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NOTRE-DAME-DE-GRÂCE—LACHINE**



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NOTRE-DAME-DE-GRÂCE—LACHINE**

**Airport Noise Management:
Challenges and Recommendations**

March 7, 2011

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March 7, 2011

Dear Friends,

As Member of Parliament for Notre-Dame-de-Grâce-Lachine, I have been approached for over three years by various members of the public, citizens' groups and elected officials, regarding the growing noise caused by air traffic. Simply put, night flights can pose a health risk. The effects of repeated exposure to the deafening sound of large aircraft that fly at night are clearly documented.

It has become apparent that the people who are or could be affected by this issue have been left in the dark about the medium and long-term risks of noise exposure. The vast majority of their elected representatives are also unaware of this situation. As a result, I organized a non-partisan roundtable for all elected officials in the metropolitan area of Montreal, at all three levels of government, whose constituents are or could be increasingly affected by air traffic noise. This roundtable took place on January 20, 2011.

It is with great pleasure that I now present to you my report entitled "Airport Noise Management: Challenges and Recommendations." I must note at the outset that this report is the culmination of years of efforts and input from various groups and individuals, including academic experts and citizens groups. It is my hope that this report will form the basis of future policy changes to resolve this issue.

The citizens of my riding, and all Canadians living in proximity to an airport, must to be protected from the health risks associated with airport noise. The federal government has a responsibility to protect its citizens and it must live up to that duty now.

Sincerely,

A handwritten signature in black ink, appearing to read "Marlene Jennings", written in a cursive style.

The Honourable Marlene Jennings, P.C., M.P.
Notre-Dame-de-Grâce—Lachine

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List of Acronyms

ADM	Aéroports de Montréal
CAA	Canadian Airport Authority
CANSCA	Civil Air Navigation Services Commercialization Act
CATA	Canadian Air Transportation Administration
CQV	Citoyens pour une qualité de vie
LAA	Local Airport Authority
NDI	Noise Depreciation Index
OEAQ	Ordre des évaluateurs agréés du Québec [College of Chartered Appraisers of Quebec]
WHO	World Health Organization

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EXECUTIVE SUMMARY

Night flights can pose a health risk, plain and simple. The effects of repeated exposure to the deafening sound of the large aircraft that fly at night are clearly documented. Health studies conducted in Europe and by the World Health Organization (WHO) confirm that people repeatedly exposed to the noise of night flights are, among other things, at higher risk of high blood pressure and stroke.¹

Airport authorities are responsible for designing flight paths for the taking-off and landing of aircraft at their respective airports. However, airport authorities are not obligated to undertake an environmental assessment or to conduct public consultations when modifying existing take-off and landing paths. In cases where public consultations do take place, there is no obligation for the airport authority to act on the suggested recommendations.²

Alternatively, NavCanada is responsible for planning flight paths of aircraft “en route” and that are not related to take-offs and landings at airports. Although such flight paths have the potential to affect populated areas, there is also no requirement for NavCanada to undertake an environmental assessment or to conduct public consultations when modifying such flight paths.³

The former Bill C-27, the *Canada Airports Act*, introduced in 2003, provides a strict framework for reforming Canada’s airport system. As such, it is recommended that the former Bill C-27 be pursued as a base piece of legislation with additional provisions added as necessary in order to incorporate mandatory public consultations as part of an airport authority’s obligations. In addition, it is recommended that an amendment be

¹ World Health Organization. “Night Noise Guidelines for Europe.” Copenhagen, Denmark: 2009.

² Health Canada. Submission from Health Canada to the Standing Committee on Transport, Infrastructure and Communities. Ottawa, Ontario: February 8, 2011. See note 29.

³ S.C. 1996, c. 20, *Civil Air Navigation Services Commercialization Act*, section 13. See note 24.

introduced to modify NavCanada's governing legislation in order to require a mandatory assessment of environmental impacts, including noise pollution, when altering flight paths that affect populated areas.

Airport Noise Management: Challenges and Recommendations

PART I: AIRPORT NOISE AND HEALTH

Night flights can pose a health risk, plain and simple. The effects of repeated exposure to the deafening sound of the large aircraft that fly at night are clearly documented. Health studies conducted in Europe and by the World Health Organization (WHO) confirm that people repeatedly exposed to the noise of night flights are, among other things, at higher risk of high blood pressure and stroke.

According to an article published in the *European Heart Journal*, “both systolic and diastolic blood pressure levels as well as heart rates increased with higher noise levels during the preceding minutes.”⁴ A similar study noted, “the increased risk of hypertension in relation to aircraft and road traffic noise...may therefore contribute to the burden of cardiovascular disease.”⁵ Furthermore, it was published in the *Lancet*, “noise exposure is associated with annoyance and impairment of quality of life in children...this association is stronger for aircraft than for road traffic noise; as in adults.”⁶ Finally, the WHO notes that “Environmental noise is a threat to public health, having negative impacts on human health and well-being.”⁷

In light of the ever growing research that has been conducted in recent times, airport noise is not just an annoyance but it has the potential to have negative consequences on human health. Effective policies should therefore be developed in order to reduce aircraft noise and to protect the health and well-being of Canadians.

⁴ Haralabidis, Alexandro et al. “Acute effects of night-time noise exposure on blood pressure in populations living near airports.” *European Heart Journal*. February 2008.

⁵ Jarup, Lars et al. “Hypertension and Exposure to Noise Near Airports: the HYENA Study.” *Environmental Health Perspectives*. Vol. 116, No. 3 (March 2008). pp329-333.

⁶ Stansfeld, S.A. et al. “Aircraft and road traffic noise and children’s cognition and health: a cross-national study.” *Lancet*. Vol. 365 (June 2005). pp1942-1949.

⁷ World Health Organization.

Even academic experts have called for policy changes to limit the amount of aircraft noise. It was noted by one author, “Our results indicate that preventative measures should be considered to reduce road-traffic noise and night time noise from aircraft.”⁸

⁸ Jarup et al.

PART II: AIRPORT MANAGEMENT IN CANADA

Airport Commercialization and Airport Authorities

Beginning in the 1960s, the Canadian Air Transportation Administration (CATA) was responsible for managing airports in Canada. Airport operations including infrastructure projects were financed by a capital fund provided by the Treasury Board of Canada and were managed directly by Transport Canada.⁹ With an increase in air travel worldwide during the subsequent decades, governments were faced with the challenges of airport congestion and insufficient airport capacity. The Canadian government, in response to this issue and in line with many countries such as the United Kingdom and the United States, undertook measures to deregulate airport system in Canada. The stated purpose of this commercialization process was to make airport operations more efficient and competitive, to allow for diversified funding options for airport expansions, and to give communities more local control over airport operations.¹⁰

In 1992, the federal government established local airport authorities (LAAs) and the financial responsibilities and direct management of airport operations were transferred to such local authorities. Transport Canada issued long-term ground leases to new LAAs in Montreal, Edmonton, Calgary and Vancouver. Two years later, larger airports, including the four in Montreal, Edmonton, Calgary and Vancouver, were then transferred under long-term leases to what are now known as Canadian airport authorities (CAAs). These authorities' leases were established for a period of 60 years with an option to renew.¹¹ The remaining airports were mostly transferred to provincial or territorial governments.

⁹ Padova, Allison. "Airport Governance Reform in Canada and Abroad." The Library of Parliament. Ottawa, Ontario: 2007.

¹⁰ Ibid.

¹¹ Ibid.

Both the LAAs and CAAs are private corporate entities that do not pay income tax. LAAs may be audited and are subjected to a performance review every five years by Transport Canada and must have public meetings each fiscal year. CAAs are subject to even greater public disclosure requirements. The Public Accountability Principles framework established over CAAs requires that airport authorities must disclose price increases to local media, must put contracts worth over \$75,000 to public tender, must hold an annual public meeting, and must establish a Community Consultative Committee.¹²

The not-for-profit LAAs and CAAs however are not subject to economic regulation through legislation, and airport fees are not reviewed externally. Although airport authorities must consult users about changes and investments, there is no requirement to act on user suggestions and there is no appeal mechanism for complaints. Airlines have argued that they have little input into airport governance and they complain that some authorities have been abusing their market power.¹³

Airport authorities are responsible for designing flight paths for the taking-off and landing of aircraft at their respective airports. Such flight path changes are often made in order to, “improve efficiency, manage changing aircraft traffic flows or overall volumes, or to accommodate technical evaluations in navigational capabilities” (**Annex A**).¹⁴ Additionally, airport authorities are responsible for developing noise abatement procedures at local airports, which are binding on pilots and air traffic controllers. In developing flight paths and noise abatement procedures, local airport authorities are obligated to consult with NavCanada. NavCanada is the corporation that owns and operates Canada’s civil air navigation service, and it provides technical advice related to

¹² Ibid.

¹³ Ibid.

