Go to www.high5adenture.org/lops.

LIST OF LOW CHALLENGE COURSE ELEMENTS

A–FRAME
ALL ABOARD
BANGLE BOARDS
DO I GO
FIDGET LADDER
FULL HOUSE
ISLANDS
LORD OF THE RINGS
THE MAZE
THE MEUSE
MOBY DECK
MOHAWK WALK
MULTIVINE TRAVERSE
NITRO CROSSING
PORTHOLE (HOLE IN ONE)
SPIDER'S WEB
SWINGING BEAM
SWINGING LOG
SWINGING TIRES
TEAM TRIANGLE
TEAM TROLLEY TRAVERSE
TP SHUFFLE
TRAVERSE WALL
TRIANGLE TENSION TRAVERSE
TROLLEYS
TRUST FALL
THE WALL
WHALE WATCH
WILD WOOSEY

Operating Procedures for Low Challenge Course Elements and Initiatives

USER GUIDE

Elements in this section are listed alphabetically. The information about each element is sub-divided into the following categories.

ELEMENT NAME

Brief description of the element.

TASK

A brief description of the objective for each challenge. Set-up instructions may be included with more unique elements.

SPOTTING CONSIDERATIONS

This section includes the spotting instructions for each element. It is important that facilitators cover each point with their groups. A facilitator may choose to add additional operational instructions for an element, particularly if in his or her judgment, an activity warrants extra guidelines.

FACILITATOR'S ROLE/ ELEMENT SPECIFIC GUIDELINES

Included are safety reminders, tips to help an activity run more smoothly and special considerations for specific elements. All of these are in addition to the following general management responsibilities that are required before running any event.

- Checking the ground for unsafe ground cover, looking for branches broken at eye level, and inspecting for widow makers above.
- Inspecting the mechanics of each element to be sure it is in good working order. That would include a visual examination, where possible, of key components.
- Clearly presenting the problem, reviewing the spotting requirements and answering any questions before the group begins the task.
- Being aware of the needs of participants. This means on-going assessment of the group's progress. Appropriate schedule adjustments to better suit the group's needs are good programming practices.

VARIATIONS

Alternative ways of using or presenting an element.

The following section on Low Challenge Course Elements and Initiatives details the standard operating procedures for many of the low elements built by High 5 Adventure Learning Center. It is important to recognize that individual challenge courses vary and that basic operational practices may require modification to meet the unique features of each course.

GROUP SIZE

Suggests ideal working numbers for each element.

DEGREE OF DIFICULTY

There are three levels:

- **Basic**—Introductory Challenges: In a sequence of activities, these elements would normally follow warm-ups, trust activities and perhaps some portable initiatives. Participants need basic spotting knowledge.
- **Intermediate**—Moderate Challenges: Groups should have good spotting skills as well as a demonstrated ability to work successfully together.
- **Advanced**—Higher Level Challenges: These elements may require focused spotting and the ability to manage dynamic movement. Initiatives might be complex requiring good problem-solving skills.

A–FRAME

This is a unique initiative that requires the group to move a wooden A-frame from point A to point B with one participant standing in the A-frame. The A-frame constructed of 2 x 4 lumber is about 10' high and has 4 ropes attached to various points of the apparatus.

GROUP SIZE:
10 or more participants

DEGREE OF DIFICULTY:
Basic

TASK

The objective is to move the A-frame about 30' from point A to point B with one person standing in the center of the A. The A-frame must maintain at least one point of contact with the ground at all times. Only one person stands on the A-frame. He or she must try to avoid contact with the ground. The remainder of the group manages the ropes to keep the A-frame upright at all times. Through coordinated pulling and tension on the ropes, the group can move the A-frame forward in a series of rocking-motion steps. The A-frame participant can assist the movement with shifts in his or her body weight. The guide ropes cannot touch the ground.

SPOTTING CONSIDERATIONS

- Make sure that the rope handlers are at least 10' away from the A-frame itself.
- Instruct the rope handlers to maintain enough constant tension on the ropes to keep the A-frame upright at all times.
- The rider of the A-frame may be individually spotted. Instruct the spotter to be alert to the movements of the apparatus. Other group members should remain outside the rope area (near the A-frame) during the activity.
- This activity is best done outside on a grassy surface. The legs of the A-frame may slip on a gymnasium floor.

FACILITATOR'S ROLE

- Continue to monitor group and intervene if the alignment of ropes would allow the A-frame to fall forward or backward.

ALL ABOARD

TASK

To have a group of participants try to fit as many people as possible on the designated platform for a given period of time. To be truly all aboard, no body parts should have contact with the ground.

SPOTTING CONSIDERATIONS

- Do not allow participants to sit on each other's shoulders.
- Encourage the group to actively spot while participants are loading the platform. The bulk mass of bodies can easily become unstable, potentially resulting in a group fall.
- Ask participants to step down and away from the platform if they feel they are about to fall.

FACILITATOR'S ROLE

- Make sure the platform is placed in an open area free from obstacles.
- Spot as needed when the whole group climbs aboard.
- All Aboard platforms can be very slippery when wet. Exercise caution and use additional spotters as needed.

VARIATIONS

Have the group try the exercise non-verbally.

A portable wooden platform (usually 2' x 2' or 3' x 3') that can be used as an element in itself or as a landing base for activities such as the Nitro Crossing, Do I Go or Trolleys.

GROUP SIZE:

The numbers that can fit on the platform will be determined by the size of the base and the size of the people.

DEGREE OF DIFICULTY:

Basic – Good introductory exercise

BANGLE BOARDS

Bangle Boards, a High 5 design, are free-standing 4 x 4 red cedar beams that are used in the indoor challenge course setting to simulate such classic cable elements as the Tension Traverse, the Wild Woosey and the Mohawk Walk. The Full House and TP Shuffle initiatives can also be done with Bangle Boards. The typical Bangle Board set includes: 5 ten-foot beams, support cradles, and a Bangle Board carrier. Support cradles for the beams are designed to hold the beams on edge creating a narrow walking surface. Each of the 4 edge surfaces are beveled to varying degrees resulting in a range of challenges from easiest to most difficult. Ten-foot beams must have 3 support cradles (two on the ends and one in the middle).

GROUP SIZE:
12-14 participants.

DEGREE OF DIFICULTY:
Basic to Advanced – As the Bangle Boards are constructed with different edge surfaces, the challenge level can be adapted to meet the skill level and needs of a group.

TASK

Depending upon the configuration of the beams, the Bangle Boards may be used as a Tension Traverse, Wild Woosey or Mohawk Walk OR a combination of all three. See the Spotting Considerations under each of the elements for safety guidelines. The write-ups for the Full House and TP Shuffle are included in the Indoor Elements section. Write-ups for the others are under Low Elements.

SPOTTING CONSIDERATIONS

- There are rubber pads to place under the support cradles designed to protect flooring from damage. Hence, Bangle Boards may slide if there is any pressure placed against them. This may be particularly apparent in the Wild Woosey as participants traverse further out along the opening V. To keep the element from sliding, have participants stand on or place a foot against the support cradles. Added weight will keep the beams from movement.
- Spot each element configuration according to the safety guidelines listed for each element in this document.
- Bangle Boards lend themselves to a variety of set-ups. Long obstacle courses can be created adding innovations from other prop activities as well. Trolleys, Stepping Stones, and/or a Nitro Swing rope can be added to the mix to create interest as well as challenge.

VARIATIONS

Bangle Boards lend themselves to a variety of set-ups. Long obstacle courses can be created adding innovations from other prop activities as well. Trolleys, Stepping Stones, and/or a Nitro Swing rope can be added to the mix to create interest as well as challenge.

DO I GO?

TASK

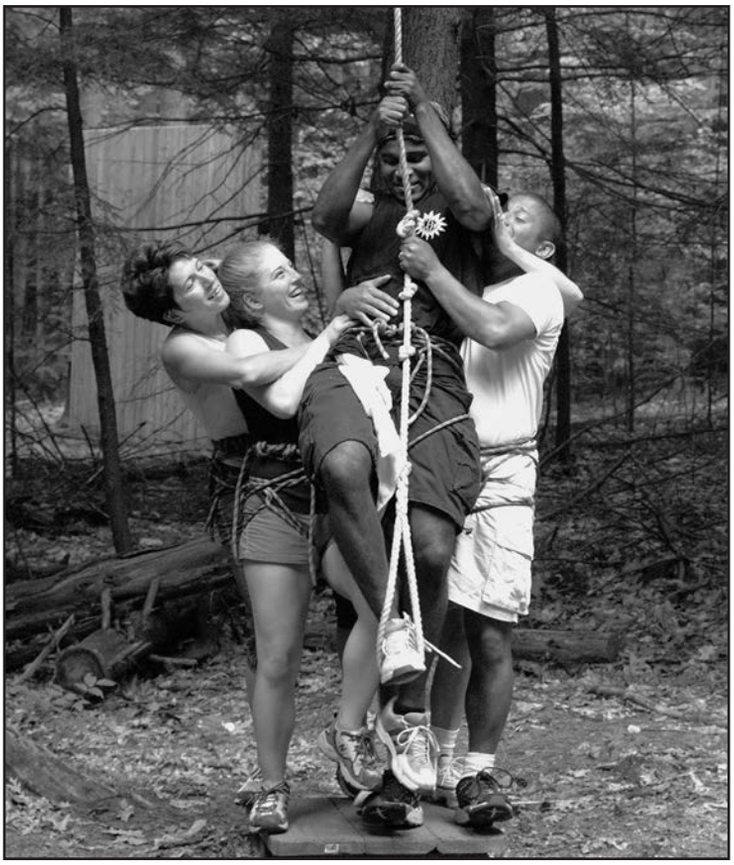
Have a group distribute themselves evenly on the four platforms. If your group numbers more than sixteen, you may want to use larger platforms. The object is for each person to swing to another platform without touching the ground. A turf touch results in sending the offending swinger back to the platform from which he or she started. Anyone else that happens to get knocked off a platform must also return to their originating platform.

SPOTTING CONSIDERATIONS

- As all participants are usually positioned on one of the four platforms, the instructor normally manages spotting. However, additional spotters should be asked to help as needed.
- Participants should be cautioned against swinging too hard and too fast.
- Spot participants carefully as they are stepping into or out of the swing rope loop.

FACILITATOR'S ROLE

- Be mindful of the varying upper arm strengths of the participants. Encourage use of the foot loop as needed. Proactively spot as needed.
- Do I Go platforms can be very slippery when wet. Exercise caution and use additional spotters as needed.



Four 2' x 2' platforms are evenly placed around the plumb line of a swing rope. To illustrate, picture the number five face of a die. The rope is represented by the center dot of the number five. The remaining four dots represent the platforms.

GROUP SIZE:
12-16 participants are ideal.

DEGREE OF DIFICULTY:
Advanced

FIDGET LADDER

The multi-rung wood and rope fidget ladder is an element that tests balance and precision. Suspended between two points, the ladder is set at such an angle that its lowest end is generally two to three feet off the ground and its highest end eight to nine feet above the ground.

GROUP SIZE:
One individual attempts the ladder surrounded by a group of spotters.

DEGREE OF DIFICULTY:
Advanced

TASK

An individual once set on the low end of the ladder attempts to move upwards while remaining in a balanced position on hands and feet.

SPOTTING CONSIDERATIONS

- Spotters need to be informed about the quick movement of the Fidget Ladder. Once weighted, the ladder can quickly flip upside down swinging in a wide arc as it turns. Spotters must stand clear of the ladder's turning radius.
- Spotters should hold the fidget ladder still while a participant mounts the ladder.
- Spotting practices for the fidget ladder vary. Effective techniques are as follows:
  - For indoor use, gym mats placed underneath the ladder can successfully cushion falls. If a gym mat is used, one to two spotters should be placed at the high end of the fidget ladder ready to protect a falling participant from having contact with the high end support structure. Spotters should also be placed along the sides with arms in a spotting position to protect a climber who may fall off the Fidget Ladder. Care should be exercised to stay clear of the rungs in the event of a quick flip.
  - A cargo net made of either rope or webbing can be slung lengthwise underneath the fidget ladder. This safety net is managed by a group of spotters who each hold one section of the net. The spotting net must be wide enough to allow room for spotters to remain clear of the element. If a fall occurs, spotters pull back on the net providing enough tension to keep the participant from having contact with the ground.
  - In both cases, participants must be told to hold on to the element with both hands if a fall occurs. This keeps the head in an upright and protected position.

VARIATIONS

Offer the Fidget Ladder in varying degrees of difficulty. The easiest is slithering up the ladder like a snake using the whole body. More difficult is allowing use of knees, hands and feet. The most difficult is an attempt with just hands and feet.

FULL HOUSE

TASK

The goal of Full House is to have the group arrange themselves in a prescribed order on the beams without ever stepping off and touching the ground.

SPOTTING CONSIDERATIONS

- Review spotting procedures.
- Encourage participants who feel they are going to fall off to step down. Have them let go of hands so they don't pull everyone off with them.
- Use spotters as needed on the exchanges.

FACILITATOR'S ROLE

- Have the participants step onto the beams in a random order. Have them spread out so participants occupy all 5 boards.
- Tell the participants that their task is to line up in a particular order without stepping off the beams. A common directive is to get into the order of when their birthdays fall in the calendar year (month and day).
- All place exchanges must take place on the straight beams only, not at the corners. This makes the activity more challenging. Participants at the corners can help and support the people changing places.
- If a participant falls off, he or she must return to his or her original starting position. For added challenge, have the whole group go back to their start point.

VARIATIONS

- Add a time limit and assign penalty seconds for anyone who falls off.
- Do the activity non-verbally.
- Place a hula hoop on the ground that can be used as a free space by any member of the group.

Five lengths of utility pole or log form a simple horizontal house shape. (2 for the peaked roof, 2 for the sides and 1 for the base). Each length is raised and supported in brackets a few inches off the ground. A full house can also be made with a Bangle Board set.

GROUP SIZE:
The larger the group, the longer it will take to order themselves. This works well with a group of between 10 to 20 individuals.

DEGREE OF DIFICULTY:
Basic – Good beginning activity to get group comfortable with appropriate touch and spotting

ISLANDS

The Islands initiative requires the following materials: three portable platforms (two large and one small) and two doubled-up 2 x 6 boards, cut to 4 foot and 6 foot lengths respectively. The platforms should be positioned so that the boards cannot reach any of the "islands" by themselves. Place them in such a way that a combination of the boards on top of each other can cross the span.

GROUP SIZE:
A group should fit comfortably, but not necessarily easily on an island.

DEGREE OF DIFICULTY:
Basic

TASK

The objective is to get the entire group from the first starting platform to the third finishing platform without touching the ground. Have the participants start on or behind one of the islands. Once the activity has begun, no one may touch the ground until everyone has journeyed to the last platform. If any member of the group touches the ground, the entire group must begin again. Modify this rule as needed depending on the experience and age of the participants. If a board touches the ground, you may elect to have a penalty for this. The boards can be heavy and hard to manipulate so choose an appropriate consequence for the group's ability.

SPOTTING CONSIDERATIONS

- Explain proper lifting procedures of the boards.
- Make sure the boards are positioned securely on the platforms with a large enough overlap before an attempt is made to cross from one platform to another.
- Caution against getting fingers pinched under boards.
- Do not allow jumping off the ends of the boards onto a platform. Such movement may cause the boards to suddenly slide and fall.

VARIATIONS

If the group is large, divide them into two groups and have each group start at opposite ends. This will result in greater complexity as the groups pass each other. However, this version can be time consuming, especially for large groups. It may be preferable to have two Islands going at the same time.

