

TITLE: DISTRICT AVALANCHE ASSISTANT

CLASSIFICATION: STO 15
(MAY BE UNDER IMPLEMENTED AT STO 11)

MINISTRY: TRANSPORTATION AND INFRASTRUCTURE

WORK UNIT: WEST KOOTENAY DISTRICT

SUPERVISOR TITLE: DISTRICT AVALANCHE SUPERVISOR

SUPERVISOR POSITION #: VARIOUS

CONTEXT

A primary function of the ministry is to ensure the safe and efficient movement of goods, services and people. The ministry avalanche programs are in place to support these objectives, ensuring the safety of all highway users while minimizing the frequency and duration of avalanche related road closures.

The District administers the road and bridge maintenance contracts, avalanche programs, commercial vehicle safety and enforcement, development approvals, portions of the rehabilitation program, and provides support for the provincial capital program. District Avalanche Programs operate in accordance with the Avalanche Safety Plan and in conjunction with other programs within the District.

Avalanche staff work closely with other ministry representatives, the maintenance contractors and key stakeholders throughout the winter months (October through May) to minimize the risk to the travelling public through avalanche areas. The program is required 24 hours per day, 7 days per week throughout the winter months. The severity of weather and snowpack conditions determine the requirements for avalanche staff to work extended shifts, to be on call or to work on scheduled days off.

JOB OVERVIEW

This position provides an opportunity to work under the mentorship and direction of the District Avalanche Supervisor. The position assists with the maintenance of the avalanche safety program by observing and assessing avalanche activity, terrain, snow and weather conditions in the field on skis or from a helicopter, conducts supervised avalanche forecasting and control activities and is responsible for drafting technical reports on local avalanche program initiatives and research projects for the District Avalanche Supervisor.

ACCOUNTABILITIES

- Performs skilled technical duties in the field for consolidation and evaluation of relevant information for snow stability analysis and avalanche forecasting.
- Monitors a data reporting network of standardized observations to ensure a high level of quality and accuracy. Synthesizes and analyzes information for evaluation of snowpack stability and avalanche hazards.
- Maintains avalanche support facilities by servicing avalanche control equipment and explosive magazines, and ensuring search and rescue caches are maintained to a state of readiness for emergency situations.

- Directs and controls the movement of operational personnel, the traveling public and commercial traffic within the avalanche control/closure/elevated hazard area, according to the level of avalanche hazard to provide acceptable standards of safety.
- Organizes, directs and conducts avalanche search and rescue operations.
- Forecasts avalanche hazard conditions relative to the highway and initiates specific actions and states of alertness for ministry and contracted personnel.
- Works with the Avalanche Team to provide input into the most effective and economic short term avalanche control measure under the given circumstance.
- Organizes and assembles crews, equipment and materials for road closures and patrols, explosive delivery, while ensuring that appropriate safety measures are taken. Conducts safe dud search and disposal activities in accordance with safety procedures under supervision as required.
- Performs avalanche control measures, using explosives and helicopter bombing to stabilize avalanche hazards.
- Presents avalanche training programs to ministry and contracted personnel and presents information regarding the avalanche program to the public.
- Drafts technical reports on local snow avalanche programs and research projects.
- Provides support to the Weather Network Program staff by assisting in conducting routine minor maintenance and monitoring of the electronic data reporting network as required.

JOB REQUIREMENTS

Note: If the following requirements are not fully met, the position can be under-implemented at the STO 11 level. The full qualifications must be achieved within 2 winter seasons to be fully implemented at the STO 15 level.

