



***Central Division***

***Senior Manual***

***The purpose of the Central Division Senior Manual is to provide the patrollers in Central Division a common document to refer to with regards to the National Ski Patrol Senior program. The basic content of this manual was derived from the National Ski Patrol Skills Development Program found in chapter 17 of the current National Ski Patrol Policies and Procedures and the Ski Patroller's Manual, 14<sup>th</sup> edition. This documentation is subject to change at any time through proposal procedure with final approval by the National Ski Patrol Central Division Board of Directors.***

### **National Education Program Mission**

The senior program is a national education program providing an opportunity for the participants to enhance their patrolling skills in a nonthreatening and supportive environment.



### **Central Division Mission**

**The senior program is governed by the Central Division and implemented by the regions.**

The mission of the Central Division is to provide guidance to the regions in the administration of the NSP senior program. The primary goal of the Central Division Senior Manual is to provide a resource to be used to maintain the integrity and consistency of the senior programs across all regions in the division. The division encourages cross-boundary exchanges between the regions, the sharing of ideas and resources, and striving for continuous senior program improvement.



First edition  
Approved by the Central Division Board of Directors September 11, 2004

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# **Senior Program-General Information for All Disciplines**

## **Program Administration**

The senior program is a National Ski Patrol education program administered by the region under the guidance of the Central Division. The format of the evaluations and the content will be maintained in a manner that is equivalent within all the regions in Central Division. Regions may adopt specific administrative protocols and training programs that meet their standard of operation. Order of completion of the core components and electives is at the discretion of the region administration.

Senior candidates may cross region boundaries to take a senior evaluation. A candidate that elects to travel across region boundaries to take an evaluation is required to obtain the approval of both region directors or their delegates. There must be written documentation submitted by the candidate to the region director of both regions that communicates approval by both regions has been granted. The visiting candidate must be familiar with the region's evaluation format and abide by any region and local area specific protocols.

A candidate will be allowed one attempt per season at any core component evaluation. Should a candidate not pass they will forgo any additional attempts until the next season. During this time the candidate should utilize available training resources to improve any skill deficits. If the candidate is unable to complete the evaluation due to non-skill related circumstances the region may reconsider allowing the candidate to participate in another evaluation within the same season. This would be handled by the region administration on a case-by-case basis.

## **Risk Management**

Participation in the senior program may involve maneuvers with an enhanced level of difficulty. All attempts must be made to mitigate exposure to any unnecessary risk. The individual participating in the program is responsible for recognizing any risks and communicating their concerns to the examiners or program administrators. All participants including candidates, instructors, examiners and support staff will sign a Central Division Release of Liability Form. Description of the Central Division risk management protocol and liability release form is found in the Central Division Policy and Procedures, chapter 7.

# **Senior Alpine Program**

## **Core Skill Requirements and Electives**

Core components required for the senior alpine patroller are:

- Alpine Toboggan Handling
- Alpine skills-Skiing/Snowboarding
- Emergency Management

Each core component is evaluated and graded separately. As an example a candidate need not pass skiing in order to pass toboggan handling. There is no mandatory time constraint regarding when each core component must be completed. Once a candidate passes each component he or she need not take that component again. It is highly recommended that all core skill requirements be completed within 3 years. The candidate is strongly encouraged to continue to participate in clinics during the time when he or she is attempting to successfully complete the core components.

In addition to the core requirements the alpine senior candidate must complete a minimum of three electives. Refer to the current NSP National Policies and Procedures, chapter 17, for the accepted list of electives.

## **Alpine Candidate Skill Development**

The senior candidate is responsible for his or her own training and abiding by any guidelines established by the region senior program administrator. Tracking skill development during training is critical for success in the alpine program. Senior Alpine Skill sign-off (appendix I) can be utilized to track training progress and must be completed in order to participate in the senior alpine evaluation. The Senior Alpine Skill sign-off is to be completed by a NSP Alpine Toboggan Instructor and must be presented to the region administration in accordance to region specific protocol.

A region may use a pre-evaluation clinic prior to the final evaluation. The pre-evaluation clinic can be used to prepare both the candidates and examiners. This clinic can be at the same area as the final evaluation or on local terrain. The objective of the pre-evaluation clinic is to introduce the candidate to the evaluation format and to provide them with constructive feedback to help them refine their skills. This is not an evaluation but a teaching environment. The use of scorecards (appendix II) is encouraged for feedback and as a teaching tool. The pre-evaluation clinic is to be held far enough in advance so the candidate has time to utilize the feedback in preparation for the final evaluation.

Candidate preparation for the senior evaluation may also be done under the guidance of a mentor or "candidate coach." The candidate coach must be familiar with the senior program content and evaluation format. The candidate coach is a skills coach and provides emotional support for the candidate. The candidate coach may be an examiner at the senior evaluation but will not evaluate their designated candidate/s. Information regarding mentoring a candidate can be found in appendix III.

## **Examiner Development**

Examiners at the senior alpine evaluation must be at least a senior level patroller. Senior examiners must have excellent communication skills and be able to demonstrate senior level skiing/boardings skills and/or toboggan handling skills. The senior examiner must be able to evaluate and provide feedback to the candidate in a positive and constructive manner. Regions will be responsible for developing and supporting a strong cadre of examiners. In order to remain current regarding the alpine programs each season the regions are expected to send appropriate representation to the division sponsored Ski/Snowboard Trainers Workshop (STW). The information obtained at the division STW will then be passed on to the other trainers and examiners at region sponsored STWs.

It is recommended that an apprentice program be used for examiner development. During this time the examiner apprentice is refining their movement analysis skills and examining skills with the assistance of other experienced examiners.

### **An example of an alpine toboggan examiner apprentice program**

To become an alpine toboggan examiner the apprentice should:

- Complete the NSP Instructor Development course.
- Complete the alpine toboggan instructor certification by participating in the NSP Alpine Toboggan Mentoring program.
- Become an active trainer at the local patrol.
- Attend a region Ski and Toboggan Trainers Workshop and express an interest in becoming an examiner.
- Maintain a log of training, continuing education and evaluation activities.
- Complete and maintain region-specific examiner requirements.