LORD OF THE RINGS

TASK

Participants each begin on a separate cable at an outer tree or pole. The challenge is for each participant to end up in a new "starting position" without falling off the cable. Suggested rules are as follows: 1) No props are allowed other than the fixed ropes. Coats, shoe strings, and other clothing are off limits. (One exception might be to allow a group to use a prop to retrieve the overhead line. It can be a long reach for younger audiences.) 2) If a participant steps off the cable, he or she returns to the starting position.

SPOTTING CONSIDERATIONS

- Spotters should be used as needed as participants exchange places on the cable.
- Spotters need to be aware of the nature of a fall from the Tension Traverse sections. A falling participant will tend to fall back towards the starting point, particularly if they maintain contact with the rope. To be effective, two spotters need to position themselves accordingly, one half step back toward the starting point. (For more details, see Triangular Tension Traverse)
- Participants should be advised to help themselves by stepping down from the cable if a fall is imminent and unavoidable.
- Participants should not move independently along the cable, i.e., without contact with another participant or a Tension Traverse rope.
- Rapid traversing movement on the cable should be discouraged.

FACILITATOR'S ROLE

- The ground should be checked for rocks and stumps that may need extra spotting.
- Encourage participants to ask for spotters if feeling unstable.

VARIATIONS

- Limit the use of the overhead rope to only one member of the group at one time.
- Require all participants to move through the center hub on their way to their final destination.

Built in a circle of trees or poles, this element is formed by cables of varying lengths that radiate out from a central hub like spokes on a bicycle wheel. Some of the trees may have placements for Tension Traverse ropes. Strung between two of the trees is an overhead Multi-line rope which can be adjusted by a Prusik knot to hang at various heights to alter the difficulty of the element.

GROUP SIZE:
Participants for each cable plus spotters.

DEGREE OF DIFICULTY:
Intermediate

THE MAZE

The Maze is just that, a maze composed of a series of rope hand lines attached to trees. These lines form an intricate network from which there is only one exit. A group's goal is to find their way out of the Maze.

Generally, groups are led in blindfold fashion to the Maze area to preclude any visual scouting of the problem.

GROUP SIZE:
An ideal size is between 10-20 participants.

DEGREE OF DIFICULTY:
Basic

TASK

If groups are first blindfolded and then led to the Maze, encourage them to stand quietly to wait for someone to come and lead them into the Maze. Next, place people as efficiently as possible throughout the Maze, keeping up a constant supportive chatter. Make sure that all participants have hand contact with a portion of the Maze line. When the entire group is within the Maze and each person has a Maze cord in hand, explain that it is up to the group to exit the Maze without stooping beneath the cord, stepping over the cord, cutting the cord, untying the cord, etc. Assure them that there is indeed an exit and that when a person physically passes through the exit, someone will tap him or her on the shoulder as a signal that he or she is free of the Maze confines.

Communication between group members is not only allowed, it is key for sharing information. However, once out of the Maze, all communication from the exited member must cease. If an exited participant, after observing what's going on within the Maze, wants to altruistically re-enter and help teammates, that person is re-blindfolded, turned around a couple of times, then re-inserted by a facilitator. That newly knowledgeable person cannot talk (optional), but can make loud sounds, and is allowed physical guiding contact with the participants remaining within the Maze. When everyone has exited or the exercise is brought to an end, allow some time for the now sighted participants to appreciate where they have been by walking them through the Maze and giving them an opportunity to share their individual sightless experiences.

SPOTTING CONSIDERATIONS

- Caution participants to walk slowly with their free hand in a bumper up position to avoid sudden contact. Remind participants that the Maze cord must always be held by at least one hand, i.e., no wandering aimlessly within the Maze confines. If someone chooses to risk a short journey from the rope, have them make contact with another participant's hand.

FACILITATOR'S ROLE

Check the area first to be sure that there are no branches broken off at eye level, vertical sticks protruding up from the ground, or any obstacles which could injure a participant.

- Assuage fears by indicating that the blindfolds can be removed as needed at any time. If wearing blindfolds seems problematic for the group, simply suggest that the group commit to keeping their eyes closed throughout the exercise.

VARIATIONS

- Have the group attempt the task non-verbally.
- Don't tell the participants what they are looking for, but say, for example: "You'll know when you've found the treasure."
- Indicate that the group has to stay together and cannot separate.
- Hang an object from one of the lines in the Maze. Ask the group to find and retrieve that object in addition to the primary task of exiting the Maze.

THE MEUSE

TASK

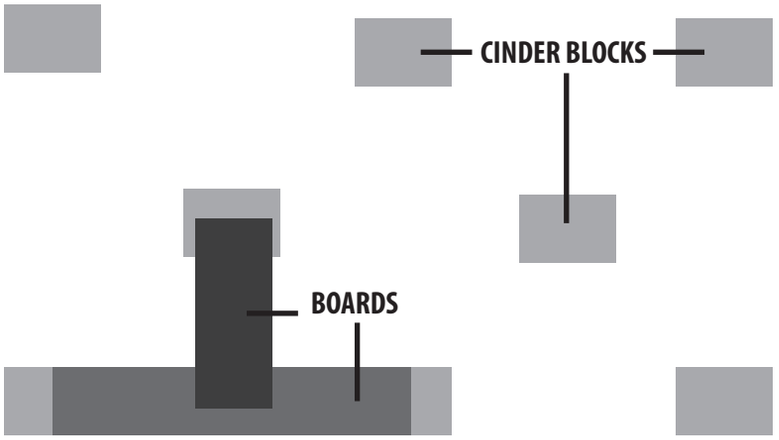
The objective is to get the entire group from one side of the cinder block grid to the other without touching the ground. The group begins behind the first row of cinder blocks. Once the activity has begun, no one may touch the ground until everyone has reached the other side of the cinder block grid, AKA the Ocean of Doom. If anyone from the group touches the ground, the entire group must begin again. Modify this rule as appropriate depending on your participants. Consider counting touches as penalties.

SPOTTING CONSIDERATIONS

- Explain proper lifting and passing procedures of the boards.
- Make sure the boards are positioned securely on the cinder blocks before an attempt is made to cross or stand on the boards.
- Caution against getting fingers pinched under boards.

VARIATIONS

- For larger groups, consider dividing them into two groups and provide each group with a set of boards. The two groups begin on opposite ends of the element and attempt to pass each other creating a more complex initiative to manage.
- Depending on the age and ability of participants, begin the initiative with two of the boards pre-positioned between blocks on the second and third row. Provide the group with only one board to begin.



The Meuse initiative consists of the following materials: Three 2 x 6 boards, cut to approximately 6 foot lengths, 10-14 cinder blocks (or wood blocks) positioned so that no single board can reach the next row of cinder blocks.

See diagram (below, left) for solution.

GROUP SIZE:
8-12 participants.

DEGREE OF DIFICULTY:
Basic

MOBY DECK

The Moby Deck is generally built as a hexagonal wooden platform balanced on a central pivot point. This construction allows the platform to teeter in multiple directions.

GROUP SIZE:
Ideally 12 participants, but 20 can participate, albeit a crowd.

DEGREE OF DIFICULTY:
Basic to Intermediate – Challenge levels vary depending upon the presented task.

TASK

To have the group execute a challenge or a series of challenges utilizing the teetering deck of the Moby Deck. See Variations.

SPOTTING CONSIDERATIONS

- Encourage participants to watch out for each other while on the Moby Deck especially to avoid any missteps off the platform.
- Indicate that no one at any time should allow any body part, especially fingers and toes, to slip beneath the ends of the platform. Emphasize that the platform is heavy and moves up and down with momentum.

FACILITATOR'S ROLE

- Present the various scenarios succinctly and clearly.
- When a group is exiting from the Moby Deck, encourage them to depart from the same end to prevent anyone from suddenly getting flipped off a higher end. There should be no jumping off the sides.
- Moby Deck platforms vary in size and configuration and hence may have different weight limits. Exercise caution to not overload the platform.

VARIATIONS

- With all participants aboard and in balance, have group members rotate positions. Possibilities are circle shuffles and side-to-side exchanges.
- A group begins on the ground. The challenge is to load all group members onto the Moby Deck, entering from the two ends. A variety of different consequences can be introduced if any side of the Moby Deck touches the ground.
- A crossing of the Moby Deck can be attempted, with all members starting on the ground at one end of the platform. Only one touch is allowed.
- Place a small beach ball on the Moby Deck platform amidst the feet of all participants. Attempt to have everyone exit from the Moby Deck while keeping the beach ball in balance on the platform. The beach ball may not be held in place by feet or hands.

MOHAWK WALK

TASK

For the group as a whole to traverse the entire length of a series of cables – from point A to Z – without making contact with the ground. A variety of hand-lines may be installed at various points to create interest for the task.

SPOTTING CONSIDERATIONS

- If a fall is imminent, have participants agree to step off the cable and not pull off other participants.
- Have participants agree to work together to avoid individuals making solo attempts without the group's consideration.
- Use group members when spotting is necessary. Group members may step off the Mohawk Walk at resting points to serve as additional spotters.
- Have participants agree not to run on the cable or dive for fixed points or trees.
- Spot more difficult sections of the Mohawk as needed. This would include any swings and/or key transition moves from one cable to another. Also, spot rock outcroppings or uneven areas of ground.

VARIATIONS

- If a member of the group falls off, have that person return to wherever the end of the group is located or to the beginning of the challenge.
- Have the whole group return to the beginning of the problem if any one member falls off. (Better bring along lunch for this variation as it can lead to a rather long initiative problem.)
- Set a predetermined number of allowed falls before the activity begins and allow fallers to get back on at the spot from where they fell.
- If time is a concern, use only three or four sections of the element.
- Offer props to the group. Possibilities are:
- A crutch: a real one – at the beginning of the problem with the proviso that the crutch can make contact with the ground, but can only move forward, never backward. Use of the crutch is disallowed if it touches the ground behind its most forward contact.
- A hula hoop: a tool that could be used just once in the activity to create a magic island on the ground. Participants would be allowed to step into this space.
- A length of rope that could be strung up as an additional hand line. Knots tied by participants should be checked by facilitators.

A Mohawk Walk is comprised of a series of low cable challenges strung between trees or poles that sequentially present a complex task for participants.

GROUP SIZE:
10-12 participants are ideal. If your group is larger, divide them in half and have each of the smaller groups start on opposite ends.

DEGREE OF DIFICULTY:
Intermediate to Advanced – Depends upon the difficulty of the individual cable elements

MULTIVINE TRAVERSE

Two cables are strung parallel to the ground, respectively at two and fifteen feet off the ground. Multi-line ropes of varying lengths are suspended at fixed intervals from the upper cable. This activity often serves as one segment of a Mohawk Walk.

GROUP SIZE:
6-20 participants allows for adequate spotting and participation.

DEGREE OF DIFICULTY:
Basic to Intermediate. The closer the ropes are hung, the easier the traverse.

TASK

An individual attempts to walk the length of the bottom cable using the hanging ropes for balance and support. Another variation is to have two participants start from opposite ends and try to meet or pass in the center. This can also be an initiative for an entire group – moving everyone from point A to B.

SPOTTING CONSIDERATIONS

- Participants should ask for spotters as needed. Two to four spotters can follow along side each traversing participant to aid when necessary.
- Participants should step off the cable if a fall is imminent or if they feel fatigued.

VARIATIONS

The crossing may also be attempted in pairs.

NITRO CROSSING

TASK

For an entire group to swing across a designated area without touching the intervening area by: 1) First obtaining the dangling rope using any resource found within the group (no sticks, ropes, etc.). No leaping or diving is permitted. 2) Transporting across the area a container filled with water (nitro) without spilling a drop. The group may elect to make the carry at any point during the exercise.

SPOTTING CONSIDERATIONS

- Participants should agree not to use excessive force to swing members across the no-touch area.
- Participants should agree to not dive or jump for the rope.
- Participants should agree to encourage and support each person's swinging effort.
- Participants should not be coerced into trying this activity.
- Encourage careful spotting during the dismount if a group member uses the loop in the end of the rope.
- Disallow any wrapping of the rope around the hands as it may result in rope burns.

FACILITATOR'S ROLE

- Encourage participants to take a trial swing before the activity starts to see if they can support their own weight. If any group member has difficulty with the swing, adjust the task rules to accommodate their level of participation.
- Be prepared to spot participants as needed. Recognize that it is difficult to spot individuals in mid-swing. Also, pay special attention to participants who use the foot loop to make sure they step out cleanly from the loop.

VARIATIONS

- Swing Aboard: This activity is essentially the same as the Nitro Crossing except that the designated landing area is on a 3' x 3' platform. Participants must be alert about falling off the platform. Do not allow participants to get on each other's shoulders.
- Disc Jockeys: This is again similar to the two previous activities but now the landing is in a series of hoops (old bike tires work well) or on discs. There is one hoop or disc per participant. Although guidelines vary for this event, participants essentially must remain in the hoop in which they initially land.

Spotting considerations for both variations follow.

SPOTTING CONSIDERATIONS: SWING ABOARD AND DISC JOCKEYS

- Inform participants that landing on a disc may cause it to slide.
- Have group members agree to communicate their intentions when swinging toward the platform, discs or hoops. Have them plan together for the effect that a swinging body may have on a crowded area. Have participants agree to swing in a controlled manner.
- Agree not to allow participants on each other's shoulders at any time during this activity.
- Swing Aboard platforms and discs may be slippery if wet. Exercise caution and use additional spotters as needed.
- Have participants agree to ask for additional spotting if balance is precarious on the landing area.

A swing rope with an attached optional prusik loop is suspended from a hanging cable. As this is an element that challenges a group to swing from Point A to Point B, boundary markers can be positioned horizontally at the beginning and end of the problem, usually about a foot off the ground.

GROUP SIZE:
10-16 participants are ideal.

DEGREE OF DIFICULTY:
Basic to Intermediate

PORTHOLE (Hole in One)

A large tire is suspended vertically between two supports at a height appropriate for the age and skill level of the participants. Tethers should be attached from eyes at the base of tire to eyes on support trees or poles to avoid excessive tire motion.

GROUP SIZE:
Both small and large groups are suitable.

DEGREE OF DIFICULTY:
Intermediate

TASK

To have the entire group pass through the suspended tire. Once through the tire, a person cannot return to the beginning side of the tire to help (except to offer back-up spotting).

SPOTTING CONSIDERATIONS

- Consistent and effective spotting is required. Spotters must be alert to protecting the head, neck and shoulders throughout the tire pass.
- Warn spotters to watch for flailing arms and legs as a participant passes through the tire.
- Diving or jumping through the tire should not be allowed.
- Have spotters agree to bring participants carefully through the tire to avoid excessive rubbing of the tire on arms and legs.

FACILITATOR'S ROLE

- Be present on the far side of the tire to spot as needed as the first participant moves through the tire. Remain in that position until a sufficient number of participants have passed through the tire to handle spotting responsibilities. Similarly, move to the front side of the tire to spot the last person moving through the tire.
- Suggest and be supportive of a second attempt so that participants have the opportunity to build upon the lessons from their first experience.
- When working with younger audiences, consider using the guideline, "First person, feet first. Last person, head first." This statement helps to emphasize the importance of careful planning and attentive spotting.

VARIATIONS

- Attempt to make the passage without touching the tire.

SPIDER'S WEB

TASK

To pass each member of a group through a separate web opening, without letting any body part touch the web. Once a member has passed through an opening, that section of web is conceptually closed to further passage. Participants cannot be passed over or around the web.