¹⁴ NavCanada. Letter from NavCanada CEO John W. Chichton addressed to the Standing Committee on Transport, Infrastructure and Communities. Ottawa, Ontario: January 21, 2011.

aircraft movement abilities. Neither airport authorities nor NavCanada are obligated to undertake an environmental assessment or public consultations when creating new or modifying existing take-off and landing paths. In cases where public consultations do take place, there is no obligation for the airport authority to act on the suggested recommendations.¹⁵

Airport Reform in Canada

In 2000, the Auditor General of Canada examined the issue of airport commercialization. Her report expressed concerns over the governance regime in place at Canadian airports and asserted that there was a lack of a clear legislated economic policy and accountability framework for airport authorities.¹⁶ In particular, her report noted “we found significant weaknesses in management practices...Transport Canada has yet to clearly define its role as landlord and overseer of the National Airports System.”¹⁷ In its five-year performance review, Transport Canada also noted problems with the governance structure of airport authorities. It was noted that “The LAA model was based on the premise that there would be no need for formal regulatory/oversight processes...It now appears that a number of these checks and balances have not operated as expected.”¹⁸ Furthermore, Transport Canada additionally asserted that authorities lacked a transparency and accountability regime, and expressed concerns that consultations were not a consistent practice across airport authorities, contrary to the rules set out in the Public Accountability Principles.¹⁹

In response to these two performance reviews, the federal government introduced on March 20, 2003, Bill C-27, the *Canada Airports Act*. This bill established a legal governance framework for airport authorities that clearly outlined the powers,

¹⁵ See note 24.

¹⁶ Auditor General of Canada. “Chapter 10: Airport Transfers: National Airports System.” *Report of the Auditor General of Canada*. Ottawa, Ontario: October 2000.

¹⁷ Ibid.

¹⁸ Transport Canada. “LAA Lease Consultation Report.” Ottawa, Ontario: April 14, 1999.

¹⁹ Pavoda, Allison.

duties and function of the Minister of Transport, as well as those duties and obligations of airport authorities. Bill C-27 also set guidelines for airport fees and required airport authorities to establish a land management plan. Finally, the bill put in place a compliance mechanism in the event that an airport authority violates the law: clear administrative monetary penalties and criminal sanctions could be placed on airport authorities in cases of non-compliance. This bill died on the *Order Paper* with the call of the 2004 federal election.

In 2006, the federal government introduced in the House of Commons Bill C-20, a revised version of the previous Bill C-27, the *Canada Airports Act*. According to Transport Canada officials, Bill C-20 was “more flexible, focused and less prescriptive than the 2003 version.”²⁰ Bill C-20 similarly established legal obligations for airport authorities. One major difference, however, is that under Bill C-20, airport authorities would have been granted an exception to not be required to publicly disclose documents relating to airports other than its principal airport. This differed from the previous 2003 version in that documents for all airports under an airport authority were subject to disclosure requirements. Under both bills, Transport Canada would have been responsible for the protection of the public interest in respect of all airports in Canada. Like the 2003 version, Bill C-20 also died on the *Order Paper* at the call of the 2008 general election. No similar legislation has been since introduced.

²⁰ Ibid.

PART III: CHRONOLOGY OF INTERVENTIONS

My efforts on the issue of airport noise began several years ago when I received numerous complaints from individuals residing in Notre-Dame-de-Grâce—Lachine, as well as in neighbouring ridings on the Island of Montreal. After consulting with citizens in my riding, as well as with various groups and local municipal councils, I decided that action had to be taken on this issue. This section of the report will provide an overview of my efforts and of other elected officials in working towards solutions on the problem of airport noise. A detailed chronology of my interventions can be found in **(Annex B)**.

Petition to the House of Commons

On March 28, 2008, I posted a petition on my website calling for an immediate moratorium on night flights in and out of Montréal—Pierre Elliott Trudeau International Airport, until public consultations are held. To date, this petition has been signed by literally thousands of citizens. On November 28, 2008, I rose in the House of Commons to urge the Minister of Transport to act on the issue of night flights. I also presented the petition signed by over 1,400 residents at that time, pleading with the government to act within its power to stop these night flight from occurring.

However, the Minister of Transport at the time responded to my petition with little but platitudes. In particular, he noted “aircraft noise has been reduced greatly in the last decade owing to regulatory changes and advances in technology” **(Annex C)**.²¹ As a result, I continued to express my disappointment with a government that stood idly while night flights in and out of Pierre Elliott Trudeau Airport continued.

²¹ House of Commons. Response to Petition – 401-001. Ottawa, Ontario: December 23, 2008.

Private Member's Motion

The largely favourable response from Canadians to my petitions on airport noise further advanced my desires to continue to fight for this cause. As a result, on November 19, 2008 and again on February 23, 2009, I introduced the following motion in the House of Commons:

M-320 — February 23, 2009 — Mrs. Jennings (Notre-Dame-de-Grâce—Lachine) — That, in the opinion of the House, the government should issue an order, under the Aeronautics Act and through the relevant airport governing bodies across Canada, to ensure that night flights of aircraft weighing more than 45,000 kilograms, between 11:00 p.m. and 7:00 a.m., into and out of Canadian airports that lie within proximity to populated areas, are suspended - except for flights operating for (1) medical emergencies, (2) delays beyond a carrier's control, (3) adverse weather conditions, and (4) flights directly related to Canadian military operations - pending the outcomes of government-led public consultations on the economic, environmental and health impacts of night flights.

This motion, if passed, would require all Canadian urban-located airports to hold mandatory public consultations, before implementing changes to their night flight paths and frequencies of departures and arrivals during the period from 11pm to 7am. I believe that citizens affected by noise should have a voice in this process.

Roundtable in Surrey, British Columbia

On July 16, 2009, I had the opportunity to host a round table meeting with my colleague, Sukh Dhaliwal, M.P. (Newton-North Delta), in Surrey, British Columbia, for citizens to share their stories and thoughts on the growing problem of airplane noise in and out of Vancouver International Airport. Many of the participants of the roundtable drew attention to the lack of public consultation done by airport authorities when

creating new – or modifying existing – flight corridors.²² The response from citizens from across the country further advanced my goal to see my motion put into action.

I also met with representatives of NavCanada, on August 19, 2009, to discuss the issue of airport noise. Under the *Civil Air Navigation Services Commercialization Act* (CANSICA), NavCanada is given the responsibility to “provide, maintain and enhance an air navigation service dedicated to the safe movement of air traffic throughout the country.”²³ NavCanada can unilaterally change “en route” flight paths between airports, however it cannot do so for take-off and landing paths at airports (**Annex D**).²⁴ Local airport authorities are responsible for designing take-off and landing paths, and NavCanada only provides technical advice related to aircraft movement abilities in these circumstances.²⁵

As some “en route” flight paths, over populated areas, that are not related to taking-off or landing paths at an airport, can pose noise problems for residents, I believe NavCanada should be consulting with affected populations when making such flight path changes. NavCanada, at this meeting on August 19, 2009, discussed the possibility of holding voluntary public consultations before modifying existing flight paths. However, nothing in CANSICA requires NavCanada to actually hold such consultations. Since no legislative requirement exists, and no federal funding to undertake such consultations exists, no clear commitment by NavCanada to do so in the future was made.

²² City of Surrey. “Surrey Airspace Task Force Successes.” <http://www.surrey.ca/files/DCTSurreyAirspaceTaskForceSuccessesJune2010.pdf>. Surrey, British Columbia. (Accessed March 1, 2011).

²³ NavCanada. “What we do.” www.navcanada.ca. Ottawa, Ontario. (Accessed February 18, 2011).

²⁴ S.C. 1996, c. 20, *Civil Air Navigation Services Commercialization Act*, section 13.

²⁵ NavCanada. Letter from NavCanada CEO John W. Chichton addressed to the Standing Committee on Transport, Infrastructure and Communities.

Obligations of Health Canada

On June 17, 2010, after repeated written correspondence with both the Minister of Transport and the Minister of Health, Health Canada officials met with my office staff to discuss what advice Health Canada has provided to both airport authorities and Transport Canada on the health effects of airport noise. I had previously been informed by the Minister of Health in a letter dated January 27, 2010, that “Health Canada provides specialist information to the responsible authorities for airport projects where noise is an issue” (**Annex E**).²⁶

Health Canada itself recognizes the negative health effects that may be caused as a result of airport noise. In an information sheet entitled “It’s Youth Health: Aircraft Noise in the Vicinity of Airports,” it is noted:

Scientists have raised concerns about the health effects of aircraft noise for two main reasons:

- There are studies that link excess noise exposure to increased stress levels;
- Some studies suggest that chronic stress might lead to an increased risk of high blood pressure (hypertension) and health disease for some people.²⁷

At this meeting on June 17, 2010, it was revealed that Health Canada only provides health advice to airport authorities when reviewing mandatory Environmental Impact Assessments, under the *Canadian Environmental Assessment Act*, related to specific Government of Canada physical infrastructure projects (**Annex F**).²⁸ A change in flight paths implemented by an airport authority, without a related physical

²⁶ Letter from the Minister to Health addressed to the Hon. Marlene Jennings, M.P. Ottawa, Ontario: January 27, 2010.

²⁷ Health Canada. “It’s Your Health: Aircraft Noise in the Vicinity of Airports.” Ottawa, Ontario: January 2010.

²⁸ S.C. 1992, c. 37, *Canadian Environmental Assessment Act*. section 5.

infrastructure project, although having the potential to alter the noise soundscape surrounding an airport, will not trigger an impact assessment.

