



TRANSPORT ACTION ONTARIO

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December 17, 2014

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Response to Worksheet on Billy Bishop Toronto City Airport(BBTCA)

This submission was written by Avrum Regenstreif, Ph. D., Director, Transport Action Ontario, and edited by Peter Miasek, Ph. D., President, Transport Action Ontario. It is in response to the questions asked in the worksheet presented at the public meeting on the BBTCA Runway Environmental Assessment on December 9, 2014.

1. What are your initial thoughts on the PROPOSAL that will be studied during the EA?

As we understand it, the PROPOSAL under study contemplates an amended tripartite agreement, with extended runway, including appropriate extensions for approach lighting and ILF control systems, and with commercial jets allowed. Other restrictions such as slots/day and current noise limits would remain in place.

All the impacts listed under community assets would be studied.

As we have not studied the tripartite agreement in detail, we are unable to comment specifically on whether this proposal is consistent with what the proponents are asking.

2. What are your initial thoughts on the BASELINE that the proposal will be measured against?

As we understand it, the BASELINE in the EA study contemplates a 2033 scenario using the existing unamended tripartite agreement, including of course no runway extension and no jets and no additional Transport Canada exemptions. We presume the Union Pearson Express and large scale jet service at Pearson Airport is implied in the baseline.

We have not studied the tripartite agreement in detail, but can relate well to today's operation. Therefore it would be helpful to also explicitly summarize the features of today's operation, and how the 2033 baseline would differ from it.

3. What are the COMMUNITY ASSETS (social, natural, economic) that the proposal may impact?

We believe that the summary listing of community assets on slide 34 is a good starting point, although more assets can be identified. We would like to provide more detail on some of these assets. Our commentary is not exhaustive, as we have not discussed some obvious assets such as birds, wildlife, ground side transportation, parking and air quality.

Airport Use Assets:

(1) *Local Flying services*, including landplane and floatplane classes and certification, light aircraft and float plane rentals, helicopter leasing and lessons, as well as aircraft flying lessons and certification, for all types of small aircraft.

(2) *Emergency helicopter services (e.g. ORNGE)*; Currently, this includes servicing, refueling, pilot and crew change space and staff parking for EMI and/or helicopter or aircraft flight staff.

(3) *Airport access for medivac air services*: BBTCA is the closest airport to the central area of Toronto, and to its 6-7 major central area hospitals, by ground ambulance, or by emergency helicopter to at least another 4 - 5 regional hospitals, all of which are equipped with helipad landing facilities.

(4) *Itinerant Small Scale Aircraft based Industries*: These have, for many years, been providing aero and geo mapping and other specialized aircraft based services to mining, resource industries and other economic activities, operating out of the BBTCA and serving the GTHA and southern Ontario.

Boat Navigation/Marine Assets:

(1) *City of Toronto Harbor Ferries* and related docking facilities at foot of Yonge Street, with landing stations at three locations on Toronto Island. These should not have their services reduced or significantly changed due to course changes arising from BBTCA operational changes.

(2) *Marine Tourism*: Marine assets such as private tour and cruise boats and sailing ships used for harbor tours, dinner cruises and evening cruise events such as dance bands and restaurants depend on easy access through both harbor openings to facilitate services for their customers.

(3) *Commercial Marine Shipping* and related harbor service vessels: This includes tug boats, marine tenders; construction barges and/ or dredging equipment for maintenance of various harbor areas. Closing a harbor opening could significantly affect these marine operations, and could also affect the ability of the harbor area waters to naturally clean themselves through daily changes in wind direction through the two openings.

(4) *Water taxis* and marine shuttles serving the general public, Island residents, and several Island yacht clubs as well as boat owners moored at the facilities at Ontario Place, require water transport through both harbor openings to fully maintain convenient and timely marine transport service;

(5) *Small marinas*, sailing and boating schools, including various rowing and paddling organizations are established at Harbor Front, Cherry Beach, at the Leslie Spit area and at Ashbridge's Bay. However, only the Harbor Front areas may face serious threat from changed operations at BBTCA. Other facilities would only likely experience overspill pressures from inner harbor marine facilities and their members, if all or some of these are obliged to relocate to sites outside the inner harbor area.

(6) *Large public marinas* eastern harbor area: e.g. Boy Scouts Assoc. sailing school, Ashbridge's Bay Yacht Club and marina; also well protected public docking areas exist for large boats within the Ashbridge's Bay area. Most of these will not be directly affected, except for possible increased overhead noise and air pollution. However, western harbor area marine activities facilities, such as the National Yacht club could face pressure to relocate if the Western Gap is restricted for yachts or other large marine traffic and larger sail boats and motor boat traffic is increasingly redirected through the Eastern Gap.

