

Toboggan Training Checklist

Checklist as follows:

1. Essential Basic Skills,
2. Toboggan Components,
3. Daily Checklist,
4. Terrain and Snow Conditions Considerations,
5. Route Selection,
6. Operate an Unloaded Toboggan to 1050, and
7. Operate a Loaded Toboggan in both the handle and tail rope positions.
8. Load chair with toboggan

Essential Basic Skills

Trainees must be able to demonstrate the following skiing snowboarding skills proficiently before beginning toboggan training. Evaluate on groomed runs of varying pitch.

1. Starting from a straight run pivot into a sideslip both left and right,
2. Vary the speed at which they pivot into a sideslip (slower can be harder),
3. Have candidates do straight run, move into sideslip, falling leaf, and back to straight run both left and right,
4. Demonstrate transitions from parallel to power snowplow,
5. Have them try kick turns on the flats and varying inclines with and without poles,
6. Have them demonstrate skating traverse to maintain and gain altitude,
7. Have them demonstrate hockey stop both left and right, and
8. Before they try the above skills with a toboggan, have them try different hand positions while performing the above tasks to ensure they have good balance skills. ie hands out front, on hips, on head etc.

Toboggan Components

Trainees must be able to identify and describe the purpose of the components of Mt Washington toboggans as follows;

1. Shell,
2. Fins,
3. Handles,
4. Handle locks,
5. Chain brake,
6. Tail rope,

7. Patient straps, and
8. Toboggan pack.

Daily Checklist

Trainees must be able to complete Daily Toboggan checklist as follows;

1. Remove toboggan from storage or dig it out of the snow,
2. Inspect the control surface for damage ice and snow, and clear them as required,
3. Inspect the shell, frame, and fins for structural integrity,
4. Inspect the handles, handle locks, bolts, and rope/webbing handles looking for defects and are functioning ,
5. Verify the chain brake and leash are functioning and secure,
6. Verify the tail rope is secured, knot free, not frayed and of appropriate length,
7. Inspect toboggan pack secured with slip knots, and
8. First Patroller confirms location and number of toboggans to first aid at the beginning of the day.

Terrain and Snow Conditions

The toboggan handler must know and demonstrate how terrain and snow conditions affect toboggan manoeuvres and how these factors influence route selection. ie that the quickest of most direct route isn't always the right one for the situation. Major Points to be covered as follows;

1. Flat terrain
 - Decreases speed
 - Increases level of effort required pace yourself
 - Lift the front of the toboggan when approaching flats to maintain momentum
 - Tail roper skates ahead to assist pulling
 - May require snowmobile to tow
2. Trails
 - Limits ability to traverse
 - May involve high traffic areas congestion
 - Limited space for skating
 - May be difficult to control and check speed
3. Terrain Drop
 - Limits the contact between the toboggans running surface and the hill
 - Speed will increase
 - Braking ability reduced
 - Traversing limited

- Pt comfort may be compromised
4. Uphill
 - Decreases Speed
 - Increases your level of fatigue pace yourself
 - May require ascending belay or climbing traverse
 - Snowmobile tow
 - Additional personnel required
 5. Groomed , Packed Powder Runs
 - Usually the most comfortable ride for the patient
 - Best edge control
 - Best braking effectiveness and turning ability
 6. Moguls
 - Rough ride uncomfortable for the patient
 - Limits route choices
 - Reduces braking control
 - Challenging to maintain consistent speed control
 - Frequently varied snow conditions requiring multiple control techniques
 - Fins may release from the snow making it harder to control toboggan
 - Move from one mogul to the next by linking the faces and sidewalls of the moguls avoiding the ridges and troughs
 7. Deep Heavy Wet Snow “West Coast Powder”
 - Snow build up in front of toboggan and operator
 - Speed reduces
 - Underlying terrain hazards often concealed
 - May require additional patrollers to pull the toboggan
 - Use snowboarder in front to break trail with slight falling leaf
 8. Breakable Crust or Crud
 - May cause the operator or toboggan to break through the snow and reduce speed impede your progress
 - Speed reduced
 - May be best to move diagonally to the fall line with static change of direction
 - May require to sidestep or belay down steeper terrain
 - Snow boarder in the handles may have better control and less fatiguing
 9. Hard pack, Firm, Icy Snow
 - Higher speeds develop

