



INDIAN NATIONS COUNCIL
BOY SCOUTS OF AMERICA®



Standard Operating Procedures for Artificial Climbing Structures On Council Property

(as of 01/01/2018)

This manual covers the following sites for use by Artificial Climbing Structure or Climbing Instructors serving Unit events (not Council or District activities):

- Outdoor Tower, Indoor Wall and traversing tower at Mabee Scout Reservation
- Outdoor Tower and Indoor Wall at Hale Scout Reservation
- Outdoor Climbing Wall and traversing wall at Graves Scout Reservation (OuterLimits)

ABOUT THIS DOCUMENT

These Standard Operating Procedures (SOP) are intended to support the Level 2 Instructor or Director (Lead) on hand for the event by providing information to be used while operating the artificial climbing structure. Additional information and BSA policies from NCAP covering camp use, first aid, etc. as referenced during training will also apply but may not be specifically identified or described herein.

All Instructors on site should recall that:

- Current Council Climbing Policies apply and should be known by Instructors on hand and should be maintained during event.
 - From Council Policy: *“Regardless of their level of training, every Climbing Instructor within the climbing site during an event is expected to maintain safe climbing conditions at all times and work within their personal capabilities and experience.”*
- The most current edition of Belay On is the document for reference for climbing activities within the BSA program.
- Climb On Safely provides awareness and identifies requirements for a Unit based climbing activity – regardless of location. Please assure that Qualified Supervision is on hand to assist Instructors in the activity.

RESERVATION and USE of Council Property

A site reservation form shall always be used and approved by the COPE and Climbing Program Manager or Climbing Committee Chair PRIOR TO using any council climbing site referenced below to assure that instructors are identified, are of proper training levels and provide sufficient staffing. No reservation is needed to use the Gateway Traversing Tower at Mabee.

Unit Check In

Before starting activities or visiting climbing site, check in with Council Ranger for the camp. The Lead Instructor must present a copy of the approved reservation form with photo ID to Ranger for access to equipment and/or any climbing site.

Equipment Check Out and Return

Check Out:

Ranger will provide direction to equipment and climbing area.

Registration form will show what site is reserved for use and if allowed to check out equipment or ropes.

If using Council gear, the pre-use inspection form shall be completed during check out process.

Use Inventory sheet for site and pull gear – ranger confirms what equipment has been checked out for use.

Equipment Check In and event close out:

At the end of usage:

1. Collect all equipment, rope and gear and return to storage locker.

2. Climbing Instructors shall inspect for and note any equipment concerns or damage experienced during event activities.
3. Contact Ranger to confirm the return of all Council equipment and gear in good condition.
4. Fill in all log books (rope, helmet or harness) with information needed.

Event Staffing:

A Lead Instructor is required and shall be a current registered scouter having completed ACS 2, COPE 2, CLI 2 or NCS COPE or Climbing Director or other BSA recognized climbing training (see current Climb On Safely). At least one additional trained Instructor of appropriate training per NCAP requirements must be present to use site.

From Climb On Safely, the Lead Instructor shall assure that Qualified Supervision is also be present in proper ratios for the group on hand.

General Operating Information

1. All BSA COPE & Climbing requirements, current Council policy, prior training and personal experience shall govern activities.
2. At least one adult at the activity site must have current training in CPR and first aid or Wilderness First Aid during all activities.
3. A First Aid Kit shall be present at activity site – Unit supplied for unit based activities.
4. Pre-use inspections are performed at all sites and on equipment to be used prior to starting activities. As needed, critical maintenance items are documented, promptly addressed and remediation is documented with Ranger prior to starting activities. In the event that repairs are not feasible, the affected site, element or component will be avoided and / or an alternate used.
5. Weather and environmental conditions shall be monitored continuously during the activities and appropriate actions, including the termination of the event, shall be taken to keep participants and instructors safe.
6. Personal helmets and harnesses are allowed only after inspection and approval by the Lead Instructor present.
7. Anyone over shoulder height from the ground shall be On Belay or an independent safety tether. No one, including instructors, shall be functioning in an unsafe manner.
8. Spotting climbers is always a best practice and should be used during activities. Participants should be trained in proper spotting techniques prior to and perform this function during activities.
9. Proper techniques for belaying shall be explained to participants and monitored continuously by Instructors if the Lead Instructor allows this activity to be performed by participants.

