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Mr. John Livey
Deputy City Manager, City of Toronto
Toronto City Hall, 100 Queen St. West
Toronto, ON M5H 2N2

Dear Mr. Livey:

I am writing to advise you of the updated flight path technology that Porter will be implementing should our plans to introduce the Bombardier CS100 at Billy Bishop Toronto City Airport (BBTCA) be approved. Required Navigation Performance (RNP) guidance technology will be part of the standard navigation system used by the CS100. RNP has significant benefits for our operation and also improves the noise and environmental footprint of our flights and would, in fact, reduce the airspace restrictions that currently exist around BBTCA.

RNP uses satellite based guidance to allow aircraft to take a shorter, more direct flight to and from the runway. As a result, aircraft fly fewer miles, use less fuel and produce fewer emissions. RNP based approaches also augment these benefits. Landing with a continuous descent at reduced power minimizes engine power requirements. Less engine power results in less fuel, less noise and less emissions.

RNP also creates more precise flight paths that do not deviate or drift with changing wind conditions. Porter's operational reliability would improve in adverse weather conditions. Also, the missed approach zone that the airport must protect for will be reduced and would stay over the inner harbour and south of the shipping channel. This could mean fewer restrictions for builders and developers close to BBTCA.

RNP technology is being used successfully by airlines in countries around the world. Here in Canada, WestJet is using RNP technology on their flights. Porter will be required to invest in designing RNP procedures and with this investment, we would also fund the upgrade of the navigation technology on our fleet of Q400 aircraft to take advantage of these new procedures. We have already begun initial work with a consultant to start preliminary design specifications, and will work with NavCanada

on executing the design. Once the RNP approach technology is approved for use by Porter at BBTCA, it will be in the public domain and available for use at BBTCA by all suitably equipped carriers.

While the CS100 can operate the same flights paths that our Q400 aircraft use today, we believe the future lies in RNP. We are very excited about the great benefit this technology will provide to our environment, our passengers, waterfront residents and the developer community.

I hope this helps the understanding of RNP and how it will be a benefit for many parties here at BBTCA. Enclosed is a short presentation highlighting the benefits of RNP technology, and how it can improve operations at BBTCA.

Please contact me if you need any clarification or more information.

Sincerely,



Robert Deluce
President and Chief Executive Officer

Cc: Geoffrey A. Wilson, President & Chief Executive Officer, Toronto Port Authority

Required Navigation Performance

- ✓ CS100 will be approved for Required Navigation Performance (RNP). RNP utilizes highly accurate satellite based curved flight paths. RNP is already being used by carriers in Canada

 - ✓ **RNP reduces fuel burn, emissions and noise footprint**
 - ✓ Direct flight paths result in fewer flown km reducing fuel burn and emissions. Aircraft also spends less time in approach zone creating smaller noise footprint
 - ✓ Continuous descent on arrivals at reduced power uses less fuel and produces less noise compared to current level flying segments during descent

