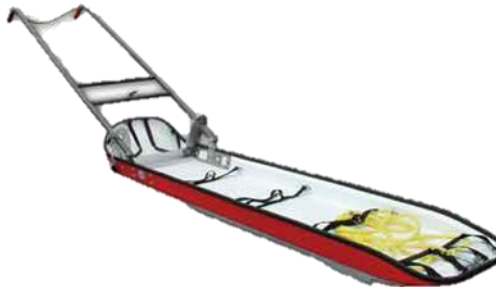




Tail Roping 101



Teaching the finer aspects of rope handling



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Central Division
November 30, 2012



Tail Roping 101

Course Objective:

Develop better understanding of the skiing skills necessary to operate a toboggan tail rope, to more effectively train patrollers on how to operate the tail of the toboggan.

Course Participants:

OET Instructor Trainers and OET Trainers.

Course Deliverables:

Develop OET trainers that can identify students that need more ski skills instruction, deliver various exercises and drills designed to improve edge control **prior** to training on the toboggan tail.



Tail Rope Clinic Structure

1 – Getting the picture – Inside-?

- Understanding alignment & stance,
- Understanding the basic planes of skiing,
- How that relates to Balance, Edging, Rotary and Pressure (**BERP**)
- How understanding **BERP** leads you to be a better trainer!

2 – Evaluating your student's degree of edge control – On Hill

- Have students ski an intermediate slope to observe their **BERP**.
- Instructors to demo side slipping and traversing
- Observe students side slipping – Error recognition
- Determine cause and suggest possible solutions to correct

3 – Use progression of edge control drills and exercises – On Hill

- Traversing
- Side slipping
- Falling Leaf

4 – Practice tail roping techniques – On Hill



Training Challenges for Tail

- The tail rope position is difficult because it requires a skier to use the entire range of skills in the balance, edge, rotary and pressuring movements. In addition, edge control skills range from slipping/sliding a flat ski, to aggressive edge control for emergency stops.
- Physically strong skiers who exhibit difficulty with the tail position may have equipment issues and need their alignment checked. Boot and/or ski canting may be necessary to achieve a flat ski.
- Too many people are training on the tail before their skiing skills are ready.





Understanding Alignment & Stance

Alignment:

- The positions of the skier's body segments in relation to each other and to the forces acting on the skier

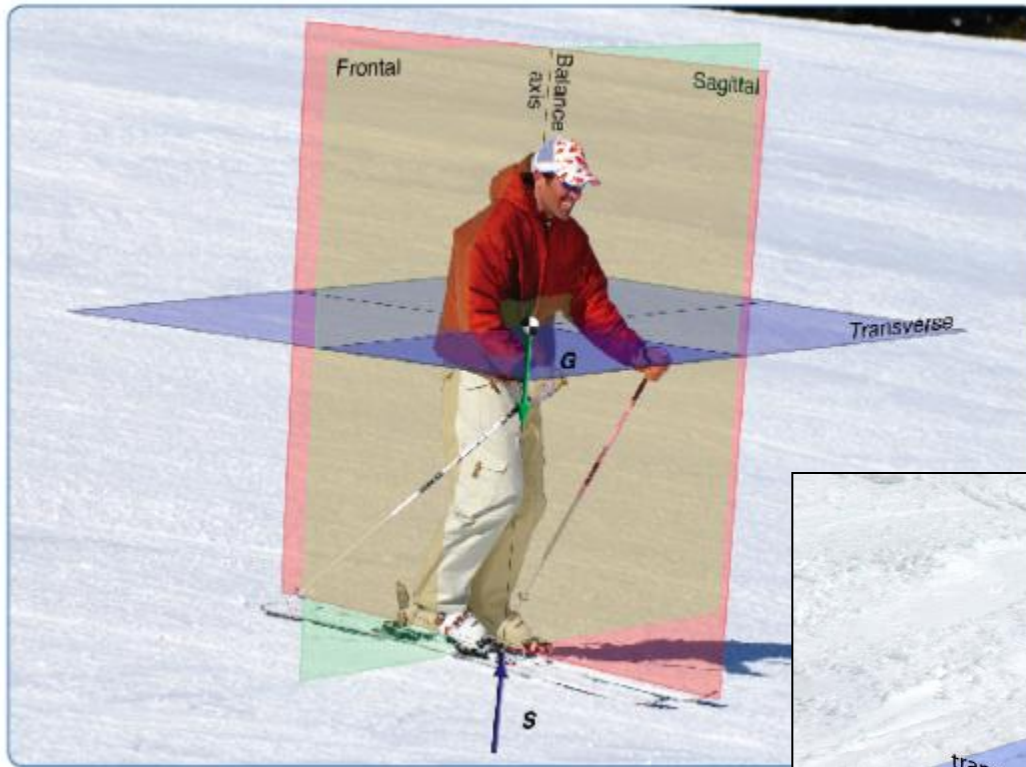
Stance:

