













## General Risk Assessment for Off Ground activities













**Activity:** Climbing, Abseiling, High Ropes (including tree climbing) & Zip Wire.

- What are the hazards?**
- Participants at height
  - Uneven ground
  - Unauthorised use, malicious damage and vandalism
  - Accessing and setting up, de-rigging
  - Items falling from height on to participants / instructors
  - Equipment failure
  - Adverse weather including lightning / high winds and storms.
  - Course / element failure

**Who at risk?** Staff, participants and members of the public.

What are the risks?	Existing safety measures/controls	Likelihood	Risk rating
Physical injuries, fractures or death from falls from height.	<ul style="list-style-type: none"> <li>• All equipment is checked before use and regular inspections carried out by qualified instructors.</li> <li>• Equipment is monitored and replaced according to the manufacturer's recommendations.</li> <li>• Any equipment that is questionable is immediately taken out of action, put into the quarantine bin, has a do not use label attached and then the CI or SI is informed.</li> <li>• Off Ground activities are checked every morning before use for malicious damage and vandalism/storm damage</li> <li>• Regular session monitoring by senior staff to ensure the SOP's are being adhered to.</li> <li>• Anyone within the activity area must be wearing a helmet except when they are under a shelter or a clearly defined safe zone.</li> <li>• Suitable fences and lockable gates around the perimeter compound or the activity is left at height so it cannot be accessed by members of the public. Warning signs are on the fence about unauthorised access</li> <li>• The equipment shed is locked and alarmed at the end of the day.</li> <li>• All equipment is stored in the ropes shed at the end of each day</li> <li>• All instructors will have been trained, assessed and deemed competent to run sessions and will operate as per their training and SOP's</li> <li>• All activities staff are first aid trained.</li> <li>• Only instructors can lower participants to the ground.</li> <li>• If the instructor is not directly tailing for the duration of the climb, back up knots must be tied in the dead rope.</li> <li>• Instructors should be aware of the continuous need to utilise C.L.A.P on all their sessions (Communication, Line of sight, Avoidance &amp; Position of most usefulness)</li> <li>• Whilst novice instructors are learning they require direct supervision from an experienced member of staff if they are accessing, setting systems up or running sessions.</li> </ul>		

What are the risks?	Existing safety measures/controls	Likelihood	Risk rating
Items falling from height causing impact injuries	<ul style="list-style-type: none"> <li>• Anyone within the activity area must be wearing a helmet except when they are under a shelter or a clearly defined safe zone.</li> <li>• Participants are asked to remove items from their pockets.</li> <li>• Dead wooding is carried out on an annual basis in accordance with the tree reports or as necessary.</li> <li>• There are regular operational inspections carried out by a competent person.</li> <li>• Instructors set up and sign the Pre use check document in the HR shed to say they have checked the activity and surrounding area is safe to use for the day.</li> </ul>		
Adverse weather conditions causing injury / illness such as lightning causing electrocution, wind and rain causing hypothermia and very hot days causing hyperthermia.	<ul style="list-style-type: none"> <li>• Sessions are cancelled in Force 6 and stronger winds (There is an anemometer available to check the wind strength- located in the Activities office and a weather station on top of the main house)</li> <li>• Sessions are stopped in lightning storms for 30 minutes.</li> <li>• Guests are recommended to wear appropriate clothing, carry water and sun cream.</li> <li>• There are shelters available for both rain and sun.</li> <li>• If the weather conditions get too much for groups/individuals, the sessions can be cancelled / postponed, and the group sent off to get dry/ warm up or cool down.</li> <li>• Water is available free of charge from drinking fountains and standpipes around the grounds.</li> <li>• Instructors can stop a session if they feel the weather conditions are unsuitable and safety might be compromised.</li> <li>• Instructors are trained to recognise signs of hypothermia / hyperthermia and what actions to take.</li> </ul>		
Equipment failure due to poor fitting, misuse or damage.	<ul style="list-style-type: none"> <li>• Instructors undergo training and assessment in off ground activities which covers correct fitting of PPE.</li> <li>• Staff are monitored with observations and feedback is recorded and passed onto them</li> <li>• PPE is checked along with the elements as part of the daily pre use checks which are recorded in the HR shed.</li> <li>• All PPE should be checked for correct fitting prior to leaving the kit up area.</li> <li>• A complete system check takes place prior to all accents/descents</li> <li>• PPE is on a regular inspection regime which gets recorded on paper trail.</li> </ul>		
Entrapment of fingers, clothes or hair.	<ul style="list-style-type: none"> <li>• As part of the kit up process, participants are advised to remove jewellery, tie long hair back and tuck any loose clothing in.</li> <li>• Participants are instructed to keep their hands at least one fist away from the belay device.</li> </ul>		
Unauthorised use of the activities	<ul style="list-style-type: none"> <li>• The climbing tower and HR compound are locked between sessions.</li> <li>• Ladders are locked away so that elements cannot be accessed.</li> <li>• Jacobs ladder and play pen have the bottom rung removed between sessions so that it cannot be climbed.</li> </ul>		