- Reduced braking effectiveness
- Traverses less effective and may require strict adherences to the fall line
- Requires well tuned equipment for control ie sharp smooth edges
- May be required to belay the toboggan in difficult areas

10. Powder

- Additional coverings for the patient may be required
- Braking more difficult
- Traversing may be ineffective stick to the fall line
- Underlying hazards hidden
- Avoid flat terrain
- Operator may be required to keep speed up to maintain control and buoyancy

Route Selection

The toboggan operator will demonstrate the ability to select the most appropriate route to and from the 1050 location and to first aid under a variety of conditions based on the following points;

1. Determine the safest and quickest route determined on
 - Runs available
 - Snow conditions
 - 1050 location
 - Patients condition
 - Skier traffic
 - Trail mergers
 - Patrol safety
2. Always look uphill and downhill before starting off
3. Check uphill before traverse
4. Maintain safe controlled speed for conditions
5. Continuously aware of your surroundings
6. Alert or avoid public of your approach / presence
7. Use direct fall-line descent when practical
8. Alter route to avoid obstacles
9. Know the trail intersections and mergers and approach them with caution
10. Know the daily trail hazards and avoid them if possible
11. Do not descend directly in the fall-line when getting close to the 1050 site
12. Slow or Stop away from the 1050 to plan your final approach with the on scene patroller 30- 50 ft away
13. Have your whistle handy to warn others of your approach thru congested areas

Operate an Unloaded Toboggan to 1050

The Patroller operating an unloaded toboggan will demonstrate knowledge and skill how to alter direction, maintain speed control, and safe approach to a 1050 of an unloaded toboggan on a variety of terrain and snow conditions.

1. Advantage to locked versus unlocked handles,
2. Use of chain brake for more control in hard pack icy conditions,
3. Use of handle pressure,
4. Control direction and speed using appropriate turns and side slipping depending on ability level terrain and snow conditions,
5. Maintain fall-line descent as much as possible for best control,
6. Keep the toboggan behind you in the fall line and moving as smoothly as possible,
7. Minimize upper body movements to prevent toboggan from swaying, maintain a neutral centered stance with handles gripped slightly in front of your body hip high, Upper body faces the fall line as much as possible, stay centered in handles,
8. Maintain a constant controlled speed during descent, turns and transitions,
9. Know how to recover a toboggan that has slid around in front of them,
10. Demonstrate a smooth controlled descending / ascending traverse maintain momentum with an unloaded toboggan,
11. Execute a stable and balanced static turn,
12. Execute a power stop (hockey stop) in a reasonable distance use of chain brake encouraged,
13. Anticipate the best final approach to the 1050 site slow or stop 30-50 ft away to determine final toboggan position perpendicular to the fall line with on scene attendant considering factors such as;
 - Patient's position injuries
 - Existing hazards
 - Requirement to dig out platform
 - Skier traffic
 - Your anticipated route out
14. Position the toboggan perpendicular to the fall line,
15. Set the braking device,
16. Remove uphill ski and place the tail in uphill carry handle front of toboggan,
17. Slide out of handles remove downhill ski and place through toboggan carrying handle at the rear of the toboggan, lock the handles in preparation for pt transport,
18. Undo pt tie downs and open the toboggan pack,
19. Load and secure pt into toboggan, spine, sitting, lateral as required have pt assist as much as possible without adding to the injury or exacerbating the illness,
20. Visually and physically check the toboggan, patient and all components for security, correctly positioned before departure,
21. Decide who will be in the operator, tail roper, and

