

August 2, 2017

Honorable Wayne Easter,  
Chair  
Standing Committee on Finance  
House of Commons

Via email: [FINA@parl.gc.ca](mailto:FINA@parl.gc.ca)

**Submission - FINA PBC- The Standing Committee on Finance's Pre-Budget consultations in advance of the 2018 budget**

Dear Mr. Easter

In 2014, Boeing informed the airline industry and governments worldwide their 737-200 gravel kit equipped aircraft were reaching the end of their useful service life and will be removed from service. In 2016, Boeing announced it was ceasing to manufacture or support gravel kits, which are mandatory for jet aircraft to operate on gravel runways. A gravel runway is a surface composed of sand, clay, crushed stone or other soil materials. This causes a safety hazard for jets and new generation propeller driven aircraft because stones, sand and changing soil conditions can cause operational safety hazards for the aircraft.

In order to maintain jet and new generation propeller driven aircraft services for many remote locations in Canada, gravel surface runways will need to be replaced with hard flexible surfaces equivalent to asphalt. The loss of jet services to communities in isolated areas could greatly increase the cost of transporting goods and services to these communities, causing hardships for the residents.

Concrete and asphalt are the two types of non-gravel materials that are used for surfacing runways. In the Arctic or remote areas, both of these products are unsuitable for runway construction. This is due to the very high construction/maintenance costs or the inability of the materials to withstand the harsh climatic conditions, such as large temperature fluctuations and ground heaving from the constant thawing and freezing cycle of the permafrost. Research and development of an aluminum runway system is taking place in Canada and will revolutionize runway construction.

Aluminum has been in military use for runway surfaces since the Second World War. An aluminum runway system, for commercial use, is currently being developed in Canada for acceptance as an alternate surface to asphalt and concrete.

The aluminum runway concept is new to the commercial world and requires testing to Transport Canada standards. Once successfully tested and accepted the aluminum runway system will be entered into Aircraft manufacturer, operator and Transport Canada publications as an acceptable alternative hard surface for commercial aircraft operations. The aluminum runway system could generate estimated worldwide sales of \$12 Billion Canadian (2017 dollars).

The aluminum runway system can be quickly installed and maintained by current airport staff and equipment. The system requires very little maintenance, has a long life cycle and is environmentally friendly. This new runway system will be a first for commercial aviation in the world.

The successful testing of the aluminum runway system as a suitable flexible hard surface and approval by Transport Canada for use will set the stage for acceptance worldwide. Mining,

oil/gas companies and communities around the world requiring hard surface runways will have the opportunity to secure a safe and cost effective system.

There needs to be increased funding provided for the development of the northern aviation infrastructure in accordance with the Federal Government's Transportation 2030 - A Strategic Plan for the Future of Transportation in Canada.

Investment in new technology to meet the challenges facing aviation, will improve system safety, increase service reliability to northern and remote communities, generate substantial revenue for Canadian companies and improve infrastructure at a substantial cost reduction for the federal government.

The opportunity to provide input to the FINA committee and the Pre-Budget consultations, on an issue affecting a vital aviation issue, is greatly appreciate.

Thank you

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