

James Bay Neighbourhood Association

jbna@jbna.org

Victoria, B.C., Canada

www.jbna.org

To: CARAC (CARRAC@tc.gc.ca)

August 21st, 2019

Fr: Marg Gardiner, President, JBNA

Re: Transport Canada NPA # 2019-014

The James Bay Neighbourhood Association (JBNA) has received and reviewed the Transport Canada CARAC Notice of Proposed Amendment (NPA) dated July 8th, 2019.

By way of introduction, JBNA is recognized by the City of Victoria as the community consultative land-use body for the James Bay neighbourhood. Our neighbourhood has a population of 12,000; it is in the south part of the City, with the middle harbour to the north, the outer harbour to the west, the Strait of Juan de Fuca to the south, and Beacon Hill Park to the east.

Our community is affected by Victoria Harbour Airport operations. With the current Victoria Harbour Airport siting, Alpha runway is to our north and Bravo runway to our west. Residents have safety, health, and quality of life concerns related to the location of the airport operations.

We appreciate the opportunity to comment on the airport, but more importantly, look forward to a full technical review of the siting and operations of the airport with the view to creating an airport that provides a level of safety equivalent to the level provided through the siting of land-based airports in the vicinity of a built-up area of a town or city.

Please accept this submission that focuses on the safety of airport operations and the well-being of James Bay residents and visitors to our community. Comments generally refer to the draft regulations as they apply to Victoria Harbour Airport

Respectfully submitted,

Marg Gardiner President, JBNA

Transport Canada Mandate, Background, and Exposure to Residents:

"Transport Canada has the responsibility and authority to propose and enforce laws and regulations to ensure safe, secure, efficient and clean transportation." TC statement

By 1975, Laurel Point Inn and Residences were nearing completion at the narrowest part of the Middle Harbour east entrance, the Songhees-Laurel Point gap. At the time, scheduled float-plane service began. Thus conflicts in the harbour were triggered; float-plane versus marine use in the midst of a built-up area of the City of Victoria, and the needs of an airport versus Transport Canada's and the City's obligation to ensure compatible land-use.

Years earlier, most of the 2-3000 aircraft movements per year took place south of Ogden Point. The shift to the narrow channel of the Middle Harbour was a significant change which warranted full consideration of safety, obstacles, compatible land use, competing marine use of harbour waters, and the requirements of the Canada Marine Act and companion legislation/regulations.

Regulatory governance of the airport, particularly the safety aspects of float-plane activity, is found within sections of the Canada Marine Act, Canada Shipping Act, Canada Aeronautics Act, and the International Civil Aviation Agreement, ICAO.

Citizens, particularly residents who live near the harbour and see flight movements daily, have witnessed or read about events which have caused them to question the siting of the Alpha runway in the Middle Harbour.

- Float planes, upon landing, heading towards the marine fuel dock, or the nearby fish loading dock, or towards the float-home village, as pilots seek shelter from wind and wave action or avoid obstacles moving on the water.
- Float planes manoeuvring at varying speeds back and forth from near the marine fuel dock towards the middle of the runway after landing westward; often planes taxi eastward, in reverse, out of Major Bay until they are able to turn 180° towards the inner harbour.
- The fire last summer during which a refuelled boat exploded next to the Marine Fuel Dock and was pushed northwards into the Alpha runway.
- Aborted landings.
- · Whales in Victoria Harbour.
- Recent float-plane accidents which have occurred along the west coast of Vancouver Island and in the interior lake areas.

JBNA has been aware of the statement(s) by the Minister of Transport Canada, and Transport Canada officials, stating the need to raise the current certified water aerodromes safety level to one comparable to that found at certified land airports and that the prepublication in Canada Gazette will be during the year or at the earliest opportunity. (see TC correspondence of 2007, 2010, 2011, 2012, 2013, 2014, 2016, 2017, 2018)

Transport Canada has taken steps to increase the safety of passengers using float-plane services; however, residents seek more, they seek the safety level comparable to certified land airports, as committed to by Ministers of the crown.

