

# Zipline



## Standard Operating Procedure

*This form describes the details, Operational Procedures, Risks and Emergency Procedures for the activity listed*

*This SOP is to be used each time the activity is conducted. Any changes or suggestions to be raised in activity debrief and meeti*

<b>Activity:</b>	Zipline		
<b>Location of Activity:</b>	Off the tower in the DOC paddock		
<b>Site:</b>	<b>Taupo</b>	<b>Area:</b>	Activities
<b>Reviewed By:</b>	Christy Breetvelt	<b>Version :</b>	3.1
<b>Position:</b>	Instructor	<b>Approved:</b>	Ted Muir (15/10/20)
<b>Date Reviewed:</b>	03/05/2022	<b>Location of Hard copy:</b>	Activity Shed
<b>Number of Participants:</b>	<b>Max Ratio:</b>	1 Instructor / 2 Participants on the tower Group size of a max of 10 Participants and a minimum 2 Adult Assistants	
<b>Instructor Competence:</b>	Site specific induction and assessment on internal competencies.		
<b>Participant &amp; Assistant Equipment &amp; Clothing Requirements:</b>	MiCamp Supplied: Rope Grabs with Carabiners, Helmets, QA Harnesses. Participant Supplied: Covered Shoes, Appropriate Clothing for weather conditions.		
<b>Instructor Equipment &amp; Clothing Requirements:</b>	Helmets, Harnesses, Energy Absorber Lanyard. Rescue Gear: (can be stored on the Instructor Harnesses or with Rescue Kit). Five Aluminium Carabiners, Belay Devices, 120cm Sling, Short Prusik, Long Prusik.		
<b>Other Equipment Requirements:</b>	Zipline Lanyard (Trolley, 3 Steel Carabiners, Lanyard), Tower lanyard with one Steel and one Aluminium Carabiners, 2 Retractable Fall Arrester Lanyard, Access Rope, Retrieval Rope. Rescue Kit: (Project Adventure Pulley, Belay Devices, Steel Carabiners, 10m Static Rope, 60m Access Line)		
<b>Activity Requirements:</b>	Loose clothing removed or tucked in, 130kg max weight, long hair tied up, covered shoes.		
<b>Communication Procedures:</b>	Use instructor's cell phone to contact emergency services and /or other staff.		
<b>Related Documents - Qualifications/ Legislation / Guideline / Permits / Consents:</b>	High wire and swing Activity Safety Guidelines. Health and Safety at work (Adventure Activities) Regulations 2016. High wire Guide level 5. OutdoorsMark (Adventure Activities Safety Audit)		

## Operating Procedures

### Pre-activity Check

1	Visual check of equipment and structures as per pre-use check.	
2	Communicate with MiCamp Manager and/or Lead Instructor to highlight safety considerations for the day.	
3	Re-familiarise with SOP.	

### Setup

1	Do pre-use checks and fill out the form.	
2	Instructor to climb up with equipment (get it belayed up if needed) using energy absorber lanyard clipping into LEAP bolts only. Instructors may use the access rope to ascend the tower once set-up.	
3	Attach trolley over wire, clip lanyard to the back-up ensuring the carabiner goes over the wire. Set-up fall arrester and tower lanyard.	
4	Set-up Access rope, open ladder hatch, attach Access rope to rixi-trix.	
5	Set-up dismount ladder and preform pre-use load test.	
6	Lay out helmets and harnesses for group.	

### MiCamp Instructor Brief to other Group Supervisors

1	One group supervisor to manage group waiting, clipping the rope grab to the access rope and to participant, giving clear communication, and checks with instructor before participant leaves the ground.	
2	Second supervisor to help unclip participants at the bottom of the wire. Explain that the dismount step ladder needs to be shifted out of the flight path between participants. Explain clear communications tools.	
3	Carabiners stay attached to the zipline trolley.	
4	Zipliner is to carry the rope grab back to the tower and give it to the supervisor at the bottom.	

