

British Columbia aerospace industry



Photo courtesy of MTU Maintenance Canada

The British Columbia Aerospace Industry:

- Consists of more than 80 companies with annual sales of more than \$800 million.
- Employs more than 7,000 highly skilled engineers, technicians and machinists.
- Derives 80 per cent of its total revenues from export sales.

British Columbia, Canada, is strategically located as the gateway between Asia and North America. Its location, talented workforce, rich natural resources and thriving new industries provide outstanding business opportunities for increased trade, investment and tourism.

Modern transportation infrastructure in British Columbia provides efficient access to key global markets by land, sea and air. British Columbia itself is a vast area of nearly one million square kilometres with several rugged mountain ranges, thousands of kilometres of coastline and vast forest regions. Fixed-wing aircraft, float planes and helicopters have played an important role for the past 60 years in the development of the province and in gaining access to key markets.

As a result, British Columbia companies have developed world-class expertise in modifying aircraft for specific applications such as firefighting, air ambulance emergencies and operations on and over water as well as providing service to aircraft serving the Vancouver and Victoria international airports.

Vancouver International Airport — with a large continental and global network of routes — ranks ahead of San Francisco and Seattle in the number of scheduled weekly international flights, and is a leading North American hub for the Asia Pacific region.

Main areas of aerospace expertise in British Columbia are:

- Maintenance, repair and overhaul
- Remote sensing, software and systems integration
- Aerospace manufacturing



Photo courtesy of BCIT

Maintenance, Repair and Overhaul

Maintenance, repair and overhaul is the largest sector of the aerospace industry in British Columbia. It generates almost half the jobs in the industry and \$400 million in revenue each year. Companies contract for customers from Asia, South America, Europe and the U.S.

Some maintenance, repair and overhaul companies include:

ACRO Aerospace supports Bell, Eurocopter and Sikorsky helicopters and Allison, GE, Pratt & Whitney and Turbomeca engines. www.acro.ca

Cascade Aerospace offers complete services for maintenance, repair and overhaul of Boeing 737 and Bombardier Dash 8 aircraft.

www.cascadeaerospace.com

Air Canada Technical Operations in Vancouver specializes in Boeing 737 and 767, and A310 heavy maintenance, component overhaul and line maintenance. www.aircanada.ca/about-us/technical

Kelowna Flightcraft in Kelowna specializes in Boeing 727 and Convair 580 aircraft. www.flightcraft.ca

Innotech Aviation in Richmond repairs and upgrades business aircraft. www.innotech.ca

Viking Air in Sidney does modifications to improve performance and capacity of various out-of-production De Havilland aircraft including the Beaver, Otter and Twin Otter. www.vikingair.com

MTU Maintenance Canada in Richmond is an engine maintenance, repair, overhaul and testing facility for CF6-50, JT8D and CFM56-3/5 engines.

www.mtucanada.com

Other maintenance, repair and overhaul service providers include:

Alpine Aerotech: www.alpineaerotech.com

AOG Air Support: www.aogair.com

Canadian Aero Technologies:

www.canadianaerotech.com

Helipro International: www.helipro.com

H-S Tool: www.hsrework.com

Pacific Avionics: www.innotech-execaire.com

Penta Aviation: www.penta-aviation.com

Van Isle Avionics: www.vanisleavionics.com

Remote Sensing, Software and Systems Integration

British Columbia's aerospace industry has become a centre of excellence in the area of remote-sensing satellites, satellite communications ground stations, data interpretation, flight management systems and air traffic control systems.

This sector reports \$250 million in annual sales and employs 1,500 people.

MacDonald Dettwiler and Associates (MDA)

in Richmond has become a world leader in the retrieval and interpretation of satellite data and as a systems integrator. MDA is the prime contractor of the \$200-million Radarsat 2 satellite. www.mda.ca

Radarsat International in Richmond processes and markets data from the Canadian Radarsat satellite. It is also the North American distributor of data from other European and Canadian satellites.

www.radarsat.mda.ca

Raytheon Systems Canada in Richmond has designed and built the Canadian Automated Air Traffic System (CAATS), the most advanced automated air traffic management system in the world. www.raytheon.ca

Other software and systems integrators:

Aeroinfo: www.aeroinfo.com

Epic Data: www.epicdata.com

Spectrum Signal Processing: www.spectrumsignal.com

Aerospace Manufacturing

British Columbia aerospace companies have the capability to manufacture large integrated components for many of the world's aircraft produced by Boeing, Bombardier and Bell helicopter.