- The collective effect of various elements of alignment
- You can always improve a person's skiing by improving his or her stance
- The segments of your body must be arranged so that you can effectively perform the movements of skiing to:
 - Accurately manipulate your skis
 - Manage terrain while balancing against the forces of the turn
- Each element of alignment addresses some element of basic technique or balance (i.e. BERP)

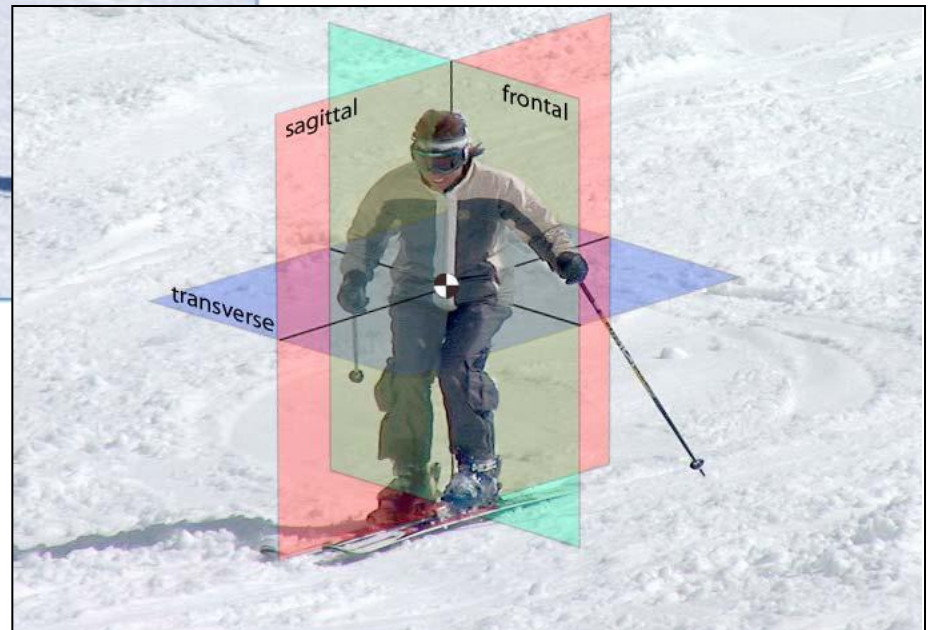