### MiCamp Instructor Brief to Participants

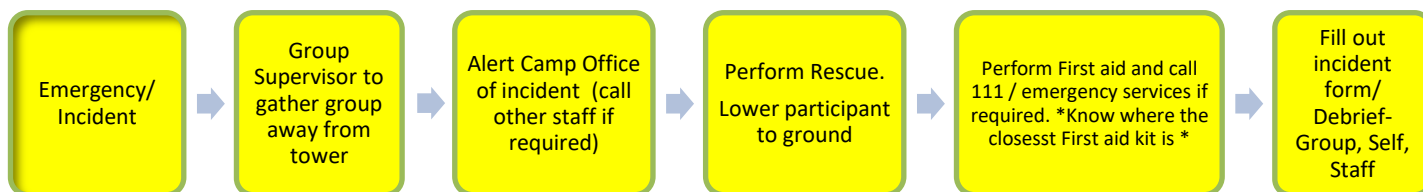
1	Gather the group together and disclose hazards, risks in the general area and the boundaries of the activity.	
2	Explain what you expect of them and what they can expect from the session/ What they want from the session. Set session goals if appropriate.	
3	Helmets must be worn by all in Drop Zone, up the tower and in the flight path.	
4	Distribute harnesses and helmets and assist with fitting them.	
5	Systematic check of gear (harness, helmet).	
6	Tell the participant the roles that they need to help with.	
7	Turn around and face the dismount ladder when climbing down.	
8	Please do not jump off the tower until the instructor removes the tower safety lanyard and has given you the all clear.	
9	Please do not go up-side-down while you are on the Zipline.	
10	Maximum weight limit of 130Kg	

### Operating Instructions

1	Instructor to verbally check with supervisor and visually check participant before they can start climbing. (If needed instructor may belay participants instead of using the access rope).	
2	Once participants to the top of the tower do a physical check of their harnesses before they are transferred on to fall arrester lanyard. (once transferred remove the rope grab from the access rope and clip it back to participant so it can't not be dropped).	
3	Attach Zipline lanyard to participant's harness and do a final check of harnesses and carabiners.	
4	Clear the flight path before removing the fall arrester lanyard.	
5	Sweep your arm behind the participant to ensure they are no longer attached to the tower. (they should only be attached to the Zipline lanyard).	
6	Send them on their way.	

<b>Debrief suggestions</b>		
1	Gather group together; what they learnt, what was challenging, what do they want to practice more.	
2	Reflect on session goals if made.	
3	Get feedback from group (Note down pertinent information). Thank the participants and group supervisors.	
<b>Closing Down the Activity</b>		
1	Gather all gear up and check that it is all returned. Note any broken or damaged gear. write in rope log (including use).	
2	Visually check equipment and record any incidents, near misses, damage, or wear before returning to shed in rope log.	
3	Ensure any ladders are secured while activity is unsupervised.	
<b>Pause points</b>		
1	Make sure there is no loose hair or clothing.	
2	If the flight path becomes obstructed including by participants.	
3	Halt activity at any time if conditions or people become unsafe.	

**Emergency Procedures**



<b>Equipment Check</b>	
1	Carabiner - check that it opens and closes easily, there are no cracks, serious abrasions or sticking gate.
2	Helmets - check the outer and inner shell for cracks, ensure straps and buckles work well.
3	Slings, Prussic, Harness - check that stitching is in tact, no fraying or cuts, no rust on buckles.
4	Rope - check for glazing of the sheath, severe furring of the rope, powdering of the fibres, soft spots, unevenness, cuts in the rope, any sign of the core showing through.
5	Structure – visual check of guy wires, connections, cables. Check for damage to tower structure.