Comments re NPA Statements:

NPA Pages 1, 2, 3 (Background, Policy Considerations, Summary)

- Statements are made stating that the "amendment" would have specific requirements similar to land airports to ensure safety of all passengers and staff.
- Amendment is to ensure no conflict with the current Canada Shipping and the collision Regulations.
- Amendment . . . allow for a standardized application of safety requirements for TC.
- An information campaign and publication of an amendment to require flotation devices are identified as safety actions.
- Amendment ensures the safety of passengers.

As resident stakeholders in the City of Victoria, our concern goes beyond "similar to land airports". Ministers of the department have stated requirements would raise the safety levels to *the equivalent of land airports*.

Land airports in the built-up areas of a city are secure, and operations can be contained within a specific boundary. In contrast, **Victoria Harbour is an open system**, one in which activities are not operated by the Airport Certificate holder, Transport Canada. In addition to aircraft operations, there are now three scheduled ferry operators (bound for USA and Vancouver), two harbour ferry operators, barges serving the expanded services of Point Hope Shipyard and other industrial enterprises in the Upper Harbour, yachts mooring at one of the marinas in the harbour, and a growing number of personal and commercial recreational operators including whale watching and other sight-seeing marine interests.

In spite of work undertaken by local Transport Canada staff to 'control' harbour movements, it may be impossible to provide a level of safety as exists with land-based airports due to the **open access to the harbour by water and by land.** The Middle Harbour, unlike the Outer Harbour, is intended to have an open walkway on foreshore lands. This walkway is about three quarters completed on the Inner and Middle harbours.

JBNA interests are focussed on the safety of those who live and are visiting our community. Although the identified 'improvements' intended to serve aircraft passengers are laudable, **they do not raise the safety level of the airport to a land-based airport.** Similarly, standardizing safety requirements, although a laudable objective, does not ensure raising the safety level of a water-airport to the equivalent of a land-based airport.

Consultation, done in 1999 (NPA 19990280), occurred twenty years ago. Surveys which served as discussion points for the 1999 NPA may be outdated and may not reflect the reality of today's harbour (see Appendix A). Much has changed since then. In addition to a more varied user groups of the harbour, significant "obstacles" have been created, including water-based obstacles such as the Victoria International Marina and land-based obstacles such as large residential and transient residential complexes in the James Bay and the Songhees areas which are on either side of runway Alpha and several tall high-rise residential structures which fall under the approach as identified on the July, 2000 Runway Approaches and Obstacles Survey.

Regarding information which would appear in the Airport Operations Manual (NPA page 3) the Port of Victoria Traffic Scheme as presented in a brochure posted on the Transport Canada web-site and predecessor versions of *TP13410* Traffic Scheme documents are not *Traffic Separation Schemes* as envisioned by Rule 10 of the Collision Prevention Regulations. The note on page 2 of the various TP13410 documents clearly states the Transport Canada Traffic Scheme it is not a separation scheme as defined by Rule 10 of the Collision Prevention Regulations.

A Port of Victoria Traffic Separation Scheme is required to comply with the Canada Marine Act. It must be consistent with national standards and practices for marine vessel traffic services, including those under Rule 10. There is no Canada Marine Act exemption for a port to do otherwise.

On the Port Traffic Schemes, vessels 20m or more in length **must** use the Seaplane Take-Off & Landing Area – Alpha runway. The **runway has been superimposed on the main shipping channel** used by three scheduled ferry services, various large vessels such as frigates accessing Point Hope Shipyards, tugs towing barges, and large yachts.

It is noted that "water airports that currently hold a water airport certificate will be required to submit an application . . . ". Since there have been significant changes both with marine traffic and with on-land structures which may be considered as obstacles, we request that any application for a certificate from a current operator be supported by current surveys and other information relating to the proposed airport environs.

NPA Page 4 (Options 1 and 2)

The choice of option does not apply to an airport in the Port of Victoria since Victoria Harbour is identified on both lists.

