



**MEMBER ORGANIZATIONS  
BOARD OF DIRECTORS OF AÉRO MONTRÉAL**

**PRIME CONTRACTORS**

Bell Helicopter Textron Canada  
Bombardier Aerospace  
CAE  
Pratt & Whitney Canada

**EQUIPMENT MANUFACTURERS, INTEGRATORS AND MROS**

Esterline CMC Electronics  
Héroux-Devtek  
L-3 MAS  
MDA Satellite Systems  
Rolls-Royce Canada  
SAFRAN  
Sonaca Montréal  
Thales Canada, Aerospace

**SUPPLIERS AND SUBCONTRACTORS**

Alta Precision  
JMJ Aerospace  
Marinvent Corporation

**INSTITUTIONAL**

École nationale d'aérotechnique – ÉNA  
École des métiers de l'aérospatiale de Montréal – ÉMAM  
Consortium for Research and Innovation in Aerospace in Québec – CRIAQ  
National Research Council of Canada - NRC  
Comité sectoriel de main-d'œuvre en aérospatiale – CAMAQ  
McGill University  
International Association of Machinists and Aerospace Workers – IAMAW

**OBSERVERS**

Quebec Ministry of Economic Development, Innovation and Export – MDEIE  
Industry Canada  
Communauté métropolitaine de Montréal – CMM



Communauté métropolitaine  
de Montréal



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Graphic: Flight Communications  
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**AÉRO MONTRÉAL  
SHAPING AEROSPACE**



**AÉRO MONTRÉAL  
THINK TANK OF THE AEROSPACE CLUSTER**

Created in 2006 to boost the productivity and growth of Québec's aerospace sector, Aéro Montréal brings together all the decision-makers of the aerospace sector from the industry, educational institutions and research centres, as well as associations and unions.

Because it helps to mobilize industry players around common goals, Aéro Montréal contributes to strengthening the position of Québec's aerospace industry and ensures its competitiveness with other aerospace centres of excellence.

Serving members of the industry, Aéro Montréal establishes concerted and strategic actions through working groups composed of representatives from the industry, the institutional sector, associations, unions and government.

In 2012, the Québec Aerospace Association (AQA) and the cluster came together under the Aéro Montréal banner. This merger, designed to promote a greater synergy among SMEs and other actors in the cluster, has given birth to a sixth working group of Aéro Montréal dedicated to ensuring a greater presence of SMEs from Québec's aerospace sector at the national and international level.

**Working Groups:**

- Branding and Promotion
- Innovation
- Supply Chain Development
- Human Resources
- National Security and Defence
- Commercialisation and Market Development

*"Montréal is the only city in the world where within a 30 km radius you can manufacture virtually all the components needed to build an airplane."*

Gilles Labbé, President and CEO, Héroux-Devtek / Chairman of the Board, Aéro Montréal

*"Aéro Montréal helps to strengthen the position of Québec aerospace industry and ensure its competitiveness against other industry leaders."*

Suzanne M. Benoit, President, Aéro Montréal



## MONTRÉAL WORLD AEROSPACE CAPITAL

A true model of excellence, Québec's aerospace cluster, concentrated in the Greater Montréal region, is one of the three world aerospace capitals, along with Seattle and Toulouse. It brings together key stakeholders from the industry, the academic community, research centres, associations and unions.

The presence of head offices of international organizations, such as the International Air Transport Association (IATA), the International Business Aviation Council (IBAC) and the International Civil Aviation Organization (ICAO), confirms Montréal's place as a major industry hub.

### QUÉBEC'S AEROSPACE SECTOR, BY THE NUMBERS

- Some 215 companies;
- More than 42,000 workers;
- Montréal, the 2nd world capital in terms of density of aerospace jobs with 1 person out of 96 whose work is related to the sector;
- Sales of \$12 billion of which 80% come from exports;
- 6<sup>th</sup> place worldwide in terms of aerospace workforce after the United States, France, Germany, the UK and Italy;
- 55% of Canadian aerospace sales;
- 50% of jobs in the Canadian industry;
- 70% of total spending on research and development (R&D) performed in Canada.

