



TEN TOBOGGAN REMINDERS

The 10 Toboggan Reminders review the NSP Central Division Practices & Procedures for safely operating toboggans. Please review this page before teaching patrollers.

1. **Inspect the toboggan** Check all attachment points, nuts, bolts, and tail rope condition, especially on older toboggan models where the tail rope or carry ropes might pull through the body, & for loose or missing parts. Also, inspect handles, handle locks, fins, patient straps, chain, and chain brake release.
2. **Fanny Packs and Backpacks must not be worn while in the lead position.**
3. **Approach: Handles Unlocked:** The most efficient, safest, and most direct route to the accident scene should be taken. The basic approach involves a combination of a wedge, parallel skiing, sideslip, or falling leaf for alpine/telemark, and sideslip for snowboarders. For senior-level patrollers, the approach primarily involves skiing (parallel) with sideslip or falling leaf. Snowboarders should also ride or sideslip to the scene and may have a hand on the crossbar or two hands holding onto one handle. The goal is to minimize toboggan movement across the fall line. Stop uphill and to the patient's side to assess the toboggan's position. When beginning the final approach, if backing the toboggan in, create a "J" shape and sideslip backward to pull the toboggan across the fall line away from the patient. Utilize the inertia to slide the toboggan forward and below the patient. Tipping the toboggan onto the downhill fin will make it easier to maneuver. The Central Division believes that all patrollers should be taught to position a toboggan for patient pickup without locking a handle. A snowboarder may choose to lock one handle to aid in positioning. In deep snow, it is acceptable for a skier to lock one handle to prevent the toboggan from becoming a shovel.
4. **Loading a Patient:** The toboggan must be securely anchored when loading the patient. This can be done by having a patroller hold the toboggan with the handles locked, dropping the chain under the bow, or pushing the handles into the snow. Alternatively, skis or poles can be placed through carry ropes, or slide arrest anchors built into newer toboggans can be used. Once the lead has operational control of the toboggan (with the handles locked), the anchor can be removed. Effective communication is crucial for safety.
5. **Lead Operator: Position in the handles:** As a skilled OET operator, you'll discover the advantages of working in all areas of the handles, both inside and outside. The key is understanding how positioning in the handles affects your performance. An athletic stance provides optimal route selection, pace, control, and braking. Patrollers should be cautious when using the crossbar while in the handles on steep slopes, as pushing against it (backward, uphill) can reduce friction for the nose of the toboggan and chain, causing you to lose balance. An athletic stance allows for greater control in applying downward *pressure* on the handles, generating more friction. The lead operator's responsibilities include selecting a smooth and continuous pace, maintaining the toboggan's stability, providing primary braking, patient monitoring, and communication with the tail person. A secondary brake is essential for the patroller, patient, and public safety. This can be a tail rope or a readily deployable chain brake. While the sideslip is our primary method of transporting a toboggan downhill, it may be necessary to switch to the opposite side. The goal for all alpine and telemark patrollers should be to perform a quality pivot slip with simultaneous edge change. Snowboards should utilize torsional flex to pivot the board.
6. **The Chain Brake,** The use of the chain brake is always at the operator's discretion. Feathering the chain enhances the efficiency of running the toboggan. Adjust your position in the handles and use your legs to manipulate the chain pressure. When operating the toboggan alone, ensure that the chain is engaged or in a deployable position so that it automatically engages if the operator falls.
7. **Deployable Chain Release:** When operating a toboggan alone, the chain brake must be in a deployable position, usually held in, or in front of the hand, off the handle stop. This ensures that the chain activates if the operator loses contact with the handles. Depending on the conditions, the skill of the operators, or the size of the occupant, having the chain in a deployable position can be advantageous. In case the lead falls, the chain deploying automatically can help the tail person regain control of the toboggan. The primary objective is always to prioritize the safety of the patient, the public, and the team.



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8. **Tail Rope:**

Role: The Tail Rope operator's primary responsibility is to monitor the patient's safety, observe the uphill traffic, assist in secondary braking, assist with control when the toboggan deviates from the fall line, and maintain communication with the lead operator.

Positioning: The tail rope operator should be positioned uphill of the rear of the toboggan, in the fall line. Maintaining functional tension on the rope helps control the toboggan. When the lead performs a direction change down the fall line, the skiing tail operator waits until the lead completes their maneuver and becomes stable before performing their direction change. Snowboarders should stay on their heel sideslip and avoid transitioning while on the tail rope. When traversing across the hill, the Tail Rope Operator should maintain control and position themselves above and slightly behind the rear of the toboggan to minimize the toboggan slipping.

Rope Handling: The tail rope should be held with both hands in front of the body, at the waist to mid-thigh level (the center of mass). This position helps maintain pressure on the downhill ski or the edge of the board. For a skier, the downhill hand, closest to the toboggan, controls the functional tension of the tail rope. To achieve this, the operator manages the appropriate length of rope by gathering and releasing it. This maintains functional tension to assist the Lead Operator. The Snowboarder may hold the rope with either hand. It's recommended to have a maximum of one coil of rope in the hands. The other hand loosely holds the looped end of the tail rope.

9. **Traversing the Hill:** Traversing the hill requires utmost caution due to the toboggan's length, the steep slope, and the limited visibility to the public. Be vigilant for uphill traffic and communicate with the tail operator. To prevent the toboggan from slipping, press the downhill handle firmly to engage the downhill fin more effectively. There are two methods for executing a direction change.

Type 1: The lead operator will set an edge to initiate the downhill traverse across the hill by pressing the downhill handle. The tail rope operator should position the tail rope in the fall line, above and slightly behind the rear of the toboggan. Once a point is reached on the other side of the hill, the lead operator will prepare for the transition. They will release the edge set and initiate a sideslip to position the toboggan and the tail rope in the fall line. Falling leaf and edging skills can be employed to maneuver the toboggan into the fall line. Once the toboggan and tail rope are in the fall line, the lead operator will transition and continue the sideslip, maintaining it until the tail rope operator completes their transition and assumes a stable sideslip position.

Type 2: This variation enables a swift change in direction for the team. The transition happens during the traverse before the toboggan enters the fall line. The lead operator initiates an edge set to begin the traverse across the hill, pressing down on the **downhill** handle. The tail rope operator positions the tail rope in the fall line, slightly above and behind the rear of the toboggan. To prepare for the direction change, the lead operator transitions while the toboggan is in the traverse and before entering the fall line. The lead operator then sideslips down the fall line in a stable sideslip position. The falling leaf and edging skills are utilized to maneuver the toboggan into the fall line. Once the toboggan and tail rope are in the fall line, the tail operator transitions and continues the sideslip, maintaining the sideslip until the tail rope operator completes their transition and assumes a stable sideslip position.

When operating a toboggan alone, refrain from attempting to traverse moderate to steep slopes due to the inherent risk of the toboggan slipping.

10. **Completing a Run:** The most efficient way to transport the toboggan to its final destination is to use the most suitable path and technique. A basic-level patroller can employ a combination of a wedge or a power wedge. On the other hand, more advanced or senior-level patrollers should "ski" the toboggan, executing short turns with minimal impact on the toboggan's track. Additionally, having the tail operator come alongside the lead on flat terrain can assist in pulling the toboggan. Lifting the handles can reduce friction, helping the toboggan slide smoothly on shallow terrain