NPA Page 5, 6, 8 (Certification, Management, Reporting)

- Demonstrate consultation with local government authorities with respect to boundaries and land adjacent to a water airport.
- Description of Water airport boundary.
- *Removing obstruction . . . within the water airport boundary.*
- Obstacle limitations surfaces meet requirements.

The general public expects the Government of Canada to lead by example and not side-step its own policies. Transport Canada, as a certificate holder should respect all Transport Canada policies, even if not mandated by provincial or municipal authorities. For example, *TP 1247 E Aviation - Land Use in the Vicinity of Aerodrome*, is the policy document created by Transport Canada to guide municipalities in land-use planning, yet Transport Canada has not respected the intent of this policy. Transport Canada, certificate holder for the Victoria Harbour Airport, has written to the City of Victoria stating the city is responsible for land use compatibility while rejecting the City's request for a NEF.

Further, TP 1247 (Section 1.2 Slopes and Surfaces) gave Transport Canada the authority "to obtain provincial/municipal zoning protection against development...". Transport Canada has neither ensured that land was secured/protected such that development did not occur in a manner compatible with the airport's proximity to land-based structures nor had it provided the City of Victoria with the information needed to adequately plan compatible land use (Note: the CMHC policy document "New Housing and Airport Noise" was widely distributed and published in 1976).

JBNA is unsure of what the "boundary" is for the current airport that is adjacent to two sides of our community. Further, with the open and easily accessible water and land access to the Harbour, the question must be asked if the boundary, once defined, can be contained or secured as with a land-based airport even with the dedicated patrolling through the Office of the Harbour Master. Given the openness of the Victoria Middle Harbour and the siting of the Victoria Harbour Airport within the most densely populated area of the city, the question must be asked as to whether another location in Victoria Harbour could provide a more secure and safe location for an airport.

The guidance provided in *TP 1247 E Aviation - Land Use in the Vicinity of Aerodrome* includes strategies especially relevant when an airport is in the built-up area of an urban centre. Transport Canada also recognizes that "the increased traffic also increases the likelihood of an accident or incident". (NPA page 2) An additional restriction to operations in urban regions may be needed to increase safety and security while limiting risk. For example, risk would be lowered if airport operations were restricted to services where land transportation is not readily available. A limitation could be:

- o scheduled or emergency flights, when
- o land and/or water transportation would be expected to involve a travel time of more than 2 hours.

The management responsibility of "Removing obstruction . . . within the water airport boundary" implies an airport within a boundary that is dedicated to airport use. This is not the case with the current siting of the Victoria Harbour Airport in which a runway, namely Alpha, is superimposed on a shipping lane used by three ferry services which take passengers and goods to the United States and/or Vancouver and by Point Hope Shipyards and other industry located on the Upper Harbour. Indeed, Transport Canada officials, at a City of Victoria Council meeting, stated that the greatest challenge to the airport is the COHO ferry at 342 ft in length and 72 ft in width. The ferries and other large marine vessels are not merely 'obstacles'. They are vessels with dominance and priority in the harbour.

NPA Page 9, 10 (Safety Requirements - Physical Characteristics)

The "Physical Characteristics" requirements as identified on NPA Pages 9 and 10 are particularly challenging for the Victoria Harbour Airport as currently sited.

The 800 metre strip of the harbour frequently has several "obstructions" on or near it. As mentioned in the previous section, large marine vessels and other watercraft use the shipping channel. In addition, dockside structures such as the fish-loading dock and Fuel Marine station are obstacles which float-planes approach, often at high speeds when landing during periods of high wind and wave action. Although Harbour Master staff "clear" the runway area, the weather, wind and waves, cannot be controlled; nor can the final end of landings which often veer away from the centre line of the runway area.

In effect the draft proposed regulation is an adaptation of vertical zoning as found in TP1247. It takes the vertical zoning and lifts it 15 meters higher. TP1247 states that vertical zoning should be used **only if necessary** when alternative sites are not available – such as in mountainous regions or river valleys. It is not a standard. And Victoria is not a remote or mountainous region.

