

GMS SPRAT Course Outline



Global Mountain Solutions Inc

Canmore, Alberta

T1W1V1

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Dates

March 29th to April 2nd – Canmore/Calgary, Alberta

April 26th to April 30th – Squamish, BC

May 17th to May 21st – Canmore/Calgary, Alberta

May 24th to May 28th – Golden, BC

What is SPRAT?

SPRAT stands for Society of professional rope access technicians. Rope access provides a safe, cost-effective, and efficient means of accessing structures and geologic features for inspection, maintenance, and construction.

The Society of Professional Rope Access Technicians (SPRAT®) based in the United States, is dedicated to promoting the safe development of industrial rope access standards in the US, Canada, Mexico and beyond.

SPRAT supports companies and technicians using rope access with certification programs, regulatory support, networking, and opportunities to participate in developing industry-consensus standards.

For more information on rope access and sprat see:

<http://www.sprat.org>

Course Requirements

Equipment

Appropriate Outdoor/work Clothing

Lunch for each day

Stiff boots

Helmet

Manual

SPRAT Safe Work Practices

Documentation

Registration Form Submitted

Waiver Signed and Submitted

Resume submitted if challenging Level 2

Fees

Course Cost \$1500 plus GST

Manual \$40

SPRAT Membership Fee \$110

Deposit - \$500 (2 weeks before start of course) check mailed to

Box 8540

Canmore, Ab

T1W 2V3

Challenging Level 2

Applicants are open to challenging the Level 2 certification. Sufficient evidence must be shown to instructor and examiner that applicant has the previous hours of work experience meeting or exceeding 500 hours. This must be provided by a resume and be detailed. What was the work, how was rope access used, how many hours, when are general categories to reference

Daily Outline

Day One Introduction Gear preparation Systems Anchor Building Knots Ascending/Descending Practice	Day Two Rope to rope transfer Passing Knots Deviations Re-belays Aid Climbing Practice	Day Three Review previous two days Rescue from ascending Rescue from Descending
Day 4 Rescue Hauling Cross Hauling Review Practice	Day 5 Written Exam Practical Exam Debrief	4 weeks Later Logbook and Certification to be mailed

Objectives

This 40-hour course is intended to prepare candidates for the SPRAT Technician certification. Level II focuses on more advanced rigging required of the Technician working in a wide variety of environments. Self- and team-rescue, including hauling and lowering skills, will be emphasized. Unlike traditional rescue courses, the course focuses on building efficient rescue skills within a small team.

Learning Objectives

Following the course and successful completion of the evaluation, the technician should be able to:

- evaluate the safety of rope access equipment and systems
- perform basic and advanced access techniques
- understand fundamental system analysis
- establish anchor systems

- efficiently perform standard rescue procedures using mechanical advantage and lowering systems

Safety Standards and Documentation

- Review of *Guidelines for Rope Access Work* and relevant legislation
- Qualifications and responsibilities required of each level of Rope Access Technician
- Review of various methods of access and hierarchy of risk
- Documentation including experience logbooks, equipment logs, and job hazard analysis (rope access permit)
- Consistent safety checks
- Insuring proper and effective communication between team members
- Establishing Access, Hazard, and Safe Zones
- Care, Inspection, Use, and Limitations of Equipment

Systems Analysis and Rigging

- Knots: Figure 8 and 9, Double-figure eight, Butterfly, Prusik, Barrel Knot, Double Fisherman's, and Clove Hitch
- Practice advanced rigging skills (structural and load sharing/distributing multi-point anchoring) taking into account fall line, rigging angles, area of work, and terrain
- Application of redirect and rebelay anchors
- Pre-rigging anchors for lowering or pull-through
- Discussion of anchor installation and testing
- Analysis of rope access systems, including fall factors, impact forces, and resultant forces

Technical Rope Access Skills

- Ascent/Descent and change-overs
- Passing knots, deviations, and intermediate anchors (re-belay)
- Rope to rope transfer
- Horizontal aid climbing: point to point and shuffling
- Structure climbing: Overview of horizontal/vertical lifelines, shock absorbing Y-lanyards, and other standard fall protection systems

Rescue

- Risk management, rescue protocol, and casualty management
- Extensive practice with mechanical advantage systems utilizing standard equipment and pulley systems
- Breaking into tensioned fixed ropes with haul systems
- Pitch head hauling
- Converting between lowering and hauling
- Single person rescue pick-off of a descending and ascending casualty

Frequently Asked Questions

What is rope access?

Rope access refers to a set of techniques where ropes and specialized hardware are used as the primary

means of providing access and support to workers. Generally a two-rope system is employed: the working rope supports the worker and the safety rope provides back-up fall protection.

Why use rope access?

Modern rope access equipment, techniques, and training can be combined to produce an exceptionally safe, versatile, efficient, and cost-effective way to solve vertical access problems.

- **Rope access is safe.** Independently-certified rope-access technicians uphold an enviable safety record with no fatalities and few lost time incidents while working on rope.
- **Rope access is versatile.** Technicians can apply the techniques in a wide variety of environments, from confined-space penstocks to massive concrete structures to complicated steel installations. Unlike traditional access methods, custom rope-access solutions can be designed to fit various applications quickly and inexpensively.
- **Rope access is efficient.** Systems are installed and dismantled quickly and often require fewer personnel than traditional access methods. Rapid deployment limits disruption to facility operations by minimizing downtime.
- **Rope access is economical.** Fewer personnel, faster completion, less equipment, and minimal downtime mean lower costs.

Who uses rope access?

- Civil, structural, and geo-technical engineers
- Operations and maintenance workers
- Construction workers and painters
- High-rise window cleaners
- Motion picture and theatrical set personnel
- Tower and antenna installers

What are some examples of common rope access applications?

- Structural inspections and non-destructive examination (NDE)
- Sealant installation and surface preparation
- Sand blasting and pressure washing
- Concrete repair
- Instrument installation
- Painting
- Rock scaling and anchoring
- Photography and cinematography
- Set installation
- Geological surveys

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