

Ground Run-Up Enclosure at Billy Bishop Toronto City Airport
April 19, 2017

QUICK FACTS

- Billy Bishop Toronto City Airport's Ground Run-up Enclosure (GRE) is the first facility of its kind in Eastern Canada, and only the second such facility in the country.
- The GRE is intended to absorb and dampen the noise experienced during mandatory engine testing which requires high-powered engine run-ups. The facility will result in a significant reduction in noise experienced by the local community and is an important part of the airport's award-winning noise management program.
- The GRE is a 200 tonne, three-sided, open-roofed enclosure, measuring 63 metres wide by 66 metres deep.
- The enclosure's north wall stands 14 metres tall and the east and south walls are 11 metres tall.
- The three walls are lined with approximately 1,750 sound-absorbing panels supported by an external frame; all three walls are perforated by several louvered vents to allow proper air flow and aerodynamic purposes.
- Over 1,400 cubic metres of concrete were used to build the enclosure and adjoining apron.
- The primary users of the GRE are maintenance operators testing their turboprop aircraft Bombardier Dash 8 Q400.
- The facility will be the primary location for high power engine run-ups performed by all operators at Billy Bishop Airport.
- An engine run-up refers to the testing of engines at various power settings to ensure all is in safe working order. Transport Canada mandates engine run-ups every time an aircraft engine undergoes certain maintenance procedures.
- The structure was designed and constructed by Blast Deflectors Inc. which has built over 30 GRE facilities worldwide in such countries as England, Germany, the United Arab Emirates and the United States.

- Further components of Billy Bishop Airport's award-winning noise management program include:
 - ✓ Upgrading the airport's two Noise Monitor Terminals (NMTs) in 2016 to the latest technology to further enhance the ability to monitor noise generated by the airport's operations, as well as adding a third NMT on the mainland ferry terminal building that enables enhanced tracking of noise generated by aircraft run-ups and the airport's ferry operations;
 - ✓ The addition of a 93-metre Noise Barrier erected in 2012 to mitigate airport ground noise;
 - ✓ Continuing to offer free access to Webtrak, an Internet-based software service that enables individuals to locate and track an aircraft they hear flying overhead from any device;
 - ✓ Continuing to use Vortex – a customizable tracking and logging software platform designed specifically for an airport environment;
 - ✓ Reduced noise from traffic due to improved vehicle flow following the opening of the pedestrian tunnel in 2015;
 - ✓ Taxiing of commercial aircraft utilizing one engine for noise reduction and environmental sustainability;
 - ✓ The installation of engine mufflers aboard the airport's ferry in 2015; and,
 - ✓ A state-of-the-art Noise Management Office formed in 2010 which has dedicated staff in place who collect, analyze and respond to noise complaints and monitor daily operations.