The proposed "vertical zoning" deliminates the transitional surface. It provides an even lower standard of safety than that proposed for mountainous regions – it has a lower portion of 15 meters in height. This is akin to asserting that anything nearby, up to 15 meters in height is NOT an obstacle – this provides a **pretense** of an unobstructed transitional surface clear of obstacles.

Although it could be argued that the tides create a need for the lower segment of the schematic, the mean tide range in Victoria is 2 meters, hardly providing credible rationale for a 15 meter lift. The Obstacle Limitation Surface in the proposed requirements **veers from tried and proven airport safety standards.** It does not provide the equivalent level of safety protocols as required for a land airport in a built-up area of a city or town.

The approach paths defined for Alpha runway in the July, 2000, *Runway Approaches and Obstacles Survey* (Appendix A) are not the routes usually taken by float-planes approaching westward onto Alpha runway (see Appendix C). Rather, as float-planes follow the Gorge waterway south towards Alpha, they must make a 90° turn westward. The tighter turn creates a flight routing close to residences and one that may hinder visibility of the water surface near the Songhees/Laurel Point gap, the narrowest part of the Middle Harbour.

The question must be asked if this non-adherence to the approach as set forth during the certification process under the Draft CAR in 2000 creates a higher risk than would be accepted at a land airport in an urban centre. Victoria Harbour Airport should not be considered as being in the vicinity of a City; rather it is in the middle of the populous part of the harbour which serves as the focal point for the Victoria and the region.

NPA Page 11 (Emergency)

The NPA emphasis of the emergency response plan, and equipment needed to be readily available, is focussed on passengers and staff; there is no mention of concern of others in the harbour or on harbour lands, and the conflicting priorities of marine and seaplane uses of the waterway. While taxiing is mentioned, actual safety issues relate to any time the seaplanes are on the water particularly during take-off and landings. This has been a long standing safety concern.

Although the NPA identifies emergency response, the implied emergency is an aircraft incident, whereas an emergency involving other harbour users may greatly impact the airport from water or land (see Appendix C, burning boat). Safety issues include both **preventative and precautionary considerations.** Considerations that include the designated "built-out form" or runway siting and configuration, and the marine use of the harbour which may conflict with airport operations.

In rough weather, as planes land, they approach structures on the south shore at speeds of 80+ mph. Safety is a real issue in the narrow waterway when planes experience difficulties. For example, planes are often caught westward of the fish-unloading dock for 5-10 minutes, teetering while maneuvering around the dock and heading to the inner harbour.

Political Reality, Requests and Concluding Comments:

Political Reality:

The sequence of actions associated with the certification of Victoria Harbour Airport, coupled with communications from Transport Canada over the past twelve years, have resulted in a unfortunate distrust of Transport Canada and, to a lesser extent, the City of Victoria. Although CARAC, as a joint undertaking of government and the aviation community with participation from outside organizations, is not the body responsible for certification or operation of the Victoria Harbour Airport, as the regulatory advisory body it is seen as the organization that may be able to bring transparency and accountability to the certification and operation of water airports.

Regarding the Victoria Harbour Airport, residents and municipal authorities know:

- The Civil Aviation Airport Certificate (Appendix B) is dated April 17th, 2000.
- Surveys, such as the *Runway Approaches and Obstacles Survey*, are dated July, 2000, after certification.
- The approach as per the Approaches Survey (July 2000) for runway Alpha appears not to be used (see photo Appendix C).
- Letters over the past twelve years, most under signature of various Ministers, state the intent to gazette the draft regulations within a specific time period, often by year-end.
- Transport Canada routinely states that land compatibility is the responsibility of the City of Victoria.
- Representatives of the City of Victoria have stated that the responsibility for the airport rests with Transport Canada.

A credibility gap has been created over the past twenty years. It is our hope that the current review by CARAC of the proposed regulations will add transparency and accountability to the intended certification of existing and more water-airports.

