

# 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 are suggestions to be raised in activity debrief and meetings.*

<b>Activity:</b>	Zipline		
<b>Location of Activity:</b>	Off the tower at the Western end of the Island		
<b>Site:</b>	Whakamaru	<b>Area:</b>	Activities
<b>Reviewed By:</b>	Chris & Keziah Muir	<b>Version:</b>	3.1
<b>Position:</b>	Site Managers	<b>Approved:</b>	Ted Muir (20/12/22)
<b>Date Reviewed:</b>	20/12/22	<b>Location of Hard copy:</b>	Office
<b>Number of Participants:</b>	<b>Max Ratio:</b>	1 Instructor / 2 Participants on the launching area of the tower. Group size of a max of 10 Participants and a minimum 1 Adult Assistants. Note: Ratio adjusted with changes in risk levels.	
<b>Instructor Competence:</b>	Site specific induction and assessment on internal competencies.		
<b>Participant &amp; Assistant Equipment &amp; Clothing Requirements:</b>	MiCamp Supplied: Helmets, QA Harnesses. Participant Supplied: Covered Shoes, Appropriate Clothing for weather conditions.		
<b>Instructor Equipment &amp; Clothing Requirements:</b>	Helmets, Harnesses. Rescue Gear: (can be stored on the Instructor Harnesses or with Rescue Kit). Five Aluminium Carabiners, Belay Device, 120cm Sling, Short Prusik, Long Prusik, Energy Absorber Lanyard.		
<b>Other Equipment Requirements:</b>	Zipline Lanyard (Trolley, 3 Steel Carabiners, Lanyard), 2 Tower lanyard (staff and participant safety) with Aluminium Carabiners, Retrieval Rope. Dismount Ladder. Rescue Kit: (CMI Pulley, Steel Carabiners, 10m Static Rope)		
<b>Activity Requirements:</b>	Loose clothing removed or tucked in, 100kg max weight, long hair tied up.		
<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 equipment 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 check and fill out form.	
2	Instructor to climb up tower and set-up tower lanyards (instructor & participant safety line) and retrieval rope.	
3	Bring out dismount ladder to lowest part of the zipline and perform pre-use load test.	
4	Using dismount ladder, secure the trolley with lanyard to the zipline. Attach trolley over wire, clip lanyard to the back-up, ensuring the carabiner goes over the wire.	
6	Lay out helmets and harnesses for group.	

### MiCamp Instructor Brief to the Adult Assistant

1	Adult Assistant to help move the dismount ladder and unclip participants at the bottom of the wire. Explain that the dismount ladder needs to be shifted out of the flight path between participants. Explain clear communications tools. Two participants may be used to stabilise the ladder. Instructor to assess the weather for the need of this.	
2	Group supervisor is to clip tow rope onto lanyard for the participant to tow back to the tower.	

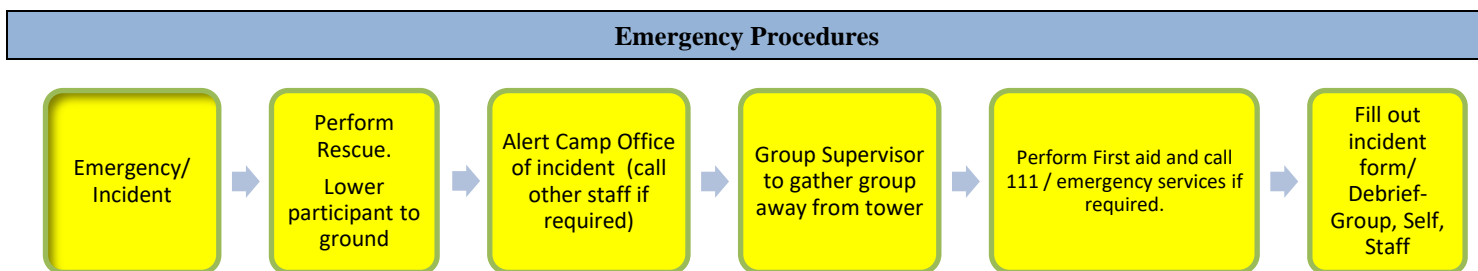
### MiCamp Instructor Brief to Participants

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	Explain tower safety Helmets must be worn by all that are 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	Using two hands to climber up the steep stairs inside the tower.	
8	Turn around and face the dismount ladder when climbing down.	
9	Please do not jump off the tower until the instructor removes the tower safety lanyard and has given you the all clear.	
10	Please do not go up-side-down while you are on the Zipline.	
11	Maximum weight limit of 100Kg	

### Operating Instructions

1	Once participants are at the launching area of the tower (level 4) clip the participant safety line to them and do a physical check of participants harnesses. (you may have 1 or 2 participant wait on level 3 of the tower, you may also have observer on the launching area of the tower as long as they are clipped into a safety line whenever the gate is open).	
2	Attach Zipline lanyard to participant and do a final check. Do a visual check of the trolley at this point.	
4	Check the flight path clear before open the gate before removing the participant safety line.	
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.	
7	Close the gate before inviting the next participant to launching area of the tower.	

<b>Debrief suggestions</b>	
1	Gather group together. Ask what they have 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).
<b>Closing Down the Activity</b>	
1	Gather all gear up and check that it is all returned. Reset harnesses for next use. Note any broken or damaged gear. Write in rope log
2	Visually check equipment and record in rope log any incidents, near misses, damage or wear before returning to shed.
3	Ensure any ladders are secured while activity is unsupervised
<b>Pause points</b>	
1	If the flight path becomes obstructed by participants or objects
2	Halt activity at any time if conditions or people become unsafe
3	Pause activity if anyone gets Injured.



<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	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 any and all change 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 remove necklaces, bracelets and rings if posed as a risk. All clothing to be tucked into harness or removed if potentially intrusive to equipment movement/function.	Low	Medium
Participant freezes	MiCamp instructors trained in talking participants through challenges. Participants can climb down the tower if needed.	Low	Medium
Swinging or falling equipment	Helmets are worn by all on and around tower. Zipline trolley to be pulled in by rope, NOT flicked up by participants, so rig does not 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 flight path is clear before letting participants leave the platform.	Low	Medium
Participant adjust their own harness making it unsafe	Give Safety brief. Once the participant gets to the lurching area of the tower the instructor will do a physical check of harness and again before the participant steps off the tower (if they have been waiting there for a while).	Low	High
Steep Stairs (falling)	Using two hands to climber up the steep stairs inside the tower.	Low	Medium
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 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 100Kg.	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. 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 before letting the participant go. 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**

***"I confirm that employees, subcontractors, suppliers and visitors have been shown and advised of all the Risks and controls in the operational procedure and they fully understand and acknowledge their requirements and are competent to fulfil their role "***