Once the alpine toboggan examiner apprentice has participated in an evaluation as an observer for at least one season, continues to actively participate in training candidates, and continues to attend region clinics the examiner's name may be added to the list of active region examiners at the discretion of the region administrator.

## **Terrain Requirements**

Every effort must be made to meet the national criteria of terrain requirements of a slope average of 22 degrees and 800 feet. If the slope does not meet the 800 ft. minimum, then a sufficient number of runs must be made so all the skills criteria can be demonstrated. Terrain should be both smooth and moguled. On occasion moguls may be unavailable due to grooming but every effort must be made to incorporate them into the evaluation.

## **Evaluation Format**

The senior candidate should be able to demonstrate strong management of alpine skills on advanced terrain and the evaluation format is the method for this. The candidate must be given every chance reasonable to demonstrate proficiency in the alpine skills. Some feedback regarding specific skill

objectives may be provided but there should be minimal teaching. The evaluation is a confirmation of skills that should already be mastered by the candidate prior to the event.

The evaluation is used to judge the candidate's alpine skiing/snowboarding skills and toboggan handling skills in a variety of terrain and snow conditions. Examiners will work as a team with the candidates on groomed, steep and moguled terrain.

Both tobogganing and skiing/boarding skill objectives must be clearly communicated to the candidates. Toboggan demos may be requested by the candidates. The toboggan demos can be done at the beginning of the evaluation with all the teams observing or ongoing within the teams during the evaluation. The ski/board evaluation is a ski-along format and the examiners will demo the skills throughout the evaluation.

During the lead with tail rope operator portion of the toboggan evaluation all attempts should be made to have a proficient toboggan handler on one end of the toboggan. If at all possible there should not be two candidates evaluated on the same toboggan at the same time. In order to provide consistency within the group the proficient toboggan handler should remain with the same team throughout the evaluation. The proficient toboggan handler may also be an examiner at the discretion of the region.

## **Evaluation Scoring for Alpine Skills**

The candidate should show senior level proficiency in alpine and toboggan handling skills. The overall rating score on the card determines if a candidate passes or fails an evaluation. After a group discussion the evaluation team must come to an agreement for either passing or failing a candidate. A senior candidate can pass or fail one or both components of the evaluation, either alpine skiing/boarding skills or toboggan handling. A candidate that fails one component only needs to retest on that component. The scorecards used for the evaluation will be the same for all regions (appendix II). There are two different styles of scorecards available, a group format card or individual format card. Either card can be used during the evaluation as long as the same card is used by all the examining teams.

## **Candidate Advocates**

The use of an advocate during the evaluation is encouraged. The advocate must be familiar with the region's current training and evaluation programs. The advocate is assigned to each senior candidate team for the day. The advocate accompanies the assigned group through the entire day's activity. This individual serves as an advocate for the team to ensure the evaluation is a positive experience. The advocate's role is to help the senior candidates by:

- Clarifying any questions the senior candidates may have regarding the evaluation.
- On-the-hill organizing, maintaining the time schedule and ensuring the group of candidates is at the right place at the right time.
- Following the evaluation the advocate will also complete the Senior Alpine Evaluation Candidate Feedback form (Appendix IV).

## **Candidate & Advocate Feedback**

The Senior Alpine Evaluation Candidate Feedback form (appendix IV) is to be used as an information-gathering tool by the regions for continuous improvement of the senior evaluation. These forms must be provided to the candidates & advocates prior to the start of the evaluation.

## **Candidate Recognition**

Upon the completion of the evaluation recognition should be given to the senior candidates for their hard work and dedication. Announcements of the results should take place on the same day as the evaluation. Candidates that have completed all the senior components should be awarded their senior chest badge at that time. Candidates unable to pass the evaluation should be given constructive feedback and encouragement to continue with the program.

# **Senior Alpine Skills Evaluation**

## **Alpine Toboggan Handling**

### **Risk Management**

Instructors and candidates will communicate any concerns regarding risk management. Strict efforts must be made to ensure the safety of all participants.

Only patrollers (including candidates) will ride in or operate the toboggans during training, clinics, and evaluations.

A *secondary brake* will be available during all loaded toboggan maneuvers. The secondary brake will be either in the form of a tail rope operator, chain brake, or other device as found in the NSP Ski and Toboggan Training Manual. Use of a nonfunctional or "*ghost tail*" is discouraged both as a risk management concern and a poor visual demonstration. In order to ensure the safety of the rider/"injured guest", lead toboggan handler, and the public the tail rope operator will always handle the tail rope in the proper manner.

Patrollers riding as "injured guests" should remove their patrol pack, lay down in the toboggan face up, feet downhill, and not strapped in. Transporting equipment in the toboggan with the rider is strongly discouraged, especially during highly technical maneuvers in the steeps and bumps.

Equipment carry is not part of the evaluation but should be used during the transportation of the loaded toboggan down the hill. Equipment will be held under the arm in a manner such that it can be readily tossed aside should the skier/boarder lose control. Equipment will not be carried over the shoulder.

It is expected that patrollers operating the lead of the toboggan will remove their patrol fanny packs or backpacks and place them in the toboggan. This will minimize any possibility of the equipment snagging in the handles.

### **Alpine Toboggan Evaluation Maneuvers**

These evaluation maneuvers are used to demonstrate skill proficiency in toboggan handling.

#### **Unloaded Toboggan Front, Loaded Toboggan Front-smooth steep terrain**

- Stationing:

The toboggan operator will start at the top of the hill, the rider is stationed off to the side of the hill approximately 1/3 the way down.

- **Unloaded Approach:**  
The toboggan operator will use a variety of skiing skills including parallel turns, sideslips, and *transitions*. The speed and expedient maneuvers demonstrated may be dictated by terrain and slope conditions.
- **Loading:**  
The toboggan operator will position the toboggan in a manner allowing for safe loading of the patient, either in or across the *fall line*. The candidate should be familiar with the different ways of securing the toboggan as described in the NSP Ski and Toboggan Training Manual. The candidate must be able to describe some of the methods to the examiners. The chain brake or other secondary braking device will be applied, the handles locked, and the patient loaded.
- **Loaded:**  
The toboggan operator will then proceed down the fall line and demonstrate the ability to complete one transition in each direction.
- **Controlled Power Stop:**  
During the run the lead toboggan handler may be called upon to stop the toboggan in a controlled *power stop* using gentle pressure on the handles to engage the braking device.