Furthermore, in cases where an infrastructure project does take place, Health Canada will provide specific recommendations to airport authorities in order to mitigate the effects of noise. Some of these recommendations may include advocating for public consultations and ongoing noise monitoring. However, airport authorities are not legally obligated to comply with such recommendations. There is no framework in place to ensure that airport authorities respect the recommendations provided by Health Canada. This information is consistent with the information provided to the Transport Committee on February 8, 2011 (**Annex G**).²⁹

Standing Committee on Transport, Infrastructure and Communities

On April 4, 2008, I sent a letter to the Chair of the Standing Committee on Transport, Infrastructure and Communities, asking that the committee undertake a study on the issue of airport noise management (**Annex H**). However, since that time, the Prime Minister called the 2008 federal election and then he subsequently prorogued Parliament twice, killing all legislative business.

As such, following a motion presented by the Bloc Québécois, and supported by the Liberal Party of Canada and the NDP, almost three years later, the Committee has recently undertaken this study. It began its hearings in December 2010. I am pleased to participate in this committee's study as an associate member of the Transport Committee.

At the time of the publication of this report, the Committee has heard from representatives from both Transport Canada and NavCanada. The testimony of these

²⁹ Health Canada. Submission from Health Canada to the Standing Committee on Transport, Infrastructure and Communities. Ottawa, Ontario: February 8, 2011.

witnesses is consistent with the information I have been provided by both departmental officials and representatives of NavCanada.

PART IV: MONTREAL ROUNDTABLE ON THE EFFECTS OF AIRPORT NOISE

After years of interventions on the issue of airport noise, it remained abundantly apparent that the people who are or could be affected by this issue had still been left in the dark about the medium and long-term risks of noise exposure. The vast majority of their elected representatives were also unaware of this situation. As a result, on January 20, 2011, I organized a non-partisan roundtable for the 40 to 50 elected officials of the metropolitan area of Montreal, at all three levels of government, whose constituents are or could be increasingly affected by air traffic noise. I was pleased with the support I received by local government officials, representatives from the National Assembly of Quebec, as well as my federal colleagues.

Over the course of the day, we heard a number of presentations from academics, industry experts as well as a citizen's group. This section of the report will provide a brief summary of the information that was presented before the roundtable. A detailed agenda of the roundtable can be found in **(Annex G)**.

Socioeconomic Considerations, Governance and Accountability

Dr. Jacques Roy of HEC Montréal provided an overview of the governance structure for Canadian airport authorities and namely that of Montréal—Pierre Elliott Trudeau International Airport.

In recent years, pressures have been exerted on international airports due to an increasing number of international flights worldwide. As a result, this has stretched the capacities of air traffic controllers and airport authorities worldwide, and has lead to an increase in both noise and atmospheric pollution. Dr. Roy reiterated that airports in Canada are managed by local authorities under leases signed with the federal government. However, all three levels of government are affected by airports in some way. The federal government is responsible for airport property and leases with airport

authorities; the provincial government is responsible for ground transportation infrastructure such as roads and highways to the airport; and municipal governments are responsible for city planning and municipal taxes. Specifically for the federal government, airport authorities, who have signed leases with Transport Canada, generally have a great deal of autonomy to manage individual airport operations. For Montréal—Pierre Elliott Trudeau International Airport, Dr. Roy believes there is a lack of a clear public understanding in who is responsible for making planning and financial decisions. This is consistent with the Auditor General's 2000 report.

According to Dr. Roy, based on studies conducted in both Europe and the United States, the true capacity of an airport to handle an increasing volume of passengers and flights is dependent on the tolerance of the surrounding local environment and population. Despite efforts taken by Aéroports de Montréal (ADM), the airport authority responsible for Pierre Elliott Trudeau Airport, the tolerance level of local residents has already reached a diminished level. It has been projected that an increasing number of passengers at a rate of 2.5% per year will continue beyond 2040 at Trudeau Airport (**Figure 1**). Major investments are thus necessary for infrastructure and to improve

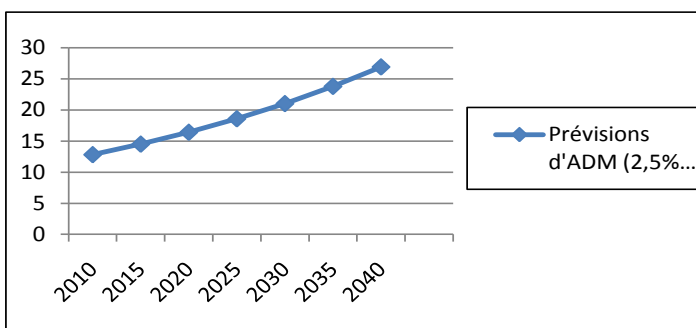


Figure 1: Projected Number of Passengers at Montréal—Pierre Elliott Trudeau International Airport

access to the airport. However, such investments would still be limited by both the existing runways structures and an already overburdened

local environment. The question then, on how to

best plan for the future of Trudeau's operations, is to decide whether or not ADM should continue to invest in this airport knowing that its capacity is limited, or instead,

to decide whether ADM should be exploring alternative options, including that of redirecting flights to other airports such as Mirabel International Airport or to Toronto.

Sustainable Airport Development Project, 2015–2040

Roger Trottier, Advisor and Researcher for Citoyens pour une qualité de vie (CQV), presented an overview of the increasing number of flights experienced at Montréal—Pierre Elliott Trudeau International Airport. Based on a study conducted by CQV, the average number of flights in and out of Trudeau International Airport on a daily basis was 543 in 1995 and is projected to be as high as 1,479 by 2040. Additionally, a comparison was provided of the flight paths by ADM for July 2007 and the actual flight paths that was established in Summer 2008. This proposed flight plan, which was not implemented, would have seen aircraft taking off directly over the borough of Lachine (Figure 2).

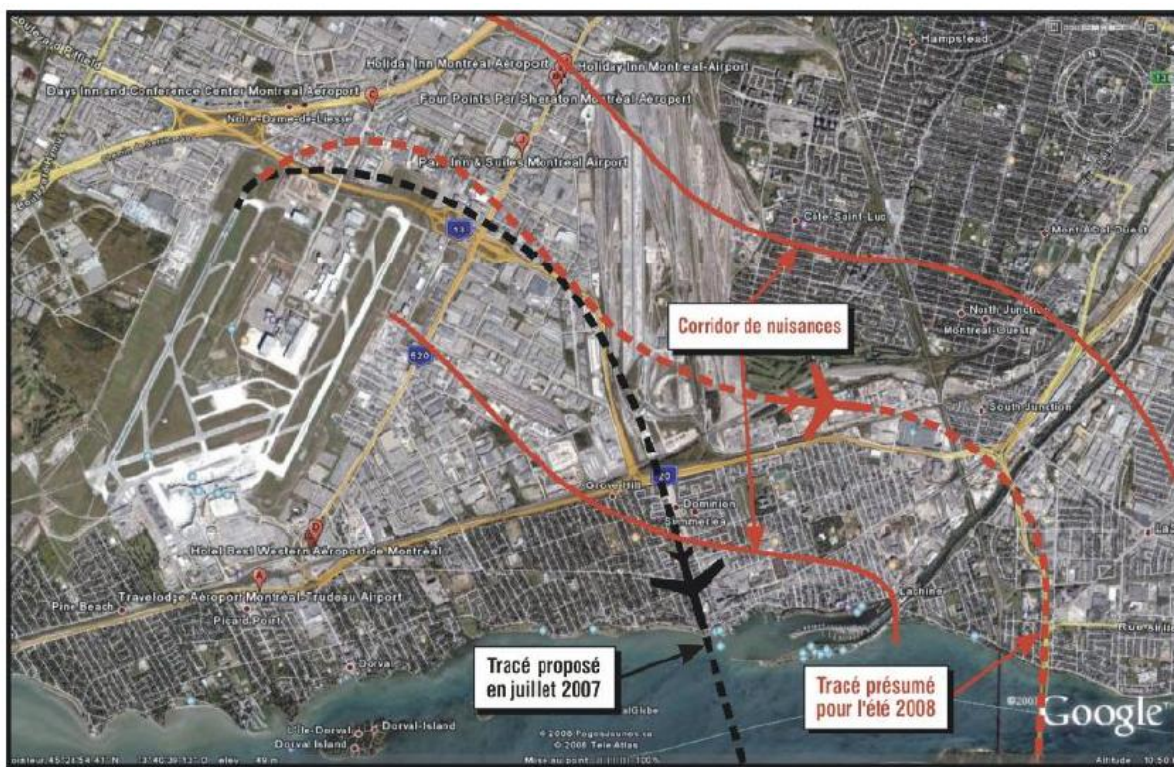


Figure 2: Proposed flight paths over the borough of Lachine

Finally, based on a study conducted by CQV, an overview of which municipalities or city boroughs had adopted municipal resolutions expressing concerns over airport noise, was provided. To date, 10 municipalities in the area surrounding Trudeau airport have adopted such resolutions (**Figure 3**).