Hazards and risk Identification			
This section describes some reasonably foreseeable risk, its potential level and suggested management strategies. <b>*All Risk must be continually monitored throughout the activity*</b> New hazards/ risk must be reported or resolved appropriately as soon as possible.			
Environment Specific Risks	Risk Management Strategy	Risk Level	
		Managed	Unmanaged
Slippery surfaces, participants running, structure hazards	No running. Ensure appropriate footwear. Disclose risks and hazards as appropriate. Monitor continually.	Low	High
Long hours in the sun (Group supervisors & Participants)	Apply sunscreen prior to activity. Bring water bottle. Program breaks/ Group supervisor & MiCamp instructor rotations. Participants to wait in shaded areas.	Low	Medium
Distraction from other groups	Group supervisors to use good group management. Disclose risk to group supervisors. Remind group supervisors of other groups if necessary, use positive communication.	Low	Medium
Change in weather	Ensure everyone has appropriate clothing. Group supervisor to halt activity at any time if weather compromises safety (e.g. Electrical storm, high wind). Weather Risk assessed continuously.	Low	Medium
Activity Specific Risks	Risk Management Strategy	Risk Level	
		Managed	Unmanaged
Fall from height	MiCamp instructor to be vigorous at all transfer points. Using the redundancy in the lanyard safety line system.	Low	High
Participant behaviour compromises group safety	Give safety brief. Staff or Group supervisor can remove participant from activity area or deny participation if safety of others is compromised.	Low	High
Loose hair/clothing	All long hair to be tied up. Participants advised to tuck into harness or remove any long or loose items and/or clothing, if potentially intrusive to equipment movement/function	Low	Medium
Participant freezes	MiCamp instructors trained in talking participants through challenges and physical rescues. Participants can climb/ be lowered back down if needed	Low	Medium
Swinging or falling equipment	Helmets are worn by all on the tower, in the drop zone and in the flight path. Zip Line to be pulled in by rope, NOT flicked up by participants, so rig doesn't swing.	Low	Medium
Participant or object in flight path	Flight path area roped off from other activity areas. Participants instructed not to walk under or through the flight path and MiCamp instructor and group supervisor to check that path is clear before letting participants leave the platform. Using clear signals to communicate.	Low	Medium
Participant adjust their own harness making it unsafe	Give Safety brief. Get the group supervisor to check harness with the instructor watching. Once the participant gets to the transfer point the instructor will do a physical check of harness before transfer happens, and again before the participant steps off the tower.	Low	High
Falling off the dismount Ladder	Turn around and face the dismount ladder and sing two hands when climbing down.	Low	Medium
Stuck on Zipline because of tower Safety lanyard	Rider does not jump off the tower until the instructor removes the tower safety lanyard and has given the all clear.	Low	Medium
Rider fall out of their harness	Instructor to do physical check of participants harnesses before going off the tower riders are not to go up-side-down while you are on the Zipline.	Low	High
Rider hitting the ground or hit the end.	Maximum weight limit of 120Kg.	Low	High

Equipment Specific Risks	Risk Management Strategy	Risk Level	
		Managed	Unmanaged
Equipment failure	Regular checks of equipment and training on correct use by MiCamp instructors.	Low	High
Incorrect use of equipment	All connections, harness and helmets fitted to be checked by staff before climbing. Correct belay techniques supervised by staff. Safety equipment is worn at all times (harness, helmet, safety line lanyard attachment to tower).	Low	High
Pause Points	Risk Management Strategy	Risk Level	
		Managed	Unmanaged
Zip line pulley jams	Group gathered away from tower. Trained MiCamp instructor to perform rescue	Low	High
Participant or equipment caught on tower	MiCamp instructor to do a visual check as they checklist to launch. If anything is caught stop the participant	Low	Medium
Object in flight path	MiCamp instructor to not let participant go unless path clear. Monitor path continually	Low	Medium

This Standard Operating Procedure (SOP) is approved for use at sites operated by MiCamp Trust. As at the time of approval this SOP meets all known regulations (Adventure Activity Regulations, Safety Audit Standards etc) and current industry good practice