Companies in this sector:

- Employ more than 1,000 people.
- Doubled sales in the past five years to more than \$150 million annually.

The provincial government is supporting the British Columbia aerospace industry by:

- Working with industry to address a critical labour shortage by supporting training programs at the British Columbia Institute of Technology and five other advanced education institutions in the province.
- Working closely with the federal government to ensure that federal aerospace-related contracts are equitably awarded to British Columbia firms.
- Jointly promoting the industry in conjunction with the Aerospace Industry Association of British Columbia.

Avcorp Industries has the largest aerospace manufacturing facility in B.C. at their 27,870-square-metre facility in Delta. The company supplies major aircraft structures to Bombardier and Boeing. The spin-off from Avcorp's success is felt by some 40 suppliers of goods and services in B.C. www.avcorp.com

Ebco Aerospace, located in Delta, is a provider of precision machining services. This state-of-the-art facility supports the precision manufacturing needs of the aerospace and defense industries specializing in medium to large structural aircraft components machined from high strength steels, titanium and aluminum alloys.

www.ebco.com/ebco_aerospace.html

Northern Airborne Technologies in Kelowna is an internationally accepted manufacturer of specialized communications equipment for rotary- and fixed-wing aircraft. Applications include Air Ambulance, Airborne Law Enforcement, Search and Rescue, military and marine programs. www.northernairborne.com

Viking Air is an aerospace manufacturer of components for fixed-wing and rotary aircraft. Viking is the primary supplier to Bombardier for parts for the De Havilland Twin Otter. www.vikingair.com

Other aerospace manufacturing companies include:

Aeroalliance: www.aeroalliance.com

Advanced Wing Technologies:

www.advancedwing.com

Customs Plastics: www.custom-plastics.com

Merril Engineering: www.merrilengineering.rotor.com

Murphy Aircraft: www.murphyair.com

Pyrotek Heat Treating: www.pyrotek.com

Versaform Canada: www.versaformcorp.com

Zum Hingst: www.zht.com

British Columbia Post-Secondary Aviation Programs

One key to having a vibrant aerospace industry is a well-trained and skilled workforce. The provincial government provides funding of over \$4 million each year for aerospace training. Currently 320 new aerospace technicians graduate from British Columbia post-secondary institutes each year. The following British Columbia institutions offer advanced educational programs related to the aerospace sector:

British Columbia Institute of Technology, Richmond
604 278-4831 www.bcit.ca

Electronics technician (core), aircraft gas turbine technician, aircraft structures technician, aircraft electronics technician (avionics), aircraft maintenance engineer.

College of New Caledonia, Prince George
250 562-2131 www.cnc.bc.ca

Commercial aviation diploma (bush pilot or instructor pilot) offered in co-operation with Pioneer Flight Training Ltd.

Northern Lights College, Dawson Creek
250 785-6981 www.nlc.bc.ca

Aircraft maintenance engineering program.

Okanagan University College, Kelowna
250 762-5445 www.ouc.bc.ca

Commercial aviation diploma offered in co-operation with the Southern Interior Flight Centre.

Selkirk College, Castlegar
250 356-7292 www.selkirk.bc.ca

Aviation technology program.

University College of the Fraser Valley, Abbotsford
604 504-7441 www.ucfv.bc.ca

Aviation diploma co-op programs (airline, wilderness and flight instruction options) offered in co-operation with Coastal Pacific Aviation. Bachelor of business administration program – aviation major.

For more information on the aerospace industry in British Columbia contact one of the following offices:

**The Aerospace Industry Association
of British Columbia**

1080 Lee Street
Whiterock, British Columbia V4B 4P1
Phone: (604) 781-7782
www.aiabc.com

British Columbia Trade and Investment Office

730 - 999 Canada Place
Vancouver, British Columbia V6C 3E1
Phone: 604 844-1946
Fax: 604 660-2457
E-mail: Scott.Morrison@gems8.gov.bc.ca
www.cse.gov.bc.ca/industryprofiles/aerospace



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Updated August 2001