

Aircraft Maintenance Engineers & Technicians

A guide for newcomers to British Columbia



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1. Working as an Aircraft Engineer and Technician

Job Description

As an Aircraft mechanic or inspector [NOC 2021: 72404 / NOC 2016: 7315] you:

- troubleshoot aircraft structural, mechanical or hydraulic systems to identify problems
- repair and overhaul aircraft structural, mechanical or hydraulic systems
- perform routine maintenance
- order and maintain inventory of parts and supplies
- Aircraft inspectors inspect structural and mechanical systems of aircraft to make sure they meet standards of performance and safety

Source: WorkBC Career Profile, Aircraft mechanics and aircraft inspectors

<https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx>

As an Aircraft instrument, electrical and avionics mechanic [NOC 2021: 22313 / NOC 2016: 2244] you:

- use computer diagnostic tests to conduct random checks on maintenance work to ensure quality and accuracy of aircraft wiring and control circuitry
- study maintenance logs kept for the aircraft to predict and prevent cyclical circuit problems
- upgrade and patch the programmed control routines of digitized electrical and electronic control systems

Source: WorkBC Career Profile, Aircraft instrument, electrical and avionics mechanics, technicians and inspectors <https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx>

Job Outlook in BC

Employment in the manufacturing and maintenance sectors of the British Columbia’s aerospace industry has grown. There is a shortage of skilled workers in this occupational group to meet future demand.

There will be strong demand for individuals trained in aviation component overhaul, which along with maintenance and repair of aircraft, is the primary activity in the B.C. aerospace industry.