## **Loaded Toboggan Front-moguls**

- **Unloaded Approach:**  
The toboggan operator will start with the unloaded toboggan at the top of the moguled run and use a variety of skiing/boarding skills to bring the toboggan to the rider/"injured guest". The rider /"injured guest" is stationed in a safe loading area part of the way down the mogul field.
- **Loading:**  
The toboggan will be secured in a manner to allow safe loading of the rider/"injured guest". This will be dictated by the terrain and snow conditions. The chain brake or other secondary braking device will be applied, the handles locked, and the rider/"injured guest" loaded.
- **Loaded Route Selection:**  
The toboggan operator will transport the toboggan in a controlled manner in the moguls negotiating an expedient route through and out of the mogul field. The smoothest and preferred route for the toboggan is in the troughs. There may be occasion to travel over the top of the moguls. Smooth and consistent speed must be maintained during the run. Falling leaf and sideslip maneuvers are used to control the progress of the toboggan.
- **Toboggan Operation:**  
The toboggan operator may operate the toboggan either inside or outside the handles. Outside the handles may not be specifically permitted by local area protocols. The senior evaluation administrator must verify the local area protocol regarding operation outside the handles. Fall line routes may utilize operation outside of the handles whereas routes with straight *traverses* are more easily negotiated inside the handles. There may be local area protocols that dictate whether a toboggan is to be operated inside or outside the handles.

- Secondary Brake Use:

Tail rope handling is not evaluated in the bumps. The chain brake, webbing, tail rope, or other mechanical braking device as described in the Ski and Toboggan Training Manual will be utilized as the secondary brake.

## **Team Toboggan Handling-Lead Toboggan Operator with Tail Rope Operator**

***Examiners, candidates, and toboggan handlers must be cautious of traffic on the hill during these maneuvers.***

The change of direction when operating the toboggan with a lead operator and tail rope operator is a coordinated maneuver of sideslips, transitions and traverses. These maneuvers are sequential where the tail rope operator will follow the direction change of the lead operator. This is a safe and preferred means of direction change on steep groomed terrain. Direction change on long, flat, and gentle terrain can be described as a gliding direction change using medium radius turns. This is a simultaneous maneuver where the tail rope operator performs the turn at the same time as the lead operator. Candidates should be reminded the most expedient way to transport a patient is straight down the fall line out of the flow of traffic.

The means of either verbal or nonverbal communication between the lead operator and tail rope operator is imperative and must be clarified prior to the maneuver. Communication is initiated by the lead operator.

## **Loaded Toboggan-Lead with Tail Rope Operator**

The primary responsibilities of the toboggan operator in the lead are:

1. Route selection
2. Primary braking
3. Initiate change in speed and direction
4. Monitor uphill and passing traffic
5. Communicate change in speed and direction to tail rope operator

The objective is to perform coordinated direction changes using a series of transitions, traverses, and sideslips on steep smooth terrain. A minimum of two direction changes must be demonstrated.

Two variations of team toboggan direction change on steep smooth terrain are described below.

### **Team Toboggan Direction change on steep smooth terrain-variation 1**

- Initiation of Direction Change by the Lead Operator:

The lead operator will initiate the direction change with a sideslip down the hill. The tail rope operator must be in a *stable sideslip position*, in the fall line above the tail of the toboggan, and ready for the next maneuver.

- **Traverse and Sideslip:**

The lead operator will do an edge set to begin the traverse across the hill. Once reaching a point on the other side of the hill the lead operator will prepare for the transition. The lead operator will release the edge set and start the sideslip in order to position the toboggan and tail rope in the fall line. Falling leaf and edging skills can be used to maneuver the toboggan into the fall line.

- **Transition and Sideslip:**

Once the toboggan and tail rope are in the fall line the lead operator will do a transition and then continue to sideslip. The lead operator will hold the sideslip until the tail rope operator completes their transition and enters a stable sideslip position.

- **Sequence:**

The tail rope operator must wait for the lead operator to complete the transition and is in a stable sideslip position before initiating a transition. The maneuver is sequential, first the lead and then the tail.

- **Traverse:**

After a quick visual check and communication to verify tail rope operator position and uphill traffic the lead operator will do an edge set and proceed to traverse across the hill. The lead operator must be aware of uphill traffic at all times during the traverse across the fall line.

## **Team Toboggan Direction change on steep smooth terrain-variation 2**

This variation allows for a very quick direction change for the team. The maneuver allows the transition to be done without the full weight of the loaded toboggan in the fall line.

- **Initiation of Direction Change by Lead Operator:**

To prepare for the direction change the lead operator will do a transition while the toboggan is in the traverse and prior to entering the fall line. The lead operator will then sideslip down the fall line in a stable sideslip position. Falling leaf and edging skills can be used to maneuver the toboggan into the fall line.

- **Transition and Sideslip by the Tail Rope Operator:**

Once the toboggan and tail rope are in the fall line the tail rope operator will do a transition and then sideslip. The lead operator will hold the sideslip until the tail rope operator completes their transition and enters a stable sideslip position.

- **Sequence:**

The tail rope operator must wait for the lead operator to complete the transition and is in a stable sideslip position before initiating a transition.

- **Sideslip and Traverse:**

Once the toboggan and tail rope are positioned in the fall line, and the tail rope operator is in a stable sideslip position, the lead operator will do an edge set to begin the traverse across the hill.

## **Loaded Toboggan-Rear**

The primary responsibilities of the tail rope operator are:

1. Provide overall safety during the operation of the toboggan with proper position of the tail rope in the fall line.
2. Provide a secondary braking if necessary.
3. Monitor patient condition and assess the effects of the ride during transport.
4. Monitor uphill and passing traffic
5. Ensure the “*reserve braking rule*” is in place at all times.

### **“Reserve Braking Rule”**

The speed of the toboggan is maintained at a pace such that there is always braking power in reserve to safely stop the toboggan in an emergency. The speed may vary due to skill, slope conditions, terrain conditions and condition of the patient. If the speed is too fast to maintain a braking reserve the tail rope operator must communicate to the lead toboggan operator the need to adjust the speed and then assist in safely stopping or slowing the progress of the toboggan.

