**American Alpine Institute**

**Alpine Mountaineering and Technical Leadership**

**Part 4**
**Mount Waddington Expedition**

**Curriculum**

**Alpine Mountaineering Skills:**

- development of mixed climbing skills – participants will have to climb 5.7 in crampons to get to the summit of Mount Waddington
- continued development of movement skills on moderate to steep ice
- development of simul-climbing skills on lower angled ice with running belays
- study and practice of transitions between glacier travel mode and technical climbing mode
- continued study of the proper choice between and application of the primary ice axe positions: piolet canne, panne, manche, poignard, ramasse, rampe, ancre, and traction
- specialized designs and uses of alpine and technical tools in high angle climbing
- free climbing technique on overhanging ice
- advanced concepts in the proper selection and placement of ice screws, snow flukes and pickets for belays and intermediate protection
- integration of specific skills with the general goals of efficient, safe, and self-dependent climbing

**Expeditionary Skills:**

- continued training on the use of maps, compasses, GPS, and guidebooks
- strategizing for multi-day backcountry tours in a remote setting
- practical application of expeditionary staged camp techniques

**Mountaineering Skills:**

- review of glacial and ice structures
- continued development of mountain sense and the ability to follow a "line of weakness "
- development of advanced technical protective systems in an alpine setting
- advanced study of movement over complex alpine terrain

**Objective Hazards Evaluation & Self-Rescue Skills:**

- evaluation & prediction of mountain weather patterns
- introduction to the assessment of natural hazards
- individual & team crevasse rescue techniques

**Leadership Skills:**

- continued study and practice of individual technical leadership skills
- development of technical leadership strategies on complex terrain
- technical & personal functions of individuals on an ascent: roles & responsibility
- problem solving: gathering appropriate data & assessment techniques
- evolving leadership roles: individual leadership vs. collective decision making
- large and small team expeditionary leadership strategy

**Itinerary**

The following is an example itinerary. This is subject to change due to weather, fitness, technical skill, road closures, wildfires or a variety of other circumstances. All course material will be covered; it simply may not be covered in this order.

It is likely that participants will go out to dinner one to three times throughout the duration of the course.

**Day 1:**
Meet in Bellingham at 7:00am at the American Alpine Institute office. Once we have completed a through gear check, we will work together to make a plan for the expedition. Before we leave Bellingham, we will shop for any last minute food at the grocery store. The group may choose to cook together to save weight. Drive up to the flight service in Canada. This will be an eight-hour drive. Participants on this course need to have a clean record and a passport to cross the boarder. Car camp.

**Day 2:**
The Bravo Glacier route begins on the Tiedemann Glacier at its junction with the Bravo Glacier. We will use a helicopter to fly into a feature on a shoulder near this area called Rainy Knob (6,955'). Bury a cache with an emergency tent, extra food and fuel at the landing site and establish a Base Camp. The team will review skills and survey the route for the remainder of the day. Backcountry camp.

**Day 3:**
The team will get up very early and will ascend the Bravo Glacier to Camp I at the Cauldron Camp (8,858'). Snow conditions can lead to very slow travel as the team ascends a multi-tiered and heavily crevassed icefall. Backcountry camp.

**Day 4:**
We will get up extremely early again to avoid the heat of the day. The team will work its way up to a very steep bergshrund, which may require vertical ice climbing. Once the 'shrund has been surpassed, the team will continue up fifty-degree snow and ice to lower-angled terrain. The final obstacle before camp will be to find a way through two extremely problematic crevasses. Once we reach the Spearman Saddle (10,662') we will establish Camp II. Backcountry camp.

**Day 5:**
After two harder days, this day will require a shorter, less dramatic climb up to the final crevasse at 12,139 feet. We establish Camp III as high as possible to put us in position for not only the "true" summit tower of Mount Waddington, but also to give us the option of climbing the Northwest Summit as well. Backcountry camp.

**Day 6:**
Summit day! This is a very serious undertaking that may involve mixed climbing up to 5.7 on ice-covered rock. As a result we will get up very early to make an ascent to the 13,177-foot summit. Most teams take 10-12 hours round trip to climb the summit tower. Backcountry camp.

**Day 7:**
If time and weather permit, we may make an ascent of the Northwest Summit from our high camp. Conversely, if the summit tower is too iced-up to climb, we may elect to ascend this lower

peak as a consolation prize. An ascent of the Northwest Summit will require a four to six hour jaunt on steepish terrain with a double-bergshrund to negotiate and 55-degree terrain to surmount before climbing to the summit. If time permits, we may begin the descent late in the day. Backcountry camp.

**Day 8:**
Begin to descend the Bravo Glacier route. Much of the route is exposed to morning sun and it may be necessary to wait until later in the day to descend. Most parties will take one to two days to get back to Rainy Knob. Backcountry Camp.

**Day 9:**
This last day will be used to fly back out from Rainy Knob. Car Camp.

**Day 10-12:**
There are significant weather issues on Mount Waddington. The remaining days in the itinerary will be used as weather days. If you complete the objective early, your guide will help you to select additional suitable training objectives either in the Waddington Range, in Southwest British Columbia, or in the North Cascades. Car Camp or Backcountry Camp.