(7) *Several public beaches* are well established on the outside of the central Toronto Island.

(8) *Private yacht clubs*; (e.g. RCYC, IYC, NYC) could all be negatively affected and possibly devalued as recreational sites by the proposal, as their normal competitive regatta and itinerant sailing and marine activities within the inner harbor could be increasingly constrained if marine circulation through the western gap is substantially reduced for large sail boat activities. Also, if the eastern gap were to become congested by too much marine activity moving through a single opening into the inner harbor, with variable winds and with large and small power boats and large ocean going ships competing for congested water areas, then these vessels will collectively generate a wake that will keep everyone awake, even when winds die down late in the afternoon!

(9) *Private companies with marine industrial functions* or docking facilities, within the east harbor area include: (i) the Redpath Sugar refinery and docking facilities for seagoing ships which transport cane sugar from the Caribbean; (ii) CSL, at the mouth of the Don River currently uses the Inner Harbor Docks for itinerant over winter docking of grain carriers, and some ship servicing; (iii) the eastern shore of the inner harbor provides periodic docking for Great Lakes cruise ships arriving from both the US and Canada. These vessels stop in regularly, during warmer months and allow passengers time ashore, for city tours and other events; (iv) current sea transport cargo ships.

(10) *Police, fire and rescue vessels*. The City of Toronto currently owns and operates a range of small marine police boats and a fire boat station on city waterfront. However, none of the city's current vessels and infrastructure is adequate to handle a commercial jet crash either into the waters of the inner harbor or into Lake Ontario. The option of a major crash rescue vessel will likely have to be considered with costs to be borne by private commercial airlines using the airport. Therefore, perhaps, the most important and expensive BBTCA asset, which has not yet been mentioned, is a high speed emergency rescue vessel, likely a hovercraft, able to accommodate approx. 150 passengers and crew. This is roughly equivalent to the capacity of a fully loaded medium size commercial jet aircraft such as the Bombardier CS 100 or equal. This marine rescue vessel would also likely have to be delivered in time for the opening of a

commercial jet airport, if it were to proceed, and would likely be permanently accommodated in the vicinity of the BBTCA.

Airport Infrastructure Assets:

Although the BBTCA airport is “owned” by TPA, this body is a government enterprise owned by the Canadian public. Hence the public has a legitimate interest in the condition and safe operation of this strategic public asset.

To date, BBTCA operations have been able to function with limited ground space allocated to aviation fuel storage, mobile fuel pumping arrangements, and/or storage tanks for deicing fluid as well as vehicles and staff to rapidly fuel and de-ice several larger aircraft, since existing turboprops such as the Q400 are smaller than the CS100, or its equals. However, to accommodate an expanded commercial jet airport 18/7/365, control arrangements for fuel and fluid spills could become much more important. Taxi ways, runways, aircraft circulation and parking areas will all likely have to be redesigned to fully recapture fluid spills, and / or to prevent such spills entering the Harbor. At the same time provision will have to be made for continuous aircraft fueling, fuel storage tanks, pumping facilities, de-icing fluid storage, adequate areas for aircraft de-icing, convenient access to takeoff areas following de-icing, etc.

For example, how do you safely fuel and/or deice sequentially several large (140-150 seat) jet aircraft, with already constrained taxiways and aircraft parking and circulation? How do you also allow for aircraft maneuvering, clear of high sound barrier walls along the north side of the taxiways, with a single main runway on the other side, when there is little room for groundside expansion for aircraft services?

Possibly, in a less constrained situation, such infrastructure expansion could occur further south of the airport on existing Toronto Island parkland, or by completely closing the western gap, and building new hangars, aircraft storage facilities, servicing infrastructure, tank farms, fuel pumping, cargo handling space, and equipment storage space on newly filled land? We have already touched on some of the problems associated with the functions of the western gap and its vital importance as a continuing marine channel. The above listing of needed airport infrastructure demonstrates the complexity of functional demands which must be carefully assessed prior to any final decisions on BBTCA runway expansion.

Public Safety:

Our report of March 24, 2014 entitled “Review of Potential Future Safety Zones at Billy Bishop Toronto City Airport with Bombardier CS100 Jets” discussed many safety concerns including:

- Revised Obstacle Limitation Surfaces
- Need for runway approach lighting
- Impacts of jet blast
- Revised Marine Exclusion Zones

We have also had subsequent discussions with the EA team on other concerns including:

- Wing tip vortexes
- Public safety zones

- Bird strikes
- Impact of runoffs and veeroffs
- Curved approach around the Hearn smokestack
- Public Safety Zones

Lastly, the issue of increased public liability is a concern. What are the increased municipal liabilities if a major air crash were to occur in or over the city, and the City and /or the Federal government were found by the Courts to have been negligent in the planning, design, or operational arrangements arising from the BBTCA proposal?