What are the risks?	Existing safety measures/controls	Likelihood	Risk rating
	<ul style="list-style-type: none"> <li>Warning signs are attached to the fence saying "Keep out, authorised personnel only"</li> </ul>		
Pressure sores from continual harness use and / or exhaustion from accessing.	<ul style="list-style-type: none"> <li>Only instructors trained and assessed in accessing can do it.</li> <li>Equipment regularly checked (visual daily and a detailed regular inspection)</li> <li>Minimum of two instructors present when accessing.</li> <li>There will always be an instructor that is rescue trained working on site while high ropes/accessing is taking place</li> <li>Accessing will only be done in the full body access harness</li> <li>The Petzl podium seat has been provided for extra comfort when inspecting wires</li> </ul>		
Inversions compromising the security of the harness	<ul style="list-style-type: none"> <li>On all high activities, chest harnesses or full body harnesses are used which prevent unexpected inversions</li> <li>The chest harness is connected to the waist harness via the main belay rope. This is tied by the instructor and checked prior to each ascent</li> <li>All harness buckles are also checked as they are put on and prior to each ascent.</li> <li>All lowering off must be while participant is upright.</li> </ul>		
Rope burns from belaying	<ul style="list-style-type: none"> <li>Petzl Rigs or Gri Gri's are generally used if participants are belaying, however ATC's can be used if it is raining and the ropes are wet, provided the participants have training and practice on the ground before going to height.</li> <li>Only the instructor can lower someone down from height.</li> </ul>		
Human error	<ul style="list-style-type: none"> <li>Full co-operation from group leaders in group control and discipline</li> <li>Instructors are authorised to stop a session if participants are acting in a dangerous or irresponsible manner.</li> <li>Where possible instructors only work two of the same session in any one day.</li> <li>Regular session monitoring by senior staff to ensure the SOP's are being adhered to.</li> </ul>		
Limited understanding due to additional support needs	<ul style="list-style-type: none"> <li>Advanced notification and high level supervision (provided by the groups own staff) required for all groups with substantial support needs</li> <li>For less substantial support needs, the level of supervision should be agreed before the session commences and monitored throughout.</li> <li>Option for groups to hire additional instructors if deemed beneficial for lower ratio working.</li> </ul>		
Human error by instructor – misuse of equipment.	<ul style="list-style-type: none"> <li>All staff are trained and assessed in the proper use of PPE and site-specific processes.</li> <li>All staff monitored through formal observation and walkabouts.</li> <li>Refresher training delivered annually and if any new equipment/processes are introduced</li> </ul>		

What are the risks?	Existing safety measures/controls	<i>Likelihood</i>	<i>Risk rating</i>
	<ul style="list-style-type: none"> <li>Techniques are in place to reduce the risk of instructor error such as slow controlled descents only, no acrobatics such as inversion during descent.</li> </ul>		

Reference to other manuals assessments:

[UK Youth Health and Safety policy](#)

Reviewed December 2019 by Chief Instructor

Approved by Director of Avon Tyrrell & Operations

Next review December 2020

# High Ropes Course Risk Assessment











Activity Ropes Course Activity Session









What are the hazards?