Safety Orientation for Participants:

Prior to setting up or starting activities, Instructors will conduct a safety orientation with all participants explaining the following:

- There are inherent risks of the activities – safety is for everyone and monitored by all so watch each other and the instructors.
- A red zone is identified for all - instructors, supervisors and participants.
 - No one, including an observer, is allowed in a red zone without a helmet properly fitted.
- Review challenge by choice and present activities for the event.
- Review proper fit of helmet and harness being used.

- “ROCK!” is a general term yelled whenever anything besides a rope is dropped or knocked off.
- Review other commands like “SLACK” or “TENSION / TAKE” for use during event.
- Never sit or place anything on railings or ledges at height; it can fall and injure someone.
- Keep ALL equipment out of dirt at all times and avoid stepping on rope or other soft goods. If Council owned equipment or gear needs to be cleaned up after use, the Lead Instructor shall be responsible for assuring everything is cleaned properly and dried as needed prior to return to Ranger and storage.

Emergency and Incident Reporting:

CLIMBING - EMERGENCY PROCEDURES

Emergencies occur anytime, anywhere. No one is ever free from the presence of a possible problem. The most important mental challenge in the event of an emergency and the most helpful to the situation is also the most difficult. You must remain calm! In the event of an emergency:

- Lead Instructor shall direct or perform the rescue with safety in mind, getting the injured party to the ground safely.
- Dial 911 and administer First Aid / CPR as needed or determined by trained first aid individual(s) on hand.
- Inform the Camp Ranger immediately for additional assistance and further coordination.
- Remove all participants from the area that are not directly involved in the situation.

REPORTING

An adult present shall have all persons present immediately write down their own independent observations of the event.

Do not disassemble any equipment associated with the accident.

A council representative will document the set up and disassemble gear

As directed by a Council representative, fill out the appropriate incident form(s) and follow directions on the incident forms.

Deliver form(s) to the appropriate Council leadership.

OUTDOOR Climbing Towers or Walls: **STANDARD OPERATING PROCEDURES**

SET UP

CLIMBING ROUTE(S)

- For climbing, a sling shot or top rope belay is used with the belayer on the ground. A belay from top of tower should only be used by trained instructors.
- Climbers may top out – finish climb to stand on platform at top of structure - only if a Level 1 or 2 instructor is present on top of climbing structure so climber may be secured to safety cable with proper tethers.
- If top out is not allowed by Lead Instructor, climbers shall be lowered by belay or down climb to ground.
- No one is allowed on top of a tower or wall except instructors and participants actually being rigged for rappelling so monitor the number of participants on tower closely.

RIGGING for CLIMB

1. P Cords (Pull Cord – a thick string) are installed on each climbing wall surface.
2. P Cords start at ground level and should be used to pull one rope end from ground, through top anchor (a shear reduction block or rated link) on anchor cable and back to ground.
 - a. Make sure to secure opposite end of rope so it is not pulled from ground.
 - b. If P Cord is missing, discuss with Ranger how to replace or if another wall is available.
3. Lead Instructor may either have climbers tie selves in using Figure 8 follow through or use locking carabiner and appropriate knot to connect rope to harness. Set up accordingly.
4. Close your system and tie knot at standing end (unused end) of rope.

SET GROUND ANCHOR with belayer out of system

1. Use available ground anchor – typically a 3-4 inch diameter steel pipe, cemented in ground, with staple or loop installed near top.
2. Using webbing, construct anchor on post using wrap 3, pull 2 or basket hitch with webbing about pole and through staple to keep webbing secured on post.
3. Use locking carabiner to join webbing ends – no girth hitches please.
4. Thread activity line through belay device and connect device to webbing attached to post with a locking carabiner.
5. Test operation of belay system and confirm that belay system is closed – that there is a knot at the standing (tail) end of the rope.

IN SYSTEM BELAY: If a ground anchor is missing, damaged or otherwise not used, belaying from the belayer (in system belay) is acceptable. All Instructors present should assure that proper loading of the belayer is maintained, good footing is available to belayer and team (if used) and that the belayer is prepared and capable to belay the climber. It is advised to also use a belay back up. The Lead Instructor has the training and ability to decide the best approach for every belay and should remain aware and adjust roles and duties as needed.

RAPPELLING ROUTE(S)

- Rappelling from the top of a climbing structure is allowed only if the Lead Instructor (Level 2) is present on top to supervise transfer from climbing to rappelling activities.