SPOTTING CONSIDERATIONS

- Group members need to actively spot any participants who are lifted during their entire passage through the web.
- Participants should agree to never drop or let go of a participant because someone touched the web.
- As lifting may be required in this task, encourage participants to protect their backs by using their legs to lift.
- Do not allow diving or jumping through the web.

FACILITATOR'S ROLE

- Monitor the spotting and be prepared to step in quickly if assistance is needed.
- Pay particular attention to the first and last participants through the web.
- It is recommended that participants be passed in a supine position (face up).
- When working with younger audiences, consider using the guideline, "First person, feet first. Last person, head first." This statement helps to emphasize the importance of careful planning and attentive spotting.

VARIATIONS

There are many options and varying rules for the web. Some of the most popular are:

- If there are more people than spaces, allow two group members to go through the same hole before it is closed. Once chosen, these spaces cannot be changed.
- If anyone penetrates an opening in the web with any body part, that opening becomes exclusively theirs to go through, regardless of the size of the opening.
- Modify the consequences for touching the web to match the ability of the participants. One option is to have the passed participant or even the group begin again if a participant or a spotter on either side of the net touch the web.
- To weave an 11 mm climbing rope through the web. The rope must go through all holes of the web. The rope may not pass completely through the first hole until it passes through the last hole. Neither the rope nor any of the participants may touch any part of the web.
- Use spring-loaded clothespins to mark which web openings have already been used.

A prefabricated web strung between two trees, 10-14 feet apart, is comprised of approximately 15 to 17 open web sections. The web is constructed of multi-line rope and bungee cord.

GROUP SIZE:
For a single web, 8-12 people are ideal – if the web is L-shaped, the group can be larger. More holes, more action.

DEGREE OF DIFICULTY:
Intermediate

SWINGING BEAM (Indoor Version)

A free-swinging 4" x 6" x 16' laminated beam suspended on each end by a pair of overhead cables.

GROUP SIZE:
One individual attempts the log while the rest of the group spots.

DEGREE OF DIFICULTY:
Intermediate

TASK

One individual mounts and walks the length of the beam, attempting to maintain his or her balance.

SPOTTING CONSIDERATIONS

- The indoor swinging beam is a very dynamic element. The beam itself has both side to side and forward and back movement. As it is not that heavy, beam movement can occur quickly especially if a participant on the beam falls off suddenly. Tethers, managed by spotters, are often placed at each end of the beam to dampen sudden movement of this element.
- Spotters are placed along the beam as needed. Spotters are also used to manage the tethers. The tethers would be held loosely unless a fall occurs. Then, tension would be applied to the tethers to reduce beam movement.
- Be sure to demonstrate the potential movement of the beam if a fall occurs. Spotters should be able to adjust their spotting positions to protect both themselves and the participant when a fall occurs.
- Spotters need to be able to move laterally with the traversing participant.
- Emphasize pro-active spotting; i.e., step toward, not away from.
- Spotters must never position themselves where they can be hit by the swinging beam.
- Have participants agree not to forcefully jump off the beam creating wild swinging motion.
- Have participants agree not to run on the beam.

FACILITATOR'S ROLE

Give a complete demonstration of how the beam can move and the various arcs through which it can swing.

VARIATIONS

From a distance of about two feet away from the beam, an individual attempts to step onto the beam to maintain balance for a five second count.

- To walk the beam backwards.
- Two participants attempt to walk the beam together or in opposite directions.

SWINGING LOG (Outdoor Version)

TASK

One individual mounts and walks the length of the log, attempting to maintain his or her balance.

SPOTTING CONSIDERATIONS

- Be sure to demonstrate the potential movement of the log if a fall occurs. Spotters should be able to adjust their spotting positions to protect both themselves and the participant when a fall occurs. Emphasize that a sideways spotting stance will help to prevent shin injury.
- There are two spotting options. One is to designate a cluster of spotters, positioned on either side of the log, who will move alongside the traversing participant. A minimum of two spotters would be required in this method. A second option is to place spotters at intervals along each side of the log. Each spotter actively spots the participant as he or she passes. Good communication among spotters is necessary to insure that spotting is continuous throughout the traverse.
- Two people need to be in position at the ends of the log to grab the support cables to lessen the motion of the log after a participant falls or steps off. Rope tethers attached to the log could also be used to reduce log motion.
- Emphasize pro-active spotting; i.e., step toward, not away from.
- Spotters must never position themselves where they can be hit by the swinging log (including in between log and support trees).
- Have participants agree to not forcefully jump off the log, creating a wild swinging motion.
- Have participants agree not to run on the log.

FACILITATOR'S ROLE

- Give a complete demonstration of how the log can move and the various arcs through which it can swing.
- Alert the group to the log's mass and weight and potential for movement.
- Do not allow participants to sit on the log.
- As a facilitator, it may be a good practice to position yourself near the end cables of the log in the event that the spotter there needs assistance to slow/stop the motion of the log.
- On set-up and take-down of the log, make sure there are enough people to manage the weight of the log. Emphasize proper techniques for lifting.

VARIATIONS

- Log pass: Two individuals mount the log on opposite ends. Their goal is to traverse the log bypassing each other in some fashion in the middle. Close spotting is required.
- High 5: Two individuals attempt to meet in the center and give a High 5.
- Executive Reach: From a distance of about two to three feet from the log (draw a line in the dirt), an individual attempts to step onto the log, gain balance and remain in place for five to ten seconds.
- Walk the log backward or blindfolded.

The Swinging Log is most often represented by a 25-30 foot utility pole, suspended on cables between two trees approximately 10-12 inches off the ground. Swinging Logs should be tightly secured or detached when not in use to limit unsupervised access.

GROUP SIZE:
12-20 individuals. One or two individuals attempt the log as the remainder of the group spots.

DEGREE OF DIFICULTY:
Intermediate

SWINGING TIRES

A series of tires are suspended from an overhead cable.

GROUP SIZE:
8-12 participants – This activity can be time consuming for larger groups as the rotation of group members across the tires is slow.

DEGREE OF DIFICULTY:
Advanced – Activity is strenuous/ requires upper body strength

TASK

The challenge is for the group to cross a designated area swinging from tire to tire. To enhance the team work aspect of the exercise, give the group a heavy object with a large handle that they must collectively transport from one side to the other.

SPOTTING CONSIDERATIONS

- Emphasize the importance of taking responsibility for self and recognizing personal limits. Participants should:
  - Dismount from the tires if they experience fatigue in the upper body (arms, shoulders, and hands).
  - Feel comfortable if a mid-traverse dismount is necessary.
  - Avoid getting a foot or other body part lodged inside the rim of a tire.
  - Ask for spotting help if they become fatigued.
- Do not allow participants to swing with their heads below tire level.
- Spot participants as they are getting onto the first tire and off the last tire.
- Do not allow participants to swing in an uncontrolled manner on the tires.

FACILITATOR'S ROLE

- Check area beneath the tires for obstacles.
- Check tires to make sure they have open drain holes for water. If no drain holes have been drilled, empty the water by hand. Watch for squirrel nests/bee nests in the tires.
- Check to make sure that the eyebolts used to hang the tires are securely fastened.

VARIATIONS

- To assist a group who may have members with less upper body strength, provide one or more intermediate resting platforms that would be situated out of the path of the swinging tires.

TEAM TRIANGLE

TASK

Participants begin as a group on the center platform(s). The object is for each participant to transfer onto the cables, traverse the entire triangle, and return to the center without touching the ground.

SPOTTING CONSIDERATIONS

- Participants should be made aware of the cables as they step over them and onto the platform.
- Participants should agree to step down if they begin to fall off the cable or platform and avoid pulling off other participants.
- Participants on the platform(s) should spot and provide support for other group members on the cables.
- Additional spotters may be used to spot the outside of the triangle as necessary.
- Do not allow jumping from the platform to the cables or vice versa.

This element is formed by a triangle of loosely strung cables approximately 1.5 to 2 feet above the ground. Two wooden platforms, varying in size and shape, are placed in the center of the triangle. The platforms can be moved and/or arranged allowing the facilitator to vary the level of difficulty of the element.

GROUP SIZE:
6-14 participants.

DEGREE OF DIFICULTY:
Basic to Intermediate

TEAM TROLLEY TRAVERSE

An adaptation of the Nitro Crossing element that allows for Universal Access. It features a 2' x 2' wooden platform suspended from a two wheel pulley system on an overhead cable. Prusik knots in the suspension system allow the platform's height to be easily adjusted. In this version, the trolley platform essentially fulfills the role of the Nitro swing rope.

GROUP SIZE:
12-20 participants, dependent on number of usable spaces.

DEGREE OF DIFICULTY:
Basic

TASK

For a group to cross the designated "river crossing" using only the trolley.

SPOTTING CONSIDERATIONS

- Only two participants should be on the trolley at any one time. Participants should ride in a sitting position.
- Encourage participants to push the trolley in a safe manner. Uncontrolled swinging of the apparatus should be avoided.
- Make sure spotters stay clear of the path of the trolley when it is moving on the cable.
- Spotters should assist in the loading and unloading of the platform.

FACILITATOR'S ROLE

- Using the adjustable prusik system, set the trolley at an appropriate height for the age and skill level of the participants.

VARIATIONS

The Cannibals and Explorers Problem: This variation requires a group of six. Two groups of people are traveling together on a joint mission to find "the lost city of gold." There are an even number in each group – 3 cannibals and 3 explorers. They come to the "river" and all want to get across. The only means of transportation is a boat (trolley) that holds only two at a time. The explorers never want to be outnumbered by the cannibals, but they all must cross the river. As the boat is a row-boat, at least one person must be in the trolley to cross. The cannibals can NEVER outnumber the explorers on either side of the "river". The problem is a logistical one – figuring out how to get everyone across.

TP SHUFFLE

TASK

Divide the group in half. Arrange the group so that each half is standing on opposite ends of the pole facing each other. The challenge is for each group to trade ends without anyone stepping off and touching the ground.

SPOTTING CONSIDERATIONS

- Agree that if a participant steps or falls off the log, he or she will step to the ground and try not to pull off anyone else.
- Spot as needed particularly if two participants are having difficulty attempting a pass.

VARIATIONS

Have the group line up categorically: for example, according to their birthdays in the calendar year.

- Add a time limit and assign penalty seconds for anyone who falls off.
- Start the problem with each group moving backward and ending up backward.
- Do the activity non-verbally.
- Place a hula-hoop on the ground that can be used as a free space by any member of the group.

A utility pole or log, raised and supported in brackets a few inches off the ground.

GROUP SIZE:
8-14 participants.

DEGREE OF DIFICULTY:
Basic

TRAVERSE WALL

The challenge level may vary according to the number, configuration and placement of the holds. More holds and/or holds that are larger and easier to grip will make for an easier route. Often, routes of differing challenges can be created on the same traverse by color-coding the allowable holds for each path.

A series of climbing holds selectively placed for hands and feet creates a horizontal climbing challenge. As footholds are only 1-2 feet from the ground, protection for the climber is provided by participant spotting.

GROUP SIZE:
Number of participants determined by size of traverse wall.

DEGREE OF DIFICULTY:
Basic to Advanced

TASK

To move laterally across The Wall using the climbing holds for hand and foot placements. There are a variety of challenges that can be presented to participants. See variations for ideas.

SPOTTING CONSIDERATIONS

- Each traversing participant should have a minimum of one spotter who actively moves and spots as the climber advances.
- Traversing climbers should be prepared to step down if they become fatigued or off balance.
- Clear communication between climber and spotter are important as falls often happen quickly.
- Climbers should be directed to not climb too high on The Wall. A three foot maximum height for foot placements is recommended.

FACILITATOR'S ROLE

- The facilitator should check the climbing holds prior to the activity to make sure they are tight.
- Encourage spotters to be alert. Spotters tend to relax in this activity as the perception of risk is low as the activity is close to the ground.

VARIATIONS

The following low wall activities were originally created by Marc Gravatt.

- Ball Traverse: Students traverse The Wall holding a single ball. The ball may be switched from hand to hand, but must always remain in a hand.
- Pick Up: Place small bean bags on the ground at four-foot intervals along the base of The Wall. These intervals correspond with marked holds on the climbing wall. As a student traverses along The Wall, he or she will reach down and pick up a bean bag with one hand and place it on the marked hold. The next student who follows will remove the bean bag from the marked hold and replace it on the ground. Throwing is not allowed.
- Blind-folded Traverse: A partnered event between a blindfolded climber and a sighted guide. Please note that the sighted guide should not also serve as a spotter. Spotters should remain silent unless there is a safety concern.

Note: these are only a few of the many possible Low Traverse activities. See Bibliography for further resources.

TRIANGLE TENSION TRAVERSE

TASK

For an individual to attempt to traverse around the cables using the suspended ropes. Three participants may go at the same time if there are enough spotters.

SPOTTING CONSIDERATIONS

- Spotters need to be aware of the nature of a fall from the Tension Traverse. A falling participant will tend to fall back towards the starting point, particularly if they maintain contact with the rope. To be effective, spotters need to position themselves accordingly, one half step back toward the starting point.
- A minimum of two spotters is required, one in front and one in back. If the terrain is more difficult, additional spotters should be used.
- Falls happen quickly on this event. Spotters need to maintain a ready position at all times. If a fall occurs, spotters should move in to support the participant.
- Spotters need to move laterally with the traversing participant.
- Spotters need to be aware of the possibility of a participant's flailing arms as he or she tries to maintain a balanced position.
- Participants should be advised to help themselves by stepping down from the cable if fall is imminent and unavoidable.
- Rapid traversing movement on the cable should be discouraged.

VARIATIONS

- Move out and back on the cable. The return is often more difficult.
- A participant tries to complete the triangle, moving out one cable, across the back, and forward on the last triangle leg using just one of the multi-line ropes. Spotting must occur on all legs. Realize that a participant will be leaning backwards on the back cable.

This element is formed by a triangle of tightly strung cables approximately 2 to 2 1/2 feet above the ground. Three lengths of multi-line rope are attached to each of the three trees. These lines provide some support as participants attempt to walk along the cable.

GROUP SIZE:
12-15: Each participant must have a minimum of two spotters.

DEGREE OF DIFICULTY:
Basic to Intermediate

TROLLEYS

Trolleys are usually represented by two sturdy 4 x 4s that are no more than 12 feet in length. Five-foot ropes, spaced at 12-inch intervals, provide hand-lines for participants.

GROUP SIZE:
Limited only by the number of available positions on the trolley.

DEGREE OF DIFICULTY:
Basic – a good introductory group exercise

TASK

To have a group move along a prescribed route. This is usually done by having participants place right feet on one of the 4 x 4s and left feet on the other. Participants may hold their respective ropes for balance. If a participant falls off during an attempt, one option is to have the group return to the starting point to begin again. Allow the students to figure out how to use the Trolleys. Don't give the solution when you present the activity.

SPOTTING CONSIDERATIONS

Encourage participants to step off the Trolleys if they are losing their balance to avoid a group tumble.

FACILITATOR'S ROLE

- Check the area for obstacles – crossing uneven ground can snap the trolley boards.
- Check to make sure that the trolley hand lines are securely connected to the boards.

VARIATIONS

- If a participant falls off the trolleys, that individual is allowed to re-mount, but must be facing in the opposite direction or become blindfolded.
- Alternatively, if a participant falls off, he or she must move to the front of the line and become the lead person; i.e., the person most apt to fall prey to the domino syndrome.
- For more activity, use shorter trolley lengths sized to accommodate 4-6 people. These shorter lengths may be constructed so that they can be connected together with rapid links. Additional links may add to the difficulty.
- Create an obstacle course with various tasks for the group to complete along the way. These challenges could metaphorically stand for goals and responsibilities of the group.