Date	Municipalité ou arrondissement	Population	Distance des pistes Trudeau en km
2007-02-05	Ahuntsic-Cartierville	135 000	3,0
2008-03-10	Lachine	44 000	2,0
2008-05-05	Laval	370 000	4,3
2008-05-26	Ville de Mont-Royal	20 000	5,2
2008-06-02	Dorval	18 500	1,1
2008-06-23	Montréal-Ouest	5 500	6,6
2008-07-07	LaSalle	75 000	7,7
2008-07-14	Beaconsfield	19 000	5,6
2008-08-05	Nouveau Saint-Laurent		2,2
	Saint-Laurent Bois-Franc	85 000	3,2
	Saint-Laurent Sud		2,6
2009-09-08	Kirkland	22 000	7,2
Sous-total		794 000	
Autres municipalités sous l'empreinte sonore sans résolution négative *	Pointe-Claire	30 400	1,0
	Dollard-des-Ormeaux	52 000	3,4
	Côte-Saint-Luc	32 000	4,6
	Baie d'Urfée	4 000	12,7
	Île-Perrot	10 500	12,9
Sous-total		128 900	
TOTAL		922 900	

*Notes: 1) Tout indique que les municipalités qui n'ont pas encore adopté de résolutions, se fient sur la pression exercée par les municipalités voisines qui ont déjà protesté. CQV a reçu des plaintes de citoyens résidant aussi loin que Baie d'Urfée et l'Île-Perrot.

Figure 3: Municipalities and boroughs adopting resolutions concerning airport noise

Air Traffic and Property Values

Francine Fortin, President of the l'Ordre des évaluateurs agréés du Québec (OEAQ) [College of Chartered Appraisers of Quebec], provided an overview of the necessary data and methodology to conduct a study on the values of property in proximity to an airport. The effect of noise on property is based on a Noise Depreciation

Index (NDI), which estimates the rate of depreciation of a property, per additional decibel, as one physically approaches a zone which is known to emit noise.

For Montréal—Pierre Elliott Trudeau International Airport, the most recent study, conducted in 1990, estimated a NDI of 0.65. This signifies that as one approaches the areas of maximum noise surrounding the airport, for each additional decibel of noise, the value of property is decreased at a rate of 0.65%. A comparison of NDI values for other major world airports was also provided. As one will note, the depreciation rate at Trudeau is equal to that of Vancouver, but is less severe than that of Toronto, based on the most recent data (**Figure 4**).

Auteur	Année d'observation	Aéroport	NDI*
Paik	1960	Dallas	2.3
Paik	1960	Los Angeles	1.8
Paik	1960	New York (JFK)	1.9
Gautrin	1968-69	Londres (Heathrow)	0.62
Blaylock	1970	Dallas	0.99
....			
Price	1970	Boston (Logan)	0.81
Mieskowski et Saper	1971	Toronto (Etobicoke)	0.95
Abelson	1972	Sydney (KSA) 1 - Marrickville	0.4
.....			
Fromme	1977	Washington (National)	1.49
Hoffmann	1977-1981	Bodø (Norvège)	0.89
...			
Opschoor	1986	Amsterdam	0.45
Uyeno et al.	1987-88	Vancouver I	0.65
Tarassoff	1990	Montréal	0.65
Gillen et Levesque	1990	Toronto	0.48
...			
BAH-FAA	1993	New York (La Guardia)	0.67
Salvi	2001	Suisse (Zurich)	0.74

Figure 4: Noise Depreciation Index for Major Airports

Air Traffic and Health

Dr. Louis Drouin and Dr. Stéphane Perron of the Public Health Sector of the Health and Social Services Agency of Montreal, provided an overview of recent scientific articles of the effects of noise on human health. According to the WHO, a level of noise

of approximately 55 decibels causes a significant amount of human disturbance (**Figure 5**).³⁰

Average night noise level over a year	Health effects observed in the population
Up to 30 dB	Although individual sensitivities and circumstances may differ, it appears that up to this level no substantial biological effects are observed. 30 dB is equivalent to the no observed effect level for night noise.
30 to 40 dB	A number of effects on sleep are observed from this range: body movements, awakening, self-reported sleep disturbance, arousals. The intensity of the effect depends on the nature of the source and the number of events. Vulnerable groups (for example children, the chronically ill and the elderly) are more susceptible. However, even in the worst cases the effects seem modest. 40 dB is equivalent to the lowest observed adverse effect level for night noise
40 to 55 dB	Adverse health effects are observed among the exposed population. Many people have to adapt their lives to cope with the noise at night. Vulnerable groups are more severely affected.
Above 55 dB	The situation is considered increasingly dangerous for public health. Adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed. There is evidence that the risk of cardiovascular disease increases.
Figure 5: Noise Level Analysis	

Various studies indicated that elevated levels of airport noise may cause sleep disturbance problems, however, this level of disturbance is not comparable to those experienced by individuals who have chronic sleeping problems. Sleep disturbance caused by airport noise may result in increased daytime tiredness.

³⁰ World Health Organization. "Night Noise Guidelines for Europe." Copenhagen, Denmark: 2009.

Epidemiological studies demonstrate a causal relation between airport noise and hypertension. Although individually these studies result in different conclusions, a systematic review of these studies (meta-analysis) undertaken by Babisch and van Kamp in 2009 establishes that a correlation exists.³¹ However, according to Dr. Perron, it is not possible at this time to determine if noise caused by Pierre Elliott Trudeau Airport is attaining levels that are having an impact on human health.

Measuring and Managing Airport Noise and its Impacts

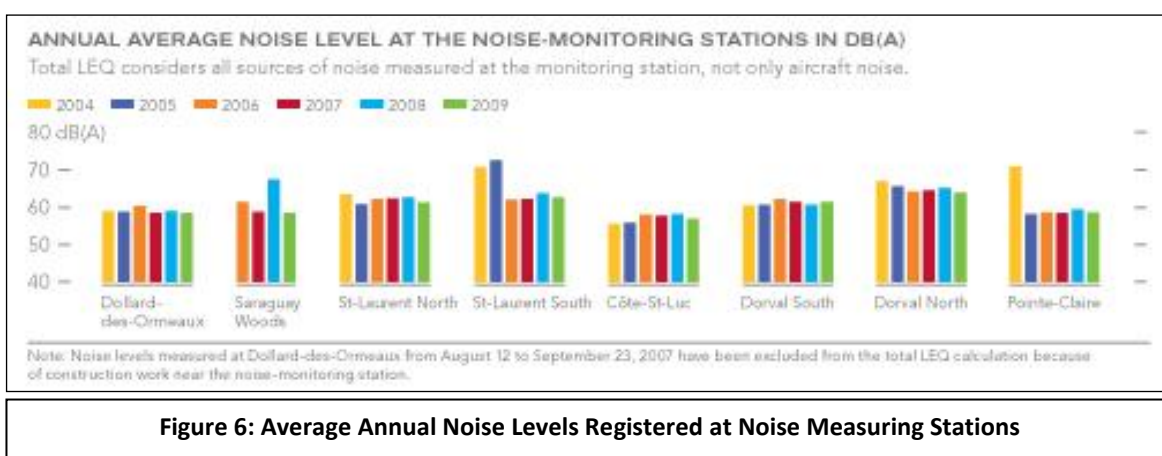
Dr. Tony Leroux, Professor of Speech Pathology and Audiology of the University of Montreal finally described the noise profile that surrounds Montréal—Pierre Elliott Trudeau International Airport. He also presented the European approach to airport noise management and formulated general observations based on this approach to better assess the noise impact in the future.

Generally, noise has been an increasing preoccupation of residents that live in proximity to major airports. According to the Directorate-General for Mobility and Transport of the European Commission, despite technological advancements in modern airplanes, an increasing number of flights has contributed to this increasing level of ambient noise.³² According to Dr. Leroux, the Health Council of the Netherlands additionally affirms that noise can cause numerous negative health effects including disturbance of sleep, causing annoyance and stress, and intensifying cardiovascular diseases. This was consistent with the information presented by Dr. Drouin and Dr. Perron in their remarks.

³¹ Babisch, Wolfgang and Irene van Kamp. "Exposure-response relationship of the association between aircraft noise and the risk of hypertension." *Noise & Health*. Vol 11, No. 44 (July-September 2009). pp161-168.

³² European Union. Directorate-General for Mobility and Transport. "Management of Noise at Community Airports." http://europa.eu/legislation_summaries/environment/noise_pollution/l28068_en.htm. Brussels, Belgium. (Accessed March 1, 2011).

As already indicated, the WHO notes that a noise level of 55 decibels, measured outside of ordinary residences, represents a severe level of noise disturbance. Based on a study conducted by ADM that involved measuring the levels of noise from all sources in several locations in the area surrounding the airport since 2004, noise levels exceed substantially a level of 55 decibels **(Figure 6)**.³³ These results demonstrate that a significant proportion of the population may be exposed to undesirable noise and thus actions should be undertaken to document and reduce these negative effects.



In concluding his presentation, Dr. Leroux, based on regulations in Europe, formulated certain observations for further measuring noise impacts and its effects on health. In particular, it was suggested that environmental assessment studies should take place including:

1. A strategic geographical mapping of noise, that is accessible and comprehensible for citizens, and that uses indicators related to the effects of noise on health;

³³ Aéroports de Montréal. "Frequently Asked Questions – Noise Soundscape." <http://admtl.com/AboutUs/Soundscape/FAQ.aspx>. Dorval, Quebec. (Accessed February 22, 2011).

