

**Risk Assessment – Skywire**

Version 3						Completed By TW				Last Updated Dec 2019	
Area of Potential Risk	Risk assessment 1-5								How the risk can be minimised		
	Participant				Staff						
	Likely to occur	Degree of injury likely	Likely to occur	Degree of injury likely	Likely to occur	Degree of injury likely	Likely to occur	Degree of injury likely			
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5			
<b>Slips Trips &amp; Falls</b>											
1. Change in levels from building to path and on platform	1	2	1	2	1. Changes in levels to be clearly marked. Daily checks for hazards and deterioration. Ground made level where possible.						
2. Stairs to top deck	1	3	1	3	2. No waiting on queueing allowed on the stairs. Participants asked to use handrails						
3. Paths to and from zip	1	2	1	2	3. Daily check to ensure even. Hazards to be removed and any remedial work undertaken.						
4. Sloped Banks on Landing Area	1	2	2	2	4. Access to the top of each bank will be for staff only and to be accessed from the top of the bank. Climbing up or down the bank is not permitted						
5. Walk into zipwire cable on landing zone	2	2	1	2	5. Good Communication with participants on landing. Signage put in place. Landing area to be kept clear of participants at all times						
6. Landing Zone	1	2	1	2	6. Constant communication with participants as they land. They are then escorted out of the area by an instructor. Signage in place to stop the public entering the area.						
<b>Fall From Height</b>											
1. Person Falling From Launch Platform	1	4	1	4	1a. All handrails are set to a height of 1200mm 1b. Everyone entering through the gate at the top of the launch platform must be wearing the appropriate harness and be immediately connected to a safety line.						
2. Items / Equipment being dropped from Launch Platform	1	3	2	3	2a. Participants are not allowed any loose items on the Skywire (coins, keys, phones etc) 2b. Instructors to receive appropriate training on how to handle PPE and to avoid dropping anything from the Skywire						
3. Person Falling From Zipline	1	5	1	5	3a. Participants to undergo appropriate safety brief and to have PPE checked immediately after briefing. 3b. Participants to have all PPE checked again by sending instructor. 3c. All PPE and rescue bag to be checked each morning before opening 3d. On-going inspection regime and quarantine box in place to help to reduce possibility of equipment failure. 3e. Only a manager with relevant experience can take PPE from the quarantine box, assess it and reinstate it back into use. 3f. All sending instructors must perform 50 perfect supervised sends before being allowed to instruct on their own.						
4. Objects falling from the Zipline	3	4	2	4	4a. Participants to wear appropriate clothing and footwear as detailed in the T&C's 4b. All loose items such as jewellery to be taken off or made safe 4c. Personal items & Large bags to be left at Landing. 4d. All pockets to be emptied. 4e. All phones and camera's to be physically attached to the participant at all times, via a lanyard or camera mount						
<b>Collision of Moving Objects</b>											