TRUST FALL

TASK

For a participant to perform a controlled fall into the arms of spotters.

SPOTTING CONSIDERATIONS

- The group is arranged in two parallel lines facing each other.
- Arms are zippered, extended and bent at the elbows, palms facing up.
- Feet are in stride position. Foot farthest from the platform and the faller is extended forward.
- Knees are flexed. Giving with the knees slightly on a catch provides for a softer landing.
- Spotters are positioned shoulder to shoulder (Velcro shoulders) to ensure a strong and tight catching bed of arms.
- Spotters' heads are comfortably back.
- Spotters should have a clear understanding of the strongest and most appropriate position to catch the fallers.
- Full attention is focused on the faller at all times.
- Spotters should be positioned close enough to the Trust Fall platform to close up any open space in the event that a faller sits or "folds".
- Upon catching a faller, spotters need to pay close attention to the faller until he or she is in an upright, standing position on the ground. If needed, the spotters should assist the faller to that position.
- Clear communication between the spotters and the fallers needs to happen on every attempt. For example,
  Faller: "Spotters ready?"
  Spotters: "Ready to Catch (insert name)"
  Faller: "Falling"
  Spotters: "Fall"

  Fallers:
- Fallers should maintain a rigid position with head slightly bent back for the fall. Fallers should try to avoid a sitting position as it makes for a more difficult catch.
- Hands and arms should be fixed in an interlocking system or other suitable technique that would prevent arms from flailing and injuring spotters.
- At the direction of a designated spotter, a faller is positioned so that his or her fall will be straight into the arms of the waiting spotters.
- After falling and being caught, fallers should ask spotters to assist them to a vertical standing position.

Suitable areas for the Trust Fall activity include platforms or a series of graduated steps. The steps for bleachers found in sport settings are also appropriate.

GROUP SIZE:
A minimum of eight catchers (spotters) is required.

DEGREE OF DIFICULTY:
Advanced

TRUST FALL (continued)

FACILITATOR'S ROLE

- It is important to emphasize participation by choice in this activity due to the trust fall's inherent physical and emotional challenges.
- A maximum height for Trust Falls is 5 feet. However, an appropriate height could be lower as it is dependent upon the size, age and skill of the group.
- The facilitator should never be the first person to fall.
- Be sure the group goes through a series of warm-up exercises and/or trust sequence before leading into this activity.
- Only attempt this activity when a group appears ready, motivated and demonstrating trustworthy behavior.
- Depending upon the height and configuration of the trust fall platform, a participant might be designated to spot the faller as he or she readies for the fall.
- Make sure all jewelry, watches, pencils and pens are removed from all fallers. It is recommended that spotters remove baseball caps or turn them backwards.

THE WALL

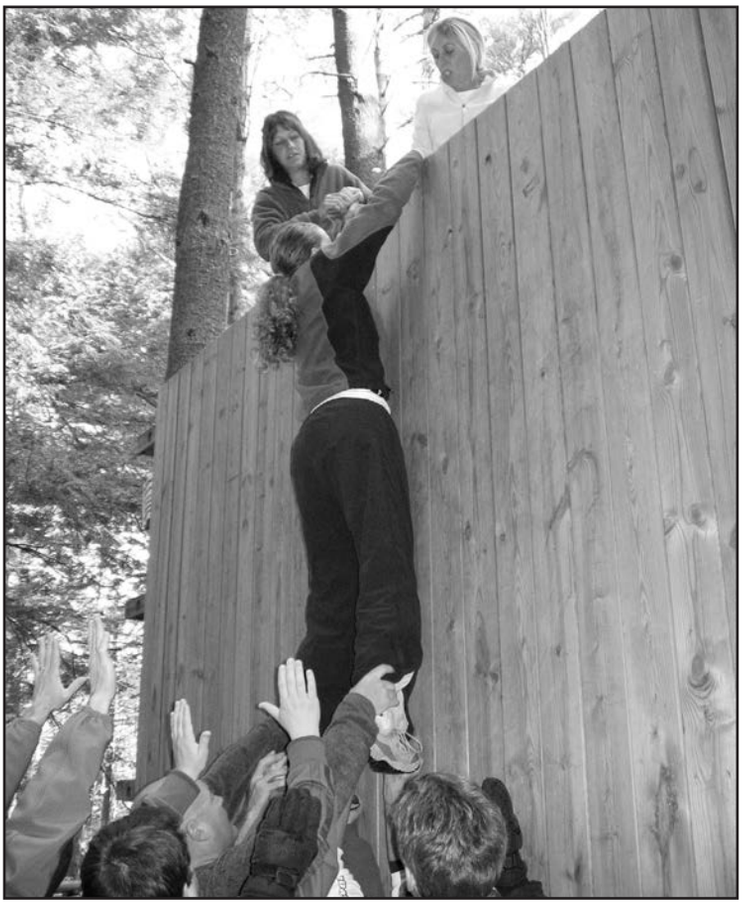
TASK

- Using all members, the group must get everyone up and over The Wall starting on the smooth-surfaced side.
- The group may have a maximum of three persons on the top of The Wall, assisting a fourth person up and over. (The maximum number of spotters can vary according to the size of the platform behind The Wall. Too many people may cause confusion.)
- The sides of The Wall and support poles cannot be used.
- Articles of clothing may not be used as props.

SPOTTING CONSIDERATIONS

- Participants should agree to support everyone's effort.
- Allow only a maximum of three people on top of The Wall at one time and one in transition. (See introductory description)
- Have an appropriate number of spotters on the front and back of The Wall at all times with their focus on spotting.
- Have spotters form a half-circle or "cocoon of spotters" around the person being lifted up The Wall. Explain to the group that falls can happen in any direction, away from The Wall as well as laterally to either side.

continued on next page



A smooth-surfaced wall, usually 12 feet in height, is secured to four 4' x 4' horizontal cross-supports. The 4 x 4 supports are bolted to two utility poles or two conveniently spaced trees. Many walls feature a small platform on the upper backside of The Wall. This serves as a secure base for spotters positioned at the top of The Wall. Descent down the backside of The Wall can be by ladder or horizontally placed staples in one of the support trees.

GROUP SIZE:
A group must be large enough to have an adequate number of spotters available at all times.

DEGREE OF DIFICULTY:
Advanced

THE WALL (continued)

- Have participants agree that, when standing on the doubled 4 x 4s or platform at the top of The Wall, both feet will be planted firmly at all times.
- Have participants agree not to hang an individual by the legs in order to reach the last member of the group.
- Have participants use the staples or ladder when descending down the back. NO JUMPING! A spotter should be on hand to assist the descent.
- Encourage spotters to maintain clear communication throughout the exercise so that only one person at a time is either ascending the front of The Wall or descending the back side of The Wall.
- Make sure that all jewelry, watches, pencils and pens are removed from participants.
- Once participants have gone over The Wall, they become spotters only. They can no longer assist someone going over The Wall.

FACILITATOR'S ROLE

- Inspect poles and support braces for soundness.
- Do not allow participants to insert their fingers in the cracks between the boards or in an available knothole.
- Make sure that the top and face of The Wall are smooth and free of splinters.
- Make sure that no nails are protruding from The Wall.
- Review spotting procedures, and remind the group of the importance of group spotting due to the height of the obstacle. Talk about the difficulty of trying to catch a falling participant from the top of The Wall.
- Pay particular attention to spotting the back side of The Wall.
- Stress the importance of spotting an individual throughout the entire task.
- Stress proper lifting and support, especially when participants are standing on other participants' shoulders or are being lifted up to that position.
- Do not allow the group to use belts, shoelaces or other articles of clothing as aids to get over The Wall.
- Do not allow a participant's head to be in a position where it is below his or her feet.

VARIATIONS

- For a group that may have difficulty with the height of The Wall, a suitably strong rope may be attached to the top of The Wall and flipped over to the front. A hole is often drilled in the top 4' x 4' for this purpose. Make sure that the rope placement has been approved and inspected by a professional vendor.
- Invite the group to set a goal as to how many participants they would like to see get up and over The Wall. All members of the group would then not have to be passed over The Wall.

WHALE WATCH

TASK

To have the group execute a challenge or a series of challenges utilizing the teetering deck of the Whale Watch. See variations.

SPOTTING CONSIDERATIONS

- Encourage participants to watch out for each other while on the Whale Watch especially to avoid any misstep off the platform.
- Indicate that no one at any time should allow any body part, especially fingers and toes, to slip beneath the ends of the platform. Emphasize that the platform is heavy and moves up and down with momentum.

FACILITATOR'S ROLE

- Present the various scenarios succinctly and clearly.
- When exiting from the Whale Watch, encourage the group to depart from the same end to prevent anyone from suddenly getting flipped off the high end. There should be no jumping off the sides.
- The Whale Watch platform should not be used as a macro teeter-totter.
- Whale Watch platforms vary in size and configuration and hence may have different weight limits. Exercise caution to not overload the platform.

VARIATIONS

- With all participants aboard and in balance, have group members rotate positions. Possibilities are circle shuffles and side-to-side exchanges.
- A group begins on the ground. The challenge is to load all group members onto the Whale Watch, entering from the two ends. A variety of different consequences can be introduced if an end of the Whale Watch touches the ground.
- A crossing of the Whale Watch can be attempted, with all members starting on the ground at one end of the platform. Only one touch is allowed.
- Place a small beach ball on the Whale Watch platform amidst the feet of all participants. Attempt to have everyone exit from the Whale Watch while keeping the beach ball in balance on the platform. The beach ball may not be held in place by feet or hands.
- Squares may be inscribed on the Whale Watch. A game of Checkers can be played. Two teams situated on either end of the Whale Watch facing each other take turns making moves as in a Checkers game. If a team causes the Whale Watch to hit the ground, the turn goes to the other team.

The Whale Watch is generally built as an approximately 7'x14' wooden platform balanced on a 6" x 6" fulcrum beam.

GROUP SIZE:
Ideally 12 participants, but upwards of 20 can participate, albeit a crowd.

DEGREE OF DIFICULTY:
Basic

WILD WOOSEY

Two tautly strung cables diverging from approximately the same point, connect with two distant anchors that are located about 14 feet apart. This creates a "V". Cables are 1 to 2 feet above the ground to allow space for spotters as particpants lean in during attempted traverse of this element.

GROUP SIZE:
2 on-cable participants with a team of spotters: 2 spotters each on the outside of the cables plus additional spotters beneath the traversing pair. The spotters in the center will increase in number as the duo progresses out.

DEGREE OF DIFICULTY:
Basic

TASK

Two options:
For two participants, one per cable, to walk the angled cables maintaining constant physical contact with one another. They go to the point where they can no longer continue (they break contact) or until they reach the far support trees.

Present this as a group problem, not for individual pairs. (See variations)

SPOTTING CONSIDERATIONS

- Understand that participants can fall in any direction when first mounting the cable.
- Spotters located outside the cables are most important for the first 10-15 feet of the activity.
- ***Do not allow*** participants to interlock fingers while attempting the activity.

There are two different techniques used for spotting potential inward falls on the Wild Woosey.

Guidelines for the first are as follows:
- Spotters assume a waist-bent position directly beneath the on-cable participants. Spotters' hands are placed on top of their knees to provide back support.
- Spotters should move only as quickly as the participants, staying beneath the cable walkers. As the two participants maneuver farther apart on the cables, more spotters should be added beneath the cable walkers (Preferred method).

Guidelines for the second technique are:
- Have spotters align themselves as in the Trust Fall (two parallel zippered lines of two or more spotters each. Number of spotters depends upon width of cables.).
- This group then moves underneath the cable duo keeping pace with their progress. Some spotters will be stepping backwards and others moving forward. Falls are caught in the zipper. Participants must be helped back to a standing position.

FACILITATOR'S ROLE

- Be aware of potential injuries from this event: finger injuries from interlocking hands, uncomfortable pain from undue pressure on wrists, back injury from unsupported backs while spotting underneath the cable walkers.

VARIATIONS

- Establish a point on the cables that participants will attempt to reach and then return from to the start. If pairs make it to the end, attempt a return to the beginning.
- Create a group problem: add together the distance traversed by each pair to create a group goal.

Operating Procedures for Dynamic High Challenge Course Elements and Initiatives

USER GUIDE

Elements in this section are listed alphabetically. The information about each element is subdivided into the following categories and includes the elements listed below:

ELEMENT NAME

Brief description of the element.

SET-UP

The belay set-ups for each element are briefly described.

TASK

A suggested goal is listed for each element.

FACILITATOR'S ROLE

This section addresses the major responsibilities for a belayer before a climb on any element. The same check list will appear with each high element listed in the High Challenge Course section. This is to emphasize the importance of a thorough and complete check of a climber's equipment prior to each and every climb.

ELEMENT SPECIFIC GUIDELINES

Element specific instructions are listed in this section. These may include spotting guidelines, tips on belayer positioning, or what to watch carefully during the belay. Every element is constructed slightly differently and may often require procedural modifications. For example, no two Pamper Poles are exactly alike and are therefore belayed slightly differently. It is important to become familiar with each element on a course and to adapt the operating guidelines to their unique qualities.

VARIATIONS

Alternative ways of using or presenting an element.

The following section on High Challenge Course Elements details the standard operating procedures for many of the high elements built by High 5 Adventure Learning Center. It is important to recognize that individual challenge courses vary and that basic operational practices may require modification to meet the unique features of each course. Elements in this section are listed alphabetically.

LIST OF DYNAMIC
HIGH CHALLENGE COURSE ELEMENTS

BEANPOLE
BURMA BRIDGE
BURMA BUCKETS
CARGO NET CLIMB
CATERPILLAR
CATWALK
CENTIPEDE
CLIMBING TOWER
DANGLE DUO
FIRE CRACKER LADDER
FLYING SQUIRREL
HIGH ENVEE
HIGH SWINGING BEAM
HIGH Y
HOLY COW SWING
INCLINED LOG
INCLINED MONKEY BARS
ISLANDS IN THE SKY
JEEBIE LUNGE
KISSING TREE
MULTIVINE TRAVERSE
OREGON TRAIL
PAMPER POLE
PAMPER PLANK
PIRATE'S CROSSING
PRUSIK CLIMB
ROLL-OUT RAPPEL
SPACE LOOPS
STEMMING CLIMB
TIRED TWO LINE
TWO LINE BRIDGE
TWO SHIPS PASSING
VERTICAL CLIMBING WALL
VERTICAL PLAYPEN
VOYAGEUR CROSSING
WILD WOOSEY
ZIP WIRE
ZIPPER BRIDGE

BEANPOLE

SET-UP

Set up from the top down on the belay cable: 12mm rapid link; stainless steel SRD.

TASK

The goal of the climb is to ascend the supported pole, stand on the tiny perch, and step off the top platform. A target for the climber may be provided although a jump from the platform is not recommended as it causes too much pole movement.

FACILITATOR'S ROLE

Setting up the Beanpole

- Place the bottom of the pole in the rectangular slot in the wooden base and raise the pole to a vertical position. The pole should be positioned so that it is offset a couple of feet from the overhead belay system. This will ensure that once the climber steps from the pole, he or she will swing clear of the pole and its spotters. Have a minimum of two spotters support the pole to maintain placement.