2. An independent study measuring the level of noise disturbance caused by air traffic and a comparison of such noise levels to those experienced in other countries such as those in Europe; and
3. An economic study to measure the costs of the effects of noise on health, including the costs and benefits of implementing various proposals designed to reduce the effects of noise.

Annex A: Letter from NavCanada to the Transport Committee

(Letter attached)



Doc. Ref./Réf. : FMP No. 2011-41

Direct Line/Ligne directe : (613) 563-7000

January 21, 2011

Mr. Merv Tweed, M.P.
Chair
Standing Committee on Transport, Infrastructure and Communities
House of Commons
Ottawa, ON
K1A 0A6

Dear Mr. Chairman:

As promised at my appearance before the Committee as part of its study on the consequences of noise caused by airport operations in urban areas, I have attached copies of Noise Abatement Procedures for several Canadian airports. I would be pleased to make published noise abatement procedures for other airports available upon request.

As I explained to the Committee on December 7th, noise abatement procedures are published by NAV CANADA in the Canada Air Pilot, but their development is the responsibility of airports. Once in place, noise abatement procedures are binding on both pilots and air traffic controllers and are enforced by Transport Canada.

I hope that this answers any outstanding items.

Thank you for the opportunity to appear before the Committee and outline NAV CANADA's position on this issue and respond to any questions committee members might have had on the matter.

Changes to aircraft routings from time to time are necessary to improve efficiency, manage changing aircraft traffic flows or overall volumes, or to accommodate technical evolutions in navigational capability. I hope that the new policy we have put in place will generate more public input into aircraft routes when changes are proposed that will materially impact noise exposure.

As always if there are any further questions do not hesitate to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "John W. Crichton".

John W. Crichton
President & Chief Executive Officer

JWC/mb
Attachments

c.c.: Bonnie Charron, Clerk, Standing Committee on Transport, Infrastructure and Communities

Annex B: Detailed Chronology of Interventions

Date	Intervention
March 8, 2008	Petition posted on website calling for an immediate moratorium on night flights in and out of Montréal-Pierre Elliott Trudeau International Airport until consultations take place
April 4, 2008	Sent letter to the Minister of Transport requesting an immediate moratorium on night flights in and out of Montréal-Pierre Elliott Trudeau International Airport until consultations take place
April 9, 2008	Tabled Private Member's Motion in the House of Commons calling on the government to suspend night flights in and out of Montréal-Pierre Elliott Trudeau International Airport until consultations take place
April 30, 2008	Received response from the Minister of Transport to April 4, 2008 letter, explaining that all activities regarding the management and development of Montréal-Pierre Elliott Trudeau International Airport, including issues related to flight paths, have been delegated to Aéroports de Montréal
May 2, 2008	Sent letter to the Minister of Transport in response to April 30, 2008 letter expressing concerns that citizens do not sit on the airport soundscape committee
May 28, 2008	Received response from the Minister of Transport to May 2, 2008 letter, explaining that Noushig Eloyan, as a representative of the City of Montreal, sits as a member of the airport soundscape committee
May 30, 2008	Sent letter to the Chair of the Standing Committee on Transport requesting that a study be undertaken regarding the effects of airport noise – no response received
June 2, 2008	Letter sent by City of Dorval to Dorval residents, requesting signatures for the petition calling for an immediate moratorium on night flights in and out of Montréal-Pierre Elliott Trudeau International Airport until consultations take place
October 14, 2008	2008 Federal Election
November 18, 2008	Re-Tabled Private Member's Motion in the House of Commons calling on the government to suspend night flights in and out of Montréal-Pierre Elliott Trudeau International Airport until consultations take place
November 20, 2008	Tabled petition signed by over 1,400 residents and made a statement in the House of Commons
December 4, 2008	Parliament prorogued by the Prime Minister

December 23, 2008	Response received by the Minister of Transport to petition tabled on November 20, 2008
February 23, 2009	Tabled Private Member's Motion calling on the government to suspend night flights at ALL airports in proximity to populated areas until consultations take place, replacing previous motion
April 7, 2009	Submission by Surrey Airspace Task force requesting amendments to the Civil Air Navigation and Services Commercialization Act, requiring NavCanada to undergo mandatory consultations before modifying flight paths over populated areas
May 13, 2009	Question placed on the <i>Order Paper</i> requesting information on the frequency of night flights over populated areas
July 16, 2009	Co-hosted with Sukh Dhaliwal, M.P, a roundtable meeting on Airport Noise in Surrey, British Columbia
July 31, 2009	Report on Airport Noise published by Maria Mourani, M.P., after consulting with constituents from Ahuntsic
August 19, 2009	Met with NavCanada officials in Ottawa to discuss the possibility of voluntarily holding public consultations before changing flight paths over populated areas –NavCanada officials did not make any firm commitments
August 20, 2009	Sent letter to the Minister of Transport with additional signatures for the petition calling for an immediate moratorium on night flights in and out of Montréal-Pierre Elliott Trudeau International Airport until consultations take place
September 15, 2009	Received response to Question on the <i>Order Paper</i> of May 13, 2009 – Statistics regarding the number of night flights are not compiled by Transport Canada and there are no legal or regulatory requirements regarding modification to the frequency of night flights in Canada
September 28, 2009	Question placed on the <i>Order Paper</i> requesting specific noise abatement procedures for each of 13 designated international airports in Canada
September 28, 2009	Sent letter to the Mayor and Council of Ahuntsic-Cartierville documenting efforts undertaken on the issue of airport noise to date
October 5, 2009	Received response from the Minister of Transport to the August 20, 2009 letter, explaining that all activities of Montréal-Pierre Elliott Trudeau International Airport have been delegated to Aéroports de Montréal, and that evidence of negative the health effects related to airport noise is inconclusive according to Health Canada's reference document "It's Your Health: Aircraft Noise in the Vicinity of Airports" published in 2002

November 3, 2009	Sent letter and academic articles to the Minister of Health and the Minister of Transport, disputing lack of conclusive evidence of health effects related to airport noise and expressing concerns over outdated “It’s Your Health” reference document
November 5, 2009	Sent letter to the Mayor and Municipal Council of Surrey, British Columbia, documenting efforts undertaken on the issue of airport noise to date
November 13, 2009	Received response to Question on the <i>Order Paper</i> of September 28, 2009 – noise abatement procedures vary by airport
November 23, 2009	Question placed on <i>Order Paper</i> requesting what measures the Airport Soundscape Committee Consultative Committee of Montréal-Pierre Elliott Trudeau International Airport has undertaken to reduce airport noise
November 30, 2009	City of Surrey, British Columbia, adopts resolution endorsing Private Member’s Motion of Mrs. Jennings calling on Private Member’s Motion calling on the government to suspend night flights at ALL airports in proximity to populated areas until consultations take place
December 31, 2009	Parliament is prorogued by the Prime Minister
January 12, 2010	Met with Citoyens pour une qualité de vie to discuss the possibility hosting a non-partisan roundtable discussion with elected officials from three levels of government on the effects of airport noise in Montreal
January 27, 2010	Received response from the Minister of Health to November 3, 2009 letter, explaining that Health Canada monitors scientific literature in providing up-to-date advice to Transport Canada on environmental assessments related for airport projects where noise is an issue
January 27, 2010	Health Canada’s “It’s Your Health” reference document updated from 2002 version – no changes to content but minor formatting changes were made
February 16, 2010	Received response from the Minister of Transport to the November 3, 2009 letter, explaining that Health Canada is tasked with providing advice to Transport Canada on the health effects of airport noise
March 3, 2010	Private Member’s Motion calling on the government to suspend night flights at ALL airports in proximity to populated areas until consultations take place , reinstated on the <i>Order Paper</i> due to prorogation
March 3, 2010	Question requesting what measures the Airport Soundscape Committee Consultative Committee for Montréal-Pierre Elliott Trudeau has undertaken to reduce airport noise, reinstated on the <i>Order Paper</i> due to prorogation

March 10, 2010	Sent letter and questionnaire to 32 municipalities surrounding Montréal-Pierre Elliott Trudeau International Airport, canvassing interest in participating in a roundtable discussion on the issue
March 12, 2010	Sent letter to the Minister of Health requesting what specific information and advice Health Canada has provided to Transport Canada
April 1, 2010	Received response to Question on the <i>Order Paper</i> of March 3, 2010 requesting what measures the Airport Soundscape Committee Consultative Committee for Montréal-Pierre Elliott Trudeau has undertaken to reduce airport noise – major reductions in airport noise were due to the implementation of International Civil Aviation Organization conventions in Canada
April 20, 2010	Letter sent by Aéroports de Montréal to municipalities, disputing information contained in March 10, 2010 letter
May 7, 2010	Question placed on the <i>Order Paper</i> by Sukh Dhaliwal, M.P., requesting what studies Health Canada has conducted
June 17, 2010	Dominic DiFruscio, Legislative Assistant to Marlene Jennings, M.P., met with Health Canada officials to discuss advice Health Canada provides to Transport Canada on the effects of airport noise: Health Canada will provide advice to Transport Canada ONLY IF a specific infrastructure project takes place – changes in flight paths will not trigger an environmental assessment
June 17, 2010	Response received to May 7, 2010, Question on the <i>Order Paper</i> of May 7, 2010 – Health Canada has published two scientific articles indicating inconclusive evidence on negative health effects related to airport noise
June 24, 2010	Response received from the Minister of Health to March 12, 2010 letter, explaining that Health Canada has published two scientific articles indicating inconclusive evidence related to negative health effects of airport noise (consistent with response to May 7, 2010 <i>Order Paper</i> Question), and that Health Canada has provided advice on environmental assessments for various airport infrastructure projects to airport authorities
June 28, 2010	Letter sent to municipalities disputing information contained in April 20, 2010 letter sent by Aéroports de Montréal
August 4, 2010	Further information received in follow-up to June 17, 2010, meeting with Health Canada officials – Health Canada has provided recommendations to various airport authorities to undertake consultations when there will be changes in airport noise, however, no legal mechanism exists to ensure that airport authorities undertake such consultations