Requests:

The general public expects the Government of Canada to lead by example and not side-step its own policies. Transport Canada, as a certificate holder should respect all Transport Canada policies, even if not mandated by provincial or municipal authorities. For example, *TP 1247 E Aviation - Land Use in the Vicinity of Aerodrome*, is the policy document created by Transport Canada to guide municipalities.

As the regulatory consultation body, we ask that CARAC consider broadening requirements to include:

- clear requirements for an airport boundary,
- respect of TP 1247,
- updated surveys including Approaches and Obstacles,
- aeronautical study and risk analysis which includes possible incursions due to the uncontrolled/uncontained boundaries of the airport, and
- a safety case which explores possible mitigation strategies to address risks.

Regarding Victoria Harbour Airport, there is a need for current and meaningful information, analysis and transparency. Considerations specific to Victoria Harbour Airport:

- Increased activity on the water with three large-ferry operations, significantly increased industrial activity in the Upper Harbour, and increased personal and commercial recreational activity; during the past twenty years, several large residential and commercial complexes have been built on harbour foreshore lands and in areas beneath the approaches as indicated on the 2000 Approaches Survey.
- Transport Canada is the Airport Operator and Certificate holder for the airport, hence to
 ensure no conflict of interest, independent expertise must be retained to provide
 obstacle surveys, risk assessment and safety case reports.
- Restricting flight movements to those which support access to areas not readily
 available by land transportation, or to areas at a distance away such that access would
 involve significantly long travel times, would reduce risk and impacts on populated
 areas where the airport is situated in a built-up area of a City or town. For example, a
 limitation could be:
 - o scheduled or emergency flights, when
 - o land and/or water transportation would be expected to involve a travel time of more than 2 hours.

There have been significant changes, both with marine traffic and with on-land structures, that may be considered as obstacles since 1999/2000. We ask that any application for a certificate from a current operator be supported by current surveys and other information relating to the proposed airport environs, and that relevant studies be provided to stakeholders in advance of any certification/licensing.

CARAC may also wish to consider a policy which might provide communities with an enddate to discussions. Twenty years under draft regulations and under a cloud of uncertainty causes undue stress in communities. Perhaps a sunset clause, whereby an application is considered withdrawn if the application process cannot be completed within a set period.

Concluding Comment:

JBNA welcomes this CARAC NPA opportunity for comment. We anticipate, as the regulatory review proceeds, that CARAC will see the necessity for creating a framework for airport certification that provides a level of safety equivalent to that provided by regulations which apply to land airports. DRAFT CAR 326 **may not and may never** provide an equivalent level of safety in the middle harbour where the airport is now sited.

JBNA believes that full analysis including obstacle identification review, risk assessment and safety case would lead to a fulsome discussion. An open transparent consideration of the siting of the airport within the Public Port of Victoria Harbour is needed to gain social license, and credibility. The goal should be to create a water-airport that is workable and tenable.

JBNA recognizes the task placed before the CARAC; pressed by operators and pressed by those most adversely affected by the water-airport operations and even by clientele of float-plane operations. Through all, safety and the public interest must be paramount.

We look forward to receiving the results of your deliberations.

Appendices: Submitted as a separate document due to document size:

Appendix A: Obstacles

Skyline Surveys: Runway Approaches & Obstacle Survey July 2000

Appendix B: Civil Aviation Certificate

Dated: April 17, 2000

Appendix C: Photos of James Bay Harbour "Obstacles" and float-planes

Top: Float home village

LHS: 3 larger ferries (USA and Vancouver)

Clipper, COHO, V2V fuelling at marine fuel dock

RHS: 2018 marine fire, float plane on approach, and

fish loading dock (planes stranded to the west in high wind events)

Bottom: float-planes in approach and on the water

Appendices:

Appendix A: Obstacles

Skyline Surveys: Runway Approaches & Obstacle Survey July 2000

This schematic does not include the approaches part of the survey which indicates the approach area to be over the City between Cook and Blanshard Streets.

