Job Class Profile: Radio Maintenance Technician

Point Band: Pay Level: **CG-28** 578-621

| | | | | | | Accountability | | Development | Environmental | |
|--------|-----------|---------------|-----------------|---------------|------------|----------------|--------|-------------|---------------|--------|
| | | Interpersonal | | | | & Decision | | and | Working | Total |
| Factor | Knowledge | Skills | Physical Effort | Concentration | Complexity | Making | Impact | Leadership | Conditions | Points |
| Rating | 3 | 4 | 4 | 5 | 3 | 3 | 3 | 2 | 6 | |
| Points | 140 | 67 | 25 | 24 | 90 | 65 | 62 | 43 | 64 | 580 |

JOB SUMMARY

The Radio Maintenance Technician performs skilled technical work in coordinating the radio communication system throughout the Province for the Department of Natural Resources.

Key and Periodic Activities

- Manages and coordinates all technical and related problems of the Province's VHF radio communication system to ensure maximum efficiency; initiates required updating and design changes to meet the requirements of the system; facilitates contingency planning and oversees the work of contract services.
- Liaises with other government staff using the system; develops and monitors procedures for system use; recommends and explains system changes to officials of the department.
- Acts as chief technical communication expert for the department, trains others in proper systems use and its capabilities; heads the communication system during major forest fires and ensures forestry personnel have adequate radio communication in an emergency.
- Administers the communications installation, maintenance and repair program; inspects and evaluates contract work; ensures the provincial communication system is properly serviced; maintains communication systems inventory and ensures that adequate supplies are available to meet service requirements.
- Performs installation, calibration, overhaul and repair of field, mobile, portable and remote tower radio equipment and generators.
- Travels throughout the province to carry out servicing, installation and repair work.

SKILL

Knowledge

General and Specific Knowledge:

- Radio communications
- Policies and Procedures
- Safe Work Procedures

Formal Education and/or Certification(s):

- Minimum: High School Diploma. Course work in electronics and radio operation and

repair.

Years of Experience:

— Minimum: 3 to 5 years

Competencies:

- Follow basic instructions and work processes
- Apply established techniques to the completion of activities
- Develop new solutions to deal with new problems
- Provide advice to others on how to solve a problem or address an issue
- Operate a computer
- Write straightforward text
- Repair or calibrate machinery
- Operate machinery
- Conduct analysis or assessment

Interpersonal Skills

- A range of interpersonal skills are used including listening to information from departmental staff, equipment suppliers and others in the radio communications field; asking questions to suppliers, manufacturers and peers to get information; providing routine and/or complex information and direction to others; coaching or mentoring new employees on the proper use and care of radio communications equipment and gaining the cooperation of others to get repair work done in a timely manner and address issues regarding radio telecommunication problems.
- Communications occur with employees within the immediate work area, department, other departments and outside agencies and include other technicians and staff utilizing VHF radios (i.e. forestry personnel during forest fires), supervisor/manager, sales representatives and suppliers and contractors.
- The most significant contacts are with the supervisor for advice and guidance on unusual situations; departmental employees/equipment users on the proper use and care of radio communications equipment; and with equipment suppliers and service providers.

EFFORT

Physical Effort

- The demands of the job do not result in fatigue, requiring periods of rest.
- Lifting or moving radios weighing less than 10 lbs. occurs regularly and lifting or moving objects such as repeaters, duplexers and radio antennas weighing between 10 and 50 lbs. is performed on an occasional basis.
- Perform fine finger precision work when using a computer to program radios, write emails and letters, prepare presentations, update the inventory and access the internet; using small hand tools such as screw drivers, pliers, soldering iron, etc to disassemble/assemble equipment and using electronic equipment to analyse radio equipment, electrical currents, etc; using gross motor skills; and using machinery or equipment that requires very controlled movement.
- Manual or physical activities are regularly required and include sitting at a workbench to

repair/program radio equipment; standing or walking while working in remote sites such as tower shacks or mountain tops; climbing mountains and tower structures and driving motor vehicles, all terrain vehicles and snowmobiles.

Concentration

- Visual concentration or alertness is required when repairing and replacing small electronic
- Auditory concentration or strain includes listening for irregularities in radio signals/reception and to radio communications among staff members during emergencies (i.e. forest fires).
- Other sensory demands such as smell are important to identify if equipment is burning out.
- Alertness and concentration are required when programming and installing radios in new
- Time pressures, interruptions, deadlines and lack of control over work pace are experienced when setting up or repairing a repeater site during a forest fire situation.
- **Eye/hand coordination** is required when repairing and replacing small electronic parts.
- **Exact results and precision** are required when repairing or replacing small components such as transistors or diodes inside radio equipment.

Complexity

- Work tasks and activities are different but allow for the use of similar skills and knowledge.
- Work involves performing skilled technical work in coordinating the radio communication system throughout the Province. Work related challenges or problems are typically welldefined, with obvious solutions or which can be addressed by following procedures and/or guidelines.
- A typical problem or challenge is the diagnosis and repair of portable or mobile radios.
- Reference material to assist in addressing problems, challenges and issues include manufacturer manuals; Occupational Health and Safety or Industry Canada Regulations; or consultation with other employees, manager, suppliers or manufacturers.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are generally prescribed or controlled.
- Work assignments are prioritized and performed with a high degree of independence under the general direction of the supervisor.
- Manages and coordinates all technical and related problems of the VHF radio communication system; acts as chief technical communication expert for the Department of Natural Resources and administers the communications installation, maintenance and repair program.
- Supervisory approval is required to make purchases; for overnight travel; and to implement major changes to the radio communications system.
- Discretion and independence of action is exercised for daily travel; equipment write-off; approval of contract work or to replace equipment which may result in a significant cost.

Impact

- Work results can have a positive impact within the immediate work area, department, organization, and on resources such as equipment, processes and systems, human resources; health and safety and corporate image when radio communications equipment is operational and maintained in good condition.
- Mistakes or errors can result in damage to equipment; additional costs to repair or replace equipment; health and safety issues if equipment is not working properly and officers are unable to call for assistance or to communicate with each other.
- Work is performed in accordance with industry standards and national regulations for programming, servicing, repairing and installing equipment and components. Problems or errors, particularly during a forest fire situation, are typically identified and resolved within hours of identification.

Development and Leadership of Others

- Not responsible for the supervision of staff.
- Involved with providing on-the-job advice and guidance to employees in the use and care of the radio communications system and overseeing the work of contract services.

WORKING CONDITIONS

Environmental Working Conditions

- There is a requirement for fall arrest equipment when working on tower structures; eye and hand protection when soldering or working around batteries; and other personal protective equipment as required.
- The likelihood of injury or illness resulting from hazards in the job is limited.
- Exposed to dust when working around helicopters and dirt when working in mountain top tower shacks; glare; fumes from vehicles and helicopters; limited lighting; vibration from vehicles and equipment; hazardous chemicals from wet cell batteries; dangerous heights from helicopters, mountain tops and tower structures; slippery or wet surfaces when working outdoors; electrical shock from AC/DC equipment; awkward spaces when installing mobile radios in vehicle cabs and engine compartments; temperature extremes; adverse weather conditions and frequent travel throughout the province by vehicle and aircraft.