- Every individual (instructor or participant) on top of a climbing structure shall be secured by a safety tether until ready to rappel or leave platform and down climb.
- To rappel from a platform, an independent, top or bottom belay is recommended for use.
- A fireman's belay shall always be used at bottom of the rappel line – even if an independent belay, autoblock or other participant back up is used by an Instructor.

Setting Rappelling Activity Line on solid wall section:

1. Haul rope, gear and hardware needed from bottom using climbing rope set up from above. Instructor should minimize number of items carried when accessing tower to remain safe.
2. Tie a munter/mule on a steel carabiner attached to the steel anchor cable – this is the primary anchor.
 - a. Webbing loop(s) can be used to position steel carabiner on steel cable if a fixed anchor is not available on steel cable.
 - b. At least 6 feet of rope should be available at ground for use in fireman's belay.
 - c. If an independent belay is also used, make sure enough rope is available to allow rappeller to reach ground.
3. Close rappel system with figure 8 or stopper knot at end of rope at ground level.

Setting Rappelling Activity Line on open wall section (for free hanging rappel):

1. Haul rope, gear and hardware needed from bottom using climbing rope set up from above. Instructor should minimize number of items carried when accessing tower to remain safe.
2. Lead Instructor shall decide based on tower items available:
 - a. If a horizontal wooden post (typically 12 to 16 minimum diameter) is present and installed overhead, a tensionless wrap about the post may be used to anchor the rappel line.
 - b. Since steel anchor cables should always be present and available on towers, a munter/mule tied to steel carabiner attached to the steel cable can be used.
3. Instructor should always route the rappel rope and belay rope in a manner that prevents the rope(s) from being pinched, bound or otherwise impact rappel or belay activities. Pay attention and adjust routing as needed.
 - a. A rappeler should never be allowed to lower BETWEEN a tower deck and any cables, poles, posts or timber; they should always have free air available to rappel.

OPERATION

CLIMBING ON THE TOWER OR WALL

1. Ask the climber their name and advise others to stay behind the anchor post until their time to climb.
2. Ask the climber if they have done this before.
 - a. If "Yes": let them proceed independently based on skills, help only if necessary but confirm that everything they complete is correct.
 - b. If "No": then take them through the whole process verbally, tell them what is going to happen, helping them set up. (Make a point to use their name, maintain eye contact and explain the equipment / process)
3. Now have climber start C.H.E.C.K. process with belayer and correct anything as needed.
4. When done with C.H.E.C.K., climber and belayer begin "Climbing Verbal Commands". Verbal Commands should be spoken clearly but not screamed. If multiple walls are being used, designate specific walls to prevent belayer confusion. (e.g. Red and Blue, A and B, etc)

5. Belayer maintains constant visual on the climber and maintains their break hand at all times from the beginning of the climb until the climber is done, back down on the ground and climber has given the verbal command "Off Belay."
- a. It is recommended to always use a backup belayer on the ground – making sure slack rope is stacked and if belayer does not perform properly, close belay to halt climber progress.
6. After the climber is back on the ground and has given the "Off Belay" command, the climber is detached from the rope.
7. If the climber is topping out, only the climber should give the "Off Belay" command to belayer after Instructor has secured climber on top with a safety tether.

RAPPELLING ON THE TOWER OR WALL

1. WHILE keeping everyone on a safety tether, ask the rappeller if they have done this before.
 - a. If "Yes": let them proceed independently, help when necessary.
 - b. If "No": then take them through the whole process verbally, tell them what is going to happen, helping them set up. (Make a point to use their name, maintain eye contact and explain the equipment / process)
 - c. Feed rappel device for Right or Left Handed braking based on rappeller preference. Typically a tube style or Figure 8 device is used by Council.
 - d. With rappeller's back facing edge, clip the carabiner on the rappel device to the harness – gate down and locked – so that the rope is in proper position for rappel.
 - e. Clip independent belay line to harness with a locking aluminum (or steel) carabiner.
2. While still on safety tether, the rappeller moves up to the rappel edge in full view of the belayer.
3. The rappeller and belayer start the C.H.E.C.K. process – correct any items as needed.
4. Once complete, they can begin "Verbal Commands for Belaying Rappeller". Verbal Commands should be spoken clearly but not screamed.
5. The Instructor may remove safety tether from the rappeller AFTER "On Belay" is confirmed by belayer..
6. The Belayer maintains constant visual on the rappeller keeping their break hand in proper position at all times until the rappeller is to the ground AND given "Off Belay" command to belayer.
 - a. It is recommended to always have a backup belayer on the ground – making sure slack rope is stacked and if belayer does not perform properly, close belay to halt rappeler decent.
7. The rappeller can now be detached from the rappel device and independent belay rope.
8. If needed, attach rappel device, gloves and any other gear to independent belay line to haul back to top.

