Aircraft Maintenance Engineers & Technicians

A guide for newcomers to British Columbia
1. Working as an Aircraft Engineer and Technician

Job Description

As an **Aircraft mechanic or inspector (NOC 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


As an **Aircraft instrument, electrical and avionics mechanic (NOC 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

Job Outlook in BC

Aircraft mechanics and inspectors (NOC 7315)

<table>
<thead>
<tr>
<th>Expected annual demand growth</th>
<th>Job openings (2015-2025)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.9%</td>
<td>1,440</td>
</tr>
</tbody>
</table>

Occupation Outlook for B.C.:
- % of job openings from replacement: 75%
- % of job openings from expansion: 25%


Aircraft instrument, electrical and avionics mechanic (NOC 2244)

<table>
<thead>
<tr>
<th>Expected annual demand growth</th>
<th>Job openings (2015-2025)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.7%</td>
<td>490</td>
</tr>
</tbody>
</table>

Occupation Outlook for B.C.:
- % of job openings from replacement: 78%
- % of job openings from expansion: 22%

The Employment Outlook for BC provides job openings projections within BC regions for **aircraft mechanics and aircraft inspectors** (NOC 7315):

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Vancouver Island</td>
<td>100</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Lower Mainland / Southwest</td>
<td>920</td>
<td>0.7%</td>
</tr>
<tr>
<td>Thompson-Okanagan</td>
<td>420</td>
<td>2.9%</td>
</tr>
<tr>
<td>Kootenay</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Cariboo</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>North Coast &amp; Nechako</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Northeast</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
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The Employment Outlook for BC provides job openings projections within BC regions for **aircraft instrument electrical and avionics mechanics** (NOC 2244):

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</tr>
</thead>
<tbody>
<tr>
<td>Vancouver Island</td>
<td>50</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Lower Mainland / Southwest</td>
<td>330</td>
<td>0.7%</td>
</tr>
<tr>
<td>Thompson-Okanagan</td>
<td>100</td>
<td>2.9%</td>
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You can learn more about working as an **aircraft mechanic or aircraft instrument, electrical and avionics mechanic** in BC from:

- WorkBC Career Profile, Aircraft mechanics and aircraft inspectors (NOC 7315)
  
  https://www.workbc.ca/Job-Seekers/Career-Profiles/7315
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- WorkBC Career Profile, Aircraft instrument, electrical and avionics mechanics, technicians and inspectors (NOC 2244) https://www.workbc.ca/Job-Seekers/Career-Profiles/2244

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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 average median salary for aircraft mechanics and inspectors is $75,082. The average median salary for aircraft instrument, electrical and avionics mechanics is $71,390.

Job Bank Canada Wage Report, provides hourly wages for aircraft mechanic or aircraft instrument, electrical and avionics mechanics in BC regions:

Aircraft Mechanics and Aircraft Inspectors (NOC 7315)

<table>
<thead>
<tr>
<th>Location</th>
<th>Low</th>
<th>Median</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>20.90</td>
<td>36.00</td>
<td>47.20</td>
</tr>
<tr>
<td>Lower Mainland - Southwest Region</td>
<td>16.25</td>
<td>34.00</td>
<td>40.57</td>
</tr>
<tr>
<td>Thompson–Okanagan Region</td>
<td>20.90</td>
<td>36.00</td>
<td>47.20</td>
</tr>
<tr>
<td>Vancouver Island and Coast Region</td>
<td>20.90</td>
<td>36.00</td>
<td>47.20</td>
</tr>
</tbody>
</table>

Source: Job Bank Canada http://www.jobbank.gc.ca/explorecareers.do
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Aircraft Instrument, Electrical and Avionics Mechanics (NOC 2244)

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<th>Location</th>
<th>Low</th>
<th>Median</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>23.54</td>
<td>34.23</td>
<td>44.04</td>
</tr>
<tr>
<td>Lower Mainland - Southwest Region</td>
<td>23.09</td>
<td>33.76</td>
<td>44.31</td>
</tr>
<tr>
<td>Vancouver Island and Coast Region</td>
<td>26.21</td>
<td>33.89</td>
<td>40.30</td>
</tr>
</tbody>
</table>


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.