Aircraft mechanics and inspectors

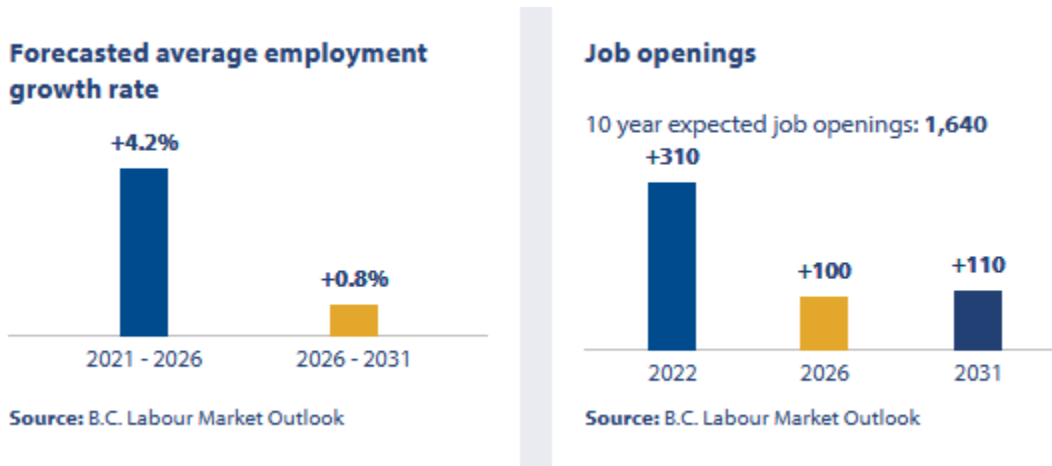


Chart from WorkBC

Aircraft instrument, electrical and avionics mechanic

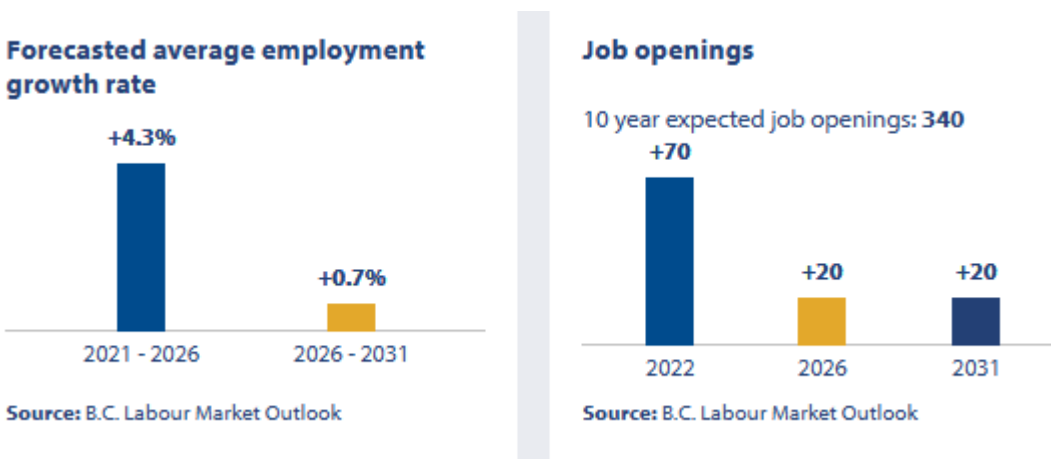


Chart from WorkBC

WorkBC provides job openings in BC regions from 2021-2031:

Aircraft mechanics and aircraft inspectors

Region	Employment in 2021	Average Annual Employment Growth 2021-2031	Estimated Number of Job Openings 2021-2031
Vancouver Island	320	0.8%	130
Lower Mainland / Southwest	1,760	3.5%	1,340
Thompson-Okanagan	560	0.2%	90
Kootenay	70	1.3%	20
Cariboo	170	-0.1%	10
North Coast & Nechako	40	7.3%	50

Aircraft instrument electrical and avionics mechanics

Region	Employment in 2021	Average Annual Employment Growth 2021-2031	Estimated Number of Job Openings 2021-2031
Vancouver Island	130	0.6%	40
Lower Mainland / Southwest	430	3.5%	300
Thompson-Okanagan	100	0.2%	20

You can learn more about working as an **aircraft mechanic or aircraft instrument, electrical and avionics mechanic** in BC from:

▪ **WorkBC Career Profiles:**

<https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx>

- Aircraft mechanics and aircraft inspectors
- Aircraft instrument, electrical and avionics mechanics, technicians and inspectors

- **Career Cruising database** (Profiles for 'Aircraft Mechanic' and 'Avionics Tech')
<https://www.vpl.ca/digital-library/career-cruising>
Available from the VPL Digital Library | Explore our Digital Library page

Types of Employers

Aircraft maintenance engineers and technicians work for:

- regional or national airline companies
- architectural or engineering companies
- aircraft manufacturing and maintenance companies
- the armed forces
- other aircraft operators

Salary

In BC, the median annual salary for *aircraft mechanics and inspectors* is \$69,868. The median annual salary for *aircraft instrument, electrical and avionics mechanics* is \$77,939.

In BC's regions, you can expect to earn:

Aircraft Mechanics and Aircraft Inspectors

Community/Area	Wages (\$/hour)		
	Low	Median	High
British Columbia	17.25	33.50	45.00
Cariboo Region	17.25	33.50	45.00
Lower Mainland–Southwest Region	17.25	33.50	45.00
Thompson–Okanagan Region	17.25	33.50	42.50
Vancouver Island and Coast Region	17.25	33.50	45.00

Source: Job Bank Canada <https://www.jobbank.gc.ca/trend-analysis/search-wages>

Aircraft Instrument, Electrical and Avionics Mechanics

Community/Area	Wages (\$/hour)		
	Low	Median	High
British Columbia	25.00	37.37	55.25
Lower Mainland–Southwest Region	27.26	39.82	51.40

Source: Job Bank Canada <https://www.jobbank.gc.ca/trend-analysis/search-wages>

If you work on jets or for commercial airlines, you are usually paid more than other employees. Full-time mechanics receive employee benefits such as dental coverage, paid sick days and vacation, and pension plans. You may also get reduced airfares for yourself and your immediate family.

Most aircraft mechanics in Canada are members of a union. This means that your pay rates and benefits are negotiated on your behalf by union representatives.