## **Tail rope operation during team toboggan direction change on steep smooth terrain**

- **Direction Change Sequence:**

A sequence of sideslip-transition-sideslip-traverse maneuvers will be done on the hill and the tail rope operator will demonstrate control and balance in a stable sideslip position when toboggan comes to a stop.

- **Tail Rope Management:**

The rope is held in a manner that will ensure safe handling of the toboggan by using edging and pressure skills. There can be many variations as long as the proper athletic skiing/boarding stance maintained. The rope must be in the fall line and the tension in the rope should not impede the progress of the toboggan down the hill.

- **Tail Rope Tension:**

Proper tension in the rope will be maintained throughout the maneuvers. There should not be excessive slack in the tail rope and all effort should be made to avoid the rope touching the snow.

- **Follow the Leader:**

The tail rope operator will be prepared to follow the lead operator. When the toboggan is traversing the tail rope will be positioned parallel to the fall line and above the rear of the toboggan. Edging skills should be used to maintain the proper rope position and tension.

- **Initiation of Direction Change:**

The tail rope operator will release their edges and drop into a sideslip after the lead has begun to sideslip. Falling leaf and other sideslip skills can be used to maneuver and maintain the tail rope in the fall line

- **Transition and Sideslip:**

Once the lead operator has completed the transition and is in a stable sideslip position with the toboggan and tail rope in the fall line the tail rope operator will then begin and complete their

transition and enter a stable sideslip position. This is a sequential maneuver. Snowboarders do not do transitions when operating a tail rope.

- **Traverse:**

After communication verifying it is safe to proceed across the hill the tail rope operator will begin to traverse when the lead operator begins to traverse.

## **Alpine Skiing and Snowboarding**

Performance objectives for both alpine skiing and snowboarding are identical. Confidence and control with good technical skills are the primary objective in the alpine skiing/boarding evaluation. All attempts should be made to include crud and moguls in the evaluation. The senior candidate is expected to demonstrate control and confidence on the most difficult hills within their region or at the evaluation.

All alpine skills are evaluated as a “ski along.” The candidates and examiners will ski together and the evaluation will be ongoing. During the evaluation the candidate should be encouraged and given every opportunity to demonstrate their skills to the best of their ability.

If candidates are using telemark skis or snowboards every attempt must be made to have an examiner on the same equipment. This is important both for visual demos and evaluation feedback.

It is encouraged that examining teams during the alpine skiing/snowboarding evaluation will have at least one NSP member who is PSIA/AASI Certified Level 2 or 3. If requested by the region, the NSP-C Ski School will provide evaluators who are current PSIA/AASI Certified Level 2 or 3.

### **Risk Management**

Instructors and candidates will communicate any concerns regarding risk management. Strict efforts must be made to ensure the safety of all participants.

### **Alpine Skills Dynamics**

The ability to effectively ski/board down a hill is a dynamic blend of several skills. The skills can be broken down into movement of the body, ski performance and terrain demands. All these different skills come into play when performing senior level alpine maneuvers.

#### **Movement of the body during alpine skiing/boarding**

This can be described in four different categories and may be present in a combination of proportions.

- **Balancing Movements:**

While in motion the ability to maintain balance and adjust to variations in snow and terrain conditions is accomplished by using the feet and hips to adjust the center of mass over the ski or board.

- Edging Movements:

Used to adjust the edge angle of the ski/board in relation to the snow. This involves the use of ankles, knees and hips to develop angles that allow for the change in the amount of edging. Edge control movements begin by tipping the ski or twisting the board (torsional flex) from uphill edges to downhill edges during turn initiation. The amount of degrees between the base of the ski/board and the snow is dictated by terrain, equipment and turn radius. *Angulation* is especially prevalent in short and medium radius turns. Longer radius turns use some angulation but is primarily controlled with *inclination* or tipping.

- Rotary Movements:

These are turning or twisting movements in the body used to guide the ski/board and shape the turn. Rotary movements involve rotating one part of the body in relation to the other. In higher level skiing/boarding these movements are subtle and originate from the lower body.

- Pressure Control Movements:

Managing pressure control involves a combination of movements that can be subtle all the way to dynamic and powerful. These movements can originate from foot to foot, along the length of the ski/board and between the ski/board and snow. Flexion and extension effectively aid in speed control, ski/board performance and skill blending used in aggressive balance adjustments that keep the ski/board in contact with the snow.

# **Alpine Skiing/Snowboarding Evaluation Maneuvers**

## **Medium Radius Turns (approximately 30 ft. radius)**

This skill is evaluated on smooth terrain. The candidate must demonstrate:

- Balance-      Balanced dynamic stance, adjusts to terrain change  
                  Maintains side-to-side and fore-aft balance
- Edging-       Ability to effectively edge with minimal skidding  
                  Early edge engagement used at the start of the turn
- Rotary-       Effectively guides both feet thru the entire turn  
                  Initiates turn from feet up
- Pressure-     Fluid lateral motion of body mass into new turn direction  
                  Effective use of flexion and extension to maintain snow contact

## **Long Radius Turns (greater than 30 ft. radius)**

This skill is evaluated on smooth terrain. The candidate must demonstrate:

- Balance-      Balanced dynamic stance, adjusts to terrain change  
                  Maintains side-to-side and fore-aft balance
- Edging-       Ability to effectively edge with minimal skidding  
                  Early edge engagement used at the start of the turn
- Rotary-       Effectively guides both feet thru the entire turn  
                  Initiates turn from feet up
- Pressure-     Fluid lateral motion of body mass into new turn direction  
                  Effective use of flexion and extension to maintain snow contact

## **Short Radius Turns (approximately 15 ft. radius)**

This skill is evaluated on smooth terrain on more to most difficult slopes and moguled terrain on more difficult slopes. The candidate must demonstrate:

- Balance-      Balanced dynamic stance, adjusts to terrain change  
                  Maintains side-to-side and fore-aft balance
- Edging-       Ability to effectively edge with minimal skidding  
                  Early edge engagement used at the start of the turn
- Rotary-       Effectively guides both feet thru the entire turn  
                  Initiates turn from feet up
- Pressure-     Effective use of flexion and extension to maintain snow contact  
                  Smooth absorption of moguls

## **Confined/Crud**

This skill is evaluated on the more difficult hill in conditions of ungroomed crud or ice. The candidate must demonstrate:

- Continually adjusts to terrain change and varied snow conditions
- Demonstrates versatility in edging and rotary skills
- Controls speed and turn size throughout the run
- Effective use of flexion and extension to maintain snow contact

## **Senior Alpine Continuing Education**

Once achieving senior status the patroller must maintain that skill level in order to maintain the senior classification. This will be accomplished every season at the local on-hill alpine skills refresher. The refreshers are not pass/fail performance evaluations. They will be a clinic format with sufficient feedback and skill enhancement provided in order for the patroller to maintain senior level alpine skills.

