

Job Class Profile: Aircraft Metal Worker II**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 Aircraft Metal Worker II performs work in the inspection, repair, modification and certification of aircraft structures.

Key and Periodic Activities

- Performs structural inspections on all Government Aircraft for structural damage such as cracks, corrosion, etc., to ensure structural integrity of aircraft for crew and passengers.
- Assesses structural damage to determine repairs required to ensure air worthiness of aircraft in accordance with the Structural Repair Manual or by liaising with Aircraft Manufacturer and/or Design Approval Representatives.
- Reviews repair drawings for all structural repair work required on aircraft. Advises proper authorities of problems with repair drawing to ensure a proper structural airworthy repair. May redesign drawings to overcome problems and solicit manufacturer's approval to proceed with repair work.
- Performs structural modifications (fabrication and installation).
- Certifies conformity of structural work to manufacturers' specifications and Transport Canada approved drawings and repair schemes.
- Orders all structural metals and aircraft components necessary to carry out repairs in accordance with Maintenance Control Manual and Transport Canada Airworthiness Manual.
- Assigns and supervises structural modification work and changes. Ensures employees are following safe work practices and equipment is being used properly.
- Prepares and paints aircraft surface and performs other techniques to control corrosion.
- Operates and maintains all tools and sheet metal equipment. Ensures equipment is in good working order.
- Participates in training sessions to keep current on the latest techniques for different structural repairs.
- Performs visual inspections of exposed structure and components at various intervals (5000/300/50 hours).
- Assesses and repairs equipment such as engine stands, etc., used at all provincial bases, as required.

SKILL

| Knowledge |
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| <p>General and Specific Knowledge:</p> <ul style="list-style-type: none"> — Transport Canada Regulations. — Maintenance Control Manual (Structural Repair Manual). — Transport Canada Air Worthiness Manual. — Safe Work Practices. <p>Formal Education and/or Certification(s):</p> <ul style="list-style-type: none"> — Minimum: Diploma in Aircraft Maintenance Engineering Technology from a Transport Canada approved institution and possession of a valid Transport Canada Aircraft Maintenance Engineer “S” license and endorsements. <p>Years of Experience:</p> <ul style="list-style-type: none"> — Minimum: 4 to 5 years <p>Competencies:</p> <ul style="list-style-type: none"> — 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. — Ability to write straightforward text such as a memo or simple letter. — Ability to repair or calibrate and operate machinery. |
| Interpersonal Skills |
| <ul style="list-style-type: none"> — Interpersonal/communication skills used include listening to information from other people and providing routine information and direction to others. — The most significant contacts are with Design Approval Technicians to design repair drawings required to perform structural repair work on aircraft that is outside the scope of the Structural Repair Manual; Aircraft Manufacturer to repair parts that cannot be manufactured in-house and to design repair drawings; and with employees from other provincial facilities to acquire materials and/or tools required to perform repairs. |

EFFORT

| Physical Effort |
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| <ul style="list-style-type: none"> — The demands of the job occasionally results in fatigue, requiring periods of rest. — Lifting or moving equipment and components weighing 10 - 25 lbs. is performed on a constant basis in the performance of daily activities; lifting or moving objects 25 – 50 lbs. is a regular requirement and lifting or moving objects over 50 lbs. is performed on an occasional basis. — Stands constantly when removing and installing rivets; using hand tools such as a drill and shop equipment and when forming material. Working in awkward or cramped positions using various body postures is required when removing and reinstalling parts located in |

awkward areas of the aircraft. Activities requiring sitting, walking, climbing and driving are performed occasionally.

- Manual or physical activities include constant fine finger or precision work, using hand tools that require accurate control and steadiness and using gross motor skills on a constant basis when performing structural repair work.

Concentration

- **Visual** concentration or alertness is required when operating power tools such as a drill; performing structural inspections of aircraft; reviewing manufacturer's repair drawings and when installing fasteners to attach repair materials, such as sheet metal to an aircraft, to ensure repair meets exact tolerance requirements as determined by the aircraft manufacturer and Transport Canada Regulations.
- **Auditory** concentration or strain is experienced when interacting with other employees in a noisy environment to perform structural repairs.
- Other sensory demands such as **smell** is important when working in the fuel tank to ensure there are no fumes present.
- All structural repair work requires **eye/hand coordination**.
- **Alertness and concentration** are required when performing repetitive tasks such as drilling to ensure that parts do not get damaged, as damage could impact the safety of the aircraft. **Higher than normal levels of attentiveness or alertness** for the health and safety of others is required when employees are working in the fuel tank to ensure all appropriate safety requirements such as a fresh air supply, spotter and emergency equipment are in place.
- **Time pressures and deadlines** are experienced as structural damage to the aircraft requires that the aircraft be removed from service until it is returned to air worthy condition. Essential services such as the Air Ambulance or Water Tankers must be repaired and returned to service as soon as possible. **Interruptions and lack of control over work pace** can occur with competing priorities as the Air Ambulance takes priority over all other jobs in progress; unavailability of parts, repair schemes for structural work or advice from manufacturer.
- **Exact results and precision** are required when installing fasteners and when drilling, as drilling tolerance is critical for strength and integrity of the repair.

Complexity

- Work involves performing inspection, repair, modification and certification of aircraft structures which requires performing a series of tasks and activities that are quite different but use similar skills and knowledge.
- The availability of repair drawings and material for repairing older aircraft causes time challenges for getting aircraft returned to service.
- Reference material to assist in addressing problems, challenges and issues include Transport Canada Air Worthiness Manual; Structural Repair Manual; manufacturer repair drawings and/or support from Design Approval Representatives and advice and guidance from the supervisor.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are performed in a highly structured and regulated environment.
- Daily work activities are carried out independently.
- Employees have authority to order repair materials such as structural metals and aircraft components from the storeroom.
- Supervisory approval is required for all purchasing.
- Discretion and judgement is exercised when making decisions around the structural repair requirements of an aircraft and when performing the final inspection to certify the airworthiness of an aircraft after maintenance and repair work is completed.

Impact

- Work results can have a positive impact within the immediate work area; department; organization and on clients/ patients/general public.
- Impact is felt on resources such as equipment; processes and systems; information; finances; material resources; human resources; health and safety and corporate image when the aircraft structure 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 services such as the air ambulance or water tanker for fire related services; increase financial costs if equipment is not maintained properly; health and safety issues for passengers, patients and crew if aircraft is not airworthy; and a negative impact on the corporate image.
- Work tasks and activities are highly monitored and controlled and problems/errors are typically resolved within hours of identification.

Development and Leadership of Others

- Not responsible for supervision of staff.
- Can assign work to other maintenance personnel, as required, and provide advice and guidance on aircraft structural repair work.

WORKING CONDITIONS

Environmental Working Conditions

- There is a requirement to wear safety equipment such as a respirator when performing work in a fuel tank; safety harness when working at heights; ear protection when using air driven tools; and other general safety equipment, as required. Special precautions such as a spotter, air quality monitoring and other emergency equipment must be in place when working in a fuel tank.
- The likelihood of injury or illness resulting from hazards in the job is significant.
- Exposed to dirt, dust, filth or garbage; fumes; limited ventilation and lighting; hazardous chemicals and toxic or poisonous substances; bodily fluids and waste and infection diseases when working on an air ambulance; dangerous heights when working on top of an aircraft; wet or slippery surfaces; awkward or confining workspaces when working in an aircraft; sharp objects; and heavy machinery, etc.