➤ **215** companies

➤ **42,000** workers

➤ **2<sup>nd</sup>** world capital in terms of density of aerospace jobs

➤ **12** billion dollars in sales

➤ **6<sup>th</sup>** place worldwide in terms of aerospace workforce

## A CONCENTRATION OF WORLD LEADERS

The Québec aerospace industry has four prime contractors and nearly 15 world-class OEM integrators that can rely on a vast network of subcontractors and suppliers of specialized products.

### RECOGNIZED PRIME CONTRACTORS

**BELL HELICOPTER TEXTRON CANADA**  
World leader in the manufacture of rotary wing aircraft.

**BOMBARDIER AEROSPACE**  
Third largest civil aircraft manufacturer in the world, a world leader in the design and manufacture of business jets, commercial aircraft, amphibious aircraft and specialized aircraft, as well as associated services.

**CAE**  
World leader in modeling, simulation and training for the civil aviation and defense sectors.

**PRATT & WHITNEY CANADA**  
World leader in the design, manufacture and maintenance of engines powering business jets, general aviation aircraft, regional aircraft and helicopters.

*"In Québec, major prime contractors can count on the strength of nearly 200 SMEs, subcontractors and product suppliers who have the ability to provide the full range of specialties needed to assemble aircraft. To exploit this expertise, we must continue working together more than ever."*

Guillermo Alonso Jr., President of Alta Precision Inc. / Aéro Montréal Executive Committee Chairman

### WORLD-CLASS EQUIPEMENT MANUFACTURERS, INTEGRATORS AND MROS

**ESTERLINE CMC ELECTRONICS**  
Designs and manufactures leading-edge electronics products for aviation markets. CMC's focus is to deliver innovative avionics and integrated cockpit system solutions to its customers worldwide.

**GENERAL ELECTRIC CANADA - AVIATION**  
Leading provider of turbojets and turboprops, components and integrated systems for commercial and military aircraft.

**HÉROUX-DEVTEK**  
North American leader in the design, development, manufacture and repair of landing gear systems and aircraft structural components in the commercial and military sectors.

**L-3 MAS**  
A leading Canadian provider of aircraft in-service support and lifecycle extension solutions. It also offers aerostructure design and manufacturing services for government and commercial customers.

**LIEBHERR-AEROSPACE CANADA**  
Provides technical and logistics support for onboard air management systems. Liebherr produces flight controls, hydraulic systems, landing gears and air-conditioning and filtering systems.

**MDA SATELLITE SYSTEMS**  
World leader in the design of leading-edge satellite systems and subsystems for the commercial and governmental sectors.

**MECACHROME CANADA**  
Major player in the design, industrialization, machining and assembly of high precision mechanical parts made of all types of materials for aviation.

**MESSIER-BUGATTI-DOWTY (SAFRAN GROUP)**  
World leader in aircraft landing and braking systems, from design and manufacture to maintenance and repair.

**ROLLS-ROYCE CANADA**  
Recognized in Canada for its expertise in the electricity production sector and for its demonstrated expertise in the design, repair and retrofitting of engines in the aerospace, energy and marine industries, as well as for its advanced testing programs.

**SONACA MONTRÉAL**  
Global aerospace industry leader in the development of machining, forming and assembly of large aluminum wing panels and other structural parts.

**THALES CANADA, AEROSPACE**  
Designer and integrator of avionics suites, flight controls, head-up displays, enhanced vision systems and other innovative avionics concepts for the regional and business aircraft markets.

**TURBOMECA CANADA (SAFRAN GROUP)**  
World leader in the design, manufacture and sale of small and medium powered gas turbines for helicopters.

### DEDICATED SUB-CONTRACTORS AND SUPPLIERS

The prime contractors rely on a network of nearly 200 innovative sub-contractors and suppliers that are specialized in several sectors: electrical and electronic systems, machining, maintenance and repair, surface treatment, IT, tests and controls, interior finishing, plastics, composites and optics.

## MACH - ACHIEVING EXCELLENCE FOR THE SUPPLY CHAIN

As a result of the concerted action of various players in Aéro Montréal, the MACH initiative aims to strengthen companies and the structure of the supply chain by leveraging special collaborative ties between customers and suppliers. It also ensures the implementation of strategies and projects that will help fill integration capability gaps in Québec. Its goal is to help develop a world-class supply chain.