# **Appendix I**

## **Senior Alpine Candidate Skills Sign-off**

## Senior Alpine Candidate Skills Sign-off

In order to participate in the senior alpine evaluation the candidate must demonstrate competency in both alpine and toboggan handling skills. These skills must be demonstrated to a NSP alpine toboggan instructor. The instructor's signature below testifies satisfactory demonstration of the skills by the candidate. This document must be presented to the region administrator responsible for the evaluation within region specified guidelines.

*Completion of this form is not an evaluation or certification of senior level proficiency*

**Candidate name:**

**Email:**

**Address:**

**City:**

**Zip code:**

**Phone:**

**NSP Registration number:**

Skill Performance	Date	Instructor Name Printed	Instructor Signature
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**Alpine Skills**

<b>Long Radius Turns:</b>			
<b>Medium Radius Turns:</b>			

- Balanced dynamic stance, adjusts to terrain change
- Consistent speed and size of rounded turn
- Ability to effectively edge ski/board with minimal skidding
- Early edge engagement at the start of the turn
- Effectively guides both feet thru the entire turn w/minimal traverse
- Initiates turn from feet up
- Effective use of flexion and extension to maintain snow contact

<b>Short Radius Turns, Smooth and Moguled:</b>			
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- Balanced dynamic stance, adjusts to terrain change
- Consistent speed and size of rounded turn
- Ability to effectively edge ski/board with minimal skidding
- Early edge engagement at the start of the turn
- Effectively guides both feet thru the entire turn w/minimal traverse
- Initiates turn from feet up
- Effective use of flexion and extension to maintain snow contact
- Smooth adsorption of moguls

<b>Crud/Confined Skiing:</b>			
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- Continually adjusts to terrain change and snow conditions
- Demonstrates versatility in edging and rotary skills
- Controls speed and turn size throughout the run
- Effective use of flexion and extension to maintain snow contact

<b>Written Questions: <i>Toboggan Handling</i></b>
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List the 5 primary roles of the lead operator:

List the 5 primary roles of the tail rope operator:

Define the *braking reserve rule*:

Skill Performance	Date	Instructor Name Printed	Instructor Signature
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**Alpine Toboggan Handling**

<b>Unloaded Toboggan Lead:</b>			
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- Appropriate route selection and approach to the scene
- Safe, expedient, controlled and consistent speed
- Smooth rounded turns
- Balanced, stable and proper position
- Effective transitions
- Minimal slipping and bouncing of the toboggan
- Effective recovery technique if needed

<b>Loaded Toboggan Lead Alone-Smooth:</b>			
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- Appropriate route selection and safe departure
- Ride is smooth and comfortable
- Safe, expedient, controlled and consistent speed
- Balanced, stable and proper position in the handles
- Demonstrates secondary braking with proper use of the chain brake
- Executes transitions with stability and control
- Brakes toboggan as needed

<b>Loaded Toboggan Lead Alone-Moguled:</b>			
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- Appropriate route selection and safe departure
- Ride is smooth and comfortable
- Safe, expedient, controlled and consistent speed
- Balanced, stable and proper position in the handles
- Demonstrates secondary braking with proper use of the chain brake
- Controls descent with sideslip and using edging skills
- Controls direction with falling leaf and side slipping skills

<b>Loaded Toboggan Lead with Tail Rope Operator:</b>			
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- Controls speed to ensure reserve braking if needed from tail rope operator
- Appropriate route selection and safe departure
- Ride is smooth and comfortable
- Safe, expedient, controlled and consistent speed
- Balanced, stable and proper position in the handles
- Controls descent with sideslip and using edging skills
- Controls direction with falling leaf and side slipping skills
- Demonstrates and understands coordinated direction change with the tail rope operator
- Controls edges during traverses with minimal sideslip
- Performs transitions in the fall line with stability and control
- Effective communication with tail rope operator
- Demonstrates appropriate use of chain brake if needed

<b>Loaded Toboggan Rear:</b>			
------------------------------	--	--	--

- Assists with braking as needed using edge and pressure control skills
- Traverses left and right with minimal slippage of toboggan
- Safe, expedient, controlled and consistent speed
- Smooth and controlled turns and transitions
- Demonstrates and understands coordinated direction change with lead operator
- Controls rope in fall line from a stable position
- Adapts to terrain and condition changes
- Controls edges during traverses with minimal sideslip
- Performs transitions in the fall line with stability and control
- Maintains safe distance from the toboggan

# **Appendix II**

## **Senior Alpine Evaluation Scorecards**

# Alpine Toboggan Performance Evaluation

Date:

Location:

Instructor/Examiner:

Skill: UNLOADED TOBOGGAN-LEAD	Performance grading scale: (+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives			
<b>Critical Standard:</b> Does the candidate safely & efficiently control the toboggan to the accident site?	Candidate:	Candidate:	Candidate:	Candidate:
<b>Unloaded:</b> More to Most Difficult Smooth or Moguled Terrain:	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Performance Objectives:</b> 1. Appropriate route selection & approach to scene 2. Safe, expedient, controlled and consistent speed 3. Smooth and rounded turns 4. Balanced, stable and proper position 5. Effective transitions 6. Minimal slipping and bouncing of toboggan 7. Performs controlled emergency stop if asked 8. Effective recovery technique if needed				
<b>OVERALL SCORE UNLOADED FRONT PASS OR FAIL</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