General

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze-checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- The belayer must make sure that the climber follows a direct path up the pole to avoid rope wrap on the pole.
- Check knots for each of the four ropes that are slotted through the vertical pole. Stretch out the four ropes so that they are at 90 degrees to one another, like points on a compass. Assign one spotter to hold each rope.
- Once the climber is set to go, check with spotters on the pole and ropes to make sure that they are ready. The rope spotters need to maintain communication throughout the climb to ensure that they are keeping the pole in a vertical position.
- As the climber begins up the pole, have additional participants spot the first few movements of the climber not only to protect the climber from a ground fall but also to protect the climber from falling into the pole spotters.
- A static rope could be used for the belay to reduce rope stretch.
- Once the climber is on the top, have him or her signal the spotters to let them know when he or she is stepping from the platform. Often, however, falls from this perch happen quickly so spotters must be prepared for pole movement.

The Portable Pamper Pole is a unique climbing activity that combines the excitement of the traditional Pamper Pole with the benefits of a group cooperative exercise. The Pamper Pole is a free-standing stapled 16 foot 4 x 4 pole that is topped with a small wooden perch. Four ropes attached to the pole near its top are managed by spotters to help maintain an upright posture and stability for the pole. In addition, the pole is slotted into a wooden base. That is also kept in place by spotters. A traditional belay is used for the climber.

DEGREE OF DIFICULTY:
Advanced. Spotters must be able to commit fully to the task at hand.

BURMA BRIDGE

This element features a V-shaped bridge formed by a foot cable and 2 multi-line hand rails.

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12mm rapid link; stainless steel SRD.

TASK

To walk across the foot cable using the two hand lines for support.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Make sure that the climbing rope is set up properly so that the climber has a direct path to the cable and does not have to climb over one of the Burma Bridge hand lines.
- When lowering climbers from the Burma Bridge, have them position themselves for the descent so that the climbing rope will be properly situated for the next climber. The climber should descend underneath the hand line.

BURMA BUCKETS

SET-UP

Set up from the top down on the belay cables: stainless steel cable pulley, 12mm rapid link, Stainless steel SRD.

TASK

The Challenge is to walk across the bridge using the two hand lines for support.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- Make sure that the climbing rope is set up properly so that the climber has a direct path to the cable and does not have to climb over one of the Burma Bucket hand lines.
- When lowering climbers from the Burma Buckets, a tether is utilized to allow the person to lower between the last Bucket and the tree or support pole. The next climber will climb up this same side of the element, unclipping the tether before traversing back to the other side. This method ensures that the descending participant is properly situating the belay with the tether at each end for the next climber.

Similar to the Burma Bridge, but without the foot cable, the element consists of two Multi-line hand rails that support a series of U-shaped rope foot loops positioned 3-4 feet apart.

CARGO NET CLIMB (vertical)

DEGREE OF DIFICULTY:
Basic to Intermediate

SET-UP

Set up from the top down on the belay cable: 12 mm rapid link; stainless steel SRD.

TASK

The challenge is to ascend as high as possible on the Cargo Net. If desired, spotters placed at the bottom of the Net may hold the element steady to reduce side to side movement.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Advise climbers to not poke their heads through the Cargo Net holes while climbing as the shifting tensions in the rope squares could cause constriction of the openings.
- When lowering a climber, have a participant pull the Cargo Net to the side, clear of the descent.

VARIATION

- This element can be built with the ability to tether out the bottom at an angle to decrease the difficulty of the climb. This design is sometimes called the Ships Prow and can include a tapered netting instead of the traditional cargo net.

CATERPILLAR

SET-UP

Set up from the top down on the belay cables: stainless steel cable pulley, 12 mm rapid link, Stainless steel SRD.

TASK

The center bridge section in this element is designed to tip when a participant steps on it. A belayed participant traverses the element while participants on the ground steady and align the center section with ropes that attach to the bridge and hang to the ground.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- At least one ground participant should control each of the four ropes on the middle bridge section. More participants may be used for additional support. Gloves for ground participants are recommended.
- If the climber falls off the element, ground participants should be instructed to control the larger center caterpillar section to avoid pinching or hitting the climber.

The Caterpillar is a series of three wooden beams suspended horizontally by rope from an overhead cable. Four long ropes running from the ground to the center section of the Caterpillar are used by ground participants to steady the element while the climber traverses the element.

CATWALK

A horizontally positioned pole or log suspended between two trees. The belay cable is positioned above the log, parallel to the ground and at a height of nine to ten feet above the log.

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12 mm rapid link; stainless steel SRD.

TASK

The challenge is to walk across the log. The belay rope may be used for balance if desired.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Set up the element in such a way that the belayer can follow the traversing participant freely.
- Lower a climber smoothly off the Cat Walk being careful to prevent the climber from banging against the beam.

CENTIPEDE

The Centipede is a vertically hanging high element composed of individual 4 x 4 x 8 foot stapled lengths of wood linked together to create a dynamic climbing challenge.

SET-UP

Set up from the top down on the belay cable: 12 mm rapid link; stainless steel SRD.

TASK

The challenge is to climb the swaying element using the randomly placed staples. The challenge may be made easier by having a spotter hold the base of the apparatus.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- The belayer must monitor the climber closely to make sure that he or she follows the path of the belay rope to avoid wraps and twists around the Centipede.
- To add stability for the climber, a spotter may be used to hold the base of the Centipede. It is recommended that the spotter wear a helmet.
- When lowering a climber, have a participant pull the Centipede to the side to allow for a clear descent.

VARIATIONS

- Two centipedes hung side by side create an element called Synchronicity. Two participants, each on one of the Centipedes, climb in tandem linked by a Velcro strap attached to the wrist. The goal is to both climb and be lowered without ever breaking the tenuous connection.

CLIMBING TOWER

A climbing tower is a challenge course structure usually built with telephone pole supports that can rise as high as 40 feet in the air. Tower designs vary offering multiple options. Climbing surfaces may feature overhangs and chimneys or rappelling walls. Ropes course elements can be either hung from the tower structure itself or set off at angles toward adjacent poles.

Most 3 or 4 pole towers also feature a decked platform at the top of the structure, a place from which instructors can oversee and manage participant safety. The safety practices for a tower vary depending on the design and complexity of the structure. Basic tower management practices will be described here. Specific training is recommended for each specific site due to the variation in design. At the top of the tower, backed up belay cables connect each of the telephone poles. Belay and rappel set-ups are hung from these cables.

SET-UP

Set up from the top down on the belay cable: 12mm rapid link; stainless steel SRD. (For two climbing routes, install 2 sets separated by a PVC pipe.)

TASK

To climb the vertical face using the attached climbing holds. The holds may be arranged in specific route patterns.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Climbers should be instructed to not stray too far to the right or left of the belay set-up particularly as they near the top of the climbing wall. A fall from such a position would result in a pendulum swing for the climber

CLIMBING TOWER: RAPPEL

SET-UP

Ropes:

- Belay rope: In all High 5 programs, participants are belayed during a rappel. The belay serves as a back-up system in case the participant on rappel loses control of the rappel or experiences a jamming of the rappel system. The belay system is set up on the belay cable with a rapid link and standard SR device.
- Rappel: Generally, static rope is used for rappel rope. A static rope features high tensile strength, low stretch, and low spinning tendencies which are key factors for the rappel. The rappel rope may be set up as a single strand or doubled to form two strands. The doubled rope set-up significantly increases the friction potential in the system.
  - A single strand is usually sufficient on a short rappel that has a back-up belay. This rappel rope can be clipped onto the belay cable with a rapid link or steel carabiner using a double figure 8 knot. (For alternative set-up, see Anchors below)

Rappel Hardware:

The figure eight is probably the most popular rappelling device although other belay devices can be used in a rappel. Both work by creating friction between the rope and the belay device.

Anchors:

There will be two separate and independent systems for the belay and the rappel. It is recommended that the rappel be set up so that the rappel rope can be easily loosened if necessary to relieve any jams in the system. Jams may be caused by hair or clothing that gets caught in the rappel hardware. If a jam were to occur in the rappel line, tension first is taken up on the belay line. Next, the rappel line is loosened and a slight amount of slack is eased into the rappel rope. When enough slack develops, the person on rappel will be held in position by the belay rope. At this point, the rappeller can remove the jam. Set-ups for this type of rappel lowering system vary. Proper training and instruction in a method best suited to each individual tower set-up is recommended.

RAPPEL TECHNIQUES:

- Make sure that the person who is going to rappel fully understands the mechanics of the rappel device and knows how to properly position his or her hand to control the rate of descent.
- Use proper communication signals. Make sure that the rappeller first goes on belay before attempting to rappel.
- Encourage the participant to move slowly into the rappel, making sure that there is adequate tension on the rappel rope and that the brake hand is applying sufficient friction.

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Often one face of the tower is designed for rappelling. This upper third of the rappel face is most often covered with decking. The lower section is open.

TOWER: RAPPEL (continued)

- Instruct the rappeller to back over the lip of the platform with feet that are approximately shoulder width apart for balance. Encourage the participant to lean back in an L-shaped position keeping feet in positive contact with The Wall. Forward lean will cause the feet to slide out from under the body potentially causing the rappeller to bump into The Wall.
- Progress should be smooth and slow. If part of the rappel is a free rappel whereby the rappeller is hanging in space, instruct the participant to maintain a comfortable sitting position.
- Gloves are recommended for the rappel participant. Gloves protect the hands both from simple abrasion as the rope passes through them and from heat built up from friction in the rappel device.

TASK

Rappelling is the skill of sliding down a rope using friction to control the rate of descent. On High 5 courses, the person on rappel is also on a belay rope that serves as a back-up system. An instructor positioned on top of the platform helps the participant into the correct rappel position. A second instructor manages the belay either from the ground or the top of the tower.

FACILITATOR'S ROLE

Before this event, cover the basic elements of the rappel on the ground. Participants should practice this skill before attempting it at height.

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- All loose clothing and long hair (anything that could get caught in the rappel device) should be secured before attempting the rappel.
- Monitor the belay rope on the participant's ascent to make sure the climber follows the path of the rope.
- During the rappel, the back-up belayer should keep a loose belay so that the participant can descend at his or her own rate. Too much tension in the belay will make it difficult for the rappeller to maintain a correct position and rate of descent. Rappels should be smooth and not overly fast.

DANGLE DUO

SET-UP

Set up from the top down on the belay cable: 12 mm rapid link; stainless steel SRD. (2 sets separated by a PVC pipe). A Dangle Trio or Quad would require three and four belay set-ups accordingly on an additional belay cable.

TASK

The Dangle Duo is generally used as a partner activity in which participants climb the ladder using only the support of the logs and/or each other. Use of the side support cables is discouraged.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Have spotters spot each participant when mounting the first rung (especially if the rung is close to the ground). Rope stretch at this point may prevent a belayer from arresting a ground fall.
- Do not allow participants to climb in such a way that their belay rope gets wrapped around a rung.
- To lower participants, have someone pull the Dangle Duo out of the way (out of plumb) to create a clear path to the ground. This can also be done by looping a rope over the bottom rung, and pulling it away from the descending climbers. If there are two climbers, it is best to lower them one at a time.

A vertically hung, oversized ladder suspended from an overhead cable or clipped directly into support trees or poles. The rungs are usually 4 x 4 x 8 pressure treated boards. A separate belay cable is suspended seven feet above the uppermost log.

FIRECRACKER LADDER

The Firecracker Ladder is a free -hanging, ladder-like climb that can provide exciting access to other high elements or operate as a separate element. The Firecracker Ladder is uniquely constructed of hardwood rungs that are secured at their middle to a central climbing line. Given the features of this design, the Firecracker Ladder becomes a challenging event requiring good technique and persistence.

DEGREE OF DIFICULTY:
Advanced

SET-UP

Set up from the top down on the belay cable: 12 mm rapid link; stainless steel SRD.

TASK

The challenge is to climb the swaying element. The climb may be made easier by having a spotter hold the base of the apparatus.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- The belayer must monitor the climber closely to make sure that he or she follows the path of the belay rope to avoid wraps and twists around the Firecracker Ladder.
- It is recommended that a spotter holding the base of the Firecracker Ladder for a climber wear a helmet.
- When lowering a climber, have a participant pull the ladder to the side, clear of the descending climber.

VARIATION

This element can also be built with a traditional rope ladder instead of the Firecracker Ladder. This style of ladder is a bit easier to climb.

FLYING SQUIRREL

The Flying Squirrel is an element that gives a participant an opportunity to be lifted in the air on a static line by members of the group. The lift can be either a straight vertical raise or a swinging motion if the participant takes a short run as he or she is being pulled into the air.

SET-UP

Two cables are strung between two trees or utility poles. On the bottom cable, a rapid link with an attached cable pulley is fixed at a midpoint on the cable. The upper backed-up belay cable has a rapid link with a short attached swaged-looped cable. This cable length is connected to the lower rapid link providing back up for the Flying Squirrel system.

TASK

To be lifted off the ground into a large swinging motion.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Clip-in the participant in the rear using a combination chest harness and seat harness. A full-body harness with a back clip could also be used. If a commercial harness is used, it must be the Headwall Universal harness or one that has been specifically manufactured for use with back clips. Have the rest of the group (minimum eight people) hold the other end of the rope. A minimum of two members of the group are clipped into the end of the rope with either a bowline on a bight or a double figure eight knot (sometimes the loops are split). To provide additional grip on the belay end of the rope, an option is to tie butterfly knots at intervals along the belay rope. If this is done, it is important to avoid a situation where pullers may trip over one another. This can be avoided by simply limiting the number of butterfly knots.
- To begin the launch process, have the participant back up a few steps towards the pulling group from his or her position directly underneath the belay set-up.
- After proper commands, have the participant run in the opposite direction away from the hauling group. It is recommended that the facilitator use a three count as part of the commands. The participant begins to run forward on #2 and the team begins to run on #3. For example:
  - Facilitator: "Participant (Squirrel) ready?"
  - Participant: "Ready"
  - Facilitator: "Pullers ready?"
  - Pullers: "Ready"
  - Facilitator: "One…Two…Three
  - Facilitator: "Stop" (when participant is approximately ½ way between the ground and the top.)

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FLYING SQUIRREL (continued)

- It is important for the participant to run straight and not at an angle. This will avoid a spiraling swinging motion. At the same time, the pulling group also moves out smartly away from the flyer, pulling the participant into the air. Once the participant is safely off the ground, the group should slow its forward momentum. Excessive and fast pulling action will result in unsafe swinging of the participant. Upward pulling of the participant must stop at such a point that there is no risk of the participant coming in contact with the belay cable approximately ½ way between the ground the anchor point overhead.
- Pay attention to the height of the flyer. His or her maximum height should be far enough below the belay cable to prevent any possibility of hitting the cable or flipping over the cable. A tennis ball could be affixed to the flying squirrel rope approximately 4-5' from the participant. This marker on the rope could then serve as a visual reminder to the group to stop pulling. This also would reduce the possibility of a person from getting pulled too high. It is best to designate one member of the belay team (or the instructor) to call "STOP" to the pulling group when the squirrel has reached maximum height.
- A long pendulum glide results when the flyer is raised less than halfway to the pulley.
- As the participant descends, have a greeter be there to offer a supporting hand. This helps to steady the participant and to slow the swinging motion.

VARIATION

As a lead in to the actual Flying Squirrel that helps participants get acclimated to height, clip the participant using a locking carabiner into the front of his or her harness. On a signal from the instructor, the hauling group begins to slowly back up pulling the participant off the ground. The group stops pulling when the participant requests to stop. The participant is then slowly lowered to the ground.

HIGH ENVEE

SET-UP

Set up from the top down on each of the two belay cables: stainless steel belay pulley; 12mm rapid link; stainless steel SRD.