Avalanche Risk Management Experience

- To be implemented at a STO15 level, you must have:
 - A) Post-secondary technical diploma, or higher, in the field of forestry, geography, engineering or meteorology with an emphasis on avalanche phenomenon and the properties of snow or other related fields with two winter seasons of experience in an operational avalanche program which include observations, snow stability analysis, avalanche hazard evaluation, avalanche control and training of staff/contractors and members of the public preferred; OR
 - B) Grade 12 with four winter seasons of experience in an operational avalanche program which include observations, snow stability analysis, avalanche hazard evaluation, avalanche control and training of staff/contractors and members of the public;
- To be under-implemented at a STO11 level, you must have:
 - Grade 12 with two winter seasons of experience in an operational avalanche program which include observations, snow stability analysis, avalanche hazard evaluation, avalanche control and training of staff/contractors and members of the public;

Date: October 15, 2019

Training Certificates/Professional Associations

- Must be registered, or be eligible to be registered, with the Canadian Avalanche Association as a professional member in good standing.
- Canadian Avalanche Association (CAA) certification (or CAA prior learning equivalency assessment) in:
 - Minimum Level 1, with Level 2 required for higher implementation
- WorkSafe BC Occupational First Aid Level 2, or equivalent;
- Incident Command System 100 is preferred.

Blasting Certification and Explosives Experience

- Avalanche Control Blasting Certification - for Hand Charge and Helicopter Control Missions - acceptable to WorkSafe BC or other equivalent Canadian regulatory agency certification - preferred.
- Knowledge of various provincial and federal regulations including, but not limited to; the *Transportation of Dangerous Goods Act*, Federal and Provincial explosives and blasting regulations, WorkSafe BC regulations and guidelines, and Workplace Hazard Information Management Systems (WHMIS).

Other Requirements

- Operational field experience making and collecting weather, snowpack, and avalanche activity observations for avalanche forecasting and risk management.
- Computer and communication skills to conduct data analysis and to write clear and concise technical reports.
- Valid Class 5 BC Driver's Licence.
- Physically fit to regularly lift in excess of 20kg, to climb towers in excess of 4m high, to travel on foot in the mountains in winter and experience traveling in avalanche terrain in a variety of conditions.
- Willingness to safely work outdoors in adverse winter weather.
- Willingness to be on call 24/7 during elevated avalanche hazard forecast levels.
- Willingness to speak in public.
- Working knowledge of snow and avalanche management techniques including avalanche control measures and search and rescue procedures. Practical knowledge of meteorology, glaciology, and instructional techniques.
- Ability to instruct effectively, work independently and respond effectively in emergency situations.
- Experience with helicopter field work preferred.
- Successful completion of security screening requirements of the BC Public Service, which may include a criminal records check, and/or Criminal Records Review Act (CRRA) check, and/or enhanced security screening checks as required by the ministry.

Note: May be asked to respond to Provincial Emergency Program callouts for mutual aid, however this is not a job requirement and participation would be at the discretion of the individual/Supervisor.

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BEHAVIOURAL COMPETENCIES

- **Analytical Thinking** is the ability to comprehend a situation by breaking it down into its components and identifying key or underlying complex issues. It implies the ability to systematically organize and compare the various aspects of a problem or situation, and determine cause-and-effect relationships ("if...then...") to resolve problems in a sound, decisive manner. Checks to ensure the validity or accuracy of all information.
- **Relationship Building** is working to build or maintain ethical relationships, networks or contacts with people who are, or may be, potentially helpful in achieving work-related goals and establishing advantages. These people may include customers, clients, counterparts, colleagues, etc.
- **Service Orientation** implies a desire to identify and serve customers/clients, who may include the public, co-workers, other branches/divisions, other ministries/agencies, other government organizations and non-government organizations. It means focusing one's efforts on discovering and meeting the needs of the customer/client.
- **Teamwork and Cooperation** is the ability to work cooperatively within diverse teams, work groups and across the organization to achieve group and organizational goals. It includes the desire and the ability to understand and respond effectively to other people from diverse backgrounds with diverse views.
- **Initiative** involves identifying a problem, obstacle or opportunity and taking appropriate action to address current or future problems or opportunities. As such, initiative can be seen in the context of proactively doing things and not simply thinking about future actions.