Industry Profile: Aviation & Aerospace

A guide for newcomers to British Columbia

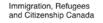
skilled immigrant **infocentre**



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1. Overview of the Aviation & Aerospace Industry

The B.C. aerospace industry employs more than 9300 British Columbians and generates \$1.8 billion in revenues annually and direct GDP of \$1.63 billion. The BC aerospace industry is the third largest in the country after Ontario and Quebec.

The Canadian aerospace industry is the fifth largest in the world with \$24 billion in revenues in 2019 supporting approximately 213,000 jobs across the country. It is ranked in the top 3 globally in the production of civil simulators, turboprop and helicopter engines, business jets, and regional aircraft.

In BC there are over 190 companies active in the aerospace sector. Most of them are small- and medium-sized enterprises (SMEs). Aircraft maintenance, repair and overhaul (MRO) companies make up the majority of the local industry.

MRO activities include:

Servicing and repairing for Aircraft, Aircraft engines, Aircraft components and other systems, Aircraft line maintenance (aircraft servicing at airports), Aircraft ferrying services, Aircraft inspection services, Aircraft testing services

BC's Aerospace Industry is uniquely positioned to capitalize on market opportunities with its proximity to the world's largest aerospace cluster next door in Washington State and to the rapidly growing Asia Pacific region.

BC's aerospace sector has nation-leading capabilities in the following sectors:

- In-Service Support (ISS) and Maintenance
- Repair and Overhaul (MRO)
- Space and remote sensing
- Aviation training and simulation
- Advanced manufacturing
- Special mission aircraft

Additional aerospace capabilities include:

- aircraft manufacturing
- design and construction of major airframe structures
- precision machining facilities, specializing in machining of medium to large complex structural aircraft components
- world leading aerial suppression and firefighting services
- specialty aerospace and defence integrated aircraft support programs;
- 3D visualization problem solving
- design and manufacture of high lift devices
- global leading surveillance and intelligence, satellite subsystems, robotics, and geospatial services

Sources:

- Canada's Aerospace Industry
 <u>https://aiac.ca/about/about-canadas-aerospace-industry/</u>
- AIAC Pacific Aerospace Industries Association of Canada Pacific <u>https://aiac.ca/aiac-pacific/</u>
- British Columbia Aerospace Capabilities: <u>https://aiacpacific.ca/publications/</u>
- Canada Country Commercial Guide Aerospace & Defense
 <u>https://www.trade.gov/knowledge-product/canada-civil-aviation</u>

BC's aerospace industry experts are concerned about the shortage of skilled labour.

The technical nature of the aviation and aerospace industry will make competition for skilled labour higher for this sector than for industries.

Immigrants are seen as an important source of talent as aviation and aerospace companies seek to meet their hiring needs in the years ahead. Industry has responded to the shortage of skilled workers by developing a number of programs to attract new employees.

SkilledTradesBC provides support for experienced tradespersons to get certified in B.C., including study and exam resources.

More information: Newcomers and International Tradespersons | SkilledTradesBC <u>https://skilledtradesbc.ca/get-certified/newcomers-international-tradespersons</u>

The *Immigrant Employment Council of BC* is another initiative that is seeking to create job opportunities for new immigrants with skilled trades. More information: https://iecbc.ca/ https://iecbc.ca/employer-tools-and-resources/find-immigrant-talent/ https://iecbc.ca/ https://iecbc.ca/employer-tools-and-resources/find-immigrant-talent/

The **British Columbia Provincial Nominee Program BCPNP** offers accelerated immigration for qualified skilled workers who want to settle in B.C. and become permanent residents of Canada.

More information:

https://www.welcomebc.ca/immigrate-to-b-c/about-the-bc-provincial-nominee-program

For more information on the aviation and aerospace sector see:

 Canada's Aerospace Industry (Aerospace Industries Association of Canada)

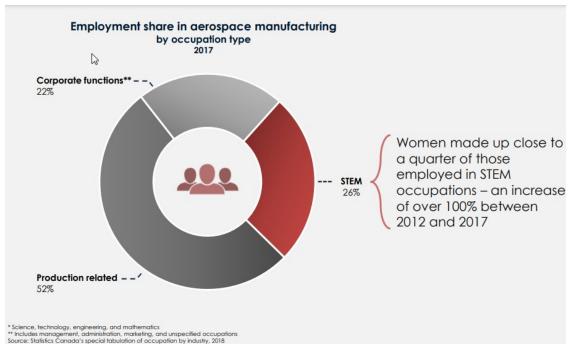
https://aiac.ca/about/about-canadas-aerospace-industry/

 Aerospace Industries Association of Canada Pacific Region https://aiacpacific/

2. Occupations and Hiring Forecasts in the Aviation & Aerospace Sector

Canada

More than two thirds of the total aerospace industry workforce is qualified as skilled labour. Engineers account for almost 50% of the scientific, R&D, engineering and related technicians category in the manufacturing sector.