TASK

Two participants traverse the element working together while participants assist the pair above by manipulating the tension and position of the hand line.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- At least one ground participant should apply tension on either end of the hand line. More participants may be used for additional support as long as both ends have an equal number of participants.
- The two climbers will access the High EnVee from the same tree or pole. Make sure that the first climber is positioned well on the element before allowing the second climber to climb.

A foot cable with an inverted V hand line suspended from an overhead cable. The hand line, made from KM-III static rope, ascends the tree through a series of rapid links and a cable pulley creating an inverted v-shaped hand line allowing ground participants to adjust the line tension and angle of the inverted V.

HIGH SWINGING BEAM

The High Swinging Beam is a 4" x 6" x 16' free-swinging laminated beam horizontally suspended from overhead cables.

DEGREE OF DIFICULTY:
Intermediate

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12 mm rapid link; stainless steel SRD.

TASK

To climb to the beam via a rope ladder and attempt to cross from one end of the beam to the other.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Belayers should monitor the tautness of the belay rope carefully. As the Swinging Beam moves freely and easily, climbers often hold onto their belay ropes tightly for added security. Make sure that no slack builds up in the belay as the climber makes his or her crossing. However, as the overhead belay cable is intentionally slightly offset from the beam to allow falls to be directed away from the beam, too much tension in the belay will pull the climber off balance.
- Lowering the climber off the beam should be done slowly and smoothly to prevent contact with the beam. Do not allow jumping from the element.

HIGH Y

SET-UP

Set up from the top down on the 2 separate belay cables: stainless steel cable pulley; 12mm rapid link; Stainless steel SRD.

TASK

This is a challenge for two people to traverse along angled cables until they come together at a junction. The pair continues on a single cable together utilizing each other and assist ropes in an attempt to reach the support tree at the far end of the element.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines under element specific guidelines (below).

ELEMENT SPECIFIC GUIDELINES

- When climbers are ready to be lowered, be sure they are lowered on the same side of the element as they climbed up.
- Belayers must pay close attention to the amount of tension in the participants' belay so as to not pull them off of the element as they traverse along the angled foot cables. The belay cables for this element are slightly behind the climber as the foot cables angle inward while the belay cables continue straight directly to the far support trees.

The belay for the High Y consists of two converging cables that come in from separate trees to a common point forming a V. Beneath this is a configuration of cables in the shape of the letter Y with the widest opening mirroring the above belay cable but converging more dramatically to a junction in which a single cable continues on to the common tree at the far end. The overhead belay cables that are slightly offset behind the climber as they traverse the element.

HOLY COW SWING

An exhilarating swing through the air that provides an "at height" experience for participants regardless of climbing ability.

SET-UP

Three cables (sometimes 2) suspended from overhead placements terminate in a single point and are connected by a large metal ring. A multi-line lanyard hung from this ring provides a clip-in point for a participant.

TASK

To pull a participant up to the desired height and have them pull a release system activating the swing. Note: The set-up can vary from site to site. Below are general directions for the operation of this event. Always get specific site training instructions prior to using this activity.

FACILITATOR'S ROLE

To set up the haul system:

- Using a lazy line, hoist up the Holy Cow haul rope (KM3 static rope).
- At one end of the haul rope, tie a backed-up double figure 8 or bowline on a bight. This end will be the clip-in point for the swinger.
- Tie a butterfly knot in the haul system rope approximately 4-5 feet from the clip-in point for the participant.
- Attach a 3/8" multi-line retrieval rope to the butterfly knot with a small clip.
- Attach a pulley with a rapid link or carabiner to the NEB at the base of the haul tree. (NEB at the base of a tree if outdoors or wall anchor if inside.)
- Reeve the other end of the haul rope through the pulley. Set up the pull so that participants can move in an unobstructed path at an angle to the swinger (and clear from the swinger.)

HOLY COW SWING (continued)

To set up the swing lanyard:

- Use a locking carabiner to attach the top end of the Holy Cow swing lanyard to the large metal ring that links the three overhead cables. The participant will clip into the bottom part of the lanyard also with a locking carabiner.

General:

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under Element Specific Guidelines (below).

ELEMENT SPECIFIC GUIDELINES

- Front clip-ins are recommended for the swing.
- Place a step ladder beneath the clip-in point. Have a participant climb up the step ladder. Make sure it is spotted by other participants.
- Have the participant clip his or her harness into the fixed triangular rapid link at the end of the Holy Cow lanyard with a locking carabiner. Lock it shut.
- Open the snap shackle (also attached to fixed rapid link) and place the Double Figure 8 (or Bowline on a Bight) knot of the haul line into opening. Snap shut. Make sure ropes are not crossed and will run smoothly.
- Place a significant number of pullers on haul line. Prepare them for the pull and the eventual release. (Note: They will topple over if they don't have a good stance at the time of release.)
- Facilitator should manage the retrieval line. That person should be standing off to the opposite side of the pullers holding the rope loosely or at the end.
- MAKE SURE THAT THERE ARE NO ROPES THAT COULD BE TANGLED WITH THE SWINGER WHEN HE OR SHE RELEASES THE SYSTEM.
- Have the participant step off of the ladder, hanging free.
- Remove the step ladder outside the range of the swinger's path.
- Activate the pullers. Pull the participant up to his or her desired height.
- Have the participant tug on the small white line attached to the snap shackle, pulling towards him or her to open the snap shackle. It is recommended that the swinger turn his or her head at this moment to ensure that there is no facial contact with the snap shackle.
- Allow the participant to swing freely. When the swinger's momentum is slowing, gently tap the swinger's legs to reduce the speed. Having the swinger cross his or her ankles helps to provide a solid point of contact for the spotters and prevents excessive pulling on the legs. Bring the participant to a stop. Move in the step ladder and help the participant stand steadily on the ladder before unclipping.
- Pull down on retrieval rope to prepare for connecting to the next swinger.

INCLINED LOG

A large diameter log rises at a low angle to a supported and secure anchor in an adjacent tree or pole. A horizontal belay cable is strung overhead slightly offset from the line of the log so that any falls or lowering off the log will remain clear of the element.

SET-UP

Set up from the top down on the belay cable: stainless steel belay pulley; 12mm rapid link; stainless steel SRD.

TASK

A belayed participant attempts to walk the length of the log from bottom to top, trying all the while to remain in an upright walking position.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4

.

ELEMENT SPECIFIC GUIDELINES

- Encourage the participant to ascend the inclined log in an upright posture rather than creeping along in an astride position. Allow only a front clip or tie-in.
- Know that if the belay rope is used for support by the climber, it may make it more difficult to maintain proper tension on the belay rope.
- Make sure that there are two to four spotters who spot the climber up the log until he or she has reached a six-foot level.
- If the climber reaches the top of the log, have him or her come down a few steps before being belayed down.

VARIATION

In situations where a log at ground level would be an access issue, this element can be raised so that the bottom end of the inclined log is at the top of a ladder height.

INCLINED MONKEY BARS

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12mm rapid link; stainless steel SRD.

TASK

The challenge is for the climber to reach the inclined ladder and move hand over hand along the ladder as far as possible.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

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ELEMENT SPECIFIC GUIDELINES

- A back clip on this event is preferred as it keeps the belay rope out of the way of the face of the climber. A chest harness is strongly recommended. This should be correctly fitted to the participant and connected to the seat harness and rope properly.
- Set up the element in such a way that the belayer can move easily with the traversing participant. The belayer may let out a small amount of slack in the belay rope to allow the climber to have enough rope to move easily from rung to rung.

The Inclined Monkey Bars feature an aluminum ladder suspended horizontally from the ceiling of the gym. The ladder is set at a slight angle with the lowest rung at the access point. Participants climb a rope ladder to get to the first rung.

DEGREE OF DIFICULTY:
Advanced

ISLANDS IN THE SKY

A pair of foot cables support a series of small wooden platforms placed approximately three feet apart.

SET-UP

Set up from the top down on each of the two belay cables: stainless steel belay pulley; 12mm rapid link; stainless steel SRD.

TASK

Two belayed climbers enter the element from opposite sides of the element. Participants traverse towards one another stepping from one platform to the other. At some point, the two participants will have to carefully pass around each other.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- When participants attempt to pass one another, belayers should guide participants to avoid crossing or twisting the belay ropes.
- Participants should avoid uncontrolled running or diving between platforms.
- Participants should be lowered off the element from the center of the element to prevent swinging into platforms.
- Participants should be advised to use their hands and feet to prevent swinging into the platforms and pinching fingers as they lower off the elements.

JEEBIE LUNGE

SET-UP

Set up from the top down on the belay cable: stainless steel belay pulley; 12mm rapid link, stainless steel SRD.

TASK

The belayed participant attempts to make his or her way out on the foot cable using the angled rope for support. Where the angled rope meets the cable, the climber makes a lunge for the dangling rope. If a catch is made, the climber continues along the foot cable, using the grasped rope as a tension traverse, until the far support tree is achieved.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Alert the belayer to the necessity of traversing with the climber. When the lunge is attempted, the belayer should be situated toward the start support tree to preclude a zipping of the belay pulley toward and into the far support tree.
- Belayers should pay attention to the climber's foot position prior to the lunge. Caution the climber not to have a foot tucked tightly in the acute angle formed by the cable and Multi-line rope.
- Participants should be cautioned not to grab the foot cable if they miss the rope when they lunge.

This challenge is represented by a taut horizontal foot cable with an overhead parallel belay cable. Approximately three-quarters of the way across the belay cable from the start, an eight-foot length of 3/4" Multi-line is hung. Additionally, a section of angled 5/8" Multi-line extends from the support tree at the start to a location on the foot cable about four feet short of the hanging 5/8" Multi-line.

KISSING TREE

A kissing tree is one that naturally grows at a slightly off-vertical angle

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12mm rapid link; stainless steel SRD.

TASK

The challenge of the kissing tree is to climb the amply stapled tree using one's hands as little as possible. A rope or cut tire segment slung around the tree may be employed as a climbing aid.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

MULTI–LINE TRAVERSE

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12mm rapid link; stainless steel SRD. If this element is to be set up for two participants, a second separate belay cable is installed.

TASK

To walk across the foot cable using the various support rope vines for aid.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Set up the element in such a way that the belayer can move easily with the traversing participant. Watch to make sure that the rope vines do not tangle with the belay rope.
- The belayer must be positioned and alert to the possibility of a pendulum fall.

A foot cable with a series of Multi-line ropes suspended from an overhead cable. Each multi-line rope is purposefully positioned just beyond reach.

OREGON TRAIL

This bridge is comprised of a series of 4x4's hanging vertically and threaded through a single foot cable near their tops. Each 4x4 is cut at varying lengths to create the challenge as longer boards will be more stable than the shorter boards. An overhead cable serves as the belay cable for this element.

SET-UP

Set up from the top down on the belay cables: stainless steel cable pulley, 12mm rapid link, stainless steel SRD.

TASK

The challenge is to walk across the bridge on the tops of the vertical 4x4s.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- The shorter 4x4s are very unstable and the belayer should be prepared to catch potential falls in these sections of the bridge.

PAMPER POLE

SET-UP

From the top down on the belay cable: 12 mm rapid link; stainless steel SRD. (In line designs require a tether on belay set-up to keep it in place).

TASK

This activity involves climbing to the top of a pole, standing on top of a small platform and then, if desired, diving out to a trapeze suspended from a cable.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- A back clip on this event is preferred as it keeps the belay rope out of the way of the jumping climber. A chest harness is strongly recommended. This should be correctly fitted to the participant and connected to the seat harness and rope properly.
- High 5 has implemented a strategy to retrofit the once common Just Rite Descender belay system on challenge courses we inspect due to the inconsistent friction generated by Just Rite Descenders of varying age. High 5 is now installing a backed up bolt, which is utilized as a belay anchor. This anchor helps absorb the dynamic forces generated in this activity. See Operational Guidelines for Belaying off a Bolt Anchor in Section 4 under Participant Belay Systems.
- Belayers should be prepared to take in slack quickly when the jumper leaps to diminish the amount of free fall after a missed jump.
- Climbers should be cautioned to spot themselves off the Pamper Pole after a jump, particularly if there is a big swing.
- If a climber catches the trapeze, he or she should be instructed to let go when the trapeze bar is swinging away from the Pamper Pole.
- Some Pamper Pole elements feature an In-line Trapeze bar adjustment whereby the trapeze can be moved via a pulley system to the desired jumping distance.

A leap to a suspended trapeze or target from a small perch on the top of a pole.

PAMPER PLANK

A leap to a suspended trapeze or target from a platform.

SET-UP

From the top down on the belay cable: 12 mm rapid link; stainless steel SRD. (In line designs require a tether on belay set-up to keep it in place).

TASK

To climb a tree or a pole to a small platform. From there, if desired, to dive out to a trapeze suspended from a cable.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- A back clip on this event is preferred as it keeps the belay rope out of the way of the jumping climber. A chest harness is strongly recommended. This should be correctly fitted to the participant and connected to the seat harness and rope properly.
- High 5 has implemented a strategy to retrofit the once common Just Rite Descender belay system on challenge courses we inspect due to the inconsistent friction generated by Just Rite Descenders of varying age. High 5 is now installing a backed up bolt, which is utilized as a belay anchor. This anchor helps absorb the dynamic forces generated in this activity. See Operational Guidelines for Belaying off a Bolt Anchor in Section 4 under Participant Belay Systems.
- Belayers should be prepared to take in slack quickly when the jumper leaps to diminish the amount of free fall after a missed jump.
- Climbers should be cautioned to spot themselves off the Pamper Plank after a jump, particularly if there is a big swing.
- If a climber catches the trapeze, he or she should be instructed to let go when the trapeze bar is swinging away from the Pamper Plank.
- Some Pamper Plank elements feature an In-line Trapeze bar adjustment whereby the trapeze can be moved via a pulley system to the desired jumping distance.

PIRATE'S CROSSING

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12mm rapid link; stainless steel SRD.

TASK

To walk across the foot cable using the multi-line ropes as aids to negotiate the difficult center section.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Falls tend to occur in the center of the climb at the X. Pay attention to the positioning of the climber's feet to make sure that they do not get stuck in the acute angle formed by the foot cable and the multi-line rope.

Two Multi-line ropes create a large X in the center of this element. These intersecting lines each connect both to the foot cable and one of the support trees. The belay cable runs overhead parallel to the foot cable.

PRUSIK CLIMB

A vertically hung length of Multi-line rope that is outfitted with two or three sets of Prusik slings: the highest to be clipped into the climbing harness, the lower one or two to be used for foot placements.

DEGREE OF DIFICULTY:
Basic to Intermediate. A certain amount of coordination and strength is needed to effectively operate the Prusik loops.

SET-UP

From top down on the belay cable: 12mm rapid link; stainless steel SRD.

TASK

To climb the hanging Multi-line rope with the aid of the two or three Prusik slings. Progress is attained by moving each of the Prusik loops upward in a rhythmic sequenced motion. As the Prusik knot tightens and grabs when weighted, any upward gain is maintained when the climber's weight is applied to the knot. Rest stops therefore can be taken at any point on the climb. For back-up protection, the climb is belayed.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- This element may be made somewhat easier if a spotter weights the Multi-line rope.
- The belayer must make sure that the belay line does not get wrapped around the Prusik climb.
- A participant may down climb the element by reversing the motion of the Prusiks or he or she may be lowered on the belay rope. To lower, all Prusiks should be first loosened and un-weighted. On the descent, the climber needs to hold above the top Prusik to help slide the loops down the rope.