TAKE DOWN

CLIMBING ROUTE(S)

1. From the ground, untie knots in activity rope and remove any carabiners used to connect to climbers so nothing can prevent pulling rope through top anchor.
2. Attach P Line to rope and carefully pull rope up and P Line through top anchor, bringing P Line back to ground.
3. Secure both ends of P Line together and then to structure at bottom.
4. Remove all equipment and materials used to set up ground anchor.

RAPPEL ROUTE(S)

Three methods to descend from tower.

1. Rappel from tower on double line rappel with fireman's belay OR

2. Break down rope(s) used during rappelling and lower or down climb on belay using climbing rope prior to it being taken down OR
3. IF available and IF Instructor has proper COPE training, traverse COPE element using safety tethers attached to overhead cable to fixed ladder and descend using tethers to ground.
4. Always lower any extra equipment or gear before descending from tower when on rappel.

RAPPELL - Instructor is last to leave platform

1. Making sure that safety tether is anchored properly to tower safety cable, check area and assure that all equipment and gear has been lowered from tower. At least 1 belay device and locking carabiner will be required to rappel.
2. If using munter/mule anchor for rappel activity, break down and feed rope through anchor point OR set up tensionless wrap in 3.
3. Reduce tensionless wrap to 1.5 rope wraps or 0.5 wrap, assure no overlaps and test that it can be pulled about log freely from below for removal after descent. Care should be taken to assure that both rope segments remain at ground and do not pull free while descending.
4. Assure that both legs of rappel line are to ground and have stopper knots on each end and a fireman's belayer is present and holding both rope segments evenly.
5. Complete C.H.E.C.K. with belayer – do not rush.
6. Take in any slack on rappel lines and test operation and feed of rappel lines.
7. Place self ON BELAY with fireman's belay as back up.
8. NOW detach safety tether from cable.
9. Rappel from tower to ground with fireman's belay.
10. Once on ground, take self "Off Belay" and clear rope from belay device.
11. Remove stopper knots and CAREFULLY pull one side of rope to pull rope over anchor log or through anchor and allow rope to fall back to ground.
12. Coil rope and clear area.

LOWER or DOWNCLIMB as last Instructor to leave platform

1. Making sure that ONE leg of safety tether is anchored properly to tower safety cable, check area and assure that all equipment and gear has been lowered from tower.
2. Connect climbing rope to harness and test function and check that rope feed does not pass over and cables or surface – only edge – of climbing wall. Adjust as needed.
3. Complete C.H.E.C.K. with belayer – do not rush.
4. Place self "On Belay" and remove safety tether.
5. Move self UNDER anchor and safety cables to keep rope free of these edges – rope should only run from belayer, through top anchor and to you, the climber.
6. Move onto wall and down climb or allow belayer to lower using commands as needed.
7. Once on ground, take self "Off Belay" and then proceed to take down climbing route.

COPE ELEMENT TRAVERSE – See Site Specific Manual for details, otherwise climbing instructor training does not include this activity and so do not attempt.

INDOOR Climbing Walls

STANDARD OPERATING PROCEDURES

Indoor climbing walls are only approved for climbing using top rope belay. No rappelling allowed.

SET UP

CLIMBING ROUTE(S)

RIGGING for CLIMB

1. P Cords (Pull Cord – a thick string) are installed on each climbing wall surface.
2. P Cords start at ground level and should be used to pull one rope end from ground, through top anchor (a shear reduction block or rated link) and back to ground.
 - a. Make sure to secure opposite end of rope to ground so it is not pulled from ground.
 - b. If P Cord is missing, discuss with Ranger how to replace or if another wall is available.
3. Lead Instructor may either have climbers tie selves in using Figure 8 follow through or use locking carabiner and appropriate knot to connect rope to harness. Set up accordingly.
4. Close your system and tie knot at standing end (unused end) of rope.

SET GROUND ANCHOR – belayer out of system is best

1. At Mabee Scout Reservation, use available ground anchor installed at base of roof support truss. This is a forged, climbing rated, eye bolt for your use.
 - a. Tie a webbing loop and attach to eye bolt with locking carabiner to create ground anchor extension to point where Lead Instructor wants belay positioned.
 - i. Watch for any overhead lights or fans to assure that belay line is and remains clear during use.
 - b. Revise equipment and adjust belay position as needed.
 - c. Thread activity line through belay device and connect to webbing loop attached to eye bolt.
 - d. Test operation of belay system and confirm that belay system is closed – that there is a knot at end of standing or free end of rope.
2. Hale Scout Reservation does not have permanent ground anchors installed so 1) use trees outside of fencing or 2) use an in system belay if needed.