November 18, 2010	House of Commons Transport Committee adopts motion to undertake study on issues related to airport noise
November 22, 2010	Invitation sent to elected officials of three levels of government to participate in a non-partisan roundtable discussion on airport noise to take place on January 20, 2011 in Montreal in the borough of Lachine
December 1, 2010	House of Commons Transport Committee begins study on airport noise
December 14, 2010	Question tabled on the <i>Order Paper</i> asking if the government has any intention of modifying existing laws or regulations requiring airport authorities to conduct mandatory public consultations when changing flight paths
January 20, 2011	Roundtable discussion on airport noise takes place in Lachine
January 31, 2011	Response received to Question on the <i>Order Paper</i> of December 14, 2010, indicating that the government has no intention of making such regulatory changes



RESPONSE TO PETITION RÉPONSE À LA PÉTITION

PREPARE IN ENGLISH AND FRENCH MARKING "ORIGINAL TEXT" OR "TRANSLATION"
PRÉPARER EN ANGLAIS ET EN FRANÇAIS EN INDIQUANT "TEXTE ORIGINAL" OU "TRADUCTION"

PETITION NO./N° DE LA PÉTITION
401- 0001

BY / DE

**Ms. Jennings
(Notre-Dame-de-Grace – Lachine)**

DATE

December 23, 2008

RESPONSE BY THE MINISTER OF TRANSPORT, INFRASTRUCTURE
AND COMMUNITIES
RÉPONSE DU MINISTRE DES TRANSPORTS, DE L'INFRASTRUCTURE
ET DES COLLECTIVITÉS

SIGNATURE
MINISTER OR PARLIAMENTARY SECRETARY
MINISTRE OU SECRÉTAIRE PARLEMENTAIRE

SUBJECT / OBJET

Transports

RESPONSE / RÉPONSE

ORIGINAL TEXT
TEXTE ORIGINAL

☐

TRANSLATION
TRADUCTION

☒

I acknowledge receipt of your petition dated November 20, 2008, requesting an immediate stop to flights departing or arriving at Pierre Elliott Trudeau International Airport (Montréal-Trudeau) between 11:00 p.m. and 7:00 a.m., except in specific situations, and requesting that Aéroports de Montréal (ADM), in cooperation with local authorities, develop noise abatement measures.

At the outset, I would like to inform you that all runway flight paths at Montreal-Trudeau extend over built-up areas. ADM has therefore put in place certain restrictions and noise abatement procedures to reduce the noise footprint of aircraft operating at the airport. For instance, turbo jet aircraft weighing more than 45,000 kg are restricted from arriving or departing Montreal-Trudeau between 11:00 p.m. and 7:00 a.m. All other aircraft are subject to various noise abatement procedures but they are not restricted from overnight flights. These restrictions have been in place for many years and are intended to minimize noise levels over the neighbouring communities. Although airlines plan their schedules accordingly, unexpected circumstances such as adverse weather conditions can create delays.

As you know, depending on the season, three to seven aircraft weighing more than 45,000 kg are authorized to take-off between 6:00 a.m. and 7:00 a.m. in order to allow passengers to meet connecting flights towards their final destination. These flights must meet specific climb criteria in order to minimize noise levels over the neighbouring communities. When noise abatement procedures are put in place, my Department must ascertain that all public interest considerations are taken into account, such as environmental aspects, safety and security, accessibility, economic efficiency, international competitiveness, public service, etc. These measures must also take into consideration the interests of the majority of the stakeholders and not only the airport or the community.

It is also important to state that aircraft noise has been reduced greatly in the last decade owing to regulatory changes and advances in technology. More stringent regulations regarding aircraft engine noise and emissions control, better performing engines that allow aircraft to reach higher altitudes in a shorter time frame and implementation of new navigation technology have resulted in more precise flight paths and reduction of inconveniences to the communities' neighbouring airports.

Should you require further information, I would invite you to contact Mr. Justin Bourgault, our regional representative for noise management, at 514-633-3297.

Annex D: Excerpt from the *Civil Air Navigation Services Commercialization Act*

Civil Air Navigation Services Commercialization Act

1996, c. 20

[Assented to June 20th, 1996]

Corporation may plan and manage airspace

13. Subject to the Governor in Council's right under the *Aeronautics Act* to make regulations respecting the classification and use of airspace and the control and use of aerial routes, the Corporation has the right to plan and manage Canadian airspace and any other airspace in respect of which Canada has responsibility for the provision of air traffic control services, other than airspace under the control of a person acting under the authority of the Minister of National Defence.

Annex E: Letter from the Minister of Health to the Hon. Marlene Jennings

(Letter attached)

Minister of Health



Ministre de la Santé

Ottawa, Canada K1A 0K9

JAN 27 2010

The Honourable Marlene Jennings, P.C., M.P.
Notre-Dame-de-Grâce-Lachine
House of Commons
Ottawa, Ontario K1A 0A6

Dear Ms. Jennings:

Thank you for your correspondence of November 3, 2009, co-addressed to my colleague, the Honourable John Baird, Minister of Transport, Infrastructure and Communities, concerning noise from night flights out of Montréal's Pierre Elliott Trudeau International Airport. I regret the delay in responding.

Health Canada's role regarding aircraft noise is an advisory one. The Department advises Transport Canada's Domestic Aircraft Noise and Emissions Committee on the health effects of noise. Under the *Canadian Environmental Assessment Act*, Health Canada provides specialist information to the responsible authorities for airport projects where noise is an issue.

The Department continues to monitor the scientific literature, including the studies that you referred to in your letter, to provide up-to-date advice to Transport Canada for environmental assessments, and for the general public. The *It's Your Health* document that relates to aircraft noise is currently being updated and will be available later this year.

Thank you for writing.

Sincerely,

Leona Aglukkaq

c.c. The Honourable John Baird, P.C., M.P.

Canada



IT'S YOUR HEALTH

Aircraft Noise in the Vicinity of Airports

The Issue

Jet aircraft are one of the most disturbing sources of noise in our environment. People who live in communities near airports have become increasingly concerned about potential health effects from aircraft noise.

Background

Scientists have raised concerns about the health effects of aircraft noise for two main reasons:

- There are studies that link excess noise exposure to increased stress levels
- Some studies suggest that chronic stress might lead to an increased risk of high blood pressure (hypertension) and heart disease for some people

Noise and Stress

The human stress response is a natural coping mechanism that occurs when we perceive something around us to be a threat. For people who are susceptible, the stress response triggers a sudden release of stress hormones. These hormones can cause temporary changes in heart rate and blood pressure.

For some people, a sudden or uncontrollable intense noise may be enough to cause a stress response. In most cases, the stress response is short-term,

and the person's heart rate and blood pressure soon return to normal.

However, some scientists are concerned that chronic stress, no matter what the cause, may lead to persistent increases in stress hormone levels and blood pressure. This may increase the long-term risk of heart disease. Health Canada's scientists are tracking these concerns, and have evaluated a number of studies about possible links between noise and stress-related health effects.

Aircraft Noise and Children

Studies conducted in both Los Angeles and Munich found that average blood pressure levels were slightly elevated in a group of schoolchildren exposed to aircraft noise. However, neither study provides conclusive proof that aircraft noise causes chronic stress in children.

One year later the researchers in Los Angeles did a follow-up study, and found no measurable difference in blood pressure levels between children exposed to aircraft noise, and those who were not. In the Munich study, it is unclear what may have caused the observed effects other factors, such as diet, could have contributed to the changes in blood pressure.

The Munich study also looked at the levels of three different stress hormones in the children's blood. When the children were exposed to aircraft noise, the levels of two

stress hormones went up, but the level of the third did not. This is significant because the stress hormone that did not increase is considered a better indicator of chronic stress than the other two.

The increases in blood pressure and stress hormone levels observed in these studies also provide no evidence that noise exposure during childhood can lead to stress-related illness, including heart disease, later in life. The blood pressure increase in the children exposed to aircraft noise was small when compared to normal blood pressure variations among children.

Aircraft Noise and Adults

Scientific studies on adults have shown that short-term exposure to intense noise can cause temporary effects, including increases in heart rate and blood pressure. However, there is no consistent evidence that chronic noise leads to hypertension. In studies where such a link has been demonstrated, the effect may have been due to other factors that are known to be linked to high blood pressure, such as low economic status.

