

Centennial College's Aerospace Campus cleared for takeoff



Proposed front entrance of the former de Havilland building and hangar at Downsview Park repurposed as Centennial College's Aerospace Campus.

When Toronto high school students Asad Muhammad and Mathew Ho sent a LEGO spaceman figure to the edge of space along with four cameras and a GPS-enabled phone, they didn't think their homemade project would capture the world's imagination. But it did.

Once news of their balloon experiment went viral in 2012, the boys were inundated with offers to study at some topflight universities. Muhammad elected to join a highly regarded trade tied to Canada's proud aviation history by enrolling in the two-year aviation technician program at Centennial College, a decision that will lead to Muhammad earning his Canadian Aircraft Maintenance Engineer (AME) licence.

Centennial has been teaching aircraft and avionics maintenance for more than 40 years at their Ashtonbee Campus in Toronto. It was the first college to earn Transport Canada accreditation, and its graduates are sought by airlines and aircraft companies across Canada and around the globe.

With success comes growth, and the college is preparing to move its avia-

tion programs into one of the most historic sites related to the industry: the de Havilland building at Downsview Park.

It was there that de Havilland Canada workers assembled aircrafts – including the high-performance Mosquito bomber composed largely of plywood – to aid Allied forces fighting in World War II. It's almost hallowed ground, a special place that MacLennan Jaunkalns Miller Architects and Stantec have pledged to rehabilitate with care.

With a \$55.4 million investment – including \$18.4 million from the federal government, \$26 million from the Ontario government, and contributions from Centennial College and its donors – the Aerospace Campus will be much more than a new home for the aviation technician programs and the 11 light aircraft that students work on.

The move to Downsview Park will strengthen the college's partnership with major industrial employer Bombardier Aerospace, which is located at the south end of the Downsview airfield. Three years ago, Bombardier designated Centennial College as its trainer of choice, helping to prepare its own workforce with new skills.

Centennial's refurbished de Havilland building will draw other investments, including the relocation of the University of Toronto Institute for Aerospace Studies, and the creation of an Innovation Centre to bring academic and industry partners together to pursue new research and development initiatives.

Establishing an "Aerospace Hub" is the mandate of the Downsview Aerospace Innovation and Research consortium, which represents leading academic and industry organizations involved in aerospace. The initiative will ensure Canada's fifth-place ranking among the world's aerospace nations remains secure through innovation.

In preparation, Centennial's School of Engineering Technology and Applied Science is launching a three-year advanced diploma in Aerospace Manufacturing Engineering Technology.

Students will focus on the functional areas of aerospace and mechanical engineering – including physics, materials science, drafting, manufacturing, hydraulics, aerodynamics, thermodynamics and CAD/CAM – and avionics courses that will provide an integrated perspective on electricity, electronics, and control and navigation systems.

The goal of the program is to educate students in the design, manufacturing and validation of aerospace components, as well as unmanned aerial vehicle technology.

Canada's history is inextricably tied to aviation, and Centennial College has established a new, vital role in shaping the future of this sector and the high-paying manufacturing jobs that rely on it. Watch for the opening of the Aerospace Campus in fall 2017.

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