POSTING DATE: 5 September 2014

JOB TITLE: Subject Matter Expert – Framework for Avalanche Risk Assessment and Mitigation (FARAM) Project

EFFECTIVE: 1 October 2014

CONCLUDES: Not later than March 31, 2016

REPORTS TO: Principal Investigator, FARAM Project

OVERVIEW OF CANADIAN AVALANCHE ASSOCIATION (CAA)

The CAA is a not-for-profit, non-government organization that serves and supports the diverse community of professional avalanche operations in Canada.

The purposes of the CAA are:

- To represent persons who are professionally engaged in avalanche work in Canada.
- To establish and maintain high standards of professional competence and ethics for persons engaged in avalanche safety programs.
- To exchange technical information and maintain communications between persons engaged in avalanche safety programs.
- To establish and maintain standards of education in avalanche safety.
- To organize training courses in all aspects of avalanche hazard control for professionals.
- To promote and act as a resource base for public awareness programs about avalanche hazards and safety measures.
- To promote research and development in avalanche safety, and
- To carry out such complementary purposes as are not inconsistent with these objects.

The Board of Directors, with input from the Executive Director, establishes policy and strategic direction, and determines or approves the goals for programs and services delivered by the CAA.

The CAA is staffed with highly skilled and dedicated employees who achieve their individual successes by working as a team to exceed expectations as they deliver programs and services to members, a wide variety of private, public and non-government organizations, and individuals involved in professional avalanche operations in Canada and around the world.

Some CAA staff may also provide specified administrative or support services to the Canadian Avalanche Centre, a sister non-government organization that provides avalanche safety programs and services for the public.
JOB SUMMARY/OVERVIEW

Funded through a New Initiatives Fund grant from the National Search and Rescue Secretariat, the Framework for Avalanche Risk Assessment and Mitigation (FARAM) Project will update and expand essential reference materials for land and SAR managers, and avalanche professionals in Canada. The materials will cover best practices, including recognition of avalanche problems, an overview of regulation and laws concerning activities in avalanche terrain, and identification of context-appropriate methods and procedures for avalanche risk assessment and mitigation.

The primary role of the Subject Matter Expert is to work on an expert panel to revise and update existing technical material and incorporate new technical material into the Framework for Avalanche Risk Assessment and Mitigation. More precisely, the panel will update the CAA’s Guidelines for Snow Avalanche Risk Determination and Mapping and The Land Manager’s Guide to Snow and Avalanche Hazards. In addition, they will develop new guidelines with consideration to proposed new content areas:

- The Conceptual Model for Avalanche Hazard (Statham et al., 2010).
- Avalanche terrain classification systems.
- The effects of climate change.
- Rule-based decision support tools.

JOB FUNCTIONS

Responsibilities

Reporting to the Principal Investigator, the Subject Matter Expert will:

- Attend an in-person meeting tentatively scheduled for 18 October 2014.
- Work with other subject matter experts to update existing materials and develop new guidelines focused on natural science and engineering aspects of avalanche risk assessment and mitigation, including:
  o a scan for issues with existing techniques;
  o identification of new techniques for inclusion;
  o the impact of climate change on existing and new techniques;
  o the potential for incorporation of ISO risk management standards and specific direction for doing so; and
  o comparison with other natural hazard domains and international practice.
- Ensure developed content and guidelines pass peer review.

QUALIFICATIONS

Education:

- Level 3 graduate of the CAA’s Industry Training program (highly desired);
- Practicing Engineer or Geoscientist registered with one of Canada’s provincial professional organizations;
AND/OR
- Graduate degree in physical or social science.
- Or demonstrable equivalencies

Skills/Experience:

- Expert-level competency in one or more of the following
  o Technical material in the existing Guidelines for Snow Avalanche Risk Determination and Mapping and The Land Manager’s Guide to Snow and Avalanche Hazards.
  o The Conceptual Model for Avalanche Hazard (Statham et al., 2010).
  o Avalanche terrain classification systems.
Climate change.
- Rule-based decision support tools.
- Avalanche mapping
- GIS and cartography
- SAR Experience (desired)

Assets/Special Abilities:
- Working in a team environment
- Group decision making (Solution-oriented, experience building consensus from divergent views)
- Flexibility
- Excellent verbal and written communications skills
- Exceptional interpersonal and collaborative skills
- Self-motivated
- Able to work in a stressful and demanding environment
- Knowledge of avalanche safety issues and needs

Remuneration:
- Subject to conditions of contract with NSS.

Deadlines and Process:
- A formal application detailing the candidate’s skills and experience should be sent to the hiring committee SAR_NIF_Hiring@AvalancheAssociation.ca by no later than Friday, 19 September 2014.

Conflicts of interest:
Canada’s professional avalanche practitioners often occupy several concurrent roles in which there may be real, perceived or potential conflicts of interest. In some cases, once declared, conflicts of interest may be addressed without compromising the integrity of the applicant, the CAA, this project or other interests. The CAA encourages all applicants to note any potential conflicts of interest they may have and if possible to suggest remedies to allow for the candidate’s application to proceed.