

Job Class Profile: Avionics Technician III

Pay Level: CG-34 **Point Band:** 742-765

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	3	4	6	4	5	4	2	6	
Points	233	50	25	29	120	108	83	43	64	755

JOB SUMMARY

The Avionics Technician III maintains, inspects and repairs aircraft electrical and electronic systems as per manufacturer's specifications and Transport Canada Regulations.

Key and Periodic Activities

- Repairs/modifies equipment and systems associated with radio communications, radio navigation and the electronic portions of flight and guidance instrumentation and flight control.
- Ensures the proper functioning of electrical avionics equipment in government aircraft and certifies the adequacy and airworthiness of all electronic repairs to instruments as required by Transport Canada.
- Inspects, overhauls, tests and calibrates radio communication, navigation, flight and guidance systems through the use of manual and computerized equipment.
- Provides advice and guidance to new and/or existing employees. Ensures work is performed in accordance with government regulations.
- Performs Air Traffic Control Transponder performance checks to ensure the integrity of the aircraft altitude reporting system and positions as required by Transport Canada.
- Completes all required maintenance records and/or technical reports in accordance with Transport Canada Regulations.

SKILL

Knowledge

General and Specific Knowledge:

- Transport Canada Regulations.
- Maintenance Control Manual.
- Safe Work Procedure.s
- 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: 4 to 5 years.

Competencies:

- Ability to follow basic instructions and work processes.
- Ability to apply established techniques to the completion of activities.
- Ability to provide advice to others on how to solve a problem or address an issue.
- Ability to interpret maintenance and technical manuals and wiring diagrams to solve technical problems.
- Ability to operate a computer.
- Ability to write straightforward text.
- Ability to repair or calibrate machinery.
- Ability to operate machinery.

Interpersonal Skills

- Interpersonal/communication skills used include listening to information from other people and asking questions to get information; 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; supervisor for work assignments and advice/guidance on problems or issues and occasionally with technical representatives for support.

EFFORT

Physical Effort

- The demands of the job occasionally results in fatigue, requiring periods of rest.
- Lifting or moving aircraft parts weighing less than 10 lbs., is performed on a regular basis and lifting or moving objects weighing 10 to 25 lbs. is occasionally required.
- Stands on a regular basis in the performance of daily activities. Activities requiring sitting, walking, climbing, driving and working in awkward or cramped positions or body movement are performed occasionally.
- Manual or physical activities include regularly using hand tools that require accurate control and steadiness and machinery or equipment that requires very controlled movement.

Concentration

- **Visual** concentration or alertness is required when performing computer work; operating test equipment and hand tools; conducting inspections; operating ground support equipment and installing aircraft parts.
- **Auditory** concentration or strain is experienced when working on aircraft systems and listening for unusual sounds to detect problems.
- 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 installation of aircraft parts. **Higher than normal levels of attentiveness or alertness** is required when ground running an aircraft for maintenance purposes on the hanger ramp to ensure the health safety of others working in the same area.
- Performing electronic/electrical repairs to aircraft systems requires **eye/hand coordination**.
- **Time pressures and deadlines** are experienced as all aircraft, particularly essential air services such as the Air Ambulance, 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 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 maintaining, inspecting and repairing aircraft electrical and electronic systems 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 to solve the problem.
- 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 co-workers and supervisor.

RESPONSIBILITY

Accountability and Decision-Making

- Daily work activities are performed independently but within a highly structured and regulated environment.
- Discretion and judgement are exercised when making decisions around the electrical and electronic repair requirements of an 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 the air ambulance or water tanker for fire related 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 and problems/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 and guidance to new and/or existing employees and to ensure 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; and a safety harness when working at heights.
- The likelihood of injury or illness resulting from hazards in the job is limited.
- There is exposure to noise from other aircraft; fumes from aircraft jet engines; hazardous cleaning chemicals; bodily fluids, waste and infectious diseases when working on an air ambulance; dangerous heights when working on top of an aircraft; awkward or confining workspaces when working in an aircraft; and physical danger when aircraft engines and propellers are running.