Sources: WorkBC & *Career Cruising*

Working Hours

Most Aircraft maintenance engineers and technicians work 40 hours per week including day, evening, night and weekend shifts.

2. Skills, Education and Experience

Skills

- good attention to detail
- manual dexterity
- good spatial perception
- problem solving
- good communication skills
- attention to safe work practices
- good visualization skills

Education and Experience

Aircraft Mechanics and Aircraft Inspectors:

- college diploma program in aircraft maintenance

OR

- completion of a four-year apprenticeship program as Aircraft Maintenance Technician through Industry Training Authority BC is usually required (see: <https://www.itabc.ca/program/aircraft-maintenance-technician>)
- several years of on-the-job training are required for aircraft mechanics
 - aircraft inspectors require several years of experience as an aircraft mechanic
 - aircraft mechanics and inspectors who sign maintenance releases and certify airworthiness require an Aircraft Maintenance Engineer's (AME) licence issued by Transport Canada, see: <https://tc.canada.ca/en/aviation/licensing-aircraft-maintenance-engineers-ame/obtaining-aircraft-maintenance-engineer-ame-licence>

Aircraft Instrument, Electrical and Avionics Mechanics:

- completion of a Transport Canada approved college diploma program, experience in the trade, as well as certification is generally required
- an Aircraft Maintenance Engineer (AME) license may be required for some occupations in this group
- Inspectors are required to obtain an Aircraft Maintenance and Inspection Certificate endorsed for the type of aircraft and power plants where they are employed

Source: WorkBC Career Profiles

Qualifications

Some jobs in this occupation class are regulated in British Columbia.

In order to use the designation of ***aircraft maintenance engineer (AME)***, you require a licence from Transport Canada.

- Obtaining an Aircraft Maintenance Engineer Licence:
<https://tc.canada.ca/en/aviation/licensing-aircraft-maintenance-engineers-ame>

Working as an **aircraft maintenance technician** does not require licensing. However, you can obtain *voluntary certification* through the Canadian Council for Aviation & Aerospace (CCAA).

- More information:
<https://www.avaerocouncil.ca/en/certification>

Further information about training and apprenticeships:

- **Trades Training BC**
<https://www.tradestrainingbc.ca/Trades/Aircraft-Maintenance>
- **Industry Training Authority of BC – Apprenticeship Program**
<https://www.itabc.ca/program/aircraft-maintenance-technician>
- **Approved Training Organizations – Aircraft Maintenance Training**
<https://tc.canada.ca/en/aviation/licensing-aircraft-maintenance-engineers-ame/approved-training-organizations-atos-aircraft-maintenance-training>

Internationally Trained Professionals

Accelerated Assessment & Certification Project

The Accelerated Assessment & Certification project works with you to expedite your certification towards in-demand occupations in the aviation and aerospace industry. The program provides you with advice and guidance on what you need to do to achieve full certification. This will assist you when looking for employment.

- **Canadian Council for Aviation and Aerospace Accelerated Assessment & Certification Project:**
<https://www.avaerocouncil.ca/en/certification/accelerated-assessment-and-certification-aac-project>
 - **In Demand Occupations:**
<https://ccaevaluation.ca/careers>

3. Finding Jobs

You'll find job advertisements in local newspapers, trade journals, and electronic sources, as well as through professional associations' publications.

Local Newspapers

You can look at the *Vancouver Sun* and *The Province* at Vancouver Public Library for free. Check the job postings daily, the careers section is in the *Vancouver Sun* on Wednesdays and Saturdays and in *The Province* on Sundays.