ROLL-OUT RAPPEL

SET-UP

From top down:
Belay: A stainless steel pulley; a 12 mm rapid link; a SRD.
Rappel: A stainless steel pulley, a 12 mm rapid link. A single or double line rappel rope is clipped to this rapid link with an approved climbing clip-in knot. A single line is usually adequate for the ROR as the participant is always on belay. However, if more friction is desired in the rappel system, use double rope set-up.

Two ropes are needed for the Roll-out Rappel, a belay rope and a rope for rappelling. The rappel rope is usually KM3, a static rope. In setting up this element, the belay rope system is outside the rappel rope system, further from the platform.

TASK

To climb to the small platform and with an instructor's help, set up the rolling rappel rope. When ready, the climber exits the platform, rides out on the pulley and then begins the rappel. The belay serves as a back-up system.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

PLATFORM INSTRUCTOR'S ROLE

- It is recommended that an instructor be placed on the high platform to assist with the connection to the rappel system. As there is no transfer of belay in this situation (the belay is always on throughout the activity), a participant who has had prior training with the rappel could set up the rappel alone without an instructor present.
- After a participant climbs to the platform, the instructor reaches out for the rappel rope. The rappel rope is usually a single length of KM3, properly knotted and attached to the pulley with a rapid link. The rappel rope is then slotted through the figure eight descender and then clipped to the participant's harness with a carabiner (next to the belay clip in).

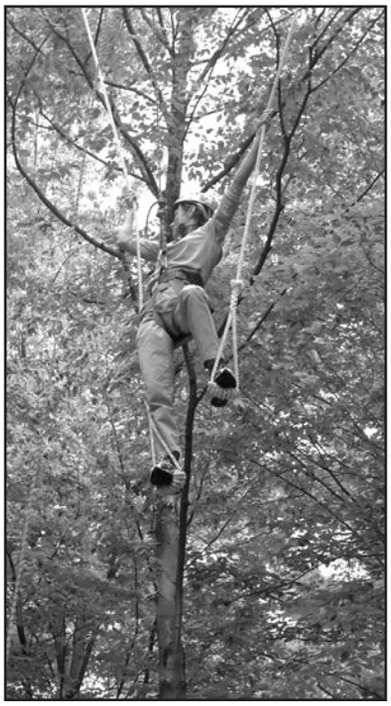
ELEMENT SPECIFIC GUIDELINES

- Monitor the belay rope on the participant's ascent to make sure the climber follows the path of the rope.
- During the rappel, the belayer will have to feed out rope to maintain a loose belay so that the participant can descend at his or her own rate. Rappels should be smooth and not overly fast.

The Roll-out Rappel involves stepping off a platform placed high in the trees. A participant climbs on belay to a small perch in the tree. An instructor on the platform greets the climber and helps him or her clip into a rappel system (staying on belay throughout the process). Once set, the climber loads the rappel system (back-up belay system remains attached). As the rappel set-up includes a pulley, the participant gets an exhilarating ride to the middle of the cable prior to his or her descent on the rappel line.

SPACE LOOPS

A series of Multi-line foot loops suspended from an overhead cable purposefully positioned to be a stretch step between each hanging rope.



SET-UP

Set up on the cable from the top down: stainless steel cable pulley; 12mm rapid link; stainless steel SRD.

TASK

To traverse across the element stepping from foot loop to foot loop.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Set up the element in such a way that the belayer can move easily with the traversing participant. The belayer may give the belay rope a small amount of slack to let the climber build a loop to loop swinging momentum. Watch to make sure that the foot loops do not tangle with the belay rope.
- When lowering a participant, make sure that the climber is completely free from the hanging loops prior to the descent.

STEMMING CLIMB

SET-UP

Set up on the cable from the top down: a 12mm rapid link; a stainless steel SRD.

TASK

The challenge in this activity is to climb the V slot in the naturally forked tree using any available handholds or footholds.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- When lowering the climber, make sure that he or she keeps his or her hands up to gently fend off the staples and holds of the stemming climb. Lower cautiously to avoid bumping into staples.

A tree with naturally V-shaped trunks provides the perfect arrangement for a challenging climb between the two large supports.

TIRED TWO LINE

Two parallel foot cables strung horizontally between trees with a third cable overhead serving as the belay cable.

SET-UP

Set up from the top down on the belay cables: stainless steel cable pulley, 12mm rapid link, Stainless steel SRD.

TASK

The challenge is to walk across the cable bridge with one foot on each cable.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- Set up the element in such a way that the belay can move freely with the traversing participants.

TWO LINE BRIDGE

SET-UP

Set up from the top down on the belay cable: stainless steel pulley; 12mm rapid link; stainless steel SRD.

TASK

To traverse across the "bridge"— hands on the multi-line rope, feet on the bottom cable.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Set up the element in such a way that the belayer can move freely with the traversing participant.

A foot cable is strung horizontally between trees. A second cable oriented above the first cable serves as the belay cable. In between the two is a multi-line hand cable positioned about four feet above the foot cable.

Hey! Wait a Minute...

TWO SHIPS PASSING

This element is almost the same as a Low Tension Traverse except that the participants are operating at height and are starting from opposite trees with separate ropes. They meet near the middle, exchange ropes, and continue on to the opposite tree from which they started. This activity is belayed from two separate cables.

SET-UP

Set up from the top down on each of the belay cables: stainless steel pulley; 12mm rapid link; stainless steel SRD.

TASK

For two people to attempt to cross the Two Ships cable from opposite sides using only Tension Traverse ropes and each other.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Set up the element in such a way that the belayers can move easily with the traversing participant. Belayers must communicate with each other so that their belay lines to the climbers do not tangle. One belayer will pass in front of the other.
- Participants should be instructed to let go of the tension traverse rope if they fall.
- The belayer must be positioned and alert to the possibility of a pendulum fall.
- As climbers pass one another and move toward the tree, belayers should stay positioned in such a way that a fall will pull the climber away from contact with the tree.

VERTICAL CLIMBING WALL

The climbing wall features a vertical arrangement of various climbing holds sequenced to create a climbing route or routes. Additional features such as overhangs and friction slabs may be constructed if the climbing wall is built of plywood. Often, a platform mounted on The Wall serves as a target destination. The lower climbing holds may be removed to prevent unwanted access to The Wall. An alternative system to reduce access is to conceal the lower holds during periods of non-use with a secured curtain or covering.

SET-UP

Set up from the top down on the belay cable: 12mm rapid link; stainless steel SRD. (For two climbing routes, install 2 sets separated by a PVC pipe.)

TASK

To climb using the various holds for hand and foot placements.

FACILITATOR'S ROLE

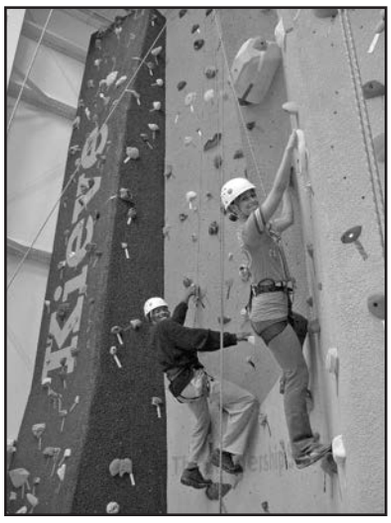
- Complete the pre-climbing check.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is worn correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- If the belay is a fixed point, make sure the climber follows a route that is more or less vertically below the anchor point. Too much lateral movement would widen the angle from the belay and could result in a pendulum fall.
- Check climbing holds on a regular basis to make sure they are tight.

DEGREE OF DIFICULTY:

The challenge level of climbing wall routes can be easily altered by changing the number, placement and size of the climbing holds.



VERTICAL PLAYPEN

Although Vertical Playpen designs vary, most include a potpourri of vertical challenges, created from rope, wooden beams and different-sized tires.

SET-UP

Set up from the top down on the belay cable: 12mm rapid link; stainless steel SRD (2 sets separated by a PVC pipe).

TASK

The challenge is for two participants to help each other climb upward, over, and through a series of obstacles using balance, dexterity, and creativity.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- When mounting the start of the Vertical Playpen, have spotters spot each participant. Rope stretch at this point may prevent a belayer from arresting a ground fall.
- Do not allow participants to wrap their belay rope around horizontally suspended logs, ropes, or tires on their upward journey.
- When being lowered, instruct participants to keep hands in a bumper's up position to protect themselves from bumping into the element. It is best to lower one climber at a time.

VOYAGEUR CROSSING

A series of disks hung from a single rope high in the trees. Each disk has four ropes that hang from bottom of the disk to the ground. These ropes are used to steady the disks for the climber.

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; stainless steel SRD.

TASK

A belayed participant traverses the element while participants assist the climber by steadying the discs and moving the climber into position using the hand lines attached to each disc.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- Ground participants should apply even tension to each hand line in order to properly stabilize and position each disc. Gloves for the ground participants are recommended.
- Ground participants should be cautioned to maintain control of the disc slowly to avoid collisions with the climber.
- When a climber is ready to be lowered, ground participants should move the discs to the side.

DEGREE OF DIFICULTY:

The challenge level of climbing wall routes can be easily altered by changing the number, placement and size of the climbing holds.

WILD WOOSEY

A Wild Woosey is built high in the trees. The configuration for this element mirrors the low element in that two diverging foot cables fan out from a common starting point forming a V. Overhead cables that are slightly inset from the foot cables provide protection points for the climbers.

SET-UP

Set up from the top down on each of the belay cables: stainless steel cable pulley; 12 mm rapid link stainless steel SRD.

TASK

This is a challenge for two people to traverse as far out on the angled cables as possible using only each other in the process.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- A back clip on this event is preferred as it keeps the belay rope out of the faces of the traversing pair. For this, a chest harness is strongly recommended in conjunction with a seat harness. The chest harness should be correctly fitted to the participant and connected to the seat harness and rope properly.
- The two climbers will access the High Y from the inside of the cables on staples that lead up the tree or pole through the space between the foot cables. Make sure that the belay ropes are aligned properly for this approach.
- Set up the element in such a way that the belayers can follow the traversing participants freely.
- As the belay cables are slightly inset from the foot cables, belayers need to stand far enough back from the element to eliminate any potential rubbing of the belay rope on the foot cable.

ZIP WIRE

TASK

To zip down a cable on a two-wheeled cable pulley.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.
- Follow all belay guidelines described under *Participant Belay Systems* in Section 4.

ELEMENT SPECIFIC GUIDELINES

- One instructor is required to be on the zip platform to closely monitor the transfer of the ground belay to the zip attachment rope. (A climber must always be clipped into at least one belay). The instructor is responsible for setting up the zip pulley correctly.
- Before letting the participant zip, the instructor must check with the dismount team to make sure everyone is ready. Do a final check to ensure that the zip attachment rope is securely and correctly connected to the participant. Make sure that the participant is not still attached to the belay rope or a lobster claw.
- Have the participant move to the edge of the platform. A standing or sitting position is allowed depending on the design of the particular element. Make sure that the participant's first step is out far enough from the platform to avoid hitting the platform edge. The exit move should be smooth and straight out from the platform. Any side to side swinging motion should be avoided.
- Most High 5 zips utilize a gravity brake system (as opposed to a bungee brake system). A dismount team needs to be in place at the take-down location to help the rider disconnect from the cable. A tall step ladder is usually used to facilitate this move.
- Care should be taken while disconnecting a rider. The supporting ladder should be spotted and the dismounting rider should descend the ladder carefully. Do not allow jumping from the ladder.
- A retrieval line is then attached to the zip pulley (if there are to be more rides) and walked back to the instructor on the platform.
- If the zip uses a bungee brake system, site specific training is recommended as the set-up and operation of bungee brake systems vary.

The Zip Wire provides an exciting means of egress from a high element. Two belays are used for the Zip. The first is a dynamic belay that runs through a large rapid link connected to a through-bolted backed-up Nut Eye located near the Zip Wire platform. The second is a static belay used for the ride down the Zip Wire. The transfer between the two occurs on the Zip Wire platform. The instructor on the Zip Wire platform oversees the transfer.

ZIPPER BRIDGE

This element consists of a series of 4x4s suspended from multi-line drop ropes in a zig-zag pattern. These drop ropes are suspended from two parallel overhead element support cables. An additional overhead cable centered between the support cables serves as the belay cable.

SET-UP

Set up from the top down on the belay cables: stainless steel cable pulley; 12mm rapid link; stainless steel SRD.

TASK

The challenge is to walk across the 4x4 bridge utilizing drop ropes as support.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- When lowering climbers from the Zipper Bridge, a tether is utilized to allow the person to lower between the last support rope and the tree or support pole. The next climber will climb up this same side of the element, unclipping the tether before traversing back to the other side. This method ensures that the descending participant is properly situating the belay with the tether at each end for the next climber.

Voyageur Course (Static) High Elements

USER GUIDE

The elements in this section are subdivided by category and listed alphabetically. The information about each element is subdivided into the following categories and includes the elements listed below.

ELEMENT NAME

Brief description of the element.

SET-UP

The belay set-ups for each element are briefly described.

FACILITATOR'S ROLE

This section addresses the major responsibilities for the facilitator operating the element. The same check list will appear with each high element listed in this section. This is to emphasize the importance of a thorough and complete check of the climber's equipment at each and every belay transfer.

ELEMENT SPECIFIC GUIDELINES

Element specific instructions are listed in this section. This may include things to watch carefully or instructions for climbers. It is important to become familiar with each element on a course and adapt the operating guidelines to their unique qualities and needs.

The following section on Voyageur Course (Static) Elements details the standard operating procedures for many of the high static elements built by High 5 Adventure Learning Center. It is important to recognize that individual challenge courses vary and that basic operational practices may require modification to meet the unique features of each course.

LIST OF VOYAGEUR COURSE (Static) HIGH ELEMENTS

BURMA BRIDGE

BURMA BUCKETS

CARGO NET

CATERPILLAR

CATWALK

ENVEE

EWOK BRIDGE

HIGH Y

HSP HIGH SWINGING PLATFORM

INCLINED LOG

INCLINED TIRES

ISLAND HOP

ISLANDS IN THE SKY

LOG LADDER

MULTIVINE TRAVERSE

ROCK RAMP

SHIP'S PROW

SHOE LACES

SPACE SHUTTLE

TIPPY BRIDGE

TIRE BRIDGE

VOYAGEUR CROSSING

ZAP LINE

ZIP WIRE

ZIPPER BRIDGE

BURMA BRIDGE

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

To walk across the cable using the two hand lines for support.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

The element features a V-shaped bridge formed by a foot cable and 2 multi-line hand rails.

BURMA BUCKETS

Similar to the Burma Bridge, but without the foot cable, the element consists of two Multi-line hand rails that support a series of U-shaped rope foot loops positioned 3-4 feet apart.

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

The challenge is to walk across the bridge.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- The belay lanyard may need to be adjusted once the participant is positioned on the bridge. A tight lanyard may make it difficult for the participant to move across the bridge.

CARGO NET

SET-UP

Set up from the top down on the belay cable to the bottom anchor cable: 12 mm rapid link ISC ALF Auto-locking pulley; static rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

A participant climbs up or down the ladder to either enter or exit the Voyageur course.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked before instructing the participant to detach from the previous belay lanyard.
- Encourage clear communication between participant climbers and participants assisting.

ELEMENT SPECIFIC GUIDELINES

- Advise climbers not to poke their heads through the cargo net holes while climbing as shifting tension in the rope squares could cause constriction of the openings.
- A ground participant may assist the movement of the belay system as the climber ascends up the net.

The Cargo net is a large rectangular net fashioned from 5/8" Multi-line rope that is woven into approximately one foot square blocks. Hung vertically, a participant climbs the rope blocks in a ladder-like technique. Used primarily as an entrance to the Voyageur Course, the element may be set up for one or two participants.