Skill: LOADED TOBOGGAN-LEAD	Performance grading scale: (+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives			
<b>Critical Standard:</b> Is the toboggan run smooth, controlled, efficient and safe?	Candidate:	Candidate:	Candidate:	Candidate:
<b>Lead Alone (with secondary brake):</b> Most Difficult Smooth:	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Lead Alone (with secondary brake):</b> More Difficult Moguled:	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Lead with Tail Operator:</b> Most Difficult Smooth:	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Performance Objectives:</b> 1. Appropriate route selection & safe departure 2. Ride is smooth and comfortable 3. Safe, expedient, controlled & consistent speed 4. Balanced, stable and proper position 5. Demonstrate appropriate use of chain brake 6. Controls direction of toboggan 7. Brakes toboggan as needed 8. Effective communication with tail operator 9. Executes transitions with stability and control 10. Controls edges during traverse with minimal sideslip				
<b>OVERALL SCORE LOADED FRONT PASS OR FAIL</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

**Comments:**

## Alpine Toboggan Performance Evaluation

Skill: LOADED TOBOGGAN-REAR	Performance grading scale: (+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives			
<b>Critical Standard:</b> Does the rear operator safely and effectively control the toboggan as needed?	Candidate:	Candidate:	Candidate:	Candidate:
Rear: Most Difficult Smooth:	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Performance Objectives:</b> 1. Traverses left and right with minimal slipping of toboggan 2. Brakes toboggan as need with effective edging and pressure 3. Safe, expedient, controlled & consistent speed 4. Smooth and controlled turns and transitions 5. Generally coordinates change of direction with front operator 6. Maintains rear of toboggan in stable position 7. Controls rope in the fall line from a stable position 8. Adapts to terrain and condition changes 9. Maintains safe distance from the toboggan 10. Monitors the condition of the patient				
<b>OVERALL LOADED REAR PASS OR FAIL</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

<b>For a Final Passing Score the candidate must pass all three toboggan handling skills, UNLOADED TOBOGGAN-FRONT, LOADED TOBOGGAN-FRONT and LOADED TOBOGGAN-REAR</b>	Candidate:	Candidate:	Candidate:	Candidate:
<b>FINAL SCORE FOR ALPINE TOBOGGAN HANDLING EVALUATION PASS OR FAIL:</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

**Comments:**

## Alpine Toboggan Performance Evaluation

### Skill: UNLOADED TOBOGGAN-LEAD

**Critical Standard:** Does the candidate safely & efficiently control the toboggan to the accident site?

#### **Performance Objectives:**

1. Appropriate route selection & approach to scene
2. Safe, expedient, controlled and consistent speed
3. Smooth and rounded turns
4. Balanced, stable and proper position
5. Effective transitions
6. Minimal slipping and bouncing of toboggan
7. Performs controlled emergency stop if asked
8. Effective recovery technique if needed

#### **Performance grading scale:**

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Unloaded:** More to Most Difficult Smooth or Moguled Terrain:(+) (=) (-)

#### **Comments:**

**OVERALL SCORE UNLOADED FRONT: PASS OR FAIL**

## Alpine Toboggan Performance Evaluation

### Skill: LOADED TOBOGGAN-LEAD

**Critical Standard:** Is the toboggan run smooth, controlled, efficient and safe?

#### **Performance Objectives:**

1. Appropriate route selection & safe departure
2. Ride is smooth and comfortable
3. Safe, expedient, controlled & consistent speed
4. Balanced, stable and proper position
5. Demonstrate appropriate use of chain brake
6. Controls direction of toboggan
7. Brakes toboggan as needed
8. Effective communication with tail operator
9. Executes transitions with stability and control
10. Controls edges during traverse with minimal sideslip

#### **Performance grading scale:**

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Lead Alone (with secondary brake):**Most Difficult Smooth: (+) (=) (-)

**Lead Alone (with secondary brake):**More Difficult Moguled: (+) (=) (-)

**Lead with Tail Operator:** Most Difficult Smooth: (+) (=) (-)

#### **Comments:**

**OVERALL SCORE LOADED FRONT: PASS OR FAIL**

## Alpine Toboggan Performance Evaluation

**Skill: LOADED TOBOGGAN-REAR**

**Critical Standard:** Does the rear operator safely and effectively control the toboggan as needed?

### **Performance Objectives:**

1. Traverses left and right with minimal slipping of toboggan
2. Brakes toboggan as need with effective edging and pressure
3. Safe, expedient, controlled & consistent speed
4. Smooth and controlled turns and transitions
5. Generally coordinates change of direction with front operator
6. Maintains rear of toboggan in stable position
7. Controls rope in the fall line from a stable position
8. Adapts to terrain and condition changes
9. Maintains safe distance from the toboggan
10. Monitors the condition of the patient

### **Performance grading scale:**

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Rear:** Most Difficult Smooth: (+) (=) (-)

**Comments:**

**OVERALL LOADED REAR: PASS OR FAIL**

## Alpine Toboggan Performance Evaluation

**Candidate Name:**

**Date:**

**Location:**

**Instructor/Examiner:**

***For a Final Passing Score the candidate must pass all three toboggan handling skills, UNLOADED TOBOGGAN-FRONT, LOADED TOBOGGAN- FRONT, and LOADED TOBOGGAN-REAR***

***FINAL SCORE FOR ALPINE TOBOGGAN HANDLING EVALUATION: PASS OR FAIL***

**Comments:**



## Alpine Skiing/Snowboarding Performance Evaluation

<b>Skill: LONG RADIUS TURN-greater than 30' radius</b>	<b>Performance grading scale:</b> (+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives			
<b><u>Critical Standard</u></b> : Does the candidate demonstrate carved, smooth, & consistent turns using ski/board design & skill blends?	<b>Candidate:</b>	<b>Candidate:</b>	<b>Candidate:</b>	<b>Candidate:</b>
<b>Terrain:</b> More Difficult Smooth	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Performance Objectives:</b> <b>B</b> - Balanced dynamic stance, adjusts to terrain change Maintains side-to-side and fore-aft balance <b>E</b> - Ability to effectively edge with minimal skidding Early edge engagement used at the start of the turn <b>R</b> - Effectively guides both feet thru the entire turn Initiates turn from feet up <b>P</b> - Fluid lateral motion of body mass into new turn direction Effective use of flexion and extension to maintain snow contact				
<b>OVERALL SCORE LONG RADIUS TURN: PASS OR FAIL</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