Planes of Reference in Skiing

3 Standard Planes:

- Frontal
- Sagittal
- Transverse

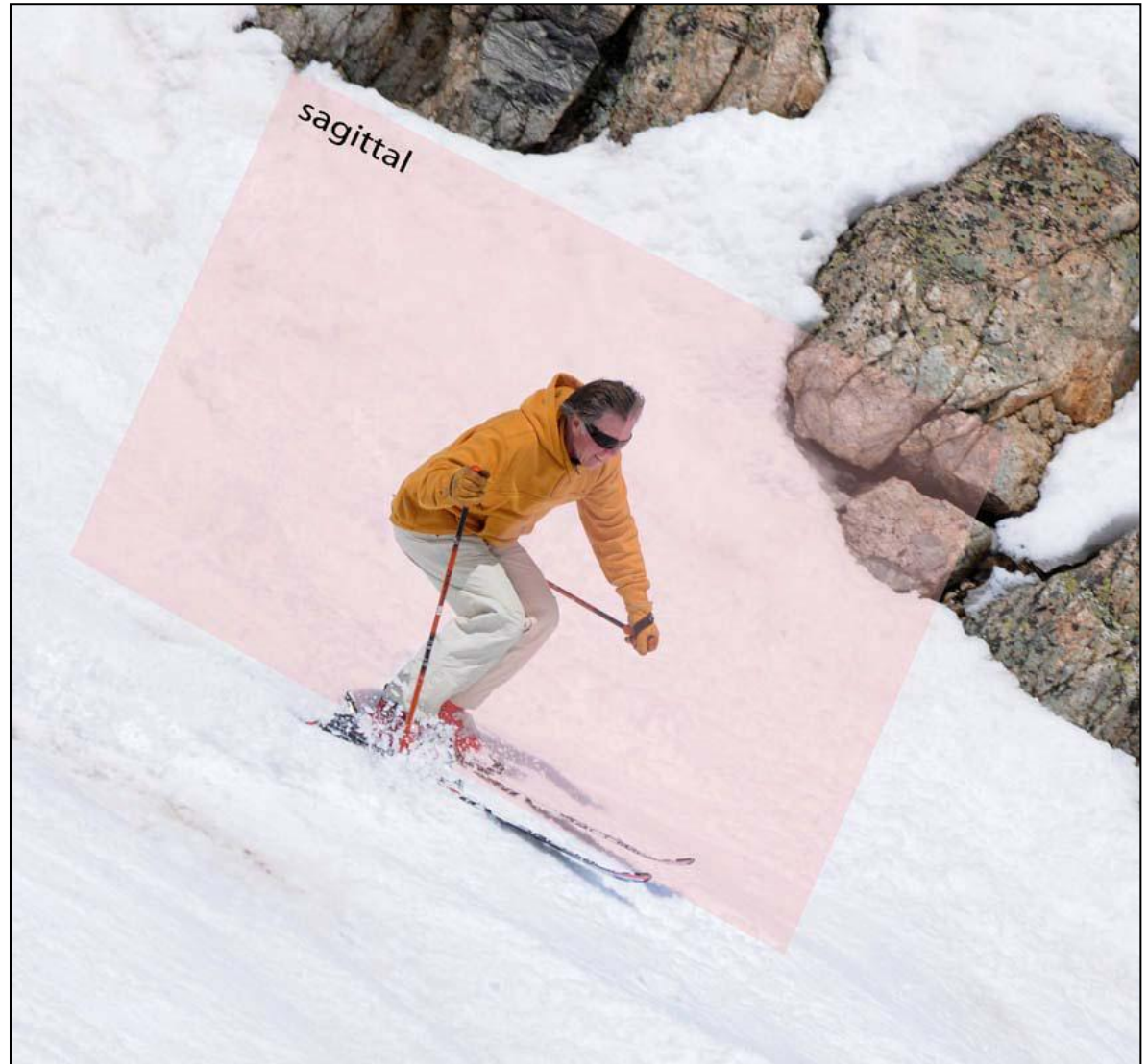


Why is this important to know?



Sagittal Plane

What we commonly refer to 'forward or back' on your skis.



Frontal Plane



When we reference a skier banking or leaning and not achieving angulation

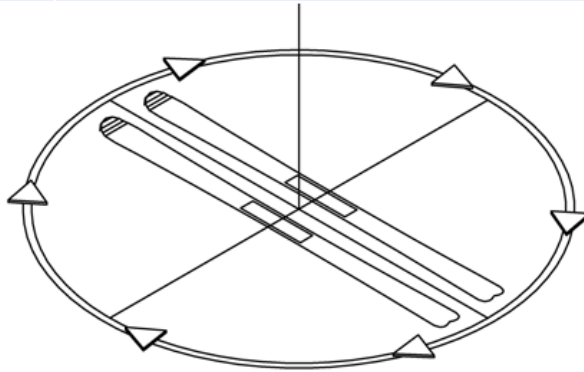
Transverse Plane

Divides the skier's body into upper and lower parts.