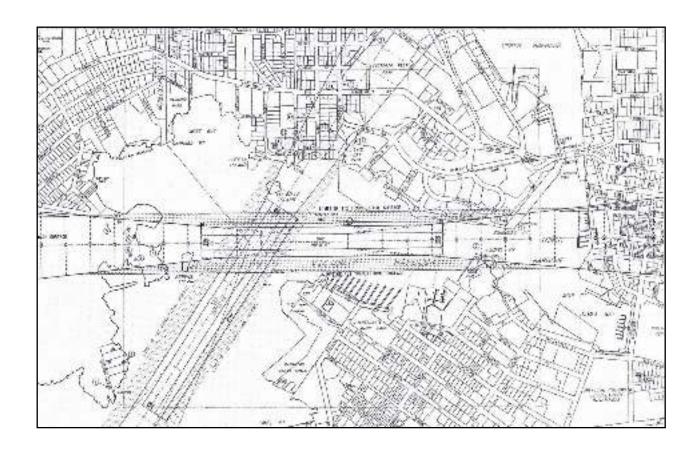
North or Songhees side: ~ 75 m from centre line to residential complex South or James Bay side: ~ 120 m from Marine Fuel dock and 120 m

 ~ 200 m from float-home village ~ 120 m from large hotel complex

~ 200 m from residential and timeshare complexes

Notes: Distance aircraft in middle of runway from obstacle must consider wingspan

Since 2000, major residential complexes have been built on land south of Alpha, in the Songhees area between Alpha and Bravo, and under the Alpha approach



Appendix B: Civil Aviation Certificate

Dated: April 17, 2000



CIVIL AVIATION AIRPORT CERTIFICATE

AVIATION CIVILE CERTIFICAT D'AÉROPORT

TAMB 5151-P325
CERTIFICATE NO. / Nº DU CERTIFICAT

VICTORIA HARBOUR, OPERATED BY TRANSPORT CANADA PROGRAMS BRANCH

NAME OF AIRPORT / NOM DE L'AÉROPORT

LATITUDE / LONGITUDE

This airport certificate is issued by the Minister pursuant to Part III of the Canadian Aviation Regulations under authority of the Aeronautics Act and authorizes the operator named in the approved Airport Operations Manual to operate this airport.

The Minister may suspend or cancel this airport certificate at any time where the airport operator fails to comply with the provisions set forth in the Act, the Regulations or for other grounds as set out in the Act.

This certificate is subject to any conditions established by the Minister pursuant to Section 302.03(3) of the Regulations and set out in the approved Airport Operations Manual.

This airport certificate is not transferable and shall remain in effect until transferred, suspended or cancelled. Ce certificat d'aéroport est délivré par le ministre en vertu de la Partie III du Règlement de l'aviation canadien sous l'autorité de la Loi sur l'aéronautique et il autorise l'exploitant, tel que l'établit le manuel d'exploitation d'aéroport approuvé, à exploiter ledit aéroport.

Le ministre peut suspendre ou annuler ce certificat d'aéroport en tout temps si l'exploitant de l'aéroport ne se conforme pas aux dispositions établies dans la Loi, le Règlement ou pour toutes autres raisons tel que l'énonce la Loi.

Ce certificat est sujet à toutes les conditions fixées par le ministre en vertu du paragraphe 302.03(3) du *Règlement* et tel que l'établit le manuel d'exploitation d'aéroport approuvé.

Ce certificat d'aéroport doit demeurer en vigueur jusqu'à son transfert, sa suspension ou son annulation.

MINISTER OF TRANSPORTS

Apri 17, 2000

CERTIFICATE DATE OF ISSUE DATE DE DÉLIVRANCE DU CERTIFICAT

Canadä

26-0610 (9912-01)

Appendix C: Photos of James Bay Harbour "Obstacles" and float-planes

Top: Float home village

LHS: 3 larger ferries (USA and Vancouver)

Clipper, COHO, V2V fuelling at marine fuel dock

RHS: 2018 marine fire, float plane on approach, and

fish loading dock (planes stranded to the west in high wind events)

Bottom: float-planes in approach and on the water



