IN SYSTEM BELAY: If a ground anchor is missing, damaged or otherwise not used, belaying from the belayer (in system belay) is acceptable. All Instructors present should assure that proper loading of the belayer is maintained, good footing is available for all involved in the belay and that the belayer is prepared and capable to belay the climber. The Lead Instructor has the training and decision for every belay and should remain aware and adjust roles and duties as needed.

OPERATIONS

CLIMBING ON THE WALL

1. Ask the climber their name and advise others to stay behind the anchor post until their time to climb.
2. Ask the climber if they have done this before.

- a. If “Yes”: let them proceed independently based on skills, help only if necessary but confirm that everything they complete is correct.
- b. If “No”: then take them through the whole process verbally, tell them what is going to happen, helping them set up. (Make a point to use their name, maintain eye contact and explain the equipment / process)
3. Now have climber start C.H.E.C.K. process with belayer.
4. When done with C.H.E.C.K., climber and belayer begin “Climbing Verbal Commands” communication process. Verbal Commands should be spoken clearly but not screamed.
5. Belayer maintains constant visual on the climber and maintains their break hand at all times from the beginning of the climb until the climber is done, back down on the ground and climber has given the verbal command “Off Belay.”
 - a. It is recommended to always use a backup belayer on the ground – making sure slack rope is stacked and if belayer does not perform properly, close belay to halt climber progress.
6. After the climber is back on the ground and has given the “Off Belay” command, the climber is detached from the rope.

TruBlue Auto Belay Devices – only found at Mabee Indoor Wall

These devices are design and installed to provide a continuous take up of rope and a continuous belay to safely lower a climber in the event of fall or letting go after reaching top of climb.

These devices only require an Instructor to perform C.H.E.C.K. and then connect carabiner to climber harness.

- a. The Climber is immediately “On Belay” with device and no verbal commands are expected. Slack is automatically gathered and a continuous belay is provided.
- b. These devices do not hold a climber in place. Climbers should be made aware of and test this activity.
 - i. Have them climb just a few feet up and let go so they learn to trust the system.
 - ii. If they get to top and refuse to let go, you may have a recovery to make.

SET UP / USE: A P Line is attached to the steel carabiner (permanently attached to webbing) on the TruBlue and should be used to pull down to lower carabiner and P Line removed during TruBlue use.

1. Once to ground, the TruBlue webbing should be inspected for wear or damage prior to use.
2. An anchor is installed at waist height on wall so you can clip carabiner to it when TruBlue is not in use. NOTICE – the device will retract (raise up) if you let go so always clip to wall when not clipped to climber.
3. If a TruBlue retracts, a climber may retrieve and bring the webbing/carabiner back to the ground. The climber must be on belay while doing this and use the climbing lane immediately next to the retracted TruBlue to avoid risk of a pendulum swing.

TAKE DOWN

CLIMBING ROUTE(S)

1. From the ground, untie knots in activity rope and remove any carabiners used to connect to climbers.

2. Attach P Line to rope and carefully pull rope up and P Line through top anchor as found, bringing back to ground.
3. Secure both ends of P Line to structure at bottom.
4. Remove all equipment and materials used to set up ground anchor.
5. For TruBlues - attach P Line to carabiner and allow device to retract webbing back to top then secure P Line to wall.

Traversing (Bouldering) Walls or Tower: **STANDARD OPERATING PROCEDURES**

A Climbing Instructor Level 1 or better should be on site during activities.

All climbers should remain below their shoulder height so that no helmet or harnesses needed for the activity.

Always have other climbers spot climbers when bouldering – helping to keep a climber upright when falling, not catching them.

A supervisor should keep participants moving in same direction and keep climbers from crossing over each other – fall risk.

Gateway Tower at Mabee is specifically designed and constructed to allow any scout to use provided that adult supervision is present. All holds can be used as desired but several “routes” are present for added challenge:

Autobahn – natural colored handholds at ~6 foot height.

Thunder – orange and blue handholds from 6-8 foot height.

Christmas – red and green handholds from 6-8 foot height.

Pro – lime green handholds at maximum height.