Source: State of Canada's Aerospace Industry 2018 <u>https://aiac.ca/wp-</u> <u>content/uploads/2018/06/State-of-Canadas-Aerospace-Industry-2018-Report.pdf</u> Across Canada the current aviation and aerospace workforce will increase 9% by 2025 in addition to the replacement of retiring workers.

Occupations most in demand in Canadian Aviation & Aerospace Industries from 2017 to 2025:

- 7,300 Air pilots, flight engineers and flying instructors
- 5,300 Aircraft mechanics and aircraft inspectors
- 4,500 Pursers and flight attendants
- 2,700 Aircraft assemblers and aircraft assembly inspectors
- 2,000 Aircraft instrument, electrical and avionics mechanics, technicians and inspectors
- 2,000 Air traffic controllers and related occupations
- 1,900 Air transport ramp attendants
- 1,600 Managers in transportation
- 1,400 Machinists and machining and tooling inspectors
- 1,300 Aerospace engineers

Source:

Aviation and Aerospace Industries Labour Market Information: Canadian Council for Aviation & Aerospace, 2018 (Provided by: Canadian Business Aviation Association)

https://www.cbaa-acaa.ca/CBAADocs/Theresa%20Davis-Woodhouse%20Dealing%20with%20Labour%20Shortages%20CBAA%202018.pdf

Critical Shortages across Canada:

Aircraft Maintenance Engineers - Maintenance:

5,300 new AMEs needed by 2025

Additional occupations that have been cited as being the most difficult to hire for across Canada include the following **Skilled Trades**, **Technician**, **and**

Technologist careers:

- Aircraft Electrical/Electronics/Instrument Component Technician
- Assemblers
- Electricians

- Machinists including CNC machinist and operator
- Mechanical Engineering Technologist and Technician
- Millwrights
- Non-Destructive Inspection Technician

Across Canada the wages for most in demand occupations: WAGES FOR AVIATION AND AEROSPACE OCCUPATIONS MOST IN DEMAND

Occupation	Annual Average Hourly Starting Wage	Annualized Wage*
Aircraft mechanics and aircraft inspectors	\$23.80	\$49,504
Air traffic controllers and related occupations	\$20.98	\$43,628
Air transport ramp attendants	\$12.58	\$26,156
Aircraft instrument, electrical and avionics mechanics, technicians and inspectors	\$23.51	\$48,906
Facility operation and maintenance managers	\$33.12	\$68,883
Air pilots, flight engineers and flying instructors	\$34.13	\$70,980
Pursers and flight attendants	\$14.95	\$31,096
Managers in transportation	\$40.43	\$84,084
Aircraft assemblers and aircraft assembly inspectors	\$15.98	\$33,228
Machinists and machining and tooling inspectors	\$19.81	\$41,210
Aerospace engineers	\$32.60	\$67,808

Sources:

Labour Market Information Report, Aviation And Aerospace Industries, CCAA Canadian Council for Aviation & Aerospace, March 2018 https://www.avaerocouncil.ca/sites/default/files/files/ccaa_lmi_report_march_2018_-_final.pdf

British Columbia

In British Columbia, aircraft maintenance, repair and overhaul (MRO) are the primary activities. Both engineers and technicians are currently in high demand.

MRO occupations include:

- Aircraft maintenance engineers
- Aircraft structural technicians
- Aircraft gas turbine engine technicians

Job Openings in BC 2019-2029:

Skill Level	NOC	Occupation	Employment 2019	Job Openings 2019-2029	Average Annual Replacement Rate	Median Wage (\$)	Low Wage (\$)	High Wage (\$)
A	2146	Aerospace engineers	330	97	2.1%	21.44	38.34	63.19
В	2244	Aircraft instrument, electrical and avignics mechanics, technicians and inspectors	713	214	2.2%	25.00	37.37	55.25

Source:

WorkBC Labour Market Outlook Profile <u>https://www.workbc.ca/Labour-Market-Industry/Industry-and-Sector-Information/Occupational-Outlooks/STEM.aspx</u>

B.C.'S Labour Market Outlook: 2019 edition <u>https://www.workbc.ca/Labour-Market-Industry/Labour-</u> <u>Market-Outlook.aspx</u>

For detailed information on occupations in the aviation and aerospace sector see:

WorkBC Career Profiles

https://www.workbc.ca/plan-career/explore-careers [search by job title]

Careers in Aviation – Transport Canada

https://tc.canada.ca/en/campaigns/national-aviation-day-february-23/careers-aviation includes Aerospace engineers and Aircraft maintenance engineers

 Aircraft Maintenance Engineers & Technicians. Skilled Immigrant InfoCentre

https://www.vpl.ca/siic/guide/employment-guides/aircraft-maintenance-engineerstechnicians