22. Call First aid when starting to transport.

Operate a Loaded Toboggan

The patroller shall demonstrate the ability to safely transport the patient by toboggan from the incident site to First Aid or handover to Skidoo for final transport, in varied terrain and snow conditions, in both the handle and tail rope positions while maintaining stability and control utilizing the following Principles;

Handle position

1. Operate the toboggan at a safe consistent, and controlled speed
2. Maintain awareness of tail ropers position communicate anticipated changes in terrain, conditions and direction with the tail roper,
3. Maintain a balance and stance position relative to the handles that allows maximum control of the toboggan
4. Ski the fall line as much as possible for maximum effect for braking,
5. Be prepared for unforeseen obstacles and be able to react with power stop in a reasonable distance,
6. Utilize ski/snowboard edges as the primary braking device, chain brake as back up braking device, use handle pressure to obtain leverage and control of the fins, to maintain a safe consistent and controlled speed,
7. Do not allow the toboggan to turn when you transitional moves from parallel, snowplow, side slipping, falling leaf techniques and vise versa,
8. Be situational aware of potential hazards, and skier / snowboarder traffic,
9. Select the appropriate route to maximize patient comfort and safety,
10. Be able to traverse a slope or trail,
11. Be able to execute static direction change when dictated by terrain such as drop offs, and
12. Be able to pivot the toboggan across the fall line in order to park the toboggan to attend to the patient or to rest when becoming too fatigued to continue safely.
13. When handing over the toboggan to skidoo for transport correctly secure skidoo and toboggan together

Tail Roper position

1. When departing 1050 site as the loaded toboggan pivots through the fall line, move laterally across the fall line, remaining uphill of the toboggan
2. Follow the front operators line of travel anticipate your required actions to assist in controlling the toboggan,
3. Maintain your upper body facing down the fall line as much as possible,

4. Maintain the appropriate uphill position relative to the toboggan to be ready to assist the front operator to control and maintain stability, avoid making simultaneous transitions with the front operator,
5. Use your downhill hand to control the tail rope so that you can power stop as required,
6. Manage slack in the tail rope to decrease reaction time to assist with breaking,
7. Do not secure yourself to the rope or wrap around hands or arms,
8. Use of knots in tail rope to serve as hand holds are allowed ensure to remove when finished transporting patient,
9. Keep the rope parallel to the fall line behind the toboggan,
10. Increase or decrease tension on the tail rope for braking as requested by the front operator,
11. Maintain tension of the trail rope to help control speed, provide lateral stability and to prevent the toboggan slipping out and over taking the front operator,
12. On flat terrain move forward of the front operator to help pull the toboggan,
13. Adjust your position due to variations in the fall line always remain uphill relative to the toboggan,
14. Maintain appropriate distance from toboggan to avoid contact with it,
15. Call out if you begin to lose your position or control so that both of you can take appropriate action,
16. When traversing slopes maintain position above and slightly behind toboggan keeping tail rope taut to prevent toboggan slipping sideways,
17. Static changes of direction do not move at the same time as the front operator, and
18. Be ready to power stop at all times should the handle operator lose control.

Load Chair with Toboggan

The Patroller will load and offload the toboggan onto the chair lift

1. Prepare the toboggan secure handles and ski poles with pt securing straps,
2. Ensure all components are serviceable and secure tail rope tucked away,
3. Attach carrier to toboggan lifting rings,
4. When ready move toboggan into position for the lift attendant to load, position yourself to off load at the top so that your ride outside the bull wheel toboggan rides the inside,
5. Follow the lift attendants direction to load the chair,
6. Once on the chair secure the carrier to the back of the chair,
7. Approaching the off load station remove the carrier's securing strap,
8. Prepare to unload, ski tips up once ski contact off load ramp stand up aggressively lifting the carrier up and forward to maintain the momentum to off load the toboggan,
9. Ski toboggan from unload area,
10. Remove carrier and return to lift attendant for transport back down the hill,
11. Remove pt securing straps from handles and secure toboggan pack, and
12. Ski and stand-up toboggan to the appropriate location.