## A LEADING EDGE TEACHING AND RESEARCH NETWORK

Greater Montréal has a unique concentration of educational institutions and research centres that work closely with companies from the sector to provide advanced training and maintain an outstanding innovation capacity.

### A SKILLED WORKFORCE

Universities, technical colleges, trade schools and continuing education institutes offer programs and opportunities in the aerospace industry. More than 4,500 new graduates per year ensure a specialized succession for the industry.

Polytechnique Montréal, ETS, McGill, Concordia, Laval, Sherbrooke universities and the Université du Québec à Chicoutimi offer programs covering the disciplines of mechanical, electrical, computer, aerospace, industrial and metallurgical engineering as well as a joint master's program with an aerospace engineering project sponsored by the Comité sectoriel de main-d'œuvre en aérospatiale au Québec (CAMAQ). Polytechnique Montréal recently introduced a new undergraduate program in aerospace engineering, which will produce its first graduates in 2012.

**ÉCOLE NATIONALE D'AÉROTECHNIQUE (ÉNA)**  
First in North America, ÉNA offers specialized programs in aircraft manufacturing, maintenance and avionics, as well as a college diploma in English in aircraft maintenance. ÉNA has advanced equipment and a fleet of over 32 aircraft used to train its 1,000 students.

**ÉCOLE DES MÉTIERS DE L'AÉROSPATIALE DE MONTRÉAL (EMAM)**  
Vocational school with a 9,755 m<sup>2</sup> facility, EMAM offers specialized programs such as cable and circuit assembly, machining techniques and surface treatment.

**INSTITUT DE FORMATION AÉROSPATIALE (IFA)**  
IFA is a non-profit organization that offers in-company professional development services. Through its strong partnerships and its purchasing power, IFA can support any company (especially SMEs in aerospace) by offering training, coordination, mentoring or consulting services.

**COMITÉ SECTORIEL DE MAIN-D'ŒUVRE EN AÉROSPATIALE AU QUÉBEC (CAMAQ)**  
CAMAQ offers a forum to promote better cooperation among employers, workers, managers of educational institutions and government stakeholders involved in workforce planning and training.

With the largest pool of engineers in the country and the highest concentration of technicians, operators and assemblers, Montréal's aerospace industry works in partnership with three unions: the IAMAW, SCEP and CAW-Canada.

### INNOVATION IN THE FOREGROUND

To maintain an enviable position in a highly competitive market, industry members put innovation at the forefront of their priorities. With 70% of Canadian aerospace research and development activities, the Greater Montréal region is home to the majority of Canada's corporate centres of excellence and stands out through its extraordinary innovation capacity, making it a true model of excellence recognized worldwide.

• \$1 billion is invested annually in R&D, or 70% of the Canadian total;

• Innovation mobilizes about 13,000 scientists and engineers in the aerospace industry;

• The aerospace industry is the R&D leader in Québec's manufacturing sector;

• Bombardier Aerospace, Pratt & Whitney Canada and CAE are among the top R&D investors in Canada.

### The Greater Montréal region is home to institutions that are recognized worldwide for their aerospace innovation:

• Consortium for Research and Innovation in Aerospace in Québec (CRIAQ)

• Canadian Space Agency (CSA)

• NRC Aerospace Portfolio, Manufacturing Technology Centre

• Centre technologique en aérospatiale (CTA)

• Composites Development Centre of Québec (CDCQ)

• Aerospace Research Institutes (Concordia University, McGill University, Polytechnique Montréal, École de technologie supérieure - ETS)

*"The success of the aerospace industry depends on the thousands of highly-skilled women and men who work in the industry. Together we must ensure we develop the next generation of technicians, engineers and professionals."*

John Saabas, President, Pratt & Whitney Canada

*"Innovation is central to our concerns as it is for our global supply chain. Networking between SMEs and large companies is essential in order to discuss technology transfers that are efficient and profitable for the entire industry."*

François Caza, Vice President and Chief Engineer, Engineering, Bombardier Aerospace