To date, there is insufficient evidence to conclude that aircraft noise causes heart disease. However, some studies suggest that people who live for many years in areas with intense traffic noise, may face a slight increase in the risk of developing heart disease. Health Canada will continue to assess future research on the potential health risks of aircraft noise.

Minimizing Your Risk

If you live near an airport, or are planning to move near one, a good first step is to get specific details about aircraft noise levels in the neighborhood. You can do this by contacting your local airport for a copy of the noise contour (noise map) for your area. From there, you can

compare your local noise contour to the contours recommended in the following document:

- Land Use in the Vicinity of Airports (TP 1247) Part IV Aircraft Noise - www.tc.gc.ca/civilaviation/publications/tp1247/part4/menu.htm

You may want to increase the sound insulation in your home if noise levels in your neighborhood exceed the recommended guidelines. The National Research Council of Canada has developed software to help acoustical consultants determine sound insulation needs. These specialists can provide professional advice for a fee.

Health Canada's Role

Health Canada provides advice to the public and regulatory authorities, such as Transport Canada, on the health effects of aircraft noise. This ensures that health risks are taken into account when decisions are made that affect our exposure to aircraft noise.

In addition, Health Canada's scientists are continuing to assess the potential health effects of aircraft noise by:

- Conducting their own research on the stress response to aircraft noise
- Tracking and assessing scientific papers by other experts in this field
- Participating in the International Congress on Noise as a Public Health Problem, which takes place every three years

These efforts will ensure that Health Canada maintains a sound scientific basis for providing up-to-date advice regarding the health effects of aircraft noise on people who live near airports.

Need More Info?

For detailed scientific information about this issue, see:

Health Canada, Environmental and Workplace Health, Aircraft Noise at: www.hc-sc.gc.ca/ewh-semt/noise-bruit/aircraf-avion/index-eng.php

Land Use in the Vicinity of Airports (TP 1247) Part IV, Aircraft Noise at : www.tc.gc.ca/civilaviation/publications/tp1247/part4/menu.htm

For additional articles on health and safety issues go to the *It's Your Health* web section at:

www.healthcanada.gc.ca/iyh
You can also call toll free at 1-866-225-0709
or TTY at 1-800-267-1245*

Annex F: Excerpt from the Canadian Environmental Assessment Act

Canadian Environmental Assessment Act

1992, c. 37

[Assented to June 23rd, 1992]

Projects requiring environmental assessment

5. (1) An environmental assessment of a project is required before a federal authority exercises one of the following powers or performs one of the following duties or functions in respect of a project, namely, where a federal authority

(a) is the proponent of the project and does any act or thing that commits the federal authority to carrying out the project in whole or in part;

(b) makes or authorizes payments or provides a guarantee for a loan or any other form of financial assistance to the proponent for the purpose of enabling the project to be carried out in whole or in part, except where the financial assistance is in the form of any reduction, avoidance, deferral, removal, refund, remission or other form of relief from the payment of any tax, duty or impost imposed under any Act of Parliament, unless that financial assistance is provided for the purpose of enabling an individual project specifically named in the Act, regulation or order that provides the relief to be carried out;

(c) has the administration of federal lands and sells, leases or otherwise disposes of those lands or any interests in those lands, or transfers the administration and control of those lands or interests to Her Majesty in right of a province, for the purpose of enabling the project to be carried out in whole or in part; or

(d) under a provision prescribed pursuant to paragraph 59(f), issues a permit or licence, grants an approval or takes any other action for the purpose of enabling the project to be carried out in whole or in part.

Annex G: Submission from Health Canada to the Transport Committee

(Attached answers to a series of questions put forward by the Hon. Marlene Jennings, M.P., on December 1, 2010)

**STANDING COMMITTEE ON TRANSPORT,
INFRASTRUCTURE AND COMMUNITIES**



**COMITÉ PERMANENT DES
TRANSPORTS, DE L'INFRASTRUCTURE
ET DES COLLECTIVITÉS**

Distributed February 8, 2011

Modern studies have found acute health effects from night-time aircraft noise exposure on populations residing near airports

a. Why has the department not assessed their importance?

Health Canada has conducted an assessment of the recent literature on acute health effects of aircraft noise that included night-time aircraft noise exposure. The department also conducts studies that assess the effects of all types of noise exposure on health, pertinent to its mandate under the Radiation Emitting Devices Act, and reviews similar research conducted by third parties. The department then uses this information in providing expert advice to other departments.

b. Health and environmental effects are considered when government infrastructure projects are completed at airports. It is my understanding that Health Canada provides input into these processes. Why are health and environmental effects not considered in the design of flight paths and noise abatement policies, or in the modification of existing flight paths?

Environmental assessments are conducted under the *Canadian Environmental Assessment Act* (the Act). The Act specifies the projects that require environmental assessments, which usually include infrastructure projects. As part of the environmental assessment for a project, noise impacts would be assessed.

c. Do airport authorities have to comply with advice provided by Health Canada in environmental impact assessments?

Health Canada's role in environmental assessment, as expert authority, is governed by the *Canadian Environmental Assessment Act* (the Act) and is advisory only. Health Canada provides advice on the potential human health impacts of the project. The responsible department then considers this advice in making a final decision regarding the significance of the environmental effects that may arise from the project. The responsible department may require the project proponent to comply with the advice provided by Health Canada.

d1) If so, what mechanisms are in place to ensure compliance

Health Canada is not responsible for ensuring compliance with advice provided to the responsible department during an environmental assessment process.

d2) If not, why not?

The advice Health Canada provides as an expert authority under the Act are of an advisory nature only. The responsible department determines how the advice will be

considered in an overall assessment of the significance of the environmental effects of a project.

e. What requirements are in place requiring airport authorities to consider the health effect of noise as they manage growth?

The *Canadian Environmental Assessment Act* requires airport authorities to conduct environmental assessments for airport expansion projects if the project is subject to the Act. Human health effects of the proposed projects would be considered as a part of the environmental assessment process. Responsible departments have the obligation to ensure that any mitigation measures they consider appropriate are implemented.

For more information on Health Canada and Aircraft Noise, consult the following website: <http://www.hc-sc.gc.ca/ewh-semt/noise-bruit/aircraf-avion/index-eng.php>

Annex H: Letter from Marlene Jennings to the Transport Committee

(Letter attached)

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Hon. Marlene Jennings
Member of Parliament for Notre-Dame-de-Grâce – Lachine
Députée de Notre-Dame-de-Grâce – Lachine

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Téléc: (514) 489-2806

Ottawa, May 30, 2008

Merv Tweed
Chair, Standing Committee on Transport, Infrastructure and Communities
Suite 511, Justice Building

Dear Mr. Chair,

I am writing to you as Chair of the Standing Committee on Transport, Infrastructure and Communities about an issue that I believe is worthy of study by the members of your committee. As you are likely aware, air passenger travel in Canada has grown exponentially in the last twenty years. The growth of short flight airlines such as Porter Airline and West Jet has given Canadians more choice in air travel, while also making it more convenient. The resulting growth has naturally put pressure on Canada's airports and the urban areas around airports as both the number of flights and the daily operating schedules of airports have expanded to accommodate this increased demand.

There has been, however, increasing public concern with the steady increase of flights arriving and departing Canadian airports in the late hours of the night and early hours of the day (11pm-7am). This is not a uniquely Canadian phenomenon; the European Union is also experiencing similar public pressure at a number of its international airports in urban areas to restrict night flights. The issue has garnered enough attention to warrant health impact studies by the European Commission, which have linked noise from airports and passing night flights with increased blood pressure and the associated health risks such as stroke, heart attack and kidney failure amongst residents in affected areas. In addition to the health risks, there are other studies which have shown that the environmental effects of the emissions of night flights are in fact worse at night than during the day.

Thus, it is not only a 'not in my backyard' sentiment that Canadians in cities like Vancouver, Toronto and Montreal are voicing when they complain about the increase in night flights, but also a profound concern for their health and quality of life. One needs only look at the significant increase in citizen engagement on this issue to see its increasing importance. Residents of my riding of Notre-Dame-de-Grâce – Lachine, for example, showed up en masse to protest the proposed expansion of night flights at Montreal's Trudeau Airport. Residents of Surrey and Richmond, British Columbia, who oppose these same night flights at Vancouver International Airport, have formed new coalitions to fight back. Residents of the Toronto area who, over the years, have opposed expanded night flights first at Pearson International Airport and, more recently, Toronto Island Airport are also testament to this growing trend, which has been echoed here in the House by a number of petitions, Private Member's motions and statements by members calling on the government to restrict night flights and consult area citizens about the health impacts urban airports have on area residents.

Responding to protests in my own riding, on April 9, I placed a motion - **M-481** - on the Order Paper which states:

That, in the opinion of the House, the government should issue an order, under the Aeronautics Act and through the Aéroports de Montréal, to ensure that night flights, between 11:00 p.m. and 7:00 a.m., into



and out of Montréal–Pierre Elliott Trudeau International Airport are suspended, except for flights operating for : (i) medical emergencies, (ii) delays beyond a carrier's control, (iii) adverse weather conditions, (iv) flights directly related to Canadian military operations.

