acoustic Treatment Program	Application of acoustic treatments beyond current building code requirements	<ul style="list-style-type: none"> Could be funded from a noise-based landing fee Consultation with municipalities to clearly define the eligibility and extent of the program 	<ul style="list-style-type: none"> Will vary based on baseline condition of each building as well as scope and scale of the program 	<ul style="list-style-type: none"> Funding solely from a noise-based landing fee may be a challenge given relatively few operations of noisier aircraft at YVR Significant VAA and municipal resources required for administration

CNCL - 87

Best Practice	Description	Implementation Considerations	Potential Effectiveness	Cost to Stakeholders
Advertise Fleet Upgrades	Communicate actual noise reductions associated with fleet upgrades	<ul style="list-style-type: none"> VAA periodically identifies changes to airlines' fleet Can use existing communication strategies (e.g., newsletter) 	<ul style="list-style-type: none"> Limited if upgrades are relatively small contribution to overall operations Better appreciation of improvements by the community 	<ul style="list-style-type: none"> Minimal cost to VAA as could be accommodated within existing communication strategies
Experience Centre / Adventure Airport	Permanent/ mobile public information centre where the community can discover how airports operate and enquire about noise impacts	<ul style="list-style-type: none"> Component of broader community outreach strategy Need clear understanding of objectives 	<ul style="list-style-type: none"> Limited on its own but can enhance a broader strategy by providing one-stop shop for public enquiries 	<ul style="list-style-type: none"> Vary based on type of development
Multilingual Communications Strategy	Communicate in native languages of largest ethnic communities	<ul style="list-style-type: none"> Assess predominant ethnic communities affected by noise in vicinity of YVR Translate and distribute materials 	<ul style="list-style-type: none"> More effective in communities where English is not broadly used 	<ul style="list-style-type: none"> Minimal cost to VAA as could be accommodated within existing communication strategies
Use of Alternative Noise Metrics	Charts and tables that better assist the community's understanding of the noise impacts of airport operations such as flight path movement charts based on actual data	<ul style="list-style-type: none"> Consult with YVR ANMC and/or community to determine best metrics Need to ensure metrics address concerns raised Need to note any limitations in modelling 	<ul style="list-style-type: none"> Has been successful in providing information to residents 	<ul style="list-style-type: none"> Typically minimal as most alternative metrics would use information already available
Noise Mitigation Design Competition	Innovative method to find solution to an identified problem that demonstrates airport's commitment to addressing the issue	<ul style="list-style-type: none"> Selection of an issue suitable for a design competition 	<ul style="list-style-type: none"> Will vary based on complexity of the targeted issue 	<ul style="list-style-type: none"> Will vary based on scope of application and costs to implement winning concept
Existing Home Noise Proofing Brochure	Production and distribution of brochure to the public that describes tools or ways for residents to reduce exposure to airport noise in their homes	<ul style="list-style-type: none"> VAA to work with adjacent municipalities to develop brochure 	<ul style="list-style-type: none"> Ensure consistency of messages from VAA and municipalities Guide residents to same resources 	<ul style="list-style-type: none"> Brochure content development, consultation and future updates Municipal staff time for participation and review
Real Estate Disclosure ⁽¹⁾	Partner with real estate associations to ensure that prospective buyers get access to tools to assess the location of properties relative to the airport and flight paths	<ul style="list-style-type: none"> VAA to partner with real estate associations Agreement on means to communicate tools to assist real estate agents and buyers 	<ul style="list-style-type: none"> Disclosure to prospective buyers creates an expectation and awareness that will assist them with their decision 	<ul style="list-style-type: none"> Minimal cost to VAA as it involves promotion of existing aircraft noise disclosure tools (i.e., WebTrak)

⁽¹⁾ Per the City's existing requirements, rezoning applications and development permits for multiple family residential developments within the Aircraft Noise Sensitive Development (ANS) Policy Area are required to:

- register a Noise Indemnity Covenant on the title of each property or strata lot;
 - achieve CMHC interior noise standards and ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standards for interior living spaces; and
 - complete an acoustical and thermal report to ensure that these noise mitigation standards are achieved and the City's Noise Bylaw is complied with.
- For new projects, the developer(s) posts signage, provided by the City, within the sales centre advising of aircraft and land use noise.

Note: The suggested practices will be reviewed by staff as part of a separate report on the NMP with respect to the potential benefits to the City.