<b>Skill: UNPACKED SNOW OR ICY CONDITIONS</b>	<b>Performance grading scale:</b> (+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives			
<b><u>Critical Standard</u></b> : Does the candidate show controlled and balanced skiing/snowboarding skills?	<b>Candidate:</b>	<b>Candidate:</b>	<b>Candidate:</b>	<b>Candidate:</b>
<b>Terrain:</b> More Difficult Ungroomed:	(+)=(-)	(+)=(-)	(+)=(-)	(+)=(-)
<b>Performance Objectives:</b> 1. Continually adjusts to terrain change & snow conditions 2. Demonstrates versatility in edging and rotary skills 3. Controls speed and turn size through out the run 4. Effective use of flexion and extension to maintain snow contact				
<b>OVERALL SCORE UNPACKED SNOW/ICY PASS OR FAIL</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

<b>For a <u>Final Passing Score</u> the candidate must pass all alpine skills: LONG, MEDIUM, SHORT RADIUS TURNS, and UNPACKED SNOW/ICY CONDITIONS</b>	<b>Candidate:</b>	<b>Candidate:</b>	<b>Candidate:</b>	<b>Candidate:</b>
<b>FINAL SCORE FOR ALPINE SKILLS EVALUATION: PASS OR FAIL</b>	(P) (F)	(P) (F)	(P) (F)	(P) (F)

<b>Comments:</b>	
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## Alpine Skiing/Snowboard Evaluation

## Alpine Skiing/Snowboard Evaluation

**Skill: MEDIUM RADIUS TURN-approximately 30' radius**

**Skill: LONG RADIUS TURN-greater than 30' radius**

**Critical Standard:** Does the candidate demonstrate carved, smooth, & consistent turns using ski/board design & skill blends?

**Performance Objectives:**

- B** - Balanced dynamic stance, adjusts to terrain change  
Maintains side-to-side and fore-aft balance
- E** - Ability to effectively edge with minimal skidding  
Early edge engagement used at the start of the turn
- R** - Effectively guides both feet thru the entire turn  
Initiates turn from feet up
- P** - Fluid lateral motion of body mass into new turn direction  
Effective use of flexion and extension to maintain snow contact

**Critical Standard:** Does the candidate demonstrate carved, smooth, & consistent turns using ski/board design & skill blends?

**Performance Objectives:**

- B** - Balanced dynamic stance, adjusts to terrain change  
Maintains side-to-side and fore-aft balance
- E** - Ability to effectively edge with minimal skidding  
Early edge engagement used at the start of the turn
- R** - Effectively guides both feet thru the entire turn  
Initiates turn from feet up
- P** - Fluid lateral motion of body mass into new turn direction  
Effective use of flexion and extension to maintain snow contact

Performance grading scale:

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Terrain-More Difficult Smooth:** (+) (=) (-)

**Comments:**

Performance grading scale:

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Terrain-More Difficult Smooth:** (+) (=) (-)

**Comments:**

**OVERALL SCORE MEDIUM RADIUS: PASS OR FAIL**

**OVERALL SCORE LONG RADIUS: PASS OR FAIL**

## Alpine Skiing/Snowboard Evaluation

**Candidate Name:**

**Date:**

**Location**

**Examiner:**

**For a Final Passing Score the candidate must pass all alpine skills, LONG, MEDIUM, SHORT RADIUS TURNS and UNPACKED SNOW/ICY CONDITIONS**

**FINAL SCORE FOR ALPINE SKIING/SNOWBOARD EVALUATION:  
PASS OR FAIL**

**Comments:**

Back	<b>BALANCE</b>	Forward
Under Edge	<b>EDGING</b>	Over Edge
Over Rotation	<b>ROTARY</b>	Counter Rotation
Static	<b>PRESSURE/FLEXION-EXTENSION</b>	Excessive

### Skill: SHORT RADIUS TURN-approximately 15' radius

**Critical Standard:** Does the candidate demonstrate carved, smooth, & consistent turns using ski/board design & skill blends?

**Performance Objectives:**

- B** - Balanced dynamic stance, adjusts to terrain change  
Maintains side-to-side and fore-aft balance
- E** - Ability to effectively edge with minimal skidding  
Early edge engagement used at the start of the turn
- R** - Effectively guides both feet thru the entire turn  
Initiates turn from feet up
- P** - Fluid lateral motion of body mass into new turn direction  
Effective use of flexion and extension to maintain snow contact  
Smooth absorption of moguls

**Performance grading scale:**

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Terrain-More Difficult Smooth:** (+) (=) (-)

**Terrain-More Difficult Moguled:** (+) (=) (-)

**Comments:**

**OVERALL SCORE SHORT RADIUS: PASS OR FAIL**

### Skill: UNPACKED SNOW OR ICY CONDITIONS

**Critical Standard:** Does the candidate show confidence with controlled and balanced skiing/snowboarding skills?

**Performance Objectives:**

1. Continually adjusts to terrain change & snow conditions
2. Demonstrates versatility in edging and rotary skills
3. Controls speed and turn size through out the run
4. Effective use of flexion and extension to maintain snow contact

**Performance grading scale:**

(+) Exceeds Objectives (=) Meets Objectives (-) Fails Objectives

**Terrain-More Difficult Ungroomed:** (+) (=) (-)

**Comments:**

**OVERALL SCORE UNPACKED OR ICY: PASS OR FAIL**

# **Appendix III**

“The Candidate Coach” Mentoring the Senior Candidate

## **Senior Candidate Coaching**

Each region is encouraged to establish a coaching program for their senior candidates. Many patrols have had excellent results when senior candidates have been paired up with a coach.

**Coaching** is service that will assist the candidate to achieve his or her objective of passing the senior On-The-Hill evaluation.

**Coaching** is structured so that the candidate takes ownership of the tasks that need to be done to accomplish the objective.