As I have illustrated, however, night flights are not solely a problem in Montreal. That is why I am asking yourself, and members of the committee, to consider undertaking a study of the economic, environmental and health impacts of night flights and to make recommendations on their regulation to the House. The Minister for Transport, Infrastructure and Communities, through the regulatory powers available to him/her under the *Aeronautics Acts* and *Canada Air Pilot*, has the power to intervene to regulate night flights in Canada. Thus, studying the issue is completely within the scope of the committee's mandate.

If the committee should decide to add such a study to their agenda for the fall (as I understand the committee's agenda is full until the summer recess), I would not consider it as an usurpation of my motion in the House, since it would not be debated until at least late 2009. In fact, I would consider replacing it with another item I have on the Order Paper should my name reach the top of the List for Consideration of Private Members' Business.

I look forward to hearing of the committee's consideration of this proposal, Mr. Chair, and thank you for considering it.

A handwritten signature in black ink, appearing to read 'M. Jennings', with a large, stylized loop at the end.

Hon. Marlene Jennings, P.C., M.P.
Notre-Dame-de-Grâce – Lachine

MJ/jt

Cc: Members of the Standing Committee on Transport, Infrastructure and Communities; Clerk of the Standing Committee on Transport, Infrastructure and Communities

Annex L: Detailed Roundtable Agenda

MONTREAL AIRPORT ROUNDTABLE FOR ELECTED OFFICIALS

The Honourable Marlene Jennings, P.C., M.P.

Date and time: Thursday, January 20, 2011, 8:30 a.m.
 Location: Ristorante Andrea, 3194 St-Joseph Boulevard, Lachine
 Participants: See attached list

AGENDA

First session (restricted attendance)

8:30–9:00 a.m.	Registration (juice and coffee)
9:00–9:10 a.m.	Welcome from Noushig Eloyan, Honorary Chair of the Organizing Committee
9:10–9:40 a.m.	“Socioeconomic Considerations, Governance and Accountability” (<i>Dr. Jacques Roy</i>)
9:40–10:10 a.m.	“Sustainable Airport Development Project, 2015–2040” (<i>Citizens for a Quality of Life</i>)
10:10–10:30 a.m.	<i>Health break</i>
10:30–11:00 a.m.	“Air Traffic and Property Values” (<i>Francine Fortin</i>)
11:00–11:30 a.m.	Presentation by Mrs. Jennings
11:30 a.m.–12:00 p.m.	“Air Traffic and Health” (<i>Dr. Louis Drouin</i>)
12:00–1:00 p.m.	<i>Light lunch</i>
12:30–1:00 p.m.	“Measuring and Managing Airport Noise and its Impacts” (<i>Dr. Tony Leroux</i>)

Second session, in camera (no speakers present)

1:00–1:15 p.m.	Action plan (—Municipal collaboration? —Public management of noise levels? —Impact studies as a prerequisite for public consultation?)
1:15–1:50 p.m.	Discussion with elected participants
1:50–2:00 p.m.	Closing remarks, Marlene Jennings

LIST OF SPEAKERS AND THEIR QUALIFICATIONS

Jacques Roy, BSc, Royal Military College Saint-Jean, 1971
 MBA, Operations Research, HEC Montréal, 1976
 PhD, Operations Management and Economics, HEC Montréal, 1985
 Aerospace engineering officer, Canadian Armed Forces, until 1980
 Director, Management Training (1988–1990) and Research (1994–1996), International Aviation Management Training Institute (IAMTI), Montréal
 Professor, Logistics and Operations Management, HEC Montréal
 Director, CHAÎNE Research Group
 Director, Carrefour logistique [Logistics forum], HEC Montréal



Roger Trottier, BA, University of Montreal (Collège de l'Assomption), 1958
 BScA, Civil Engineering, École Polytechnique de Montréal, 1962
 MSc, Environmental Engineering, Purdue University, West Lafayette, Indiana, 1966
 Senior manager, Groupe Lavalin, 1966–1989
 Vice-president (project management), Groupe Dessau, 1989–1995
 President, Gestion HERTÉ Inc. (project management consultant), 1995–2006
 Volunteer researcher and advisor, Citizens for a Quality of Life, 2006–2010



Francine Fortin, Chartered Appraiser
 Property management department, City of Quebec
 Director, Real property division
 President, Ordre des évaluateurs agréés du Québec [College of Chartered Appraisers of Quebec]



Stéphane Perron MD, MSc, FRCPC
 Urban Environment and Health – Public Health Sector
 Health and Social Services Agency of Montreal
 Assistant Professor, University of Montreal, specializing in health problems related to housing and environmental noise
 Supervisor of the Medical Residence Program – University of Montreal



Louis Drouin, Medical doctor (MD)
 Master's in Public Health
 Head, Urban Environment and Health – Public Health Sector – Health and Social Services Agency of Montreal
 Montreal-Centre regional health and social services board



Tony Leroux, BSc, Speech Pathology and Audiology, University of Montreal, 1986
 Certificate, Human Biology, University of Bordeaux 2, Victor Segalen, France, 1987
 MSc, Biomedical Sciences, University of Montreal, 1988
 PhD, Psychology, Carleton University, Ottawa, Ontario, 1999
 Associate professor, School of speech therapy and audiology, Supervisor of the undergraduate and graduate audiology programs, University of Montreal
 Researcher and Site Director, CRIR—Institut Raymond-Dewar

ROUNDTABLE HOSTS

The Honourable Marlene Jennings, P.C., M.P.



First elected in June 1997, the Honourable Marlene Jennings was re-elected as Member of Parliament for Notre-Dame-de-Grâce–Lachine in November 2000, June 2004, January 2006 and October 2008. Ms. Jennings is the first Black woman from Quebec to be elected to Parliament in the history of Confederation. She became a member of the Privy Council in July 2004.

Ms. Jennings is Liberal Critic for Justice and the Attorney General of Canada. In 2006 and from 2008 to 2010, Ms. Jennings was Deputy House Leader for the Official Opposition. From July 2004 to October 2005, during the previous Liberal government, Ms. Jennings was Parliamentary Secretary to the Prime Minister (with emphasis on Canada–U.S. relations). From January to December 2003, she was Parliamentary Secretary to the Solicitor General of Canada, and from September 2001 to December 2002, she was Parliamentary Secretary to the Minister for International Cooperation.

Ms. Jennings developed her multi-disciplinary experience through positions in both the public and private sectors. She has over nine years of professional experience in policing, first as a member of the Quebec Police Commission (1988–90) and then as Deputy Commissioner for Police Ethics for the Province of Quebec (1990–97).

Ms. Jennings was born on November 10, 1951, on the South Shore of Montreal. After studying English Literature and Psychology at McGill University (no degree), she completed her Bachelor of Laws (LLB) at the University of Quebec at Montréal in 1986 and was called to the Quebec Bar in 1988. She also completed part of an Executive MBA Program at Concordia University in 1990. Fluently bilingual (English and French), Ms. Jennings also possesses an intermediate knowledge of Italian.

Ms. Jennings has been married to Luciano Del Negro since 1974, and they have a daughter, Anne-Darla.



MEMBERS OF THE ROUNDTABLE ORGANIZING COMMITTEE

Noushig Eloyan, Honorary Chair, Former Representative on the Airport Soundscape Committee

Jean-Marc Hétu, Advisor – Municipal Politics

Dominic DiFruscio, Legislative Assistant

Gabriel Retta, Riding Assistant, Notre-Dame-de-Grâce—Lachine

Annalisa Harris, Parliamentary Intern

LIST OF INVITED PARTICIPANTS

Municipal Officials

Ahuntsic—Cartierville.....	Pierre Gagnier, Mayor Robert Dolbec, Political Assistant
Châteauguay.....	Nathalie Simon, Mayor
Dorval.....	Marc Doret, Municipal Councillor
Lachine.....	Bernard Blanchet, Municipal Councillor Jean-François Cloutier, Municipal Councillor
Longueuil.....	Éric Beaulieu, Political Assistant to Mayor Caroline St-Hillaire Gilles Grégoire, Municipal Opposition Leader Éric Côté, Political Assistant
Mirabel.....	Hubert Meilleur, Mayor
Mont-Royal.....	Philippe Roy, Mayor Erin Kennedy, Municipal Councillor

Provincial Officials

Acadie.....	Diane Eng, Political Assistant to Christine Saint-Pierre, MNA
Marguerite—Bourgeois.....	Luciana Evangelista, Political Assistant to Clément Gignac, MNA
Marquette.....	Michel Dion, Political Assistant to François Ouimet, MNA
Mont-Royal.....	Louise Bertrand, Political Assistant to Pierre Arcand, MNA

Federal Officials

Notre-Dame-de-Grâce—Lachine.....	Hon. Marlene Jennings, M.P.
Lac-Saint-Louis.....	Francis Scarpaleggia, M.P.
Outremont.....	Thomas Mulcair, M.P.
Pierrefonds—Dollard.....	Dr. Bernard Patry, M.P.
Saint-Laurent—Cartierville.....	Jocelyn Decoste, Political Assistant to Hon. Stéphane Dion, M.P.