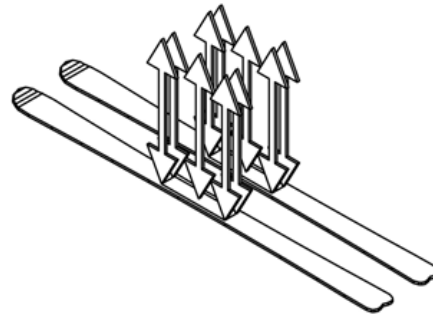


4 Basic Ski Skills: BERP

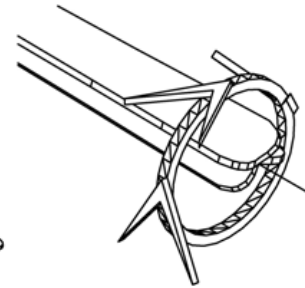
Proficiency		Leads to...
B	Balancing	Maintaining balance while in motion
E	Edging	Aiding in adjusting the edge angle of the ski relative to the snow
R	Rotary	Turning and guiding the skis
P	Pressure Control	Managing and manipulating pressure variations between the ski and the snow



Rotary/Steering/Guiding



Pressure



Edging

Balance



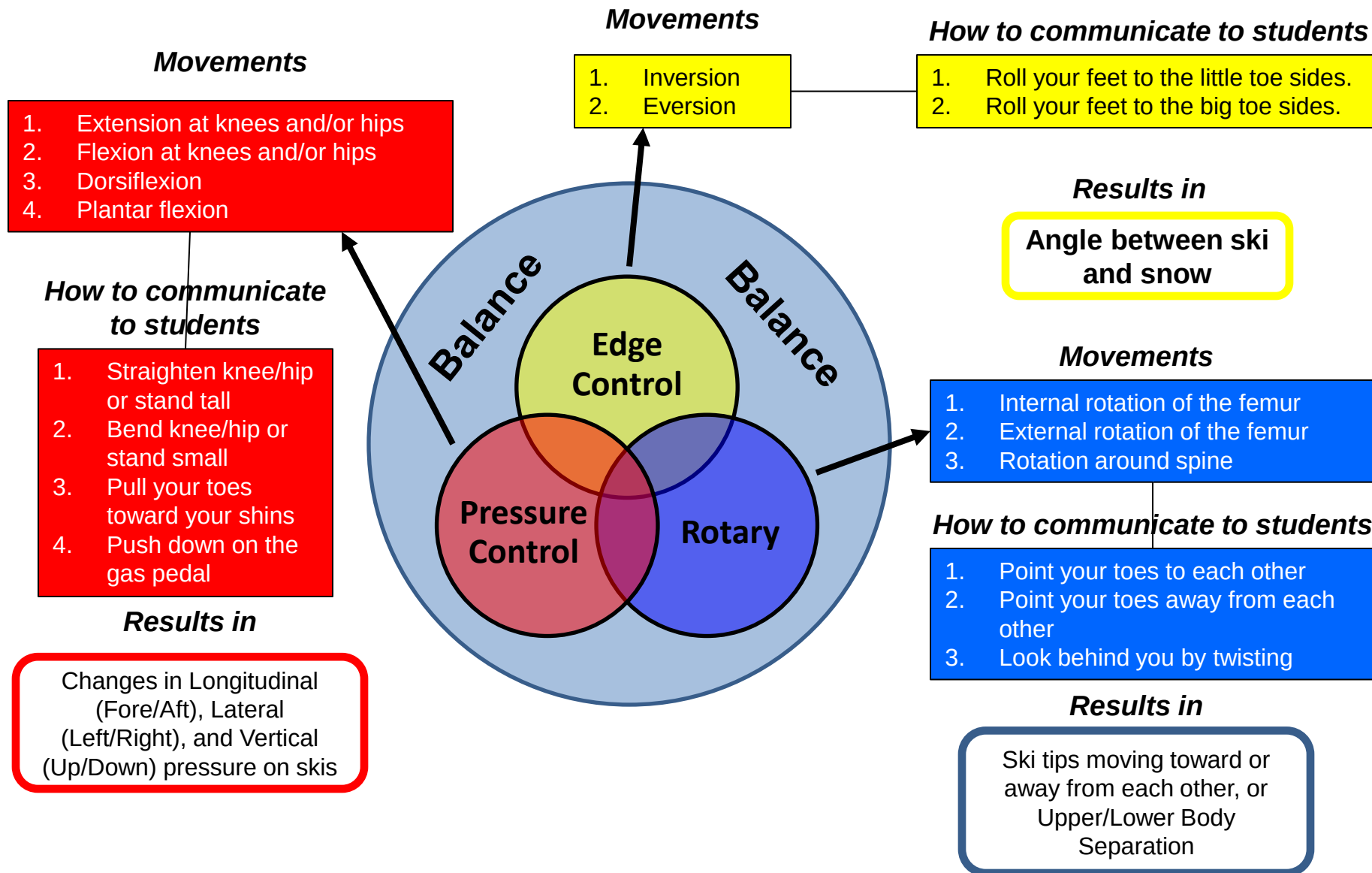
What Does Alignments, Planes and Burping Have to do With Skiing?