Trades Training BC

https://www.tradestrainingbc.ca

Skilled Trades BC
 <u>https://skilledtradesbc.ca/</u>

3. Hiring Forecast by Region

The majority of jobs in BC's aviation and aerospace industries are located in the Lower Mainland and Southwest region of the province. However, opportunities for careers in the aviation and aerospace sector do exist on Vancouver Island and in Okanagan region. For example:

Aircraft mechanics and aircraft inspectors (NOC 7315) – Regional Outlook

Cariboo	5	Kootenay	
Employment in 2019:	110	Employment in 2019:	30
Average annual employment		Average annual employment	
growth(%) 2019-2029:	0.2%	growth(%) 2019-2029:	6.0%
Expected number of job openings		Expected number of job openings	
2019-2029:	20	2019-2029:	30
Mainland / Southwest		North Coast & Nechako	
Employment in 2019:	2,050	Employment in 2019:	80
Average annual employment		Average annual employment	
growth(%) 2019-2029:	0.5%	growth(%) 2019-2029:	3.2%
Expected number of job openings		Expected number of job openings	
2019-2029:	740	2019-2029:	50
Northeast		Thompson-Okanagan	
Employment in 2019:	40	Employment in 2019:	380
Average annual employment		Average annual employment	
growth(%) 2019-2029:	1.6%	growth(%) 2019-2029:	1.6%
Expected number of job openings		Expected number of job openings	
2019-2029:	20	2019-2029:	120
Vancouver Island / Coast			
Employment in 2019:	360		
Average annual employment			
growth(%) 2019-2029:	0.7%		
Expected number of job openings			
2019-2029:	130		

Source: B.C. Labour Market Outlook

Additional Regional Employment Outlook available at WorkBC:

- Aircraft instrument, electrical and avionics mechanics, technicians and inspectors <u>https://www.workbc.ca/career-profiles/aircraft-instrument-electrical-and-avionics-mechanics-</u> <u>technicians-and-inspectors</u>
- Aerospace Engineers <u>https://www.workbc.ca/career-profiles/aerospace-engineers</u>

Aircraft Assemblers
 <u>https://www.workbc.ca/career-profiles/aircraft-assemblers-and-aircraft-assembly-inspectors</u>

4. Finding Jobs

Online Job Postings

- BC Aviation Council Job Postings https://www.bcaviationcouncil.org/
- Canadian Council for Aviation & Aerospace CCAA
 <u>https://avaerocouncil.ca/</u>
- Wings Magazine Job Board <u>https://www.wingsmagazine.com/classified-section/jobs/</u>
- Aerojobs https://www.aerojobs.ca/en/
- Aviation AV Job Search https://www.avjobs.com/jobs/country.asp
- WorkBC Jobs
 <u>https://www.workbc.ca/search-and-prepare-job/find-jobs#/job-search</u>
- Indeed.com
 https://ca.indeed.com/
- Talent.com https://ca.talent.com/

Creating a List of Potential Employers

You can use directories to produce lists of employers in the aviation and aerospace industry in British Columbia. Contact them directly to find out if they're hiring.

- BC Aviation Council Member Directory
 <u>https://www.bcaviationcouncil.org/</u>
- Canadian Aerospace Products & Services. AIAC <u>https://aiac.ca/products-and-services/</u>
- AIAC Pacific Publications BC Aerospace Capabilities Guide https://aiacpacific.ca/publications/ https://aiacpacific.ca/publications/ https://aiacpacific.ca/publications/ https://aiacpacific.ca/wp-content/uploads/2018/09/BC-Aerospace-Capabilities-Guide_Web_Spreads.pdf

Wings Magazine MRO Directory https://www.wingsmagazine.com/mro-directory

5. Additional Resources

Still looking for more information? Try looking at the following resources:

- Aerospace Industries Association of Canada Pacific <u>https://aiacpacific.ca/</u>
- BC Aviation Council
 <u>https://www.bcaviationcouncil.org/</u>
- Canadian Council for Aviation & Aerospace CCAA <u>https://avaerocouncil.ca/en</u>
- Pacific Aircraft Maintenance Engineers Association <u>https://amec-teac.ca/pacific/</u>
- State of Canada's Aerospace Industry Report Summer 2024
 https://ised-isde.canada.ca/site/aerospace-defence/en/state-canadian-aerospace-industry
- Career Paths for Skilled Immigrants Program
 https://www.welcomebc.ca/work-in-b-c/career-paths-for-skilled-immigrants
- WorkBC | People New to B.C.
 https://www.workbc.ca/plan-career/resources/people-new-bc
- Immigrant Employment Council of British Columbia <u>https://iecbc.ca/</u>
- path2work
 https://www.path2work.ca/

Questions? Please ask the Information Staff in the Central Branch, Vancouver Public Library or telephone 604-331-3603.

Please note that the information in this guide is also available online through the Skilled Immigrant InfoCentre website at <u>https://www.vpl.ca/siic</u>