CATERPILLAR

The Caterpillar is a series of three wooden beams suspended horizontally by rope from an overhead cable. Four long ropes running from the ground to the center section of the Caterpillar are used by ground participants to steady the element while the climber traverses the element.

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

To walk across the element while ground participants steady the center of the element.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- At least one ground participant should control each of the four ropes. More participants may be used for additional support.
- If the climber falls off the element, ground participants should be instructed to control the larger center caterpillar section to avoid pinching or hitting the climber.

CATWALK

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

The challenge is to walk across the log.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

A horizontally positioned pole or log suspended between two trees.

ENVEE

A foot cable with an inverted V hand line suspended from an overhead cable. The Hand line, made from KM-III static rope, ascends the tree through a series of rapid links and a cable pulley creating an inverted v-shaped hand line allowing ground participants to adjust the line tension and angle of the inverted V.

SET-UP

Set up from the top down on each of the two belay cables: stainless steel belay pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

Two participants traverse the element working together while participants assist the pair above by manipulating the tension and position of the hand line.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- At least one ground participant should apply tension on either end of the hand line. More participants may be used for additional support as long as both ends have an equal number of participants.

EWOK BRIDGE

SET-UP

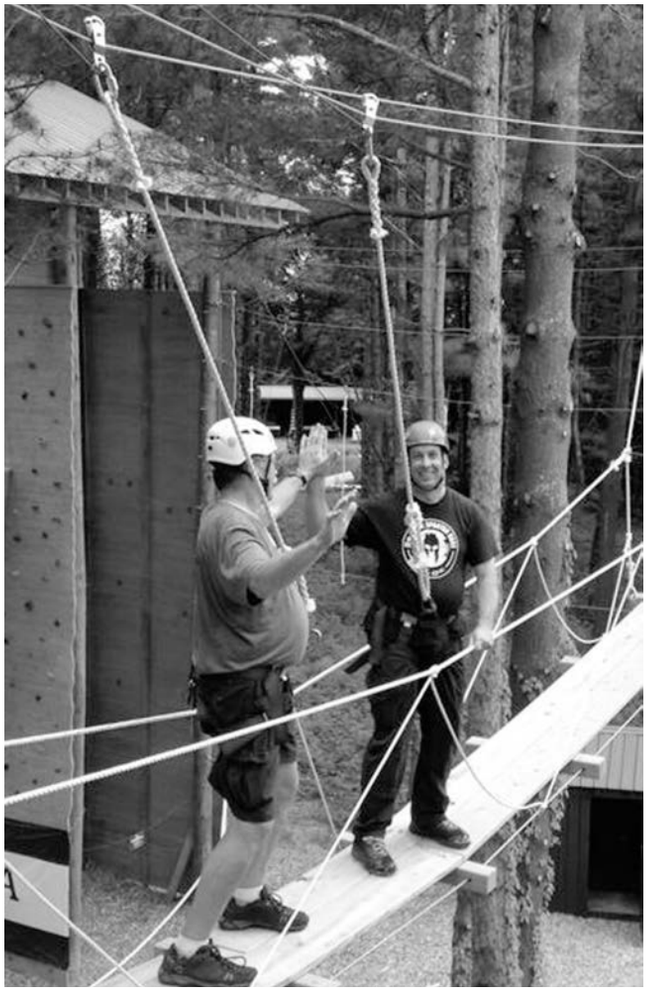
Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

The challenge is to walk across the bridge.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.



The Ewok Bridge consists of a pair of foot cables that support a horizontally positioned wooden foot bridge. The bridge includes two Multi-line rope hand rails.

HIGH Y

The belay for the High Y consists of two converging cables that come in from separate trees to a common point forming a V. Beneath this is a configuration of cables in the shape of the letter Y with the widest opening mirroring the above belay cable but converging more dramatically to a junction in which a single cable continues on to the common tree at the far end. The overhead belay cables are slightly offset behind the climber as they traverse the element.

SET-UP

Set up from the top down on the belay cable: 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

Often placed at the end of a traversing bridge, this platform is a gathering place for small groups to reflect or engage in an initiative at height.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.

HSP HIGH SWINGING PLATFORM

SET-UP

Set up from the top anchor to the bottom anchor: 12 mm rapid link; ISC ALF Auto-locking pulley; static rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

The climber ascends the tires to the top of the element.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- Encourage the participant to ascend in the center of the tire ladder.
- A ground participant may assist the movement of the belay system as the climber ascends up the log.

The HSP is a unique element that allows for small groups of participants to gather at height and participate in initiatives, reflection or dialogue. This large platform is suspended between two poles or trees with overhead belay cables upon which belay lanyards are attached for participants. The large platform often has a bench around the perimeter for participants.

INCLINED LOG

A large diameter log rising at a low angle to a supported and secure anchor in an adjacent tree or pole provides a challenging entrance to the Voyageur course.

SET-UP

Set up from the top down on the belay cable to the bottom anchor cable: 12 mm rapid link; ISC ALF Auto-locking pulley; static rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

A participant attempts to walk the length of the log from bottom to top, trying all the way to remain in an upright walking position.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- Encourage the participant to ascend the inclined log in an upright position rather than creeping along in an astride position. Allow only a front clip-in.
- The climber should be instructed how to avoid interfering with the proper operation of the belay system. These instructions may differ from one belay system to the other.
- A ground participant may assist the movement of the belay system as the climber ascends up the log.
- A minimum of 2 spotters should be positioned on either side of the climber for the first 6 ft. of element.

INCLINED TIRES

SET-UP

Set up from the top anchor to the bottom anchor; 12 mm rapid link: ISC ALF Auto-locking pulley; static rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

The climber ascends the tires to the top of the element.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- Encourage the participant to ascend in the center of the tire ladder.
- A ground participant may assist the movement of the belay system as the climber ascends up the log.

Essentially a ladder constructed of tires, the Inclined Tires is a series of tires strung along two parallel cables rising from a low angle to a nearly vertical position near the top. The Inclined Tires provide a challenging climb entrance to the Voyageur course.

ISLAND HOP

Island Hop consists of swinging from one platform to another on a swing rope, suspended from an over-head belay cable. In this static design, the swing rope extends to the ground in order to allow participants on the ground to assist if necessary.

SET-UP

Set up from the top down on the belay cable: Fixed 12mm rapid link; Multi-line swing rope with adjustable attached Tech-cord prussic loop; locking carabiner.

TASK

A participant swings from one platform to the other using the rope swing.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- If a participant is unsuccessful in reaching the other platform, a ground participant may assist the climber by pulling the swing rope towards a platform.

ISLANDS IN THE SKY

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

To traverse the element by stepping from one platform to the other.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- Participants should avoid uncontrolled running or diving between platforms.

A pair of foot cables support a series of small wooden platforms placed approximately three feet apart.

LOG LADDER

A vertically hung ladder suspended from an overhead cable or clipped directly into support trees. The rungs of the ladder are typically two feet apart and made from 4x4x3 boards. The log ladder provides a simple entrance or exit to the Voyageur course. In some designs, the Log Ladder is set up with a dynamic belay.

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

A participant climbs up or down the ladder to either enter or exit the Voyageur course.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- Encourage the participant to ascend in the center of the ladder.
- A ground participant may assist the movement of the belay system as the climber ascends or descends the ladder.

MULTIVINE TRAVERSE

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

To walk across the foot cable using the various support rope vines for aid.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

A foot cable with a series of Multi-line ropes suspended from an overhead cable. Each Multi-line rope is purposefully positioned just beyond reach.

ROCK RAMP

The Rock Ramp is a small section of climbing wall used primarily as an entrance to the Voyageur Course. The element may be set up for one or two participants.

SET-UP

Set up from the top down on the belay cable to the bottom anchor cable: 12 mm rapid link; ISC ALF Auto-locking pulley; static rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

A participant climbs up or down the Rock Ramp to either enter or exit the Voyageur course..

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- When not in use, a tarp or other covering can be put in place to limit access to the course.
- A ground participant may assist the movement of the belay system as the climber ascends up the ramp.

SHIP'S PROW

SET-UP

Set up from the top down on the belay cable to the bottom anchor cable: 12 mm rapid link; ISC ALF Auto-locking pulley; static rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

A participant climbs up or down the Ship's Prow to either enter the Voyageur course or ascend from lower platforms to higher platforms. The Ship's Prow can be set up for one or two climbers.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Encourage clear communication between participant climbers and participants assisting.

ELEMENT SPECIFIC GUIDELINES

- Advise climbers not to poke their heads through the net holes while climbing as shifting tension in the rope squares could cause constriction of the openings.
- Another participant may assist the movement of the belay system as the climber ascends up the net.

The Ships Prow is similar to a Cargo Net in that it is net fashioned from 5/8" Multi-line rope that is woven into approximately one foot square blocks. However, the Ships Prow is hung at a sloping angle. In addition the net is not pulled tight, creating high sides that contain the participant climbing up the Ship's Prow.

SHOE LACES

Shoe Laces is constructed from a single length of Multi-line rope laced through a series of off-set staples between two trees or poles. The zigzag pattern of the properly tensioned rope creates a vertical ladder from the ground up. Used primarily as an entrance to the Voyageur Course, the element may be set up for one or two participants. In some designs, the Shoe Laces may be set up with a dynamic belay.

SET-UP

Set up from the top down on the belay cable to the bottom anchor cable: 12 mm rapid link; ISC ALF Auto-locking pulley; Static Rope with fixed loop attachment points; stainless steel pulley; 12 mm rapid link; 5 mm shock cord; 12 mm rapid link; stainless steel pulley.

TASK

A participant is challenged to climb the Shoe Laces to the top of the element.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- A ground participant may assist the movement of the belay system as the climber ascends up the log.

SPACE SHUTTLE

SET-UP

Set up from the top down on each of the two belay cables: stainless steel zip pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

One or two participants traverse the element aboard the space shuttle platform with assistance from several participants on the ground.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- At least one ground participant should control each of the four ropes. More participants may be used for additional support.
- Ground participants must hold the platform securely in place during belay transfers and while participant climbers board the Space Shuttle platform. Clear communication between the climbers and ground participants should be used.
- The movement of the Space Shuttle platform should be controlled and smooth. Ground participants should prevent the Shuttle Platform from colliding with platforms on either end of the element. Do **NOT** allow participants to run.

The Space Shuttle, a wood platform suspended from a pair of parallel overhead belay cables attached to 2 two-wheeled cable pulleys, provides an exciting participant-powered ride between two platforms of equal height. Four ropes running from each cable pulley through several re-directs to the ground allow ground participants control of lateral Space Shuttle movement.

TIPPY BRIDGE

A pair of foot cables support a series of horizontally positioned 4X4X2 wooden rungs spaced a few inches apart. Several rungs are intentionally missing or hung from a single cable creating gaps in the bridge.

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

The challenge is to walk across the bridge.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

TIRE BRIDGE

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

The challenge is to traverse the element by walking across the tires.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

A pair of foot cables support a series of horizontally positioned tires.

VOYAGEUR CROSSING

A series of disks hung from a single rope high in the trees. Each disk has four ropes that hang from bottom of the disk to the ground. These ropes are used to steady the disks for the climbers.

SET-UP

Set up from the top down on the belay cable: stainless steel cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

A belayed participant traverses the element while participants assist the climber by steadying the disks and moving the climber into position using the hand lines attached to each disk.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly-sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- Ground participants should apply even tension to each hand line in order to properly stabilize and position each disk. Gloves for the ground participants are recommended.
- Ground participants should be cautioned to maintain control of the disk slowly to avoid collisions with the climber.

ZAP LINE

SET-UP

Set up from the top down on the belay cable: two-wheeled cable pulley; 12mm rapid link; Multi-line adjustable belay lanyard; locking carabiner.

TASK

To zip across a cable from one platform to another on a two-wheeled cable pulley.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- Before pushing off from the platform, the climber should detach the zip retrieval rope and drop it to the ground. The climber should clearly communicate with participants on the ground before the rope is dropped to ensure the area is clear. Do not allow the retrieval rope to remain attached to the climber while zipping.
- A ground participant should assist the climber in attaching the zip retrieval rope in order to return the Zap Line pulley to beginning of the element. Depending on the specific design of the element, retrieval procedures may vary.
- If a participant is unsuccessful in reaching the landing platform, a ground participant can assist the participant to the platform using the retrieval rope.

The Zap Line provides an exciting means of transport via a short zip between two platforms of equal height. Zap Lines, unlike Zip Lines, end at the same height of the start. In addition, Zap Lines span far shorter distances, usually 10-15 feet and the cable has very little drape. The participant clips into the adjustable static lanyard attached to the zip pulley and pushes across the element. The length of Zap Lines varies with each installation.

ZIP WIRE

The Zip Wire provides an egress from a high platform to the ground and is often used as an exciting exit from the Voyageur Course. One instructor is required on the zip platform to oversee belay transfers and operation of the element.

TASK

To zip down a cable on a two-wheeled cable pulley.

FACILITATOR'S ROLE

- Carefully monitor the belay transfer sequence. Do not allow participants to attach or detach belay lanyards unless under facilitator supervision.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked before instructing the participant to detach from the previous belay lanyard.
- Visually check that the adjustable belay lanyard is appropriately tightened.
- Encourage clear communication between participant climbers and participants assisting on the ground.

ELEMENT SPECIFIC GUIDELINES

- One instructor is required to be on the zip platform to closely monitor the transfer from the static belay lanyard to the zip attachment rope. The instructor is responsible for setting up the zip pulley.
- Before detaching the static belay pulley and letting the participant zip, the instructor must check with the dismount team to ensure they are ready and zip corridor is clear. In addition, the instructor must ensure that the zip attachment rope is securely and correctly connected to the participant.
- Have participants move to the edge of the platform. A standing or sitting position is allowed depending on the design of the particular element. Make sure that the participant's first step is out far enough from the platform to avoid hitting the platform edge. The exit move should be smooth and straight out from the platform. Any side to side motion should be avoided.
- Most High 5 zips utilize a gravity brake system. A dismount team needs to be in place at the take-down location to help the rider disconnect from the cable. A tall step ladder is usually used to facilitate this move.
- Care should be taken while disconnecting a rider. The supporting ladder should be spotted and the dismounting rider should descend the ladder carefully. Do not allow jumping from the ladder.
- A retrieval line is attached to the zip pulley and walked back to the instructor on the platform.

ZIPPER BRIDGE

This element consists of a series of 4x4s suspended from multi-line drop ropes in a zig-zag pattern. These drop ropes are suspended from two parallel overhead element support cables. An additional overhead cable centered between the support cables serves as the belay cable.

SET-UP

Set up from the top down on the belay cables: stainless steel cable pulley; 12mm rapid link; stainless steel SRD.

TASK

The challenge is to walk across the 4x4 bridge utilizing drop ropes as support.

FACILITATOR'S ROLE

- Complete the pre-climbing check.
- Visually check to see that belay set-ups are properly oriented.
- Check the knot in the end of the belay rope.
- Visually check that a locking carabiner has been properly clipped into the harness. It should be locked and squeeze-checked.
- Before climbing, check that the harness is belted correctly according to manufacturer's recommendations.
- Make sure that the participant is wearing a correctly sized helmet and that it is put on properly.

ELEMENT SPECIFIC GUIDELINES

- When lowering climbers from the Zipper Bridge, a tether is utilized to allow the person to lower between the last support rope and the tree or support pole. The next climber will climb up this same side of the element, unclipping the tether before traversing back to the other side. This method ensures that the descending participant is properly situating the belay with the tether at each end for the next climber.