Tail Roping 101



How Movements Relate to Skills





Basic Ski Skills

Balance - Candidate will be able to do:

- Maintain lateral and fore-aft balance through common tasks and demonstrations

Edging - Candidate will be able to do:

- Demonstrate a gradual increasing and decreasing of edge angle throughout a series of turns.
- Demonstrate use of ski design in Beginner/Novice zone level skiing tasks.

Rotary - Candidate will be able to do:

- Demonstrate a gradual steering of the skis to assist turn shaping.

Pressure - Candidate will be able to do:

- Maintain ski-snow contact with both skis.
- Demonstrate a shift of pressure to the outside ski throughout a series of turns.



Objectives and Skills Intersect on the Score Sheet

Skill: Loaded Toboggan - Rear

Critical Standard:

Does the toboggan tail rope operator maintain balance while stabilizing rear of the loaded toboggan?

Performance Objectives:

1. Holds tail rope using both hands in front of body, waist to mid-thigh level
2. Downhill hand closest to toboggan and used to control tail rope
3. Tail rope in fall line with maximum of one coil recommended
4. Tail rope managed with functional tension (minimal slack)
5. Provides secondary braking as necessary
6. Traverses in both directions with minimal toboggan sideways slippage
7. Coordinates and communicates with toboggan lead
8. Monitors patient and hill traffic condition
9. Ensure that 'reserve braking rule' is in place at all times



On-Hill Clinics for Tail Rope

Ski Training:

- Side slipping
- Falling Leaf
- Traversing
- Garlands

Toboggan simulation drills:

- Rope-a-Goat
- Are there others???

We are really practicing skiing skills and not tobogganing skills.



What' wrong with this picture? Would your momma let you handle a tail rope this way?



Exercises to Improve Skiing Skills for Tail Rope

Maneuver	Description	Key Points	Skill Highlights
Traversing			
Parallel Traversing	Travel in a straight line across the hill	Maintain two distinct tracks in the snow	Balance, Edging
Uphill Ski Traverses	Travel in a straight line across the hill on the uphill ski	On uphill ski with downhill ski just off and parallel to the snow	Balance, Edging
Downhill Ski Traverses	Travel in a straight line across the hill on the downhill ski	On downhill ski with uphill ski just off and parallel to the snow	Balance, Edging
Side cut Traverse	Parallel traverse letting sidecut of skis create a natural arc	Maintain two distinct tracks in snow	Balance, Edging
Sideslip			
Straight	Slipping straight down the fall line	Maintaining balanced parallel stance with upper body maintaining a slight counter	Balance, Edging
Forward	Slipping forward, across the hill	Maintain a balanced parallel stance slipping forward, across the hill, upper body facing direction of travel	Balance, Edging
Falling Leaf	Series of slips back and forth across the fall line achieved by changing pressure on front and tail of skis	Maintain a balanced parallel stance	Balance, Edging, Pressure
Rapid Lateral Sideslips	Quickly release and reengaging the ski edges while moving down the fall line	Maintain a balanced parallel stance. Simultaneously release both edges and reengage after slight descent down fall line.	Balance, Edging, Pressure
Rapid Forward Sideslips	Quickly releasing and reengaging the ski edges while maintaining a parallel relationship working legs against the upper body	Maintaining a parallel relationship working legs against the upper body	Balance, Edging, Pressure



