



IDENTIFICATION

Department	Position Title	
Infrastructure	Heavy Equipment Mechanic	
Position Number	Community	Division/Region
33-7744	Fort Smith	South Slave

PURPOSE OF THE POSITION

The Heavy Equipment Mechanic (HEM) contributes to the safe and reliable operation of the South Slave Airports (Fort Smith, Hay River, Fort Resolution, and Fort Providence) by performing maintenance, repairs, and reconditioning to all mobile equipment and stationary power units, when required assist with airfield maintenance duties and checks.

The Government of the Northwest Territories (GNWT) owns and operates all airports in the Northwest Territories (NWT). The Airports Division has the responsibility to ensure that airports facilities are in place to meet the demand of the air industry, and that those airports are operated according to federal regulations and standards.

SCOPE

The HEM is located at the Fort Smith Airport and reports to the Supervisor Surface & Mobile. This position implements a planned service, maintenance and repair program for all mobile equipment and stationary power units at Airports in the South Slave Region and utilizes the Computerized Maintenance Management System to track inventory and work orders.

The HEM assists with performing and reporting runway condition reports, daily physical inspections, and pre-flight checks as required. The HEM will also assist with airport maintenance as required such as snow removal, ice control, FOD control, etc.



RESPONSIBILITIES

1. Plans, organizes and implements the maintenance program for the airport mobile equipment and stationary power units.

- Formulates and implements work programs and develops work methods, procedures and acceptance criteria.
- Establishes operation and maintenance costs, and capital costs of new systems, equipment and installations.
- Carries out emergency repairs and makes alternative arrangements in response to equipment failures, so as to minimize the impact on airport operations.
- Ensures proper completion and entry of Work Orders and Work Requests following the Computerized Maintenance Management System (CMMS) on a timely and efficient basis to allow for on-going evaluation of equipment condition.
- Prepares requisitions for materials and supplies.
- Prepares and administers maintenance contracts, inspects completed work, and Recommends payment of invoices.

2. Services, reconditions, and repairs mobile equipment and stationary power units as required and in accordance with maintenance schedules.

- Carries out fault diagnoses to determine the cause and extent of vehicle or unit failure.
- Dismantles components such as engines, transmissions, differentials, electrical equipment, hydraulic systems, air systems, etc.
- Identifies parts required and preparing parts orders, replacing components, and reassembling components and adjusting to OEM specifications.
- Replaces and restores faulty and defective components and sub-component parts.
- Services equipment and power units in accordance with maintenance schedules.
- Measures surfaces and refurbishing by polishing, cleaning and painting components on equipment as required.

3. Manages a preventative maintenance program to reduce early failure and carrying out major overhauls to mobile equipment and stationary power units.

- Conducts preventative maintenance servicing using preventative maintenance program
- Diagnoses faults in components and determines restoration requirements.
- Checks, adjusts, dismantles, refurbishes, replaces, and reassembles components to original specifications in accordance with service manuals.
- Cleans and paints equipment as required.
- Tests mobile equipment and stationary power units.



Performs other maintenance duties.

- Welding, brazing, and soldering.
- Completes service reports.
- Maintains shop equipment and tools.
- Assists operators by relating required maintenance procedures.
- Keeps work area clean and free of safety hazards.

4. Maintains associated records and implements approved standards and practices.

- Completes work orders and identifies parts and supplies used.
- Records and reports defects and potential for equipment and power unit failure to the appropriate supervisor.
- Recommends and prepares requisitions for parts and materials.
- Completes parts and materials stock control records.
- Prepares condition reports based on observations from inspections, experience, and knowledge with recommendations for repair, replacement, or surplus of unit.

5. Provides support functions.

- Maintains a safe and orderly work environment.
- Assists in snow removal or ice control duties during emergencies.
- Supervises and trains apprentices and casual staff as required.
- Advises equipment operators on the proper use of equipment.
- Provides mechanical support and assistance at remote sites.
- Welds, forms, builds and repairs metal sheeting, frames and parts.
- Performs and reports runway condition reports, daily physical inspections, and pre-flight checks as required using airport reporting systems (AIM, TRACR, Paper records)
- As required, assists with airport maintenance such as snow removal, ice control, FOD control, etc.

6. Travelling to Airports in South Slave to provide service and repairs to mobile equipment and Stationary Power Units.

- Conducts regular inspections, tests, checks and verifications on equipment condition and performance.
- Conducts preventative maintenance servicing using preventative maintenance program.
- Carries out fault diagnoses to determine the cause and extent of vehicle or unit failure.
- Carries out emergency repairs and makes alternative arrangements in response to equipment failures, so as to minimize the impact on airport operations.
- Maintains records of materials spent in preventative maintenance using CMMS.
- Incumbent will have to travel to communities in the South Slave Region to perform emergence repairs on airport equipment throughout the year.



WORKING CONDITIONS

Physical Demands

All of the duties require some level of physical effort. Most include strenuous physical effort for the full duration of the workday. The effort would include heavy lifting, stretching, reaching, operation of tools and other heavy equipment. Both upper and lower body physical strength and agility is required.

Environmental Conditions

Although most of the duties are conducted within a heated and ventilated workshop, there will be some requirement to conduct these duties in the field, outdoors, in extreme summer and winter weather conditions. All duties will include exposure to fumes, fuels, oils, lubricants, other solvents and somewhat dangerous or hazardous working conditions.

Sensory Demands

All five senses are used in all duties to investigate and determine the nature of problems in equipment servicing and repair. Attention of all senses, in particular hearing, sight, smell, and must be paid during the course of the work, to ensure the safety of the HEM and co-workers.

Mental Demands

Incumbent will be required to travel in the South Slave Region throughout the year to perform preventive maintenance on airport equipment. Travel will be up to 5 days in duration, approximately 6 times per year. Travel by road in winter and summer settings, and staying in hotels away from home community, up to a work week.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of all equipment, from heavy to light, mobile equipment to stationary units such as motor graders, generator sets, runway sweepers, etc.
- Knowledge of standard repair methods, tools, equipment and techniques.
- Ability to sign off equipment.
- Ability to mentor and train apprentice mechanics.
- Ability to locate and diagnose mechanical problems.
- Ability to interpret diagrams, service manual, parts manual, repair manual and specifications.
- Ability to operate equipment for test purposes.
- Ability to complete written estimates, shop repair orders, condition reports, and other reports associated with equipment repair.
- Ability to effectively communicate with supervisor and clients to perform the required work.
- Teaching, supervisory and communication skills to train apprentice mechanics.



- Time management and organization skills to estimate resource requirements for repairs and to complete the necessary shop repair orders and condition reports.
- Ability to prioritize work based on operational demand and decision-making ability.
- Verbal communication skills.
- Ability to relay information on equipment repair and service requirements to operators and Field Supervisors.
- Written communication skills.
- Ability to complete estimates, shop repair orders, condition reports and other paperwork associated with equipment service and repair. Occasional contact is with the equipment operators to give maintenance instruction on newly repaired equipment.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

Journeyman Heavy Equipment Mechanic Certification (Ticket) with Interprovincial Red Seal including one year experience post-Journeyman certification.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

A Class 3 Driver's License.

A full set of mechanic hand tools of proven quality.



Position Security (check one)

- ☒ No criminal records check required
- ☐ Position of Trust – criminal records check required
- ☐ Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applicable)

- ☐ French required (must identify required level below)

Level required for this Designated Position is:

ORAL EXPRESSION AND COMPREHENSION

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

READING COMPREHENSION:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

WRITING SKILLS:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

- ☐ French preferred

Indigenous language: Select language

- ☐ Required
- ☐ Preferred