Job Class Profile: Avionics Technician II

Pay Level: CG-32  Point Band: 704-717

<table>
<thead>
<tr>
<th>Factor</th>
<th>Knowledge</th>
<th>Interpersonal Skills</th>
<th>Physical Effort</th>
<th>Concentration</th>
<th>Complexity</th>
<th>Accountability &amp; Decision Making</th>
<th>Impact</th>
<th>Development and Leadership</th>
<th>Environmental Working Conditions</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Points</td>
<td>233</td>
<td>33</td>
<td>25</td>
<td>29</td>
<td>90</td>
<td>108</td>
<td>83</td>
<td>43</td>
<td>64</td>
<td>708</td>
</tr>
</tbody>
</table>

JOB SUMMARY

The Avionics Technician II performs skilled work in the evaluation, testing, installation, and maintenance of aircraft electrical and electronic systems in accordance with Transport Canada Regulations and air worthiness standards.

Key and Periodic Activities

- Inspects, repairs and calibrates all electronic avionics equipment associated with radio communications, radio navigation, the electronic portions of flight and guidance instrumentation and flight control.
- Maintains the inspection procedures manual in accordance with Transport Canada regulations and procedures.
- Oversees all work performed in the aircrafts by the aircraft electrician.
- Ensures all maintenance performed on each avionic product or component part is in accordance with the procedures established by the product manufacturer or Transport Canada.
- Establishes and maintains records of calibration and repair of test equipment.
- Approves source of supply in the purchasing of electronic avionics or electronic testing equipment.
- Prepares correspondence to avionic equipment dealers relating to ordering new equipment or obtaining of parts for existing equipment.
- Oversees all work completed by Avionic Technician I’s.
- Certifies all electronic repairs to instruments as required by Transport Canada.

SKILL

Knowledge

General and Specific Knowledge:
- Transport Canada Regulations.
- Safe Work Procedures.
- Policies and Procedures.

**Formal Education and/or Certification(s):**
- Minimum: Diploma in Aircraft Maintenance Engineering Technology from a Transport Canada approved institution and possession of a valid Transport Canada AME “E” license and endorsements.

**Years of Experience:**
- Minimum: 3 to 4 years.

**Competencies:**
- Ability to follow basic instructions and work processes.
- Ability to apply established techniques to the completion of activities.
- Ability to co-ordinate a range of related work or project activities.
- Ability to develop new solutions to deal with new problems.
- Ability to provide advice to others on how to solve a problem or address an issue.
- Ability to operate a computer to update/maintain aircraft records and systems.
- Ability to write straightforward text.
- Ability to repair or calibrate machinery.
- Ability to operate machinery to tow aircraft and ground equipment.
- Ability to conduct analysis or assessment.

**Interpersonal Skills**
- Interpersonal/communication skills used include listening to information from other people and asking questions to get information to diagnose problems with instrumentation; providing routine information and direction to others and gaining the co-operation of others to complete work, address issues and/or solve problems.
- The most significant contacts are with co-workers in the performance of daily work activities; avionics supervisor for work assignments and advice/guidance on problems or issues: and with the Crew Chief to establish goals and objectives.

**EFFORT**

**Physical Effort**
- The demands of the job occasionally results in fatigue, requiring periods of rest.
- Aircraft servicing requires regularly lifting or moving objects such as oil and fuel hoses weighing less than 10 lbs., and occasionally lifting or moving objects over 50 lbs. when loading and unloading the aircraft is performed.
- Stands on a constant basis in the performance of daily activities. Walking and climbing are performed on a regular basis and activities requiring sitting, driving and working in awkward or cramped positions or body movement when performing repair work are required on an occasional basis.
- Manual or physical activities include performing fine finger or precision work; using hand tools that require accurate control and steadiness; using gross motor skills; using machinery or equipment that requires very controlled movement; operating heavy equipment and maintaining physical balance.
### Concentration

- **Visual** concentration or alertness is required when referring to reference manuals and publications; using hand tools; conducting inspections; operating ground support equipment and installing aircraft parts, soldering or performing wiring repairs.
- **Auditory** concentration or strain is experienced when performing maintenance work on aircraft systems around loud fans and electronics.
- Other sensory demands such as **smell** are important to detect if equipment is overheating on aircraft.
- **Alertness and concentration** are required when performing **repetitive** tasks such as the movement and servicing of an aircraft. **Higher than normal levels of attentiveness or alertness** is required when servicing and moving an Air Ambulance with crew and patients on board.
- Performing avionics assembly and repair requires **eye/hand coordination**.
- **Time pressures and deadlines** are experienced as all aircraft, particularly essential air services such as the Air Ambulance and water tankers during the fire season, must be serviced and returned to service as quickly as possible. **Interruptions and lack of control over work pace** are experienced occasionally and can occur when there is an urgent requirement to service an aircraft such as an air ambulance or when parts to complete a repair are unavailable.
- **Exact results and precision** are required to meet Aircraft Manufacturer’s Specifications and Transport Canada Regulations.

### Complexity

- Work involves the evaluation, testing, installation and maintenance of aircraft electronic equipment which requires performing a series of tasks and activities that are quite different but use similar skills and knowledge.
- Typically, aircraft electrical or electronic system malfunctions require analysis and the application of troubleshooting techniques and test procedures to resolve the problem in a timely and cost effective manner.
- Reference material to assist in addressing problems, challenges and issues include aircraft manufacturer’s maintenance and wiring manuals; maintenance control manual; Canadian Aviation Regulations; technical representatives and advice and support from supervisor.

### RESPONSIBILITY

#### Accountability and Decision-Making

- Daily work activities are performed independently but within a highly structured and regulated environment.
- Supervisory approval is required to requisition major parts or to perform aircraft repairs that would result in significant downtime of the aircraft.
- Problems or issues can be referred to the supervisor.
- Discretion and judgement is exercised when troubleshooting problems, performing maintenance on aircraft and when certifying the airworthy condition of all electronic repairs made to instruments, as required by Transport Canada.
## Impact

- Work results can have a positive impact within the immediate work area; department; organization; and on clients/patients/general public.
- Work also impacts resources such as equipment; processes and systems; information; finances; material resources; human resources; health and safety and corporate image when the electrical avionics equipment in government aircraft is repaired on a timely basis and returned to service in an airworthy condition to ensure essential services are not disrupted.
- Mistakes or errors can result in delays in aircraft returning to service; disruption of essential air services such as air ambulance or fire fighting services; increased financial costs if equipment is not maintained and functioning properly; health and safety issues for passengers, patients and crew if aircraft is not airworthy; and a negative impact on the corporate image.
- Aircraft maintenance work is highly monitored and controlled by regulations. Mistakes/errors are typically resolved within hours of identification to ensure airworthiness of aircraft.

## Development and Leadership of Others

- Not responsible for the supervision of staff.
- Typically required to provide advice, guidance and mentoring to Avionics Technician I’s and to certify that work is performed in accordance with government regulations.

## WORKING CONDITIONS

### Environmental Working Conditions

- There is a requirement to wear safety equipment such as safety glasses; gloves; shoes; safety harness when working at heights and hearing protection is required when engines are running.
- The likelihood of minor cuts, bruises, abrasions or minor illnesses is moderate. Fractures or partial/total disability is limited.
- There is exposure to noise from fans, aircraft engines and rivet guns; fumes from aircraft jet engines; hazardous cleaning chemicals; bodily fluids and odours when working on Air Ambulance aircraft; dangerous heights when working on top of an aircraft; awkward or confining workspaces when working in an aircraft; physical danger when aircraft engines and propellers are running and adverse weather conditions when working outside.