- Unauthorized Use
- Vandalism
- Slips, Trips and Falls
- Falls from height
- Items falling from height
- Adverse weather conditions
- Human error, inappropriate use of equipment.
- Ladders slipping
- Slipping on foot wires
- Swinging into trees

Who is at risk?

- Staff, participants and members of the public.

What are the risks?	Existing safety measures/controls	Likelihood	Risk Rating
Incorrect use of ladders resulting slipping & falls from height or ladders falling on people.	<ul style="list-style-type: none"> <li>• All staff trained in the safe use of ladders</li> <li>• All ladders are suitable for the tasks</li> <li>• Ladders will be secured to poles or trees by tying the top rung of the ladder to the pole or tree. The ladder must be footed by another person when the instructors is tying the ladder to the pole or tree</li> <li>• When accessing the element, the instructor must attach in to a safety as soon as possible.</li> <li>• The ladders must be footed when participants use the ladder in addition to being secured at the top of the ladder</li> </ul>		
Cuts from wire splinters in the wire rope	<ul style="list-style-type: none"> <li>• Participants briefed not to touch the wire ropes</li> <li>• Wire ropes inspected thoroughly regularly, and damage reported</li> </ul>		
Participants being pulled off apparatus by team mates/falling off elements at height resulting in collisions (all elements)	<ul style="list-style-type: none"> <li>• Participants are briefed on how to safely use the elements at the start of the session.</li> <li>• Where appropriate a “let go” on command is used when the team becomes unstable</li> <li>• Participants briefed to fend away from the apparatus</li> <li>• Helmets to be worn</li> <li>• The tightness of the rope is closely managed by the instructors. If the rope is too tight it can pull people however a slack rope can also be dangerous. Instructors are taught to ‘feel’ the rope as part of their training.</li> </ul>		
Ropes entangling on activities	<ul style="list-style-type: none"> <li>• Elements are set up in a way where people fall away from each other</li> <li>• Good briefing highlighting the safe method of use for the elements are provided</li> </ul>		
Slipping from wires and beams	<ul style="list-style-type: none"> <li>• Correct traversing method explained and coached (wires running widthways across the sole of the foot, rather than lengthways)</li> <li>• Good technique from the instructor whilst belaying</li> <li>• Good instructor awareness</li> </ul>		

<p>Swinging back into element(s) when stepping of the apparatus to be lowered</p>	<ul style="list-style-type: none"> <li>• Participants asked to step off slowly, where possible after the maximum amount of slack is taken from the system by the belayer.</li> <li>• Participants are asked to fend of the element if appropriate during their descent using their hands and feet to make a more comfortable lower off</li> <li>• If possible, on the catwalk, participants are asked to sit down on the log and slide off or climbing down the tree until their waist is level with the beam before putting their weight on the rope</li> <li>• If possible, on the multi-vine participants are asked to climb down the tree until their head is level with the wire. The instructor is to make themselves stable and to remain stationary during the decent as much as possible.</li> <li>• On the Jacobs ladder and play pen, the apparatus can be pulled away from the participant by another participant to make a clear and easy lower off</li> </ul>		
<p>Crates from the crate stack falling onto participants as the tower falls over</p>	<ul style="list-style-type: none"> <li>• Platform angled so the straight edges are facing away from the belayers</li> <li>• Platform angle is slightly bias towards falling away from the belayers</li> <li>• Good instructor briefing</li> <li>• Participants passing crates up do so with careful supervision and the number of people are limited to a few as possible</li> <li>• Participant not to stand in the area that the tower has a tendency to fall in. Typically this is south of the tower but may change due to tower design</li> </ul>		
<p>Crates falling onto participants because they were dropped by the people building the tower</p>	<ul style="list-style-type: none"> <li>• A rope and a hook is available for the team climbing to lift the crates up instead of having them thrown</li> <li>• The “slot and lift” technique can be taught</li> </ul>		
<p>Falling when close to the ground on the Incline Log</p>	<ul style="list-style-type: none"> <li>• The participants will be spotted by other participants for the first section (until spotting would be unproductive)</li> <li>• Instructor will keep rope tight</li> </ul>		

Reference to other manuals assessments:  
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