1. Instructor & participant collide on landing	1	5	1	5	<p><b>1a.</b> Instructor on landing to give radio call when landing area is clear and they are ready to receive.</p> <p><b>1b.</b> Instructor on landing to watch participant as the approach landing area</p> <p><b>1c.</b> Instructor on landing to stand to one side until participant has come to a complete stop</p>
2. Colliding with ropes, equipment or PPE at landing or during a rescue	2	4	0	0	<p><b>2a.</b> All PPE, ropes and lanyards to be in proper location and in good order before landing area is made clear for a zipline flight.</p> <p><b>2b.</b> Zipstop braking system to be retracted and correctly seated before landing area is made clear for a flight</p> <p><b>2c.</b> Only trained instructors to perform a rescue. All PPE must remain physically attached to the instructor. No extra or loose rope to be used during rescue</p>
3. Multiple Participants collide on the Zipline	1	5	0	0	<p><b>3a.</b> Participants can not be released until the 5 step radio sending procedure has been performed.</p> <p><b>3b.</b> The sending instructor must not release the black lanyard from in front of the participant until all radio calls have been completed</p> <p><b>3c.</b> Landing area must be clear of all previous participants and only contain the 1 (or 2) landing instructors.</p>
<b>Suspension Trauma</b>					
1. Participant or Instructor being left weighted in harness too long	2	3	1	3	<p><b>1a.</b> Using a Superman style harness greatly reduces this risk as it spreads to load over the full body and not just the legs</p> <p><b>1b.</b> The rescue kit must be laid out every morning and the instructor on landing must be wearing a harness. This greatly reduces the amount of time a participant will be in their harness in a rescue situation</p> <p><b>1c.</b> Any instructor accessing the cable in a sit harness must be attached to either end with a long rope. They can then be pulled back in at any point</p>
<b>Manual Handling and Repetitive Stress Injury</b>					
1. Sending, Landing and Briefing require some repetitive tasks and some manual handling	1	3	2	3	<p><b>1a.</b> Participants are not allowed to do any manual handling</p> <p><b>1b.</b> Staff are trained to be efficient with their movements especially on landing.</p> <p><b>1c.</b> Staff are to be rotated through different positions throughout the day and trained in manual handling</p>
<b>Working at Height</b>					
1. Maintenance checks on cable	0	0	3	5	<p><b>1a.</b> Checks to be carried out by designated maintenance person only or principal contractor only after specialist training.</p> <p><b>1b.</b> Correct PPE to be worn</p>
2. Performing a Rescue on the Skywire	0	0	2	5	<p><b>2a.</b> Rescue Kit to be checked daily.</p> <p><b>2b.</b> Correct PPE to be used as determined by ERCA trainer.</p> <p><b>2c.</b> Site specific rescue procedure tested and trained for.</p> <p><b>2d.</b> Regular rehearsal of rescue procedure to be carried out and only qualified staff to attempt rescue.</p> <p><b>2e.</b> Catastrophic rescue procedure to be considered and practiced at ground level.</p>
<b>Engineering Hazards</b>					
1. Zipline Cable	1	5	1	5	1. Cable to be inspected regularly by Maintenance team
2. Ground Anchors - Start and Finish	1	5	1	5	2. All ground anchors are to be visually inspected at the start of each day and fully inspected by the maintenance team on a monthly basis
3. Starting Tower - stairs, handrails, pulleys	1	5	1	5	3. All are to be visually inspected at the start of each day and fully inspected by the maintenance team on a monthly basis
<b>Adverse Weather Conditions</b>					

1. Heavy rain, wind, thunder and lightning may make the zipwire un-operable	3	3	0	0	<p><b>1.</b> A test flight is to be carried out each morning before opening to assess the effect that the wind is having</p> <p><b>1a.</b> If the wind speed and direction are effecting the landing speed of the participant to a degree whereby they are approaching too fast or perhaps with not enough speed then the Zipwire will be closed until the weather changes. A succesful test flight is required to reopen the Zipline</p> <p><b>1c.</b> Heavy rain may make ground conditions under foot too slippery. Manager must monitor regularly and close if necessary</p> <p><b>1d.</b> A visable lightning strike within the area will result in the immediate closure of the zip. It will remain closed until there has been a 30min period without lightning</p>
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### RISK ASSESSMENT LEVELS

<b>Likely to occur</b>	<p>Level 5 Very likely, almost certain</p> <p>Level 4 Likely to occur, easily precipitated by slight carelessness</p> <p>Level 3 Quite possible</p> <p>Level 2 Possible – a low or minimal risk</p> <p>Level 1 Not at all likely except under freak conditions</p>
<b>Degree of injury likely</b>	<p>Level 5 Potential for multiple deaths</p> <p>Level 4 Death or serious injury to an individual (RIDDOR )</p> <p>Level 3 Individual off work for three or more days (RIDDOR)</p> <p>Level 2 Minor injuries (person able to continue after being given first aid)</p> <p>Level 1 No risk of injury or disease</p>