Online Job Postings

- **Aerojobs.ca**
<https://www.aerojobs.ca/en/>
- **Indeed.com**
https://ca.indeed.com/advanced_search
<https://ca.indeed.com/Ame-jobs>
- **WorkBC**
<https://www.workbc.ca/Jobs-Careers/Find-Jobs/Jobs.aspx#/job-search>

Professional Associations Career Resources

- **British Columbia Aviation Council Job Postings**
<https://www.bcaviationcouncil.org/jobs/>
- **Canadian Council for Aviation & Aerospace: jobs**
<https://www.avaerocouncil.ca/en/https%3A/www.avaerocouncil.ca/en/jobs-across-canada-new-opportunities>

Identifying the Right Position

When you browse job advertisements you'll find a range of different job titles. For aircraft maintenance engineers and technicians, look for these related job titles:

Aircraft Mechanics and Aircraft Inspectors (from NOC)

- aircraft maintenance engineer (AME)
- aircraft structural repair technician
- aircraft systems inspector
- certified aircraft technician
- inspector, repair and overhaul

Aircraft Instrument, Electrical and Avionics Mechanics (from NOC)

- aircraft electrical technician
- aircraft electrician
- aircraft instrument mechanic
- aircraft maintenance engineer (AME)
- avionics technician
- instrument inspector, aircraft

Creating a List of Potential Employers

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

- **Aerospace Industries Association of Canada**
<https://aiac.ca/member-directory/>
- **British Columbia Aviation Council**
<https://bcaviationcouncil.silkstart.com/directory>
- **Wings Magazine Directory**
<https://www.wingsmagazine.com/mro-directory/>
- **Reference Canada**
<https://www.vpl.ca/digital-library/reference-canada>

Click on "Start Search" beside Canadian Businesses, then select the "Advanced Search" button. Select both "Keyword/SIC/NAICS" under Business Type and "City" under Geography. In the top search box enter "aviation" and click LOOKUP. Select the appropriate headings. Lower down, select the Province, choose the cities, and click the "View Results" button.

Available from the VPL Digital Library | Explore our Digital Library page

NOTE: You can access this database from a Library computer. If you are using a computer from outside the Library, you will need a Vancouver Public Library card to login to this database. After clicking on the database name, you will be asked to enter your library card number and PIN (usually last four digits of your telephone number).

4. Applying for a Job

In Canada, employers usually expect to receive a resume or curriculum vitae and a cover letter that identifies the position you are applying for and summarizes your relevant experience.

Use the library catalogue, <https://vpl.bibliocommons.com/> to find books on writing resumes and cover letters specific to your industry.

To learn about applying for jobs in Canada, use the following guides which are available in print at the Central Library or online at <https://www.vpl.ca/siic/>.

- **Writing Resumes and Cover Letters**
<https://www.vpl.ca/siic/guide/job-search-resources/writing-resumes-and-cover-letters>
- **Getting Canadian Work Experience**
<https://www.vpl.ca/siic/guide/job-search-resources/writing-resumes-and-cover-letters>
- **Networking for Employment**
<https://www.vpl.ca/siic/guide/job-search-resources/networking-for-employment>
- **Learn More About Working in BC and Canada**
<https://www.vpl.ca/siic/guide/job-search-resources/learn-more-about-working-in-bc-and-canada>

5. Getting Help from Industry Sources

Industry Associations

Aviation associations can provide information and assistance. Registration and fees are usually required for membership

- **Canadian Council for Aviation & Aerospace**
<https://www.avaerocouncil.ca/>
- **Aerospace Industries Association of Canada AIAC**
<https://aiac.ca/>
- **British Columbia Aviation Council**
<https://www.bcaviationcouncil.org/>
- **Pacific Aircraft Maintenance Engineers Association (PAMEA)**
<https://amec-teac.ca/pacific/>
- **Careers in Aviation Expos**
<https://www.careersinaviation.ca/>

Industry Journals

Search the Vancouver Public Library catalogue for journals related to your profession. Examples at the Central Library:

- **Canadian Aviator**
Available at the Central Library 629.105 W522 or online at:
<https://canadianaviator.com/>
- **Wings**
Available at the Central Library 629.105 C212 or online at
<https://www.wingsmagazine.com/>

Questions? Please ask the Information Staff in the Central Library, 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 <https://www.vpl.ca/siic/>.