# American Alpine Institute Technical Rope Rescue Comprehensive

# Rope Rescue Operations and Technician Technical Self-Rescue for Climbers Advanced Mountain Rescue

#### **Itinerary**

The Technical Rope Rescue Comprehensive will take place in three settings. The first will be in a classroom, where we will look at a variety of systems and discuss the issues surrounding them. The second will be at local crags where we will work in steep and high-angle environments. And the third will be on Mount Baker, where we will address steep and high-angle environments as well as crevasse issues on snow and ice.

Participants will meet daily at 8am at the American Alpine Institute. Most days will run from approximately 8am to approximately 5:30pm. Classroom sessions will take place at the Institute.

Participants may choose to camp at Larabee State Park, located six miles from the Institute or to stay at a local hotel. The Institute can provide daily transportation to and from the Four Points by Sheraton in Bellingham.

Temperatures at front-country steep and high-angle locations in the spring and summer will range from 50 to 80-degrees Fahrenheit. Temperatures in the backcountry may drop to as low as 30-degrees. Rain is not uncommon, even in the middle of the summer, so dress appropriately.

As a side note, students should be aware that this is a concurrent program. There are four parts to the comprehensive program. Some students may only be taking one or two parts, others will take all the parts together.

**Text Book:** Technical Rescue Riggers Guide by Rick Lipke – AAI has library copies of this text available and may have some for sale. If you wish to buy a copy, call prior to the program to confirm. You may also order this online from several companies.

#### Day One (Rope Rescue Level I - Days 1-4):

*Classroom Sessions:* course introduction, safety discussion/rules, NFPA Standards, scene management, systems overview, definitions, ropes and carabiners, friction devices, commands, physics of rope rescue

*Practical Application*: overview of basic knots and hitches, improvised harnesses, patient packaging with and without a harness, rope climbing with prusik system, classic rappel, main and belay demo.

Lodging: front country camp or hotel

#### Day Two:

*Classroom Sessions:* introduction to the politics of rescue, simple litter lowering systems, belay systems, high points, tripod construction, physics of rope rescue, introduction of hybrid two tensioned rope systems.

Field Sessions: high-angle lowering systems with a main line and a belay line Lodging: front country camp or hotel

### Day Three:

*Classroom Sessions:* introduction to helicopter operations, understanding hauling systems, physics of rope rescue

*Field Sessions:* low-angle litter hauling systems with three attendants *Lodging:* front-country camp or hotel

### Day Four (Rope Rescue Level II - Days 4-7):

*Classroom Sessions:* communications, introduction to guiding lines, physics of rope rescue

Field Sessions: steep-angle litter hauling with guiding lines Lodging: front-country camp or hotel

## Day Five:

Classroom Sessions: knot pass with a litter, improvised high-directionals, physics of rope rescue, pick-off techniques (B.C. Pickoff, B.C. Tilt Lift, Panorama Pickoff)

Field Sessions: practical use of improvised highpoints, practice pick-off techniques

Lodging: front-country camp or hotel

## Day Six:

Classroom Sessions: difficult edge issues, pike and pivot techniques, floating focal point systems, physics of rope rescue Field Sessions: practical application of pike and pivot Lodging: front-country camp or hotel

#### Day Seven:

Classroom Sessions: physics of rope rescue, introduction to highline systems including and introduction to reeves (English and Norwegian)

Field Sessions: practical application of highline systems

Lodging: front-country camp or hotel

#### **Day Eight (Technical Self Rescue for Climbers - Days 8-9):**

Field Sessions: ground school techniques – self-rescue knot pass, belay escapes, hauling systems (3:1, 5:1, 6:1), lowering systems (munter, tube-style device, assisted breaking device), rope climbing systems, rappel systems (extended rappel, tandem rappel, counterbalance rappel), multi-pitch transitions Lodging: front-country camp or hotel

# Day Nine:

Field Sessions: practical application in a high angle setting – self-rescue knot pass, belay escapes, hauling systems (3:1, 5:1, 6:1), lowering systems (munter, tube-style device, assisted breaking device), rope climbing systems, rappel systems (extended rappel, tandem rappel, counterbalance rappel), multi-pitch transitions *Lodging:* front-country camp or hotel

#### Day Ten:

*Day Off* – If students wish to practice skills that they learned during the program, they are welcome to borrow gear.

Lodging: front-country camp or hotel

### Day Eleven (Advanced Mountain Rescue - Days 11-15):

Students will arrive at 8am at the American Alpine Institute headquarters for the first day of the Advanced Mountain Rescue portion of the program. This will be a front-country day that includes a comprehensive equipment check. Be sure to bring all of your gear

*Classroom Sessions:* The team will go over several topics including the strength of snow and ice anchors, bolts, two tensioned systems, plaquette systems, the diminishing loop and the San Juan Pickoff.

Lodging: front-country camp or hotel

# **Day Twelve:**

The team will meet at 7am at the American Alpine Institute to prep for the backcountry. If the conditions are not right, this day may be switched with Day Fifteen.

Transportation: If the team decides to go into the backcountry, they will drive approximately 1 hour to the trailhead. From there we will hike approximately 3 miles to a camp at 6,000-feet. Programs in the spring may go to the ski area parking lot instead of the backcountry. This will allow for less time spent on approaches. Field Sessions: review of snow school techniques and snow anchors, introduction to steep angle litter haul and lower with attendants, backcountry patient packaging Lodging: backcountry camp

#### Day Thirteen:

Field Sessions: crevasse rescue comprehensive – in depth study of team rescue as well as self rescue in a crevasse fall scenario; instruction will include descending into the crevasse to perform first aid on the client before hauling him out; systems will include the drop C, 3:1, and 6:1 crevasse rescue hauling systems Lodging: backcountry camp

#### **Day Fourteen:**

*Field Sessions:* The team will work on managing a litter on low-angle snow terrain. Develop techniques to manage litter through a crevasse field and an icefall. Once this is complete, the team will hike out.

Lodging: front-country camp or hotel

## Day Fifteen:

This day may be interchangeable with Day Twelve depending on weather. *Classroom Session:* Discuss a high-end scenario. This scenario will have a pickoff and will require lowering and hauling systems in complex terrain.

Field Sessions: Execute a difficult rescue. Lodging: front-country camp or hotel

# **Weather Options:**

The Cascades are a wet range, and a rescue team has to be prepared for wet conditions. However, sometimes rain and snow is a hindrance to the learning environment. This is especially true if everyone is cold and wet while trying to understand complex concepts. As such, this course has some poor weather options that will still provide participants with significant advanced level experiences.

# **Optional Front Country Day #1:**

Instead of going into the backcountry, the team may spend a significant amount of time working on highlines and reeves at a front-country location. The highline scenario will be designed to go over a serious chasm that will require advanced rigging techniques.

# **Optional Front Country Day #2:**

In the unlikely event that there is a second front-country day, the team will have a second difficult rescue scenario with significantly different problems than the scenario encountered on Day Five.

#### Note:

As the final five days may have up to three days in the backcountry, it's important that your lodging is flexible. We will determine how many days we will go into the backcountry on the first day of Advanced Mountain Rescue so that you are able to make plans.

Due to the significant snowfall in the Cascade range, it is common for the Advanced Mountain Rescue portion of the program to avoid going up onto the flanks of Mount Baker in the Spring. This is because it requires significant road walking. As such, the team commonly does many of the Advanced Mountain Rescue techniques on Spring programs near the Mt. Baker Ski area, commonly as day trips. For summer and fall programs, the team will hike up onto the flanks of Mt. Baker.