Exercises to Improve Skiing Skills for Tail Rope

Maneuver	Description	Key Points	Skill Highlights
Sideslip			
Hockey Slips	From a straight run down the fall line, quickly and simultaneously, pivot skis under torso, keeping upper body downhill. Vary edge angle to maintain slip.	To come out of slip to straight run, rise up by pressuring the uphill ski and release edges at same time	Balance, Edging, Pressure and Rotary
Hockey Stops	From a straight run down the fall line, quickly and simultaneously, pivot skis under torso, keeping upper body countered downhill. Increase edge angle to stop.	Simultaneously release, pivot and reengage skis.	Balance, Edging, Pressure and Rotary
High Speed Side Slip	From ski racing, typically done at somewhat higher speeds, slipping down the run for a good distance before coming to a stop	Balanced with widened stance, equal on both skis.	Balance, Edging, Pressure and Rotary
Pivot Slips	Quick simultaneous rotation of both skis side to side.	Balanced and centered stance. Quickly flatten and rotate both skis simultaneously. Link and maintain fall line descent.	Rotary, Edging and Balance
Whirly Birds	Series or linked 360 degree slips completed in both directions	Staying close to the fall line maintain a consistent speed	Balance, Rotary, edging



The Secret to Success!

“What makes the tail person position difficult is that you must use aggressive edge control on your skis/board to maintain both position and speed. The key: Practice traverse and falling leaf exercises until you can do them perfect in all conditions and terrain, then the tail position becomes easier.”



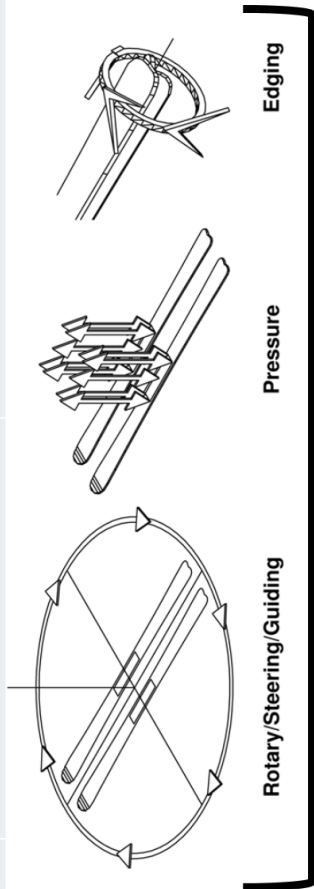
Quick Reference Card

Front

Back

4 Basic Ski Skills: BERP

Proficiency		Leads to...
B	Balancing	Maintaining balance while in motion
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BERP – Skills Assessment (PSIA)

Balance	Edging	Rotary	Pressure
- Maintain lateral and fore-aft balance through turn transitions, as balance shifts from foot to foot through terrain and conditional variations - Demonstrate an ability to consistently maintain the balanced relationship of the hips and the feet through all phases of the turn - Utilize proactive movements which anticipate ski reaction and create balance adjustments, minimizing the interruption of rhythm and flow in most situations common to all mountain skiing	- Begin tipping of the skis from uphill edges to the downhill edges before turning the skis toward the fall line (minimal pivoting to an edge) in most conditions on any terrain on most mountains - Demonstrate progressive, dynamic increase and decrease of edge angle throughout the phases of the turn - Utilize sidecut/ski design as the primary component controlling turn shape in most conditions in most situations	- Use an appropriate amount of rotational guiding to assist edge engagement and direction change when dictated by conditions, terrain, or task - Demonstrate consistent guiding of both feet into and out of the fall line, creating two well defined arcs in the snow (minimal tail displacement) - Utilize strong, accurate rotational movements in conditions, terrain, and tasks which require quick direction change with minimal side cut engagement	- Maintain ski-snow contact when appropriate to condition, task, or demonstration - Adjust movements to maintain, increase, or decrease pressure and turn forces as conditions, tasks, or demonstrations require, while maintaining turn shape and accuracy - Demonstrate a gradual increase in pressure to the outside ski throughout round turns in most conditions in most conditions on any terrain on most mountains. - Adapt to terrain variables with minimal interference with ski performance