All these aspects of public safety need to be assessed.

East Harbor Area – Current and Future:

For a number of years this relatively low rise, mixed industrial area has been gradually developing as a site for movie, film and TV productions and related studios. As such, it has become an important land use asset of the City which must continue to be protected if it is to continue to be used for film making and related activities. For this area, heavy commercial jet traffic landing and/or taking off on a direct flight path (virtually over these same facilities) will provide a serious impediment to the continuing use of warehouse or studio buildings for sound films in the area, since there may be large sound stages with inadequate soundproofing of the walls, and roof areas.

In addition, architectural and urban design studies have shown that some of this land area has potential for harbor front residential condo development. However, if such land uses were to be built directly beneath the flight path of an intensive commercial jet airport approach, this land use option might also have to be eliminated.

Because turboprop aircraft have steeper angles of approach and takeoff, and usually generate inherently lower noise levels, they pose less of a problem to a number of land uses than conventional commercial jet aircraft, especially under IFR operating conditions. Consequently, this East Harbor land and industrial building asset may have to be significantly modified at considerable cost to overcome the noise impediment imposed by commercial jet operation on this flight path.

Community Facility Assets:

(1) *New school and community centre.* In the residential neighborhood immediately adjacent to the north shore arrival point for most BBTCA ground traffic, a new school and a community and day care center have recently been built. These have now become important institutions within their immediate waterfront residential neighborhood, and airport expansion could seriously threaten their wellbeing.

(2) *New music venue.* In the past few years a new music venue on a grassy sloped landscaped lawn area has been established along the Toronto lakeshore, a short distance east of the intersection of Bathurst and Lakeshore Boulevard. This new music venue, established with the assistance of the world renowned cellist Yo Yo Ma, could also be adversely affected in terms of serious aircraft noise by the establishment of a proposed commercial jet airport at BBTCA,

located only several hundred meters distance from this venue.

(3) *Westjet Outdoor Music Shell*. The present major Harbor Front music venue, including the Westjet Outdoor Music Shell, faces directly out onto the Toronto harbor side approach to the BBTCA runway which is proposed to be extended. Both of these music venues, (Assets 2&3) could be significantly devalued with respect to their major purpose, if the present commercial jet proposal proceeds and no alternative arrangements for a similar facility are brought forward.

(4) *Public and Private Quality of Life*. Along the waterfront between York and Bathurst Streets are a host of pleasant, renovated historic anchor buildings, and a number of potential future residential and commercial building sites, cruise boat docking areas, and a number of reasonably quiet pedestrian spaces, jogging paths, bicycle paths, benches, landscaping, a canoe pond, winter skating rink, as well as many restaurants, pubs, pedestrian bridges over boat marinas, an art gallery within a renovated former power plant, and a number of art studios

Along the otherwise pleasant, north shoreline pedestrian route are many elegant residential condo buildings, and boutique hotels anchoring various waterfront blocks. Over the past several decades, tens of billions of public and private dollars, including federal, provincial, municipal, and private investments, individual contributions, as well as significant public investments in rail based surface transport infrastructure, have been allocated, committed and expended to bring the harbor front area alive. The result is a vital manmade, pedestrian friendly public open space system on the harbor front of the City. Literally millions of Toronto citizens have already paid, in one way or another, for these public investments which have transformed the City's waterfront from a noisy dirty industrial area to the relatively clean, quiet, pedestrian oriented urban environment which it is now becoming. City residents have done all of this through their property taxes, user fees for facilities use, parking and transit fees, by expenditure of disposable income dollars at waterfront venues, and by purchase of waterfront property. They have attended ticketed venues, and have also paid for g cruises which have in turn paid taxes and marine parking fees into city coffers.

4. What INFORMATION IS NEEDED TO ASSESS these potential impacts?

The information needed to assess the potential impacts of BBTCA commercial jet airport should include a comprehensive in-depth cost /benefit analysis and related report. Efforts need to be made to cost out the impact on all the identified community assets.

On the benefits side, we need to understand what would be the total benefit(s) of the project and to whom? How many Torontonians will benefit, and from which user groups? How many tourists from outside the province, or from within Canada itself will benefit? How many from provinces other than Ontario? What will be the direct and indirect benefits?

The costs and benefits need to be compared to the BASELINE, which includes fewer development restrictions and the availability of excellent jet service at Pearson Airport and the Union Pearson Express to provide fast ground transport between Pearson and Toronto city centre.