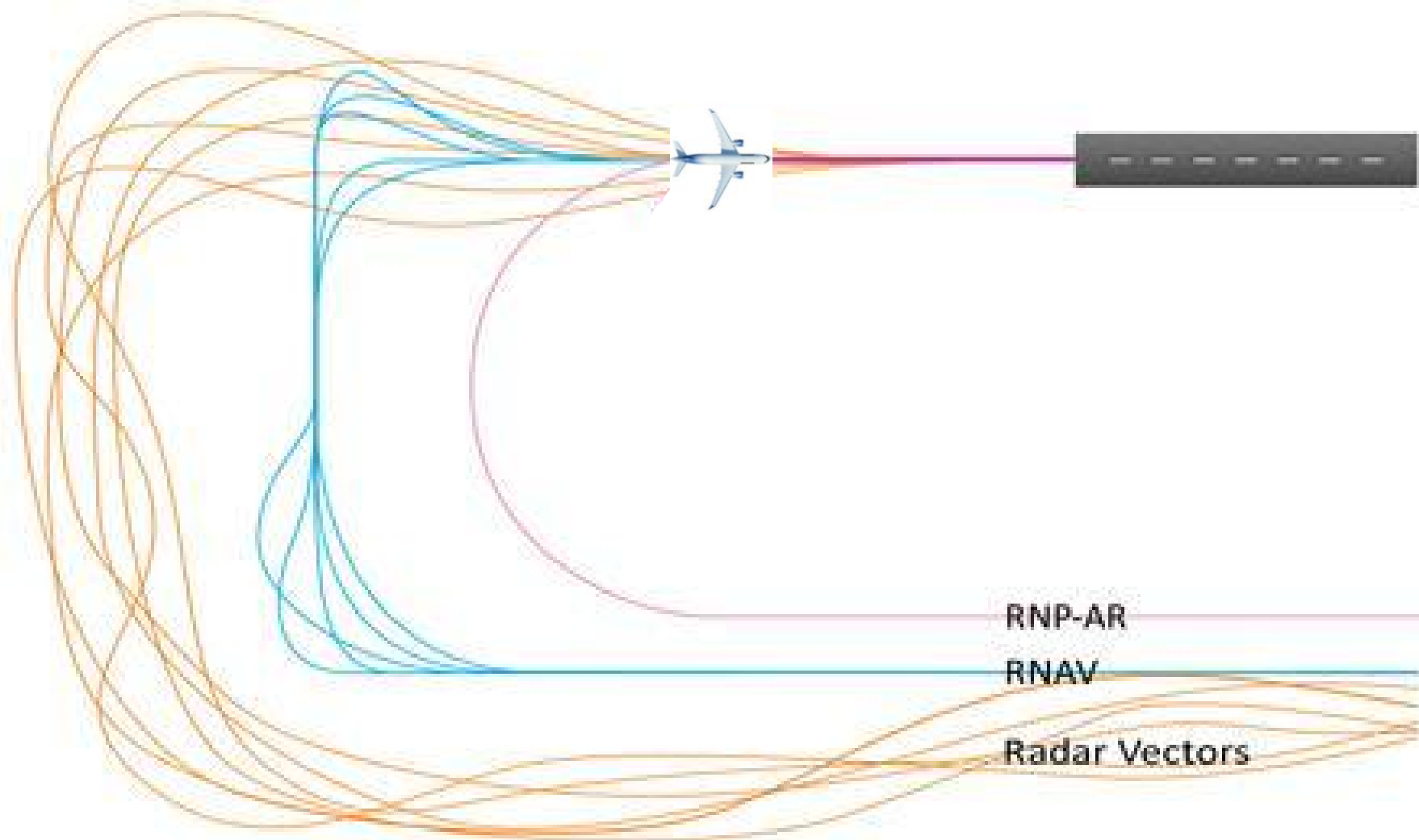
 - ✓ **RNP reduces current restrictions on waterfront development**
 - ✓ Highly accurate approaches with GPS positive course guidance eliminating aircraft drift. No drift produces smaller required protection area

 - ✓ RNP approaches designed for BBTCA require a significant investment by Porter. The Q400 could utilize these same approaches and realize the same benefits following a hardware upgrade
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RNP Concept

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- ✓ **Smaller noise footprint, less miles, reduced emissions**



Today's Protected Airspace – East of BBTCA

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- ✓ Missed approach zone has to account for aircraft drift as a result of wind
- ✓ Transport Canada regulations ensure aircraft will not encounter obstacles (e.g. buildings) on a missed approach resulting in building height restrictions.
- ✓ Port lands are part of current airport zoning and any current or future planned developments would have to be compliant with today's existing restrictions



Future Protected Airspace with RNP

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- ✓ Positive course guidance by GPS navigation systems eliminates dispersion of flight paths
- ✓ Aircraft require a much narrower missed approach zone on either side of the flight path
- ✓ Anticipated missed approach zone east of BBTCA would stay over inner harbour and south of shipping channel



Thank you
Merci

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