Source: Career Cruising database

### 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 (NOC 7315):

- 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: http://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://www.tc.gc.ca/eng/civilaviation/standards/maintenance-aarpb-ame-menu-530.htm

Source: https://www.workbc.ca/Job-Seekers/Career-Profiles/7315

Aircraft Instrument, Electrical and Avionics Mechanics (NOC 2244):

- 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: https://www.workbc.ca/Job-Seekers/Career-Profiles/7315

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.

- Current licensing requirements:  

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:  

Further information about training and apprenticeships:

- **Trades Training BC**  
  [https://www.tradestrainingbc.ca/Trades/Aircraft-Maintenance](https://www.tradestrainingbc.ca/Trades/Aircraft-Maintenance)

- **Industry Training Authority of BC – Apprenticeship Program**  
  [http://www.itabc.ca/program/aircraft-maintenance-technician](http://www.itabc.ca/program/aircraft-maintenance-technician)

- **Trades Training Program for Immigrants**  
  [http://www.itabc.ca/immigrants-trades/overview](http://www.itabc.ca/immigrants-trades/overview)

**Internationally Trained Professionals**

**Prior Learning Assessment and Recognition (PLAR)**

The Prior Learning Assessment and Recognition project helps you obtain an *Attestation of Competence* if you’re already experienced as an Aircraft Maintenance Technician. This will assist you when looking for employment.

- **Canadian Council for Aviation and Aerospace Prior Learning & Recognition:**  
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.

**Job White Pages**

Available in print at the Central Library or online at [http://www.vpl.ca/digital-library/jobfreewaycom](http://www.vpl.ca/digital-library/jobfreewaycom)

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

NOTE: You can only access this database from the Central Library or VPL Branch Libraries. Access to this database is NOT available from home or outside the library.

**Online Job Postings**

- Aerojobs.ca
- AVJobs.com
- British Columbia Aviation Council Job Postings
  [http://www.bcaviationcouncil.org/jobs/](http://www.bcaviationcouncil.org/jobs/)
- Canadian Council for Aviation & Aerospace: jobs
- Careers in Aviation
  [http://www.careersinaviation.ca/](http://www.careersinaviation.ca/)
- Indeed.com
  [http://ca.indeed.com/advanced_search](http://ca.indeed.com/advanced_search)
  [http://ca.indeed.com/Ame-jobs](http://ca.indeed.com/Ame-jobs)
- TechJobs.ca
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 (NOC 7315)**

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

**Aircraft Instrument, Electrical and Avionics Mechanics (NOC 2244)**

- 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.

- **British Columbia Aviation Council**  
  http://www.bcaviationcouncil.org/member-directory/

- **Canadian Aviation Directory**  
  https://www.a-list.ca/

- **Aerospace Industries Association of Canada**  
  http://aiac.ca/member-directory

- **Reference Canada**  
  http://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, http://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 http://skilledimmigrants.vpl.ca/.

- **Writing Resumes and Cover Letters**
  Go to http://skilledimmigrants.vpl.ca
  [Search Writing Resumes and Cover Letters]

- **Getting Canadian Work Experience**
  Go to http://skilledimmigrants.vpl.ca
  [Search Getting Canadian Work Experience]

- **Networking for Employment**
  Go to http://skilledimmigrants.vpl.ca
  [Search Networking for Employment]

- **Learn More About Working in BC and Canada**
  Go to http://skilledimmigrants.vpl.ca
  [Search Learn More About Working in BC and Canada]

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5. Getting Help from Industry Sources

**Industry Associations**

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

- **Aerospace Industries Association of Canada AIAC**
  http://aiac.ca/industry-statistics/
- **Careers in Aviation**
  http://www.careersinaviation.ca/
- **British Columbia Aviation Council**
  http://www.bcaviationcouncil.org/
- **Pacific Aircraft Maintenance Engineers Association (PAMEA)**
  http://pamea.ca/
- **Canadian Federation of Aircraft Maintenance Engineers Associations**
  http://www.cfamea.com
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:  
  [http://canadianaviator.com/](http://canadianaviator.com/)

- **Wings**

  Available at the Central Library 629.105 C212 or online at  

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 [http://skilledimmigrants.vpl.ca/](http://skilledimmigrants.vpl.ca/).