**Coaching** is a guide to what programs are available to enhance the skills required.

**Coaching** can be limited to weekly conversations to follow-up with the candidate to check on status of tasks assigned.

**Coaching** forces reflection and thinking when often people don't get that done for themselves.

**Coaching** is a supportive relationship when candidate have a sense that they are going it alone.

### **What are the qualifications of a candidate coach?**

The coach should be:

1. A senior or certified patroller.
2. Someone who is familiar with the content of the region's current training and evaluation programs.
3. Someone who is willing to spend the necessary time:
  - a. to listen to the concerns of the candidate
  - b. to encourage the candidate when they become discouraged
  - c. to follow-up with the candidate and the other trainers who may be working with the candidates to determine skills improvement progress
  - d. to be knowledgeable of the region's skills enhancement clinics and other patrols skills enhancement programs
  - e. to organize a team of qualified instructors/trainers to support the skiing or toboggan handling skills enhancement goals of the candidate.
4. Being a coach for a candidate is a big responsibility. You want your friend to succeed and he/she is counting on you help them. That puts the pressure on but it makes it all the more rewarding when they are successful.

### **How will the coaching work?**

1. A candidate requests the services of a coach by contacting the region's Proficiency Advisor or local Ski Patrol director.
2. The coach contacts the candidate
3. The coach and the candidate discuss the areas that the candidate thinks they need improvement.
4. The candidate and coach develop a plan to address the need(s). This requires the coach to know of all of the resources that are available (i.e. region clinics, local instructors who are willing to work with candidates, other hill training schedules and availability).
5. The coach and candidate agree to meet on a regular basis to discuss progress.
6. The coaching process could include face to face instructions on the hill, but is not required.
7. Coaching is not a replacement for candidate participation in the region clinics and other enhancement programs.
8. It is encouraged but not required to have the coach attend the evaluation.

# **Appendix IV**

## **Senior Alpine Evaluation Candidate Feedback**

## Senior Alpine Evaluation Candidate Feedback

**Name (optional):**

**Date:**

**Location:**

**Region:**

- |    |  |                |           |         |                   |                   |
|----|--|----------------|-----------|---------|-------------------|-------------------|
| 1. | The evaluation met my expectations.  | Strongly agree | Agree     | Neutral | Disagree          | Strongly disagree |
| 2. | The evaluation was well organized and started on time.                         | Strongly agree | Agree     | Neutral | Disagree          | Strongly disagree |
| 3. | The skill performance expectations were easy to understand.                    | Strongly agree | Agree     | Neutral | Disagree          | Strongly disagree |
| 4. | The skills demonstrations were valuable.                                       | Strongly agree | Agree     | Neutral | Disagree          | Strongly disagree |
| 5. | The examiner(s) clarified material when candidates appeared not to understand. | Strongly agree | Agree     | Neutral | Disagree          | Strongly disagree |
| 6. | The evaluation was in a relaxed, positive manner.                              | Strongly agree | Agree     | Neutral | Disagree          | Strongly disagree |
| 7. | Overall, I would rate this evaluation:   | Excellent      | Very Good | Good    | Needs Improvement |                   |

The staff welcomes your comments and suggestions for improving the senior evaluation. It is helpful if you are as specific as possible. Please use another sheet of paper if needed.

What are the strengths of the evaluation?

What could be improved in the evaluation?

Who were your examiners?

I'd like my examiners to do a better job of:

My examiners did an excellent job of:

Other comments?

# **Appendix V**

**Senior Evaluation Quality Assurance Feedback**  
(To be completed by visiting division staff )

# Central Division Quality Assurance Feedback for Senior Alpine Evaluation

Region:

Date:

Visiting Division Staff Completing Form:

Location:

Region Alpine Evaluation Administrator:

Number of Participants:

Examiners:

Candidates:

Support Staff:

Ratio of examiners/candidates:

---

---

- Were the Central Division Alpine Evaluation Scorecards used?
  - Individual or Group?
  
- Were all events on the Toboggan Scorecard evaluated?
  - If not, why?
  
- Were all events on the Skiing/Boarding Scorecard evaluated?
  - If not, why?
  
- Were adequate pre and post demonstrations done?
  - If not, why?
  
- Who did the demos?
  
- Did the candidates have ample opportunity to demonstrate their skills?
  
- Were the candidates well prepared?
  
- Did the region use the candidate skills sign-off sheet?
  
- Were the examiners calibrated?
  - How are the examiners calibrated?
  
- How were the final results tallied and then presented to the candidates?
  
- What was the pass/fail ratio of the candidates?

General comments of the evaluation:

Did the event satisfactorily meet all requirements for the senior alpine evaluation as found on scorecard?  
If not, what was missing and why?

Are there any recommendations to improve this event?

# **Senior Alpine Glossary**

**Angulation:** In skiing angulation involves the formation of angles between body segments using hips, knees and ankles. Angulation also involves flexing and extending on a diagonal and/or lateral plane.

**Fall Line:** The path of least resistance down the hill. The fall line is the path a ball would take if you let it roll down a slope. In skiing the fall line is the place where skis are pointing straight downhill, or the fastest accelerating part of a turn.

**Ghost Tail:** When the tail rope operator is handling the rope with excessive slack and coiling.

**Inclination:** Defined in skiing as tipping of a body part relative to the slope. Edging movements involve inclination of several body parts: feet/ankles, lower legs/knees, upper legs/hips, lower spine and the whole body.

**Power Stop:** Utilizing edging skills and a balanced stable sideslip position to bring the toboggan to a controlled stop as soon as possible. In order to maintain control it is important to maintain the toboggan in the fall line.

**Secondary Brake:** In toboggan handling it is the tail rope operator or a mechanical device (such as the chain brake or webbing) used to assist the lead toboggan operator in slowing or stopping the toboggan.

**Stable Sideslip Position:** When handling the tail rope of the toboggan it is a flexed and stable stance that is maintained to avoid being pulled off balance should the lead operator need assistance in slowing or stopping the toboggan.

**Transition:** A maneuver used to change the direction the toboggan operator is facing in preparation for a change in the direction of travel.

**Traverse:** The route of travel on the hill that is across the fall line.

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